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Title: Crystal Structure of the 30S Ribosome and Its Use

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CRYSTAL STRUCTURE

Field of the Invention

The present invention relates to the provision of a high resolution crystal structure of the prokaryotic 30S ribosome subunit, and the use of this structure in drug discovery.

Background of the Invention

Translation of the genetic code into proteins occurs on the ribosome, a large nucleoprotein complex consisting of two subunits. In bacteria, the two subunits are denoted as 30S and 50S. The 50S subunit contains the site of peptidyl transferase, while codon-anticodon pairing between mRNA and tRNA takes place in the 30S subunit. The 30S subunit is composed of 21 proteins, termed S1 to S21, and a 16S RNA molecule.

Protein synthesis involves many complex steps to combine speed with accuracy. It also involves the participation of various factors and hydrolysis of GTP during each of the main stages of initiation, elongation and termination. Despite several decades of work, the molecular details of the process are still poorly understood, and the structure of the ribosome is one of the fundamental problems in molecular biology today. A recent collection of articles summarizes the state of understanding of the field [1].

A major contribution to the problem was made by Yonath and coworkers, who after nearly a decade of work showed that structures as large as the 50S ribosomal subunit would crystallize and diffract beyond 3 Å resolution [2], and also that cryocrystallography was essential for data collection on the

ribosome [3]. Originally, it was not clear that phases from such a large asymmetric unit could be obtained to high resolution. However, the determination of the crystal structure of F1-ATPase [4] suggested that even structures as large as the ribosome could be solved by standard crystallographic methods. Concrete evidence in support of this view was obtained when heavy atom clusters could be visualized directly in difference Patterson maps of the 50S subunit, and recognizable features such as double-helical segments of RNA could be seen in electron density maps [5]. The development of bright, tunable synchrotron radiation, large and accurate area detectors, vastly improved crystallographic computing and the use of cryocrystallography have all contributed to making progress on the ribosome more tractable. In our case, the use of anomalous scattering from LIII edges of lanthanides and osmium has also played a critical role in obtaining phases.

The 30S ribosomal subunit (hereafter referred to as 30S) from Thermus thermophilus was originally crystallized in both 2-methyl-2,4-pentanediol (MPD) [6] and in a mixture of butanol and ethanol [7]. Subsequent work showed that the MPD form diffracted to about 9-12 Å resolution [8,9]. The diffraction limit of these crystals did not improve beyond 7 Å resolution for almost a decade, but more recently both Yonath and coworkers [10,11] and we [12] obtained crystals of the MPD form that diffract significantly better. Since both results are improvements of the original MPD form, not suprisingly, they have the same spacegroup and similar cell dimensions. However, there are also significant differences: Unlike the crystals obtained by the Yonath group [11], our crystals do not undergo a transformation from a low to high resolution form as a result of exposure to tungsten clusters, nor do they require heat activation of the crystals to obtain a high proportion that diffract well. Thus it is possible that real differences between the two structures exist.

Last year, we described the structure of the 30S at 5.5 Å resolution [12]. That work established that it was possible to place those individual proteins whose structures had been determined in isolation in electron density maps of the whole 30S subunit. We were thus able to place all seven proteins whose structures were known at the time, infer the structure of protein S20 to be a three-helix bundle, and also trace the fold of the central domain and much of the 3′ minor domain of 16S RNA. Proteins S5 and S7 were also identified in electron density maps of the 30S obtained by Yonath and coworkers [11].

The 30S ribosomal subunit is a major target for antibiotics. The ribosome is a useful target for antibiotics since the structure of the 30S is widely conserved between prokaryotes, allowing for broad spectrum antibiotics. However, resistance to current antibiotics is currently a major problem in the field of medicine. There are presently very few new antibiotics available which can be used to treat the highly resistant strains of bacteria such as MRSA (methicilin resistant Staphylococcus aureus) which are becoming increasingly widespread.

Understanding the interaction of antibiotics with the ribosome at the molecular level is important for two reasons. Firstly, antibiotics act by interfering with various aspects of ribosome function. Thus understanding their interaction will help shed light on mechanisms involved in translation. Secondly, a detailed knowledge of antibiotic interactions with the ribosome could aid the development of new drugs against increasingly resistant strains of bacteria. Although antibiotics were characterized several decades ago, a detailed knowledge of their mechanism will in general require a three-dimensional structure of their complex with the ribosome.

The low (greater than 3Å resolution) crystal structures

described above do not provide sufficiently detailed resolution for useful modelling of the crystal structure of the 30S and there is thus a need for a high resolution structure which can be used usefully in the development of novel therapeutics.

Summary of the Invention

We have now solved and refined the structure of the 30S at 3 Å resolution. The structure contains all of the ordered regions of 16S RNA and 20 associated proteins, and contains over 99% of the RNA sequence and 95% of the protein sequences, with the missing parts being exclusively at the termini of RNA or polypeptide chains. Here we describe the overall architecture and the main structural features of the 30S subunit. In accompanying examples, we further describe functional insights gleaned from the structure and the location of antibiotics bound to the 30S.

In a first aspect, the present invention provides a crystal of the *Thermus thermophilus* 30S subunit having a tetragonal space group $P4_12_12$ with unit cell dimensions of a = 401.375, b = 401.375, c = 175.887 Å. An advantageous feature of the structure is that it diffracts beyond 3Å resolution. Another feature of the structure is that it was obtained in a method which did not involve the use of heavy atom clusters or heat activation. Furthermore, it is specifically of the 885-888/910-912 base pairing confirmation of 16S RNA. These features, both singly and in combination all contribute to features of the invention which are advantageous.

In a second aspect, the invention also provides a crystal of 30S having the three dimensional atomic coordinates of Table 1 or Table 2, the data of Table 2 optionally further including the data of one or more of Tables 3 to 5.

We have also observed that 30S crystals do not contain the S1

subunit protein. In our studies, we have found that by selectively removing this protein prior to crystallization, we have been able to obtain the improved resolution described herein. Although the atomic co-ordinates provided in Tables 1 and 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5) below allow those of skill in the art to bypass the need to undertake the crystallization of the 30S, this crystallization method nonetheless forms a further aspect of the invention.

Accordingly, there is provided a method for crystallizing a the 30S subunit to obtain a high resolution structure of a 30S subunit, which method comprises providing a 30S subunit, selectively removing the S1 subunit therefrom and crystallizing the 30S. The crystallization conditions may comprises the use of 13-17% methyl-2,4-pentanediol in the presence of 250 mM KCl, 75 mM ammonium chloride, 15 mM $MgCl_2$ at a pH of 6.5 in sodium cacodylate or MES (2-(N-morpholino)ethane sulphonic acid). Crystals may be grown over a period of 4-8 weeks at about 4°C. Crystals obtainable by such a method are also a further aspect of the invention.

This methodology provides those of skill in the art a means to provide 30S crystals of *T.thermophilus*. The conservation of ribosome structure, particularly regions of structure essential for function, between prokaryotes, for example prokaryotes which are human pathogens, such as Staphylococcus spp, and the like, allows the structure herein to be useful in the provision of anti-bacterial agents in general.

The crystals may be grown by any suitable method known as such to those of skill in the art. The structure of the crystals so obtained may be resolved to a resolution of at least 3Å.

In a further aspect, the present invention provides a method for

identifying a potential inhibitor of the 30S comprising the steps of:

a. employing a three-dimensional structure of 30S, or at least one sub-domain thereof, to characterise at least one active site, the three-dimensional structure being defined by atomic coordinate data according to Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5); and

b. identifying the potential inhibitor by designing or selecting a compound for interaction with the active site.

The term "sub-domain" includes the following:

at least one complete element of secondary structure, i.e. an alpha helix or a beta sheet, or RNA helix, as described in the detailed description below;

a group of two or more such elements which interact with each other;

at least one subunit protein;

a subgroup of subunit proteins, for example a group which includes two or more proteins which are found to interact with each other;

any of the above, when being protein or element thereof being used in conjunction with all or part of the 16S RNA structure associated with said elements or proteins.

An active site of the 30S is any part of this structure involved in tRNA or mRNA binding, synthesis or translocation, including regions of the complex not directly associated with tRNA or mRNA binding but which are required for the ribosome to function, for example those regions which undergo structural changes associated with protein synthesis or are target sites for regulation by co-factors, phosphorylation or acetlyation.

Particular regions of the 30S include those identified herein as antibiotic binding regions based on the data provided in Tables

3 to 5.

Regions further include any one of the subunit proteins S2 to S21, including any of the individually identified subunit proteins in the accompanying examples.

In any event, the determination of the three-dimensional structure of 30S provides a basis for the design of new and specific ligands for 30S. For example, knowing the three-dimensional structure of 30S, computer modelling programs may be used to design different molecules expected to interact with possible or confirmed active sites, such as binding sites or other structural or functional features of 30S.

More specifically, a potential modulator of 30S activity can be examined through the use of computer modelling using a docking program such as GRAM, DOCK, or AUTODOCK (see Walters et al., *Drug Discovery Today*, Vol.3, No.4, (1998), 160-178, and Dunbrack et al., *Folding and Design*, 2, (1997), 27-42) to identify potential inhibitors of 30S. This procedure can include computer fitting of potential inhibitors to 30S to ascertain how well the shape and the chemical structure of the potential inhibitor will bind to the enzyme.

Also computer-assisted, manual examination of the active site structure of 30S may be performed. The use of programs such as GRID (Goodford, *J. Med. Chem.*, 28, (1985), 849-857) - a program that determines probable interaction sites between molecules with various functional groups and the enzyme surface - may also be used to analyse the active site to predict partial structures of inhibiting compounds.

Computer programs can be employed to estimate the attraction, repulsion, and steric hindrance of the two binding partners (e.g. the 30S and a potential stabilizer). Generally the

tighter the fit, the fewer the steric hindrances, and the greater the attractive forces, the more potent the potential modulator since these properties are consistent with a tighter binding constant. Furthermore, the more specificity in the design of a potential drug, the more likely it is that the drug will not interact with other proteins as well. This will tend to minimise potential side-effects due to unwanted interactions with other proteins.

Having designed or selected possible binding partners, these can then be screened for activity. Consequently, the method preferably further comprises the further steps of:

c. obtaining or synthesising the potential inhibitor; and

d. contacting the potential inhibitor with 30S to determine the ability of the potential inhibitor to interact with 30S.

More preferably, in step d. the potential inhibitor is contacted with 30S under conditions to determine its function, for example in a cell free translation system.

Instead of, or in addition to, performing such an assay, the method may comprise the further steps of:

c. obtaining or synthesising said potential inhibitor;

d. forming a complex of 30S and said potential inhibitor; and

e. analysing said complex by X-ray crystallography to determine the ability of said potential inhibitor to interact with 30S. Detailed structural information can then be obtained about the binding of the potential inhibitor to 30S, and in the light of this information adjustments can be made to the structure or functionality of the potential inhibitor, e.g. to improve binding to the active site. Steps c. to e. may be repeated and re-repeated as necessary.

Another aspect of the invention includes a compound which is

identified as an inhibitor of 30S by the method of the above aspects of the invention.

In another aspect, the invention provides a method of analysing a 30S-ligand complex comprising the step of employing (i) X-ray crystallographic diffraction data from the 30S-ligand complex and (ii) a three-dimensional structure of 30S, or at least one sub-domain thereof, to generate a difference Fourier electron density map of the complex, the three-dimensional structure being defined by atomic coordinate data according to Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5).

Therefore, 30S-ligand complexes can be crystallised and analysed using X-ray diffraction methods, e.g. according to the approach described by Greer et al., *J. of Medicinal Chemistry*, Vol. 37, (1994), 1035-1054, and difference Fourier electron density maps can be calculated based on X-ray diffraction patterns of soaked or co-crystallised 30S and the solved structure of uncomplexed 30S. These maps can then be used to determine whether and where a particular ligand binds to 30S and/or changes the conformation of 30S.

Electron density maps can be calculated using programs such as those from the CCP4 computing package (Collaborative Computational Project 4. The CCP4 Suite: Programs for Protein Crystallography, *Acta Crystallographica*, D50, (1994), 760-763.). For map visualisation and model building programs such as "O" (Jones et al., *Acta Crystallograhy*, A47, (1991), 110-119) can be used.

In a further aspect, the present invention provides computer readable media with either (a) atomic coordinate data according to Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5) recorded thereon, said data

defining the three-dimensional structure of 30S or at least one sub-domain thereof, or (b) structure factor data for 30S recorded thereon, the structure factor data being derivable from the atomic coordinate data of Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5).

As used herein, "computer readable media" refers to any media which can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media such as floppy discs, hard disc storage medium and magnetic tape; optical storage media such as optical discs or CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media.

By providing such computer readable media, the atomic coordinate data can be routinely accessed to model 30S or a sub-domain thereof. For example, RASMOL is a publicly available computer software package which allows access and analysis of atomic coordinate data for structure determination and/or rational drug design.

On the other hand, structure factor data, which are derivable from atomic coordinate data (see e.g. Blundell et al., in *Protein Crystallography*, Academic Press, New York, London and San Fransisco, (1976)), are particularly useful for calculating e.g. difference Fourier electron density maps.

In another aspect, the present invention provides systems, particularly a computer systems, intended to generate structures and/or perform rational drug design for 30S or 30S ligand complexes, the systems containing either (a) atomic coordinate data according to Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5), said data defining the three-dimensional structure of 30S or at least one sub-domain thereof, or (b) structure factor data for 30S, said

structure factor data being derivable from the atomic coordinate data of Table 1 or 2 (the data of Table 2 optionally including one or more of the data of Tables 3 to 5).

Examples of such systems are microcomputer workstations available from Silicon Graphics Incorporated and Sun Microsystems running Unix based, Windows NT or IBM OS/2 operating systems.

As used herein, "a computer system" refers to the hardware means, software means and data storage means used to analyse the atomic coordinate data of the present invention. The minimum hardware means of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means and data storage means. Desirably a monitor is provided to visualise structure data. The data storage means may be RAM or means for accessing computer readable media of the invention.

The present high resolution structure of 30S provides a means to address the problems of antibiotic resistance in prokaryotes which are resistant to antibiotics known to act on the 30S, including paromomycin, streptomycin and spectinomycin. The data of Table 2 in conjunction with one or more of the data of Tables 3 to 5 provides high resolution of the site of action of these antibiotics. Mutant strains resistant to the action of these antibiotics can arise through mutation of a protein subunit of the 30S or through mutation in the 16S RNA. As indicated in the accompanying examples, the sites of mutations in some cases are known or can be identified. Where such sites are identified through, for example, primary sequence data, the invention provides a means to model the structure of the mutants.

There is thus provided a method which comprises providing the structure of the 30S ribosome of Table 1 or Table 2 (the data of

Table 2 optionally including one or more of the data of Tables 3 to 5), changing one amino acid or nucleotide of said structure to provide a mutant 30S, and modelling the structure of the mutant 30S to provide a structure of the mutant. The mutant may be used in the manner described above for the wild type, e.g. stored in computer readable form, modelled to provide ligands, and the like. The modelling may be based upon the predicted behaviour of the atoms of the changed amino acid based upon its interaction with the surrounding atoms in the model provided herein.

This process may be iterative, e.g. to produce successive mutations into the 30S structure, for example 2, 3, 4, or 5 to 10 mutations.

Regions of 30S which may be subject to this aspect of the invention include those regions identified in the accompanying examples as regions of the 30S involved in ribosome function or in resistance to antibiotics.

The invention is illustrated below by the following examples 1 to 3, their accompanying Figures and the tables 1 to 7. In Tables 1 and 2, there is shown in each row Atom number, element type, residue (amino acid, nucleotide, etc), number in molecule (for proteins N to C terminal direction, for nucleic acid 5' to 3' direction), X, Y and Z co-ordinates, occupancy, B factor ($Å^2$) and an identifier for the member of the 30S (e.g. for the subunits in the format "A"S"n" where A is an arbitary letter, different for each member, S is the subunit and n is the subunit number; and for the 16S as "A16S"). Tables 3 to 5 provide the X, Y and Z coordinates of the defined atoms of the antibiotics mentioned therein.

Example 1

The crystal structure of the 30S ribosomal subunit has been solved and refined to 3 Å resolution. The final atomic model rationalizes over four decades of biochemical data on the ribosome, and provides a wealth of information about RNA and protein structure, protein-RNA interactions and ribosome assembly. It also provides a firm structural basis for the analysis of functional roles of the 30S subunit such as decoding, and for understanding the basis of antibiotic action. The structure will also provide the basis for interpretation of lower resolution structural data on functional states of the ribosome from electron microscopy and crystallography.

Materials and Methods:

Crystallization of the 30S

Because we observed that the 30S crystals completely lacked ribosomal protein S1, care was taken to remove S1 selectively from the 30S prior to crystallization. Crystals were obtained in 13-17% MPD over a range of pH in the salt and magnesium conditions described by Trakhanov et al.(6). The crystals were largest and most reproducibly obtained at a pH of 6.5 in 0.1 M cacodylate or MES buffer. Crystals took approximately 6 weeks at 4 °C to grow to their maximum size. The largest crystals, which were required for high resolution data collection, grew to a size of 80-100 × 80-100 × 200-300 microns. The activity of redissolved crystals in poly(U)-directed protein synthesis was comparable to that of freshly isolated 30S subunits.

Data collection

Crystals were transferred to 26% MPD by vapor diffusion in two steps over a period of 6 days. All crystals (except for those soaked in osmium hexammine or osmium pentammine) also contained 1 mM cobalt hexammine in the cryoprotectant. Crystals were

flash-cooled by plunging into liquid nitrogen, and data collection was done in a cryostream at 90-100 K.

A large fraction of crystals was screened at beamlines 9.6 or 14.1 at the SRS at Daresbury Laboratories, using two short exposures at least 40 degrees apart. These crystals were then analyzed for diffraction limits, cell dimensions and mosaic spread. Only crystals of similar cell dimensions and with reasonable mosaic spread were used for data collection.

Potential derivatives were screened on beamlines X25 at the NSLS at Brookhaven National Laboratory and BM-14 at the ESRF (Grenoble). Data to about 4.5 Å were obtained from X25. High resolution data were collected at SBC ID-19 at the APS in Argonne National Laboratory, and ID14-4 at the ESRF. In all cases, derivative data were collected at the peak of the fluorescence at the LIII edge to maximize anomalous differences. At X25 and SBC ID-19, the kappa goniostat was used to rotate precisely about a mirror plane so that small anomalous differences could be measured accurately. Each crystal typically yielded 3-10 degrees of data. Data were integrated and scaled using HKL-2000 (13).

Structure determination

Previously determined phases at 5.5 Å (12) were used to locate heavy atom sites using anomalous difference Fourier maps. Initially, these sites were used for phasing to 3.35 Å using the program SOLVE (14), followed by density modification with SOLOMON (15), using the procedure implemented in SHARP (16). Optimization of the various parameters in the procedure was required to obtain interpretable maps. The RNA and some of the proteins were built using the SOLVE maps. The sequence of Thermus thermophilus 16S RNA (17) was used for the structure.

For proteins, a combination of previously published sequences and new ones from the Göttingen Thermus genome sequencing project were used. Improved maps were obtained by calculating experimental phases to 3.2 Å using SHARP (16) followed by density modification and phase extension to 3.05 Å with DM (18). The improved maps allowed us to build all the ordered parts of the structure. The model was built using O (19), and refined using the program CNS (20). Maximum likelihood refinement was used, initially with both amplitudes and experimental phase probability distributions to 3.35 Å, and subsequently with amplitudes to 3.05 Å.

Results

The 30S subunit from Thermus thermophilus consists of a 1522 nucleotide 16S ribosomal RNA (17) and 21 associated proteins, of which 20 have known counterparts in E. coli. Protein S21 is not present in Thermus, and protein S1 has been removed from the 30S prior to our crystallization. In addition, a 26 residue peptide, Thx, is present in Thermus 30S subunits (21).

The quality of the data and phasing statistics are shown in Table 6(a and b). Experimentally phased maps clearly showed main chain density for RNA and protein, individual bases (which were often of sufficient quality to distinguish purines from pyrimidines), and large well-ordered side chains of proteins (Fig.1). These maps were used to build 16S RNA and the previously unknown proteins S2, S3, S9, S10, S11, S12, S13, S14 and Thx. In addition, regions that were disordered in isolated structures or had changed significantly were also built. This often consisted of significant portions of the N- and C-terminal tails of the proteins, sometimes including entire domains that were unfolded in isolation. Proteins with small cores and long loops, such as S16 and S17, had to be substantially rebuilt, since these loops were generally disordered in the solution NMR

structures. Finally, the entire structure was rebuilt after an initial round of refinement. Our current model consists of nucleotides 5-1511 of Thermus thermophilus 16S RNA (corresponding to 5-1534 of E. coli 16S RNA) and all of the ordered regions of the associated 20 proteins. The current model has been refined against 3.05 Å data with a conventional R-factor of 0.213, a free R-factor of 0.256 and good geometry (Table 6c). For the proteins, 94% of the residues were in the core or allowed regions of the Ramachandran plot, 3.9% in the generously allowed region and 1.8% in the disallowed region.

Overview of the 30S subunit

Throughout this paper, we use the numbering system for E.coli 16S RNA, as well as the standard helix numbering, denoted H1-H45, for the secondary structure elements (22) with some modifications as shown in Fig. 2a. The most significant differences between the E.coli and T. thermophilus sequences are a shorter H6 and H10, and insertions in H9 and H33a. Any insertions in T. thermophilus relative to E. coli are indicated in the coordinates with an insertion letter after the nucleotide number, following the practice for tRNA.

The overall shape of the 30S is very similar to the classical model derived from negatively stained EM samples and to more recent cryo-EM reconstructions (23). The standard view, shown in Fig. 2b, clearly shows the head with a beak pointing leftwards, and a body with the platform to its top right and shoulder to its top right. These features have nearly identical shapes to their EM counterparts. The overall shape of the subunit is determined by the shape of the RNA component; none of the gross morphological features are all protein. As seen in Fig. 2b, individual secondary structure domains make up each of the morphological features, a feature which was also deduced in previous modelling studies (22,24,25). The 5' domain (fpd) makes

up the bulk of the body; the central domain (cd) is most of the platform; and the 3' major domain (tpd) constitutes the bulk of the head. The 3' minor domain (tmd) is the only significant exception to this rule, as it is part of the body at the subunit interface.

The four domains of the 16S rRNA secondary structure radiate from a central point (Fig. 2c and d). In the crystal structure, this central point is found in the neck region of the subunit, around the base of the head. The four domains are especially tightly associated in this area. The W-shaped central domain wraps its outer arms around the fpd and tmd domains. The long arm of the central domain reaches around and packs against fpd. The other outer arm of the central domain wraps around the tmd.

The structure of the RNA

Overview

The secondary structure of 16S ribosomal RNA contains forty-five double helices connected by short single-stranded segments. In the crystal structure, many of these helices are coaxially stacked with a helix neighboring in the sequence. There are 13 groups of coaxially stacked helices and 23 unstacked helices in 16S rRNA, for a total of 36 helical elements. There are three different types of helix-helix packing. Most of the helical elements are packed in a minor groove to minor groove fashion, which often requires distortions from canonical A-form helical geometry in one of the two helices. Adenosines from internal loops or from hairpin loops often mediate docking against an A-form double helix, with a dense network of base-2' OH and 2' OH - 2' OH hydrogen bonds stabilising the packing (Fig. 3a). Less often, helix-helix packing occurs in a different mode, by insertion of a ridge of phosphates into a complementary minor groove of another helix (Fig. 3b). This packing mode is

stabilized by hydrogen bonds between the ridge of phosphate oxygens and a layer of 2' OH and guanine base NH2 groups. These guanine N2 groups are often made more accessible by the geometry of G-U pairs, which places this moiety farther into the minor groove than do Watson-Crick pairs. Finally, the rare end-on mode of interhelical packing uses a purine base to mediate the perpendicular packing of one helix against the minor groove of another helix (Fig. 3c). All three modes of helix-helix packing are further stabilized by idiosyncratic interactions between double-helical RNA and short non-helical RNA segments. Small bulges of one to three nucleotides are often found to pack either between helices or in the major groove of a helix. A complete analysis of the details of the 16S rRNA structure will be described elsewhere; below we present an overview of the architecture.

The 5' domain (fpd)

The fpd of 16S RNA contains 19 double helices (Fig 4a), arranged as 7 groups of coaxially stacked helices and 5 unstacked helices, for a total of 12 double-helical elements packed tightly together. The result is a wedge-shaped mass of RNA that tapers to a single layer of double helices near the top of the domain. Like the other domains, the fpd is rather longer along the subunit interface than in the perpendicular direction.

The fpd can be divided into three subdomains, roughly corresponding to the upper, lower, and middle thirds of the secondary structure of the fpd. These subdomains make up the top and left-hand, the middle, and the lower right-hand sides of the body, respectively, in the view from 50S. The upper subdomain (Fig. 4b) is a nearly planar arrangement of four helical elements (H16/H17, H4/H15, H1/H3, and H18). The H16/H17 stack forms the left-hand border of the body as viewed from 50s. This stack is almost 120 Å long, with H16 making contact with the

head and H17 reaching the bottom of the subunit. Internal loops in both helices contain S-turns, which are used to modulate the position of the phosphate backbone in the case of H17, or to create an extended minor groove surface for helix-helix docking in the case of H16. The H4/H15 stack points towards the bottom of the subunit, with H15 well-packed against H17. The H1/H3 stack is bent by the conserved bulge at position 31, which results in the proximal end being horizontal and the terminal end pointing up to the head. The fourth helical element is H18, which is sharply bent to accommodate the 530 pseudoknot, defined by the unstacked helices 505-507/524-526 (H18.2) and 521-522/527-528 (H18.1). H18 is well-packed between the other two upwards-pointing elements of the upper subdomain, H1/H3 and H16. The 530 pseudoknot packs against the central pseudoknot at the H18.1 - H1 interface.

The middle subdomain (Fig. 4c) contains four helical elements (H5, H6, H12/H6A, and H13/H14) that form a layer between the upper and lower subdomains in the centre of the body. There are relatively few packing interactions within the subdomain, and several of its helices pack against the upper subdomain on one side and the lower subdomain on the other. Thus at the bottom of the subunit, the conserved root of H6 packs against H8 (lower subdomain) on one side and H15 (upper subdomain) on the other side. Similarly, the H12/H6A stack packs against H4 (upper subdomain) and H7 (lower subdomain). H12/H6A also packs against H5 and the 117 loop, which pack against elements from the upper and lower subdomains, respectively. H5 is well-packed against H15 and the 117 loop stacks with the root of H11. H5 also packs against the H13/H14 stack in the phosphate ridge-minor groove manner. H13/H14 interacts with two different regions of the lower subdomain. The conserved UACG hairpin loop at the end of H14 packs against the 160 GAAA hairpin from H8 while the large conserved hairpin at the end of H13 interacts with H7. This hairpin loop also makes many interactions with elements from the

middle subdomain.

The lower subdomain (Fig. 4d) is a collection of three helical elements that form an open saddle-shaped structure in the lower right-hand corner of the body. The H8/H9 stack stretches from the back of the subunit to the front, with the conserved 160 GAAA hairpin pointing toward the 50S subunit. It packs tightly against the H7/H10 stack at the 4-way junction that joins them, and again at a Thermus-specific interaction between insertions at nucleotides 190 and 129. The H7/H10 stack also makes weak interactions with H15 and H17 from the upper subdomain at the bottom of the subunit. H11 contains two sharp bends that allow its conserved terminal hairpin loop to pack against H7. Both bends are stabilized by short-range minor-groove to minor-groove packing contacts.

The central domain (cd)

The cd is the RNA component of the platform. Its fold based on our previous 5.5 Å structure (12) is in excellent agreement with our current structure (Fig. 5). It contains nine helical elements folded into a W-shape in the 50S view. Two long single-stranded segments of RNA, the 570 and 820 loops, are also important structural elements. The domain is dominated by the long stack of H21/H22/H23, which forms the U-shaped perimeter of the domain. H21 is the only component of the left-hand arm of the W, while H22 and H23 form the base of the right-hand side. The right-hand arm of the W consists of H23B and H24A whose conserved hairpin loops are tightly packed. This arrangement requires sharp bends between H23 and H23B, and between H24 and H24A. The H23/H23B bend is stabilized by short-range minor groove-minor groove packing interactions. The H24/H24A bend is more unusual in that the bend is towards the major groove, which places a ridge of H24A phosphates in the major groove of H24. This major-groove bend is stabilized partly by short-range

base-base and base-backbone interactions in the major groove of the bend, and partly by long-range interactions between the bent H24/H24A minor groove and the minor groove of H23. The heart of the central domain is the thicker middle arm of the W, which contains six helical elements (H20, H19/H25, H24, H26/H26A, H27, and H23B) and the 570 and 820 loops. On the left-hand side of the arm, the H26/H26A stack packs tightly against H22, the base of H25, and the 570 loop. The H25/H19 stack packs well with H20 and with the 570 loop. On the right-hand side of the central arm of the W, H23A packs well with H22, the 820 loop stacks on H24, and H24 packs well with the conserved GCAA hairpin loop of H27. In the centre of the arm, H23A packs with H26 in the phosphate ridge-minor groove manner, and the conserved H23A GAAG hairpin loop packs against H20. The 820 loop also interacts with H20, H25, and the 570 loop.

The 3' major domain (tmd)

The 3' major domain (tpd) is the RNA component of the head of the 30S subunit. From the 50S view, the left-hand side of the head tapers to a beak made of RNA on the 50S side and protein on the solvent side (Fig. 6a). Like the other domains, the tpd is relatively thin in the direction perpendicular to the intersubunit interface. The tpd consists of fifteen helical elements, most of which do not stack on a neighboring helix, in contrast to the extensive stacking of neigboring helices seen in the fpd and the central domain. The tpd can be divided into three subdomains, which correspond to the upper, middle, and lower portions of the tpd secondary structure. The upper subdomain is an extended structure in the part of the head farthest from the 50S subunit, and makes relatively few packing contacts with RNA from the other head subdomains. The lower and middle subdomains are more globular and are more intimately packed together, and make up the front-right and front-left portions of the head, respectively. The middle subdomain

includes the RNA portion of the beak.

The upper subdomain contains three helical elements that make up a well-separated structure on the solvent side of the head (Fig. 6b) The subdomain is dominated by the H35-H36-H38-H39 stack, which stretches from the top to the bottom of the head. The other two helical elements of this subdomain are H37 and H40, which pack well with each other and loosely with the H35-H36-H38-H39 stack. The H37-H40 pack is mediated by a semiconserved GAAA hp in H40 with adjacent G-C pairs in H37.

The smaller middle subdomain is extended and contains only four helical elements, H32, H33/H33A, H33B and H34 (Fig. 6c). Two of these (H33/H33A and H33B) form the Y-shaped RNA component of the beak. The H33/H33A stack points to the left in the 50S view while H33B points to the right, with its terminal conserved GNRA hairpin loop packed against H32, the covalent connection between the beak and the lower subdomain. H32 in turn packs against the H33-H34 junction as well as the 980 loop in the lower subdomain. With the exception of a small packing interaction with H32, the irregular H34 makes only long-range and somewhat tenuous packing interactions. The first is with H31 in the lower subdomain, an unusually weak minor-groove to minor groove packing. The second interaction is an unusual end-on packing interaction with the minor groove of the H34/H35/H38 junction in the upper subdomain.

The lower subdomain contains almost half of the tpd RNA (Fig. 6d) and contains seven helical elements (H28/H29, H30, H31/980 loop, H41, H41A, H42 and H43) intimately packed into a globular mass. Helices 42 and 43 are arranged in an approximately parallel fashion at the center of the fold, and each interacts with at least three of the the other helical elements. Helices 42 and 43 dock together by means of a minor-groove to minor-groove packing of their conserved hairpin loops. On the

solvent side of the H42/H43 pair, H41 packs with both H42 and H43, while the terminal GCAA hairpin loop of H41A packs against H42. This arrangement requires a sharp bend between H41 and H41A, whose minor grooves pack against each other at the bend. The H43-H41 pack is made more extensive by an underwound A-rich internal loop in H41. On the 50S side of the central H42/H43 pair are H29, H30, H31 and the 980 loop. H43 is well-packed with H29 and makes weaker interactions with H30 and the 980 loop, while H42 is well-packed with H30 and the 980 loop. The H42-H30 pack is mediated by successive conserved G-A pairs at the base of H42. The H43-H29 pack is mediated by a conserved S-turn at the base of H43. An S-turn also mediates the packing of H42 with H41. H31 is a peripheral element of the subdomain, packing well only with H30, but also packs with H34 from the middle subdomain.

The 3' minor domain

The 3' minor domain consists of just two helices at the subunit interface (Fig. 6e). H44 is the longest single helix in the subunit, and stretches from the bottom of the head to the bottom of the body. It projects prominently from the body for interaction with the 50S subunit. H45 is approximately perpendicular to H44, with its conserved GGAA hairpin loop packed against H44 and available for interaction with the large subunit.

Proteins in the 30S and their interaction with 16S rRNA

The current structure includes all of the 30S proteins except S1. The proteins generally consist of one or more folded domains, about half of which were known from previous work on isolated proteins 26. However, nearly all of the proteins contain extended termini or loops which interact intimately with RNA and were disordered in the isolated structures. Although

most of the proteins form intimate contacts with ribosomal RNA, there are also protein-protein interactions such as those seen in the S4-S5-S8 and S3-S10-S14 clusters. Finally, we see the same folds, e.g. a/b? folds, used to interact with RNA in different ways, making prediction of mode of RNA binding from topology difficult.

In general, prior biochemical data on hydroxyl-radical footprinting 27 and crosslinking 28,29 (see also summaries in ref. 22 #39 and www.mpimg-berlin-dahlem.mpg.de/~ag_ribo/ag_brimacombe/drc) agree well with the structure, and were useful as a guide to interpreting the fold at lower resolution. However, while a strong hydroxyl-radical footprint is indicative of contact, the converse is not true because extensive interactions often occur via the major groove or the phosphate backbone. Earlier base footprinting methods show poor correlation to structural contacts. Similarly, the residues in UV-induced crosslinks are generally found close together, but generally not those crosslinked using other reagents.

Proteins in the central domain

Our current structure agrees both with our previous model of the central domain 12 and subsequent high resolution structures that describe parts of this domain 30,31. Here we focus on new information.

The structure of S6, S11 and S18 bound to RNA is shown in Fig. 7a. The structure of S6 bound to H22 and S18 is similar to previous descriptions 12,31.

S18

S18 in the 30S consists of residues 19-88 (Fig. 7a). It consists of two helices, and a third helical element formed by

two short turns from different parts of the structure that stack end-to-end. These helices together form a hydrophobic core. The C-terminus interacts with S11. Although similar in fold, the structure differs in detail from the one recently reported as part of the S6/S15/S18 complex with a fragment of RNA 31, which consisted of residues 35-84. Residues 63-80 of both structures are in agreement. Of those regions where the backbone trace is in a similar spatial location, our residues 25-40 align with their 37-52, 50-54 with 54-58, 58-62 with 59-63. The loop from 43-51 in our structure has no counterpart in theirs and has been bridged across by the peptide backbone. The C-terminus in their structure corresponds to part of this loop in ours. The differences probably arise from different interpretations of the electron density rather than conformational changes. These differences necessitate a reevaluation of some of the interactions of S18 with its neighbors, although most of the interactions previously described 31 involved the C-terminal helix, which is the same in both structures.

S11

S11 is a new structure and consists of two helices packed against a sheet, a type of fold seen in many ribosomal proteins (Fig. 7a). The sheet packs against the minor groove of the 690 loop (H23), and has a C-terminal extension that interacts with the C-terminal extension of S18 and also with the 790 loop (H24). Thus S11 stabilizes folding of the platform, by binding to both H23 and H24 near the tip of the platform.

S8

As observed previously 12 and in agreement with biochemical data, S8 binds near the H20/H21/H22 three-way junction and makes extensive interactions with H21 and H25 (Fig. 7b). We now have molecular details of these interactions. In particular, two

loops from S8 (87-92 and 112-118) wrap around the bulged bases 641-642 which were known to be required for high affinity binding of S8 32,33. The N-terminus of the protein also packs against the minor groove of the 825 stem (H25), thus helping the folding of the central domain. Residues K55 on S8 and 653 on RNA are next to each other as would be expected from crosslinking 29. The extension in Thermus S8 of the loop 69-76 packs against S2 from a symmetry related molecule.

S15

S15 binds between H20 and H22 near the three-way junction (Fig. 7c), and its complex with 16S RNA is essentially identical to that described previously both in our low resolution 12 and subsequent high resolution structures 30,31.

The 5' domain binding proteins S17, S16 and S20

S17

Although originally thought to be exclusively a 5' domain binding protein, S17 also binds near the H20/H21/H22 three-way junction as we previously proposed in our low resolution structure 12 and consistent with crosslinking data (28). However, at that resolution, its orientation was ambiguous.

The core of S17 is known from NMR to be a β barrel with an OB fold, with long extended loops 34. These loops are disordered in solution but bind RNA in the 30S (Fig. 7c). In Thermus, there is a long C-terminal extension to S17 that is organized as an RNA-binding helix. The core of the protein and the C-terminal helix make extensive contacts with H11 and also contact H7. The C-terminal helix also contacts H21 in the central domain. Two long loops, loop 1 (26-36) and loop 2 (60-71) are ordered and interact with disparate domains of RNA exactly as predicted.

Loop 1, which contains the site of neamine resistance, is inserted between H21 and a highly irregular structure at the base of H11. The very tip of loop 1 also touches the 560 loop of 16S RNA. Loop 2, which contains the site of a mutant defective in assembly, is involved in stitching together H7 and H11. Thus S17 interacts with H7, H11 and the 560 loop in the 5′ domain, and H21 in the central domain.

S16

For a small protein, S16 has an extensive footprint throughout the 5′ domain. Recently, the NMR structure of the protein along with its placement in the 5.5 Å map of the 30S has been described (35). Our structure reveals details of the RNA environment around the protein.

All of the residues (1-88) are visible in the electron density (Fig. 7d), and were rebuilt using the NMR structure as a guide. The protein consists of an N-terminal sheet with two extended loops, and two short helices in the C-terminal end as previously described 35. All of the extensive contacts with 16S RNA are now clear. The b sheet is packed between the 608/620 internal loop of H21 on one side and a minor groove of H4 on the other. The two loops that extend out from this sheet both interact with RNA. Loop 1 interacts with phosphates in major groove of H4, while residues 39-43 in loop 2 make contact with the phosphate backbone around the internal loop near 453 in H17. The first helix (53-61) also extends across the major groove of this internal loop, while the C-terminal end of the second helix along with the turn leading out of it point into a minor groove of H17. There is also interaction with the 110 loop of the 5′ domain. Finally, the extended C-terminus lies across the minor groove at the tip of H17.

S20

In our low resolution structure 12, this protein was putatively identified as a three helix bundle in the 5' domain based on biochemical data that placed it at the bottom of the subunit 36,37. The current high resolution structure confirms this. The long N-terminal helix contacts the base of H6 and the tip of helix 44 (Fig. 7e), and many conserved basic residues make salt-bridges with phosphates. Helices 2 and 3 of S20 interact with the minor groove of H9, and helix 3 also interacts with tip of H11 (263). Finally the extreme C-terminus of the protein is extended and lies along the minor groove of H9, which is longer in Thermus by 11 nucleotides. Thus S20 brings together several helices near the bottom of the subunit.

Proteins near the functional center

S4, S5 and S12 are clustered near the "functional center" of the ribosome and contain the sites of several important mutations.

In the structure of isolated S4 38,39 the N-terminal domain was cleaved off prior to crystallization. This N-terminal region is organized as a tightly folded domain with a metal ion (presumably zinc) that is coordinated by four cysteines (Fig. 8a). The domain is packed against the body of the protein. While the N-terminus of S4 is highly conserved, the cysteines themselves are not. It is therefore likely that the addition of a "zinc finger" is for additional stability rather than essential for the fold. The linker residues 46-52 connect the N-terminal domain with the rest of the protein. All domains of S4 make intimate contacts with RNA. In particular, S4 makes extensive contacts with a five-way junction where H3, H4, H16, H17 and H18 come together in the 5' domain.

The N-terminal domain is packed against the 420 stem-loop (H16). The largely helical domain I is packed against a complicated region of RNA where H3 and the 507 bulge at the base of H18

come together. The remaining domain of S4 makes extensive contact with the minor groove of the base of H16. In addition, it also makes contact with the tip of the H21, which is itself packed against H4. This position is consistent with the large body of biochemical data on S4 binding to 16S RNA.

As we previously noted 12, the C-terminus of S4 makes an extensive interface with S5. Most of the known mutations of S4 and S5 that confer the ram phenotype are located in this region 40,41. The interface consists of several highly conserved salt bridges, and some of the mutations break one or more of these interactions.

The structure of S5 is similar to the crystal structure of the isolated protein 42 with two important differences: The loop from residues 14-28 is folded back onto the body of the protein in the isolated structure, but is a fully extended b-hairpin in the 30S (Fig. 8b). Also, the C-terminus of S5, which is disordered in the isolated structure, is mainly helical and packs against a complicated surface of S8 formed by many different strands.

S5 interacts closely with a region of the ribosome where the head and the body come together. In the head, the extended H35/H36 helix packs against H28, which forms the neck of the 30S connecting the body with the head. The tip of H36 makes contact with H26a, H2 and the central pseudoknot in the body. Protein S5 has contacts throughout this region, thereby stabilizing the conformation of the head with respect to the body.

The C-terminal sheet of S5 makes extensive interactions with the major groove of the H1 and the central pseudoknot. The N-terminal domain binds to the major groove of H36, as does the base of the b-hairpin. The tip of the hairpin interacts with the

phosphate backbone in H28 and is also very close to H34. Nucleotide 560 is very close to K121 in agreement with crosslinking data.

Most of the extensive interactions with RNA occur via major grooves or phosphate backbone. This explains the lack of a hydroxyl-radical footprint from S5 27.

Protein S12

S12 is unusual both for its structure and location. It is unique among the 30S proteins in being on the interface side of the subunit. Its central core consists of a b-barrel with an OB fold, a feature found in other proteins such as S17. This core binds together H18, the 530 stem loop (at the tip of H18), H3 and a part of H44 close to the decoding site (Fig. 8c). An unusual feature is a long extension that connects this core with a short helix at the N-terminus of the protein. This extension threads between the 560 loop and H12 on one side, and H11 on the other, to make contact with both S8 and S17 on the other side of the 30S.

S12 is also the only protein in the vicinity of the decoding site near 1492-1493 of RNA. It is the site of a number of functionally interesting mutations which will be discussed in an accompanying paper.

The head proteins

S7

Protein S7, whose structure in isolation was previously known, is known to be crucial for the assembly of the head 43. In the 30S, the entire sequence is visible, including the very basic N-terminus (Fig. 9a). S7 binds to a small but complex region of

the tpd that encompasses two multiple-stem junctions at a corner of the head. The majority of the interaction surface consists of H29 tightly docked to the S-turn at the base of H43. This docking requires a tight turn at 1346, probably stabilized by S7 binding. Because S7 also makes interactions with H28, its primary surface of interaction encompasses all three of the helices around the H28/H29/H43 three-way junction. The very tight docking of H29 to H43 gives rise to a small region of very high negative charge density, which is bound by a surface of S7 with very high concentration of positive charge (mainly S7 helices 1 and 4).

The second important interaction surface is centred on the second mutiple stem juction that S7 binds, the H29/H30/H41/H42 junction. In this junction, H30 and the base of H42 are tightly packed together, with a tight turn between them. An S-turn between helices 41 and 42 mediates packing of H41 and H42, which also have a tight turn between them. H41 also packs very tightly against H43. S7 makes contacts to the phosphate backbone of H41, stabilizing its packing with H43, and to residues around 1240 and 1298 where the tight bends occur in the H29/H30/H41/H42 junction. Contacts with U1240 are particularly intimate: the universally conserved bulge U1240 is deeply buried into a conserved hydrophobic pocket between the 35 and 115 loops of S7.

The b-hairpin is not tightly associated with 16S RNA, but probably
fits tightly into the minor groove of the E-site tRNA (see accompanying paper). The structure is in rough agreement with a model of S7 binding to ribosomal RNA 44, but there are also significant differences, including the location of H43.

S9

S9 consists of a a compact RNA-binding domain consisting of 2

helices packed against a 5-stranded sheet, with a third short helix at the C-terminal end of the domain (Fig. 9b). From this domain, there is a long 25 residue C-terminal tail that snakes into elements of the head RNA. S9 also interacts with S7 via a small hydrophobic patch.

The sheet of S9 makes extensive interactions with H38 and H39. It also has two loops that interact with the 1250 internal loop of H41. The short C-terminal helix interacts with 1177-1180 in H40.

The long C-terminal extension snakes between the H29-H43 junction on one side and the H38-H34 junction on the other to touch a portion of H31.

The S3 S10 S14 cluster

These three proteins form a cluster on the rear left-hand of the head, as the protein portion of the beak. S3 is clearly stacked on top of the other two proteins, consistent with the order of assembly.

S14 is bound in a crevice in the RNA and is mostly covered by S3 and S10. Almost the whole molecule contacts RNA, including helices H31, H32, H34, H38, and H43 (Fig. 9c). A cross linked residue is is in close proximity to the RNA 28.

S14 contains a zinc ion 45 coordinated by four cysteines from a CXXC-X12-CXXC motif. This motif is structurally similar to that found in the first zinc finger in the glucocorticoid receptor. This zinc binding motif is not conserved among all bacteria, although many of the residues surrounding it are, suggesting perhaps that in other organisms the protein folds via a hydrophobic core.

S10 is structurally very similar to the S6 fold, with two helices packed against a 4-stranded sheet (Fig. 10c). Two of the strands in this sheet are connected by a long b-hairpin that extends out from the sheet and is inserted right into the center of the head RNA fold. The b-hairpin makes most of the contacts with RNA, including helices H31, H34 and H41. The two strands of the sheet pack into the shallow minor groove of H39, making contacts with backbone residues on both sides of the groove.

S3 contains two domains, both consisting of two helices packed against a 4-stranded sheet, which is similar to several other ribosomal proteins (Fig. 9d). In addition to the domains there is an N-terminal tail (all of which is visible). The C-terminal 30 residues are poorly conserved and disordered in the structure.

RNA contact is made by the N terminal tail and the C terminal domain. The N?terminal tail fits into a major groove of H34. The sheet in the C terminal domain also packs against H34.

The N terminal domain makes few if any contacts with the RNA, but is mainly involved with making protein contacts with S10 and S14. A KH domain was predicted to occur in S3 46. While elements of the KH domain are present in S3, they are split between the N- and C-terminal domains of the protein, so no KH domain as such is present.

Interestingly, the structure does not agree very well with biochemical data. Although the protein does interact with H34, which it footprints 27, it is some distance (>10 Å) from the H36-H37 region where it also has a footprint. Moreover, residues that crosslink RNA with iminithiolane 28 are on the same side of the N-terminal domain but about 10 Å from the nearest RNA. This RNA is the H33/H33a region, which is one of the most poorly ordered parts of our structure (as judged by the B-factor and

weak density), suggesting that it could move in towards the N-terminal domain in other conformations.

S13 and S19

S13 and S19 form a loose dimer at the very "top" of the interface side of the head, extending both above and closer to the 50S than any of the head RNA (Fig. 9e). In spite of their location in this flexible region, they are both relatively well-defined in the electron density. Except for the C-terminal tail of S13, which reaches into the head and almost touches the tail of S9, none of these proteins are in contact with any other of the proteins in the small subunit. Together with S12, S11 and S15, these are among the few proteins that surround the region of intersubunit contact.

All 125 residues of S13 are visible in the structure. The N-terminus (app. 60 residues) forms a compact domain consisting of three small helices. Of this domain, only a small loop is in contact with the RNA and the domain appears to be clinging to the subunit only by virtue of its highly extended C-terminal region. This region begins with a long, straight alpha-helix that creeps along the top of the 30S head towards S19. It interacts mainly with the 1300 loop and H42. At this point the polypeptide chain bends by about 90 degrees, and the rest of the protein is mostly lacking in any secondary structure. This extended region curves around H41 into the head where it is buried in the RNA about 50-60 Å from the the globular, N-terminal domain. It contacts H30 in the head.

S19 consists of 92 residues. An NMR structure of isolated S19 47 ?showed a single globular domain consisting of a helix packed against a three-stranded sheet, in which residues 9-78 were ordered. In the 30S structure, residues 2-81 are visible in the electron density. The C-terminus of the protein points towards

the interface side and may become ordered in the 70S complex. Like S13, most of the globular domain of S19 is well separated from the RNA, but here both the N- and C-terminal extensions to the globular domain, as well as the loops 68-73 and 34-39 make contacts with H42. The C-terminal extension, like S13, bends around the RNA, to contact H31 while the N-terminus reaches H42 some considerable distance away. Thus, S19 straddles a portion of the head of the 30S. The residues in S13 and S19 that were crosslinked 48 are adjacent to each other in the structure.

S2

Thermus S2 consists of 256 residues of which 7-235 are visible in our structure (Fig. 10a). The protein consists of a large central domain of about 200 residues that consists of a 5-stranded parallel sheet and four helices connecting them. Two helices that form a small coiled-coil motif protrude out of this domain. The protein is located on the back of the 30S at the interface between the head and the rest of the particle. While it is primarily regarded as a "head" protein, it also makes contacts with the central domain in our structure.

S2 is quite tenuously attached to RNA, which is consistent both with the fact that it is easy to wash off with salt and also that it is one of the last proteins to assemble onto the 30S 49. It binds RNA in H35-H38 in the head. There are also a few weak interactions with H25 and S8 in the central domain. It is not near H34 in our conformation of the 30S.

Thx

This small 26 residue peptide was isolated and characterized from Thermus ribosomes 21. Thx fills a cavity formed by a number of different elements at the very top of the head (Fig. 10b). Residues 1-24 are visible in the electron density, of which 8-14

form a short helix, flanked by extended ends. It is surrounded by H42, the tip of H41, and the base of H41, while the bottom of the cavity is formed by the major groove of H43. The protein is highly basic, and there are extensive salt-bridges between these residues and phosphates of nearby RNA. Thus Thx stabilizes a number of different RNA elements that come close together near the top of the head. Thx is known to exist in two other species of Thermus 21, and chloroplast ribosomes contain a nuclear-encoded Thx homologue 50. Because of its small size, it is difficult to determine whether it has counterparts in other bacterial genomes, but it would be surprising if homologues of the protein did not exist in many other bacteria.

Assembly of the 30S

Information of the order of assembly of proteins onto 16S RNA to form the 30S was studied using reconstitution 49. This was later combined with chemical footprinting of RNA to look at changes in RNA accessibility during assembly 51. The consensus now is that not only do the initial proteins form parts of the binding sites of later proteins, but by helping condense ribosomal RNA, they also create the binding sites for subsequent proteins in a cooperative manner. The structure fully confirms this hypothesis. Thus many of the primary binding proteins bring together different parts of the molecule to create a tertiary fold for the RNA. Very often these proteins bind multi-stem junctions or sharp turns in the RNA. The structure also suggests that assembly of the head, body, and platform occurs independently. Below we interpret assembly of the body in terms of our structure.

There is some evidence that the fpd has some higher-order structure even before any of the ribosomal proteins bind 27,51. Only proteins S4, S16, S17 and S20 bind to the fpd, with S4

thought to bind first 43. S17 and S20 can each bind 16S RNA alone, but the binding of S16 and S20 are facilitated by binding of S4 49. In the crystal structure, the S17 binding site is relatively independent and consistent with biochemical studies. The binding of S4 to a 5-way junction appears to organize a large fraction of the fpd, consistent with the biochemical data. Because S4 does not directly contact S16 or S20, it must facilitate their binding through indirect effects. In the case of S16, a large fraction of the S16 RNA binding surface lies in helices that are part of the five way junction organized by S4. The remainder of the S16-binding RNA surface arises from H7 and H12. S16-induced organisation of H12 would appear to organize the only portions of the S12 and S5 binding sites that are not already part of the S4 five-way junction (the 565 and 5' end of 16S RNA), in good agreement with the observation that S16 facilitates binding of S12 and S5 49. However, the structural basis for some of the assembly map is much less clear. For example, there is no rationale for S4 facilitation of S20 binding, since the S20 RNA binding surface does not include any part of the five-way junction and is quite remote from it. Similarly, it is unlikely that the binding of S20 in the lower part of the body has any effect on the binding of S13 as predicted by the assembly map 49.

A new feature from the structure is the observation of long, highly basic extensions to many of the proteins that thread between disparate RNA elements, thus holding them together. In particular, the long extension from S12 that threads from the interface side to the back of the subunit implies that the binding of S12 must occur before the RNA folds around this extension, since the other end is organized as a short helix that could not fit through the hole. Another interesting feature is that in the head, two RNA domains are glued together by a layer of protein tails from S3, S9, S10 and S14. A detailed analysis of the implications of the structure for 30S assembly

will have to await a later publication.

In the 5.5Å structure, it appeared that the interface side of the 30S was likely to be free of proteins 12. As can be seen from Fig. 11, this is largely but not completely true, since S12 is clearly on the interface side of the 30S. Other proteins such as S15 are positioned on the side of the 30S from where they could the 50S as has been noted from biochemical and crystallographic data 52. However, the distribution of proteins and RNA is asymmetric, with the proteins being concentrated in the top and back of the 30S subunit. It therefore remains true that much of the functional interface of the 30S consists of RNA.

Conclusions

The refined atomic resolution model of the 30S presented here allows the interpretation of a vast amount of biochemical data on its function in precise structural terms. Functional insights from the structure are described in an accompanying paper. The structure will also serve as a basis for the interpretation in molecular terms of lower resolution models of various functional states by electron-microscopy or x-ray crystallography. Finally, the 30S structure will help produce testable models for various aspects of ribosome function.

Figure Legends

Fig 1. Electron density maps of the 30S. (a) and (b): Stereo views respectively of the experimental and sigmaA weighted (2mFo- DFc) refined maps, respectively, of a loop of RNA (c) and (d) Experimental and refined maps of a strand of protein showing amino acid side chains.

Fig. 2. (a) Secondary structure diagram of 16S RNA (modified

from ref. 53), showing the definition of the various helical elements used throughout the text. The numbering and diagram correspond to the E. coli sequence. The colors for the domains are: red, 5' domain; green, central domain; orange, 3' major domain; and cyan, 3' minor domain. (b) Stereo view of the tertiary structure of 16S RNA from our refined model, with the same coloring for the domains. (c) and (d) Details of the interdomain junction seen from the interface side and back side respectively.

Fig. 3. Different modes of interhelical packing in the 16S rRNA. (a) The common minor-groove to minor-groove packing mode is often stabilized by a layer of adenosines (red), which mediate most of the hydrogen bonds between two helices (blue and green). (b) The phosphate ridge to minor groove mode. Usually this mode is stabilized by hydrogen bonds between guanine N2 groups (red bases) and phosphate oxygens. (c) The rare end-on mode of packing uses an unpaired purine (leftmost yellow base) to mediate packing of two helices at right angles to each other.

Fig. 4. Structure of the 5' domain of 16S RNA. (a) stereo view of the 5' domain, with an inset on the right showing its location in the 30S subunit. The upper (b), middle (c) and lower (d) parts of the domain are shown separately next to corresponding parts of the secondary structure diagrams. The colors in the secondary structure diagrams match those in the structure. The middle part of the domain has been rotated relative to the others for clarity.

Fig. 5. Structure of the central domain of 16S RNA. (a) stereo view of the domain with secondary structure diagram and inset showing its location in the 30S. (b) Secondary structure diagram for the central domain.

Fig. 6. Structure of the 3' major and 3' minor domains of 16S

RNA. (a) Stereo view of the 3' major domain, with inset showing its location in the 30S. (b)-(d) The upper, middle and lower parts of the 3' major domain, with corresponding secondary structure diagrams. (e) Stereo view of the 3' minor domain, with secondary structure diagram and inset showing its location in the 30S.

Fig. 7. Proteins from the central and 5' domains. The coloring for the various RNA elements in this and subsequent figures is the same as in Figs 3-5. (a) The S6-S18-S11 complex (b) S8 (c) the S15-S17-S8 complex (d) S16 and (e) S20.

Fig. 8. Proteins from the functional center of the 30S subunit. (a) S4 (b) S5 and (c) S12.

Fig. 9. Proteins from the head. (a) S7 (b) S9 (c) the S10-S14 complex (d) S3 on top of S10 and S14 (e) the S13-S19.

Fig. 10. Proteins (a) S2 and (b) Thx in the head.

Fig. 11. Overview of the entire 30S structure showing the front or subunit interface side (a) and the back side (b). The domains for the RNA have been colored as in Fig. 2.

References for Example 1.

1. Garrett, R. A. et al. (eds.) The Ribosome. Structure, Function, Antibiotics and Cellular Interactions (ASM Press, Washington, D.C., 2000).

2. von Böhlen, K. et al. Characterization and preliminary attempts for derivatization of crystals of large ribosomal subunits from Haloarcula marismortui diffracting to 3 Å resolution. J. Mol. Biol. 222, 11-15 (1991).

3. Hope, H. et al. Cryocrystallography of ribosomal particles. Acta Crystallogr. B 45, 190-199 (1989).

4. Abrahams, J. P., Leslie, A. G., Lutter, R. & Walker, J. E. Structure at 2.8 A resolution of F1-ATPase from bovine heart mitochondria [see comments]. Nature 370, 621-8 (1994).

5. Ban, N. et al. A 9 Å resolution x-ray crystallographic map of the large ribosomal subunit. Cell 93, 1105-1115 (1998).

6. Trakhanov, S. D. et al. Crystallization of 70 S ribosomes and 30 S ribosomal subunits from Thermus thermophilus. FEBS Lett. 220, 319-322 (1987).

7. Glotz, C. et al. Three-dimensional crystals of ribosomes and their subunits from eu- and archaebacteria. Biochem. Int. 15, 953-960 (1987).

8. Yonath, A. et al. Characterization of crystals of small ribosomal subunits. J. Mol. Biol. 203, 831-834 (1988).

9. Yusupov, M. M., Tischenko, S. V., Trakhanov, S. D., Ryazantsev, S. N. & Garber, M. B. A new crystalline form of 30 S ribosomal subunits from Thermus thermophilus. FEBS Lett. 238, 113-115 (1988).

10. Yonath, A. et al. Crystallographic studies on the ribosome, a large macromolecular assembly exhibiting severe nonisomorphism, extreme beam sensitivity and no internal symmetry. Acta Crystallogr A54, 945-55 (1998).

11. Tocilj, A. et al. The small ribosomal subunit from Thermus thermophilus at 4.5 A resolution: pattern fittings and the identification of a functional site. Proc Natl Acad Sci U S A 96, 14252-7 (1999).

12. Clemons, W. M., Jr. et al. Structure of a bacterial 30S ribosomal subunit at 5.5 Å resolution. Nature 400, 833-840 (1999).

13. Otwinowski, Z. & Minor, W. in Methods in Enzymology (eds. Carter, C. W. J. & Sweet, R. M.) 307-25 (Academic Press, New York, 1997).

14. Terwilliger, T. & Berendzen, J. Automated MAD and MIR structure determination. Acta Cryst D55, 849-861 (1999).

15. Abrahams, J. P. Bias reduction in phase refinement by modified interference functions: introducing the gamma

correction. Acta Cryst. D53 (1997).

16. de la Fortelle, E. & Bricogne, G. in Methods in Enzymology (eds. Carter, C. W., Jr. & Sweet, R. M.) 472-93 (Academic Press, New York, 1997).

17. Hartmann, R. K. & Erdmann, V. A. Thermus thermophilus 16S rRNA is transcribed from an isolated transcription unit. J Bacteriol 171, 2933-41 (1989).

18. Cowtan, K. & Main, P. Miscellaneous algorithms for density modification. Acta Crystallogr D Biol Crystallogr 54, 487-93 (1998).

19. Jones, T. A. & Kjeldgaard, M. Electron-density map interpretation. Meth. Enzymol. 277B, 173-207 (1997).

20. Brünger, A. T. et al. Crystallography & NMR system: A new software suite for macromolecular structure determination. Acta Crystallogr D Biol Crystallogr 54, 905-21 (1998).

21. Choli, T., Franceschi, F., Yonath, A. & Wittmann-Liebold, B. Isolation and characterization of a new ribosomal protein from the thermophilic eubacteria, Thermus thermophilus, T. aquaticus and T. flavus. Biol Chem Hoppe Seyler 374, 377-83 (1993).

22. Mueller, F. & Brimacombe, R. A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. I. Fitting the RNA to a 3D electron microscopic map at 20 A. J Mol Biol 271, 524-44 (1997).

23. Gabashvili, I. S., Agrawal, R. K., Grassucci, R. & Frank, J. Structure and structural variations of the Escherichia coli 30S ribosomal subunit as revealed by three-dimensional cryo-electron microscopy. J. Mol. Biol. 286, 1285-91 (1999).

24. Stern, S., Weiser, B. & Noller, H. F. Model for the three-dimensional folding of 16S ribosomal RNA. J. Mol. Biol. 204, 447-481 (1988).

25. Malhotra, A. & Harvey, S. C. A quantitative model of the Escherichia coli 16 S RNA in the 30 S ribosomal subunit. J Mol Biol 240, 308-40 (1994).

26. Ramakrishnan, V. & White, S. W. Ribosomal protein

structures: insights into the architecture, machinery and evolution of the ribosome. Trends Biochem Sci 23, 208-12 (1998).

27. Powers, T. & Noller, H. F. Hydroxyl radical footprinting of ribosomal proteins on 16S rRNA. Rna 1, 194-209 (1995).

28. Urlaub, H., Kruft, V., Bischof, O., Muller, E. C. & Wittmann-Liebold, B. Protein-rRNA binding features and their structural and functional implications in ribosomes as determined by cross-linking studies. EMBO J 14, 4578-88 (1995).

29. Urlaub, H., Thiede, B., Muller, E. C., Brimacombe, R. & Wittmann-Liebold, B. Identification and sequence analysis of contact sites between ribosomal proteins and rRNA in Escherichia coli 30 S subunits by a new approach using matrix-assisted laser desorption/ionization-mass spectrometry combined with N-terminal microsequencing. J Biol Chem 272, 14547-55 (1997).

30. Nikulin, A. et al. Crystal structure of the S15-rRNA complex. Nat Struct Biol 7, 273-7 (2000).

31. Agalarov, S. C., Sridhar Prasad, G., Funke, P. M., Stout, C. D. & Williamson, J. R. Structure of the S15,S6,S18-rRNA complex: assembly of the 30S ribosome central domain. Science 288, 107-13 (2000).

32. Mougel, M. et al. Minimal 16S rRNA binding site and role of conserved nucleotides in Escherichia coli ribosomal protein S8 recognition. Eur J Biochem 215, 787-92 (1993).

33. Wu, H., Jiang, L. & Zimmermann, R. A. The binding site for ribosomal protein S8 in 16S rRNA and spc mRNA from Escherichia coli: minimum structural requirements and the effects of single bulged bases on S8-RNA interaction. Nucleic Acids Res 22, 1687-95 (1994).

34. Golden, B. L., Hoffman, D. W., Ramakrishnan, V. & White, S. W. Ribosomal protein S17: characterization of the three-dimensional structure by 1H- and 15N-NMR. Biochemistry 32, 12812-20 (1993).

35. Allard, P. et al. Another piece of the ribosome: Solution structure of S16 and its location in the 30S subunit. Structure, (in press) (2000).

36. Mueller, F. & Brimacombe, R. A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. II. The RNA-protein interaction data. J Mol Biol 271, 545-65 (1997).

37. Culver, G. M. & Noller, H. F. Directed hydroxyl radical probing of 16S ribosomal RNA in ribosomes containing Fe(II) tethered to ribosomal protein S20. Rna 4, 1471-80 (1998).

38. Davies, C., Gerstner, R. B., Draper, D. E., Ramakrishnan, V. & White, S. W. The crystal structure of ribosomal protein S4 reveals a two-domain molecule with an extensive RNA-binding surface: one domain shows structural homology to the ETS DNA-binding motif. Embo J 17, 4545-58 (1998).

39. Markus, M. A., Gerstner, R. B., Draper, D. E. & Torchia, D. A. The solution structure of ribosomal protein S4 delta41 reveals two subdomains and a positively charged surface that may interact with RNA. Embo J 17, 4559-71 (1998).

40. van Acken, U. Proteinchemical studies on ribosomal proteins S4 and S12 from ram (ribosomal ambiguity) mutants of Escherichia coli. Mol Gen Genet 140, 61-8 (1975).

41. Wittmann-Liebold, B. & Greuer, B. The primary structure of protein S5 from the small subunit of the Escherichia coli ribosome. FEBS Lett 95, 91-8 (1978).

42. Ramakrishnan, V. & White, S. W. Structure of ribosomal protein S5 reveals sites of interaction with 16S RNA. Nature 358, 768-771 (1992).

43. Nowotny, V. & Nierhaus, K. H. Assembly of the 30S subunit from Escherichia coli ribosomes occurs via two assembly domains which are initiated by S4 and S7. Biochemistry 27, 7051-5 (1988).

44. Tanaka, I. et al. Matching the crystallographic structure of ribosomal protein S7 to a three-dimensional model of the 16S ribosomal RNA. Rna 4, 542-50 (1998).

45. Tsiboli, P., Triantafillidou, D., Franceschi, F. & Choli-Papadopoulou, T. Studies on the Zn-containing S14 ribosomal protein from Thermus thermophilus. Eur J Biochem 256,

136-41 (1998).
46. Siomi, H., Matunis, M. J., Michael, W. M. & Dreyfuss, G. The pre-mRNA binding K protein contains a novel evolutionarily conserved motif. Nucleic Acids Res 21, 1193-8 (1993).
47. Helgstrand, M. et al. Solution structure of the ribosomal protein S19 from Thermus thermophilus. J Mol Biol 292, 1071-81 (1999).
48. Pohl, T. & Wittmann-Liebold, B. Identification of a cross-link in the Escherichia coli ribosomal protein pair S13-S19 at the amino acid level. J Biol Chem 263, 4293-301 (1988).
49. Held, W. A., Ballou, B., Mizushima, S. & Nomura, M. Assembly mapping of 30S ribosomal proteins from Escherichia coli. Further studies. J. Biol. Chem. 249, 3103-11 (1974).
50. Yamaguchi, K., von Knoblauch, K. & Subramanian, A. R. The plastid ribosomal proteins (1): identification of all the proteins in the 30S subunit of an organelle ribosome (chloroplast). J Biol Chem (2000).
51. Stern, S., Powers, T., Changchien, L.-M. & Noller, H. F. RNA-protein interactions in 30S ribosomal subunits: folding and function of 16S rRNA. Science 244, 783-90 (1989).
52. Culver, G. M., Cate, J. H., Yusupova, G. Z., Yusupov, M. M. & Noller, H. F. Identification of an RNA-protein bridge spanning the ribosomal subunit interface [see comments]. Science 285, 2133-6 (1999).
53. Gutell, R. R. Collection of small subunit (16S- and 16S-like) ribosomal RNA structures: 1994. Nucleic Acids Res 22, 3502-7 (1994).

Example 2 - Structural basis for the action of the antibiotics paromomycin, streptomycin and spectinomycin on the 30S ribosomal subunit.

We have collected data to 3 Å resolution on crystals of the 30S subunit complexed with streptomycin and paromomycin (which

reduce translational accuracy), and spectinomycin (which blocks translocation). Difference Fourier maps from the refinement of our atomic model of the 30S subunit using these data directly reveals the bound antibiotic molecules in situ. The structure allows us to rationalize much of the biochemical and genetic data on these antibiotics and propose models for their mode of action.

Accurate translation of mRNA into protein requires the correct recognition of each codon by the anticodon of the corresponding aa-tRNA. The difference in binding energy between the codon and anticodon with correct (cognate) versus incorrect (noncognate) tRNAs is too small to account for the high accuracy of translation 1. The high level of accuracy of translation by the ribosome is thought to be a combination of the initial codon-anticodon interaction when an EF-Tu.aatRNA binds to the A site and a proofreading step occurring after GTP hydrolysis and EF-Tu release which further discriminates correct from incorrect recognition 2,3. The proofreading step is especially important for detecting codon-anticodon interactions that are almost as strong as the cognate interaction. It has been suggested that this detection is based on some feature of the codon anticodon interaction besides the differences in energy of base pairing which is used in initial recognition. It is possible that during proofreading the 30S ribosomal subunit (which is the site of binding of the mRNA and anticodon stem of tRNA) discriminates the shape of the RNA double helix formed by the codon interaction 4. The mechanism by which proof-reading occurs remains unclear , although a number of models have been proposed (5,6). It has been shown recently that the 30S switches between at least two distinct states during translation, and that stabilizing one state over the other can affect accuracy (6,7).

Paromomycin is a member of the aminoglycoside family of

antibiotics which increases the error rate of the ribosome. This family is thought to reduce the dissociation rate of A-site tRNA from the ribosome (8). Recent experiments suggest that it affects both initial selection and proofreading (5). Early experiments suggested streptomycin made ribosomes error prone by predominantly affecting the proofreading step (9). More recent data (8,10,11) suggest interference of both initial selection and proofreading of tRNA selection (reviewed by 12). In contrast to paromomycin and streptomycin, spectinomycin inhibits EF-G catalyzed translocation of the peptidyl-tRNA from the A site to the P site (13).

Materials and methods

Purification of ribosomal subunits, followed by crystallization, cryoprotection and flashcooling were carried out exactly as described in the accompanying paper 14, except that crystallization was carried out in the presence of a 10-fold molar excess of each of a mixture of streptomycin, paromomycin and spectinomycin, no cobalt hexammine was included in the cryoprotectant, and antibiotics were present throughout the transfers into cryoprotectant solutions.

Data were collected on beamline ID14-4 at the ESRF in Grenoble, and integrated and scaled with HKL-2000 15. The refined 3 Å structure of the 30S (see accompanying example 1) was used as a starting model for refinement, with the cobalt ions removed. Refinement was carried out using CNS 16. Rigid body refinement was followed by positional refinement using energy minimization and finally by grouped B-factor refinement. For cross-validation, 5% of the reflections were left out of the refinement, and care was taken to ensure that these corresponded to the same 5% that were omitted for the refinement of the original 30S model. Statistics for the data and refinement are shown in Table 7.

Results:

A single round of refinement as described above resulted in a model with good refinement statistics. In this model, no antibiotics were included, so that the density for them is free of any model bias. The antibiotics and any changes in the 30S structure upon antibiotic binding were clearly visible in difference Fourier maps. In general the structure of the 30S was changed significantly only in the vicinity of the antibiotic binding sites. The phosphate rmsd through most of the structure was about 0.45 Å, which is comparable to the coordinate error in the original model.

Electron density for the antibiotics was present in both sigmaa-weighted and difference Fourier maps. At 3 Å resolution, it was easy to place the antibiotic molecules in an unambiguous orientation in the density, thus allowing us to make precise statements about the location and interactions of each antibiotic molecule in the 30S subunit.

In the discussion that follows, elements of 16S RNA are described by the helix numbering of Brimacombe and coworkers 17. The E. coli numbering for 16S RNA is used throughout, as described in the accompanying example 1.

Paromomycin

Paromomycin binds in the major groove of H44 (Fig. 12 in a location that is in agreement with mutagenesis and protection data 18,19. It is also in general agreement with an NMR structure of paromomycin bound to an RNA fragment corresponding to its binding site 20. Ring IV contacts the backbone of both sides of helix in an orientation that differs from the NMR structure, while ring III makes only weak contacts with the RNA. Ring II forms tight interactions with both bases and

backbone of the RNA, while Ring I inserts into the RNA helix and helps flip out bases A1192 and A1493 when compared to the structure in the absence of paromomycin. Ring I mimics a nucleotide base, stacking against G1491 and hydrogen-bonding with A1408. In addition it forms a tight H bond interaction with the phosphate backbone of A1493 which helps lock the flipped out bases in place. Except as noted, many of the interactions are similar to those reported in the NMR structure 20 although the bases are flipped out to a far greater degree, and consequently, we do not see a base pair between A1408 and A1493 (Fig. 12).

We have modeled the codon and anticodon in the A site using a superposition of the 7.8Å structure of the 70S ribosome with tRNA and mRNA bound 21 as described in our accompanying paper 22. The flipped out bases point directly into the A site and are positioned to interact with the minor groove of the helix formed by the codon-anticodon interaction (Fig12b). It is probable that the A-site codon-anticodon helix must undergo some degree of rotation during or after GTP hydrolysis by EF-Tu, in a conformational change to a proofreading state of the decoding site. However, there are rather strict covalent and steric constraints on the A-site anticodon and especially the codon, which is covalently attached to both the P-site codon and downstream message. Thus, despite some rotational uncertainty in the orientation of the codon-anticodon helix, it appears unlikely that the 1492-1493 bases could interact with any portion of the codon-anticodon helix other than its minor groove, though interactions with other portions of the A-site tRNA anticodon loop are not ruled out. This model provides clues as to how paromomycin increases the affinity of the A site for tRNA. It seems likely that in the absence of paromomycin some energy is required to flip out A1492-A1493 so they can contact the tRNA, and presumably this energetic cost is compensated by the formation of favorable interactions with tRNA. By binding

to H44, paromomycin forms a structure in which these bases are already flipped out, thus reducing the energetic cost of both cognate and non-cognate tRNA binding and increasing tRNA affinity for the A site.

This structure is in general agreement with a previously proposed model in which A1492 and A1493 would make contact with the minor groove of the mRNA-tRNA duplex 4. In that model, it was suggested that these bases hydrogen bond with the 2'-OH of the message. Given the rotational uncertainty of the positioning of the A-site tRNA in our model, we cannot determine that these adenines hydrogen-bond to the message 4. However, two scenarios appear possible, within the limits of the model. The adenines may hydrogen-bond to 2' OH groups of only the tRNA anticodon stem-loop, or they may hydrogen-bond to 2'OH groups of both the tRNA and the message. Both possibilities are attractive because they offer a direct explanation for increased affinity (and lower dissociation rate) of tRNA in the presence of the antibiotic. Finally, the degree to which the bases are flipped out in our structure allows a possible reconciliation of the proposal that the mRNA binds in the major groove of H44 23 with the notion that A1492 and A1493 inspect the minor groove of the codon-anticodon interaction 4.

Rings I and II of paromomycin are found in a number of other antibiotics including gentamycin. An NMR structure of gentamycin bound to the same fragment of H44 showed that these two rings interact with RNA in the same way as in paromomycin (20). This suggests that other aminoglycosides that bind to the decoding centre on H44 induce errors in translation by the same mechanism as paromomycin.

Streptomycin

Unlike paromomycin, which can bind to an isolated fragment of

ribosomal RNA, streptomycin is tightly bound to the phosphate backbone of 16S RNA from 4 different parts of the molecule via both salt links and hydrogen bonds (Fig. 13). It also makes contact with a lysine (K45) from ribosomal protein S12. The 4 regions of 16S RNA (1490, 915, 526, and 13) had all been implicated in streptomycin binding on the basis of protection (18), crosslinking (24) and mutagenesis data (25-27) (reviewed in 19).

It has been proposed that translational fidelity involves a switch between two states of the ribosome, an error prone or ram (885) state, characterized by nucleotides 910-912 pairing with 885-887, and a restrictive or hyperaccurate (888) state in which 910-912 pair with 888-890 (7).

The structure of the 30S reported here, like that of the 70S ribosome at 7.8 Å 21 is in the 885 pairing configuration, and hence presumably in the ram state. The tight interactions described above suggest that streptomycin preferentially stabilizes this form. The 888 state A site has a low tRNA affinity, while the 885 state has a higher affinity (5,7). Therefore by stabilizing the 885 state streptomycin would be expected to increase initial binding of non-cognate tRNAs. The preferential stabilization of the 885 state would also make the transition to the 888 state more difficult, thereby also affecting proofreading. Thus our results offer a structural rationale for the observed properties of streptomycin.

This stabilization of the 885 state by streptomycin suggested by our structure can explain much of the genetic data on the antibiotic. Mutations in S12 lead to a hyper-accurate phenotype 28-33 (reviewed by 12) . A weak phenotype manifests itself as streptomycin resistance, where as a strong phenotype (often the result of multiple mutations) leads to streptomycin dependence. Most of these mutants are to varying degrees more

hyperaccurate and slower than wild type ribosomes, consistent with destabilization of the 885 state with respect to the 888 state.

All the mutations in S12 map to the a protein loops that connect and hold in place the 908-915 and 524-527 regions, with the exception of one mutant K56 (E.coli K53) which contacts H44 (Fig 13). Thus S12 stabilizes the same region that is stabilized by streptomycin. In the resistance mutations, the 885 state is destabilized sufficiently so that the additional stabilization induced by streptomycin does not trap the ribosome in this state. In the streptomycin dependent mutants, the 885 state is so destabilized that the 888 (hyperaccurate) form predominates and protein synthesis becomes very slow. Streptomycin can then help stabilize the 885 state sufficiently to restore the balance between the two states and help restore translation.

The K45R (E.coli K42) mutation is resistant to streptomycin but is not hyperaccurate (12). K45 forms a salt bridge with phosphate A913 and thus contributes to stabilization of the 885 state. It also makes direct hydrogen bonding contacts to two OH groups on streptomycin (Fig. 13). Mutation of this lysine to arginine, would disrupt the hydrogen bonding and thereby reduce the affinity of the 30S for streptomycin, leading to resistance. However, the mutation would leave the salt bridge intact, so that the 885 form is not destabilized and thus translation remains normal.

A number of mutations in rRNA also lead to hyperaccuracy (25,26,34-37). Some of these nucleotides are involved in hydrogen bonding interactions in regions close to the streptomycin binding site. Thus the mutations disrupt interactions that help to stabilize the 885 state. Others such as A915 make no contacts with any other bases. It is possible that mutation of this base leads to more favourable contacts in

the 888 state, thus acting by stabilizing the 888 state rather than destabilizing the 885 state.

The ram mutations lead to error-prone ribosomes and are generally found as suppressors of streptomycin resistance. These mutations in S4 (30,38,39) and S5 (29) can counter the effect of hyperaccurate mutations in S12 (reviewed by 12). All ram mutants in S4 and S5 map near the interface between the two proteins with the exception of S52 (E.coli S49) which makes a direct hydrogen bond to the backbone of rRNA (Fig 14). At lower resolution 40, it appeared that the ram mutations destablized the S4-S5 interface. However, at atomic resolution, we see that two of the mutations V56 (E.coli V53) in S4 and G99 (E.coli G103) in S5 are not in contact with the other protein, and it is not obvious from our structure how they would affect stability of the ram state. In fact, there is a cleft between the two proteins which could close up on the 885-888 transition. This leads us to suggest that these residues (and perhaps the corresponding surfaces of S4 and S5) are involved in intimate contacts in the 888 state, and these contacts would be disrupted by the ram mutations. In this model, ram mutations act by destabilizing the 888 state, and thus shifting the equilibrium to the error prone 885 state. The observation that ram mutations increase the affinity of ribosomes for streptomycin 41 is consistent with this model, since the ribosome would be preferentially in the 885 form. A definitive test of this model must await an atomic resolution structure of the 888 form. Nevertheless, our results provide a structural basis for the notion that a delicate balance exists between the 885 and 888 states for optimal translation, and also explains how disruption of this balance leads to the various phenotypes observed.

Spectinomycin

In contrast to the flexible aminoglycosides, the fused ring

system in spectinomycin makes it a rigid molecule. It binds in the minor groove at one end of H34. It makes a single contact with a backbone phosphate and makes hydrogen bonds to a number of bases (Fig 15). The most interactions are made with G1064 and C1192, consistent with protection studies (18 and mutagenesis data which showed that any combination of substitutions at these bases gave resistance to spectinomycin 42. These two bases are held too far apart to form Watson-Crick base pairs, but are able to make a single hydrogen bond.

A loop of S5 and part of H28 of 16S RNA approach the spectinomycin binding site, but in this state do not make direct contacts with it. It is possible, however, that in other conformations of the 30S, spectinomycin is in more direct contact with these regions.

A superposition of the A, P and E site tRNAs from the 70S ribosome onto our 30S structure shows that a number of highly specific contacts from the head stabilize these tRNAs. A movement of tRNA from one site to the other must necessarily involve movement of elements of the head. Such movements would involve H34 and a possible rearrangement of the connections between it and helices 35 and 38. The structure suggests that the rigid spectinomycin molecule binds near this pivot point of the head and sterically blocks movement although it is also possible that it acts to stabilize the upper stem of H34 42. As mentioned above, mutations in S5 that cause resistance to spectinomycin 43 do not make direct contacts with the antibiotic. Rather, they map to a loop that stabilizes the interaction between H1 and the H35-H36 region which is directly connected to H34. An attractive hypothesis is that the mutants destablize this interaction, and by thus removing the network of interactions that stabilizes the conformation of the head to the body via S5, allows it to move even when spectinomycin is bound.

Conclusions

In this work, we have chosen to investigate three antibiotics that target different regions of the 30S ribosomal subunit and work in different ways. It is striking that all three antibiotics bind at the functional center (with streptomycin and paromomycin being particularly close to each other). Another common theme is that all three antibiotics work by altering a delicate balance between conformational states of the 30S as it goes through the process of translation. Each of them sheds light on a different but fundamental process during translation: paromomycin on decoding, streptomycin on the switch between ram and restrictive states and spectinomycin on translocation. They thus serve the same role in elucidating protein synthesis as do inhibitors in classical enzymology. Additionally, the detailed knowledge of their binding sites from the structure of their complex with the 30S subunit should help to serve as the basis for the design of novel drugs that target bacterial protein synthesis.

Figure Legends for Example 2.

Figure 12

Interaction of paromomycin with the 30S ribosomal subunit.

(a) Electron density from difference Fourier showing the paromomycin molecule in a pocket formed by the major groove of H44. The bases A1492 and A1493 are flipped out from the starting model, as can also be seen in the difference density.

(b) Chemical diagram for paromomycin, showing interactions of the various groups with specific residues of the ribosome

(c) A zoomed out view of the paromomycin binding site, with a

model for the A-site codon and anticodon as described in the text. The bases A1492 and A1493 that are flipped out by paromomycin interact with the minor groove of the codon-anticodon duplex.

(d) A view of the 30S showing paromomycin in a space-filling model, and the surrounding elements.

Figure 13

Interaction of streptomycin with the 30S ribosomal subunit.

(a) Electron density from difference Fourier showing the binding site of streptomycin. Mutations in ribosomal protein S12 that confer resistance are also shown.

(b) Chemical diagram for streptomycin, showing interactions of the various groups with specific residues of the ribosome

(c) A zoomed out view of the streptomycin binding site, showing its interaction with H27, the 530 loop (H18), H44 and ribosomal protein S12

(d) A view of the 30S showing streptomycin in a space-filling model, and the surrounding elements.

Figure 14

Ribosomal proteins S4 and S5, showing the sites of mutations that confer the ram phenotype.

Figure 15.

Interaction of spectinomycin with the 30S ribosomal subunit.

(a) Electron density from difference Fourier showing the binding site of spectinomycin in helix 44.

(b) Chemical diagram for spectinomycin, showing interactions of the various groups with specific residues of the ribosome.

(c) A zoomed out view of the spectinomycin binding site, showing its location at a pivotal point in the head of the 30S subunit.

(d) A view of the 30S showing spectinomycin in a space-filling model, and the surrounding elements.

References for Example 2.

1. Kurland, C. G. Translational accuracy and the fitness of bacteria. Annu Rev Genet 26, 29-50 (1992).

2. Pape, T., Wintermeyer, W. & Rodnina, M. V. Complete kinetic mechanism of elongation factor Tu-dependent binding of aminoacyl-tRNA to the A site of the E. coli ribosome. Embo J 17, 7490-7 (1998).

3. Pape, T., Wintermeyer, W. & Rodnina, M. Induced fit in initial selection and proofreading of aminoacyl-tRNA on the ribosome. Embo J 18, 3800-7 (1999).

4. Yoshizawa, S., Fourmy, D. & Puglisi, J. D. Recognition of the codon-anticodon helix by ribosomal RNA. Science 285, 1722-5 (1999).

5. Pape, T., Wintermeyer, W. & Rodnina, M. V. Conformational switch in the decoding region of 16S rRNA during aminoacyl-tRNA selection on the ribosome. Nat Struct Biol 7, 104-7 (2000).

6. Gabashvili, I. S. et al. Major rearrangements in the 70S ribosomal 3D structure caused by a conformational switch in 16S ribosomal RNA. Embo J 18, 6501-7 (1999).

7. Lodmell, J. S. & Dahlberg, A. E. A conformational switch in Escherichia coli 16S ribosomal RNA during decoding of messenger

RNA. Science 277, 1262-7 (1997).

8. Karimi, R. & Ehrenberg, M. Dissociation rate of cognate peptidyl-tRNA from the A-site of hyper- accurate and error-prone ribosomes. Eur J Biochem 226, 355-60 (1994).

9. Ruusala, T. & Kurland, C. G. Streptomycin preferentially perturbs ribosomal proofreading. Mol Gen Genet 198, 100-4 (1984).

10. Karimi, R. & Ehrenberg, M. Dissociation rates of peptidyl-tRNA from the P-site of E.coli ribosomes. Embo J 15, 1149-54 (1996).

11. Bilgin, N. & Ehrenberg, M. Mutations in 23 S ribosomal RNA perturb transfer RNA selection and can lead to streptomycin dependence. J Mol Biol 235, 813-24 (1994).

12. Kurland, C. G., Hughes, D., Ehrenberg, M. Limitations of translational accuracy. (ed. Neidhardt, F. C., Curtiss, III, R., Ingraham, J.L., Lin, E.C.C., Low, K.B., Magasanik, B., et al) (American Society for Microbiology Press, Washington, DC, 1996).

13. Bilgin, N., Richter, A. A., Ehrenberg, M., Dahlberg, A. E. & Kurland, C. G. Ribosomal RNA and protein mutants resistant to spectinomycin. Embo J 9, 735-9 (1990).

14. Example 1 herein.

15. Otwinowski, Z. & Minor, W. in Methods in Enzymology (eds. Carter, C. W. J. & Sweet, R. M.) 307-25 (Academic Press, New York, 1997).

16. Brünger, A. T. et al. Crystallography & NMR system: A new software suite for macromolecular structure determination. Acta Crystallogr D Biol Crystallogr 54, 905-21 (1998).

17. Mueller, F. & Brimacombe, R. A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. I. Fitting the RNA to a 3D electron microscopic map at 20 A. J Mol Biol 271, 524-44 (1997).

18. Moazed, D. & Noller, H. F. Interaction of antibiotics with functional sites in 16S ribosomal RNA. Nature 327, 389-394 (1987).

19. Spahn, C. M. & Prescott, C. D. Throwing a spanner in the

works: antibiotics and the translation apparatus. J Mol Med 74, 423-39 (1996).

20. Fourmy, D., Recht, M. I., Blanchard, S. C. & Puglisi, J. D. Structure of the A site of Escherichia coli 16S ribosomal RNA complexed with an aminoglycoside antibiotic. Science 274, 1367-71 (1996).

21. Cate, J. H., Yusupov, M. M., Yusupova, G. Z., Earnest, T. N. & Noller, H. F. X-ray crystal structures of 70S ribosome functional complexes [see comments]. Science 285, 2095-104 (1999).

22. Example 3 herein.

23. VanLoock, M. S., Easterwood, T. R. & Harvey, S. C. Major groove binding of the tRNA/mRNA complex to the 16 S ribosomal RNA decoding site. J Mol Biol 285, 2069-78 (1999).

24. Gravel, M., Melancon, P. & Brakier-Gingras, L. Cross-linking of streptomycin to the 16S ribosomal RNA of Escherichia coli. Biochemistry 26, 6227-32 (1987).

25. Montandon, P. E., Wagner, R. & Stutz, E. E. coli ribosomes with a C912 to U base change in the 16S rRNA are streptomycin resistant. Embo J 5, 3705-8 (1986).

26. Pinard, R., Payant, C., Melancon, P. & Brakier-Gingras, L. The 5' proximal helix of 16S rRNA is involved in the binding of streptomycin to the ribosome. Faseb J 7, 173-6 (1993).

27. Melancon, P., Lemieux, C. & Brakier-Gingras, L. A mutation in the 530 loop of Escherichia coli 16S ribosomal RNA causes resistance to streptomycin. Nucleic Acids Res 16, 9631-9 (1988).

28. Funatsu, G. & Wittmann, H. G. Ribosomal proteins. 33. Location of amino-acid replacements in protein S12 isolated from Escherichia coli mutants resistant to streptomycin. J Mol Biol 68, 547-50 (1972).

29. Ito, T. & Wittmann, H. G. Amino acid replacements in proteins S5 and S12 of two Escherichia coli revertants from streptomycin dependence to independence. Mol Gen Genet 127, 19-32 (1973).

30. van Acken, U. Proteinchemical studies on ribosomal proteins

S4 and S12 from ram (ribosomal ambiguity) mutants of Escherichia coli. Mol Gen Genet 140, 61-8 (1975).

31. Timms, A. R. & Bridges, B. A. Double, independent mutational events in the rpsL gene of Escherichia coli: an example of hypermutability? Mol Microbiol 9, 335-42 (1993).

32. Timms, A. R., Steingrimsdottir, H., Lehmann, A. R. & Bridges, B. A. Mutant sequences in the rpsL gene of Escherichia coli B/r: mechanistic implications for spontaneous and ultraviolet light mutagenesis. Mol Gen Genet 232, 89-96 (1992).

33. Tubulekas, I., Buckingham, R. H. & Hughes, D. Mutant ribosomes can generate dominant kirromycin resistance. J Bacteriol 173, 3635-43 (1991).

34. Montandon, P. E., Nicolas, P., Schurmann, P. & Stutz, E. Streptomycin-resistance of Euglena gracilis chloroplasts: identification of a point mutation in the 16S rRNA gene in an invariant position. Nucleic Acids Res 13, 4299-310 (1985).

35. Leclerc, D., Melancon, P. & Brakier-Gingras, L. Mutations in the 915 region of Escherichia coli 16S ribosomal RNA reduce the binding of streptomycin to the ribosome. Nucleic Acids Res 19, 3973-7 (1991).

36. Melancon, P., Boileau, G. & Brakier-Gingras, L. Cross-linking of streptomycin to the 30S subunit of Escherichia coli with phenyldiglyoxal. Biochemistry 23, 6697-703 (1984).

37. Powers, T. & Noller, H. F. A functional pseudoknot in 16S ribosomal RNA. Embo J 10, 2203-14 (1991).

38. Donner, D. & Kurland, C. G. Changes in the primary structure of a mutationally altered ribosomal protein S4 of Escherichia coli. Mol Gen Genet 115, 49-53 (1972).

39. Funatsu, G., Puls, W., Schiltz, E., Reinbolt, J. & Wittmann, H. G. Ribosomal proteins. XXXI. Comparative studies on altered proteins S4 of six Escherichia coli revertants from streptomycin dependence. Mol Gen Genet 115, 131-9 (1972).

40. Clemons, W. M., Jr. et al. Structure of a bacterial 30S ribosomal subunit at 5.5 Å resolution. Nature 400, 833-840 (1999).

41. Bock, A., Petzet, A. & Piepersberg, W. Ribosomal ambiguity (ram) mutations facilitate diyhydrostreptomycin binding to ribosomes. FEBS Lett 104, 317-21 (1979).

42. Brink, M. F., Brink, G., Verbeet, M. P. & de Boer, H. A. Spectinomycin interacts specifically with the residues G1064 and C1192 in 16S rRNA, thereby potentially freezing this molecule into an inactive conformation. Nucleic Acids Res 22, 325-31 (1994).

43. Wittmann-Liebold, B. & Greuer, B. The primary structure of protein S5 from the small subunit of the Escherichia coli ribosome. FEBS Lett 95, 91-8 (1978).

Example 3 - Functional Insights from the Structure of the 30S Ribosomal Subunit.

During translation of the genetic code, the 30S ribosomal subunit provides the framework for base-pairing between the anticodon of tRNA and the codon of mRNA, and discriminates between cognate and non-cognate tRNAs to ensure translational fidelity, in a process termed decoding. During translocation, the ribosome must move by precisely one codon relative to mRNA and the bound tRNAs. Both decoding and translocation involve "switches" in which precise conformational changes occur in the ribosome. The atomic resolution structure of the 30S subunit allows us to interpret the environment of the mRNA and tRNA binding sites in molecular terms. In one well-characterized example of a functional switch involved in accuracy, we are also able to determine the spatial arrangement of its elements, thus elucidating its architecture. The structure also suggests other possible switching elements in the 30S, and sheds light on the kinds of movements that might occur.

As a large, template-directed enzyme with sophisticated proofreading capabilities, the ribosome must contain at least two kinds of functionally important sites. Like all enzymes, the

ribosome must contain ligand-binding active sites that are in direct contact with its substrates, tRNA and mRNA. In addition, the ribosome must also undergo precise structural rearrangements at conformational switches, which may be remote from the ligand-binding active sites. Determination of the structural basis for ribosomal functions will require high-resolution views of both kinds of active sites in their various functionally distinct states.

The ribosome contains three tRNA binding sites, designated A (aminoacyl), P (peptidyl) and E (exit), after their respective tRNA substrates. Each site is bipartite, located partly on the 30S ribosomal subunit and partly on the 50S subunit. The A- and P-site tRNAs bind with their aminoacyl acceptor ends on the 50S subunit, and with their anticodon ends base-paired to adjacent mRNA codons on the 30S subunit. The E-site tRNA is bound in a similar orientation but it is not known whether the E-site tRNA is base-paired to the E-site mRNA codon. The 30S subunit also binds mRNA upstream and downstream of the A, P and E codons. During translation, incoming aminoacyl tRNA is delivered to the A-site as a ternary complex with EF-Tu and GTP. Discrimination of cognate from non-cognate tRNAs occurs in the A-site. It is thought that there is also a second "proofreading" discrimination step in the A-site after GTP hydrolysis by EF-Tu, which is needed to discriminate cognate from near-cognate tRNAs. The 30S P-site has a much higher affinity for tRNA, in order to maintain the reading frame.

There is one well-characterized conformational switch in the 30S subunit, the helix 27 accuracy switch [1]. Genetic and biochemical data support a model in which this switch may be part of a larger-scale conformational change that occurs between initial selection and proofreading of the A-site tRNA, or the switch may play a role in translocation.

Until recently, there has been a large disparity between the high resolution of the genetic and biochemical data that define the RNA components of the active sites of the 30S subunit, and the relatively low-resolution of the three-dimensional structures of ribosomes available. Thus, footprinting and crosslinking data have identified a large number of discrete nucleotides of the 16S RNA implicated in binding P- or A-site tRNAs, while direct visualization of tRNA binding to ribosomes allowed only a ca. 15 Å view of the gross morphological features that correspond to the tRNA binding sites. This disparity in resolution began to narrow rapidly last year, with the publication of medium-resolution crystallographic maps of individual ribosomal subunits [2-4], and of intact 70S ribosomes containing tRNA and mRNA ligands [5]. The 70S structure in particular resulted in the first precise determination of the relative geometry of the three tRNAs, and of their locations relative to landmark features of the 30S subunit (H44 and H27). However, at this intermediate resolution it was not possible to trace the great majority of the 16S RNA chain. With both the high-resolution biochemical data and the 3.0 Å crystal structure of the 30S subunit in hand, it is now possible to identify the detailed structure of 30S active sites. In addition, by superimposing the tRNA and mRNA coordinates from the 7.8 Å 70S structure, it is now possible to infer many of the interactions between 30S active sites and tRNA/mRNA ligands.

Results and Discussion

As described in the accompanying example, we use the standard H1-H45 nomenclature to describe the helical elements in 16S RNA [6].

Very high sequence conservation often indicates functional importance. While the secondary structure of 16S RNA is highly conserved, relatively little of its sequence is universally

conserved [7]. Figure 16 shows the tertiary fold of 16S RNA, with those residues that are over 95% conserved in nonmitochondrial ribosomes highlighted. The residues conserved purely for structural reasons are scattered throughout the subunit. In contrast, there are many more universally conserved residues on the 50S-facing ("front") surface than on the back surface of the 30S. This asymmetry is in accordance with the known role of the front surface in subunit association and in binding of the tRNA and mRNA ligands in the intersubunit space. More specifically, on the front surface there is a high concentration of universally conserved residues in the neck region between the head and the body of the subunit, and along the platform. The surface exposure and high concentration of conservation of these residues suggest that they form a series of active-site ligand-binding surfaces. In fact, the neck region contains a cluster of nucleotides implicated in binding the A- and P-site tRNAs by footprint and crosslinking data [8,9], and similar conclusions about the locations of the A and P-sites were drawn from low-resolution cryoelectron microscopy [10,11] and medium-resolution (7.8 Å) x-ray crystallography on 70S ribosomes [5]. With our complete and high resolution structure of the 30S subunit in hand, it is now possible to identify at the residue level the elements of the 30S subunit that interact with the anticodon stem-loop (ASL) of the A, P and E-site tRNAs and associated mRNA.

Identification of the precise boundaries of the A, P, and E sites in an unbiased fashion in a structure determined in the absence of cognate tRNA ligands would normally be problematic. As it happens, the P-site in the 30S structure is filled with a stem-loop of RNA corresponding to residues 75-95 (in the *E. coli* numbering system, see accompanying example, ref. [6]) from the end of the "spur" (H6) of a neighboring molecule. (Henceforth the term "spur" will refer to the symmetry-related spur docked in the P-site, rather than the spur at the bottom of the same subunit). The spur appears to mimic P-site tRNA by a variety of criteria. The extent of the 30S interaction with the anticodon stem-loop (ASL) is in very good

agreement with that determined by affinity measurements [12] and by hydroxyl radical footprinting [13]. Secondly, the conformation of the spur stem-loop is distorted in order to more closely resemble the canonical tRNA ASL conformation [14,15]: a U-A base pair is broken so that the spur hairpin loop can approximate the conformation of a tRNA ASL, complete with a U-turn and stacked anticodon (Fig. 17a). Another indication that the spur is a mimic of a bound P-site tRNA ASL is that of the twelve hydrogen bonds between 30S and the spur, only one appears to be sequence-specific, in accordance with the lack of sequence conservation in tRNA anticodon stems. Finally, close contacts of the spur with 16S RNA are on the whole consistent with chemical protection data for P-site tRNA [8] and with the 34-C1400 UV-induced crosslink between tRNA and 16S RNA [16] (the analogous residues are stacked in the 30S crystal structure).

Yet another indication that the spur mimics a P-site tRNA ASL is that its "pseudo-anticodon" is base-paired to a triplet of nucleotides, a mimic of mRNA (Fig. 17a). A fourth nucleotide is also visible 5′ to the pseudo-anticodon, in the E site. These pseudo-codon bases are clearly pyrimidines, and appear to be UCU from the base-pairing geometries, which are U-U, U-C, and U-U since the pseudo-anticodon is UUU. The origin of this "pseudo-message" is unclear, but it probably comes from the 3′ end of 16S RNA, which ends with 5′ U1542C1543U1544 3′. The last nucleotide of our 16S model is C1533, so that seven disordered nucleotides would span the 25-Å gap between C1533 and U1541, which is clearly stereochemically feasible. Alternatively, it is possible that the 3′ end of 16S RNA has been cleaved somewhere between C1533 and U1541 prior to or during crystallization. The presence of functional mimics of mRNA and P-site tRNA also explains why these crystals diffract relatively well: the P-site tRNA makes extensive contacts with both the head and the body of the 30S, thereby helping to lock the particle into a single conformation.

To ask how well pseudomessage and spur mimic mRNA and the ASL of tRNA, we have used the 7.8 Å resolution structure of the 70S ribosome with bound mRNA and tRNAs [5]. In that structure, two elements of 16S RNA were identified, H27 and H44. To avoid any possible bias in our interpretation of the spur as a mimic, only H27 and H44 were used to in the alignment to superimpose the 70S structures onto our 30S structure. Despite the relatively low resolution of the 70S structure used, a least-squares superposition of these two elements had a phosphate r.m.s.d. of only 2.3 Å. When the 70S elements are superimposed in this manner onto our 30S structure, we found that indeed, as expected, the P-site tRNA superimposes well onto the 30S spur (Fig. 17b), and the 30S pseudo-message corresponds to the P-site codon. In particular, the orientation of the spur stem-loop is very similar to the 70S P-site ASL, and there are no significant clashes between the 70S A- and E-site tRNAs and our 30S subunit when superimposed in this manner (Fig. 18a). It is clear that the spur and pseudo-message cannot be perfect mimics, however, because the pseudo-anticodon – codon helix consists of three pyrimidine-pyrimidine base pairs, which are about 2 Å narrower than Watson-Crick pairs. Thus it seems likely that the spur and its pseudo-message are good but not perfect mimics of P-site tRNA and P-site codon, respectively, and that the spur mimic model should explain many but perhaps not all features of P-site tRNA binding to the 30S. Moreover, the transformed A- and P-site tRNAs and A-site codon provides a useful landmarks for modeling the extent of the A- and E-sites of the 30S.

Detailed descriptions of the A, P, and E sites

The P-site spur contacts several discrete regions of 16S RNA, most of which have been implicated in P-site binding by biochemical experiments. Two proteins also participate in binding the P-site ASL, a possibly surprising result. Most of the contact surface lies between the minor groove of the spur stem and 16S RNA nucleotides 1338-1341, 1229-1230, and the C-terminal tails of proteins S13 and

S9. There are many hydrogen bonds between the minor groove (i.e. the 2′ OH and base groups) of spur residues C91, C92, and G78 and the minor groove surface of G1338-A1339. Only one of these hydrogen bonds appears to be sequence-specific (G78 N2 - A1339 N3). A contact from Lys 126 of S9 appears to help stabilize this minor-groove to minor-groove packing interaction. Both 1338 and 1339 have previously been implicated in P-site binding [8]. A second area of contact, nearly continuous with the first, is between the 16S 1229-1230 sugar-phosphate backbone and spur residues G77 and G78. This region of contact is extended by the C-terminal tail of S13, which seems to help glue the spur and the 1229-1230 area together. The other areas of contact are much more tenuous. One interaction is stacking of U82 on C1400, which rationalizes the ASL 34-C1400 uv-induced crosslink[16]. The other is a packing interaction between A790 and spur residues 88-89, with a single hydrogen bond present. A790 is a so-called class III site, that is it is protected by either tRNA or 50S subunits. From the spur interaction, it would thus appear that binding of either the 50S subunit or the P-site ASL stabilizes a contact between A790 N6 and the phosphate of 1498, ie a contact between the central and three-prime minor domains. Finally, if the pseudo-codon - pseudo-anticodon helix were a few Å wider, as it would be for a Watson-Crick-paired helix, it would make van der Waals contact with the base of G966. G966 has also previously been implicated as part of the P-site by chemical modification experiments and has also been identified as a one of the few guanines crucial for P-site binding [17].

The P-site codon is threaded through the major groove of the upper portion of helix 44, in a universally conserved region of 16S RNA (Fig. 18b). There appears to be a tight turn between nucleotides -1 and +1, that is, between the last E-site and the first P-site codon nucleotides. This tight turn is stabilized by a hydrogen bond to the N1/N2 groups of the conserved residue G926, a residue previously implicated as crucial for P-site binding [17]. Additional hydrogen bonds are seen between the 2′OH of +1 to the phosphate of

C1498, and between the phosphate of +2 and the 2′ OH of C1498. The phosphate of +2 also stacks on the base of C1498. The phosphate of +3 is within hydrogen-bonding distance of two conserved cytidine N4 groups, from C1402 and C1403. The +3 base also stacks on the sugar of C1400. Finally, it appears likely that there are several magnesium ions that may help stabilize the location of the P-site codon in the major groove of H44.

The E-site discussed below is defined by the environment surrounding the 70S E-site tRNA superimposed onto our 30S structure, as described above. Unlike the A and P-sites, the E-site consists mostly of protein. Proteins S7 and S11 have a small interface that binds the minor groove of the E-site ASL. The highly conserved beta-hairpin of S7 extends this surface nearly to the bottom of the anticodon, and it is possible that the S7 beta-hairpin helps dissociate the E-site codon from the E-site anticodon. The RNA portion of the E-site makes only tenuous interactions with the E-site ASL. 16S nucleotides 1382 and 1383 may interact with residue 34 of the anticodon. The minor-groove surface of the conserved 16S residues 693 and 694 may interact with the minor-groove surface of the 37-39 residues of the E-site ASL.

The A-site is rather wider and shallower than the P or E sites, perhaps in order to allow rotation of the A-site codon-anticodon helix during or after GTP hydrolysis by EF-Tu. The RNA components of the A-site appear to include portions of the 530 loop, H34 in the head, and residues 1492-1493 from the 3′ minor domain, all of which have been previously implicated in A-site binding.

The Helix 27 switch

It is clear that many of the elements that make contact with the various tRNA would have to move during translocation. Indeed, the ribosome is known to undergo extensive conformational changes during the elongation cycle, and these must involve breaking and

making precise contacts. However, the precise switching elements in these conformational changes are not known in general, with the exception of a switch in H27.

H27 is proposed to have two alternative base-pairing schemes during translation (Fig. 19a), one a "*ram*" or permissive form that pairs 885-887 with 910-912, and an alternative "restrictive" form that pairs 888-890 with 910-912 [1]. The *ram* form appears to be the more stable form in the ribosome and it features an S-turn (or loop E motif) in H27 (Fig. 19b). The S-turn in H27 is also seen in the tRNA-bound structure of the 70S [5]. A switch to the restrictive form would involve a sliding of the two strands of H27 relative to each other and the S-turn would be replaced by an internal loop with a different structure for H27. Indeed, analysis of the two forms by cryoelectron microscopy reveal noticeable conformational changes in the ribosome, especially around the A-site [18]. We can now precisely define the structure around H27 and use previous chemical modification data [1] to suggest the kinds of movement involved.

The S-turn in H27 around 888 is right next to 1489 in H44, and H27 packs against the minor groove of H44 just below the decoding site (Fig. 19c). The tip of H27 is close to H11, while 885, which is base-paired with 910 in our conformation, is near both H1 and the 570 loop. Finally, 914 is near both H1 and 526 in the 530 loop. Thus H27 is right in the heart of an area which includes the decoding site and the 530 loop. So it is not surprising that a change in the conformation of H27 would have affect these elements.

The chemical protection data [1]are also shown in Fig. 19c. A number of elements that are more accessible in the "restrictive" state appear to be protected in ours. Thus for example, 524-526 are currently base-paired with 507-505 in the 530 pseudoknot. This suggests that the 530 pseudoknot could be broken in the restrictive state. Similarly, 1053 and 1197 are base-paired in the current structure, but they are part of a distorted region of H34 analogous

to an S-turn, and it is not hard to envisage that an analogous switch might occur in H34 in the alternative state. Thus the data in combination with our structure suggests that H34 in the head and the 530 loop in the shoulder move between the two states, with H34 possibly adopting an alternative form, and the 530 pseudoknot being disrupted. In this context, it is interesting to note that both H34 and the 530 loop have been implicated in tRNA binding (see above).

Other parts of the chemical protection data (Fig. 19c), especially those that are supposed to indicate enhanced accessiblity in the *ram* state, are not so easy to rationalize since they involve protected bases in our structure.

The 30S structure has allowed us to identify details of the tRNA and mRNA binding sites, as well as obtain our first detailed look at the structure around the H27 switch. Clearly, H27 is only one component of major conformational changes that occur during translation. Analysis of the high resolution 30S structure should allow us to identify other potential switching elements, which could then be tested genetically.

Figure legends

Figure 16. Pattern of conservation on the surface of 16S RNA. (a) View of the 50S or "front" side, showing RNA residues conserved at the 95% level highlighted in red. For clarity, proteins have been omitted from view. (b) Same as in (a) except the "back" side is shown.

Figure 17. The spur as a mimic of P-site tRNA. (a) The spur from a neighboring molecule in the crystal, with density showing the presence of a P-site codon (b) Superposition of the spur and the anticodon stem-loop of P-site tRNA from the 70S crystal structure [5]. See text for details.

Figure 18. Model for tRNA and mRNA binding to the 30S. (a) Superposition of the A, P and E site tRNAs from the 70S crystal structure [5] (see text). The view shows that there are no serious clashes with the 30S as a result of this superposition (b) The observed P-site codon (with a single base extension into the E site) and the superimposed A-site codon and tRNAs from the 70S structure. The figure illustrates the path of mRNA around the A and P-sites, as well as the conformation of tRNA relative to the 30S structure.

Figure 19. The helix 27 switch in the 30S. (a) Alternative base-pairing schemes for helix 27 in the switch from the *ram* to the restrictive states [1,19] (b) View of helix 27 and its associated electron density showing that it has an S-turn and is therefore in the *ram* conformation (c) Environment of helix 27 in the 30S structure. Bases showing enhanced reactivity in the *ram* (blue) and restrictive (red) states [1] are shown. Other elements of the 30S are shown in grey. (d) The location of the H27 region shown in (c), relative to the whole 30S subunit

References for Example 3

1. Lodmell, J. S. & Dahlberg, A. E. A conformational switch in Escherichia coli 16S ribosomal RNA during decoding of messenger RNA. *Science* **277**, 1262-7 (1997).
2. Ban, N. *et al.* Placement of protein and RNA structures into a 5 A-resolution map of the 50S ribosomal subunit [see comments]. *Nature* **400**, 841-7 (1999).
3. Clemons, W. M., Jr. *et al.* Structure of a bacterial 30S ribosomal subunit at 5.5 Å resolution. *Nature* **400**, 833-840 (1999).
4. Tocilj, A. *et al.* The small ribosomal subunit from Thermus thermophilus at 4.5 A resolution: pattern fittings and the

identification of a functional site. *Proc Natl Acad Sci U S A* **96**, 14252-7 (1999).

5. Cate, J. H., Yusupov, M. M., Yusupova, G. Z., Earnest, T. N. & Noller, H. F. X-ray crystal structures of 70S ribosome functional complexes [see comments]. *Science* **285**, 2095-104 (1999).
6. Example 1 herein.
7. Gutell, R. R. Collection of small subunit (16S- and 16S-like) ribosomal RNA structures: 1994. *Nucleic Acids Res* **22**, 3502-7 (1994).
8. Moazed, D. & Noller, H. F. Binding of tRNA to the ribosomal A and P-sites protects two distinct sets of nucleotides in 16 S rRNA. *J Mol Biol* **211**, 135-45 (1990).
9. Mueller, F. & Brimacombe, R. A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. I. Fitting the RNA to a 3D electron microscopic map at 20 A. *J Mol Biol* **271**, 524-44 (1997).
10. Agrawal, R. K. *et al.* Direct visualization of A-, P-, and E-site transfer RNAs in the Escherichia coli ribosome. *Science* **271**, 1000-2 (1996).
11. Stark, H. *et al.* Arrangement of tRNAs in pre- and posttranslocational ribosomes revealed by electron cryomicroscopy. *Cell* **88**, 19-28 (1997).
12. Rose, S. J. d., Lowary, P. T. & Uhlenbeck, O. C. Binding of yeast tRNAPhe anticodon arm to Escherichia coli 30 S ribosomes. *J Mol Biol* **167**, 103-17 (1983).
13. Huttenhofer, A. & Noller, H. F. Hydroxyl radical cleavage of tRNA in the ribosomal P-site. *Proc Natl Acad Sci U S A* **89**, 7851-5 (1992).
14. Jack, A., Ladner, J. E. & Klug, A. Crystallographic refinement of yeast phenylalanine transfer RNA at 2-5A resolution. *J Mol Biol* **108**, 619-49 (1976).

15. Rich, A. & RajBhandary, U. L. Transfer RNA: molecular structure, sequence, and properties. *Annu Rev Biochem* **45**, 805-60 (1976).

16. Prince, J. B., Taylor, B. H., Thurlow, D. L., Ofengand, J. & Zimmermann, R. A. Covalent crosslinking of tRNA1Val to 16S RNA at the ribosomal P-site: identification of crosslinked residues. *Proc Natl Acad Sci U S A* **79**, 5450-4 (1982).

17. von Ahsen, U. & Noller, H. F. Identification of bases in 16S rRNA essential for tRNA binding at the 30S ribosomal P-site. *Science* **267**, 234-7 (1995).

18. Gabashvili, I. S. *et al.* Major rearrangements in the 70S ribosomal 3D structure caused by a conformational switch in 16S ribosomal RNA. *Embo J* **18**, 6501-7 (1999).

19. Lodmell, J. S., Gutell, R. R. & Dahlberg, A. E. Genetic and comparative analyses reveal an alternative secondary structure in the region of nt 912 of Escherichia coli 16S rRNA. *Proc Natl Acad Sci U S A* **92**, 10555-9 (1995).

TABLE 1 - NATIVE COORDINATES

```
REMARK coordinates from individual occupancy refinement
REMARK refinement resolution: 99 - 3.0 A
REMARK starting r= 0.2132 free_r= 0.2561
REMARK final    r= 0.2131 free_r= 0.2561
REMARK wa= 3.95584
REMARK target= mlf  steps= 30
REMARK sg= P4(1)2(1)2 a= 401.375 b= 401.375 c= 175.887 alpha= 90 beta= 90 gamma=
90
REMARK parameter file 1  : CNS_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNS_TOPPAR:dna-rna-multi-endo.param
REMARK parameter file 3  : CNS_TOPPAR:ion.param
REMARK molecular structure file: generate.mtf
REMARK input coordinates: b2.pdb
REMARK reflection file= cns_refine.hkl
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 3.0
REMARK initial B-factor correction applied to fobs :
REMARK   B11=   5.012 B22=   5.012 B33= -10.024
REMARK   B12=   0.000 B13=   0.000 B23=   0.000
REMARK B-factor correction applied to coordinate array B:    1.086
REMARK bulk solvent: density level= 0.278539 e/A^3, B-factor= 29.219 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:    283454 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):  45249 (  16.0 % )
REMARK number of reflections rejected:                            0 (   0.0 % )
REMARK total number of reflections used:                     238205 (  84.0 % )
REMARK number of reflections in working set:                 226169 (  79.8 % )
REMARK number of reflections in test set:                     12036 (   4.2 % )
CRYST1  401.375  401.375  175.887  90.00  90.00  90.00 P 41 21 2
REMARK FILENAME="/ramakgrp0/ribo/cnsrefine/6Jul00/chmes_nolow/occmetals2.pdb"
REMARK DATE: 6-Jul-00  19:14:05       created by user: root
REMARK VERSION:1.0
ATOM      1  CB  ALA     1     216.271 118.799  27.606  1.00 31.96      NS14
ATOM      2  C   ALA     1     216.225 116.985  29.343  1.00 72.05      NS14
ATOM      3  O   ALA     1     215.024 117.234  29.489  1.00 72.05      NS14
ATOM      4  N   ALA     1     217.516 116.681  27.282  1.00 72.05      NS14
ATOM      5  CA  ALA     1     217.068 117.682  28.283  1.00 72.05      NS14
ATOM      6  N   ARG     2     216.879 116.084  30.062  1.00111.80      NS14
ATOM      7  CA  ARG     2     216.253 115.345  31.140  1.00111.80      NS14
ATOM      8  CB  ARG     2     216.718 113.893  31.118  1.00 84.22      NS14
ATOM      9  CG  ARG     2     216.365 113.168  29.838  1.00 84.22      NS14
ATOM     10  CD  ARG     2     217.603 112.671  29.109  1.00 84.22      NS14
ATOM     11  NE  ARG     2     218.402 111.762  29.930  1.00 84.22      NS14
ATOM     12  CZ  ARG     2     219.517 111.165  29.520  1.00 84.22      NS14
ATOM     13  NH1 ARG     2     219.977 111.372  28.291  1.00 84.22      NS14
ATOM     14  NH2 ARG     2     220.180 110.366  30.344  1.00 84.22      NS14
ATOM     15  C   ARG     2     216.717 116.019  32.425  1.00111.80      NS14
ATOM     16  O   ARG     2     217.880 116.413  32.531  1.00111.80      NS14
ATOM     17  N   LYS     3     215.811 116.178  33.388  1.00 89.41      NS14
ATOM     18  CA  LYS     3     216.174 116.806  34.651  1.00 89.41      NS14
ATOM     19  CB  LYS     3     215.156 116.455  35.740  1.00121.30      NS14
ATOM     20  CG  LYS     3     213.938 117.363  35.804  1.00121.30      NS14
ATOM     21  CD  LYS     3     213.107 117.035  37.038  1.00121.30      NS14
ATOM     22  CE  LYS     3     212.083 118.123  37.355  1.00121.30      NS14
ATOM     23  NZ  LYS     3     211.291 117.821  38.594  1.00121.30      NS14
ATOM     24  C   LYS     3     217.543 116.275  35.045  1.00 89.41      NS14
ATOM     25  O   LYS     3     218.501 117.033  35.201  1.00 89.41      NS14
ATOM     26  N   ALA     4     217.622 114.955  35.167  1.00 68.74      NS14
ATOM     27  CA  ALA     4     218.849 114.276  35.547  1.00 68.74      NS14
ATOM     28  CB  ALA     4     218.721 112.787  35.248  1.00 63.80      NS14
ATOM     29  C   ALA     4     220.098 114.837  34.871  1.00 68.74      NS14
ATOM     30  O   ALA     4     221.136 115.004  35.518  1.00 68.74      NS14
ATOM     31  N   LEU     5     219.997 115.123  33.575  1.00 98.79      NS14
ATOM     32  CA  LEU     5     221.137 115.640  32.827  1.00 98.79      NS14
ATOM     33  CB  LEU     5     221.074 115.224  31.351  1.00 80.76      NS14
ATOM     34  CG  LEU     5     221.106 113.726  31.010  1.00 80.76      NS14
ATOM     35  CD1 LEU     5     221.482 113.588  29.548  1.00 80.76      NS14
ATOM     36  CD2 LEU     5     222.114 112.974  31.868  1.00 80.76      NS14
ATOM     37  C   LEU     5     221.318 117.142  32.923  1.00 98.79      NS14
ATOM     38  O   LEU     5     221.994 117.744  32.090  1.00 98.79      NS14
ATOM     39  N   ILE     6     220.689 117.757  33.916  1.00 92.20      NS14
ATOM     40  CA  ILE     6     220.888 119.181  34.130  1.00 92.20      NS14
ATOM     41  CB  ILE     6     219.574 119.975  34.169  1.00 53.33      NS14
ATOM     42  CG2 ILE     6     219.883 121.471  34.171  1.00 53.33      NS14
ATOM     43  CG1 ILE     6     218.748 119.648  32.923  1.00 53.33      NS14
ATOM     44  CD1 ILE     6     217.594 120.564  32.707  1.00 53.33      NS14
ATOM     45  C   ILE     6     221.632 119.233  35.464  1.00 92.20      NS14
ATOM     46  O   ILE     6     221.177 119.795  36.467  1.00 92.20      NS14
ATOM     47  N   GLU     7     222.780 118.557  35.425  1.00 93.58      NS14
ATOM     48  CA  GLU     7     223.736 118.429  36.510  1.00 93.58      NS14
ATOM     49  CB  GLU     7     224.250 116.990  36.585  1.00 92.46      NS14
ATOM     50  CG  GLU     7     225.215 116.621  35.452  1.00 92.46      NS14
ATOM     51  CD  GLU     7     225.278 115.118  35.160  1.00 92.46      NS14
ATOM     52  OE1 GLU     7     225.547 114.323  36.092  1.00 92.46      NS14
ATOM     53  OE2 GLU     7     225.066 114.732  33.985  1.00 92.46      NS14
ATOM     54  C   GLU     7     224.849 119.341  36.027  1.00 93.58      NS14
ATOM     55  O   GLU     7     225.992 119.249  36.467  1.00 93.58      NS14
ATOM     56  N   LYS     8     224.493 120.194  35.070  1.00 95.46      NS14
ATOM     57  CA  LYS     8     225.411 121.159  34.492  1.00 95.46      NS14
ATOM     58  CB  LYS     8     224.824 121.732  33.201  1.00 92.92      NS14
ATOM     59  CG  LYS     8     225.681 122.802  32.523  1.00 92.92      NS14
ATOM     60  CD  LYS     8     225.516 124.187  33.152  1.00 92.92      NS14
ATOM     61  CE  LYS     8     226.457 125.196  32.502  1.00 92.92      NS14
ATOM     62  NZ  LYS     8     226.194 126.593  32.942  1.00 92.92      NS14
ATOM     63  C   LYS     8     225.579 122.260  35.523  1.00 95.46      NS14
ATOM     64  O   LYS     8     226.602 122.950  35.571  1.00 95.46      NS14
ATOM     65  N   ALA     9     224.556 122.415  36.352  1.00 95.01      NS14
ATOM     66  CA  ALA     9     224.582 123.416  37.396  1.00 95.01      NS14
ATOM     67  CB  ALA     9     223.168 123.699  37.875  1.00 95.06      NS14
ATOM     68  C   ALA     9     225.451 122.911  38.547  1.00 95.01      NS14
ATOM     69  O   ALA     9     225.891 123.699  39.383  1.00 95.01      NS14
ATOM     70  N   LYS    10     225.701 121.599  38.580  1.00128.35      NS14
ATOM     71  CA  LYS    10     226.526 120.981  39.627  1.00128.35      NS14
```

ATOM	72	CB	LYS	10	226.561	119.461	39.475	1.00 72.22	NS14	ATOM	125	CA	LYS	16	236.427	122.533	34.713	1.00100.69	NS14
ATOM	73	CG	LYS	10	225.391	118.696	40.060	1.00 72.22	NS14	ATOM	126	CB	LYS	16	236.882	123.940	35.125	1.00 98.21	NS14
ATOM	74	CD	LYS	10	225.696	117.195	39.995	1.00 72.22	NS14	ATOM	127	CG	LYS	16	238.167	124.432	34.488	1.00 98.21	NS14
ATOM	75	CE	LYS	10	224.506	116.336	40.393	1.00 72.22	NS14	ATOM	128	CD	LYS	16	237.931	125.758	33.762	1.00 98.21	NS14
ATOM	76	NZ	LYS	10	224.820	114.880	40.268	1.00 72.22	NS14	ATOM	129	CE	LYS	16	237.266	126.792	34.668	1.00 98.21	NS14
ATOM	77	C	LYS	10	227.968	121.476	39.618	1.00128.35	NS14	ATOM	130	NZ	LYS	16	237.044	128.097	33.987	1.00 98.21	NS14
ATOM	78	O	LYS	10	228.879	120.780	40.081	1.00128.35	NS14	ATOM	131	C	LYS	16	236.281	122.475	33.195	1.00100.69	NS14
ATOM	79	N	ARG	11	228.179	122.670	39.085	1.00135.42	NS14	ATOM	132	O	LYS	16	235.840	123.448	32.579	1.00100.69	NS14
ATOM	80	CA	ARG	11	229.509	123.242	39.027	1.00135.42	NS14	ATOM	133	N	VAL	17	236.627	121.348	32.586	1.00121.29	NS14
ATOM	81	CB	ARG	11	230.084	123.403	40.440	1.00 99.37	NS14	ATOM	134	CA	VAL	17	236.480	121.228	31.139	1.00121.29	NS14
ATOM	82	CG	ARG	11	229.765	124.751	41.023	1.00 99.37	NS14	ATOM	135	CB	VAL	17	237.658	120.456	30.504	1.00 79.35	NS14
ATOM	83	CD	ARG	11	230.231	125.813	40.044	1.00 99.37	NS14	ATOM	136	CG1	VAL	17	238.800	121.420	30.232	1.00 79.35	NS14
ATOM	84	NE	ARG	11	229.457	127.044	40.136	1.00 99.37	NS14	ATOM	137	CG2	VAL	17	238.112	119.316	31.425	1.00 79.35	NS14
ATOM	85	CZ	ARG	11	229.551	128.049	39.268	1.00 99.37	NS14	ATOM	138	C	VAL	17	235.167	120.540	30.787	1.00121.29	NS14
ATOM	86	NH1	ARG	11	230.387	127.970	38.237	1.00 99.37	NS14	ATOM	139	O	VAL	17	234.861	120.314	29.613	1.00121.29	NS14
ATOM	87	NH2	ARG	11	228.808	129.137	39.432	1.00 99.37	NS14	ATOM	140	N	ARG	18	234.388	120.228	31.818	1.00 72.30	NS14
ATOM	88	C	ARG	11	230.477	122.456	38.166	1.00135.42	NS14	ATOM	141	CA	ARG	18	233.100	119.572	31.643	1.00 72.30	NS14
ATOM	89	O	ARG	11	230.240	122.246	36.976	1.00135.42	NS14	ATOM	142	CB	ARG	18	232.994	118.379	32.598	1.00 59.54	NS14
ATOM	90	N	THR	12	231.565	122.013	38.784	1.00103.62	NS14	ATOM	143	CG	ARG	18	234.189	117.432	32.594	1.00 59.54	NS14
ATOM	91	CA	THR	12	232.606	121.289	38.079	1.00103.62	NS14	ATOM	144	CD	ARG	18	233.940	116.257	33.542	1.00 59.54	NS14
ATOM	92	CB	THR	12	233.963	121.991	38.281	1.00128.36	NS14	ATOM	145	NE	ARG	18	234.887	115.162	33.337	1.00 59.54	NS14
ATOM	93	OG1	THR	12	233.984	123.216	37.540	1.00128.36	NS14	ATOM	146	CZ	ARG	18	234.910	114.032	34.046	1.00 59.54	NS14
ATOM	94	CG2	THR	12	235.103	121.102	37.843	1.00128.36	NS14	ATOM	147	NH1	ARG	18	234.034	113.833	35.022	1.00 59.54	NS14
ATOM	95	C	THR	12	232.762	119.844	38.511	1.00103.62	NS14	ATOM	148	NH2	ARG	18	235.808	113.094	33.779	1.00 59.54	NS14
ATOM	96	O	THR	12	233.352	119.574	39.550	1.00103.62	NS14	ATOM	149	C	ARG	18	231.931	120.537	31.901	1.00 72.30	NS14
ATOM	97	N	PRO	13	232.225	118.893	37.729	1.00201.09	NS14	ATOM	150	O	ARG	18	231.182	120.355	32.848	1.00 72.30	NS14
ATOM	98	CD	PRO	13	231.230	119.041	36.650	1.00132.01	NS14	ATOM	151	N	ALA	19	231.767	121.553	31.058	1.00123.62	NS14
ATOM	99	CA	PRO	13	232.370	117.486	38.113	1.00201.09	NS14	ATOM	152	CA	ALA	19	230.683	122.528	31.228	1.00123.62	NS14
ATOM	100	CB	PRO	13	231.575	116.751	37.036	1.00132.01	NS14	ATOM	153	CB	ALA	19	231.272	123.848	31.650	1.00 34.95	NS14
ATOM	101	CG	PRO	13	230.476	117.724	36.725	1.00132.01	NS14	ATOM	154	C	ALA	19	229.923	122.695	29.915	1.00123.62	NS14
ATOM	102	C	PRO	13	233.857	117.118	38.100	1.00201.09	NS14	ATOM	155	O	ALA	19	230.558	122.733	28.865	1.00123.62	NS14
ATOM	103	O	PRO	13	234.326	116.412	37.208	1.00201.09	NS14	ATOM	156	N	TYR	20	228.590	122.807	29.932	1.00 92.43	NS14
ATOM	104	N	LYS	14	234.577	117.624	39.099	1.00115.47	NS14	ATOM	157	CA	TYR	20	227.914	122.951	28.640	1.00 92.43	NS14
ATOM	105	CA	LYS	14	236.012	117.418	39.282	1.00115.47	NS14	ATOM	158	CB	TYR	20	227.301	121.622	28.185	1.00 64.67	NS14
ATOM	106	CB	LYS	14	236.442	116.001	38.870	1.00113.29	NS14	ATOM	159	CG	TYR	20	226.867	120.623	29.218	1.00 64.67	NS14
ATOM	107	CG	LYS	14	235.976	114.856	39.772	1.00113.29	NS14	ATOM	160	CD1	TYR	20	227.798	119.956	30.001	1.00 64.67	NS14
ATOM	108	CD	LYS	14	234.589	114.345	39.388	1.00113.29	NS14	ATOM	161	CE1	TYR	20	227.415	118.898	30.815	1.00 64.67	NS14
ATOM	109	CE	LYS	14	234.255	113.020	40.071	1.00113.29	NS14	ATOM	162	CD2	TYR	20	225.532	120.220	29.288	1.00 64.67	NS14
ATOM	110	NZ	LYS	14	235.159	111.914	39.639	1.00113.29	NS14	ATOM	163	CE2	TYR	20	225.135	119.168	30.094	1.00 64.67	NS14
ATOM	111	C	LYS	14	236.874	118.439	38.533	1.00115.47	NS14	ATOM	164	CZ	TYR	20	226.077	118.502	30.853	1.00 64.67	NS14
ATOM	112	O	LYS	14	237.578	119.228	39.158	1.00115.47	NS14	ATOM	165	OH	TYR	20	225.691	117.411	31.613	1.00 64.67	NS14
ATOM	113	N	PHE	15	236.811	118.436	37.204	1.00 59.13	NS14	ATOM	166	C	TYR	20	226.940	124.061	28.228	1.00 92.43	NS14
ATOM	114	CA	PHE	15	237.633	119.342	36.392	1.00 59.13	NS14	ATOM	167	O	TYR	20	226.287	123.945	27.185	1.00 92.43	NS14
ATOM	115	CB	PHE	15	238.528	118.523	35.459	1.00 66.69	NS14	ATOM	168	N	THR	21	226.824	125.126	29.004	1.00103.54	NS14
ATOM	116	CG	PHE	15	238.762	117.110	35.936	1.00 66.69	NS14	ATOM	169	CA	THR	21	225.977	126.240	28.577	1.00103.54	NS14
ATOM	117	CD1	PHE	15	237.757	116.147	35.826	1.00 66.69	NS14	ATOM	170	CB	THR	21	226.562	126.849	27.275	1.00 70.67	NS14
ATOM	118	CD2	PHE	15	239.970	116.747	36.520	1.00 66.69	NS14	ATOM	171	OG1	THR	21	227.984	126.718	27.297	1.00 70.67	NS14
ATOM	119	CE1	PHE	15	237.950	114.845	36.291	1.00 66.69	NS14	ATOM	172	CG2	THR	21	226.216	128.329	27.145	1.00 70.67	NS14
ATOM	120	CE2	PHE	15	240.174	115.445	36.991	1.00 66.69	NS14	ATOM	173	C	THR	21	224.472	126.005	28.334	1.00103.54	NS14
ATOM	121	CZ	PHE	15	239.159	114.496	36.874	1.00 66.69	NS14	ATOM	174	O	THR	21	223.807	126.887	27.793	1.00103.54	NS14
ATOM	122	C	PHE	15	236.757	120.297	35.596	1.00 59.13	NS14	ATOM	175	N	ARG	22	223.934	124.844	28.706	1.00 67.95	NS14
ATOM	123	O	PHE	15	235.673	119.921	35.156	1.00 59.13	NS14	ATOM	176	CA	ARG	22	222.501	124.552	28.519	1.00 67.95	NS14
ATOM	124	N	LYS	16	237.229	121.525	35.399	1.00100.69	NS14	ATOM	177	CB	ARG	22	222.000	123.704	29.678	1.00 65.88	NS14

ATOM	178	CG	ARG	22	222.694	122.384	29.839	1.00	65.88	NS14	ATOM	231	N	ALA	29	221.082	122.277	25.271	1.00	71.56	NS14
ATOM	179	CD	ARG	22	221.904	121.303	29.174	1.00	65.88	NS14	ATOM	232	CA	ALA	29	222.530	122.437	25.295	1.00	71.56	NS14
ATOM	180	NE	ARG	22	222.398	119.987	29.544	1.00	65.88	NS14	ATOM	233	CB	ALA	29	223.153	121.255	26.028	1.00	72.95	NS14
ATOM	181	CZ	ARG	22	221.970	118.862	28.988	1.00	65.88	NS14	ATOM	234	C	ALA	29	223.150	122.559	23.899	1.00	71.56	NS14
ATOM	182	NH1	ARG	22	221.040	118.918	28.037	1.00	65.88	NS14	ATOM	235	O	ALA	29	224.197	123.180	23.729	1.00	71.56	NS14
ATOM	183	NH2	ARG	22	222.466	117.689	29.375	1.00	65.88	NS14	ATOM	236	N	ARG	30	222.476	121.982	22.909	1.00	74.10	NS14
ATOM	184	C	ARG	22	221.591	125.792	28.408	1.00	67.95	NS14	ATOM	237	CA	ARG	30	222.950	121.941	21.530	1.00	74.10	NS14
ATOM	185	O	ARG	22	221.829	126.806	29.069	1.00	67.95	NS14	ATOM	238	CB	ARG	30	221.923	121.269	20.630	1.00	60.45	NS14
ATOM	186	N	CYS	23	220.545	125.705	27.582	1.00	96.13	NS14	ATOM	239	CG	ARG	30	222.558	120.656	19.388	1.00	60.45	NS14
ATOM	187	CA	CYS	23	219.612	126.825	27.412	1.00	96.13	NS14	ATOM	240	CD	ARG	30	223.054	119.264	19.693	1.00	60.45	NS14
ATOM	188	CB	CYS	23	218.486	126.480	26.419	1.00	55.35	NS14	ATOM	241	NE	ARG	30	224.251	118.925	18.947	1.00	60.45	NS14
ATOM	189	SG	CYS	23	217.310	127.848	25.957	1.00	55.35	NS14	ATOM	242	CZ	ARG	30	224.766	117.704	18.913	1.00	60.45	NS14
ATOM	190	C	CYS	23	219.016	127.093	28.774	1.00	96.13	NS14	ATOM	243	NH1	ARG	30	224.174	116.720	19.577	1.00	60.45	NS14
ATOM	191	O	CYS	23	218.627	126.165	29.487	1.00	96.13	NS14	ATOM	244	NH2	ARG	30	225.880	117.476	18.232	1.00	60.45	NS14
ATOM	192	N	VAL	24	218.958	128.363	29.142	1.00	80.57	NS14	ATOM	245	C	ARG	30	223.413	123.185	20.810	1.00	74.10	NS14
ATOM	193	CA	VAL	24	218.407	128.722	30.429	1.00	80.57	NS14	ATOM	246	O	ARG	30	224.383	123.110	20.066	1.00	74.10	NS14
ATOM	194	CB	VAL	24	218.427	130.246	30.637	1.00	64.10	NS14	ATOM	247	N	SER	31	222.725	124.309	20.962	1.00	43.32	NS14
ATOM	195	CG1	VAL	24	217.100	130.720	31.232	1.00	64.10	NS14	ATOM	248	CA	SER	31	223.182	125.509	20.260	1.00	43.32	NS14
ATOM	196	CG2	VAL	24	219.588	130.617	31.557	1.00	64.10	NS14	ATOM	249	CB	SER	31	222.566	125.594	18.862	1.00	126.07	NS14
ATOM	197	C	VAL	24	216.987	128.209	30.588	1.00	80.57	NS14	ATOM	250	OG	SER	31	221.165	125.769	18.935	1.00	126.07	NS14
ATOM	198	O	VAL	24	216.621	127.736	31.661	1.00	80.57	NS14	ATOM	251	C	SER	31	222.850	126.757	21.039	1.00	43.32	NS14
ATOM	199	N	ARG	25	216.186	128.278	29.527	1.00	75.21	NS14	ATOM	252	O	SER	31	222.193	127.672	20.533	1.00	43.32	NS14
ATOM	200	CA	ARG	25	214.810	127.825	29.650	1.00	75.21	NS14	ATOM	253	N	VAL	32	223.334	126.779	22.276	1.00	77.19	NS14
ATOM	201	CB	ARG	25	213.849	128.938	29.240	1.00	67.26	NS14	ATOM	254	CA	VAL	32	223.124	127.875	23.214	1.00	77.19	NS14
ATOM	202	CG	ARG	25	213.528	129.056	27.786	1.00	67.26	NS14	ATOM	255	CB	VAL	32	223.384	127.409	24.647	1.00	73.56	NS14
ATOM	203	CD	ARG	25	212.578	130.220	27.635	1.00	67.26	NS14	ATOM	256	CG1	VAL	32	222.268	126.510	25.118	1.00	73.56	NS14
ATOM	204	NE	ARG	25	211.948	130.295	26.324	1.00	67.26	NS14	ATOM	257	CG2	VAL	32	224.706	126.649	24.693	1.00	73.56	NS14
ATOM	205	CZ	ARG	25	211.011	131.184	26.007	1.00	67.26	NS14	ATOM	258	C	VAL	32	224.035	129.059	22.974	1.00	77.19	NS14
ATOM	206	NH1	ARG	25	210.602	132.069	26.911	1.00	67.26	NS14	ATOM	259	O	VAL	32	225.253	128.909	22.957	1.00	77.19	NS14
ATOM	207	NH2	ARG	25	210.485	131.193	24.790	1.00	67.26	NS14	ATOM	260	N	TYR	33	223.453	130.236	22.791	1.00	71.43	NS14
ATOM	208	C	ARG	25	214.402	126.524	28.978	1.00	75.21	NS14	ATOM	261	CA	TYR	33	224.263	131.428	22.604	1.00	71.43	NS14
ATOM	209	O	ARG	25	213.399	125.935	29.373	1.00	75.21	NS14	ATOM	262	CB	TYR	33	223.446	132.538	21.951	1.00	76.08	NS14
ATOM	210	N	CYS	26	215.147	126.067	27.973	1.00	68.35	NS14	ATOM	263	CG	TYR	33	223.362	132.440	20.444	1.00	76.08	NS14
ATOM	211	CA	CYS	26	214.794	124.799	27.325	1.00	68.35	NS14	ATOM	264	CD1	TYR	33	222.749	131.356	19.824	1.00	76.08	NS14
ATOM	212	CB	CYS	26	214.658	124.959	25.801	1.00	19.43	NS14	ATOM	265	CE1	TYR	33	222.633	131.289	18.432	1.00	76.08	NS14
ATOM	213	SG	CYS	26	215.950	125.888	25.005	1.00	19.43	NS14	ATOM	266	CD2	TYR	33	223.867	133.453	19.641	1.00	76.08	NS14
ATOM	214	C	CYS	26	215.799	123.704	27.645	1.00	68.35	NS14	ATOM	267	CE2	TYR	33	223.761	133.401	18.254	1.00	76.08	NS14
ATOM	215	O	CYS	26	215.504	122.519	27.490	1.00	68.35	NS14	ATOM	268	CZ	TYR	33	223.140	132.320	17.651	1.00	76.08	NS14
ATOM	216	N	GLY	27	216.977	124.111	28.115	1.00	77.36	NS14	ATOM	269	OH	TYR	33	223.007	132.297	16.274	1.00	76.08	NS14
ATOM	217	CA	GLY	27	218.020	123.154	28.450	1.00	77.36	NS14	ATOM	270	C	TYR	33	224.713	131.834	24.005	1.00	71.43	NS14
ATOM	218	C	GLY	27	218.723	122.694	27.189	1.00	77.36	NS14	ATOM	271	O	TYR	33	224.107	131.407	24.985	1.00	71.43	NS14
ATOM	219	O	GLY	27	219.663	121.897	27.226	1.00	77.36	NS14	ATOM	272	N	ARG	34	225.778	132.628	24.111	1.00	73.36	NS14
ATOM	220	N	ARG	28	218.245	123.214	26.065	1.00	145.74	NS14	ATOM	273	CA	ARG	34	226.290	133.054	25.418	1.00	73.36	NS14
ATOM	221	CA	ARG	28	218.792	122.884	24.764	1.00	145.74	NS14	ATOM	274	CB	ARG	34	227.788	133.346	25.342	1.00	94.58	NS14
ATOM	222	CB	ARG	28	218.084	123.692	23.678	1.00	78.05	NS14	ATOM	275	CG	ARG	34	228.692	132.151	25.173	1.00	94.58	NS14
ATOM	223	CG	ARG	28	218.449	123.258	22.272	1.00	78.05	NS14	ATOM	276	CD	ARG	34	230.131	132.615	25.312	1.00	94.58	NS14
ATOM	224	CD	ARG	28	217.774	121.946	21.907	1.00	78.05	NS14	ATOM	277	NE	ARG	34	231.106	131.545	25.126	1.00	94.58	NS14
ATOM	225	NE	ARG	28	218.424	121.285	20.780	1.00	78.05	NS14	ATOM	278	CZ	ARG	34	232.422	131.726	25.192	1.00	94.58	NS14
ATOM	226	CZ	ARG	28	218.632	121.843	19.590	1.00	78.05	NS14	ATOM	279	NH1	ARG	34	232.909	132.934	25.441	1.00	94.58	NS14
ATOM	227	NH1	ARG	28	218.240	123.087	19.353	1.00	78.05	NS14	ATOM	280	NH2	ARG	34	233.252	130.705	25.008	1.00	94.58	NS14
ATOM	228	NH2	ARG	28	219.239	121.151	18.633	1.00	78.05	NS14	ATOM	281	C	ARG	34	225.601	134.306	25.945	1.00	73.36	NS14
ATOM	229	C	ARG	28	220.284	123.184	24.722	1.00	145.74	NS14	ATOM	282	O	ARG	34	224.974	134.302	27.006	1.00	73.36	NS14
ATOM	230	O	ARG	28	220.702	124.215	24.200	1.00	145.74	NS14	ATOM	283	N	PHE	35	225.756	135.382	25.187	1.00	55.19	NS14

ATOM	284	CA	PHE	35	225.199	136.683	25.505	1.00	55.19	NS14	ATOM	337	CG2	ILE	41	213.030	127.357	19.666	1.00	33.48	NS14
ATOM	285	CB	PHE	35	225.262	137.551	24.257	1.00	43.55	NS14	ATOM	338	CG1	ILE	41	215.044	126.183	18.738	1.00	33.48	NS14
ATOM	286	CG	PHE	35	224.726	138.935	24.436	1.00	43.55	NS14	ATOM	339	CD1	ILE	41	214.542	124.788	19.093	1.00	33.48	NS14
ATOM	287	CD1	PHE	35	223.357	139.170	24.494	1.00	43.55	NS14	ATOM	340	C	ILE	41	214.555	129.644	20.318	1.00	44.39	NS14
ATOM	288	CD2	PHE	35	225.591	140.022	24.454	1.00	43.55	NS14	ATOM	341	O	ILE	41	213.905	130.611	19.894	1.00	44.39	NS14
ATOM	289	CE1	PHE	35	222.857	140.473	24.555	1.00	43.55	NS14	ATOM	342	N	CYS	42	214.750	129.389	21.611	1.00	37.52	NS14
ATOM	290	CE2	PHE	35	225.100	141.333	24.515	1.00	43.55	NS14	ATOM	343	CA	CYS	42	214.256	130.235	22.682	1.00	37.52	NS14
ATOM	291	CZ	PHE	35	223.729	141.555	24.563	1.00	43.55	NS14	ATOM	344	CB	CYS	42	214.906	129.788	23.989	1.00	32.58	NS14
ATOM	292	C	PHE	35	223.781	136.638	26.036	1.00	55.19	NS14	ATOM	345	SG	CYS	42	214.699	128.001	24.345	1.00	32.58	NS14
ATOM	293	O	PHE	35	223.353	137.572	26.703	1.00	55.19	NS14	ATOM	346	C	CYS	42	214.602	131.686	22.338	1.00	37.52	NS14
ATOM	294	N	PHE	36	223.058	135.560	25.750	1.00	67.52	NS14	ATOM	347	O	CYS	42	213.750	132.572	22.407	1.00	37.52	NS14
ATOM	295	CA	PHE	36	221.678	135.431	26.204	1.00	67.52	NS14	ATOM	348	N	LEU	43	215.853	131.926	21.954	1.00	48.11	NS14
ATOM	296	CB	PHE	36	220.745	135.250	25.010	1.00	59.39	NS14	ATOM	349	CA	LEU	43	216.280	133.268	21.546	1.00	48.11	NS14
ATOM	297	CG	PHE	36	220.615	136.466	24.152	1.00	59.39	NS14	ATOM	350	CB	LEU	43	217.728	133.226	20.997	1.00	35.50	NS14
ATOM	298	CD1	PHE	36	220.878	136.404	22.791	1.00	59.39	NS14	ATOM	351	CG	LEU	43	218.238	134.086	19.814	1.00	35.50	NS14
ATOM	299	CD2	PHE	36	220.186	137.670	24.689	1.00	59.39	NS14	ATOM	352	CD1	LEU	43	217.600	135.472	19.766	1.00	35.50	NS14
ATOM	300	CE1	PHE	36	220.709	137.524	21.976	1.00	59.39	NS14	ATOM	353	CD2	LEU	43	219.761	134.218	19.931	1.00	35.50	NS14
ATOM	301	CE2	PHE	36	220.016	138.795	23.878	1.00	59.39	NS14	ATOM	354	C	LEU	43	215.317	133.823	20.481	1.00	48.11	NS14
ATOM	302	CZ	PHE	36	220.277	138.721	22.520	1.00	59.39	NS14	ATOM	355	O	LEU	43	214.859	134.964	20.575	1.00	48.11	NS14
ATOM	303	C	PHE	36	221.422	134.293	27.180	1.00	67.52	NS14	ATOM	356	N	ARG	44	215.010	133.004	19.477	1.00	69.32	NS14
ATOM	304	O	PHE	36	220.477	134.353	27.963	1.00	67.52	NS14	ATOM	357	CA	ARG	44	214.115	133.405	18.393	1.00	69.32	NS14
ATOM	305	N	GLY	37	222.250	133.257	27.136	1.00	67.19	NS14	ATOM	358	CB	ARG	44	214.116	132.339	17.295	1.00	66.86	NS14
ATOM	306	CA	GLY	37	222.044	132.112	28.010	1.00	67.19	NS14	ATOM	359	CG	ARG	44	213.159	132.600	16.136	1.00	66.86	NS14
ATOM	307	C	GLY	37	220.963	131.228	27.414	1.00	67.19	NS14	ATOM	360	CD	ARG	44	212.963	131.319	15.325	1.00	66.86	NS14
ATOM	308	O	GLY	37	220.588	130.195	27.969	1.00	67.19	NS14	ATOM	361	NE	ARG	44	211.834	131.388	14.401	1.00	66.86	NS14
ATOM	309	N	LEU	38	220.475	131.647	26.252	1.00	71.50	NS14	ATOM	362	CZ	ARG	44	211.749	132.254	13.402	1.00	66.86	NS14
ATOM	310	CA	LEU	38	219.424	130.951	25.531	1.00	71.50	NS14	ATOM	363	NH1	ARG	44	212.729	133.121	13.200	1.00	66.86	NS14
ATOM	311	CB	LEU	38	218.384	131.971	25.076	1.00	50.47	NS14	ATOM	364	NH2	ARG	44	210.687	132.250	12.610	1.00	66.86	NS14
ATOM	312	CG	LEU	38	217.499	132.577	26.165	1.00	50.47	NS14	ATOM	365	C	ARG	44	212.687	133.640	18.871	1.00	69.32	NS14
ATOM	313	CD1	LEU	38	216.757	133.803	25.615	1.00	50.47	NS14	ATOM	366	O	ARG	44	212.026	134.571	18.415	1.00	69.32	NS14
ATOM	314	CD2	LEU	38	216.528	131.509	26.671	1.00	50.47	NS14	ATOM	367	N	GLU	45	212.216	132.793	19.785	1.00	77.47	NS14
ATOM	315	C	LEU	38	219.927	130.170	24.317	1.00	71.50	NS14	ATOM	368	CA	GLU	45	210.857	132.917	20.310	1.00	77.47	NS14
ATOM	316	O	LEU	38	221.024	130.414	23.822	1.00	71.50	NS14	ATOM	369	CB	GLU	45	210.511	131.722	21.201	1.00	78.43	NS14
ATOM	317	N	CYS	39	219.102	129.234	23.846	1.00	69.32	NS14	ATOM	370	CG	GLU	45	210.735	130.379	20.521	1.00	78.43	NS14
ATOM	318	CA	CYS	39	219.400	128.403	22.675	1.00	69.32	NS14	ATOM	371	CD	GLU	45	210.219	129.207	21.333	1.00	78.43	NS14
ATOM	319	CB	CYS	39	218.740	127.039	22.817	1.00	48.84	NS14	ATOM	372	OE1	GLU	45	210.466	129.164	22.557	1.00	78.43	NS14
ATOM	320	SG	CYS	39	216.937	127.166	22.859	1.00	48.84	NS14	ATOM	373	OE2	GLU	45	209.575	128.318	20.744	1.00	78.43	NS14
ATOM	321	C	CYS	39	218.808	129.106	21.457	1.00	69.32	NS14	ATOM	374	C	GLU	45	210.696	134.204	21.096	1.00	77.47	NS14
ATOM	322	O	CYS	39	217.861	129.884	21.584	1.00	69.32	NS14	ATOM	375	O	GLU	45	209.707	134.917	20.929	1.00	77.47	NS14
ATOM	323	N	ARG	40	219.349	128.811	20.279	1.00	71.97	NS14	ATOM	376	N	LEU	46	211.679	134.505	21.941	1.00	59.03	NS14
ATOM	324	CA	ARG	40	218.894	129.432	19.036	1.00	71.97	NS14	ATOM	377	CA	LEU	46	211.649	135.718	22.754	1.00	59.03	NS14
ATOM	325	CB	ARG	40	219.454	128.672	17.820	1.00	75.16	NS14	ATOM	378	CB	LEU	46	212.651	135.605	23.902	1.00	59.55	NS14
ATOM	326	CG	ARG	40	218.737	127.361	17.470	1.00	75.16	NS14	ATOM	379	CG	LEU	46	212.296	134.459	24.857	1.00	59.55	NS14
ATOM	327	CD	ARG	40	218.420	127.297	15.972	1.00	75.16	NS14	ATOM	380	CD1	LEU	46	213.297	134.403	25.994	1.00	59.55	NS14
ATOM	328	NE	ARG	40	217.626	126.129	15.606	1.00	75.16	NS14	ATOM	381	CD2	LEU	46	210.885	134.653	25.397	1.00	59.55	NS14
ATOM	329	CZ	ARG	40	218.119	124.904	15.473	1.00	75.16	NS14	ATOM	382	C	LEU	46	211.908	136.986	21.952	1.00	59.03	NS14
ATOM	330	NH1	ARG	40	219.410	124.685	15.673	1.00	75.16	NS14	ATOM	383	O	LEU	46	211.390	138.047	22.274	1.00	59.03	NS14
ATOM	331	NH2	ARG	40	217.320	123.898	15.142	1.00	75.16	NS14	ATOM	384	N	ALA	47	212.703	136.886	20.900	1.00	71.05	NS14
ATOM	332	C	ARG	40	217.372	129.559	18.906	1.00	71.97	NS14	ATOM	385	CA	ALA	47	212.971	138.062	20.091	1.00	71.05	NS14
ATOM	333	O	ARG	40	216.875	130.531	18.329	1.00	71.97	NS14	ATOM	386	CB	ALA	47	214.026	137.748	19.043	1.00	89.74	NS14
ATOM	334	N	ILE	41	216.636	128.587	19.443	1.00	44.39	NS14	ATOM	387	C	ALA	47	211.674	138.500	19.421	1.00	71.05	NS14
ATOM	335	CA	ILE	41	215.174	128.618	19.364	1.00	44.39	NS14	ATOM	388	O	ALA	47	211.494	139.677	19.111	1.00	71.05	NS14
ATOM	336	CB	ILE	41	214.558	127.252	19.711	1.00	33.48	NS14	ATOM	389	N	HIS	48	210.767	137.547	19.214	1.00	94.99	NS14

ATOM	390	CA	HIS	48	209.490	137.831	18.565	1.00	94.99	NS14	ATOM	443	CG1	VAL	55	217.043	140.850	19.594	1.00	86.07	NS14
ATOM	391	CB	HIS	48	208.889	136.552	17.961	1.00	68.12	NS14	ATOM	444	CG2	VAL	55	217.920	141.939	21.620	1.00	86.07	NS14
ATOM	392	CG	HIS	48	209.532	136.129	16.676	1.00	68.12	NS14	ATOM	445	C	VAL	55	215.746	143.262	18.741	1.00	81.73	NS14
ATOM	393	CD2	HIS	48	209.819	134.902	16.184	1.00	68.12	NS14	ATOM	446	O	VAL	55	214.773	142.516	18.812	1.00	81.73	NS14
ATOM	394	ND1	HIS	48	209.948	137.033	15.719	1.00	68.12	NS14	ATOM	447	N	ARG	56	215.963	144.062	17.701	1.00	77.41	NS14
ATOM	395	CE1	HIS	48	210.466	136.380	14.696	1.00	68.12	NS14	ATOM	448	CA	ARG	56	215.069	144.078	16.548	1.00	77.41	NS14
ATOM	396	NE2	HIS	48	210.400	135.086	14.953	1.00	68.12	NS14	ATOM	449	CB	ARG	56	215.177	145.389	15.776	1.00	129.14	NS14
ATOM	397	C	HIS	48	208.468	138.478	19.481	1.00	94.99	NS14	ATOM	450	CG	ARG	56	214.394	146.547	16.311	1.00	129.14	NS14
ATOM	398	O	HIS	48	207.506	139.089	19.014	1.00	94.99	NS14	ATOM	451	CD	ARG	56	214.302	147.596	15.223	1.00	129.14	NS14
ATOM	399	N	LYS	49	208.673	138.347	20.783	1.00	87.07	NS14	ATOM	452	NE	ARG	56	213.613	148.803	15.658	1.00	129.14	NS14
ATOM	400	CA	LYS	49	207.753	138.930	21.744	1.00	87.07	NS14	ATOM	453	CZ	ARG	56	213.236	149.782	14.840	1.00	129.14	NS14
ATOM	401	CB	LYS	49	207.690	138.065	22.988	1.00	51.11	NS14	ATOM	454	NH1	ARG	56	213.479	149.695	13.538	1.00	129.14	NS14
ATOM	402	CG	LYS	49	207.237	136.660	22.721	1.00	51.11	NS14	ATOM	455	NH2	ARG	56	212.612	150.848	15.325	1.00	129.14	NS14
ATOM	403	CD	LYS	49	207.115	135.903	24.022	1.00	51.11	NS14	ATOM	456	C	ARG	56	215.450	142.969	15.587	1.00	77.41	NS14
ATOM	404	CE	LYS	49	206.532	134.520	23.804	1.00	51.11	NS14	ATOM	457	O	ARG	56	216.324	142.141	15.866	1.00	77.41	NS14
ATOM	405	NZ	LYS	49	206.279	133.816	25.095	1.00	51.11	NS14	ATOM	458	N	LYS	57	214.786	142.970	14.439	1.00	65.27	NS14
ATOM	406	C	LYS	49	208.169	140.338	22.135	1.00	87.07	NS14	ATOM	459	CA	LYS	57	215.070	142.003	13.400	1.00	65.27	NS14
ATOM	407	O	LYS	49	207.323	141.191	22.397	1.00	87.07	NS14	ATOM	460	CB	LYS	57	213.796	141.592	12.660	1.00	81.63	NS14
ATOM	408	N	GLY	50	209.477	140.571	22.174	1.00	85.74	NS14	ATOM	461	CG	LYS	57	212.785	140.802	13.484	1.00	81.63	NS14
ATOM	409	CA	GLY	50	209.992	141.877	22.539	1.00	85.74	NS14	ATOM	462	CD	LYS	57	212.240	139.620	12.687	1.00	81.63	NS14
ATOM	410	C	GLY	50	210.602	141.851	23.925	1.00	85.74	NS14	ATOM	463	CE	LYS	57	211.738	140.055	11.326	1.00	81.63	NS14
ATOM	411	O	GLY	50	210.877	142.891	24.519	1.00	85.74	NS14	ATOM	464	NZ	LYS	57	211.589	138.891	10.426	1.00	81.63	NS14
ATOM	412	N	GLN	51	210.811	140.648	24.441	1.00	71.25	NS14	ATOM	465	C	LYS	57	216.007	142.710	12.435	1.00	65.27	NS14
ATOM	413	CA	GLN	51	211.391	140.486	25.759	1.00	71.25	NS14	ATOM	466	O	LYS	57	215.726	143.826	11.987	1.00	65.27	NS14
ATOM	414	CB	GLN	51	210.860	139.210	26.402	1.00	52.76	NS14	ATOM	467	N	ALA	58	217.122	142.061	12.126	1.00	70.13	NS14
ATOM	415	CG	GLN	51	209.358	139.143	26.317	1.00	52.76	NS14	ATOM	468	CA	ALA	58	218.102	142.620	11.209	1.00	70.13	NS14
ATOM	416	CD	GLN	51	208.756	138.066	27.187	1.00	52.76	NS14	ATOM	469	CB	ALA	58	219.389	141.843	11.307	1.00	86.70	NS14
ATOM	417	OE1	GLN	51	209.429	137.105	27.570	1.00	52.76	NS14	ATOM	470	C	ALA	58	217.605	142.613	9.770	1.00	70.13	NS14
ATOM	418	NE2	GLN	51	207.468	138.209	27.492	1.00	52.76	NS14	ATOM	471	O	ALA	58	216.698	141.872	9.410	1.00	70.13	NS14
ATOM	419	C	GLN	51	212.914	140.489	25.693	1.00	71.25	NS14	ATOM	472	N	SER	59	218.221	143.443	8.947	1.00	61.13	NS14
ATOM	420	O	GLN	51	213.596	140.261	26.694	1.00	71.25	NS14	ATOM	473	CA	SER	59	217.857	143.553	7.545	1.00	61.13	NS14
ATOM	421	N	LEU	52	213.451	140.730	24.503	1.00	69.61	NS14	ATOM	474	CB	SER	59	216.414	144.027	7.423	1.00	57.92	NS14
ATOM	422	CA	LEU	52	214.895	140.827	24.352	1.00	69.61	NS14	ATOM	475	OG	SER	59	216.216	144.705	6.197	1.00	57.92	NS14
ATOM	423	CB	LEU	52	215.417	139.934	23.227	1.00	83.01	NS14	ATOM	476	C	SER	59	218.784	144.576	6.908	1.00	61.13	NS14
ATOM	424	CG	LEU	52	215.369	138.426	23.492	1.00	83.01	NS14	ATOM	477	O	SER	59	218.994	145.644	7.478	1.00	61.13	NS14
ATOM	425	CD1	LEU	52	216.329	137.741	22.545	1.00	83.01	NS14	ATOM	478	N	TRP	60	219.344	144.262	5.742	1.00	99.05	NS14
ATOM	426	CD2	LEU	52	215.757	138.111	24.921	1.00	83.01	NS14	ATOM	479	CA	TRP	60	220.249	145.194	5.073	1.00	99.05	NS14
ATOM	427	C	LEU	52	215.122	142.295	24.030	1.00	69.61	NS14	ATOM	480	CB	TRP	60	221.450	145.487	5.977	1.00	55.66	NS14
ATOM	428	O	LEU	52	215.069	142.715	22.868	1.00	69.61	NS14	ATOM	481	CG	TRP	60	222.414	144.341	6.104	1.00	55.66	NS14
ATOM	429	N	PRO	53	215.355	143.101	25.081	1.00	72.52	NS14	ATOM	482	CD2	TRP	60	222.268	143.164	6.914	1.00	55.66	NS14
ATOM	430	CD	PRO	53	215.600	142.583	26.440	1.00	71.65	NS14	ATOM	483	CE2	TRP	60	223.402	142.351	6.681	1.00	55.66	NS14
ATOM	431	CA	PRO	53	215.591	144.548	25.023	1.00	72.52	NS14	ATOM	484	CE3	TRP	60	221.293	142.715	7.811	1.00	55.66	NS14
ATOM	432	CB	PRO	53	216.136	144.870	26.416	1.00	71.65	NS14	ATOM	485	CD1	TRP	60	223.596	144.195	5.436	1.00	55.66	NS14
ATOM	433	CG	PRO	53	216.622	143.532	26.947	1.00	71.65	NS14	ATOM	486	NE1	TRP	60	224.194	143.006	5.775	1.00	55.66	NS14
ATOM	434	C	PRO	53	216.509	145.018	23.910	1.00	72.52	NS14	ATOM	487	CZ2	TRP	60	223.587	141.114	7.312	1.00	55.66	NS14
ATOM	435	O	PRO	53	217.637	144.552	23.781	1.00	72.52	NS14	ATOM	488	CZ3	TRP	60	221.479	141.478	8.440	1.00	55.66	NS14
ATOM	436	N	GLY	54	216.008	145.951	23.107	1.00	115.68	NS14	ATOM	489	CH2	TRP	60	222.618	140.697	8.185	1.00	55.66	NS14
ATOM	437	CA	GLY	54	216.792	146.483	22.010	1.00	115.68	NS14	ATOM	490	C	TRP	60	220.730	144.644	3.733	1.00	99.05	NS14
ATOM	438	C	GLY	54	217.262	145.424	21.032	1.00	115.68	NS14	ATOM	491	O	TRP	60	220.388	145.170	2.672	1.00	99.05	NS14
ATOM	439	O	GLY	54	218.364	145.526	20.487	1.00	115.68	NS14	ATOM	492	ZN+2	ZN2	106	-1.704	0.513	0.713	1.00	71.67	NS14
ATOM	440	N	VAL	55	216.435	144.404	20.811	1.00	81.73	NS14	ATOM	493	C	GLY	2	149.261	96.032	32.557	1.00	68.67	DS4
ATOM	441	CA	VAL	55	216.766	143.327	19.879	1.00	81.73	NS14	ATOM	494	O	GLY	2	150.080	96.206	31.660	1.00	68.67	DS4
ATOM	442	CB	VAL	55	216.808	141.955	20.595	1.00	86.07	NS14	ATOM	495	N	GLY	2	148.771	93.688	31.866	1.00	68.67	DS4

ATOM	496	CA	GLY	2	148.920	94.628	33.014	1.00	68.67	DS4
ATOM	497	N	ARG	3	148.644	97.036	33.169	1.00	83.85	DS4
ATOM	498	CA	ARG	3	148.898	98.416	32.786	1.00	83.85	DS4
ATOM	499	CB	ARG	3	147.675	99.277	33.095	1.00	194.67	DS4
ATOM	500	CG	ARG	3	146.514	98.961	32.176	1.00	194.67	DS4
ATOM	501	CD	ARG	3	146.971	99.053	30.726	1.00	194.67	DS4
ATOM	502	NE	ARG	3	146.102	98.327	29.805	1.00	194.67	DS4
ATOM	503	CZ	ARG	3	144.866	98.693	29.477	1.00	194.67	DS4
ATOM	504	NH1	ARG	3	144.325	99.791	29.990	1.00	194.67	DS4
ATOM	505	NH2	ARG	3	144.174	97.952	28.627	1.00	194.67	DS4
ATOM	506	C	ARG	3	150.133	98.994	33.445	1.00	83.85	DS4
ATOM	507	O	ARG	3	150.131	99.324	34.626	1.00	83.85	DS4
ATOM	508	N	TYR	4	151.192	99.115	32.658	1.00	141.54	DS4
ATOM	509	CA	TYR	4	152.461	99.644	33.128	1.00	141.54	DS4
ATOM	510	CB	TYR	4	152.445	101.168	33.140	1.00	52.61	DS4
ATOM	511	CG	TYR	4	153.797	101.725	33.499	1.00	52.61	DS4
ATOM	512	CD1	TYR	4	154.955	101.104	33.035	1.00	52.61	DS4
ATOM	513	CE1	TYR	4	156.207	101.581	33.363	1.00	52.61	DS4
ATOM	514	CD2	TYR	4	153.931	102.852	34.306	1.00	52.61	DS4
ATOM	515	CE2	TYR	4	155.191	103.344	34.640	1.00	52.61	DS4
ATOM	516	CZ	TYR	4	156.321	102.696	34.162	1.00	52.61	DS4
ATOM	517	OH	TYR	4	157.581	103.143	34.468	1.00	52.61	DS4
ATOM	518	C	TYR	4	152.922	99.162	34.496	1.00	141.54	DS4
ATOM	519	O	TYR	4	153.578	98.126	34.610	1.00	141.54	DS4
ATOM	520	N	ILE	5	152.593	99.933	35.529	1.00	110.25	DS4
ATOM	521	CA	ILE	5	152.995	99.607	36.893	1.00	110.25	DS4
ATOM	522	CB	ILE	5	152.528	98.198	37.305	1.00	71.79	DS4
ATOM	523	CG2	ILE	5	153.043	97.866	38.692	1.00	71.79	DS4
ATOM	524	CG1	ILE	5	151.002	98.134	37.283	1.00	71.79	DS4
ATOM	525	CD1	ILE	5	150.447	96.751	37.496	1.00	71.79	DS4
ATOM	526	C	ILE	5	154.514	99.673	36.989	1.00	110.25	DS4
ATOM	527	O	ILE	5	155.214	98.711	36.667	1.00	110.25	DS4
ATOM	528	N	GLY	6	155.006	100.828	37.425	1.00	41.60	DS4
ATOM	529	CA	GLY	6	156.435	101.065	37.576	1.00	41.60	DS4
ATOM	530	C	GLY	6	156.656	102.533	37.886	1.00	41.60	DS4
ATOM	531	O	GLY	6	155.689	103.296	37.862	1.00	41.60	DS4
ATOM	532	N	PRO	7	157.885	102.974	38.185	1.00	59.54	DS4
ATOM	533	CD	PRO	7	159.203	102.339	38.056	1.00	86.91	DS4
ATOM	534	CA	PRO	7	158.020	104.405	38.472	1.00	59.54	DS4
ATOM	535	CB	PRO	7	159.521	104.662	38.297	1.00	86.91	DS4
ATOM	536	CG	PRO	7	160.014	103.466	37.508	1.00	86.91	DS4
ATOM	537	C	PRO	7	157.144	105.246	37.540	1.00	59.54	DS4
ATOM	538	O	PRO	7	157.244	105.154	36.318	1.00	59.54	DS4
ATOM	539	N	VAL	8	156.265	106.050	38.125	1.00	39.52	DS4
ATOM	540	CA	VAL	8	155.358	106.866	37.339	1.00	39.52	DS4
ATOM	541	CB	VAL	8	153.926	106.620	37.807	1.00	31.95	DS4
ATOM	542	CG1	VAL	8	152.969	107.568	37.159	1.00	31.95	DS4
ATOM	543	CG2	VAL	8	153.548	105.195	37.449	1.00	31.95	DS4
ATOM	544	C	VAL	8	155.684	108.351	37.332	1.00	39.52	DS4
ATOM	545	O	VAL	8	155.589	108.991	36.285	1.00	39.52	DS4
ATOM	546	N	CYS	9	156.042	108.922	38.482	1.00	168.29	DS4
ATOM	547	CA	CYS	9	156.413	110.332	38.481	1.00	168.29	DS4
ATOM	548	CB	CYS	9	156.372	110.951	39.910	1.00	23.15	DS4
ATOM	549	SG	CYS	9	155.192	112.397	40.081	1.00	23.15	DS4
ATOM	550	C	CYS	9	157.833	110.310	37.874	1.00	168.29	DS4
ATOM	551	O	CYS	9	158.760	110.923	38.388	1.00	168.29	DS4
ATOM	552	N	ARG	10	157.963	109.548	36.781	1.00	61.49	DS4
ATOM	553	CA	ARG	10	159.194	109.374	35.983	1.00	61.49	DS4
ATOM	554	CB	ARG	10	159.755	107.943	36.103	1.00	46.91	DS4
ATOM	555	CG	ARG	10	159.621	107.091	34.816	1.00	46.91	DS4
ATOM	556	CD	ARG	10	160.095	105.628	34.997	1.00	46.91	DS4
ATOM	557	NE	ARG	10	161.536	105.442	34.811	1.00	46.91	DS4
ATOM	558	CZ	ARG	10	162.167	105.635	33.655	1.00	46.91	DS4
ATOM	559	NH1	ARG	10	161.483	106.019	32.586	1.00	46.91	DS4
ATOM	560	NH2	ARG	10	163.472	105.441	33.559	1.00	46.91	DS4
ATOM	561	C	ARG	10	158.774	109.622	34.529	1.00	61.49	DS4
ATOM	562	O	ARG	10	159.594	109.881	33.655	1.00	61.49	DS4
ATOM	563	N	LEU	11	157.475	109.489	34.292	1.00	80.37	DS4
ATOM	564	CA	LEU	11	156.883	109.740	32.992	1.00	80.37	DS4
ATOM	565	CB	LEU	11	155.614	108.907	32.801	1.00	51.57	DS4
ATOM	566	CG	LEU	11	155.684	107.409	33.122	1.00	51.57	DS4
ATOM	567	CD1	LEU	11	154.290	106.803	33.064	1.00	51.57	DS4
ATOM	568	CD2	LEU	11	156.612	106.716	32.142	1.00	51.57	DS4
ATOM	569	C	LEU	11	156.518	111.212	33.124	1.00	80.37	DS4
ATOM	570	O	LEU	11	156.655	111.972	32.165	1.00	80.37	DS4
ATOM	571	N	CYS	12	156.052	111.602	34.324	1.00	73.04	DS4
ATOM	572	CA	CYS	12	155.705	113.002	34.615	1.00	73.04	DS4
ATOM	573	CB	CYS	12	155.667	113.312	36.165	1.00	47.73	DS4
ATOM	574	SG	CYS	12	154.193	113.038	37.379	1.00	47.73	DS4
ATOM	575	C	CYS	12	156.914	113.745	33.996	1.00	73.04	DS4
ATOM	576	O	CYS	12	156.763	114.782	33.352	1.00	73.04	DS4
ATOM	577	N	ARG	13	158.105	113.158	34.168	1.00	65.80	DS4
ATOM	578	CA	ARG	13	159.387	113.720	33.706	1.00	65.80	DS4
ATOM	579	CB	ARG	13	160.549	113.131	34.528	1.00	43.56	DS4
ATOM	580	CG	ARG	13	160.479	113.418	36.029	1.00	43.56	DS4
ATOM	581	CD	ARG	13	161.868	113.660	36.635	1.00	43.56	DS4
ATOM	582	NE	ARG	13	162.653	112.442	36.818	1.00	43.56	DS4
ATOM	583	CZ	ARG	13	163.964	112.356	36.603	1.00	43.56	DS4
ATOM	584	NH1	ARG	13	164.655	113.415	36.196	1.00	43.56	DS4
ATOM	585	NH2	ARG	13	164.584	111.201	36.772	1.00	43.56	DS4
ATOM	586	C	ARG	13	159.780	113.639	32.230	1.00	65.80	DS4
ATOM	587	O	ARG	13	160.345	114.595	31.698	1.00	65.80	DS4
ATOM	588	N	ARG	14	159.529	112.503	31.583	1.00	64.39	DS4
ATOM	589	CA	ARG	14	159.872	112.327	30.165	1.00	64.39	DS4
ATOM	590	CB	ARG	14	159.585	110.878	29.735	1.00	56.49	DS4
ATOM	591	CG	ARG	14	159.671	110.602	28.229	1.00	56.49	DS4
ATOM	592	CD	ARG	14	160.974	111.097	27.605	1.00	56.49	DS4
ATOM	593	NE	ARG	14	162.127	110.275	27.950	1.00	56.49	DS4
ATOM	594	CZ	ARG	14	163.389	110.598	27.673	1.00	56.49	DS4
ATOM	595	NH1	ARG	14	163.672	111.736	27.045	1.00	56.49	DS4
ATOM	596	NH2	ARG	14	164.373	109.778	28.018	1.00	56.49	DS4
ATOM	597	C	ARG	14	159.124	113.318	29.258	1.00	64.39	DS4
ATOM	598	O	ARG	14	159.707	113.896	28.337	1.00	64.39	DS4
ATOM	599	N	GLU	15	157.834	113.508	29.513	1.00	60.91	DS4
ATOM	600	CA	GLU	15	157.055	114.453	28.729	1.00	60.91	DS4
ATOM	601	CB	GLU	15	155.562	114.124	28.780	1.00	78.62	DS4

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ATOM    602  CG  GLU    15     155.068 113.195  27.687  1.00 78.62      DS4
ATOM    603  CD  GLU    15     155.611 111.792  27.827  1.00 78.62      DS4
ATOM    604  OE1 GLU    15     156.050 111.433  28.941  1.00 78.62      DS4
ATOM    605  OE2 GLU    15     155.582 111.042  26.828  1.00 78.62      DS4
ATOM    606  C   GLU    15     157.275 115.833  29.316  1.00 60.91      DS4
ATOM    607  O   GLU    15     156.701 116.810  28.849  1.00 60.91      DS4
ATOM    608  N   GLY    16     158.108 115.906  30.349  1.00108.65      DS4
ATOM    609  CA  GLY    16     158.378 117.180  30.993  1.00108.65      DS4
ATOM    610  C   GLY    16     157.141 117.689  31.710  1.00108.65      DS4
ATOM    611  O   GLY    16     157.145 117.875  32.933  1.00108.65      DS4
ATOM    612  N   VAL    17     156.083 117.909  30.933  1.00 57.67      DS4
ATOM    613  CA  VAL    17     154.806 118.383  31.441  1.00 57.67      DS4
ATOM    614  CB  VAL    17     153.730 118.360  30.339  1.00 79.02      DS4
ATOM    615  CG1 VAL    17     152.407 118.855  30.895  1.00 79.02      DS4
ATOM    616  CG2 VAL    17     154.172 119.223  29.165  1.00 79.02      DS4
ATOM    617  C   VAL    17     154.317 117.543  32.620  1.00 57.67      DS4
ATOM    618  O   VAL    17     154.466 116.318  32.647  1.00 57.67      DS4
ATOM    619  N   LYS    18     153.718 118.227  33.588  1.00 57.88      DS4
ATOM    620  CA  LYS    18     153.208 117.600  34.793  1.00 57.88      DS4
ATOM    621  CB  LYS    18     152.617 118.675  35.710  1.00 77.62      DS4
ATOM    622  CG  LYS    18     152.631 118.338  37.203  1.00 77.62      DS4
ATOM    623  CD  LYS    18     152.272 119.573  38.036  1.00 77.62      DS4
ATOM    624  CE  LYS    18     152.650 119.417  39.500  1.00 77.62      DS4
ATOM    625  NZ  LYS    18     152.316 120.646  40.269  1.00 77.62      DS4
ATOM    626  C   LYS    18     152.153 116.552  34.484  1.00 57.88      DS4
ATOM    627  O   LYS    18     151.275 116.753  33.649  1.00 57.88      DS4
ATOM    628  N   LEU    19     152.259 115.420  35.162  1.00151.48      DS4
ATOM    629  CA  LEU    19     151.291 114.358  34.996  1.00151.48      DS4
ATOM    630  CB  LEU    19     151.918 113.146  34.324  1.00 71.58      DS4
ATOM    631  CG  LEU    19     152.026 113.269  32.810  1.00 71.58      DS4
ATOM    632  CD1 LEU    19     152.606 111.980  32.252  1.00 71.58      DS4
ATOM    633  CD2 LEU    19     150.650 113.545  32.220  1.00 71.58      DS4
ATOM    634  C   LEU    19     150.751 113.993  36.363  1.00151.48      DS4
ATOM    635  O   LEU    19     151.505 113.761  37.321  1.00151.48      DS4
ATOM    636  N   TYR    20     149.429 113.969  36.447  1.00108.81      DS4
ATOM    637  CA  TYR    20     148.756 113.661  37.690  1.00108.81      DS4
ATOM    638  CB  TYR    20     147.474 114.491  37.776  1.00 74.51      DS4
ATOM    639  CG  TYR    20     147.764 115.979  37.857  1.00 74.51      DS4
ATOM    640  CD1 TYR    20     146.839 116.921  37.414  1.00 74.51      DS4
ATOM    641  CE1 TYR    20     147.131 118.290  37.460  1.00 74.51      DS4
ATOM    642  CD2 TYR    20     148.984 116.442  38.355  1.00 74.51      DS4
ATOM    643  CE2 TYR    20     149.283 117.799  38.404  1.00 74.51      DS4
ATOM    644  CZ  TYR    20     148.361 118.717  37.955  1.00 74.51      DS4
ATOM    645  OH  TYR    20     148.680 120.057  37.972  1.00 74.51      DS4
ATOM    646  C   TYR    20     148.483 112.172  37.751  1.00108.81      DS4
ATOM    647  O   TYR    20     147.386 111.702  37.460  1.00108.81      DS4
ATOM    648  N   LEU    21     149.514 111.432  38.132  1.00 96.70      DS4
ATOM    649  CA  LEU    21     149.424 109.990  38.221  1.00 96.70      DS4
ATOM    650  CB  LEU    21     150.558 109.377  37.406  1.00 55.03      DS4
ATOM    651  CG  LEU    21     150.523 109.809  35.932  1.00 55.03      DS4
ATOM    652  CD1 LEU    21     151.811 109.450  35.212  1.00 55.03      DS4
ATOM    653  CD2 LEU    21     149.330 109.154  35.250  1.00 55.03      DS4
ATOM    654  C   LEU    21     149.500 109.547  39.670  1.00 96.70      DS4
ATOM    655  O   LEU    21     149.752 108.381  39.963  1.00 96.70      DS4
ATOM    656  N   LYS    22     149.271 110.493  40.575  1.00 84.21      DS4
ATOM    657  CA  LYS    22     149.316 110.217  42.006  1.00 84.21      DS4
ATOM    658  CB  LYS    22     150.740 110.395  42.532  1.00 49.38      DS4
ATOM    659  CG  LYS    22     151.601 109.159  42.437  1.00 49.38      DS4
ATOM    660  CD  LYS    22     152.921 109.376  43.136  1.00 49.38      DS4
ATOM    661  CE  LYS    22     153.784 108.137  43.056  1.00 49.38      DS4
ATOM    662  NZ  LYS    22     155.100 108.374  43.686  1.00 49.38      DS4
ATOM    663  C   LYS    22     148.380 111.121  42.800  1.00 84.21      DS4
ATOM    664  O   LYS    22     148.356 111.081  44.038  1.00 84.21      DS4
ATOM    665  N   GLY    23     147.599 111.928  42.092  1.00144.60      DS4
ATOM    666  CA  GLY    23     146.707 112.829  42.785  1.00144.60      DS4
ATOM    667  C   GLY    23     147.529 113.573  43.820  1.00144.60      DS4
ATOM    668  O   GLY    23     148.532 114.202  43.484  1.00144.60      DS4
ATOM    669  N   GLU    24     147.128 113.476  45.082  1.00 75.22      DS4
ATOM    670  CA  GLU    24     147.824 114.160  46.164  1.00 75.22      DS4
ATOM    671  CB  GLU    24     147.097 113.930  47.476  1.00134.13      DS4
ATOM    672  CG  GLU    24     147.817 114.515  48.656  1.00134.13      DS4
ATOM    673  CD  GLU    24     147.525 113.756  49.919  1.00134.13      DS4
ATOM    674  OE1 GLU    24     146.335 113.649  50.283  1.00134.13      DS4
ATOM    675  OE2 GLU    24     148.486 113.262  50.544  1.00134.13      DS4
ATOM    676  C   GLU    24     149.246 113.668  46.310  1.00 75.22      DS4
ATOM    677  O   GLU    24     149.455 112.550  46.750  1.00 75.22      DS4
ATOM    678  N   ARG    25     150.202 114.527  45.962  1.00 81.50      DS4
ATOM    679  CA  ARG    25     151.652 114.273  46.012  1.00 81.50      DS4
ATOM    680  CB  ARG    25     152.013 112.785  45.921  1.00 55.26      DS4
ATOM    681  CG  ARG    25     153.382 112.332  46.523  1.00 55.26      DS4
ATOM    682  CD  ARG    25     154.614 113.095  46.018  1.00 55.26      DS4
ATOM    683  NE  ARG    25     155.848 112.285  45.929  1.00 55.26      DS4
ATOM    684  CZ  ARG    25     156.671 111.967  46.934  1.00 55.26      DS4
ATOM    685  NH1 ARG    25     156.429 112.369  48.170  1.00 55.26      DS4
ATOM    686  NH2 ARG    25     157.771 111.260  46.696  1.00 55.26      DS4
ATOM    687  C   ARG    25     152.138 114.955  44.754  1.00 81.50      DS4
ATOM    688  O   ARG    25     152.944 115.876  44.830  1.00 81.50      DS4
ATOM    689  N   CYS    26     151.639 114.503  43.596  1.00164.92      DS4
ATOM    690  CA  CYS    26     152.013 115.104  42.315  1.00164.92      DS4
ATOM    691  CB  CYS    26     151.469 114.275  41.101  1.00 30.26      DS4
ATOM    692  SG  CYS    26     152.717 113.140  40.216  1.00 30.26      DS4
ATOM    693  C   CYS    26     151.461 116.546  42.355  1.00164.92      DS4
ATOM    694  O   CYS    26     151.196 117.161  41.326  1.00164.92      DS4
ATOM    695  N   TYR    27     151.293 117.053  43.583  1.00 89.40      DS4
ATOM    696  CA  TYR    27     150.839 118.417  43.892  1.00 89.40      DS4
ATOM    697  CB  TYR    27     149.533 118.425  44.693  1.00 59.26      DS4
ATOM    698  CG  TYR    27     148.306 118.257  43.843  1.00 59.26      DS4
ATOM    699  CD1 TYR    27     147.884 116.996  43.449  1.00 59.26      DS4
ATOM    700  CE1 TYR    27     146.799 116.833  42.590  1.00 59.26      DS4
ATOM    701  CD2 TYR    27     147.608 119.365  43.365  1.00 59.26      DS4
ATOM    702  CE2 TYR    27     146.522 119.217  42.506  1.00 59.26      DS4
ATOM    703  CZ  TYR    27     146.125 117.945  42.121  1.00 59.26      DS4
ATOM    704  OH  TYR    27     145.065 117.768  41.259  1.00 59.26      DS4
ATOM    705  C   TYR    27     151.907 119.069  44.760  1.00 89.40      DS4
ATOM    706  O   TYR    27     152.696 119.898  44.303  1.00 89.40      DS4
ATOM    707  N   SER    28     151.919 118.679  46.028  1.00 73.86      DS4
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ATOM	708	CA	SER	28	152.890	119.198	46.974	1.00 73.86	DS4	ATOM	761	CD	ARG	35	168.415	120.922	41.765	1.00134.59	DS4
ATOM	709	CB	SER	28	152.561	118.703	48.383	1.00175.80	DS4	ATOM	762	NE	ARG	35	169.214	121.746	42.676	1.00134.59	DS4
ATOM	710	OG	SER	28	151.276	119.143	48.786	1.00175.80	DS4	ATOM	763	CZ	ARG	35	170.371	122.323	42.356	1.00134.59	DS4
ATOM	711	C	SER	28	154.303	118.767	46.582	1.00 73.86	DS4	ATOM	764	NH1	ARG	35	170.880	122.175	41.140	1.00134.59	DS4
ATOM	712	O	SER	28	154.593	117.572	46.471	1.00 73.86	DS4	ATOM	765	NH2	ARG	35	171.020	123.051	43.255	1.00134.59	DS4
ATOM	713	N	PRO	29	155.212	119.745	46.420	1.00 85.75	DS4	ATOM	766	C	ARG	35	165.781	119.069	39.117	1.00201.09	DS4
ATOM	714	CD	PRO	29	155.080	120.980	47.205	1.00 53.05	DS4	ATOM	767	O	ARG	35	166.838	118.781	38.559	1.00201.09	DS4
ATOM	715	CA	PRO	29	156.617	119.576	46.041	1.00 85.75	DS4	ATOM	768	N	ARG	36	164.621	118.519	38.765	1.00141.13	DS4
ATOM	716	CB	PRO	29	157.361	120.494	47.021	1.00 53.05	DS4	ATOM	769	CA	ARG	36	164.609	117.528	37.695	1.00141.13	DS4
ATOM	717	CG	PRO	29	156.302	120.901	48.057	1.00 53.05	DS4	ATOM	770	CB	ARG	36	164.973	116.158	38.273	1.00 78.87	DS4
ATOM	718	C	PRO	29	157.197	118.168	46.023	1.00 85.75	DS4	ATOM	771	CG	ARG	36	164.351	115.880	39.626	1.00 78.87	DS4
ATOM	719	O	PRO	29	157.381	117.545	47.070	1.00 85.75	DS4	ATOM	772	CD	ARG	36	164.521	114.423	40.013	1.00 78.87	DS4
ATOM	720	N	LYS	30	157.473	117.700	44.805	1.00111.86	DS4	ATOM	773	NE	ARG	36	165.922	114.021	40.054	1.00 78.87	DS4
ATOM	721	CA	LYS	30	158.071	116.399	44.514	1.00111.86	DS4	ATOM	774	CZ	ARG	36	166.324	112.766	40.216	1.00 78.87	DS4
ATOM	722	CB	LYS	30	157.563	115.307	45.467	1.00 98.64	DS4	ATOM	775	NH1	ARG	36	165.431	111.792	40.349	1.00 78.87	DS4
ATOM	723	CG	LYS	30	158.342	115.192	46.795	1.00 98.64	DS4	ATOM	776	NH2	ARG	36	167.617	112.482	40.250	1.00 78.87	DS4
ATOM	724	CD	LYS	30	159.876	115.302	46.639	1.00 98.64	DS4	ATOM	777	C	ARG	36	163.385	117.392	36.786	1.00141.13	DS4
ATOM	725	CE	LYS	30	160.382	116.760	46.693	1.00 98.64	DS4	ATOM	778	O	ARG	36	162.953	116.283	36.487	1.00141.13	DS4
ATOM	726	NZ	LYS	30	161.881	116.882	46.740	1.00 98.64	DS4	ATOM	779	N	PRO	37	162.805	118.517	36.336	1.00 83.23	DS4
ATOM	727	C	LYS	30	157.883	115.949	43.062	1.00111.86	DS4	ATOM	780	CD	PRO	37	162.942	119.870	36.893	1.00 56.54	DS4
ATOM	728	O	LYS	30	158.870	115.703	42.368	1.00111.86	DS4	ATOM	781	CA	PRO	37	161.640	118.452	35.445	1.00 83.23	DS4
ATOM	729	N	CYS	31	156.639	115.847	42.595	1.00112.65	DS4	ATOM	782	CB	PRO	37	161.139	119.890	35.421	1.00 56.54	DS4
ATOM	730	CA	CYS	31	156.380	115.414	41.216	1.00112.65	DS4	ATOM	783	CG	PRO	37	161.537	120.398	36.762	1.00 56.54	DS4
ATOM	731	CB	CYS	31	154.873	115.387	40.935	1.00 24.30	DS4	ATOM	784	C	PRO	37	162.142	118.014	34.073	1.00 83.23	DS4
ATOM	732	SG	CYS	31	154.364	114.734	39.328	1.00 24.30	DS4	ATOM	785	O	PRO	37	161.492	118.224	33.048	1.00 83.23	DS4
ATOM	733	C	CYS	31	157.067	116.360	40.235	1.00112.65	DS4	ATOM	786	N	TYR	38	163.332	117.425	34.080	1.00 80.50	DS4
ATOM	734	O	CYS	31	156.394	117.155	39.577	1.00112.65	DS4	ATOM	787	CA	TYR	38	163.968	116.933	32.876	1.00 80.50	DS4
ATOM	735	N	ALA	32	158.401	116.271	40.152	1.00 70.36	DS4	ATOM	788	CB	TYR	38	165.432	117.362	32.848	1.00 58.83	DS4
ATOM	736	CA	ALA	32	159.217	117.106	39.258	1.00 70.36	DS4	ATOM	789	CG	TYR	38	166.220	117.040	34.102	1.00 58.83	DS4
ATOM	737	CB	ALA	32	158.894	116.782	37.793	1.00127.16	DS4	ATOM	790	CD1	TYR	38	166.437	115.724	34.502	1.00 58.83	DS4
ATOM	738	C	ALA	32	159.014	118.597	39.503	1.00 70.36	DS4	ATOM	791	CE1	TYR	38	167.215	115.433	35.629	1.00 58.83	DS4
ATOM	739	O	ALA	32	159.105	119.401	38.573	1.00 70.36	DS4	ATOM	792	CD2	TYR	38	166.796	118.057	34.866	1.00 58.83	DS4
ATOM	740	N	MET	33	158.732	118.962	40.750	1.00100.18	DS4	ATOM	793	CE2	TYR	38	167.570	117.772	35.987	1.00 58.83	DS4
ATOM	741	CA	MET	33	158.503	120.358	41.102	1.00100.18	DS4	ATOM	794	CZ	TYR	38	167.776	116.465	36.358	1.00 58.83	DS4
ATOM	742	CB	MET	33	157.825	120.472	42.467	1.00 98.27	DS4	ATOM	795	OH	TYR	38	168.560	116.179	37.442	1.00 58.83	DS4
ATOM	743	CG	MET	33	156.353	120.826	42.390	1.00 98.27	DS4	ATOM	796	C	TYR	38	163.864	115.416	32.835	1.00 80.50	DS4
ATOM	744	SD	MET	33	156.077	122.454	41.661	1.00 98.27	DS4	ATOM	797	O	TYR	38	163.624	114.771	33.858	1.00 80.50	DS4
ATOM	745	CE	MET	33	155.449	123.366	43.110	1.00 98.27	DS4	ATOM	798	N	PRO	39	164.052	114.824	31.647	1.00 72.67	DS4
ATOM	746	C	MET	33	159.795	121.131	41.127	1.00100.18	DS4	ATOM	799	CD	PRO	39	164.477	115.472	30.395	1.00 67.94	DS4
ATOM	747	O	MET	33	159.785	122.361	41.200	1.00100.18	DS4	ATOM	800	CA	PRO	39	163.973	113.368	31.484	1.00 72.67	DS4
ATOM	748	N	GLU	34	160.910	120.412	41.065	1.00121.19	DS4	ATOM	801	CB	PRO	39	164.323	113.173	30.008	1.00 67.94	DS4
ATOM	749	CA	GLU	34	162.205	121.071	41.090	1.00121.19	DS4	ATOM	802	CG	PRO	39	165.204	114.362	29.702	1.00 67.94	DS4
ATOM	750	CB	GLU	34	162.421	121.724	42.461	1.00169.69	DS4	ATOM	803	C	PRO	39	164.870	112.560	32.432	1.00 72.67	DS4
ATOM	751	CG	GLU	34	163.441	122.854	42.479	1.00169.69	DS4	ATOM	804	O	PRO	39	165.920	113.024	32.882	1.00 72.67	DS4
ATOM	752	CD	GLU	34	162.932	124.106	41.794	1.00169.69	DS4	ATOM	805	N	PRO	40	164.451	111.331	32.750	1.00 62.59	DS4
ATOM	753	OE1	GLU	34	162.645	124.055	40.579	1.00169.69	DS4	ATOM	806	CD	PRO	40	163.178	110.717	32.328	1.00 65.13	DS4
ATOM	754	OE2	GLU	34	162.817	125.144	42.476	1.00169.69	DS4	ATOM	807	CA	PRO	40	165.188	110.436	33.644	1.00 62.59	DS4
ATOM	755	C	GLU	34	163.373	120.137	40.779	1.00121.19	DS4	ATOM	808	CB	PRO	40	164.129	109.412	34.041	1.00 65.13	DS4
ATOM	756	O	GLU	34	163.229	118.909	40.752	1.00121.19	DS4	ATOM	809	CG	PRO	40	163.344	109.269	32.778	1.00 65.13	DS4
ATOM	757	N	ARG	35	164.526	120.762	40.547	1.00201.09	DS4	ATOM	810	C	PRO	40	166.388	109.777	32.978	1.00 62.59	DS4
ATOM	758	CA	ARG	35	165.785	120.092	40.245	1.00201.09	DS4	ATOM	811	O	PRO	40	166.431	109.650	31.756	1.00 62.59	DS4
ATOM	759	CB	ARG	35	166.359	119.443	41.512	1.00134.59	DS4	ATOM	812	N	GLY	41	167.363	109.365	33.784	1.00 50.98	DS4
ATOM	760	CG	ARG	35	167.134	120.396	42.425	1.00134.59	DS4	ATOM	813	CA	GLY	41	168.527	108.696	33.235	1.00 50.98	DS4

ATOM	814	C	GLY	41	169.833	109.463	33.088	1.00	50.98	DS4	ATOM	867	O	ARG	47	170.560	117.295	24.754	1.00	75.04	DS4
ATOM	815	O	GLY	41	169.889	110.688	33.130	1.00	50.98	DS4	ATOM	868	N	ALA	48	169.131	119.023	24.667	1.00	91.78	DS4
ATOM	816	N	GLN	42	170.895	108.699	32.889	1.00	56.87	DS4	ATOM	869	CA	ALA	48	168.162	118.306	23.843	1.00	91.78	DS4
ATOM	817	CA	GLN	42	172.233	109.225	32.730	1.00	56.87	DS4	ATOM	870	CB	ALA	48	166.749	118.598	24.328	1.00	101.77	DS4
ATOM	818	CB	GLN	42	173.135	108.100	32.224	1.00	79.82	DS4	ATOM	871	C	ALA	48	168.297	118.692	22.374	1.00	91.78	DS4
ATOM	819	CG	GLN	42	174.528	108.505	31.800	1.00	79.82	DS4	ATOM	872	O	ALA	48	168.539	119.853	22.049	1.00	91.78	DS4
ATOM	820	CD	GLN	42	175.430	107.298	31.605	1.00	79.82	DS4	ATOM	873	N	ARG	49	168.136	117.714	21.489	1.00	54.64	DS4
ATOM	821	OE1	GLN	42	176.366	107.335	30.808	1.00	79.82	DS4	ATOM	874	CA	ARG	49	168.238	117.962	20.058	1.00	54.64	DS4
ATOM	822	NE2	GLN	42	175.159	106.222	32.347	1.00	79.82	DS4	ATOM	875	CB	ARG	49	169.001	116.821	19.396	1.00	140.41	DS4
ATOM	823	C	GLN	42	172.355	110.442	31.820	1.00	56.87	DS4	ATOM	876	CG	ARG	49	170.386	116.617	19.968	1.00	140.41	DS4
ATOM	824	O	GLN	42	173.337	111.184	31.907	1.00	56.87	DS4	ATOM	877	CD	ARG	49	171.050	115.403	19.353	1.00	140.41	DS4
ATOM	825	N	HIS	43	171.364	110.675	30.967	1.00	51.11	DS4	ATOM	878	NE	ARG	49	172.446	115.271	19.764	1.00	140.41	DS4
ATOM	826	CA	HIS	43	171.451	111.796	30.037	1.00	51.11	DS4	ATOM	879	CZ	ARG	49	173.262	114.303	19.351	1.00	140.41	DS4
ATOM	827	CB	HIS	43	171.308	111.270	28.610	1.00	59.54	DS4	ATOM	880	NH1	ARG	49	172.820	113.372	18.513	1.00	140.41	DS4
ATOM	828	CG	HIS	43	172.284	110.191	28.269	1.00	59.54	DS4	ATOM	881	NH2	ARG	49	174.522	114.268	19.768	1.00	140.41	DS4
ATOM	829	CD2	HIS	43	172.121	108.854	28.127	1.00	59.54	DS4	ATOM	882	C	ARG	49	166.853	118.106	19.426	1.00	54.64	DS4
ATOM	830	ND1	HIS	43	173.626	110.437	28.074	1.00	59.54	DS4	ATOM	883	O	ARG	49	165.871	117.559	19.927	1.00	54.64	DS4
ATOM	831	CE1	HIS	43	174.248	109.298	27.828	1.00	59.54	DS4	ATOM	884	N	ARG	50	166.784	118.857	18.331	1.00	69.49	DS4
ATOM	832	NE2	HIS	43	173.357	108.321	27.855	1.00	59.54	DS4	ATOM	885	CA	ARG	50	165.529	119.074	17.615	1.00	69.49	DS4
ATOM	833	C	HIS	43	170.467	112.940	30.256	1.00	51.11	DS4	ATOM	886	CB	ARG	50	165.781	119.763	16.271	1.00	132.85	DS4
ATOM	834	O	HIS	43	170.588	113.993	29.629	1.00	51.11	DS4	ATOM	887	CG	ARG	50	164.609	119.608	15.309	1.00	132.85	DS4
ATOM	835	N	GLY	44	169.499	112.735	31.140	1.00	58.14	DS4	ATOM	888	CD	ARG	50	165.050	119.476	13.861	1.00	132.85	DS4
ATOM	836	CA	GLY	44	168.499	113.757	31.404	1.00	58.14	DS4	ATOM	889	NE	ARG	50	165.291	120.771	13.233	1.00	132.85	DS4
ATOM	837	C	GLY	44	168.919	115.223	31.363	1.00	58.14	DS4	ATOM	890	CZ	ARG	50	165.617	120.932	11.953	1.00	132.85	DS4
ATOM	838	O	GLY	44	168.226	116.062	30.773	1.00	58.14	DS4	ATOM	891	NH1	ARG	50	165.746	119.877	11.158	1.00	132.85	DS4
ATOM	839	N	GLN	45	170.052	115.543	31.978	1.00	73.13	DS4	ATOM	892	NH2	ARG	50	165.807	122.152	11.465	1.00	132.85	DS4
ATOM	840	CA	GLN	45	170.498	116.925	32.027	1.00	73.13	DS4	ATOM	893	C	ARG	50	164.813	117.754	17.344	1.00	69.49	DS4
ATOM	841	CB	GLN	45	171.353	117.134	33.273	1.00	88.57	DS4	ATOM	894	O	ARG	50	165.273	116.938	16.546	1.00	69.49	DS4
ATOM	842	CG	GLN	45	170.587	116.900	34.567	1.00	88.57	DS4	ATOM	895	N	PRO	51	163.665	117.531	17.991	1.00	45.61	DS4
ATOM	843	CD	GLN	45	171.465	117.010	35.798	1.00	88.57	DS4	ATOM	896	CD	PRO	51	162.988	118.330	19.024	1.00	48.79	DS4
ATOM	844	OE1	GLN	45	172.079	118.049	36.047	1.00	88.57	DS4	ATOM	897	CA	PRO	51	162.951	116.278	17.753	1.00	45.61	DS4
ATOM	845	NE2	GLN	45	171.531	115.936	36.576	1.00	88.57	DS4	ATOM	898	CB	PRO	51	161.752	116.387	18.692	1.00	48.79	DS4
ATOM	846	C	GLN	45	171.222	117.443	30.791	1.00	73.13	DS4	ATOM	899	CG	PRO	51	162.255	117.269	19.787	1.00	48.79	DS4
ATOM	847	O	GLN	45	171.370	118.653	30.626	1.00	73.13	DS4	ATOM	900	C	PRO	51	162.516	116.157	16.293	1.00	45.61	DS4
ATOM	848	N	LYS	46	171.666	116.542	29.920	1.00	63.08	DS4	ATOM	901	O	PRO	51	162.312	117.170	15.612	1.00	45.61	DS4
ATOM	849	CA	LYS	46	172.358	116.947	28.697	1.00	63.08	DS4	ATOM	902	N	SER	52	162.386	114.923	15.813	1.00	32.22	DS4
ATOM	850	CB	LYS	46	172.863	115.722	27.944	1.00	62.87	DS4	ATOM	903	CA	SER	52	161.927	114.683	14.446	1.00	32.22	DS4
ATOM	851	CG	LYS	46	173.903	114.907	28.694	1.00	62.87	DS4	ATOM	904	CB	SER	52	162.370	113.302	13.965	1.00	59.83	DS4
ATOM	852	CD	LYS	46	174.421	113.768	27.834	1.00	62.87	DS4	ATOM	905	OG	SER	52	162.010	112.301	14.900	1.00	59.83	DS4
ATOM	853	CE	LYS	46	175.577	113.058	28.501	1.00	62.87	DS4	ATOM	906	C	SER	52	160.399	114.757	14.459	1.00	32.22	DS4
ATOM	854	NZ	LYS	46	176.007	111.888	27.697	1.00	62.87	DS4	ATOM	907	O	SER	52	159.772	114.589	15.509	1.00	32.22	DS4
ATOM	855	C	LYS	46	171.416	117.731	27.793	1.00	63.08	DS4	ATOM	908	N	ASP	53	159.789	115.018	13.310	1.00	54.87	DS4
ATOM	856	O	LYS	46	170.196	117.646	27.944	1.00	63.08	DS4	ATOM	909	CA	ASP	53	158.336	115.091	13.277	1.00	54.87	DS4
ATOM	857	N	ARG	47	171.983	118.482	26.850	1.00	75.04	DS4	ATOM	910	CB	ASP	53	157.830	115.189	11.834	1.00	82.37	DS4
ATOM	858	CA	ARG	47	171.200	119.293	25.911	1.00	75.04	DS4	ATOM	911	CG	ASP	53	158.106	116.547	11.208	1.00	82.37	DS4
ATOM	859	CB	ARG	47	172.135	120.079	24.987	1.00	109.86	DS4	ATOM	912	OD1	ASP	53	159.226	117.066	11.399	1.00	82.37	DS4
ATOM	860	CG	ARG	47	171.457	120.644	23.746	1.00	109.86	DS4	ATOM	913	OD2	ASP	53	157.212	117.090	10.519	1.00	82.37	DS4
ATOM	861	CD	ARG	47	172.483	121.089	22.717	1.00	109.86	DS4	ATOM	914	C	ASP	53	157.781	113.845	13.963	1.00	54.87	DS4
ATOM	862	NE	ARG	47	171.885	121.340	21.408	1.00	109.86	DS4	ATOM	915	O	ASP	53	156.772	113.921	14.664	1.00	54.87	DS4
ATOM	863	CZ	ARG	47	172.566	121.732	20.334	1.00	109.86	DS4	ATOM	916	N	TYR	54	158.451	112.706	13.778	1.00	43.01	DS4
ATOM	864	NH1	ARG	47	173.877	121.921	20.405	1.00	109.86	DS4	ATOM	917	CA	TYR	54	158.010	111.464	14.399	1.00	43.01	DS4
ATOM	865	NH2	ARG	47	171.935	121.936	19.186	1.00	109.86	DS4	ATOM	918	CB	TYR	54	158.909	110.295	13.995	1.00	37.77	DS4
ATOM	866	C	ARG	47	170.261	118.447	25.060	1.00	75.04	DS4	ATOM	919	CG	TYR	54	158.438	108.983	14.581	1.00	37.77	DS4

ATOM	920	CD1	TYR	54	157.279	108.380	14.117	1.00	37.77	DS4	ATOM	973	CG	GLU	60	150.617	115.408	21.381	1.00	60.72	DS4
ATOM	921	CE1	TYR	54	156.776	107.216	14.705	1.00	37.77	DS4	ATOM	974	CD	GLU	60	151.031	116.622	22.213	1.00	60.72	DS4
ATOM	922	CD2	TYR	54	159.100	108.383	15.655	1.00	37.77	DS4	ATOM	975	OE1	GLU	60	151.986	116.516	23.011	1.00	60.72	DS4
ATOM	923	CE2	TYR	54	158.602	107.214	16.254	1.00	37.77	DS4	ATOM	976	OE2	GLU	60	150.385	117.684	22.075	1.00	60.72	DS4
ATOM	924	CZ	TYR	54	157.434	106.640	15.770	1.00	37.77	DS4	ATOM	977	C	GLU	60	151.406	112.543	22.408	1.00	49.13	DS4
ATOM	925	OH	TYR	54	156.890	105.505	16.342	1.00	37.77	DS4	ATOM	978	O	GLU	60	150.658	112.608	23.382	1.00	49.13	DS4
ATOM	926	C	TYR	54	158.068	111.636	15.913	1.00	43.01	DS4	ATOM	979	N	LYS	61	151.445	111.482	21.607	1.00	47.79	DS4
ATOM	927	O	TYR	54	157.072	111.459	16.618	1.00	43.01	DS4	ATOM	980	CA	LYS	61	150.568	110.337	21.839	1.00	47.79	DS4
ATOM	928	N	ALA	55	159.251	111.988	16.405	1.00	50.97	DS4	ATOM	981	CB	LYS	61	150.728	109.286	20.745	1.00	55.60	DS4
ATOM	929	CA	ALA	55	159.466	112.198	17.828	1.00	50.97	DS4	ATOM	982	CG	LYS	61	149.833	108.080	20.968	1.00	55.60	DS4
ATOM	930	CB	ALA	55	160.799	112.873	18.051	1.00	26.30	DS4	ATOM	983	CD	LYS	61	150.315	106.878	20.189	1.00	55.60	DS4
ATOM	931	C	ALA	55	158.349	113.034	18.435	1.00	50.97	DS4	ATOM	984	CE	LYS	61	151.510	106.212	20.848	1.00	55.60	DS4
ATOM	932	O	ALA	55	157.761	112.649	19.439	1.00	50.97	DS4	ATOM	985	NZ	LYS	61	151.127	105.534	22.111	1.00	55.60	DS4
ATOM	933	N	VAL	56	158.044	114.172	17.825	1.00	45.32	DS4	ATOM	986	C	LYS	61	150.854	109.676	23.178	1.00	47.79	DS4
ATOM	934	CA	VAL	56	156.989	115.021	18.357	1.00	45.32	DS4	ATOM	987	O	LYS	61	149.935	109.381	23.927	1.00	47.79	DS4
ATOM	935	CB	VAL	56	156.827	116.325	17.546	1.00	36.44	DS4	ATOM	988	N	GLN	62	152.130	109.428	23.463	1.00	53.66	DS4
ATOM	936	CG1	VAL	56	155.745	117.186	18.178	1.00	36.44	DS4	ATOM	989	CA	GLN	62	152.541	108.803	24.719	1.00	53.66	DS4
ATOM	937	CG2	VAL	56	158.153	117.085	17.501	1.00	36.44	DS4	ATOM	990	CB	GLN	62	154.071	108.742	24.802	1.00	67.92	DS4
ATOM	938	C	VAL	56	155.639	114.312	18.402	1.00	45.32	DS4	ATOM	991	CG	GLN	62	154.685	107.765	23.814	1.00	67.92	DS4
ATOM	939	O	VAL	56	154.956	114.343	19.429	1.00	45.32	DS4	ATOM	992	CD	GLN	62	154.271	106.328	24.089	1.00	67.92	DS4
ATOM	940	N	ARG	57	155.243	113.691	17.292	1.00	42.62	DS4	ATOM	993	OE1	GLN	62	154.845	105.657	24.940	1.00	67.92	DS4
ATOM	941	CA	ARG	57	153.968	112.981	17.248	1.00	42.62	DS4	ATOM	994	NE2	GLN	62	153.258	105.859	23.375	1.00	67.92	DS4
ATOM	942	CB	ARG	57	153.678	112.431	15.855	1.00	49.58	DS4	ATOM	995	C	GLN	62	151.998	109.577	25.908	1.00	53.66	DS4
ATOM	943	CG	ARG	57	152.937	113.365	14.920	1.00	49.58	DS4	ATOM	996	O	GLN	62	151.656	109.009	26.939	1.00	53.66	DS4
ATOM	944	CD	ARG	57	153.836	114.411	14.344	1.00	49.58	DS4	ATOM	997	N	LYS	63	151.924	110.887	25.754	1.00	50.78	DS4
ATOM	945	NE	ARG	57	153.148	115.166	13.309	1.00	49.58	DS4	ATOM	998	CA	LYS	63	151.418	111.751	26.803	1.00	50.78	DS4
ATOM	946	CZ	ARG	57	153.511	116.384	12.920	1.00	49.58	DS4	ATOM	999	CB	LYS	63	151.635	113.205	26.390	1.00	60.83	DS4
ATOM	947	NH1	ARG	57	154.560	116.982	13.487	1.00	49.58	DS4	ATOM	1000	CG	LYS	63	151.393	114.214	27.480	1.00	60.83	DS4
ATOM	948	NH2	ARG	57	152.822	117.011	11.973	1.00	49.58	DS4	ATOM	1001	CD	LYS	63	151.416	115.621	26.912	1.00	60.83	DS4
ATOM	949	C	ARG	57	154.029	111.819	18.216	1.00	42.62	DS4	ATOM	1002	CE	LYS	63	152.753	115.944	26.273	1.00	60.83	DS4
ATOM	950	O	ARG	57	153.055	111.514	18.889	1.00	42.62	DS4	ATOM	1003	NZ	LYS	63	152.695	117.271	25.616	1.00	60.83	DS4
ATOM	951	N	LEU	58	155.178	111.163	18.289	1.00	47.52	DS4	ATOM	1004	C	LYS	63	149.928	111.453	26.977	1.00	50.78	DS4
ATOM	952	CA	LEU	58	155.292	110.043	19.194	1.00	47.52	DS4	ATOM	1005	O	LYS	63	149.511	110.827	27.953	1.00	50.78	DS4
ATOM	953	CB	LEU	58	156.636	109.331	18.995	1.00	44.82	DS4	ATOM	1006	N	LEU	64	149.135	111.889	26.006	1.00	43.01	DS4
ATOM	954	CG	LEU	58	156.904	108.007	19.738	1.00	44.82	DS4	ATOM	1007	CA	LEU	64	147.699	111.675	26.032	1.00	43.01	DS4
ATOM	955	CD1	LEU	58	157.445	108.296	21.116	1.00	44.82	DS4	ATOM	1008	CB	LEU	64	147.105	111.873	24.626	1.00	34.04	DS4
ATOM	956	CD2	LEU	58	155.630	107.165	19.810	1.00	44.82	DS4	ATOM	1009	CG	LEU	64	145.579	111.967	24.444	1.00	34.04	DS4
ATOM	957	C	LEU	58	155.127	110.538	20.635	1.00	47.52	DS4	ATOM	1010	CD1	LEU	64	144.989	110.638	24.099	1.00	34.04	DS4
ATOM	958	O	LEU	58	154.316	109.998	21.393	1.00	47.52	DS4	ATOM	1011	CD2	LEU	64	144.953	112.499	25.716	1.00	34.04	DS4
ATOM	959	N	ARG	59	155.871	111.577	21.009	1.00	54.11	DS4	ATOM	1012	C	LEU	64	147.363	110.283	26.543	1.00	43.01	DS4
ATOM	960	CA	ARG	59	155.770	112.105	22.364	1.00	54.11	DS4	ATOM	1013	O	LEU	64	146.331	110.088	27.165	1.00	43.01	DS4
ATOM	961	CB	ARG	59	156.721	113.281	22.580	1.00	55.79	DS4	ATOM	1014	N	ARG	65	148.239	109.319	26.299	1.00	59.45	DS4
ATOM	962	CG	ARG	59	158.192	112.988	22.433	1.00	55.79	DS4	ATOM	1015	CA	ARG	65	147.985	107.957	26.741	1.00	59.45	DS4
ATOM	963	CD	ARG	59	158.581	111.618	22.939	1.00	55.79	DS4	ATOM	1016	CB	ARG	65	148.666	106.954	25.810	1.00	51.48	DS4
ATOM	964	NE	ARG	59	157.969	111.258	24.209	1.00	55.79	DS4	ATOM	1017	CG	ARG	65	148.703	105.544	26.366	1.00	51.48	DS4
ATOM	965	CZ	ARG	59	158.080	110.049	24.752	1.00	55.79	DS4	ATOM	1018	CD	ARG	65	148.851	104.515	25.276	1.00	51.48	DS4
ATOM	966	NH1	ARG	59	158.788	109.115	24.133	1.00	55.79	DS4	ATOM	1019	NE	ARG	65	149.789	103.454	25.641	1.00	51.48	DS4
ATOM	967	NH2	ARG	59	157.454	109.751	25.884	1.00	55.79	DS4	ATOM	1020	CZ	ARG	65	151.111	103.598	25.664	1.00	51.48	DS4
ATOM	968	C	ARG	59	154.359	112.569	22.710	1.00	54.11	DS4	ATOM	1021	NH1	ARG	65	151.664	104.762	25.350	1.00	51.48	DS4
ATOM	969	O	ARG	59	153.879	112.345	23.822	1.00	54.11	DS4	ATOM	1022	NH2	ARG	65	151.886	102.569	25.968	1.00	51.48	DS4
ATOM	970	N	GLU	60	153.685	113.220	21.774	1.00	49.13	DS4	ATOM	1023	C	ARG	65	148.379	107.654	28.174	1.00	59.45	DS4
ATOM	971	CA	GLU	60	152.354	113.695	22.086	1.00	49.13	DS4	ATOM	1024	O	ARG	65	147.590	107.095	28.928	1.00	59.45	DS4
ATOM	972	CB	GLU	60	151.795	114.540	20.944	1.00	60.72	DS4	ATOM	1025	N	ARG	66	149.597	107.999	28.558	1.00	58.40	DS4

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ATOM   1026  CA  ARG    66     150.026 107.728  29.921  1.00 58.40      DS4
ATOM   1027  CB  ARG    66     151.501 108.067  30.072  1.00 51.49      DS4
ATOM   1028  CG  ARG    66     152.373 107.082  29.340  1.00 51.49      DS4
ATOM   1029  CD  ARG    66     153.781 107.587  29.177  1.00 51.49      DS4
ATOM   1030  NE  ARG    66     154.637 106.530  28.657  1.00 51.49      DS4
ATOM   1031  CZ  ARG    66     155.942 106.657  28.435  1.00 51.49      DS4
ATOM   1032  NH1 ARG    66     156.559 107.812  28.681  1.00 51.49      DS4
ATOM   1033  NH2 ARG    66     156.637 105.618  27.983  1.00 51.49      DS4
ATOM   1034  C   ARG    66     149.174 108.487  30.932  1.00 58.40      DS4
ATOM   1035  O   ARG    66     149.193 108.188  32.123  1.00 58.40      DS4
ATOM   1036  N   ILE    67     148.413 109.461  30.449  1.00 54.96      DS4
ATOM   1037  CA  ILE    67     147.535 110.222  31.318  1.00 54.96      DS4
ATOM   1038  CB  ILE    67     146.917 111.424  30.575  1.00 61.07      DS4
ATOM   1039  CG2 ILE    67     145.642 111.882  31.268  1.00 61.07      DS4
ATOM   1040  CG1 ILE    67     147.943 112.559  30.500  1.00 61.07      DS4
ATOM   1041  CD1 ILE    67     147.412 113.840  29.869  1.00 61.07      DS4
ATOM   1042  C   ILE    67     146.422 109.309  31.826  1.00 54.96      DS4
ATOM   1043  O   ILE    67     146.015 109.390  32.986  1.00 54.96      DS4
ATOM   1044  N   TYR    68     145.927 108.435  30.958  1.00 55.87      DS4
ATOM   1045  CA  TYR    68     144.869 107.517  31.353  1.00 55.87      DS4
ATOM   1046  CB  TYR    68     143.815 107.415  30.262  1.00 48.95      DS4
ATOM   1047  CG  TYR    68     143.137 108.713  29.944  1.00 48.95      DS4
ATOM   1048  CD1 TYR    68     143.829 109.755  29.334  1.00 48.95      DS4
ATOM   1049  CE1 TYR    68     143.186 110.944  28.993  1.00 48.95      DS4
ATOM   1050  CD2 TYR    68     141.788 108.891  30.213  1.00 48.95      DS4
ATOM   1051  CE2 TYR    68     141.132 110.074  29.879  1.00 48.95      DS4
ATOM   1052  CZ  TYR    68     141.833 111.093  29.269  1.00 48.95      DS4
ATOM   1053  OH  TYR    68     141.167 112.249  28.928  1.00 48.95      DS4
ATOM   1054  C   TYR    68     145.435 106.134  31.626  1.00 55.87      DS4
ATOM   1055  O   TYR    68     144.711 105.139  31.567  1.00 55.87      DS4
ATOM   1056  N   GLY    69     146.731 106.082  31.921  1.00 75.49      DS4
ATOM   1057  CA  GLY    69     147.387 104.817  32.204  1.00 75.49      DS4
ATOM   1058  C   GLY    69     146.778 103.656  31.444  1.00 75.49      DS4
ATOM   1059  O   GLY    69     146.429 102.637  32.034  1.00 75.49      DS4
ATOM   1060  N   ILE    70     146.654 103.808  30.130  1.00 72.46      DS4
ATOM   1061  CA  ILE    70     146.069 102.773  29.293  1.00 72.46      DS4
ATOM   1062  CB  ILE    70     144.859 103.342  28.543  1.00 49.68      DS4
ATOM   1063  CG2 ILE    70     144.955 103.092  27.055  1.00 49.68      DS4
ATOM   1064  CG1 ILE    70     143.599 102.713  29.087  1.00 49.68      DS4
ATOM   1065  CD1 ILE    70     142.407 103.145  28.310  1.00 49.68      DS4
ATOM   1066  C   ILE    70     147.060 102.150  28.311  1.00 72.46      DS4
ATOM   1067  O   ILE    70     148.042 102.782  27.908  1.00 72.46      DS4
ATOM   1068  N   SER    71     146.790 100.901  27.936  1.00 59.69      DS4
ATOM   1069  CA  SER    71     147.641 100.152  27.015  1.00 59.69      DS4
ATOM   1070  CB  SER    71     147.279  98.670  27.050  1.00 74.52      DS4
ATOM   1071  OG  SER    71     145.945  98.475  26.605  1.00 74.52      DS4
ATOM   1072  C   SER    71     147.485 100.650  25.594  1.00 59.69      DS4
ATOM   1073  O   SER    71     146.400 101.067  25.193  1.00 59.69      DS4
ATOM   1074  N   GLU    72     148.567 100.604  24.827  1.00 52.54      DS4
ATOM   1075  CA  GLU    72     148.497 101.043  23.446  1.00 52.54      DS4
ATOM   1076  CB  GLU    72     149.808 100.755  22.722  1.00 77.35      DS4
ATOM   1077  CG  GLU    72     149.741 101.005  21.227  1.00 77.35      DS4
ATOM   1078  CD  GLU    72     149.574 102.474  20.868  1.00 77.35      DS4
ATOM   1079  OE1 GLU    72     149.359 102.774  19.669  1.00 77.35      DS4
ATOM   1080  OE2 GLU    72     149.666 103.325  21.777  1.00 77.35      DS4
ATOM   1081  C   GLU    72     147.363 100.262  22.803  1.00 52.54      DS4
ATOM   1082  O   GLU    72     146.481 100.836  22.172  1.00 52.54      DS4
ATOM   1083  N   ARG    73     147.381  98.947  22.998  1.00 55.34      DS4
ATOM   1084  CA  ARG    73     146.360  98.077  22.433  1.00 55.34      DS4
ATOM   1085  CB  ARG    73     146.425  96.701  23.088  1.00104.78      DS4
ATOM   1086  CG  ARG    73     145.674  95.629  22.333  1.00104.78      DS4
ATOM   1087  CD  ARG    73     146.196  95.543  20.926  1.00104.78      DS4
ATOM   1088  NE  ARG    73     145.676  94.386  20.215  1.00104.78      DS4
ATOM   1089  CZ  ARG    73     145.880  94.168  18.921  1.00104.78      DS4
ATOM   1090  NH1 ARG    73     146.590  95.036  18.211  1.00104.78      DS4
ATOM   1091  NH2 ARG    73     145.376  93.088  18.338  1.00104.78      DS4
ATOM   1092  C   ARG    73     144.951  98.651  22.575  1.00 55.34      DS4
ATOM   1093  O   ARG    73     144.262  98.847  21.577  1.00 55.34      DS4
ATOM   1094  N   GLN    74     144.525  98.923  23.811  1.00 40.60      DS4
ATOM   1095  CA  GLN    74     143.190  99.476  24.068  1.00 40.60      DS4
ATOM   1096  CB  GLN    74     142.872  99.458  25.564  1.00 73.67      DS4
ATOM   1097  CG  GLN    74     142.539  98.088  26.131  1.00 73.67      DS4
ATOM   1098  CD  GLN    74     141.671  98.184  27.378  1.00 73.67      DS4
ATOM   1099  OE1 GLN    74     142.011  98.879  28.340  1.00 73.67      DS4
ATOM   1100  NE2 GLN    74     140.540  97.489  27.365  1.00 73.67      DS4
ATOM   1101  C   GLN    74     143.061 100.900  23.552  1.00 40.60      DS4
ATOM   1102  O   GLN    74     142.060 101.256  22.930  1.00 40.60      DS4
ATOM   1103  N   PHE    75     144.080 101.707  23.825  1.00 50.99      DS4
ATOM   1104  CA  PHE    75     144.128 103.101  23.390  1.00 50.99      DS4
ATOM   1105  CB  PHE    75     145.511 103.673  23.707  1.00 50.64      DS4
ATOM   1106  CG  PHE    75     145.634 105.149  23.475  1.00 50.64      DS4
ATOM   1107  CD1 PHE    75     145.662 106.032  24.544  1.00 50.64      DS4
ATOM   1108  CD2 PHE    75     145.761 105.655  22.191  1.00 50.64      DS4
ATOM   1109  CE1 PHE    75     145.822 107.399  24.334  1.00 50.64      DS4
ATOM   1110  CE2 PHE    75     145.921 107.021  21.975  1.00 50.64      DS4
ATOM   1111  CZ  PHE    75     145.953 107.889  23.048  1.00 50.64      DS4
ATOM   1112  C   PHE    75     143.855 103.206  21.880  1.00 50.99      DS4
ATOM   1113  O   PHE    75     142.965 103.946  21.446  1.00 50.99      DS4
ATOM   1114  N   ARG    76     144.633 102.455  21.099  1.00 39.69      DS4
ATOM   1115  CA  ARG    76     144.533 102.414  19.639  1.00 39.69      DS4
ATOM   1116  CB  ARG    76     145.527 101.384  19.091  1.00 79.59      DS4
ATOM   1117  CG  ARG    76     145.635 101.368  17.585  1.00 79.59      DS4
ATOM   1118  CD  ARG    76     146.258 102.656  17.101  1.00 79.59      DS4
ATOM   1119  NE  ARG    76     146.085 102.879  15.666  1.00 79.59      DS4
ATOM   1120  CZ  ARG    76     146.724 102.219  14.703  1.00 79.59      DS4
ATOM   1121  NH1 ARG    76     147.603 101.265  15.003  1.00 79.59      DS4
ATOM   1122  NH2 ARG    76     146.488 102.527  13.432  1.00 79.59      DS4
ATOM   1123  C   ARG    76     143.118 102.078  19.141  1.00 39.69      DS4
ATOM   1124  O   ARG    76     142.564 102.768  18.278  1.00 39.69      DS4
ATOM   1125  N   ASN    77     142.539 101.015  19.679  1.00 43.51      DS4
ATOM   1126  CA  ASN    77     141.206 100.615  19.263  1.00 43.51      DS4
ATOM   1127  CB  ASN    77     140.794  99.331  19.988  1.00 79.34      DS4
ATOM   1128  CG  ASN    77     141.746  98.176  19.709  1.00 79.34      DS4
ATOM   1129  OD1 ASN    77     142.081  97.895  18.554  1.00 79.34      DS4
ATOM   1130  ND2 ASN    77     142.181  97.497  20.763  1.00 79.34      DS4
ATOM   1131  C   ASN    77     140.186 101.731  19.504  1.00 43.51      DS4
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ATOM	1132	O	ASN	77	139.223	101.888	18.741	1.00	43.51	DS4	ATOM	1185	CD	LYS	84	135.476	102.074	12.392	1.00	68.13	DS4
ATOM	1133	N	LEU	78	140.397	102.505	20.568	1.00	46.11	DS4	ATOM	1186	CE	LYS	84	136.755	101.248	12.224	1.00	68.13	DS4
ATOM	1134	CA	LEU	78	139.515	103.620	20.882	1.00	46.11	DS4	ATOM	1187	NZ	LYS	84	136.609	99.825	12.668	1.00	68.13	DS4
ATOM	1135	CB	LEU	78	139.894	104.241	22.209	1.00	33.96	DS4	ATOM	1188	C	LYS	84	133.567	106.723	12.551	1.00	62.70	DS4
ATOM	1136	CG	LEU	78	138.934	103.872	23.326	1.00	33.96	DS4	ATOM	1189	O	LYS	84	132.848	107.177	11.655	1.00	62.70	DS4
ATOM	1137	CD1	LEU	78	139.368	104.585	24.609	1.00	33.96	DS4	ATOM	1190	N	LYS	85	133.319	106.912	13.839	1.00	73.19	DS4
ATOM	1138	CD2	LEU	78	137.508	104.263	22.917	1.00	33.96	DS4	ATOM	1191	CA	LYS	85	132.154	107.659	14.266	1.00	73.19	DS4
ATOM	1139	C	LEU	78	139.668	104.659	19.804	1.00	46.11	DS4	ATOM	1192	CB	LYS	85	132.061	107.624	15.792	1.00	79.03	DS4
ATOM	1140	O	LEU	78	138.694	105.256	19.357	1.00	46.11	DS4	ATOM	1193	CG	LYS	85	131.813	106.215	16.320	1.00	79.03	DS4
ATOM	1141	N	PHE	79	140.910	104.882	19.393	1.00	35.64	DS4	ATOM	1194	CD	LYS	85	131.880	106.143	17.826	1.00	79.03	DS4
ATOM	1142	CA	PHE	79	141.180	105.844	18.341	1.00	35.64	DS4	ATOM	1195	CE	LYS	85	130.781	106.943	18.477	1.00	79.03	DS4
ATOM	1143	CB	PHE	79	142.676	105.959	18.071	1.00	49.36	DS4	ATOM	1196	NZ	LYS	85	130.950	106.934	19.955	1.00	79.03	DS4
ATOM	1144	CG	PHE	79	142.994	106.930	16.990	1.00	49.36	DS4	ATOM	1197	C	LYS	85	132.225	109.086	13.746	1.00	73.19	DS4
ATOM	1145	CD1	PHE	79	142.852	108.297	17.211	1.00	49.36	DS4	ATOM	1198	O	LYS	85	133.310	109.650	13.602	1.00	73.19	DS4
ATOM	1146	CD2	PHE	79	143.328	106.482	15.717	1.00	49.36	DS4	ATOM	1199	N	LYS	86	131.061	109.654	13.445	1.00	67.06	DS4
ATOM	1147	CE1	PHE	79	143.027	109.203	16.179	1.00	49.36	DS4	ATOM	1200	CA	LYS	86	130.968	111.020	12.941	1.00	67.06	DS4
ATOM	1148	CE2	PHE	79	143.506	107.375	14.676	1.00	49.36	DS4	ATOM	1201	CB	LYS	86	129.502	111.404	12.725	1.00	83.64	DS4
ATOM	1149	CZ	PHE	79	143.354	108.741	14.903	1.00	49.36	DS4	ATOM	1202	CG	LYS	86	128.772	110.600	11.666	1.00	83.64	DS4
ATOM	1150	C	PHE	79	140.471	105.439	17.047	1.00	35.64	DS4	ATOM	1203	CD	LYS	86	127.384	111.171	11.429	1.00	83.64	DS4
ATOM	1151	O	PHE	79	139.774	106.241	16.442	1.00	35.64	DS4	ATOM	1204	CE	LYS	86	126.695	110.511	10.241	1.00	83.64	DS4
ATOM	1152	N	GLU	80	140.643	104.193	16.621	1.00	39.16	DS4	ATOM	1205	NZ	LYS	86	125.365	111.136	9.936	1.00	83.64	DS4
ATOM	1153	CA	GLU	80	139.991	103.754	15.395	1.00	39.16	DS4	ATOM	1206	C	LYS	86	131.594	112.013	13.916	1.00	67.06	DS4
ATOM	1154	CB	GLU	80	140.461	102.353	14.996	1.00	72.44	DS4	ATOM	1207	O	LYS	86	131.808	111.694	15.085	1.00	67.06	DS4
ATOM	1155	CG	GLU	80	141.947	102.296	14.630	1.00	72.44	DS4	ATOM	1208	N	GLY	87	131.892	113.216	13.434	1.00	60.56	DS4
ATOM	1156	CD	GLU	80	142.296	103.100	13.373	1.00	72.44	DS4	ATOM	1209	CA	GLY	87	132.452	114.235	14.307	1.00	60.56	DS4
ATOM	1157	OE1	GLU	80	143.498	103.388	13.166	1.00	72.44	DS4	ATOM	1210	C	GLY	87	133.958	114.272	14.436	1.00	60.56	DS4
ATOM	1158	OE2	GLU	80	141.379	103.434	12.588	1.00	72.44	DS4	ATOM	1211	O	GLY	87	134.629	113.242	14.398	1.00	60.56	DS4
ATOM	1159	C	GLU	80	138.480	103.794	15.550	1.00	39.16	DS4	ATOM	1212	N	VAL	88	134.485	115.478	14.600	1.00	47.80	DS4
ATOM	1160	O	GLU	80	137.755	103.789	14.562	1.00	39.16	DS4	ATOM	1213	CA	VAL	88	135.914	115.674	14.732	1.00	47.80	DS4
ATOM	1161	N	GLU	81	138.006	103.836	16.792	1.00	63.45	DS4	ATOM	1214	CB	VAL	88	136.237	116.984	15.464	1.00	31.70	DS4
ATOM	1162	CA	GLU	81	136.571	103.922	17.057	1.00	63.45	DS4	ATOM	1215	CG1	VAL	88	137.754	117.119	15.652	1.00	31.70	DS4
ATOM	1163	CB	GLU	81	136.273	103.685	18.533	1.00	76.76	DS4	ATOM	1216	CG2	VAL	88	135.685	118.159	14.676	1.00	31.70	DS4
ATOM	1164	CG	GLU	81	135.686	102.347	18.857	1.00	76.76	DS4	ATOM	1217	C	VAL	88	136.544	114.536	15.498	1.00	47.80	DS4
ATOM	1165	CD	GLU	81	134.543	102.454	19.841	1.00	76.76	DS4	ATOM	1218	O	VAL	88	136.412	114.442	16.718	1.00	47.80	DS4
ATOM	1166	OE1	GLU	81	133.444	102.891	19.436	1.00	76.76	DS4	ATOM	1219	N	THR	89	137.230	113.668	14.769	1.00	40.58	DS4
ATOM	1167	OE2	GLU	81	134.747	102.107	21.021	1.00	76.76	DS4	ATOM	1220	CA	THR	89	137.892	112.530	15.382	1.00	40.58	DS4
ATOM	1168	C	GLU	81	136.163	105.341	16.730	1.00	63.45	DS4	ATOM	1221	CB	THR	89	138.913	111.921	14.405	1.00	46.58	DS4
ATOM	1169	O	GLU	81	135.232	105.594	15.969	1.00	63.45	DS4	ATOM	1222	OG1	THR	89	138.222	111.444	13.241	1.00	46.58	DS4
ATOM	1170	N	ALA	82	136.892	106.268	17.331	1.00	45.83	DS4	ATOM	1223	CG2	THR	89	139.657	110.772	15.059	1.00	46.58	DS4
ATOM	1171	CA	ALA	82	136.640	107.677	17.153	1.00	45.83	DS4	ATOM	1224	C	THR	89	138.591	112.952	16.675	1.00	40.58	DS4
ATOM	1172	CB	ALA	82	137.471	108.461	18.146	1.00	37.73	DS4	ATOM	1225	O	THR	89	138.372	112.376	17.732	1.00	40.58	DS4
ATOM	1173	C	ALA	82	136.940	108.151	15.739	1.00	45.83	DS4	ATOM	1226	N	GLY	90	139.410	113.987	16.579	1.00	62.53	DS4
ATOM	1174	O	ALA	82	136.647	109.293	15.388	1.00	45.83	DS4	ATOM	1227	CA	GLY	90	140.139	114.468	17.734	1.00	62.53	DS4
ATOM	1175	N	SER	83	137.535	107.290	14.924	1.00	59.72	DS4	ATOM	1228	C	GLY	90	139.386	114.474	19.045	1.00	62.53	DS4
ATOM	1176	CA	SER	83	137.861	107.691	13.569	1.00	59.72	DS4	ATOM	1229	O	GLY	90	139.784	113.797	19.991	1.00	62.53	DS4
ATOM	1177	CB	SER	83	139.137	107.002	13.094	1.00	69.34	DS4	ATOM	1230	N	SER	91	138.304	115.241	19.118	1.00	60.66	DS4
ATOM	1178	OG	SER	83	140.237	107.343	13.918	1.00	69.34	DS4	ATOM	1231	CA	SER	91	137.548	115.314	20.356	1.00	60.66	DS4
ATOM	1179	C	SER	83	136.726	107.330	12.646	1.00	59.72	DS4	ATOM	1232	CB	SER	91	136.634	116.547	20.358	1.00	75.10	DS4
ATOM	1180	O	SER	83	136.566	107.928	11.583	1.00	59.72	DS4	ATOM	1233	OG	SER	91	135.838	116.614	19.197	1.00	75.10	DS4
ATOM	1181	N	LYS	84	135.931	106.350	13.053	1.00	62.70	DS4	ATOM	1234	C	SER	91	136.758	114.039	20.635	1.00	60.66	DS4
ATOM	1182	CA	LYS	84	134.815	105.913	12.230	1.00	62.70	DS4	ATOM	1235	O	SER	91	136.778	113.529	21.755	1.00	60.66	DS4
ATOM	1183	CB	LYS	84	134.554	104.420	12.455	1.00	68.13	DS4	ATOM	1236	N	VAL	92	136.075	113.510	19.629	1.00	41.40	DS4
ATOM	1184	CG	LYS	84	135.746	103.545	12.115	1.00	68.13	DS4	ATOM	1237	CA	VAL	92	135.319	112.274	19.820	1.00	41.40	DS4

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ATOM   1238  CB  VAL    92     134.900 111.672  18.484  1.00 30.08      DS4
ATOM   1239  CG1 VAL    92     134.290 110.291  18.699  1.00 30.08      DS4
ATOM   1240  CG2 VAL    92     133.919 112.600  17.803  1.00 30.08      DS4
ATOM   1241  C   VAL    92     136.177 111.241  20.552  1.00 41.40      DS4
ATOM   1242  O   VAL    92     135.686 110.473  21.383  1.00 41.40      DS4
ATOM   1243  N   PHE    93     137.462 111.233  20.220  1.00 60.70      DS4
ATOM   1244  CA  PHE    93     138.423 110.332  20.831  1.00 60.70      DS4
ATOM   1245  CB  PHE    93     139.794 110.530  20.180  1.00 48.39      DS4
ATOM   1246  CG  PHE    93     140.859 109.619  20.710  1.00 48.39      DS4
ATOM   1247  CD1 PHE    93     142.188 110.011  20.703  1.00 48.39      DS4
ATOM   1248  CD2 PHE    93     140.539 108.359  21.207  1.00 48.39      DS4
ATOM   1249  CE1 PHE    93     143.184 109.165  21.186  1.00 48.39      DS4
ATOM   1250  CE2 PHE    93     141.531 107.505  21.692  1.00 48.39      DS4
ATOM   1251  CZ  PHE    93     142.854 107.911  21.681  1.00 48.39      DS4
ATOM   1252  C   PHE    93     138.500 110.663  22.321  1.00 60.70      DS4
ATOM   1253  O   PHE    93     138.262 109.808  23.177  1.00 60.70      DS4
ATOM   1254  N   LEU    94     138.828 111.914  22.624  1.00 51.83      DS4
ATOM   1255  CA  LEU    94     138.935 112.349  24.009  1.00 51.83      DS4
ATOM   1256  CB  LEU    94     139.240 113.845  24.069  1.00 41.46      DS4
ATOM   1257  CG  LEU    94     140.662 114.245  23.664  1.00 41.46      DS4
ATOM   1258  CD1 LEU    94     140.733 115.758  23.558  1.00 41.46      DS4
ATOM   1259  CD2 LEU    94     141.673 113.721  24.691  1.00 41.46      DS4
ATOM   1260  C   LEU    94     137.665 112.044  24.793  1.00 51.83      DS4
ATOM   1261  O   LEU    94     137.719 111.678  25.967  1.00 51.83      DS4
ATOM   1262  N   GLY    95     136.518 112.191  24.142  1.00 74.00      DS4
ATOM   1263  CA  GLY    95     135.271 111.907  24.823  1.00 74.00      DS4
ATOM   1264  C   GLY    95     135.275 110.483  25.341  1.00 74.00      DS4
ATOM   1265  O   GLY    95     134.993 110.231  26.514  1.00 74.00      DS4
ATOM   1266  N   LEU    96     135.614 109.552  24.456  1.00 51.18      DS4
ATOM   1267  CA  LEU    96     135.660 108.138  24.789  1.00 51.18      DS4
ATOM   1268  CB  LEU    96     135.936 107.335  23.522  1.00 36.48      DS4
ATOM   1269  CG  LEU    96     134.659 107.010  22.743  1.00 36.48      DS4
ATOM   1270  CD1 LEU    96     133.668 108.190  22.780  1.00 36.48      DS4
ATOM   1271  CD2 LEU    96     135.044 106.629  21.329  1.00 36.48      DS4
ATOM   1272  C   LEU    96     136.667 107.794  25.880  1.00 51.18      DS4
ATOM   1273  O   LEU    96     136.435 106.893  26.688  1.00 51.18      DS4
ATOM   1274  N   LEU    97     137.786 108.501  25.905  1.00 51.38      DS4
ATOM   1275  CA  LEU    97     138.774 108.249  26.939  1.00 51.38      DS4
ATOM   1276  CB  LEU    97     140.048 109.043  26.665  1.00 55.24      DS4
ATOM   1277  CG  LEU    97     141.043 108.465  25.671  1.00 55.24      DS4
ATOM   1278  CD1 LEU    97     142.218 109.415  25.502  1.00 55.24      DS4
ATOM   1279  CD2 LEU    97     141.518 107.130  26.192  1.00 55.24      DS4
ATOM   1280  C   LEU    97     138.199 108.669  28.297  1.00 51.38      DS4
ATOM   1281  O   LEU    97     138.427 108.012  29.314  1.00 51.38      DS4
ATOM   1282  N   GLU    98     137.448 109.767  28.302  1.00 63.48      DS4
ATOM   1283  CA  GLU    98     136.859 110.282  29.529  1.00 63.48      DS4
ATOM   1284  CB  GLU    98     136.492 111.755  29.359  1.00 58.41      DS4
ATOM   1285  CG  GLU    98     136.758 112.605  30.579  1.00 58.41      DS4
ATOM   1286  CD  GLU    98     138.240 112.836  30.781  1.00 58.41      DS4
ATOM   1287  OE1 GLU    98     138.908 113.179  29.790  1.00 58.41      DS4
ATOM   1288  OE2 GLU    98     138.743 112.682  31.915  1.00 58.41      DS4
ATOM   1289  C   GLU    98     135.621 109.503  29.955  1.00 63.48      DS4
ATOM   1290  O   GLU    98     135.090 109.739  31.039  1.00 63.48      DS4
ATOM   1291  N   SER    99     135.160 108.587  29.103  1.00 37.43      DS4
ATOM   1292  CA  SER    99     133.979 107.778  29.418  1.00 37.43      DS4
ATOM   1293  CB  SER    99     133.139 107.547  28.170  1.00 38.58      DS4
ATOM   1294  OG  SER    99     132.682 108.777  27.664  1.00 38.58      DS4
ATOM   1295  C   SER    99     134.301 106.426  30.068  1.00 37.43      DS4
ATOM   1296  O   SER    99     133.402 105.624  30.363  1.00 37.43      DS4
ATOM   1297  N   ARG   100     135.583 106.164  30.286  1.00 57.46      DS4
ATOM   1298  CA  ARG   100     135.957 104.924  30.936  1.00 57.46      DS4
ATOM   1299  CB  ARG   100     137.476 104.725  30.908  1.00 52.59      DS4
ATOM   1300  CG  ARG   100     138.046 104.443  29.526  1.00 52.59      DS4
ATOM   1301  CD  ARG   100     139.563 104.420  29.560  1.00 52.59      DS4
ATOM   1302  NE  ARG   100     140.099 103.332  30.380  1.00 52.59      DS4
ATOM   1303  CZ  ARG   100     140.005 102.041  30.066  1.00 52.59      DS4
ATOM   1304  NH1 ARG   100     139.390 101.677  28.945  1.00 52.59      DS4
ATOM   1305  NH2 ARG   100     140.532 101.117  30.866  1.00 52.59      DS4
ATOM   1306  C   ARG   100     135.474 105.036  32.374  1.00 57.46      DS4
ATOM   1307  O   ARG   100     135.734 106.034  33.054  1.00 57.46      DS4
ATOM   1308  N   LEU   101     134.751 104.021  32.825  1.00 68.24      DS4
ATOM   1309  CA  LEU   101     134.246 103.993  34.188  1.00 68.24      DS4
ATOM   1310  CB  LEU   101     133.711 102.600  34.518  1.00 42.68      DS4
ATOM   1311  CG  LEU   101     133.213 102.431  35.947  1.00 42.68      DS4
ATOM   1312  CD1 LEU   101     132.068 103.397  36.178  1.00 42.68      DS4
ATOM   1313  CD2 LEU   101     132.766 101.000  36.175  1.00 42.68      DS4
ATOM   1314  C   LEU   101     135.349 104.348  35.179  1.00 68.24      DS4
ATOM   1315  O   LEU   101     135.156 105.167  36.073  1.00 68.24      DS4
ATOM   1316  N   ASP   102     136.511 103.730  35.012  1.00 50.04      DS4
ATOM   1317  CA  ASP   102     137.618 103.984  35.911  1.00 50.04      DS4
ATOM   1318  CB  ASP   102     138.802 103.024  35.624  1.00 76.25      DS4
ATOM   1319  CG  ASP   102     139.641 103.421  34.408  1.00 76.25      DS4
ATOM   1320  OD1 ASP   102     139.078 103.824  33.366  1.00 76.25      DS4
ATOM   1321  OD2 ASP   102     140.884 103.302  34.493  1.00 76.25      DS4
ATOM   1322  C   ASP   102     138.051 105.439  35.863  1.00 50.04      DS4
ATOM   1323  O   ASP   102     138.525 105.974  36.864  1.00 50.04      DS4
ATOM   1324  N   ASN   103     137.877 106.098  34.721  1.00 56.31      DS4
ATOM   1325  CA  ASN   103     138.270 107.498  34.636  1.00 56.31      DS4
ATOM   1326  CB  ASN   103     138.317 107.976  33.191  1.00 41.86      DS4
ATOM   1327  CG  ASN   103     138.469 109.487  33.087  1.00 41.86      DS4
ATOM   1328  OD1 ASN   103     139.535 110.053  33.374  1.00 41.86      DS4
ATOM   1329  ND2 ASN   103     137.389 110.151  32.684  1.00 41.86      DS4
ATOM   1330  C   ASN   103     137.261 108.328  35.404  1.00 56.31      DS4
ATOM   1331  O   ASN   103     137.623 109.132  36.262  1.00 56.31      DS4
ATOM   1332  N   VAL   104     135.989 108.132  35.084  1.00 47.04      DS4
ATOM   1333  CA  VAL   104     134.924 108.846  35.756  1.00 47.04      DS4
ATOM   1334  CB  VAL   104     133.583 108.218  35.447  1.00 25.43      DS4
ATOM   1335  CG1 VAL   104     132.482 109.008  36.115  1.00 25.43      DS4
ATOM   1336  CG2 VAL   104     133.390 108.152  33.948  1.00 25.43      DS4
ATOM   1337  C   VAL   104     135.134 108.806  37.265  1.00 47.04      DS4
ATOM   1338  O   VAL   104     135.186 109.844  37.921  1.00 47.04      DS4
ATOM   1339  N   VAL   105     135.249 107.610  37.825  1.00 59.33      DS4
ATOM   1340  CA  VAL   105     135.463 107.495  39.258  1.00 59.33      DS4
ATOM   1341  CB  VAL   105     135.859 106.054  39.634  1.00 34.35      DS4
ATOM   1342  CG1 VAL   105     136.451 105.983  41.045  1.00 34.35      DS4
ATOM   1343  CG2 VAL   105     134.615 105.192  39.553  1.00 34.35      DS4
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ATOM   1344  C   VAL   105     136.522 108.494  39.700  1.00 59.33      DS4
ATOM   1345  O   VAL   105     136.341 109.192  40.691  1.00 59.33      DS4
ATOM   1346  N   TYR   106     137.616 108.581  38.955  1.00 56.01      DS4
ATOM   1347  CA  TYR   106     138.673 109.532  39.283  1.00 56.01      DS4
ATOM   1348  CB  TYR   106     139.831 109.408  38.309  1.00 51.38      DS4
ATOM   1349  CG  TYR   106     140.747 110.608  38.350  1.00 51.38      DS4
ATOM   1350  CD1 TYR   106     141.698 110.747  39.365  1.00 51.38      DS4
ATOM   1351  CE1 TYR   106     142.524 111.863  39.431  1.00 51.38      DS4
ATOM   1352  CD2 TYR   106     140.645 111.621  37.395  1.00 51.38      DS4
ATOM   1353  CE2 TYR   106     141.462 112.742  37.452  1.00 51.38      DS4
ATOM   1354  CZ  TYR   106     142.399 112.857  38.475  1.00 51.38      DS4
ATOM   1355  OH  TYR   106     143.195 113.975  38.564  1.00 51.38      DS4
ATOM   1356  C   TYR   106     138.121 110.942  39.171  1.00 56.01      DS4
ATOM   1357  O   TYR   106     138.293 111.768  40.060  1.00 56.01      DS4
ATOM   1358  N   ARG   107     137.486 111.213  38.042  1.00 75.61      DS4
ATOM   1359  CA  ARG   107     136.893 112.510  37.795  1.00 75.61      DS4
ATOM   1360  CB  ARG   107     136.146 112.483  36.458  1.00 53.50      DS4
ATOM   1361  CG  ARG   107     136.994 112.800  35.228  1.00 53.50      DS4
ATOM   1362  CD  ARG   107     137.195 114.309  35.081  1.00 53.50      DS4
ATOM   1363  NE  ARG   107     137.805 114.700  33.809  1.00 53.50      DS4
ATOM   1364  CZ  ARG   107     139.100 114.946  33.630  1.00 53.50      DS4
ATOM   1365  NH1 ARG   107     139.957 114.848  34.636  1.00 53.50      DS4
ATOM   1366  NH2 ARG   107     139.538 115.305  32.435  1.00 53.50      DS4
ATOM   1367  C   ARG   107     135.941 112.924  38.927  1.00 75.61      DS4
ATOM   1368  O   ARG   107     135.891 114.103  39.293  1.00 75.61      DS4
ATOM   1369  N   LEU   108     135.198 111.964  39.484  1.00 60.58      DS4
ATOM   1370  CA  LEU   108     134.250 112.255  40.566  1.00 60.58      DS4
ATOM   1371  CB  LEU   108     133.089 111.267  40.543  1.00 44.88      DS4
ATOM   1372  CG  LEU   108     132.117 111.499  39.396  1.00 44.88      DS4
ATOM   1373  CD1 LEU   108     130.907 110.586  39.551  1.00 44.88      DS4
ATOM   1374  CD2 LEU   108     131.689 112.951  39.398  1.00 44.88      DS4
ATOM   1375  C   LEU   108     134.828 112.291  41.976  1.00 60.58      DS4
ATOM   1376  O   LEU   108     134.082 112.271  42.953  1.00 60.58      DS4
ATOM   1377  N   GLY   109     136.150 112.332  42.078  1.00 67.21      DS4
ATOM   1378  CA  GLY   109     136.792 112.405  43.376  1.00 67.21      DS4
ATOM   1379  C   GLY   109     136.759 111.194  44.287  1.00 67.21      DS4
ATOM   1380  O   GLY   109     137.309 111.247  45.388  1.00 67.21      DS4
ATOM   1381  N   PHE   110     136.117 110.108  43.871  1.00 60.24      DS4
ATOM   1382  CA  PHE   110     136.090 108.925  44.719  1.00 60.24      DS4
ATOM   1383  CB  PHE   110     135.353 107.788  44.032  1.00 45.98      DS4
ATOM   1384  CG  PHE   110     133.918 108.077  43.763  1.00 45.98      DS4
ATOM   1385  CD1 PHE   110     133.304 109.192  44.317  1.00 45.98      DS4
ATOM   1386  CD2 PHE   110     133.162 107.213  42.978  1.00 45.98      DS4
ATOM   1387  CE1 PHE   110     131.947 109.443  44.091  1.00 45.98      DS4
ATOM   1388  CE2 PHE   110     131.808 107.447  42.743  1.00 45.98      DS4
ATOM   1389  CZ  PHE   110     131.195 108.562  43.297  1.00 45.98      DS4
ATOM   1390  C   PHE   110     137.530 108.507  44.993  1.00 60.24      DS4
ATOM   1391  O   PHE   110     137.911 108.267  46.141  1.00 60.24      DS4
ATOM   1392  N   ALA   111     138.331 108.432  43.932  1.00 60.14      DS4
ATOM   1393  CA  ALA   111     139.732 108.056  44.063  1.00 60.14      DS4
ATOM   1394  CB  ALA   111     140.079 106.983  43.051  1.00 87.35      DS4
ATOM   1395  C   ALA   111     140.622 109.271  43.861  1.00 60.14      DS4
ATOM   1396  O   ALA   111     140.263 110.202  43.140  1.00 60.14      DS4
ATOM   1397  N   VAL   112     141.782 109.260  44.506  1.00 61.16      DS4
ATOM   1398  CA  VAL   112     142.735 110.357  44.398  1.00 61.16      DS4
ATOM   1399  CB  VAL   112     143.793 110.279  45.524  1.00 61.99      DS4
ATOM   1400  CG1 VAL   112     145.031 111.078  45.151  1.00 61.99      DS4
ATOM   1401  CG2 VAL   112     143.209 110.825  46.812  1.00 61.99      DS4
ATOM   1402  C   VAL   112     143.451 110.341  43.052  1.00 61.16      DS4
ATOM   1403  O   VAL   112     143.918 111.378  42.570  1.00 61.16      DS4
ATOM   1404  N   THR   113     143.525 109.161  42.444  1.00 63.55      DS4
ATOM   1405  CA  THR   113     144.208 109.009  41.167  1.00 63.55      DS4
ATOM   1406  CB  THR   113     145.539 108.268  41.336  1.00106.27      DS4
ATOM   1407  OG1 THR   113     145.287 106.890  41.647  1.00106.27      DS4
ATOM   1408  CG2 THR   113     146.343 108.893  42.452  1.00106.27      DS4
ATOM   1409  C   THR   113     143.405 108.224  40.154  1.00 63.55      DS4
ATOM   1410  O   THR   113     142.259 107.851  40.403  1.00 63.55      DS4
ATOM   1411  N   ARG   114     144.030 107.988  39.001  1.00 51.16      DS4
ATOM   1412  CA  ARG   114     143.417 107.214  37.936  1.00 51.16      DS4
ATOM   1413  CB  ARG   114     143.981 107.638  36.583  1.00 48.23      DS4
ATOM   1414  CG  ARG   114     143.425 108.958  36.086  1.00 48.23      DS4
ATOM   1415  CD  ARG   114     142.947 108.832  34.645  1.00 48.23      DS4
ATOM   1416  NE  ARG   114     142.106 109.947  34.217  1.00 48.23      DS4
ATOM   1417  CZ  ARG   114     142.487 111.220  34.214  1.00 48.23      DS4
ATOM   1418  NH1 ARG   114     143.710 111.559  34.619  1.00 48.23      DS4
ATOM   1419  NH2 ARG   114     141.639 112.155  33.801  1.00 48.23      DS4
ATOM   1420  C   ARG   114     143.730 105.749  38.230  1.00 51.16      DS4
ATOM   1421  O   ARG   114     142.909 104.859  38.004  1.00 51.16      DS4
ATOM   1422  N   ARG   115     144.921 105.499  38.755  1.00 63.37      DS4
ATOM   1423  CA  ARG   115     145.283 104.138  39.101  1.00 63.37      DS4
ATOM   1424  CB  ARG   115     146.738 104.064  39.579  1.00 70.76      DS4
ATOM   1425  CG  ARG   115     147.771 104.278  38.481  1.00 70.76      DS4
ATOM   1426  CD  ARG   115     149.171 103.938  38.966  1.00 70.76      DS4
ATOM   1427  NE  ARG   115     150.077 103.677  37.852  1.00 70.76      DS4
ATOM   1428  CZ  ARG   115     151.275 103.110  37.972  1.00 70.76      DS4
ATOM   1429  NH1 ARG   115     151.732 102.741  39.163  1.00 70.76      DS4
ATOM   1430  NH2 ARG   115     152.014 102.889  36.892  1.00 70.76      DS4
ATOM   1431  C   ARG   115     144.338 103.694  40.212  1.00 63.37      DS4
ATOM   1432  O   ARG   115     143.612 102.715  40.053  1.00 63.37      DS4
ATOM   1433  N   GLN   116     144.337 104.438  41.320  1.00 71.43      DS4
ATOM   1434  CA  GLN   116     143.494 104.139  42.477  1.00 71.43      DS4
ATOM   1435  CB  GLN   116     143.500 105.318  43.446  1.00 68.05      DS4
ATOM   1436  CG  GLN   116     143.027 104.982  44.860  1.00 68.05      DS4
ATOM   1437  CD  GLN   116     143.008 106.196  45.772  1.00 68.05      DS4
ATOM   1438  OE1 GLN   116     142.059 106.978  45.755  1.00 68.05      DS4
ATOM   1439  NE2 GLN   116     144.069 106.368  46.558  1.00 68.05      DS4
ATOM   1440  C   GLN   116     142.058 103.830  42.068  1.00 71.43      DS4
ATOM   1441  O   GLN   116     141.481 102.822  42.484  1.00 71.43      DS4
ATOM   1442  N   ALA   117     141.477 104.705  41.258  1.00 42.67      DS4
ATOM   1443  CA  ALA   117     140.114 104.500  40.786  1.00 42.67      DS4
ATOM   1444  CB  ALA   117     139.715 105.616  39.827  1.00 43.85      DS4
ATOM   1445  C   ALA   117     140.026 103.148  40.084  1.00 42.67      DS4
ATOM   1446  O   ALA   117     139.060 102.402  40.256  1.00 42.67      DS4
ATOM   1447  N   ARG   118     141.045 102.835  39.291  1.00 67.92      DS4
ATOM   1448  CA  ARG   118     141.070 101.572  38.574  1.00 67.92      DS4
ATOM   1449  CB  ARG   118     142.398 101.403  37.817  1.00 58.81      DS4
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ATOM	1450	CG	ARG	118	142.354	100.343	36.718	1.00	58.81	DS4	ATOM	1503	N	GLY	124	135.522	95.847	43.057	1.00	65.76	DS4
ATOM	1451	CD	ARG	118	143.736	99.978	36.169	1.00	58.81	DS4	ATOM	1504	CA	GLY	124	134.080	95.908	43.266	1.00	65.76	DS4
ATOM	1452	NE	ARG	118	143.647	98.872	35.211	1.00	58.81	DS4	ATOM	1505	C	GLY	124	133.505	97.106	44.003	1.00	65.76	DS4
ATOM	1453	CZ	ARG	118	143.334	99.006	33.923	1.00	58.81	DS4	ATOM	1506	O	GLY	124	132.284	97.298	44.012	1.00	65.76	DS4
ATOM	1454	NH1	ARG	118	143.263	97.936	33.144	1.00	58.81	DS4	ATOM	1507	N	HIS	125	134.376	97.910	44.612	1.00	60.07	DS4
ATOM	1455	NH2	ARG	118	143.117	100.211	33.407	1.00	58.81	DS4	ATOM	1508	CA	HIS	125	133.968	99.094	45.368	1.00	60.07	DS4
ATOM	1456	C	ARG	118	140.891	100.441	39.583	1.00	67.92	DS4	ATOM	1509	CB	HIS	125	135.202	99.794	45.938	1.00	69.25	DS4
ATOM	1457	O	ARG	118	140.068	99.550	39.388	1.00	67.92	DS4	ATOM	1510	CG	HIS	125	136.127	98.882	46.679	1.00	69.25	DS4
ATOM	1458	N	GLN	119	141.647	100.490	40.675	1.00	71.26	DS4	ATOM	1511	CD2	HIS	125	137.473	98.743	46.630	1.00	69.25	DS4
ATOM	1459	CA	GLN	119	141.560	99.447	41.693	1.00	71.26	DS4	ATOM	1512	ND1	HIS	125	135.685	97.994	47.635	1.00	69.25	DS4
ATOM	1460	CB	GLN	119	142.638	99.647	42.764	1.00	50.69	DS4	ATOM	1513	CE1	HIS	125	136.719	97.350	48.146	1.00	69.25	DS4
ATOM	1461	CG	GLN	119	142.882	98.407	43.604	1.00	50.69	DS4	ATOM	1514	NE2	HIS	125	137.816	97.786	47.554	1.00	69.25	DS4
ATOM	1462	CD	GLN	119	144.072	98.538	44.545	1.00	50.69	DS4	ATOM	1515	C	HIS	125	133.139	100.132	44.602	1.00	60.07	DS4
ATOM	1463	OE1	GLN	119	144.057	99.333	45.476	1.00	50.69	DS4	ATOM	1516	O	HIS	125	132.847	101.198	45.143	1.00	60.07	DS4
ATOM	1464	NE2	GLN	119	145.111	97.755	44.299	1.00	50.69	DS4	ATOM	1517	N	ILE	126	132.752	99.833	43.363	1.00	56.14	DS4
ATOM	1465	C	GLN	119	140.179	99.398	42.346	1.00	71.26	DS4	ATOM	1518	CA	ILE	126	131.976	100.785	42.568	1.00	56.14	DS4
ATOM	1466	O	GLN	119	139.612	98.324	42.539	1.00	71.26	DS4	ATOM	1519	CB	ILE	126	132.825	101.322	41.410	1.00	45.79	DS4
ATOM	1467	N	LEU	120	139.634	100.558	42.689	1.00	51.36	DS4	ATOM	1520	CG2	ILE	126	131.996	102.204	40.492	1.00	45.79	DS4
ATOM	1468	CA	LEU	120	138.322	100.589	43.304	1.00	51.36	DS4	ATOM	1521	CG1	ILE	126	133.993	102.115	41.988	1.00	45.79	DS4
ATOM	1469	CB	LEU	120	137.890	102.032	43.543	1.00	47.68	DS4	ATOM	1522	CD1	ILE	126	133.553	103.302	42.811	1.00	45.79	DS4
ATOM	1470	CG	LEU	120	138.750	102.719	44.601	1.00	47.68	DS4	ATOM	1523	C	ILE	126	130.664	100.243	42.014	1.00	56.14	DS4
ATOM	1471	CD1	LEU	120	138.363	104.165	44.720	1.00	47.68	DS4	ATOM	1524	O	ILE	126	130.485	99.036	41.891	1.00	56.14	DS4
ATOM	1472	CD2	LEU	120	138.570	102.017	45.922	1.00	47.68	DS4	ATOM	1525	N	THR	127	129.757	101.159	41.682	1.00	52.38	DS4
ATOM	1473	C	LEU	120	137.338	99.883	42.390	1.00	51.36	DS4	ATOM	1526	CA	THR	127	128.435	100.828	41.147	1.00	52.38	DS4
ATOM	1474	O	LEU	120	136.643	98.963	42.802	1.00	51.36	DS4	ATOM	1527	CB	THR	127	127.335	101.116	42.212	1.00	79.11	DS4
ATOM	1475	N	VAL	121	137.280	100.316	41.140	1.00	70.97	DS4	ATOM	1528	OG1	THR	127	127.076	99.922	42.957	1.00	79.11	DS4
ATOM	1476	CA	VAL	121	136.383	99.697	40.178	1.00	70.97	DS4	ATOM	1529	CG2	THR	127	126.032	101.627	41.560	1.00	79.11	DS4
ATOM	1477	CB	VAL	121	136.618	100.283	38.766	1.00	52.45	DS4	ATOM	1530	C	THR	127	128.098	101.634	39.889	1.00	52.38	DS4
ATOM	1478	CG1	VAL	121	135.790	99.535	37.742	1.00	52.45	DS4	ATOM	1531	O	THR	127	128.650	102.703	39.666	1.00	52.38	DS4
ATOM	1479	CG2	VAL	121	136.256	101.764	38.756	1.00	52.45	DS4	ATOM	1532	N	VAL	128	127.193	101.116	39.067	1.00	52.41	DS4
ATOM	1480	C	VAL	121	136.634	98.186	40.160	1.00	70.97	DS4	ATOM	1533	CA	VAL	128	126.760	101.826	37.870	1.00	52.41	DS4
ATOM	1481	O	VAL	121	135.705	97.379	40.244	1.00	70.97	DS4	ATOM	1534	CB	VAL	128	127.523	101.376	36.600	1.00	56.53	DS4
ATOM	1482	N	ARG	122	137.907	97.819	40.074	1.00	58.17	DS4	ATOM	1535	CG1	VAL	128	126.855	101.959	35.361	1.00	56.53	DS4
ATOM	1483	CA	ARG	122	138.326	96.423	40.038	1.00	58.17	DS4	ATOM	1536	CG2	VAL	128	128.967	101.847	36.662	1.00	56.53	DS4
ATOM	1484	CB	ARG	122	139.847	96.362	39.906	1.00	64.28	DS4	ATOM	1537	C	VAL	128	125.279	101.549	37.691	1.00	52.41	DS4
ATOM	1485	CG	ARG	122	140.320	95.783	38.594	1.00	64.28	DS4	ATOM	1538	O	VAL	128	124.891	100.551	37.088	1.00	52.41	DS4
ATOM	1486	CD	ARG	122	140.145	94.287	38.591	1.00	64.28	DS4	ATOM	1539	N	ASN	129	124.460	102.442	38.235	1.00	61.16	DS4
ATOM	1487	NE	ARG	122	139.271	93.828	37.523	1.00	64.28	DS4	ATOM	1540	CA	ASN	129	123.010	102.317	38.167	1.00	61.16	DS4
ATOM	1488	CZ	ARG	122	138.929	92.557	37.353	1.00	64.28	DS4	ATOM	1541	CB	ASN	129	122.554	102.073	36.735	1.00	61.65	DS4
ATOM	1489	NH1	ARG	122	139.392	91.636	38.184	1.00	64.28	DS4	ATOM	1542	CG	ASN	129	123.060	103.123	35.799	1.00	61.65	DS4
ATOM	1490	NH2	ARG	122	138.132	92.203	36.354	1.00	64.28	DS4	ATOM	1543	OD1	ASN	129	123.192	104.290	36.177	1.00	61.65	DS4
ATOM	1491	C	ARG	122	137.867	95.607	41.250	1.00	58.17	DS4	ATOM	1544	ND2	ASN	129	123.341	102.731	34.567	1.00	61.65	DS4
ATOM	1492	O	ARG	122	137.206	94.580	41.093	1.00	58.17	DS4	ATOM	1545	C	ASN	129	122.570	101.162	39.026	1.00	61.16	DS4
ATOM	1493	N	HIS	123	138.219	96.067	42.451	1.00	58.90	DS4	ATOM	1546	O	ASN	129	121.645	100.433	38.662	1.00	61.16	DS4
ATOM	1494	CA	HIS	123	137.846	95.384	43.686	1.00	58.90	DS4	ATOM	1547	N	GLY	130	123.235	101.008	40.168	1.00	57.90	DS4
ATOM	1495	CB	HIS	123	138.639	95.939	44.868	1.00	64.91	DS4	ATOM	1548	CA	GLY	130	122.910	99.913	41.056	1.00	57.90	DS4
ATOM	1496	CG	HIS	123	140.110	95.672	44.795	1.00	64.91	DS4	ATOM	1549	C	GLY	130	123.904	98.786	40.853	1.00	57.90	DS4
ATOM	1497	CD2	HIS	123	141.168	96.375	45.264	1.00	64.91	DS4	ATOM	1550	O	GLY	130	124.846	98.662	41.636	1.00	57.90	DS4
ATOM	1498	ND1	HIS	123	140.633	94.518	44.252	1.00	64.91	DS4	ATOM	1551	N	ARG	131	123.717	97.977	39.804	1.00	69.34	DS4
ATOM	1499	CE1	HIS	123	141.947	94.520	44.393	1.00	64.91	DS4	ATOM	1552	CA	ARG	131	124.619	96.857	39.523	1.00	69.34	DS4
ATOM	1500	NE2	HIS	123	142.297	95.637	45.006	1.00	64.91	DS4	ATOM	1553	CB	ARG	131	124.439	96.323	38.096	1.00	128.84	DS4
ATOM	1501	C	HIS	123	136.352	95.451	44.025	1.00	58.90	DS4	ATOM	1554	CG	ARG	131	123.085	95.732	37.791	1.00	128.84	DS4
ATOM	1502	O	HIS	123	135.966	95.160	45.157	1.00	58.90	DS4	ATOM	1555	CD	ARG	131	122.124	96.803	37.325	1.00	128.84	DS4

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ATOM  1556  NE  ARG  131     120.796  96.258  37.067  1.00128.84      DS4
ATOM  1557  CZ  ARG  131     119.793  96.954  36.542  1.00128.84      DS4
ATOM  1558  NH1 ARG  131     119.969  98.227  36.216  1.00128.84      DS4
ATOM  1559  NH2 ARG  131     118.613  96.379  36.347  1.00128.84      DS4
ATOM  1560  C   ARG  131     126.061  97.300  39.684  1.00 69.34      DS4
ATOM  1561  O   ARG  131     126.431  98.390  39.239  1.00 69.34      DS4
ATOM  1562  N   ARG  132     126.873  96.465  40.324  1.00 62.66      DS4
ATOM  1563  CA  ARG  132     128.271  96.809  40.504  1.00 62.66      DS4
ATOM  1564  CB  ARG  132     128.869  96.125  41.740  1.00 94.92      DS4
ATOM  1565  CG  ARG  132     129.340  94.697  41.542  1.00 94.92      DS4
ATOM  1566  CD  ARG  132     130.340  94.327  42.632  1.00 94.92      DS4
ATOM  1567  NE  ARG  132     130.667  92.904  42.631  1.00 94.92      DS4
ATOM  1568  CZ  ARG  132     129.822  91.939  42.984  1.00 94.92      DS4
ATOM  1569  NH1 ARG  132     128.589  92.233  43.374  1.00 94.92      DS4
ATOM  1570  NH2 ARG  132     130.206  90.673  42.943  1.00 94.92      DS4
ATOM  1571  C   ARG  132     129.027  96.381  39.260  1.00 62.66      DS4
ATOM  1572  O   ARG  132     128.706  95.368  38.651  1.00 62.66      DS4
ATOM  1573  N   VAL  133     130.020  97.176  38.888  1.00 51.81      DS4
ATOM  1574  CA  VAL  133     130.846  96.919  37.721  1.00 51.81      DS4
ATOM  1575  CB  VAL  133     130.584  97.985  36.642  1.00 44.59      DS4
ATOM  1576  CG1 VAL  133     131.618  97.870  35.543  1.00 44.59      DS4
ATOM  1577  CG2 VAL  133     129.175  97.823  36.080  1.00 44.59      DS4
ATOM  1578  C   VAL  133     132.311  96.979  38.141  1.00 51.81      DS4
ATOM  1579  O   VAL  133     132.719  97.920  38.815  1.00 51.81      DS4
ATOM  1580  N   ASP  134     133.098  95.978  37.756  1.00 52.95      DS4
ATOM  1581  CA  ASP  134     134.515  95.957  38.109  1.00 52.95      DS4
ATOM  1582  CB  ASP  134     134.851  94.703  38.909  1.00105.27      DS4
ATOM  1583  CG  ASP  134     134.651  93.444  38.104  1.00105.27      DS4
ATOM  1584  OD1 ASP  134     133.548  93.286  37.553  1.00105.27      DS4
ATOM  1585  OD2 ASP  134     135.582  92.615  38.017  1.00105.27      DS4
ATOM  1586  C   ASP  134     135.376  95.991  36.857  1.00 52.95      DS4
ATOM  1587  O   ASP  134     136.528  95.550  36.876  1.00 52.95      DS4
ATOM  1588  N   LEU  135     134.809  96.519  35.775  1.00 62.29      DS4
ATOM  1589  CA  LEU  135     135.497  96.626  34.489  1.00 62.29      DS4
ATOM  1590  CB  LEU  135     134.541  96.214  33.376  1.00 25.73      DS4
ATOM  1591  CG  LEU  135     133.945  94.822  33.542  1.00 25.73      DS4
ATOM  1592  CD1 LEU  135     132.768  94.655  32.630  1.00 25.73      DS4
ATOM  1593  CD2 LEU  135     135.004  93.780  33.238  1.00 25.73      DS4
ATOM  1594  C   LEU  135     135.965  98.063  34.266  1.00 62.29      DS4
ATOM  1595  O   LEU  135     135.192  98.926  33.868  1.00 62.29      DS4
ATOM  1596  N   PRO  136     137.248  98.330  34.502  1.00 34.10      DS4
ATOM  1597  CD  PRO  136     138.288  97.355  34.841  1.00 46.42      DS4
ATOM  1598  CA  PRO  136     137.828  99.662  34.339  1.00 34.10      DS4
ATOM  1599  CB  PRO  136     139.311  99.437  34.611  1.00 46.42      DS4
ATOM  1600  CG  PRO  136     139.332  98.240  35.482  1.00 46.42      DS4
ATOM  1601  C   PRO  136     137.612 100.239  32.961  1.00 34.10      DS4
ATOM  1602  O   PRO  136     137.551 101.445  32.788  1.00 34.10      DS4
ATOM  1603  N   SER  137     137.516  99.376  31.965  1.00 66.02      DS4
ATOM  1604  CA  SER  137     137.333  99.843  30.607  1.00 66.02      DS4
ATOM  1605  CB  SER  137     138.015  98.877  29.643  1.00 90.63      DS4
ATOM  1606  OG  SER  137     137.606  97.544  29.891  1.00 90.63      DS4
ATOM  1607  C   SER  137     135.862  99.966  30.278  1.00 66.02      DS4
ATOM  1608  O   SER  137     135.496 100.214  29.132  1.00 66.02      DS4
ATOM  1609  N   TYR  138     135.013  99.790  31.284  1.00 54.53      DS4
ATOM  1610  CA  TYR  138     133.575  99.882  31.068  1.00 54.53      DS4
ATOM  1611  CB  TYR  138     132.823  99.552  32.354  1.00 52.20      DS4
ATOM  1612  CG  TYR  138     131.322  99.702  32.234  1.00 52.20      DS4
ATOM  1613  CD1 TYR  138     130.513  98.616  31.893  1.00 52.20      DS4
ATOM  1614  CE1 TYR  138     129.134  98.758  31.757  1.00 52.20      DS4
ATOM  1615  CD2 TYR  138     130.712 100.936  32.439  1.00 52.20      DS4
ATOM  1616  CE2 TYR  138     129.341 101.089  32.306  1.00 52.20      DS4
ATOM  1617  CZ  TYR  138     128.558  99.998  31.964  1.00 52.20      DS4
ATOM  1618  OH  TYR  138     127.201 100.166  31.826  1.00 52.20      DS4
ATOM  1619  C   TYR  138     133.209 101.292  30.610  1.00 54.53      DS4
ATOM  1620  O   TYR  138     133.597 102.278  31.237  1.00 54.53      DS4
ATOM  1621  N   ARG  139     132.452 101.392  29.526  1.00 42.49      DS4
ATOM  1622  CA  ARG  139     132.077 102.703  29.020  1.00 42.49      DS4
ATOM  1623  CB  ARG  139     131.924 102.669  27.507  1.00 43.77      DS4
ATOM  1624  CG  ARG  139     131.422 103.983  26.946  1.00 43.77      DS4
ATOM  1625  CD  ARG  139     131.467 103.973  25.447  1.00 43.77      DS4
ATOM  1626  NE  ARG  139     132.812 103.670  24.983  1.00 43.77      DS4
ATOM  1627  CZ  ARG  139     133.122 103.489  23.711  1.00 43.77      DS4
ATOM  1628  NH1 ARG  139     132.174 103.593  22.788  1.00 43.77      DS4
ATOM  1629  NH2 ARG  139     134.367 103.183  23.372  1.00 43.77      DS4
ATOM  1630  C   ARG  139     130.805 103.282  29.605  1.00 42.49      DS4
ATOM  1631  O   ARG  139     129.706 102.791  29.328  1.00 42.49      DS4
ATOM  1632  N   VAL  140     130.967 104.355  30.374  1.00 49.90      DS4
ATOM  1633  CA  VAL  140     129.855 105.059  31.016  1.00 49.90      DS4
ATOM  1634  CB  VAL  140     130.380 106.027  32.096  1.00 52.26      DS4
ATOM  1635  CG1 VAL  140     129.226 106.644  32.843  1.00 52.26      DS4
ATOM  1636  CG2 VAL  140     131.324 105.303  33.040  1.00 52.26      DS4
ATOM  1637  C   VAL  140     129.068 105.890  30.001  1.00 49.90      DS4
ATOM  1638  O   VAL  140     129.637 106.764  29.353  1.00 49.90      DS4
ATOM  1639  N   ARG  141     127.774 105.625  29.850  1.00 55.73      DS4
ATOM  1640  CA  ARG  141     126.960 106.407  28.920  1.00 55.73      DS4
ATOM  1641  CB  ARG  141     125.759 105.600  28.429  1.00130.47      DS4
ATOM  1642  CG  ARG  141     126.074 104.371  27.616  1.00130.47      DS4
ATOM  1643  CD  ARG  141     124.768 103.737  27.180  1.00130.47      DS4
ATOM  1644  NE  ARG  141     124.951 102.470  26.483  1.00130.47      DS4
ATOM  1645  CZ  ARG  141     123.951 101.718  26.029  1.00130.47      DS4
ATOM  1646  NH1 ARG  141     122.694 102.109  26.199  1.00130.47      DS4
ATOM  1647  NH2 ARG  141     124.205 100.574  25.405  1.00130.47      DS4
ATOM  1648  C   ARG  141     126.440 107.655  29.652  1.00 55.73      DS4
ATOM  1649  O   ARG  141     126.639 107.803  30.857  1.00 55.73      DS4
ATOM  1650  N   PRO  142     125.778 108.578  28.930  1.00 81.71      DS4
ATOM  1651  CD  PRO  142     125.775 108.768  27.474  1.00 76.66      DS4
ATOM  1652  CA  PRO  142     125.259 109.778  29.593  1.00 81.71      DS4
ATOM  1653  CB  PRO  142     125.013 110.742  28.435  1.00 76.66      DS4
ATOM  1654  CG  PRO  142     125.929 110.259  27.375  1.00 76.66      DS4
ATOM  1655  C   PRO  142     123.961 109.427  30.302  1.00 81.71      DS4
ATOM  1656  O   PRO  142     123.056 108.853  29.696  1.00 81.71      DS4
ATOM  1657  N   GLY  143     123.870 109.761  31.582  1.00 70.45      DS4
ATOM  1658  CA  GLY  143     122.658 109.464  32.318  1.00 70.45      DS4
ATOM  1659  C   GLY  143     122.847 108.439  33.414  1.00 70.45      DS4
ATOM  1660  O   GLY  143     121.966 108.246  34.248  1.00 70.45      DS4
ATOM  1661  N   ASP  144     123.993 107.775  33.426  1.00 61.05      DS4
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ATOM   1662  CA  ASP   144      124.249 106.775  34.447  1.00 61.05      DS4
ATOM   1663  CB  ASP   144      125.417 105.876  34.037  1.00 77.30      DS4
ATOM   1664  CG  ASP   144      125.165 105.137  32.738  1.00 77.30      DS4
ATOM   1665  OD1 ASP   144      124.000 104.763  32.481  1.00 77.30      DS4
ATOM   1666  OD2 ASP   144      126.140 104.917  31.983  1.00 77.30      DS4
ATOM   1667  C   ASP   144      124.582 107.436  35.776  1.00 61.05      DS4
ATOM   1668  O   ASP   144      124.940 108.613  35.815  1.00 61.05      DS4
ATOM   1669  N   GLU   145      124.448 106.671  36.858  1.00 65.90      DS4
ATOM   1670  CA  GLU   145      124.778 107.138  38.206  1.00 65.90      DS4
ATOM   1671  CB  GLU   145      123.613 106.926  39.176  1.00137.42      DS4
ATOM   1672  CG  GLU   145      122.299 107.568  38.781  1.00137.42      DS4
ATOM   1673  CD  GLU   145      121.294 107.551  39.921  1.00137.42      DS4
ATOM   1674  OE1 GLU   145      121.137 106.491  40.565  1.00137.42      DS4
ATOM   1675  OE2 GLU   145      120.658 108.597  40.171  1.00137.42      DS4
ATOM   1676  C   GLU   145      125.957 106.296  38.679  1.00 65.90      DS4
ATOM   1677  O   GLU   145      125.873 105.071  38.719  1.00 65.90      DS4
ATOM   1678  N   ILE   146      127.058 106.936  39.038  1.00 66.44      DS4
ATOM   1679  CA  ILE   146      128.210 106.172  39.483  1.00 66.44      DS4
ATOM   1680  CB  ILE   146      129.466 106.582  38.705  1.00 65.07      DS4
ATOM   1681  CG2 ILE   146      130.689 105.814  39.212  1.00 65.07      DS4
ATOM   1682  CG1 ILE   146      129.227 106.294  37.222  1.00 65.07      DS4
ATOM   1683  CD1 ILE   146      130.430 106.504  36.357  1.00 65.07      DS4
ATOM   1684  C   ILE   146      128.426 106.289  40.984  1.00 66.44      DS4
ATOM   1685  O   ILE   146      129.113 107.186  41.478  1.00 66.44      DS4
ATOM   1686  N   ALA   147      127.829 105.338  41.695  1.00 69.35      DS4
ATOM   1687  CA  ALA   147      127.876 105.288  43.141  1.00 69.35      DS4
ATOM   1688  CB  ALA   147      126.532 104.807  43.672  1.00120.48      DS4
ATOM   1689  C   ALA   147      128.975 104.428  43.723  1.00 69.35      DS4
ATOM   1690  O   ALA   147      129.448 103.478  43.104  1.00 69.35      DS4
ATOM   1691  N   VAL   148      129.365 104.783  44.940  1.00 70.47      DS4
ATOM   1692  CA  VAL   148      130.372 104.045  45.667  1.00 70.47      DS4
ATOM   1693  CB  VAL   148      131.022 104.920  46.759  1.00 63.73      DS4
ATOM   1694  CG1 VAL   148      131.783 104.050  47.752  1.00 63.73      DS4
ATOM   1695  CG2 VAL   148      131.976 105.919  46.110  1.00 63.73      DS4
ATOM   1696  C   VAL   148      129.639 102.874  46.304  1.00 70.47      DS4
ATOM   1697  O   VAL   148      128.556 103.037  46.871  1.00 70.47      DS4
ATOM   1698  N   ALA   149      130.229 101.692  46.181  1.00 79.49      DS4
ATOM   1699  CA  ALA   149      129.652 100.477  46.728  1.00 79.49      DS4
ATOM   1700  CB  ALA   149      130.651  99.335  46.612  1.00101.82      DS4
ATOM   1701  C   ALA   149      129.225 100.653  48.179  1.00 79.49      DS4
ATOM   1702  O   ALA   149      129.980 101.142  49.023  1.00 79.49      DS4
ATOM   1703  N   GLU   150      127.998 100.240  48.458  1.00 76.39      DS4
ATOM   1704  CA  GLU   150      127.435 100.329  49.792  1.00 76.39      DS4
ATOM   1705  CB  GLU   150      126.101  99.579  49.832  1.00100.87      DS4
ATOM   1706  CG  GLU   150      125.130 100.016  48.730  1.00100.87      DS4
ATOM   1707  CD  GLU   150      125.642  99.721  47.312  1.00100.87      DS4
ATOM   1708  OE1 GLU   150      125.509  98.560  46.860  1.00100.87      DS4
ATOM   1709  OE2 GLU   150      126.187 100.645  46.654  1.00100.87      DS4
ATOM   1710  C   GLU   150      128.418  99.738  50.790  1.00 76.39      DS4
ATOM   1711  O   GLU   150      128.971 100.455  51.616  1.00 76.39      DS4
ATOM   1712  N   LYS   151      128.658  98.436  50.690  1.00 52.65      DS4
ATOM   1713  CA  LYS   151      129.570  97.762  51.605  1.00 52.65      DS4
ATOM   1714  CB  LYS   151      129.849  96.342  51.119  1.00 99.09      DS4
ATOM   1715  CG  LYS   151      128.645  95.421  51.170  1.00 99.09      DS4
ATOM   1716  CD  LYS   151      127.530  95.879  50.240  1.00 99.09      DS4
ATOM   1717  CE  LYS   151      126.366  94.900  50.254  1.00 99.09      DS4
ATOM   1718  NZ  LYS   151      125.289  95.306  49.310  1.00 99.09      DS4
ATOM   1719  C   LYS   151      130.896  98.500  51.805  1.00 52.65      DS4
ATOM   1720  O   LYS   151      131.586  98.307  52.815  1.00 52.65      DS4
ATOM   1721  N   SER   152      131.246  99.362  50.855  1.00 71.49      DS4
ATOM   1722  CA  SER   152      132.502 100.096  50.940  1.00 71.49      DS4
ATOM   1723  CB  SER   152      133.175 100.134  49.574  1.00 59.47      DS4
ATOM   1724  OG  SER   152      133.268  98.839  49.018  1.00 59.47      DS4
ATOM   1725  C   SER   152      132.324 101.517  51.431  1.00 71.49      DS4
ATOM   1726  O   SER   152      133.302 102.161  51.803  1.00 71.49      DS4
ATOM   1727  N   ARG   153      131.081 102.004  51.422  1.00 78.22      DS4
ATOM   1728  CA  ARG   153      130.777 103.369  51.861  1.00 78.22      DS4
ATOM   1729  CB  ARG   153      129.263 103.618  51.868  1.00 86.32      DS4
ATOM   1730  CG  ARG   153      128.721 103.995  50.509  1.00 86.32      DS4
ATOM   1731  CD  ARG   153      127.268 104.436  50.540  1.00 86.32      DS4
ATOM   1732  NE  ARG   153      126.334 103.319  50.391  1.00 86.32      DS4
ATOM   1733  CZ  ARG   153      125.058 103.453  50.032  1.00 86.32      DS4
ATOM   1734  NH1 ARG   153      124.560 104.659  49.781  1.00 86.32      DS4
ATOM   1735  NH2 ARG   153      124.276 102.385  49.923  1.00 86.32      DS4
ATOM   1736  C   ARG   153      131.349 103.678  53.230  1.00 78.22      DS4
ATOM   1737  O   ARG   153      131.405 104.838  53.639  1.00 78.22      DS4
ATOM   1738  N   ASN   154      131.784 102.629  53.924  1.00 76.42      DS4
ATOM   1739  CA  ASN   154      132.355 102.745  55.260  1.00 76.42      DS4
ATOM   1740  CB  ASN   154      131.744 101.682  56.176  1.00159.86      DS4
ATOM   1741  CG  ASN   154      130.250 101.871  56.373  1.00159.86      DS4
ATOM   1742  OD1 ASN   154      129.812 102.850  56.980  1.00159.86      DS4
ATOM   1743  ND2 ASN   154      129.458 100.934  55.855  1.00159.86      DS4
ATOM   1744  C   ASN   154      133.870 102.594  55.238  1.00 76.42      DS4
ATOM   1745  O   ASN   154      134.528 102.782  56.257  1.00 76.42      DS4
ATOM   1746  N   LEU   155      134.417 102.257  54.072  1.00 76.88      DS4
ATOM   1747  CA  LEU   155      135.859 102.079  53.914  1.00 76.88      DS4
ATOM   1748  CB  LEU   155      136.191 101.591  52.501  1.00 84.77      DS4
ATOM   1749  CG  LEU   155      135.913 100.117  52.218  1.00 84.77      DS4
ATOM   1750  CD1 LEU   155      136.255  99.810  50.777  1.00 84.77      DS4
ATOM   1751  CD2 LEU   155      136.744  99.247  53.152  1.00 84.77      DS4
ATOM   1752  C   LEU   155      136.627 103.355  54.195  1.00 76.88      DS4
ATOM   1753  O   LEU   155      136.377 104.396  53.582  1.00 76.88      DS4
ATOM   1754  N   GLU   156      137.572 103.256  55.123  1.00 70.02      DS4
ATOM   1755  CA  GLU   156      138.398 104.387  55.521  1.00 70.02      DS4
ATOM   1756  CB  GLU   156      139.685 103.876  56.160  1.00 99.21      DS4
ATOM   1757  CG  GLU   156      140.504 104.951  56.838  1.00 99.21      DS4
ATOM   1758  CD  GLU   156      141.935 104.520  57.064  1.00 99.21      DS4
ATOM   1759  OE1 GLU   156      142.741 104.624  56.116  1.00 99.21      DS4
ATOM   1760  OE2 GLU   156      142.252 104.063  58.182  1.00 99.21      DS4
ATOM   1761  C   GLU   156      138.752 105.293  54.339  1.00 70.02      DS4
ATOM   1762  O   GLU   156      138.542 106.511  54.377  1.00 70.02      DS4
ATOM   1763  N   LEU   157      139.284 104.675  53.289  1.00 81.31      DS4
ATOM   1764  CA  LEU   157      139.704 105.381  52.088  1.00 81.31      DS4
ATOM   1765  CB  LEU   157      140.233 104.382  51.058  1.00 80.31      DS4
ATOM   1766  CG  LEU   157      141.467 104.781  50.241  1.00 80.31      DS4
ATOM   1767  CD1 LEU   157      141.575 103.854  49.043  1.00 80.31      DS4
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ATOM	1768	CD2	LEU	157	141.377	106.231	49.787	1.00	80.31	DS4	ATOM	1821	OE2	GLU	163	134.537	114.960	55.549	1.00	98.38	DS4
ATOM	1769	C	LEU	157	138.603	106.214	51.444	1.00	81.31	DS4	ATOM	1822	C	GLU	163	135.992	115.346	51.914	1.00	83.37	DS4
ATOM	1770	O	LEU	157	138.786	107.399	51.184	1.00	81.31	DS4	ATOM	1823	O	GLU	163	135.264	116.272	51.561	1.00	83.37	DS4
ATOM	1771	N	ILE	158	137.463	105.590	51.180	1.00	78.89	DS4	ATOM	1824	N	ALA	164	137.309	115.329	51.714	1.00	68.59	DS4
ATOM	1772	CA	ILE	158	136.362	106.288	50.540	1.00	78.89	DS4	ATOM	1825	CA	ALA	164	138.011	116.424	51.055	1.00	68.59	DS4
ATOM	1773	CB	ILE	158	135.195	105.334	50.267	1.00	83.95	DS4	ATOM	1826	CB	ALA	164	139.420	115.997	50.704	1.00	64.54	DS4
ATOM	1774	CG2	ILE	158	134.056	106.076	49.569	1.00	83.95	DS4	ATOM	1827	C	ALA	164	137.263	116.846	49.796	1.00	68.59	DS4
ATOM	1775	CG1	ILE	158	135.685	104.183	49.393	1.00	83.95	DS4	ATOM	1828	O	ALA	164	137.466	117.939	49.275	1.00	68.59	DS4
ATOM	1776	CD1	ILE	158	134.634	103.147	49.107	1.00	83.95	DS4	ATOM	1829	N	MET	165	136.400	115.967	49.308	1.00	43.79	DS4
ATOM	1777	C	ILE	158	135.853	107.481	51.337	1.00	78.89	DS4	ATOM	1830	CA	MET	165	135.616	116.265	48.128	1.00	43.79	DS4
ATOM	1778	O	ILE	158	135.389	108.470	50.753	1.00	78.89	DS4	ATOM	1831	CB	MET	165	134.965	114.994	47.581	1.00	67.99	DS4
ATOM	1779	N	ARG	159	135.934	107.399	52.664	1.00	72.26	DS4	ATOM	1832	CG	MET	165	135.739	114.388	46.424	1.00	67.99	DS4
ATOM	1780	CA	ARG	159	135.472	108.509	53.487	1.00	72.26	DS4	ATOM	1833	SD	MET	165	136.066	115.629	45.129	1.00	67.99	DS4
ATOM	1781	CB	ARG	159	135.235	108.055	54.930	1.00	160.35	DS4	ATOM	1834	CE	MET	165	134.410	115.727	44.321	1.00	67.99	DS4
ATOM	1782	CG	ARG	159	133.975	107.208	55.063	1.00	160.35	DS4	ATOM	1835	C	MET	165	134.550	117.304	48.435	1.00	43.79	DS4
ATOM	1783	CD	ARG	159	133.438	107.163	56.484	1.00	160.35	DS4	ATOM	1836	O	MET	165	133.893	117.824	47.526	1.00	43.79	DS4
ATOM	1784	NE	ARG	159	132.145	106.482	56.539	1.00	160.35	DS4	ATOM	1837	N	LYS	166	134.377	117.595	49.722	1.00	88.15	DS4
ATOM	1785	CZ	ARG	159	131.411	106.342	57.640	1.00	160.35	DS4	ATOM	1838	CA	LYS	166	133.404	118.587	50.175	1.00	88.15	DS4
ATOM	1786	NH1	ARG	159	131.836	106.836	58.795	1.00	160.35	DS4	ATOM	1839	CB	LYS	166	133.369	118.651	51.704	1.00	84.36	DS4
ATOM	1787	NH2	ARG	159	130.248	105.706	57.588	1.00	160.35	DS4	ATOM	1840	CG	LYS	166	132.739	117.459	52.407	1.00	84.36	DS4
ATOM	1788	C	ARG	159	136.423	109.701	53.428	1.00	72.26	DS4	ATOM	1841	CD	LYS	166	132.860	117.642	53.918	1.00	84.36	DS4
ATOM	1789	O	ARG	159	135.971	110.840	53.324	1.00	72.26	DS4	ATOM	1842	CE	LYS	166	132.170	116.537	54.695	1.00	84.36	DS4
ATOM	1790	N	GLN	160	137.731	109.452	53.471	1.00	67.72	DS4	ATOM	1843	NZ	LYS	166	132.401	116.699	56.161	1.00	84.36	DS4
ATOM	1791	CA	GLN	160	138.706	110.543	53.387	1.00	67.72	DS4	ATOM	1844	C	LYS	166	133.808	119.956	49.637	1.00	88.15	DS4
ATOM	1792	CB	GLN	160	140.137	110.007	53.363	1.00	107.96	DS4	ATOM	1845	O	LYS	166	134.923	120.426	49.888	1.00	88.15	DS4
ATOM	1793	CG	GLN	160	140.612	109.339	54.629	1.00	107.96	DS4	ATOM	1846	N	GLY	167	132.901	120.588	48.898	1.00	128.06	DS4
ATOM	1794	CD	GLN	160	142.078	108.955	54.542	1.00	107.96	DS4	ATOM	1847	CA	GLY	167	133.189	121.893	48.335	1.00	128.06	DS4
ATOM	1795	OE1	GLN	160	142.935	109.803	54.294	1.00	107.96	DS4	ATOM	1848	C	GLY	167	133.688	121.805	46.905	1.00	128.06	DS4
ATOM	1796	NE2	GLN	160	142.373	107.672	54.739	1.00	107.96	DS4	ATOM	1849	O	GLY	167	133.127	122.439	46.009	1.00	128.06	DS4
ATOM	1797	C	GLN	160	138.498	111.364	52.113	1.00	67.72	DS4	ATOM	1850	N	ARG	168	134.745	121.022	46.694	1.00	104.81	DS4
ATOM	1798	O	GLN	160	138.284	112.577	52.165	1.00	67.72	DS4	ATOM	1851	CA	ARG	168	135.321	120.842	45.365	1.00	104.81	DS4
ATOM	1799	N	ASN	161	138.566	110.680	50.969	1.00	87.81	DS4	ATOM	1852	CB	ARG	168	136.172	119.576	45.316	1.00	114.70	DS4
ATOM	1800	CA	ASN	161	138.429	111.310	49.659	1.00	87.81	DS4	ATOM	1853	CG	ARG	168	137.546	119.668	45.949	1.00	114.70	DS4
ATOM	1801	CB	ASN	161	138.676	110.293	48.540	1.00	74.48	DS4	ATOM	1854	CD	ARG	168	138.332	118.426	45.554	1.00	114.70	DS4
ATOM	1802	CG	ASN	161	139.975	109.513	48.726	1.00	74.48	DS4	ATOM	1855	NE	ARG	168	139.720	118.429	46.002	1.00	114.70	DS4
ATOM	1803	OD1	ASN	161	141.019	110.070	49.084	1.00	74.48	DS4	ATOM	1856	CZ	ARG	168	140.597	117.483	45.678	1.00	114.70	DS4
ATOM	1804	ND2	ASN	161	139.914	108.215	48.466	1.00	74.48	DS4	ATOM	1857	NH1	ARG	168	140.222	116.471	44.907	1.00	114.70	DS4
ATOM	1805	C	ASN	161	137.088	111.979	49.439	1.00	87.81	DS4	ATOM	1858	NH2	ARG	168	141.846	117.545	46.121	1.00	114.70	DS4
ATOM	1806	O	ASN	161	137.037	113.101	48.941	1.00	87.81	DS4	ATOM	1859	C	ARG	168	134.241	120.729	44.301	1.00	104.81	DS4
ATOM	1807	N	LEU	162	136.001	111.296	49.787	1.00	65.62	DS4	ATOM	1860	O	ARG	168	133.321	119.920	44.427	1.00	104.81	DS4
ATOM	1808	CA	LEU	162	134.679	111.894	49.617	1.00	65.62	DS4	ATOM	1861	N	LYS	169	134.350	121.538	43.253	1.00	94.04	DS4
ATOM	1809	CB	LEU	162	133.588	110.854	49.827	1.00	71.43	DS4	ATOM	1862	CA	LYS	169	133.376	121.487	42.172	1.00	94.04	DS4
ATOM	1810	CG	LEU	162	133.018	110.394	48.485	1.00	71.43	DS4	ATOM	1863	CB	LYS	169	133.465	122.737	41.295	1.00	76.83	DS4
ATOM	1811	CD1	LEU	162	132.407	109.023	48.638	1.00	71.43	DS4	ATOM	1864	CG	LYS	169	133.177	124.052	41.996	1.00	76.83	DS4
ATOM	1812	CD2	LEU	162	131.999	111.402	47.969	1.00	71.43	DS4	ATOM	1865	CD	LYS	169	133.327	125.207	41.010	1.00	76.83	DS4
ATOM	1813	C	LEU	162	134.521	113.051	50.593	1.00	65.62	DS4	ATOM	1866	CE	LYS	169	132.950	126.547	41.622	1.00	76.83	DS4
ATOM	1814	O	LEU	162	133.649	113.909	50.429	1.00	65.62	DS4	ATOM	1867	NZ	LYS	169	133.097	127.671	40.647	1.00	76.83	DS4
ATOM	1815	N	GLU	163	135.388	113.063	51.605	1.00	83.37	DS4	ATOM	1868	C	LYS	169	133.687	120.258	41.326	1.00	94.04	DS4
ATOM	1816	CA	GLU	163	135.409	114.123	52.605	1.00	83.37	DS4	ATOM	1869	O	LYS	169	134.659	119.543	41.583	1.00	94.04	DS4
ATOM	1817	CB	GLU	163	136.299	113.730	53.792	1.00	98.38	DS4	ATOM	1870	N	VAL	170	132.869	120.030	40.306	1.00	72.61	DS4
ATOM	1818	CG	GLU	163	136.756	114.906	54.657	1.00	98.38	DS4	ATOM	1871	CA	VAL	170	133.045	118.888	39.419	1.00	72.61	DS4
ATOM	1819	CD	GLU	163	135.620	115.571	55.424	1.00	98.38	DS4	ATOM	1872	CB	VAL	170	132.041	117.766	39.797	1.00	52.55	DS4
ATOM	1820	OE1	GLU	163	135.818	116.705	55.912	1.00	98.38	DS4	ATOM	1873	CG1	VAL	170	131.578	117.001	38.567	1.00	52.55	DS4

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ATOM   1874  CG2 VAL   170     132.696 116.819  40.795  1.00 52.55      DS4
ATOM   1875  C   VAL   170     132.842 119.308  37.969  1.00 72.61      DS4
ATOM   1876  O   VAL   170     132.132 120.274  37.699  1.00 72.61      DS4
ATOM   1877  N   GLY   171     133.475 118.586  37.044  1.00 38.39      DS4
ATOM   1878  CA  GLY   171     133.334 118.891  35.628  1.00 38.39      DS4
ATOM   1879  C   GLY   171     131.904 119.214  35.208  1.00 38.39      DS4
ATOM   1880  O   GLY   171     130.946 118.580  35.664  1.00 38.39      DS4
ATOM   1881  N   PRO   172     131.729 120.204  34.324  1.00 51.92      DS4
ATOM   1882  CD  PRO   172     132.795 120.940  33.626  1.00 48.21      DS4
ATOM   1883  CA  PRO   172     130.412 120.621  33.838  1.00 51.92      DS4
ATOM   1884  CB  PRO   172     130.738 121.816  32.952  1.00 48.21      DS4
ATOM   1885  CG  PRO   172     132.070 121.443  32.396  1.00 48.21      DS4
ATOM   1886  C   PRO   172     129.644 119.546  33.082  1.00 51.92      DS4
ATOM   1887  O   PRO   172     128.473 119.749  32.747  1.00 51.92      DS4
ATOM   1888  N   TRP   173     130.294 118.416  32.793  1.00 61.80      DS4
ATOM   1889  CA  TRP   173     129.628 117.321  32.080  1.00 61.80      DS4
ATOM   1890  CB  TRP   173     130.533 116.741  30.979  1.00 45.76      DS4
ATOM   1891  CG  TRP   173     131.671 115.881  31.457  1.00 45.76      DS4
ATOM   1892  CD2 TRP   173     132.978 116.323  31.830  1.00 45.76      DS4
ATOM   1893  CE2 TRP   173     133.705 115.184  32.234  1.00 45.76      DS4
ATOM   1894  CE3 TRP   173     133.605 117.570  31.863  1.00 45.76      DS4
ATOM   1895  CD1 TRP   173     131.658 114.524  31.642  1.00 45.76      DS4
ATOM   1896  NE1 TRP   173     132.878 114.099  32.108  1.00 45.76      DS4
ATOM   1897  CZ2 TRP   173     135.026 115.258  32.666  1.00 45.76      DS4
ATOM   1898  CZ3 TRP   173     134.915 117.643  32.290  1.00 45.76      DS4
ATOM   1899  CH2 TRP   173     135.613 116.496  32.687  1.00 45.76      DS4
ATOM   1900  C   TRP   173     129.267 116.256  33.101  1.00 61.80      DS4
ATOM   1901  O   TRP   173     128.708 115.203  32.775  1.00 61.80      DS4
ATOM   1902  N   LEU   174     129.589 116.569  34.351  1.00 70.33      DS4
ATOM   1903  CA  LEU   174     129.317 115.697  35.477  1.00 70.33      DS4
ATOM   1904  CB  LEU   174     130.627 115.249  36.121  1.00 57.57      DS4
ATOM   1905  CG  LEU   174     131.550 114.330  35.333  1.00 57.57      DS4
ATOM   1906  CD1 LEU   174     132.774 114.017  36.175  1.00 57.57      DS4
ATOM   1907  CD2 LEU   174     130.810 113.051  34.981  1.00 57.57      DS4
ATOM   1908  C   LEU   174     128.475 116.426  36.520  1.00 70.33      DS4
ATOM   1909  O   LEU   174     127.971 117.526  36.284  1.00 70.33      DS4
ATOM   1910  N   SER   175     128.347 115.792  37.680  1.00 70.43      DS4
ATOM   1911  CA  SER   175     127.597 116.321  38.812  1.00 70.43      DS4
ATOM   1912  CB  SER   175     126.154 116.630  38.413  1.00 88.07      DS4
ATOM   1913  OG  SER   175     125.454 115.442  38.095  1.00 88.07      DS4
ATOM   1914  C   SER   175     127.608 115.227  39.860  1.00 70.43      DS4
ATOM   1915  O   SER   175     127.426 114.059  39.538  1.00 70.43      DS4
ATOM   1916  N   LEU   176     127.836 115.589  41.112  1.00 84.03      DS4
ATOM   1917  CA  LEU   176     127.858 114.585  42.155  1.00 84.03      DS4
ATOM   1918  CB  LEU   176     129.308 114.292  42.561  1.00 64.47      DS4
ATOM   1919  CG  LEU   176     129.871 114.705  43.922  1.00 64.47      DS4
ATOM   1920  CD1 LEU   176     131.336 114.278  44.007  1.00 64.47      DS4
ATOM   1921  CD2 LEU   176     129.757 116.203  44.115  1.00 64.47      DS4
ATOM   1922  C   LEU   176     127.017 114.989  43.363  1.00 84.03      DS4
ATOM   1923  O   LEU   176     126.493 116.099  43.435  1.00 84.03      DS4
ATOM   1924  N   ASP   177     126.881 114.065  44.302  1.00 84.34      DS4
ATOM   1925  CA  ASP   177     126.115 114.282  45.517  1.00 84.34      DS4
ATOM   1926  CB  ASP   177     124.735 113.639  45.368  1.00108.56      DS4
ATOM   1927  CG  ASP   177     124.047 113.407  46.695  1.00108.56      DS4
ATOM   1928  OD1 ASP   177     124.414 112.440  47.394  1.00108.56      DS4
ATOM   1929  OD2 ASP   177     123.140 114.192  47.041  1.00108.56      DS4
ATOM   1930  C   ASP   177     126.917 113.603  46.613  1.00 84.34      DS4
ATOM   1931  O   ASP   177     126.741 112.415  46.875  1.00 84.34      DS4
ATOM   1932  N   VAL   178     127.810 114.357  47.245  1.00 56.14      DS4
ATOM   1933  CA  VAL   178     128.661 113.790  48.283  1.00 56.14      DS4
ATOM   1934  CB  VAL   178     129.618 114.846  48.826  1.00 53.59      DS4
ATOM   1935  CG1 VAL   178     130.720 114.177  49.631  1.00 53.59      DS4
ATOM   1936  CG2 VAL   178     130.202 115.642  47.680  1.00 53.59      DS4
ATOM   1937  C   VAL   178     127.882 113.168  49.444  1.00 56.14      DS4
ATOM   1938  O   VAL   178     128.471 112.594  50.367  1.00 56.14      DS4
ATOM   1939  N   GLU   179     126.556 113.285  49.384  1.00131.84      DS4
ATOM   1940  CA  GLU   179     125.667 112.740  50.408  1.00131.84      DS4
ATOM   1941  CB  GLU   179     124.220 113.178  50.148  1.00134.42      DS4
ATOM   1942  CG  GLU   179     124.046 114.658  49.832  1.00134.42      DS4
ATOM   1943  CD  GLU   179     123.964 115.531  51.068  1.00134.42      DS4
ATOM   1944  OE1 GLU   179     124.820 115.383  51.965  1.00134.42      DS4
ATOM   1945  OE2 GLU   179     123.043 116.373  51.134  1.00134.42      DS4
ATOM   1946  C   GLU   179     125.737 111.221  50.354  1.00131.84      DS4
ATOM   1947  O   GLU   179     126.469 110.593  51.118  1.00131.84      DS4
ATOM   1948  N   GLY   180     124.967 110.642  49.438  1.00113.08      DS4
ATOM   1949  CA  GLY   180     124.942 109.201  49.280  1.00113.08      DS4
ATOM   1950  C   GLY   180     126.107 108.725  48.441  1.00113.08      DS4
ATOM   1951  O   GLY   180     126.156 107.565  48.028  1.00113.08      DS4
ATOM   1952  N   MET   181     127.047 109.630  48.186  1.00 91.85      DS4
ATOM   1953  CA  MET   181     128.229 109.312  47.397  1.00 91.85      DS4
ATOM   1954  CB  MET   181     129.038 108.225  48.107  1.00 77.99      DS4
ATOM   1955  CG  MET   181     129.308 108.535  49.568  1.00 77.99      DS4
ATOM   1956  SD  MET   181     129.829 107.089  50.507  1.00 77.99      DS4
ATOM   1957  CE  MET   181     131.417 107.636  51.263  1.00 77.99      DS4
ATOM   1958  C   MET   181     127.809 108.836  46.009  1.00 91.85      DS4
ATOM   1959  O   MET   181     128.173 107.744  45.580  1.00 91.85      DS4
ATOM   1960  N   LYS   182     127.039 109.668  45.315  1.00 84.07      DS4
ATOM   1961  CA  LYS   182     126.554 109.343  43.982  1.00 84.07      DS4
ATOM   1962  CB  LYS   182     125.049 109.118  44.014  1.00 96.59      DS4
ATOM   1963  CG  LYS   182     124.623 108.266  45.164  1.00 96.59      DS4
ATOM   1964  CD  LYS   182     123.136 108.037  45.171  1.00 96.59      DS4
ATOM   1965  CE  LYS   182     122.764 107.165  46.361  1.00 96.59      DS4
ATOM   1966  NZ  LYS   182     121.334 106.764  46.356  1.00 96.59      DS4
ATOM   1967  C   LYS   182     126.857 110.477  43.025  1.00 84.07      DS4
ATOM   1968  O   LYS   182     126.751 111.646  43.385  1.00 84.07      DS4
ATOM   1969  N   GLY   183     127.230 110.122  41.802  1.00 62.78      DS4
ATOM   1970  CA  GLY   183     127.528 111.117  40.790  1.00 62.78      DS4
ATOM   1971  C   GLY   183     126.798 110.741  39.522  1.00 62.78      DS4
ATOM   1972  O   GLY   183     126.252 109.642  39.427  1.00 62.78      DS4
ATOM   1973  N   LYS   184     126.769 111.647  38.552  1.00 67.25      DS4
ATOM   1974  CA  LYS   184     126.102 111.363  37.290  1.00 67.25      DS4
ATOM   1975  CB  LYS   184     124.700 111.971  37.249  1.00 79.55      DS4
ATOM   1976  CG  LYS   184     123.609 111.033  37.698  1.00 79.55      DS4
ATOM   1977  CD  LYS   184     122.250 111.522  37.234  1.00 79.55      DS4
ATOM   1978  CE  LYS   184     121.145 110.540  37.625  1.00 79.55      DS4
ATOM   1979  NZ  LYS   184     119.807 110.925  37.081  1.00 79.55      DS4
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ATOM	1980	C	LYS	184	126.876	111.857	36.088	1.00	67.25	DS4	ATOM	2033	C	ASP	190	135.278	118.699	24.962	1.00	56.16	DS4
ATOM	1981	O	LYS	184	127.430	112.959	36.088	1.00	67.25	DS4	ATOM	2034	O	ASP	190	135.740	118.942	26.071	1.00	56.16	DS4
ATOM	1982	N	PHE	185	126.911	111.016	35.062	1.00	46.77	DS4	ATOM	2035	N	ARG	191	135.993	118.775	23.853	1.00	57.22	DS4
ATOM	1983	CA	PHE	185	127.580	111.342	33.810	1.00	46.77	DS4	ATOM	2036	CA	ARG	191	137.396	119.145	23.892	1.00	57.22	DS4
ATOM	1984	CB	PHE	185	127.990	110.050	33.095	1.00	48.99	DS4	ATOM	2037	CB	ARG	191	137.890	119.439	22.475	1.00	68.55	DS4
ATOM	1985	CG	PHE	185	128.970	110.256	31.984	1.00	48.99	DS4	ATOM	2038	CG	ARG	191	139.280	120.012	22.425	1.00	68.55	DS4
ATOM	1986	CD1	PHE	185	130.303	110.526	32.261	1.00	48.99	DS4	ATOM	2039	CD	ARG	191	140.200	119.257	23.354	1.00	68.55	DS4
ATOM	1987	CD2	PHE	185	128.555	110.191	30.654	1.00	48.99	DS4	ATOM	2040	NE	ARG	191	141.584	119.682	23.195	1.00	68.55	DS4
ATOM	1988	CE1	PHE	185	131.211	110.732	31.230	1.00	48.99	DS4	ATOM	2041	CZ	ARG	191	142.526	119.525	24.118	1.00	68.55	DS4
ATOM	1989	CE2	PHE	185	129.454	110.396	29.622	1.00	48.99	DS4	ATOM	2042	NH1	ARG	191	142.238	118.952	25.282	1.00	68.55	DS4
ATOM	1990	CZ	PHE	185	130.786	110.667	29.910	1.00	48.99	DS4	ATOM	2043	NH2	ARG	191	143.759	119.941	23.868	1.00	68.55	DS4
ATOM	1991	C	PHE	185	126.506	112.086	33.005	1.00	46.77	DS4	ATOM	2044	C	ARG	191	137.693	120.331	24.816	1.00	57.22	DS4
ATOM	1992	O	PHE	185	125.618	111.465	32.402	1.00	46.77	DS4	ATOM	2045	O	ARG	191	138.679	120.313	25.552	1.00	57.22	DS4
ATOM	1993	N	LEU	186	126.590	113.416	33.011	1.00	40.35	DS4	ATOM	2046	N	GLU	192	136.840	121.352	24.786	1.00	67.67	DS4
ATOM	1994	CA	LEU	186	125.607	114.246	32.326	1.00	40.35	DS4	ATOM	2047	CA	GLU	192	137.048	122.530	25.618	1.00	67.67	DS4
ATOM	1995	CB	LEU	186	125.749	115.708	32.775	1.00	72.95	DS4	ATOM	2048	CB	GLU	192	136.127	123.672	25.177	1.00	136.23	DS4
ATOM	1996	CG	LEU	186	125.582	115.992	34.278	1.00	72.95	DS4	ATOM	2049	CG	GLU	192	136.441	124.255	23.800	1.00	136.23	DS4
ATOM	1997	CD1	LEU	186	125.813	117.460	34.553	1.00	72.95	DS4	ATOM	2050	CD	GLU	192	135.812	123.471	22.655	1.00	136.23	DS4
ATOM	1998	CD2	LEU	186	124.197	115.599	34.732	1.00	72.95	DS4	ATOM	2051	OE1	GLU	192	136.132	122.276	22.495	1.00	136.23	DS4
ATOM	1999	C	LEU	186	125.676	114.152	30.813	1.00	40.35	DS4	ATOM	2052	OE2	GLU	192	134.994	124.053	21.909	1.00	136.23	DS4
ATOM	2000	O	LEU	186	124.678	113.840	30.159	1.00	40.35	DS4	ATOM	2053	C	GLU	192	136.846	122.243	27.105	1.00	67.67	DS4
ATOM	2001	N	ARG	187	126.850	114.428	30.257	1.00	56.70	DS4	ATOM	2054	O	GLU	192	137.428	122.930	27.948	1.00	67.67	DS4
ATOM	2002	CA	ARG	187	127.030	114.366	28.816	1.00	56.70	DS4	ATOM	2055	N	ASP	193	136.033	121.229	27.420	1.00	55.92	DS4
ATOM	2003	CB	ARG	187	126.593	115.691	28.182	1.00	108.46	DS4	ATOM	2056	CA	ASP	193	135.744	120.842	28.810	1.00	55.92	DS4
ATOM	2004	CG	ARG	187	126.672	115.695	26.674	1.00	108.46	DS4	ATOM	2057	CB	ASP	193	134.626	119.794	28.851	1.00	78.33	DS4
ATOM	2005	CD	ARG	187	125.893	114.529	26.100	1.00	108.46	DS4	ATOM	2058	CG	ASP	193	133.270	120.359	28.467	1.00	78.33	DS4
ATOM	2006	NE	ARG	187	126.590	113.911	24.976	1.00	108.46	DS4	ATOM	2059	OD1	ASP	193	132.660	121.063	29.303	1.00	78.33	DS4
ATOM	2007	CZ	ARG	187	126.160	112.828	24.335	1.00	108.46	DS4	ATOM	2060	OD2	ASP	193	132.816	120.102	27.330	1.00	78.33	DS4
ATOM	2008	NH1	ARG	187	125.029	112.242	24.707	1.00	108.46	DS4	ATOM	2061	C	ASP	193	136.978	120.287	29.518	1.00	55.92	DS4
ATOM	2009	NH2	ARG	187	126.861	112.328	23.326	1.00	108.46	DS4	ATOM	2062	O	ASP	193	137.112	120.410	30.735	1.00	55.92	DS4
ATOM	2010	C	ARG	187	128.490	114.084	28.483	1.00	56.70	DS4	ATOM	2063	N	LEU	194	137.873	119.673	28.749	1.00	60.54	DS4
ATOM	2011	O	ARG	187	129.365	114.187	29.349	1.00	56.70	DS4	ATOM	2064	CA	LEU	194	139.095	119.106	29.302	1.00	60.54	DS4
ATOM	2012	N	LEU	188	128.755	113.707	27.236	1.00	53.13	DS4	ATOM	2065	CB	LEU	194	139.478	117.808	28.577	1.00	50.38	DS4
ATOM	2013	CA	LEU	188	130.129	113.452	26.815	1.00	53.13	DS4	ATOM	2066	CG	LEU	194	138.531	116.614	28.410	1.00	50.38	DS4
ATOM	2014	CB	LEU	188	130.167	112.914	25.387	1.00	48.54	DS4	ATOM	2067	CD1	LEU	194	137.946	116.226	29.749	1.00	50.38	DS4
ATOM	2015	CG	LEU	188	129.899	111.443	25.115	1.00	48.54	DS4	ATOM	2068	CD2	LEU	194	137.432	116.951	27.429	1.00	50.38	DS4
ATOM	2016	CD1	LEU	188	129.763	111.251	23.621	1.00	48.54	DS4	ATOM	2069	C	LEU	194	140.244	120.099	29.145	1.00	60.54	DS4
ATOM	2017	CD2	LEU	188	131.030	110.597	25.661	1.00	48.54	DS4	ATOM	2070	O	LEU	194	140.361	120.779	28.127	1.00	60.54	DS4
ATOM	2018	C	LEU	188	130.903	114.765	26.851	1.00	53.13	DS4	ATOM	2071	N	ALA	195	141.095	120.191	30.153	1.00	58.31	DS4
ATOM	2019	O	LEU	188	130.519	115.732	26.191	1.00	53.13	DS4	ATOM	2072	CA	ALA	195	142.233	121.088	30.057	1.00	58.31	DS4
ATOM	2020	N	PRO	189	132.000	114.823	27.616	1.00	45.48	DS4	ATOM	2073	CB	ALA	195	142.361	121.931	31.313	1.00	45.76	DS4
ATOM	2021	CD	PRO	189	132.708	113.746	28.316	1.00	34.03	DS4	ATOM	2074	C	ALA	195	143.449	120.203	29.898	1.00	58.31	DS4
ATOM	2022	CA	PRO	189	132.770	116.067	27.671	1.00	45.48	DS4	ATOM	2075	O	ALA	195	144.440	120.352	30.621	1.00	58.31	DS4
ATOM	2023	CB	PRO	189	133.921	115.723	28.604	1.00	34.03	DS4	ATOM	2076	N	LEU	196	143.368	119.270	28.955	1.00	51.63	DS4
ATOM	2024	CG	PRO	189	134.125	114.283	28.344	1.00	34.03	DS4	ATOM	2077	CA	LEU	196	144.469	118.349	28.724	1.00	51.63	DS4
ATOM	2025	C	PRO	189	133.257	116.477	26.284	1.00	45.48	DS4	ATOM	2078	CB	LEU	196	143.985	117.134	27.926	1.00	57.65	DS4
ATOM	2026	O	PRO	189	133.503	115.634	25.411	1.00	45.48	DS4	ATOM	2079	CG	LEU	196	143.191	116.116	28.758	1.00	57.65	DS4
ATOM	2027	N	ASP	190	133.379	117.782	26.078	1.00	56.16	DS4	ATOM	2080	CD1	LEU	196	142.387	115.187	27.865	1.00	57.65	DS4
ATOM	2028	CA	ASP	190	133.830	118.291	24.797	1.00	56.16	DS4	ATOM	2081	CD2	LEU	196	144.157	115.329	29.629	1.00	57.65	DS4
ATOM	2029	CB	ASP	190	132.990	119.495	24.380	1.00	140.52	DS4	ATOM	2082	C	LEU	196	145.613	119.023	28.002	1.00	51.63	DS4
ATOM	2030	CG	ASP	190	132.989	119.704	22.885	1.00	140.52	DS4	ATOM	2083	O	LEU	196	145.407	119.716	27.012	1.00	51.63	DS4
ATOM	2031	OD1	ASP	190	134.085	119.752	22.288	1.00	140.52	DS4	ATOM	2084	N	PRO	197	146.838	118.855	28.515	1.00	50.45	DS4
ATOM	2032	OD2	ASP	190	131.890	119.819	22.304	1.00	140.52	DS4	ATOM	2085	CD	PRO	197	147.169	118.102	29.738	1.00	37.42	DS4

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ATOM   2086  CA  PRO  197     148.041 119.440  27.913  1.00 50.45      DS4
ATOM   2087  CB  PRO  197     149.066 119.310  29.023  1.00 37.42      DS4
ATOM   2088  CG  PRO  197     148.678 117.993  29.650  1.00 37.42      DS4
ATOM   2089  C   PRO  197     148.377 118.554  26.718  1.00 50.45      DS4
ATOM   2090  O   PRO  197     149.462 117.980  26.634  1.00 50.45      DS4
ATOM   2091  N   VAL  198     147.423 118.448  25.800  1.00 66.87      DS4
ATOM   2092  CA  VAL  198     147.558 117.586  24.637  1.00 66.87      DS4
ATOM   2093  CB  VAL  198     146.818 116.250  24.887  1.00 69.45      DS4
ATOM   2094  CG1 VAL  198     146.685 115.460  23.594  1.00 69.45      DS4
ATOM   2095  CG2 VAL  198     147.553 115.447  25.942  1.00 69.45      DS4
ATOM   2096  C   VAL  198     147.002 118.181  23.356  1.00 66.87      DS4
ATOM   2097  O   VAL  198     145.932 118.784  23.351  1.00 66.87      DS4
ATOM   2098  N   ASN  199     147.734 117.993  22.264  1.00 47.47      DS4
ATOM   2099  CA  ASN  199     147.288 118.468  20.967  1.00 47.47      DS4
ATOM   2100  CB  ASN  199     148.435 119.154  20.233  1.00 50.78      DS4
ATOM   2101  CG  ASN  199     147.984 119.790  18.942  1.00 50.78      DS4
ATOM   2102  OD1 ASN  199     146.803 119.721  18.586  1.00 50.78      DS4
ATOM   2103  ND2 ASN  199     148.914 120.411  18.228  1.00 50.78      DS4
ATOM   2104  C   ASN  199     146.857 117.214  20.214  1.00 47.47      DS4
ATOM   2105  O   ASN  199     147.669 116.570  19.558  1.00 47.47      DS4
ATOM   2106  N   GLU  200     145.589 116.844  20.317  1.00 63.08      DS4
ATOM   2107  CA  GLU  200     145.156 115.633  19.641  1.00 63.08      DS4
ATOM   2108  CB  GLU  200     143.672 115.341  19.896  1.00 52.63      DS4
ATOM   2109  CG  GLU  200     142.743 116.333  19.271  1.00 52.63      DS4
ATOM   2110  CD  GLU  200     142.490 117.545  20.154  1.00 52.63      DS4
ATOM   2111  OE1 GLU  200     143.372 117.903  20.977  1.00 52.63      DS4
ATOM   2112  OE2 GLU  200     141.400 118.145  20.005  1.00 52.63      DS4
ATOM   2113  C   GLU  200     145.415 115.693  18.143  1.00 63.08      DS4
ATOM   2114  O   GLU  200     145.376 114.661  17.467  1.00 63.08      DS4
ATOM   2115  N   ASN  201     145.686 116.885  17.615  1.00 45.79      DS4
ATOM   2116  CA  ASN  201     145.948 116.990  16.183  1.00 45.79      DS4
ATOM   2117  CB  ASN  201     146.180 118.446  15.757  1.00 78.35      DS4
ATOM   2118  CG  ASN  201     145.648 118.739  14.346  1.00 78.35      DS4
ATOM   2119  OD1 ASN  201     144.470 118.509  14.054  1.00 78.35      DS4
ATOM   2120  ND2 ASN  201     146.515 119.252  13.474  1.00 78.35      DS4
ATOM   2121  C   ASN  201     147.184 116.144  15.911  1.00 45.79      DS4
ATOM   2122  O   ASN  201     147.219 115.361  14.962  1.00 45.79      DS4
ATOM   2123  N   LEU  202     148.190 116.282  16.765  1.00 41.42      DS4
ATOM   2124  CA  LEU  202     149.401 115.499  16.616  1.00 41.42      DS4
ATOM   2125  CB  LEU  202     150.454 115.967  17.598  1.00 37.53      DS4
ATOM   2126  CG  LEU  202     150.819 117.433  17.484  1.00 37.53      DS4
ATOM   2127  CD1 LEU  202     151.894 117.755  18.512  1.00 37.53      DS4
ATOM   2128  CD2 LEU  202     151.294 117.727  16.075  1.00 37.53      DS4
ATOM   2129  C   LEU  202     149.131 114.013  16.855  1.00 41.42      DS4
ATOM   2130  O   LEU  202     149.875 113.160  16.378  1.00 41.42      DS4
ATOM   2131  N   VAL  203     148.085 113.689  17.607  1.00 55.96      DS4
ATOM   2132  CA  VAL  203     147.790 112.283  17.849  1.00 55.96      DS4
ATOM   2133  CB  VAL  203     146.826 112.088  19.055  1.00 33.94      DS4
ATOM   2134  CG1 VAL  203     146.393 110.626  19.149  1.00 33.94      DS4
ATOM   2135  CG2 VAL  203     147.529 112.495  20.349  1.00 33.94      DS4
ATOM   2136  C   VAL  203     147.176 111.686  16.587  1.00 55.96      DS4
ATOM   2137  O   VAL  203     147.567 110.605  16.145  1.00 55.96      DS4
ATOM   2138  N   ILE  204     146.224 112.398  15.995  1.00 43.30      DS4
ATOM   2139  CA  ILE  204     145.596 111.900  14.788  1.00 43.30      DS4
ATOM   2140  CB  ILE  204     144.513 112.855  14.291  1.00 73.19      DS4
ATOM   2141  CG2 ILE  204     143.969 112.379  12.951  1.00 73.19      DS4
ATOM   2142  CG1 ILE  204     143.389 112.922  15.318  1.00 73.19      DS4
ATOM   2143  CD1 ILE  204     142.250 113.819  14.901  1.00 73.19      DS4
ATOM   2144  C   ILE  204     146.650 111.735  13.709  1.00 43.30      DS4
ATOM   2145  O   ILE  204     146.651 110.756  12.973  1.00 43.30      DS4
ATOM   2146  N   GLU  205     147.561 112.694  13.629  1.00 60.44      DS4
ATOM   2147  CA  GLU  205     148.612 112.639  12.635  1.00 60.44      DS4
ATOM   2148  CB  GLU  205     149.417 113.932  12.672  1.00 69.83      DS4
ATOM   2149  CG  GLU  205     148.668 115.120  12.119  1.00 69.83      DS4
ATOM   2150  CD  GLU  205     149.519 116.372  12.087  1.00 69.83      DS4
ATOM   2151  OE1 GLU  205     149.095 117.374  11.465  1.00 69.83      DS4
ATOM   2152  OE2 GLU  205     150.614 116.354  12.690  1.00 69.83      DS4
ATOM   2153  C   GLU  205     149.532 111.437  12.837  1.00 60.44      DS4
ATOM   2154  O   GLU  205     149.979 110.815  11.879  1.00 60.44      DS4
ATOM   2155  N   PHE  206     149.810 111.105  14.084  1.00 42.52      DS4
ATOM   2156  CA  PHE  206     150.678 109.981  14.381  1.00 42.52      DS4
ATOM   2157  CB  PHE  206     150.966 109.949  15.879  1.00 22.89      DS4
ATOM   2158  CG  PHE  206     151.655 108.708  16.341  1.00 22.89      DS4
ATOM   2159  CD1 PHE  206     153.021 108.703  16.571  1.00 22.89      DS4
ATOM   2160  CD2 PHE  206     150.932 107.544  16.584  1.00 22.89      DS4
ATOM   2161  CE1 PHE  206     153.658 107.552  17.049  1.00 22.89      DS4
ATOM   2162  CE2 PHE  206     151.560 106.392  17.058  1.00 22.89      DS4
ATOM   2163  CZ  PHE  206     152.916 106.400  17.291  1.00 22.89      DS4
ATOM   2164  C   PHE  206     150.065 108.654  13.936  1.00 42.52      DS4
ATOM   2165  O   PHE  206     150.776 107.745  13.532  1.00 42.52      DS4
ATOM   2166  N   TYR  207     148.752 108.513  14.020  1.00 42.20      DS4
ATOM   2167  CA  TYR  207     148.168 107.257  13.592  1.00 42.20      DS4
ATOM   2168  CB  TYR  207     146.885 106.953  14.374  1.00 43.16      DS4
ATOM   2169  CG  TYR  207     147.171 106.464  15.775  1.00 43.16      DS4
ATOM   2170  CD1 TYR  207     146.418 106.906  16.868  1.00 43.16      DS4
ATOM   2171  CE1 TYR  207     146.732 106.512  18.173  1.00 43.16      DS4
ATOM   2172  CD2 TYR  207     148.237 105.606  16.022  1.00 43.16      DS4
ATOM   2173  CE2 TYR  207     148.555 105.204  17.317  1.00 43.16      DS4
ATOM   2174  CZ  TYR  207     147.806 105.661  18.384  1.00 43.16      DS4
ATOM   2175  OH  TYR  207     148.149 105.276  19.658  1.00 43.16      DS4
ATOM   2176  C   TYR  207     147.897 107.283  12.104  1.00 42.20      DS4
ATOM   2177  O   TYR  207     147.210 106.403  11.581  1.00 42.20      DS4
ATOM   2178  N   SER  208     148.447 108.292  11.428  1.00 55.58      DS4
ATOM   2179  CA  SER  208     148.288 108.451   9.981  1.00 55.58      DS4
ATOM   2180  CB  SER  208     148.284 109.928   9.593  1.00 93.71      DS4
ATOM   2181  OG  SER  208     147.144 110.581  10.110  1.00 93.71      DS4
ATOM   2182  C   SER  208     149.403 107.761   9.220  1.00 55.58      DS4
ATOM   2183  O   SER  208     149.166 107.170   8.172  1.00 55.58      DS4
ATOM   2184  N   ARG  209     150.619 107.854   9.754  1.00 74.22      DS4
ATOM   2185  CA  ARG  209     151.802 107.254   9.149  1.00 74.22      DS4
ATOM   2186  CB  ARG  209     152.893 107.065  10.205  1.00107.56      DS4
ATOM   2187  CG  ARG  209     154.099 106.283   9.720  1.00107.56      DS4
ATOM   2188  CD  ARG  209     155.141 106.177  10.810  1.00107.56      DS4
ATOM   2189  NE  ARG  209     155.728 107.479  11.107  1.00107.56      DS4
ATOM   2190  CZ  ARG  209     156.809 107.968  10.506  1.00107.56      DS4
ATOM   2191  NH1 ARG  209     157.434 107.257   9.573  1.00107.56      DS4
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ATOM	2192	NH2	ARG	209	157.260	109.173	10.836	1.00	107.56	DS4	ATOM	2245	CG2	ILE	8	205.182	142.390	19.433	1.00 96.64	CS3
ATOM	2193	C	ARG	209	151.485	105.920	8.493	1.00	74.22	DS4	ATOM	2246	CG1	ILE	8	203.172	141.028	18.838	1.00 96.64	CS3
ATOM	2194	O	ARG	209	151.552	105.795	7.269	1.00	74.22	DS4	ATOM	2247	CD1	ILE	8	203.024	140.267	20.142	1.00 96.64	CS3
ATOM	2195	ZN+2	ZN2	300	-1.954	-3.058	1.723	1.00	71.67	DS4	ATOM	2248	C	ILE	8	206.208	141.933	16.673	1.00 66.76	CS3
ATOM	2196	C	GLY	2	205.398	128.791	7.377	1.00	67.91	CS3	ATOM	2249	O	ILE	8	206.675	142.973	16.202	1.00 66.76	CS3
ATOM	2197	O	GLY	2	206.129	129.041	6.433	1.00	67.91	CS3	ATOM	2250	N	GLY	9	206.932	140.835	16.892	1.00 78.26	CS3
ATOM	2198	N	GLY	2	204.326	126.556	7.559	1.00	67.91	CS3	ATOM	2251	CA	GLY	9	208.353	140.803	16.589	1.00 78.26	CS3
ATOM	2199	CA	GLY	2	205.439	127.440	8.044	1.00	67.91	CS3	ATOM	2252	C	GLY	9	208.678	141.433	15.245	1.00 78.26	CS3
ATOM	2200	N	ASN	3	204.548	129.668	7.876	1.00	51.82	CS3	ATOM	2253	O	GLY	9	209.773	141.967	15.027	1.00 78.26	CS3
ATOM	2201	CA	ASN	3	204.393	130.994	7.298	1.00	51.82	CS3	ATOM	2254	N	PHE	10	207.713	141.368	14.336	1.00 58.61	CS3
ATOM	2202	CB	ASN	3	203.104	131.047	6.472	1.00	86.67	CS3	ATOM	2255	CA	PHE	10	207.883	141.931	13.011	1.00 58.61	CS3
ATOM	2203	CG	ASN	3	203.155	130.183	5.247	1.00	86.67	CS3	ATOM	2256	CB	PHE	10	206.822	141.360	12.061	1.00 50.96	CS3
ATOM	2204	OD1	ASN	3	203.864	130.496	4.294	1.00	86.67	CS3	ATOM	2257	CG	PHE	10	206.862	141.954	10.671	1.00 50.96	CS3
ATOM	2205	ND2	ASN	3	202.399	129.088	5.255	1.00	86.67	CS3	ATOM	2258	CD1	PHE	10	208.030	141.914	9.909	1.00 50.96	CS3
ATOM	2206	C	ASN	3	204.302	132.114	8.334	1.00	51.82	CS3	ATOM	2259	CD2	PHE	10	205.733	142.545	10.119	1.00 50.96	CS3
ATOM	2207	O	ASN	3	204.173	131.886	9.551	1.00	51.82	CS3	ATOM	2260	CE1	PHE	10	208.064	142.453	8.623	1.00 50.96	CS3
ATOM	2208	N	LYS	4	204.326	133.337	7.819	1.00	56.79	CS3	ATOM	2261	CE2	PHE	10	205.762	143.085	8.831	1.00 50.96	CS3
ATOM	2209	CA	LYS	4	204.192	134.550	8.620	1.00	56.79	CS3	ATOM	2262	CZ	PHE	10	206.926	143.039	8.086	1.00 50.96	CS3
ATOM	2210	CB	LYS	4	202.701	134.827	8.860	1.00	50.80	CS3	ATOM	2263	C	PHE	10	207.734	143.438	13.088	1.00 58.61	CS3
ATOM	2211	CG	LYS	4	201.811	133.596	8.883	1.00	50.80	CS3	ATOM	2264	O	PHE	10	208.377	144.180	12.343	1.00 58.61	CS3
ATOM	2212	CD	LYS	4	200.815	133.664	7.745	1.00	50.80	CS3	ATOM	2265	N	ARG	11	206.891	143.875	14.017	1.00 67.96	CS3
ATOM	2213	CE	LYS	4	199.910	132.462	7.750	1.00	50.80	CS3	ATOM	2266	CA	ARG	11	206.582	145.283	14.191	1.00 67.96	CS3
ATOM	2214	NZ	LYS	4	198.766	132.715	6.842	1.00	50.80	CS3	ATOM	2267	CB	ARG	11	205.097	145.405	14.524	1.00155.76	CS3
ATOM	2215	C	LYS	4	204.958	134.756	9.936	1.00	56.79	CS3	ATOM	2268	CG	ARG	11	204.525	146.747	14.198	1.00155.76	CS3
ATOM	2216	O	LYS	4	204.975	133.895	10.828	1.00	56.79	CS3	ATOM	2269	CD	ARG	11	204.459	146.935	12.701	1.00155.76	CS3
ATOM	2217	N	ILE	5	205.577	135.932	10.035	1.00	66.27	CS3	ATOM	2270	NE	ARG	11	204.099	148.296	12.317	1.00155.76	CS3
ATOM	2218	CA	ILE	5	206.330	136.331	11.219	1.00	66.27	CS3	ATOM	2271	CZ	ARG	11	204.961	149.308	12.263	1.00155.76	CS3
ATOM	2219	CB	ILE	5	207.133	137.659	11.020	1.00	53.29	CS3	ATOM	2272	NH1	ARG	11	206.241	149.112	12.566	1.00155.76	CS3
ATOM	2220	CG2	ILE	5	208.593	137.381	10.762	1.00	53.29	CS3	ATOM	2273	NH2	ARG	11	204.547	150.517	11.909	1.00155.76	CS3
ATOM	2221	CG1	ILE	5	206.473	138.502	9.934	1.00	53.29	CS3	ATOM	2274	C	ARG	11	207.403	146.079	15.223	1.00 67.96	CS3
ATOM	2222	CD1	ILE	5	204.973	138.721	10.148	1.00	53.29	CS3	ATOM	2275	O	ARG	11	207.401	147.315	15.186	1.00 67.96	CS3
ATOM	2223	C	ILE	5	205.367	136.647	12.343	1.00	66.27	CS3	ATOM	2276	N	LEU	12	208.099	145.387	16.129	1.00 50.36	CS3
ATOM	2224	O	ILE	5	204.157	136.798	12.132	1.00	66.27	CS3	ATOM	2277	CA	LEU	12	208.888	146.043	17.177	1.00 50.36	CS3
ATOM	2225	N	HIS	6	205.928	136.760	13.539	1.00	53.67	CS3	ATOM	2278	CB	LEU	12	210.015	145.126	17.646	1.00 37.27	CS3
ATOM	2226	CA	HIS	6	205.161	137.149	14.696	1.00	53.67	CS3	ATOM	2279	CG	LEU	12	209.529	143.898	18.416	1.00 37.27	CS3
ATOM	2227	CB	HIS	6	206.071	137.222	15.897	1.00	72.84	CS3	ATOM	2280	CD1	LEU	12	210.681	143.214	19.132	1.00 37.27	CS3
ATOM	2228	CG	HIS	6	205.337	137.297	17.184	1.00	72.84	CS3	ATOM	2281	CD2	LEU	12	208.507	144.340	19.419	1.00 37.27	CS3
ATOM	2229	CD2	HIS	6	204.833	138.354	17.856	1.00	72.84	CS3	ATOM	2282	C	LEU	12	209.460	147.408	16.821	1.00 50.36	CS3
ATOM	2230	ND1	HIS	6	204.999	136.176	17.909	1.00	72.84	CS3	ATOM	2283	O	LEU	12	209.563	148.297	17.669	1.00 50.36	CS3
ATOM	2231	CE1	HIS	6	204.317	136.540	18.979	1.00	72.84	CS3	ATOM	2284	N	GLY	13	209.838	147.577	15.564	1.00 93.13	CS3
ATOM	2232	NE2	HIS	6	204.202	137.858	18.970	1.00	72.84	CS3	ATOM	2285	CA	GLY	13	210.370	148.855	15.142	1.00 93.13	CS3
ATOM	2233	C	HIS	6	204.735	138.565	14.305	1.00	53.67	CS3	ATOM	2286	C	GLY	13	209.381	149.961	15.450	1.00 93.13	CS3
ATOM	2234	O	HIS	6	205.568	139.378	13.888	1.00	53.67	CS3	ATOM	2287	O	GLY	13	209.711	150.943	16.118	1.00 93.13	CS3
ATOM	2235	N	PRO	7	203.440	138.884	14.410	1.00	60.64	CS3	ATOM	2288	N	ILE	14	208.158	149.800	14.959	1.00 70.57	CS3
ATOM	2236	CD	PRO	7	202.276	138.084	14.820	1.00	47.94	CS3	ATOM	2289	CA	ILE	14	207.124	150.790	15.198	1.00 70.57	CS3
ATOM	2237	CA	PRO	7	203.046	140.244	14.023	1.00	60.64	CS3	ATOM	2290	CB	ILE	14	206.696	151.476	13.885	1.00 90.46	CS3
ATOM	2238	CB	PRO	7	201.521	140.194	14.090	1.00	47.94	CS3	ATOM	2291	CG2	ILE	14	205.933	152.759	14.196	1.00 90.46	CS3
ATOM	2239	CG	PRO	7	201.265	139.144	15.125	1.00	47.94	CS3	ATOM	2292	CG1	ILE	14	207.933	151.778	13.027	1.00 90.46	CS3
ATOM	2240	C	PRO	7	203.663	141.322	14.906	1.00	60.64	CS3	ATOM	2293	CD1	ILE	14	208.959	152.694	13.693	1.00 90.46	CS3
ATOM	2241	O	PRO	7	203.758	142.494	14.509	1.00	60.64	CS3	ATOM	2294	C	ILE	14	205.919	150.122	15.850	1.00 70.57	CS3
ATOM	2242	N	ILE	8	204.094	140.914	16.098	1.00	66.76	CS3	ATOM	2295	O	ILE	14	206.048	149.049	16.440	1.00 70.57	CS3
ATOM	2243	CA	ILE	8	204.728	141.837	17.032	1.00	66.76	CS3	ATOM	2296	N	THR	15	204.758	150.760	15.731	1.00 53.22	CS3
ATOM	2244	CB	ILE	8	204.624	141.340	18.487	1.00	96.64	CS3	ATOM	2297	CA	THR	15	203.506	150.285	16.316	1.00 53.22	CS3

ATOM	2298	CB	THR	15	202.470	149.976	15.215	1.00	80.98	CS3	ATOM	2351	N	ARG	21	212.403	147.117	28.535	1.00	112.76	CS3
ATOM	2299	OG1	THR	15	202.815	148.759	14.550	1.00	80.98	CS3	ATOM	2352	CA	ARG	21	213.267	148.150	27.962	1.00	112.76	CS3
ATOM	2300	CG2	THR	15	202.428	151.108	14.192	1.00	80.98	CS3	ATOM	2353	CB	ARG	21	212.409	149.285	27.396	1.00	118.89	CS3
ATOM	2301	C	THR	15	203.630	149.074	17.254	1.00	53.22	CS3	ATOM	2354	CG	ARG	21	211.271	149.707	28.300	1.00	118.89	CS3
ATOM	2302	O	THR	15	202.932	148.062	17.089	1.00	53.22	CS3	ATOM	2355	CD	ARG	21	210.180	150.409	27.510	1.00	118.89	CS3
ATOM	2303	N	ARG	16	204.515	149.196	18.244	1.00	58.86	CS3	ATOM	2356	NE	ARG	21	208.939	150.490	28.274	1.00	118.89	CS3
ATOM	2304	CA	ARG	16	204.746	148.142	19.223	1.00	58.86	CS3	ATOM	2357	CZ	ARG	21	207.743	150.723	27.741	1.00	118.89	CS3
ATOM	2305	CB	ARG	16	204.713	146.775	18.550	1.00	66.12	CS3	ATOM	2358	NH1	ARG	21	207.622	150.901	26.430	1.00	118.89	CS3
ATOM	2306	CG	ARG	16	204.138	145.701	19.424	1.00	66.12	CS3	ATOM	2359	NH2	ARG	21	206.665	150.770	28.517	1.00	118.89	CS3
ATOM	2307	CD	ARG	16	202.660	145.927	19.611	1.00	66.12	CS3	ATOM	2360	C	ARG	21	214.292	148.716	28.939	1.00	112.76	CS3
ATOM	2308	NE	ARG	16	202.093	144.970	20.553	1.00	66.12	CS3	ATOM	2361	O	ARG	21	214.038	149.717	29.601	1.00	112.76	CS3
ATOM	2309	CZ	ARG	16	200.790	144.846	20.801	1.00	66.12	CS3	ATOM	2362	N	TRP	22	215.455	148.077	29.016	1.00	127.60	CS3
ATOM	2310	NH1	ARG	16	199.906	145.622	20.169	1.00	66.12	CS3	ATOM	2363	CA	TRP	22	216.503	148.534	29.915	1.00	127.60	CS3
ATOM	2311	NH2	ARG	16	200.367	143.942	21.684	1.00	66.12	CS3	ATOM	2364	CB	TRP	22	217.146	147.376	30.652	1.00	83.32	CS3
ATOM	2312	C	ARG	16	206.101	148.318	19.907	1.00	58.86	CS3	ATOM	2365	CG	TRP	22	216.290	146.218	30.836	1.00	83.32	CS3
ATOM	2313	O	ARG	16	207.143	148.277	19.244	1.00	58.86	CS3	ATOM	2366	CD2	TRP	22	216.714	144.861	30.863	1.00	83.32	CS3
ATOM	2314	N	ASP	17	206.086	148.520	21.226	1.00	54.01	CS3	ATOM	2367	CE2	TRP	22	215.590	144.078	31.196	1.00	83.32	CS3
ATOM	2315	CA	ASP	17	207.323	148.679	21.997	1.00	54.01	CS3	ATOM	2368	CE3	TRP	22	217.945	144.224	30.651	1.00	83.32	CS3
ATOM	2316	CB	ASP	17	207.200	149.802	23.034	1.00	109.73	CS3	ATOM	2369	CD1	TRP	22	214.960	146.214	31.128	1.00	83.32	CS3
ATOM	2317	CG	ASP	17	206.904	151.153	22.404	1.00	109.73	CS3	ATOM	2370	NE1	TRP	22	214.528	144.931	31.347	1.00	83.32	CS3
ATOM	2318	OD1	ASP	17	207.624	151.547	21.463	1.00	109.73	CS3	ATOM	2371	CZ2	TRP	22	215.654	142.690	31.316	1.00	83.32	CS3
ATOM	2319	OD2	ASP	17	205.953	151.829	22.853	1.00	109.73	CS3	ATOM	2372	CZ3	TRP	22	218.009	142.839	30.770	1.00	83.32	CS3
ATOM	2320	C	ASP	17	207.608	147.360	22.697	1.00	54.01	CS3	ATOM	2373	CH2	TRP	22	216.869	142.089	31.104	1.00	83.32	CS3
ATOM	2321	O	ASP	17	206.743	146.479	22.759	1.00	54.01	CS3	ATOM	2374	C	TRP	22	217.597	149.241	29.150	1.00	127.60	CS3
ATOM	2322	N	TRP	18	208.827	147.225	23.209	1.00	81.45	CS3	ATOM	2375	O	TRP	22	217.327	150.073	28.281	1.00	127.60	CS3
ATOM	2323	CA	TRP	18	209.253	146.005	23.887	1.00	81.45	CS3	ATOM	2376	N	TYR	23	218.841	148.891	29.476	1.00	61.48	CS3
ATOM	2324	CB	TRP	18	210.771	146.023	24.092	1.00	67.93	CS3	ATOM	2377	CA	TYR	23	219.994	149.498	28.823	1.00	61.48	CS3
ATOM	2325	CG	TRP	18	211.615	145.832	22.843	1.00	67.93	CS3	ATOM	2378	CB	TYR	23	220.275	150.893	29.420	1.00	201.09	CS3
ATOM	2326	CD2	TRP	18	211.800	146.765	21.767	1.00	67.93	CS3	ATOM	2379	CG	TYR	23	220.474	150.965	30.931	1.00	201.09	CS3
ATOM	2327	CE2	TRP	18	212.748	146.201	20.881	1.00	67.93	CS3	ATOM	2380	CD1	TYR	23	221.597	150.398	31.542	1.00	201.09	CS3
ATOM	2328	CE3	TRP	18	211.261	148.023	21.466	1.00	67.93	CS3	ATOM	2381	CE1	TYR	23	221.804	150.509	32.920	1.00	201.09	CS3
ATOM	2329	CD1	TRP	18	212.430	144.768	22.565	1.00	67.93	CS3	ATOM	2382	CD2	TYR	23	219.559	151.642	31.742	1.00	201.09	CS3
ATOM	2330	NE1	TRP	18	213.114	144.984	21.393	1.00	67.93	CS3	ATOM	2383	CE2	TYR	23	219.756	151.757	33.117	1.00	201.09	CS3
ATOM	2331	CZ2	TRP	18	213.171	146.852	19.715	1.00	67.93	CS3	ATOM	2384	CZ	TYR	23	220.880	151.188	33.698	1.00	201.09	CS3
ATOM	2332	CZ3	TRP	18	211.685	148.674	20.300	1.00	67.93	CS3	ATOM	2385	OH	TYR	23	221.079	151.296	35.056	1.00	201.09	CS3
ATOM	2333	CH2	TRP	18	212.630	148.084	19.442	1.00	67.93	CS3	ATOM	2386	C	TYR	23	221.273	148.660	28.800	1.00	61.48	CS3
ATOM	2334	C	TRP	18	208.575	145.819	25.240	1.00	81.45	CS3	ATOM	2387	O	TYR	23	221.456	147.696	29.573	1.00	61.48	CS3
ATOM	2335	O	TRP	18	207.943	146.740	25.752	1.00	81.45	CS3	ATOM	2388	N	ALA	24	222.134	149.063	27.868	1.00	146.18	CS3
ATOM	2336	N	GLU	19	208.706	144.620	25.808	1.00	64.91	CS3	ATOM	2389	CA	ALA	24	223.425	148.458	27.582	1.00	146.18	CS3
ATOM	2337	CA	GLU	19	208.134	144.315	27.121	1.00	64.91	CS3	ATOM	2390	CB	ALA	24	224.413	149.557	27.240	1.00	38.89	CS3
ATOM	2338	CB	GLU	19	207.596	142.876	27.171	1.00	110.49	CS3	ATOM	2391	C	ALA	24	224.046	147.517	28.611	1.00	146.18	CS3
ATOM	2339	CG	GLU	19	206.265	142.649	26.454	1.00	110.49	CS3	ATOM	2392	O	ALA	24	224.939	147.916	29.357	1.00	146.18	CS3
ATOM	2340	CD	GLU	19	205.642	141.288	26.785	1.00	110.49	CS3	ATOM	2393	N	GLY	25	223.578	146.271	28.650	1.00	106.49	CS3
ATOM	2341	OE1	GLU	19	205.348	141.042	27.974	1.00	110.49	CS3	ATOM	2394	CA	GLY	25	224.158	145.293	29.558	1.00	106.49	CS3
ATOM	2342	OE2	GLU	19	205.445	140.460	25.865	1.00	110.49	CS3	ATOM	2395	C	GLY	25	225.069	144.421	28.703	1.00	106.49	CS3
ATOM	2343	C	GLU	19	209.184	144.501	28.224	1.00	64.91	CS3	ATOM	2396	O	GLY	25	224.818	144.319	27.503	1.00	106.49	CS3
ATOM	2344	O	GLU	19	208.862	144.497	29.403	1.00	64.91	CS3	ATOM	2397	N	LYS	26	226.119	143.814	29.263	1.00	74.71	CS3
ATOM	2345	N	SER	20	210.441	144.651	27.831	1.00	74.13	CS3	ATOM	2398	CA	LYS	26	227.005	142.953	28.459	1.00	74.71	CS3
ATOM	2346	CA	SER	20	211.529	144.857	28.783	1.00	74.13	CS3	ATOM	2399	CB	LYS	26	228.166	143.767	27.877	1.00	101.98	CS3
ATOM	2347	CB	SER	20	212.277	143.541	29.072	1.00	40.35	CS3	ATOM	2400	CG	LYS	26	227.673	144.853	26.944	1.00	101.98	CS3
ATOM	2348	OG	SER	20	211.410	142.512	29.552	1.00	40.35	CS3	ATOM	2401	CD	LYS	26	228.724	145.388	25.996	1.00	101.98	CS3
ATOM	2349	C	SER	20	212.480	145.850	28.134	1.00	74.13	CS3	ATOM	2402	CE	LYS	26	228.057	146.377	25.040	1.00	101.98	CS3
ATOM	2350	O	SER	20	213.265	145.472	27.268	1.00	74.13	CS3	ATOM	2403	NZ	LYS	26	228.985	147.001	24.057	1.00	101.98	CS3

ATOM	2404	C	LYS	26	227.533	141.739	29.218	1.00 74.71	CS3
ATOM	2405	O	LYS	26	227.491	140.611	28.719	1.00 74.71	CS3
ATOM	2406	N	LYS	27	228.049	141.968	30.417	1.00 90.87	CS3
ATOM	2407	CA	LYS	27	228.526	140.868	31.238	1.00 90.87	CS3
ATOM	2408	CB	LYS	27	229.711	141.303	32.102	1.00107.70	CS3
ATOM	2409	CG	LYS	27	230.974	141.629	31.331	1.00107.70	CS3
ATOM	2410	CD	LYS	27	232.174	141.737	32.267	1.00107.70	CS3
ATOM	2411	CE	LYS	27	233.484	141.870	31.493	1.00107.70	CS3
ATOM	2412	NZ	LYS	27	234.658	141.986	32.402	1.00107.70	CS3
ATOM	2413	C	LYS	27	227.333	140.553	32.128	1.00 90.87	CS3
ATOM	2414	O	LYS	27	227.316	139.570	32.876	1.00 90.87	CS3
ATOM	2415	N	GLN	28	226.321	141.406	32.020	1.00113.60	CS3
ATOM	2416	CA	GLN	28	225.121	141.272	32.821	1.00113.60	CS3
ATOM	2417	CB	GLN	28	224.827	142.596	33.506	1.00111.55	CS3
ATOM	2418	CG	GLN	28	225.996	143.177	34.247	1.00111.55	CS3
ATOM	2419	CD	GLN	28	225.720	144.590	34.677	1.00111.55	CS3
ATOM	2420	OE1	GLN	28	224.759	144.851	35.405	1.00111.55	CS3
ATOM	2421	NE2	GLN	28	226.550	145.522	34.218	1.00111.55	CS3
ATOM	2422	C	GLN	28	223.898	140.859	32.025	1.00113.60	CS3
ATOM	2423	O	GLN	28	223.137	139.996	32.465	1.00113.60	CS3
ATOM	2424	N	TYR	29	223.710	141.479	30.861	1.00 65.02	CS3
ATOM	2425	CA	TYR	29	222.550	141.202	30.014	1.00 65.02	CS3
ATOM	2426	CB	TYR	29	222.908	141.328	28.535	1.00 62.73	CS3
ATOM	2427	CG	TYR	29	221.707	141.616	27.652	1.00 62.73	CS3
ATOM	2428	CD1	TYR	29	221.555	142.863	27.031	1.00 62.73	CS3
ATOM	2429	CE1	TYR	29	220.468	143.128	26.194	1.00 62.73	CS3
ATOM	2430	CD2	TYR	29	220.733	140.638	27.420	1.00 62.73	CS3
ATOM	2431	CE2	TYR	29	219.637	140.887	26.587	1.00 62.73	CS3
ATOM	2432	CZ	TYR	29	219.511	142.134	25.973	1.00 62.73	CS3
ATOM	2433	OH	TYR	29	218.445	142.378	25.128	1.00 62.73	CS3
ATOM	2434	C	TYR	29	221.891	139.848	30.251	1.00 65.02	CS3
ATOM	2435	O	TYR	29	220.714	139.792	30.582	1.00 65.02	CS3
ATOM	2436	N	ARG	30	222.637	138.760	30.088	1.00 76.86	CS3
ATOM	2437	CA	ARG	30	222.055	137.436	30.295	1.00 76.86	CS3
ATOM	2438	CB	ARG	30	223.098	136.341	30.040	1.00 82.63	CS3
ATOM	2439	CG	ARG	30	224.367	136.507	30.824	1.00 82.63	CS3
ATOM	2440	CD	ARG	30	225.348	135.382	30.562	1.00 82.63	CS3
ATOM	2441	NE	ARG	30	226.690	135.732	31.029	1.00 82.63	CS3
ATOM	2442	CZ	ARG	30	227.379	136.797	30.612	1.00 82.63	CS3
ATOM	2443	NH1	ARG	30	226.862	137.634	29.713	1.00 82.63	CS3
ATOM	2444	NH2	ARG	30	228.590	137.034	31.097	1.00 82.63	CS3
ATOM	2445	C	ARG	30	221.457	137.275	31.696	1.00 76.86	CS3
ATOM	2446	O	ARG	30	220.320	136.820	31.844	1.00 76.86	CS3
ATOM	2447	N	HIS	31	222.227	137.655	32.714	1.00 80.73	CS3
ATOM	2448	CA	HIS	31	221.801	137.569	34.114	1.00 80.73	CS3
ATOM	2449	CB	HIS	31	222.926	138.054	35.027	1.00 67.30	CS3
ATOM	2450	CG	HIS	31	224.210	137.304	34.869	1.00 67.30	CS3
ATOM	2451	CD2	HIS	31	225.422	137.698	34.407	1.00 67.30	CS3
ATOM	2452	ND1	HIS	31	224.352	135.984	35.243	1.00 67.30	CS3
ATOM	2453	CE1	HIS	31	225.598	135.599	35.024	1.00 67.30	CS3
ATOM	2454	NE2	HIS	31	226.269	136.620	34.517	1.00 67.30	CS3
ATOM	2455	C	HIS	31	220.573	138.449	34.341	1.00 80.73	CS3
ATOM	2456	O	HIS	31	219.542	138.012	34.862	1.00 80.73	CS3
ATOM	2457	N	LEU	32	220.717	139.702	33.939	1.00 66.32	CS3
ATOM	2458	CA	LEU	32	219.675	140.697	34.064	1.00 66.32	CS3
ATOM	2459	CB	LEU	32	220.161	142.004	33.448	1.00 62.84	CS3
ATOM	2460	CG	LEU	32	220.041	143.242	34.330	1.00 62.84	CS3
ATOM	2461	CD1	LEU	32	220.628	144.483	33.636	1.00 62.84	CS3
ATOM	2462	CD2	LEU	32	218.576	143.441	34.647	1.00 62.84	CS3
ATOM	2463	C	LEU	32	218.389	140.257	33.379	1.00 66.32	CS3
ATOM	2464	O	LEU	32	217.297	140.605	33.826	1.00 66.32	CS3
ATOM	2465	N	LEU	33	218.524	139.495	32.295	1.00103.41	CS3
ATOM	2466	CA	LEU	33	217.376	139.013	31.523	1.00103.41	CS3
ATOM	2467	CB	LEU	33	217.794	138.657	30.094	1.00 79.73	CS3
ATOM	2468	CG	LEU	33	216.709	138.285	29.070	1.00 79.73	CS3
ATOM	2469	CD1	LEU	33	217.372	138.162	27.707	1.00 79.73	CS3
ATOM	2470	CD2	LEU	33	215.993	136.989	29.439	1.00 79.73	CS3
ATOM	2471	C	LEU	33	216.728	137.800	32.139	1.00103.41	CS3
ATOM	2472	O	LEU	33	215.508	137.748	32.288	1.00103.41	CS3
ATOM	2473	N	LEU	34	217.546	136.812	32.472	1.00 60.54	CS3
ATOM	2474	CA	LEU	34	217.024	135.592	33.052	1.00 60.54	CS3
ATOM	2475	CB	LEU	34	218.137	134.765	33.687	1.00 38.45	CS3
ATOM	2476	CG	LEU	34	217.794	133.274	33.814	1.00 38.45	CS3
ATOM	2477	CD1	LEU	34	218.906	132.567	34.591	1.00 38.45	CS3
ATOM	2478	CD2	LEU	34	216.454	133.076	34.506	1.00 38.45	CS3
ATOM	2479	C	LEU	34	216.024	135.970	34.118	1.00 60.54	CS3
ATOM	2480	O	LEU	34	214.963	135.353	34.230	1.00 60.54	CS3
ATOM	2481	N	GLU	35	216.372	136.996	34.895	1.00 87.46	CS3
ATOM	2482	CA	GLU	35	215.516	137.482	35.972	1.00 87.46	CS3
ATOM	2483	CB	GLU	35	216.069	138.800	36.522	1.00102.38	CS3
ATOM	2484	CG	GLU	35	215.422	139.256	37.824	1.00102.38	CS3
ATOM	2485	CD	GLU	35	216.285	140.244	38.603	1.00102.38	CS3
ATOM	2486	OE1	GLU	35	217.394	139.861	39.041	1.00102.38	CS3
ATOM	2487	OE2	GLU	35	215.851	141.403	38.779	1.00102.38	CS3
ATOM	2488	C	GLU	35	214.087	137.676	35.474	1.00 87.46	CS3
ATOM	2489	O	GLU	35	213.160	137.015	35.948	1.00 87.46	CS3
ATOM	2490	N	ASP	36	213.920	138.569	34.504	1.00 69.36	CS3
ATOM	2491	CA	ASP	36	212.604	138.843	33.944	1.00 69.36	CS3
ATOM	2492	CB	ASP	36	212.734	139.545	32.600	1.00101.95	CS3
ATOM	2493	CG	ASP	36	213.325	140.919	32.732	1.00101.95	CS3
ATOM	2494	OD1	ASP	36	213.017	141.778	31.876	1.00101.95	CS3
ATOM	2495	OD2	ASP	36	214.097	141.133	33.693	1.00101.95	CS3
ATOM	2496	C	ASP	36	211.723	137.623	33.764	1.00 69.36	CS3
ATOM	2497	O	ASP	36	210.541	137.663	34.092	1.00 69.36	CS3
ATOM	2498	N	GLN	37	212.290	136.548	33.226	1.00118.56	CS3
ATOM	2499	CA	GLN	37	211.527	135.325	33.001	1.00118.56	CS3
ATOM	2500	CB	GLN	37	212.350	134.328	32.169	1.00 89.94	CS3
ATOM	2501	CG	GLN	37	211.998	134.315	30.671	1.00 89.94	CS3
ATOM	2502	CD	GLN	37	211.871	135.714	30.070	1.00 89.94	CS3
ATOM	2503	OE1	GLN	37	212.818	136.504	30.089	1.00 89.94	CS3
ATOM	2504	NE2	GLN	37	210.691	136.022	29.535	1.00 89.94	CS3
ATOM	2505	C	GLN	37	211.088	134.705	34.325	1.00118.56	CS3
ATOM	2506	O	GLN	37	210.043	134.056	34.399	1.00118.56	CS3
ATOM	2507	N	ARG	38	211.891	134.907	35.365	1.00100.00	CS3
ATOM	2508	CA	ARG	38	211.562	134.402	36.694	1.00100.00	CS3
ATOM	2509	CB	ARG	38	212.731	134.638	37.645	1.00 98.52	CS3

ATOM	2510	CG	ARG	38	213.971	133.858	37.298	1.00	98.52	CS3	ATOM	2563	OE2	GLU	44	204.551	135.750	31.348	1.00	108.96	CS3
ATOM	2511	CD	ARG	38	213.831	132.405	37.717	1.00	98.52	CS3	ATOM	2564	C	GLU	44	200.981	133.385	35.598	1.00	86.54	CS3
ATOM	2512	NE	ARG	38	214.958	131.594	37.257	1.00	98.52	CS3	ATOM	2565	O	GLU	44	199.803	133.056	35.466	1.00	86.54	CS3
ATOM	2513	CZ	ARG	38	216.240	131.910	37.438	1.00	98.52	CS3	ATOM	2566	N	LYS	45	201.841	132.743	36.386	1.00	107.99	CS3
ATOM	2514	NH1	ARG	38	216.570	133.032	38.073	1.00	98.52	CS3	ATOM	2567	CA	LYS	45	201.476	131.561	37.163	1.00	107.99	CS3
ATOM	2515	NH2	ARG	38	217.194	131.103	36.983	1.00	98.52	CS3	ATOM	2568	CB	LYS	45	202.712	130.986	37.869	1.00	99.45	CS3
ATOM	2516	C	ARG	38	210.357	135.225	37.138	1.00	100.00	CS3	ATOM	2569	CG	LYS	45	203.191	129.641	37.328	1.00	99.45	CS3
ATOM	2517	O	ARG	38	209.355	134.693	37.629	1.00	100.00	CS3	ATOM	2570	CD	LYS	45	202.129	128.559	37.517	1.00	99.45	CS3
ATOM	2518	N	ILE	39	210.482	136.537	36.952	1.00	82.24	CS3	ATOM	2571	CE	LYS	45	202.596	127.204	36.990	1.00	99.45	CS3
ATOM	2519	CA	ILE	39	209.429	137.485	37.279	1.00	82.24	CS3	ATOM	2572	NZ	LYS	45	201.559	126.144	37.173	1.00	99.45	CS3
ATOM	2520	CB	ILE	39	209.793	138.889	36.789	1.00	70.32	CS3	ATOM	2573	C	LYS	45	200.402	131.846	38.208	1.00	107.99	CS3
ATOM	2521	CG2	ILE	39	208.570	139.793	36.835	1.00	70.32	CS3	ATOM	2574	O	LYS	45	199.678	130.938	38.620	1.00	107.99	CS3
ATOM	2522	CG1	ILE	39	210.961	139.435	37.612	1.00	70.32	CS3	ATOM	2575	N	GLU	46	200.302	133.100	38.640	1.00	92.60	CS3
ATOM	2523	CD1	ILE	39	211.391	140.840	37.195	1.00	70.32	CS3	ATOM	2576	CA	GLU	46	199.316	133.471	39.650	1.00	92.60	CS3
ATOM	2524	C	ILE	39	208.163	137.043	36.565	1.00	82.24	CS3	ATOM	2577	CB	GLU	46	200.013	134.115	40.852	1.00	147.39	CS3
ATOM	2525	O	ILE	39	207.276	136.443	37.178	1.00	82.24	CS3	ATOM	2578	CG	GLU	46	200.376	133.109	41.931	1.00	147.39	CS3
ATOM	2526	N	ARG	40	208.094	137.341	35.267	1.00	73.92	CS3	ATOM	2579	CD	GLU	46	199.151	132.377	42.463	1.00	147.39	CS3
ATOM	2527	CA	ARG	40	206.954	136.970	34.430	1.00	73.92	CS3	ATOM	2580	OE1	GLU	46	198.348	133.001	43.193	1.00	147.39	CS3
ATOM	2528	CB	ARG	40	207.346	137.013	32.945	1.00	60.50	CS3	ATOM	2581	OE2	GLU	46	198.983	131.181	42.141	1.00	147.39	CS3
ATOM	2529	CG	ARG	40	207.678	138.411	32.410	1.00	60.50	CS3	ATOM	2582	C	GLU	46	198.201	134.383	39.163	1.00	92.60	CS3
ATOM	2530	CD	ARG	40	207.862	138.393	30.902	1.00	60.50	CS3	ATOM	2583	O	GLU	46	197.037	133.974	39.106	1.00	92.60	CS3
ATOM	2531	NE	ARG	40	207.847	139.729	30.303	1.00	60.50	CS3	ATOM	2584	N	LEU	47	198.564	135.615	38.822	1.00	89.05	CS3
ATOM	2532	CZ	ARG	40	208.904	140.536	30.217	1.00	60.50	CS3	ATOM	2585	CA	LEU	47	197.611	136.614	38.344	1.00	89.05	CS3
ATOM	2533	NH1	ARG	40	210.084	140.145	30.697	1.00	60.50	CS3	ATOM	2586	CB	LEU	47	198.352	137.888	37.938	1.00	60.67	CS3
ATOM	2534	NH2	ARG	40	208.785	141.730	29.639	1.00	60.50	CS3	ATOM	2587	CG	LEU	47	199.037	138.702	39.035	1.00	60.67	CS3
ATOM	2535	C	ARG	40	206.487	135.563	34.794	1.00	73.92	CS3	ATOM	2588	CD1	LEU	47	199.850	137.774	39.955	1.00	60.67	CS3
ATOM	2536	O	ARG	40	205.284	135.278	34.818	1.00	73.92	CS3	ATOM	2589	CD2	LEU	47	199.916	139.792	38.375	1.00	60.67	CS3
ATOM	2537	N	GLY	41	207.457	134.700	35.093	1.00	70.25	CS3	ATOM	2590	C	LEU	47	196.744	136.173	37.166	1.00	89.05	CS3
ATOM	2538	CA	GLY	41	207.171	133.324	35.465	1.00	70.25	CS3	ATOM	2591	O	LEU	47	196.200	137.018	36.449	1.00	89.05	CS3
ATOM	2539	C	GLY	41	206.043	133.152	36.464	1.00	70.25	CS3	ATOM	2592	N	TYR	48	196.609	134.867	36.954	1.00	87.23	CS3
ATOM	2540	O	GLY	41	205.017	132.554	36.137	1.00	70.25	CS3	ATOM	2593	CA	TYR	48	195.805	134.391	35.844	1.00	87.23	CS3
ATOM	2541	N	LEU	42	206.219	133.679	37.676	1.00	112.23	CS3	ATOM	2594	CB	TYR	48	195.757	132.856	35.827	1.00	101.29	CS3
ATOM	2542	CA	LEU	42	205.197	133.553	38.714	1.00	112.23	CS3	ATOM	2595	CG	TYR	48	194.958	132.305	34.661	1.00	101.29	CS3
ATOM	2543	CB	LEU	42	205.782	133.853	40.102	1.00	145.99	CS3	ATOM	2596	CD1	TYR	48	194.732	133.088	33.513	1.00	101.29	CS3
ATOM	2544	CG	LEU	42	206.022	132.639	41.014	1.00	145.99	CS3	ATOM	2597	CE1	TYR	48	193.977	132.615	32.445	1.00	101.29	CS3
ATOM	2545	CD1	LEU	42	206.349	133.115	42.422	1.00	145.99	CS3	ATOM	2598	CD2	TYR	48	194.408	131.020	34.704	1.00	101.29	CS3
ATOM	2546	CD2	LEU	42	204.781	131.748	41.049	1.00	145.99	CS3	ATOM	2599	CE2	TYR	48	193.649	130.531	33.633	1.00	101.29	CS3
ATOM	2547	C	LEU	42	203.955	134.410	38.505	1.00	112.23	CS3	ATOM	2600	CZ	TYR	48	193.437	131.339	32.506	1.00	101.29	CS3
ATOM	2548	O	LEU	42	202.841	133.966	38.793	1.00	112.23	CS3	ATOM	2601	OH	TYR	48	192.685	130.881	31.444	1.00	101.29	CS3
ATOM	2549	N	LEU	43	204.137	135.629	38.010	1.00	86.60	CS3	ATOM	2602	C	TYR	48	194.394	134.971	35.931	1.00	87.23	CS3
ATOM	2550	CA	LEU	43	203.001	136.521	37.793	1.00	86.60	CS3	ATOM	2603	O	TYR	48	193.897	135.578	34.974	1.00	87.23	CS3
ATOM	2551	CB	LEU	43	203.463	137.818	37.151	1.00	74.50	CS3	ATOM	2604	N	SER	49	193.769	134.801	37.093	1.00	79.54	CS3
ATOM	2552	CG	LEU	43	204.897	138.196	37.491	1.00	74.50	CS3	ATOM	2605	CA	SER	49	192.412	135.288	37.341	1.00	79.54	CS3
ATOM	2553	CD1	LEU	43	205.169	139.579	36.898	1.00	74.50	CS3	ATOM	2606	CB	SER	49	191.970	134.850	38.733	1.00	97.58	CS3
ATOM	2554	CD2	LEU	43	205.118	138.171	39.002	1.00	74.50	CS3	ATOM	2607	OG	SER	49	192.938	135.229	39.690	1.00	97.58	CS3
ATOM	2555	C	LEU	43	201.958	135.862	36.899	1.00	86.60	CS3	ATOM	2608	C	SER	49	192.262	136.807	37.212	1.00	79.54	CS3
ATOM	2556	O	LEU	43	200.759	135.881	37.198	1.00	86.60	CS3	ATOM	2609	O	SER	49	191.164	137.319	36.986	1.00	79.54	CS3
ATOM	2557	N	GLU	44	202.423	135.289	35.794	1.00	86.54	CS3	ATOM	2610	N	ALA	50	193.362	137.530	37.367	1.00	49.85	CS3
ATOM	2558	CA	GLU	44	201.538	134.601	34.870	1.00	86.54	CS3	ATOM	2611	CA	ALA	50	193.312	138.978	37.252	1.00	49.85	CS3
ATOM	2559	CB	GLU	44	202.319	134.172	33.629	1.00	108.96	CS3	ATOM	2612	CB	ALA	50	194.577	139.587	37.852	1.00	62.01	CS3
ATOM	2560	CG	GLU	44	202.618	135.320	32.680	1.00	108.96	CS3	ATOM	2613	C	ALA	50	193.163	139.399	35.788	1.00	49.85	CS3
ATOM	2561	CD	GLU	44	203.620	134.950	31.603	1.00	108.96	CS3	ATOM	2614	O	ALA	50	192.510	140.400	35.465	1.00	49.85	CS3
ATOM	2562	OE1	GLU	44	203.472	133.863	31.003	1.00	108.96	CS3	ATOM	2615	N	GLY	51	193.767	138.615	34.903	1.00	111.13	CS3

ATOM	2616	CA	GLY	51	193.722	138.932	33.491	1.00111.13	CS3	ATOM	2669	CG	GLU	58	211.916	151.085	32.458	1.00106.93	CS3
ATOM	2617	C	GLY	51	195.055	139.541	33.103	1.00111.13	CS3	ATOM	2670	CD	GLU	58	210.917	152.098	31.933	1.00106.93	CS3
ATOM	2618	O	GLY	51	195.155	140.745	32.861	1.00111.13	CS3	ATOM	2671	OE1	GLU	58	209.818	151.680	31.504	1.00106.93	CS3
ATOM	2619	N	LEU	52	196.084	138.698	33.069	1.00 86.79	CS3	ATOM	2672	OE2	GLU	58	211.233	153.309	31.936	1.00106.93	CS3
ATOM	2620	CA	LEU	52	197.445	139.104	32.713	1.00 86.79	CS3	ATOM	2673	C	GLU	58	213.074	148.598	34.341	1.00 74.85	CS3
ATOM	2621	CB	LEU	52	198.398	137.936	32.928	1.00 90.44	CS3	ATOM	2674	O	GLU	58	212.889	147.920	35.355	1.00 74.85	CS3
ATOM	2622	CG	LEU	52	197.971	136.687	32.134	1.00 90.44	CS3	ATOM	2675	N	ARG	59	214.225	149.230	34.099	1.00 99.98	CS3
ATOM	2623	CD1	LEU	52	199.146	135.707	32.028	1.00 90.44	CS3	ATOM	2676	CA	ARG	59	215.334	149.137	35.056	1.00 99.98	CS3
ATOM	2624	CD2	LEU	52	196.730	136.035	32.785	1.00 90.44	CS3	ATOM	2677	CB	ARG	59	216.102	147.827	34.862	1.00 73.23	CS3
ATOM	2625	C	LEU	52	197.482	139.489	31.245	1.00 86.79	CS3	ATOM	2678	CG	ARG	59	215.300	146.567	35.106	1.00 73.23	CS3
ATOM	2626	O	LEU	52	197.263	138.649	30.382	1.00 86.79	CS3	ATOM	2679	CD	ARG	59	216.113	145.587	35.911	1.00 73.23	CS3
ATOM	2627	N	ALA	53	197.757	140.747	30.943	1.00 80.84	CS3	ATOM	2680	NE	ARG	59	215.631	144.224	35.744	1.00 73.23	CS3
ATOM	2628	CA	ALA	53	197.798	141.141	29.544	1.00 80.84	CS3	ATOM	2681	CZ	ARG	59	216.116	143.183	36.413	1.00 73.23	CS3
ATOM	2629	CB	ALA	53	196.862	142.317	29.302	1.00 28.00	CS3	ATOM	2682	NH1	ARG	59	217.095	143.361	37.298	1.00 73.23	CS3
ATOM	2630	C	ALA	53	199.208	141.493	29.087	1.00 80.84	CS3	ATOM	2683	NH2	ARG	59	215.641	141.961	36.187	1.00 73.23	CS3
ATOM	2631	O	ALA	53	199.538	141.360	27.906	1.00 80.84	CS3	ATOM	2684	C	ARG	59	216.357	150.274	35.065	1.00 99.98	CS3
ATOM	2632	N	ARG	54	200.047	141.928	30.020	1.00 83.90	CS3	ATOM	2685	O	ARG	59	216.388	151.116	34.160	1.00 99.98	CS3
ATOM	2633	CA	ARG	54	201.397	142.315	29.657	1.00 83.90	CS3	ATOM	2686	N	ALA	60	217.196	150.265	36.107	1.00111.27	CS3
ATOM	2634	CB	ARG	54	201.335	143.425	28.612	1.00 99.69	CS3	ATOM	2687	CA	ALA	60	218.268	151.247	36.311	1.00111.27	CS3
ATOM	2635	CG	ARG	54	202.670	143.794	28.019	1.00 99.69	CS3	ATOM	2688	CB	ALA	60	217.688	152.656	36.463	1.00 60.48	CS3
ATOM	2636	CD	ARG	54	202.596	145.176	27.400	1.00 99.69	CS3	ATOM	2689	C	ALA	60	219.102	150.889	37.545	1.00111.27	CS3
ATOM	2637	NE	ARG	54	203.773	145.483	26.594	1.00 99.69	CS3	ATOM	2690	O	ALA	60	219.714	151.761	38.164	1.00111.27	CS3
ATOM	2638	CZ	ARG	54	204.128	146.711	26.233	1.00 99.69	CS3	ATOM	2691	N	ALA	61	219.104	149.601	37.887	1.00125.01	CS3
ATOM	2639	NH1	ARG	54	203.400	147.756	26.610	1.00 99.69	CS3	ATOM	2692	CA	ALA	61	219.843	149.043	39.030	1.00125.01	CS3
ATOM	2640	NH2	ARG	54	205.209	146.895	25.489	1.00 99.69	CS3	ATOM	2693	CB	ALA	61	221.257	149.630	39.099	1.00 81.82	CS3
ATOM	2641	C	ARG	54	202.221	142.799	30.842	1.00 83.90	CS3	ATOM	2694	C	ALA	61	219.151	149.222	40.373	1.00125.01	CS3
ATOM	2642	O	ARG	54	201.818	143.710	31.561	1.00 83.90	CS3	ATOM	2695	O	ALA	61	218.733	150.326	40.723	1.00125.01	CS3
ATOM	2643	N	VAL	55	203.385	142.190	31.026	1.00 73.81	CS3	ATOM	2696	N	ASP	62	219.036	148.121	41.116	1.00139.71	CS3
ATOM	2644	CA	VAL	55	204.296	142.557	32.100	1.00 73.81	CS3	ATOM	2697	CA	ASP	62	218.415	148.115	42.442	1.00139.71	CS3
ATOM	2645	CB	VAL	55	205.009	141.325	32.693	1.00 48.25	CS3	ATOM	2698	CB	ASP	62	219.393	148.677	43.477	1.00145.34	CS3
ATOM	2646	CG1	VAL	55	206.160	141.784	33.596	1.00 48.25	CS3	ATOM	2699	CG	ASP	62	220.582	147.772	43.707	1.00145.34	CS3
ATOM	2647	CG2	VAL	55	204.026	140.456	33.462	1.00 48.25	CS3	ATOM	2700	OD1	ASP	62	220.378	146.660	44.238	1.00145.34	CS3
ATOM	2648	C	VAL	55	205.395	143.461	31.564	1.00 73.81	CS3	ATOM	2701	OD2	ASP	62	221.714	148.168	43.356	1.00145.34	CS3
ATOM	2649	O	VAL	55	206.235	143.007	30.796	1.00 73.81	CS3	ATOM	2702	C	ASP	62	217.091	148.871	42.557	1.00139.71	CS3
ATOM	2650	N	ASP	56	205.399	144.728	31.961	1.00100.74	CS3	ATOM	2703	O	ASP	62	216.637	149.175	43.665	1.00139.71	CS3
ATOM	2651	CA	ASP	56	206.453	145.643	31.530	1.00100.74	CS3	ATOM	2704	N	ASN	63	216.478	149.179	41.420	1.00166.46	CS3
ATOM	2652	CB	ASP	56	205.904	147.058	31.337	1.00 97.90	CS3	ATOM	2705	CA	ASN	63	215.210	149.898	41.406	1.00166.46	CS3
ATOM	2653	CG	ASP	56	205.233	147.240	29.997	1.00 97.90	CS3	ATOM	2706	CB	ASN	63	215.455	151.403	41.306	1.00147.83	CS3
ATOM	2654	OD1	ASP	56	204.560	146.288	29.552	1.00 97.90	CS3	ATOM	2707	CG	ASN	63	216.149	151.956	42.533	1.00147.83	CS3
ATOM	2655	OD2	ASP	56	205.369	148.331	29.399	1.00 97.90	CS3	ATOM	2708	OD1	ASN	63	215.634	151.856	43.649	1.00147.83	CS3
ATOM	2656	C	ASP	56	207.544	145.656	32.596	1.00100.74	CS3	ATOM	2709	ND2	ASN	63	217.327	152.539	42.337	1.00147.83	CS3
ATOM	2657	O	ASP	56	207.258	145.780	33.788	1.00100.74	CS3	ATOM	2710	C	ASN	63	214.372	149.420	40.239	1.00166.46	CS3
ATOM	2658	N	ILE	57	208.795	145.518	32.175	1.00 67.76	CS3	ATOM	2711	O	ASN	63	213.894	150.206	39.423	1.00166.46	CS3
ATOM	2659	CA	ILE	57	209.890	145.524	33.129	1.00 67.76	CS3	ATOM	2712	N	VAL	64	214.211	148.105	40.178	1.00132.35	CS3
ATOM	2660	CB	ILE	57	210.538	144.138	33.234	1.00 53.74	CS3	ATOM	2713	CA	VAL	64	213.441	147.448	39.137	1.00132.35	CS3
ATOM	2661	CG2	ILE	57	211.839	144.228	34.036	1.00 53.74	CS3	ATOM	2714	CB	VAL	64	213.334	145.955	39.445	1.00 58.30	CS3
ATOM	2662	CG1	ILE	57	209.542	143.160	33.864	1.00 53.74	CS3	ATOM	2715	CG1	VAL	64	212.969	145.187	38.187	1.00 58.30	CS3
ATOM	2663	CD1	ILE	57	210.103	141.755	34.071	1.00 53.74	CS3	ATOM	2716	CG2	VAL	64	214.643	145.462	40.069	1.00 58.30	CS3
ATOM	2664	C	ILE	57	210.963	146.547	32.782	1.00 67.76	CS3	ATOM	2717	C	VAL	64	212.036	148.049	39.064	1.00132.35	CS3
ATOM	2665	O	ILE	57	211.753	146.332	31.867	1.00 67.76	CS3	ATOM	2718	O	VAL	64	211.493	148.487	40.079	1.00132.35	CS3
ATOM	2666	N	GLU	58	210.984	147.658	33.521	1.00 74.85	CS3	ATOM	2719	N	ALA	65	211.450	148.066	37.868	1.00119.48	CS3
ATOM	2667	CA	GLU	58	211.965	148.714	33.297	1.00 74.85	CS3	ATOM	2720	CA	ALA	65	210.111	148.627	37.678	1.00119.48	CS3
ATOM	2668	CB	GLU	58	211.288	150.076	33.380	1.00106.93	CS3	ATOM	2721	CB	ALA	65	210.010	149.314	36.306	1.00 64.03	CS3

ATOM	2722	C	ALA	65	208.993	147.592	37.839	1.00	119.48	CS3	ATOM	2775	O	LYS	72	192.301	142.768	38.888	1.00	94.15	CS3
ATOM	2723	O	ALA	65	208.597	147.277	38.962	1.00	119.48	CS3	ATOM	2776	N	PRO	73	192.174	144.890	38.103	1.00	89.33	CS3
ATOM	2724	N	VAL	66	208.486	147.073	36.721	1.00	99.16	CS3	ATOM	2777	CD	PRO	73	191.474	146.002	37.437	1.00	83.12	CS3
ATOM	2725	CA	VAL	66	207.401	146.086	36.722	1.00	99.16	CS3	ATOM	2778	CA	PRO	73	193.226	145.399	38.991	1.00	89.33	CS3
ATOM	2726	CB	VAL	66	207.493	145.110	37.926	1.00	46.37	CS3	ATOM	2779	CB	PRO	73	193.178	146.911	38.757	1.00	83.12	CS3
ATOM	2727	CG1	VAL	66	206.344	144.096	37.869	1.00	46.37	CS3	ATOM	2780	CG	PRO	73	191.749	147.151	38.375	1.00	83.12	CS3
ATOM	2728	CG2	VAL	66	208.849	144.404	37.925	1.00	46.37	CS3	ATOM	2781	C	PRO	73	192.987	145.017	40.441	1.00	89.33	CS3
ATOM	2729	C	VAL	66	206.042	146.776	36.777	1.00	99.16	CS3	ATOM	2782	O	PRO	73	193.921	144.965	41.246	1.00	89.33	CS3
ATOM	2730	O	VAL	66	205.615	147.243	37.830	1.00	99.16	CS3	ATOM	2783	N	GLY	74	191.726	144.744	40.762	1.00	78.49	CS3
ATOM	2731	N	THR	67	205.362	146.828	35.639	1.00	70.40	CS3	ATOM	2784	CA	GLY	74	191.380	144.355	42.113	1.00	78.49	CS3
ATOM	2732	CA	THR	67	204.051	147.464	35.544	1.00	70.40	CS3	ATOM	2785	C	GLY	74	192.057	143.057	42.509	1.00	78.49	CS3
ATOM	2733	CB	THR	67	204.126	148.722	34.632	1.00	65.62	CS3	ATOM	2786	O	GLY	74	192.881	143.031	43.423	1.00	78.49	CS3
ATOM	2734	OG1	THR	67	205.024	149.673	35.221	1.00	65.62	CS3	ATOM	2787	N	VAL	75	191.724	141.981	41.807	1.00	70.33	CS3
ATOM	2735	CG2	THR	67	202.748	149.364	34.446	1.00	65.62	CS3	ATOM	2788	CA	VAL	75	192.285	140.665	42.093	1.00	70.33	CS3
ATOM	2736	C	THR	67	202.996	146.499	34.999	1.00	70.40	CS3	ATOM	2789	CB	VAL	75	192.021	139.693	40.908	1.00	78.26	CS3
ATOM	2737	O	THR	67	202.501	146.671	33.883	1.00	70.40	CS3	ATOM	2790	CG1	VAL	75	192.170	138.247	41.367	1.00	78.26	CS3
ATOM	2738	N	VAL	68	202.661	145.481	35.787	1.00	62.57	CS3	ATOM	2791	CG2	VAL	75	190.629	139.929	40.338	1.00	78.26	CS3
ATOM	2739	CA	VAL	68	201.659	144.492	35.389	1.00	62.57	CS3	ATOM	2792	C	VAL	75	193.795	140.727	42.385	1.00	70.33	CS3
ATOM	2740	CB	VAL	68	201.332	143.537	36.580	1.00	61.67	CS3	ATOM	2793	O	VAL	75	194.336	139.903	43.138	1.00	70.33	CS3
ATOM	2741	CG1	VAL	68	199.990	142.838	36.365	1.00	61.67	CS3	ATOM	2794	N	VAL	76	194.465	141.713	41.793	1.00	114.20	CS3
ATOM	2742	CG2	VAL	68	202.435	142.495	36.729	1.00	61.67	CS3	ATOM	2795	CA	VAL	76	195.905	141.885	41.978	1.00	114.20	CS3
ATOM	2743	C	VAL	68	200.357	145.145	34.891	1.00	62.57	CS3	ATOM	2796	CB	VAL	76	196.516	142.821	40.888	1.00	111.82	CS3
ATOM	2744	O	VAL	68	199.800	146.011	35.567	1.00	62.57	CS3	ATOM	2797	CG1	VAL	76	197.996	142.500	40.686	1.00	111.82	CS3
ATOM	2745	N	HIS	69	199.890	144.739	33.705	1.00	67.04	CS3	ATOM	2798	CG2	VAL	76	195.753	142.677	39.582	1.00	111.82	CS3
ATOM	2746	CA	HIS	69	198.638	145.254	33.130	1.00	67.04	CS3	ATOM	2799	C	VAL	76	196.193	142.496	43.348	1.00	114.20	CS3
ATOM	2747	CB	HIS	69	198.801	145.558	31.652	1.00	60.55	CS3	ATOM	2800	O	VAL	76	196.834	141.876	44.203	1.00	114.20	CS3
ATOM	2748	CG	HIS	69	199.695	146.720	31.381	1.00	60.55	CS3	ATOM	2801	N	ILE	77	195.707	143.719	43.541	1.00	119.45	CS3
ATOM	2749	CD2	HIS	69	201.045	146.828	31.389	1.00	60.55	CS3	ATOM	2802	CA	ILE	77	195.899	144.461	44.782	1.00	119.45	CS3
ATOM	2750	ND1	HIS	69	199.211	147.971	31.061	1.00	60.55	CS3	ATOM	2803	CB	ILE	77	194.954	145.670	44.843	1.00	59.58	CS3
ATOM	2751	CE1	HIS	69	200.225	148.799	30.881	1.00	60.55	CS3	ATOM	2804	CG2	ILE	77	195.167	146.413	46.153	1.00	59.58	CS3
ATOM	2752	NE2	HIS	69	201.349	148.130	31.074	1.00	60.55	CS3	ATOM	2805	CG1	ILE	77	195.182	146.578	43.626	1.00	59.58	CS3
ATOM	2753	C	HIS	69	197.550	144.206	33.318	1.00	67.04	CS3	ATOM	2806	CD1	ILE	77	196.576	147.168	43.532	1.00	59.58	CS3
ATOM	2754	O	HIS	69	197.737	143.027	32.979	1.00	67.04	CS3	ATOM	2807	C	ILE	77	195.685	143.637	46.048	1.00	119.45	CS3
ATOM	2755	N	VAL	70	196.414	144.639	33.863	1.00	107.53	CS3	ATOM	2808	O	ILE	77	196.604	143.469	46.846	1.00	119.45	CS3
ATOM	2756	CA	VAL	70	195.321	143.718	34.147	1.00	107.53	CS3	ATOM	2809	N	GLY	78	194.465	143.141	46.230	1.00	129.74	CS3
ATOM	2757	CB	VAL	70	195.329	143.331	35.648	1.00	88.34	CS3	ATOM	2810	CA	GLY	78	194.145	142.351	47.406	1.00	129.74	CS3
ATOM	2758	CG1	VAL	70	194.562	142.050	35.857	1.00	88.34	CS3	ATOM	2811	C	GLY	78	193.188	143.100	48.318	1.00	129.74	CS3
ATOM	2759	CG2	VAL	70	196.755	143.192	36.156	1.00	88.34	CS3	ATOM	2812	O	GLY	78	192.744	144.201	47.978	1.00	129.74	CS3
ATOM	2760	C	VAL	70	193.924	144.242	33.810	1.00	107.53	CS3	ATOM	2813	N	ARG	79	192.868	142.508	49.470	1.00	133.67	CS3
ATOM	2761	O	VAL	70	193.716	145.441	33.647	1.00	107.53	CS3	ATOM	2814	CA	ARG	79	191.961	143.125	50.445	1.00	133.67	CS3
ATOM	2762	N	ALA	71	192.972	143.318	33.715	1.00	91.79	CS3	ATOM	2815	CB	ARG	79	191.647	142.131	51.569	1.00	124.29	CS3
ATOM	2763	CA	ALA	71	191.582	143.658	33.439	1.00	91.79	CS3	ATOM	2816	CG	ARG	79	192.887	141.586	52.243	1.00	124.29	CS3
ATOM	2764	CB	ALA	71	190.901	142.510	32.709	1.00	63.52	CS3	ATOM	2817	CD	ARG	79	192.593	140.550	53.303	1.00	124.29	CS3
ATOM	2765	C	ALA	71	190.892	143.912	34.783	1.00	91.79	CS3	ATOM	2818	NE	ARG	79	193.828	140.122	53.954	1.00	124.29	CS3
ATOM	2766	O	ALA	71	190.082	144.833	34.912	1.00	91.79	CS3	ATOM	2819	CZ	ARG	79	193.885	139.375	55.055	1.00	124.29	CS3
ATOM	2767	N	LYS	72	191.233	143.085	35.774	1.00	94.15	CS3	ATOM	2820	NH1	ARG	79	192.767	138.960	55.641	1.00	124.29	CS3
ATOM	2768	CA	LYS	72	190.685	143.180	37.132	1.00	94.15	CS3	ATOM	2821	NH2	ARG	79	195.062	139.049	55.578	1.00	124.29	CS3
ATOM	2769	CB	LYS	72	190.111	141.825	37.570	1.00	78.90	CS3	ATOM	2822	C	ARG	79	192.585	144.398	51.031	1.00	133.67	CS3
ATOM	2770	CG	LYS	72	189.322	141.098	36.492	1.00	78.90	CS3	ATOM	2823	O	ARG	79	193.437	144.341	51.926	1.00	133.67	CS3
ATOM	2771	CD	LYS	72	188.648	139.838	37.024	1.00	78.90	CS3	ATOM	2824	N	GLY	80	192.148	145.546	50.516	1.00	107.67	CS3
ATOM	2772	CE	LYS	72	187.425	140.175	37.870	1.00	78.90	CS3	ATOM	2825	CA	GLY	80	192.674	146.819	50.973	1.00	107.67	CS3
ATOM	2773	NZ	LYS	72	186.567	138.986	38.150	1.00	78.90	CS3	ATOM	2826	C	GLY	80	194.027	147.089	50.343	1.00	107.67	CS3
ATOM	2774	C	LYS	72	191.794	143.596	38.114	1.00	94.15	CS3	ATOM	2827	O	GLY	80	194.382	148.237	50.060	1.00	107.67	CS3

ATOM	2828	N	GLY	81	194.778	146.014	50.118	1.00108.15	CS3	ATOM	2881	CG	LEU	87	201.238	139.166	44.461	1.00 69.20	CS3
ATOM	2829	CA	GLY	81	196.096	146.117	49.521	1.00108.15	CS3	ATOM	2882	CD1	LEU	87	200.529	139.758	43.256	1.00 69.20	CS3
ATOM	2830	C	GLY	81	197.022	145.078	50.123	1.00108.15	CS3	ATOM	2883	CD2	LEU	87	201.408	137.668	44.296	1.00 69.20	CS3
ATOM	2831	O	GLY	81	198.242	145.235	50.080	1.00108.15	CS3	ATOM	2884	C	LEU	87	204.739	140.226	45.874	1.00117.32	CS3
ATOM	2832	N	GLU	82	196.443	144.009	50.672	1.00154.23	CS3	ATOM	2885	O	LEU	87	205.840	139.677	45.814	1.00117.32	CS3
ATOM	2833	CA	GLU	82	197.217	142.943	51.310	1.00154.23	CS3	ATOM	2886	N	ARG	88	204.586	141.545	45.993	1.00 88.84	CS3
ATOM	2834	CB	GLU	82	196.307	142.103	52.219	1.00125.16	CS3	ATOM	2887	CA	ARG	88	205.723	142.466	46.037	1.00 88.84	CS3
ATOM	2835	CG	GLU	82	195.762	140.817	51.591	1.00125.16	CS3	ATOM	2888	CB	ARG	88	205.259	143.850	46.505	1.00130.32	CS3
ATOM	2836	CD	GLU	82	196.755	139.663	51.621	1.00125.16	CS3	ATOM	2889	CG	ARG	88	206.007	145.023	45.867	1.00130.32	CS3
ATOM	2837	OE1	GLU	82	197.225	139.309	52.724	1.00125.16	CS3	ATOM	2890	CD	ARG	88	205.248	146.338	46.092	1.00130.32	CS3
ATOM	2838	OE2	GLU	82	197.065	139.106	50.544	1.00125.16	CS3	ATOM	2891	NE	ARG	88	205.767	147.447	45.290	1.00130.32	CS3
ATOM	2839	C	GLU	82	197.958	142.020	50.336	1.00154.23	CS3	ATOM	2892	CZ	ARG	88	205.148	148.618	45.144	1.00130.32	CS3
ATOM	2840	O	GLU	82	199.048	141.535	50.654	1.00154.23	CS3	ATOM	2893	NH1	ARG	88	203.985	148.836	45.747	1.00130.32	CS3
ATOM	2841	N	ARG	83	197.375	141.760	49.164	1.00 90.51	CS3	ATOM	2894	NH2	ARG	88	205.685	149.572	44.388	1.00130.32	CS3
ATOM	2842	CA	ARG	83	198.028	140.886	48.188	1.00 90.51	CS3	ATOM	2895	C	ARG	88	206.824	141.935	46.956	1.00 88.84	CS3
ATOM	2843	CB	ARG	83	197.040	140.400	47.128	1.00 94.66	CS3	ATOM	2896	O	ARG	88	208.011	142.168	46.721	1.00 88.84	CS3
ATOM	2844	CG	ARG	83	197.739	139.632	46.030	1.00 94.66	CS3	ATOM	2897	N	GLU	89	206.425	141.219	48.002	1.00121.07	CS3
ATOM	2845	CD	ARG	83	196.790	138.863	45.146	1.00 94.66	CS3	ATOM	2898	CA	GLU	89	207.394	140.641	48.922	1.00121.07	CS3
ATOM	2846	NE	ARG	83	197.541	137.878	44.376	1.00 94.66	CS3	ATOM	2899	CB	GLU	89	206.742	140.298	50.261	1.00144.83	CS3
ATOM	2847	CZ	ARG	83	197.054	136.713	43.964	1.00 94.66	CS3	ATOM	2900	CG	GLU	89	207.705	139.659	51.252	1.00144.83	CS3
ATOM	2848	NH1	ARG	83	195.799	136.375	44.242	1.00 94.66	CS3	ATOM	2901	CD	GLU	89	207.054	139.324	52.578	1.00144.83	CS3
ATOM	2849	NH2	ARG	83	197.833	135.874	43.293	1.00 94.66	CS3	ATOM	2902	OE1	GLU	89	206.043	138.586	52.579	1.00144.83	CS3
ATOM	2850	C	ARG	83	199.205	141.563	47.499	1.00 90.51	CS3	ATOM	2903	OE2	GLU	89	207.556	139.796	53.620	1.00144.83	CS3
ATOM	2851	O	ARG	83	200.258	140.950	47.334	1.00 90.51	CS3	ATOM	2904	C	GLU	89	207.950	139.376	48.278	1.00121.07	CS3
ATOM	2852	N	ILE	84	199.024	142.819	47.092	1.00 92.43	CS3	ATOM	2905	O	GLU	89	209.161	139.169	48.250	1.00121.07	CS3
ATOM	2853	CA	ILE	84	200.092	143.566	46.435	1.00 92.43	CS3	ATOM	2906	N	GLU	90	207.056	138.532	47.762	1.00142.61	CS3
ATOM	2854	CB	ILE	84	199.635	145.009	46.062	1.00 92.35	CS3	ATOM	2907	CA	GLU	90	207.454	137.291	47.096	1.00142.61	CS3
ATOM	2855	CG2	ILE	84	198.892	145.639	47.231	1.00 92.35	CS3	ATOM	2908	CB	GLU	90	206.240	136.631	46.428	1.00135.46	CS3
ATOM	2856	CG1	ILE	84	200.844	145.844	45.613	1.00 92.35	CS3	ATOM	2909	CG	GLU	90	205.901	135.218	46.922	1.00135.46	CS3
ATOM	2857	CD1	ILE	84	200.517	147.266	45.218	1.00 92.35	CS3	ATOM	2910	CD	GLU	90	207.049	134.220	46.757	1.00135.46	CS3
ATOM	2858	C	ILE	84	201.274	143.612	47.398	1.00 92.43	CS3	ATOM	2911	OE1	GLU	90	206.802	133.001	46.902	1.00135.46	CS3
ATOM	2859	O	ILE	84	202.380	144.032	47.050	1.00 92.43	CS3	ATOM	2912	OE2	GLU	90	208.196	134.647	46.490	1.00135.46	CS3
ATOM	2860	N	ARG	85	201.016	143.164	48.620	1.00111.96	CS3	ATOM	2913	C	GLU	90	208.489	137.642	46.033	1.00142.61	CS3
ATOM	2861	CA	ARG	85	202.027	143.094	49.663	1.00111.96	CS3	ATOM	2914	O	GLU	90	209.404	136.870	45.747	1.00142.61	CS3
ATOM	2862	CB	ARG	85	201.357	143.212	51.042	1.00130.18	CS3	ATOM	2915	N	LEU	91	208.321	138.827	45.457	1.00 99.69	CS3
ATOM	2863	CG	ARG	85	202.298	143.092	52.227	1.00130.18	CS3	ATOM	2916	CA	LEU	91	209.209	139.343	44.430	1.00 99.69	CS3
ATOM	2864	CD	ARG	85	203.329	144.196	52.191	1.00130.18	CS3	ATOM	2917	CB	LEU	91	208.703	140.717	43.977	1.00 87.33	CS3
ATOM	2865	NE	ARG	85	204.518	143.848	52.958	1.00130.18	CS3	ATOM	2918	CG	LEU	91	209.654	141.839	43.538	1.00 87.33	CS3
ATOM	2866	CZ	ARG	85	205.664	144.520	52.896	1.00130.18	CS3	ATOM	2919	CD1	LEU	91	208.854	142.848	42.726	1.00 87.33	CS3
ATOM	2867	NH1	ARG	85	205.772	145.578	52.102	1.00130.18	CS3	ATOM	2920	CD2	LEU	91	210.307	142.521	44.747	1.00 87.33	CS3
ATOM	2868	NH2	ARG	85	206.706	144.130	53.622	1.00130.18	CS3	ATOM	2921	C	LEU	91	210.657	139.436	44.908	1.00 99.69	CS3
ATOM	2869	C	ARG	85	202.698	141.725	49.514	1.00111.96	CS3	ATOM	2922	O	LEU	91	211.570	138.943	44.240	1.00 99.69	CS3
ATOM	2870	O	ARG	85	203.913	141.624	49.328	1.00111.96	CS3	ATOM	2923	N	ALA	92	210.865	140.069	46.061	1.00 96.51	CS3
ATOM	2871	N	VAL	86	201.881	140.677	49.581	1.00111.73	CS3	ATOM	2924	CA	ALA	92	212.208	140.222	46.612	1.00 96.51	CS3
ATOM	2872	CA	VAL	86	202.354	139.305	49.458	1.00111.73	CS3	ATOM	2925	CB	ALA	92	212.179	141.144	47.812	1.00 58.66	CS3
ATOM	2873	CB	VAL	86	201.172	138.320	49.327	1.00 89.56	CS3	ATOM	2926	C	ALA	92	212.804	138.871	47.000	1.00 96.51	CS3
ATOM	2874	CG1	VAL	86	201.658	136.895	49.551	1.00 89.56	CS3	ATOM	2927	O	ALA	92	214.022	138.702	47.009	1.00 96.51	CS3
ATOM	2875	CG2	VAL	86	200.074	138.685	50.312	1.00 89.56	CS3	ATOM	2928	N	LYS	93	211.942	137.913	47.331	1.00153.68	CS3
ATOM	2876	C	VAL	86	203.247	139.139	48.235	1.00111.73	CS3	ATOM	2929	CA	LYS	93	212.390	136.570	47.689	1.00153.68	CS3
ATOM	2877	O	VAL	86	204.385	138.682	48.344	1.00111.73	CS3	ATOM	2930	CB	LYS	93	211.220	135.744	48.236	1.00112.94	CS3
ATOM	2878	N	LEU	87	202.721	139.512	47.072	1.00117.32	CS3	ATOM	2931	CG	LYS	93	210.936	135.937	49.715	1.00112.94	CS3
ATOM	2879	CA	LEU	87	203.464	139.395	45.825	1.00117.32	CS3	ATOM	2932	CD	LYS	93	212.068	135.364	50.568	1.00112.94	CS3
ATOM	2880	CB	LEU	87	202.602	139.843	44.636	1.00 69.20	CS3	ATOM	2933	CE	LYS	93	211.761	135.461	52.061	1.00112.94	CS3

ATOM	2934	NZ	LYS	93	212.856	134.899	52.907	1.00112.94	CS3	ATOM	2987	CB	LEU	101	204.777	145.772	42.082	1.00 90.62	CS3
ATOM	2935	C	LYS	93	212.929	135.917	46.420	1.00153.68	CS3	ATOM	2988	CG	LEU	101	204.307	144.375	41.649	1.00 90.62	CS3
ATOM	2936	O	LYS	93	213.432	134.792	46.443	1.00153.68	CS3	ATOM	2989	CD1	LEU	101	203.973	143.531	42.881	1.00 90.62	CS3
ATOM	2937	N	LEU	94	212.816	136.648	45.315	1.00 99.05	CS3	ATOM	2990	CD2	LEU	101	203.094	144.496	40.740	1.00 90.62	CS3
ATOM	2938	CA	LEU	94	213.263	136.179	44.009	1.00 99.05	CS3	ATOM	2991	C	LEU	101	203.823	147.735	40.865	1.00 79.37	CS3
ATOM	2939	CB	LEU	94	212.084	136.254	43.031	1.00 76.36	CS3	ATOM	2992	O	LEU	101	203.246	148.129	41.873	1.00 79.37	CS3
ATOM	2940	CG	LEU	94	212.129	135.583	41.658	1.00 76.36	CS3	ATOM	2993	N	ASN	102	203.432	148.065	39.638	1.00 87.32	CS3
ATOM	2941	CD1	LEU	94	210.713	135.506	41.093	1.00 76.36	CS3	ATOM	2994	CA	ASN	102	202.311	148.978	39.424	1.00 87.32	CS3
ATOM	2942	CD2	LEU	94	213.045	136.353	40.723	1.00 76.36	CS3	ATOM	2995	CB	ASN	102	202.818	150.261	38.762	1.00 96.62	CS3
ATOM	2943	C	LEU	94	214.426	137.053	43.537	1.00 99.05	CS3	ATOM	2996	CG	ASN	102	203.974	150.887	39.509	1.00 96.62	CS3
ATOM	2944	O	LEU	94	215.469	136.551	43.123	1.00 99.05	CS3	ATOM	2997	OD1	ASN	102	203.772	151.659	40.453	1.00 96.62	CS3
ATOM	2945	N	THR	95	214.242	138.366	43.616	1.00146.75	CS3	ATOM	2998	ND2	ASN	102	205.199	150.546	39.101	1.00 96.62	CS3
ATOM	2946	CA	THR	95	215.280	139.303	43.209	1.00146.75	CS3	ATOM	2999	C	ASN	102	201.154	148.451	38.585	1.00 87.32	CS3
ATOM	2947	CB	THR	95	214.808	140.188	42.024	1.00 86.41	CS3	ATOM	3000	O	ASN	102	201.189	148.558	37.360	1.00 87.32	CS3
ATOM	2948	OG1	THR	95	214.288	141.436	42.513	1.00 86.41	CS3	ATOM	3001	N	VAL	103	200.122	147.909	39.231	1.00 82.81	CS3
ATOM	2949	CG2	THR	95	213.713	139.477	41.240	1.00 86.41	CS3	ATOM	3002	CA	VAL	103	198.946	147.417	38.507	1.00 82.81	CS3
ATOM	2950	C	THR	95	215.623	140.211	44.386	1.00146.75	CS3	ATOM	3003	CB	VAL	103	197.875	146.856	39.475	1.00 64.40	CS3
ATOM	2951	O	THR	95	214.770	140.974	44.848	1.00146.75	CS3	ATOM	3004	CG1	VAL	103	196.625	146.466	38.703	1.00 64.40	CS3
ATOM	2952	N	GLY	96	216.853	140.120	44.891	1.00109.28	CS3	ATOM	3005	CG2	VAL	103	198.425	145.652	40.218	1.00 64.40	CS3
ATOM	2953	CA	GLY	96	217.230	140.989	45.991	1.00109.28	CS3	ATOM	3006	C	VAL	103	198.323	148.566	37.699	1.00 82.81	CS3
ATOM	2954	C	GLY	96	216.890	142.382	45.497	1.00109.28	CS3	ATOM	3007	O	VAL	103	198.090	149.655	38.225	1.00 82.81	CS3
ATOM	2955	O	GLY	96	216.189	143.153	46.157	1.00109.28	CS3	ATOM	3008	N	GLN	104	198.075	148.332	36.415	1.00 92.46	CS3
ATOM	2956	N	LYS	97	217.386	142.667	44.297	1.00124.60	CS3	ATOM	3009	CA	GLN	104	197.486	149.363	35.578	1.00 92.46	CS3
ATOM	2957	CA	LYS	97	217.194	143.916	43.564	1.00124.60	CS3	ATOM	3010	CB	GLN	104	198.526	149.933	34.618	1.00 95.88	CS3
ATOM	2958	CB	LYS	97	216.548	143.576	42.218	1.00 91.99	CS3	ATOM	3011	CG	GLN	104	198.120	151.281	34.056	1.00 95.88	CS3
ATOM	2959	CG	LYS	97	217.389	142.649	41.346	1.00 91.99	CS3	ATOM	3012	CD	GLN	104	199.100	151.830	33.032	1.00 95.88	CS3
ATOM	2960	CD	LYS	97	218.603	143.377	40.778	1.00 91.99	CS3	ATOM	3013	OE1	GLN	104	200.315	151.831	33.247	1.00 95.88	CS3
ATOM	2961	CE	LYS	97	219.313	142.549	39.715	1.00 91.99	CS3	ATOM	3014	NE2	GLN	104	198.569	152.314	31.913	1.00 95.88	CS3
ATOM	2962	NZ	LYS	97	220.352	143.342	39.000	1.00 91.99	CS3	ATOM	3015	C	GLN	104	196.333	148.755	34.797	1.00 92.46	CS3
ATOM	2963	C	LYS	97	216.455	145.122	44.177	1.00124.60	CS3	ATOM	3016	O	GLN	104	196.545	148.080	33.793	1.00 92.46	CS3
ATOM	2964	O	LYS	97	216.962	146.242	44.097	1.00124.60	CS3	ATOM	3017	N	GLU	105	195.114	149.004	35.273	1.00109.33	CS3
ATOM	2965	N	ASN	98	215.276	144.902	44.767	1.00 99.07	CS3	ATOM	3018	CA	GLU	105	193.891	148.482	34.667	1.00109.33	CS3
ATOM	2966	CA	ASN	98	214.447	145.980	45.347	1.00 99.07	CS3	ATOM	3019	CB	GLU	105	192.664	149.176	35.270	1.00112.74	CS3
ATOM	2967	CB	ASN	98	215.318	147.076	45.990	1.00138.72	CS3	ATOM	3020	CG	GLU	105	191.349	148.442	35.005	1.00112.74	CS3
ATOM	2968	CG	ASN	98	214.512	148.304	46.416	1.00138.72	CS3	ATOM	3021	CD	GLU	105	190.126	149.353	35.059	1.00112.74	CS3
ATOM	2969	OD1	ASN	98	214.057	149.093	45.581	1.00138.72	CS3	ATOM	3022	OE1	GLU	105	189.952	150.178	34.133	1.00112.74	CS3
ATOM	2970	ND2	ASN	98	214.332	148.465	47.723	1.00138.72	CS3	ATOM	3023	OE2	GLU	105	189.337	149.241	36.025	1.00112.74	CS3
ATOM	2971	C	ASN	98	213.618	146.563	44.199	1.00 99.07	CS3	ATOM	3024	C	GLU	105	193.829	148.599	33.144	1.00109.33	CS3
ATOM	2972	O	ASN	98	214.100	147.408	43.435	1.00 99.07	CS3	ATOM	3025	O	GLU	105	194.197	149.625	32.559	1.00109.33	CS3
ATOM	2973	N	VAL	99	212.366	146.129	44.083	1.00122.79	CS3	ATOM	3026	N	VAL	106	193.346	147.525	32.522	1.00 89.54	CS3
ATOM	2974	CA	VAL	99	211.539	146.576	42.968	1.00122.79	CS3	ATOM	3027	CA	VAL	106	193.189	147.431	31.075	1.00 89.54	CS3
ATOM	2975	CB	VAL	99	211.551	145.466	41.864	1.00117.04	CS3	ATOM	3028	CB	VAL	106	193.313	145.956	30.585	1.00101.83	CS3
ATOM	2976	CG1	VAL	99	211.819	144.108	42.501	1.00117.04	CS3	ATOM	3029	CG1	VAL	106	193.049	145.879	29.091	1.00101.83	CS3
ATOM	2977	CG2	VAL	99	210.245	145.440	41.089	1.00117.04	CS3	ATOM	3030	CG2	VAL	106	194.697	145.408	30.895	1.00101.83	CS3
ATOM	2978	C	VAL	99	210.100	147.028	43.232	1.00122.79	CS3	ATOM	3031	C	VAL	106	191.807	147.957	30.691	1.00 89.54	CS3
ATOM	2979	O	VAL	99	209.468	146.627	44.214	1.00122.79	CS3	ATOM	3032	O	VAL	106	190.783	147.347	31.012	1.00 89.54	CS3
ATOM	2980	N	ALA	100	209.605	147.873	42.324	1.00130.31	CS3	ATOM	3033	N	GLN	107	191.789	149.100	30.016	1.00119.41	CS3
ATOM	2981	CA	ALA	100	208.247	148.413	42.368	1.00130.31	CS3	ATOM	3034	CA	GLN	107	190.547	149.722	29.574	1.00119.41	CS3
ATOM	2982	CB	ALA	100	208.115	149.582	41.367	1.00 52.66	CS3	ATOM	3035	CB	GLN	107	190.800	151.186	29.213	1.00126.67	CS3
ATOM	2983	C	ALA	100	207.211	147.324	42.047	1.00130.31	CS3	ATOM	3036	CG	GLN	107	192.275	151.542	29.118	1.00126.67	CS3
ATOM	2984	O	ALA	100	207.396	146.157	42.402	1.00130.31	CS3	ATOM	3037	CD	GLN	107	193.051	150.568	28.252	1.00126.67	CS3
ATOM	2985	N	LEU	101	206.133	147.720	41.371	1.00 79.37	CS3	ATOM	3038	OE1	GLN	107	192.703	150.338	27.094	1.00126.67	CS3
ATOM	2986	CA	LEU	101	205.038	146.822	40.989	1.00 79.37	CS3	ATOM	3039	NE2	GLN	107	194.107	149.985	28.814	1.00126.67	CS3

ATOM	3040	C	GLN	107	189.980	148.972	28.372	1.00	119.41	CS3	ATOM	3093	CB	LEU	115	192.421	139.740	27.216	1.00	76.67	CS3
ATOM	3041	O	GLN	107	190.318	149.264	27.221	1.00	119.41	CS3	ATOM	3094	CG	LEU	115	193.356	140.425	28.222	1.00	76.67	CS3
ATOM	3042	N	ASN	108	189.114	148.005	28.671	1.00	86.02	CS3	ATOM	3095	CD1	LEU	115	192.774	141.749	28.665	1.00	76.67	CS3
ATOM	3043	CA	ASN	108	188.450	147.147	27.686	1.00	86.02	CS3	ATOM	3096	CD2	LEU	115	193.565	139.506	29.424	1.00	76.67	CS3
ATOM	3044	CB	ASN	108	188.049	147.932	26.425	1.00	75.75	CS3	ATOM	3097	C	LEU	115	192.005	137.627	25.894	1.00	61.24	CS3
ATOM	3045	CG	ASN	108	187.070	147.160	25.548	1.00	75.75	CS3	ATOM	3098	O	LEU	115	191.676	136.483	26.245	1.00	61.24	CS3
ATOM	3046	OD1	ASN	108	186.361	146.264	26.022	1.00	75.75	CS3	ATOM	3099	N	VAL	116	191.537	138.222	24.795	1.00	36.12	CS3
ATOM	3047	ND2	ASN	108	187.012	147.515	24.271	1.00	75.75	CS3	ATOM	3100	CA	VAL	116	190.578	137.550	23.919	1.00	36.12	CS3
ATOM	3048	C	ASN	108	189.306	145.949	27.300	1.00	86.02	CS3	ATOM	3101	CB	VAL	116	190.488	138.241	22.544	1.00	49.83	CS3
ATOM	3049	O	ASN	108	190.061	145.989	26.333	1.00	86.02	CS3	ATOM	3102	CG1	VAL	116	189.106	137.998	21.941	1.00	49.83	CS3
ATOM	3050	N	PRO	109	189.195	144.859	28.067	1.00	97.41	CS3	ATOM	3103	CG2	VAL	116	190.781	139.735	22.676	1.00	49.83	CS3
ATOM	3051	CD	PRO	109	188.203	144.626	29.132	1.00	89.55	CS3	ATOM	3104	C	VAL	116	191.016	136.096	23.701	1.00	36.12	CS3
ATOM	3052	CA	PRO	109	189.964	143.642	27.794	1.00	97.41	CS3	ATOM	3105	O	VAL	116	190.189	135.192	23.589	1.00	36.12	CS3
ATOM	3053	CB	PRO	109	189.577	142.728	28.959	1.00	89.55	CS3	ATOM	3106	N	ALA	117	192.332	135.894	23.655	1.00	53.90	CS3
ATOM	3054	CG	PRO	109	188.145	143.110	29.197	1.00	89.55	CS3	ATOM	3107	CA	ALA	117	192.929	134.576	23.464	1.00	53.90	CS3
ATOM	3055	C	PRO	109	189.515	143.084	26.446	1.00	97.41	CS3	ATOM	3108	CB	ALA	117	194.448	134.704	23.332	1.00	55.39	CS3
ATOM	3056	O	PRO	109	190.161	142.218	25.850	1.00	97.41	CS3	ATOM	3109	C	ALA	117	192.592	133.672	24.631	1.00	53.90	CS3
ATOM	3057	N	ASN	110	188.390	143.614	25.981	1.00	94.54	CS3	ATOM	3110	O	ALA	117	191.869	132.682	24.471	1.00	53.90	CS3
ATOM	3058	CA	ASN	110	187.783	143.210	24.727	1.00	94.54	CS3	ATOM	3111	N	GLN	118	193.142	134.022	25.796	1.00	65.10	CS3
ATOM	3059	CB	ASN	110	186.356	143.753	24.666	1.00	113.40	CS3	ATOM	3112	CA	GLN	118	192.928	133.277	27.038	1.00	65.10	CS3
ATOM	3060	CG	ASN	110	185.417	142.824	23.946	1.00	113.40	CS3	ATOM	3113	CB	GLN	118	193.455	134.082	28.227	1.00	93.27	CS3
ATOM	3061	OD1	ASN	110	185.432	141.611	24.177	1.00	113.40	CS3	ATOM	3114	CG	GLN	118	194.917	134.478	28.121	1.00	93.27	CS3
ATOM	3062	ND2	ASN	110	184.581	143.383	23.075	1.00	113.40	CS3	ATOM	3115	CD	GLN	118	195.238	135.708	28.947	1.00	93.27	CS3
ATOM	3063	C	ASN	110	188.595	143.686	23.527	1.00	94.54	CS3	ATOM	3116	OE1	GLN	118	194.750	136.803	28.663	1.00	93.27	CS3
ATOM	3064	O	ASN	110	188.160	143.569	22.386	1.00	94.54	CS3	ATOM	3117	NE2	GLN	118	196.052	135.534	29.979	1.00	93.27	CS3
ATOM	3065	N	LEU	111	189.773	144.235	23.794	1.00	84.13	CS3	ATOM	3118	C	GLN	118	191.429	133.073	27.190	1.00	65.10	CS3
ATOM	3066	CA	LEU	111	190.657	144.696	22.731	1.00	84.13	CS3	ATOM	3119	O	GLN	118	190.960	132.010	27.619	1.00	65.10	CS3
ATOM	3067	CB	LEU	111	190.589	146.222	22.564	1.00	48.27	CS3	ATOM	3120	N	ARG	119	190.697	134.126	26.830	1.00	71.59	CS3
ATOM	3068	CG	LEU	111	189.285	146.871	22.085	1.00	48.27	CS3	ATOM	3121	CA	ARG	119	189.246	134.146	26.871	1.00	71.59	CS3
ATOM	3069	CD1	LEU	111	189.609	148.245	21.476	1.00	48.27	CS3	ATOM	3122	CB	ARG	119	188.756	135.425	26.194	1.00	102.97	CS3
ATOM	3070	CD2	LEU	111	188.594	145.996	21.043	1.00	48.27	CS3	ATOM	3123	CG	ARG	119	187.268	135.490	25.930	1.00	102.97	CS3
ATOM	3071	C	LEU	111	192.098	144.273	23.022	1.00	84.13	CS3	ATOM	3124	CD	ARG	119	186.460	135.593	27.218	1.00	102.97	CS3
ATOM	3072	O	LEU	111	193.046	144.855	22.490	1.00	84.13	CS3	ATOM	3125	NE	ARG	119	185.029	135.624	26.931	1.00	102.97	CS3
ATOM	3073	N	SER	112	192.252	143.266	23.880	1.00	78.09	CS3	ATOM	3126	CZ	ARG	119	184.073	135.583	27.851	1.00	102.97	CS3
ATOM	3074	CA	SER	112	193.568	142.746	24.235	1.00	78.09	CS3	ATOM	3127	NH1	ARG	119	184.382	135.512	29.139	1.00	102.97	CS3
ATOM	3075	CB	SER	112	193.743	142.669	25.748	1.00	119.80	CS3	ATOM	3128	NH2	ARG	119	182.801	135.595	27.477	1.00	102.97	CS3
ATOM	3076	OG	SER	112	193.747	143.956	26.321	1.00	119.80	CS3	ATOM	3129	C	ARG	119	188.706	132.917	26.137	1.00	71.59	CS3
ATOM	3077	C	SER	112	193.716	141.355	23.661	1.00	78.09	CS3	ATOM	3130	O	ARG	119	187.907	132.148	26.689	1.00	71.59	CS3
ATOM	3078	O	SER	112	193.232	140.379	24.245	1.00	78.09	CS3	ATOM	3131	N	VAL	120	189.163	132.733	24.897	1.00	55.99	CS3
ATOM	3079	N	ALA	113	194.390	141.273	22.518	1.00	52.75	CS3	ATOM	3132	CA	VAL	120	188.729	131.612	24.067	1.00	55.99	CS3
ATOM	3080	CA	ALA	113	194.606	140.001	21.850	1.00	52.75	CS3	ATOM	3133	CB	VAL	120	189.088	131.845	22.588	1.00	45.31	CS3
ATOM	3081	CB	ALA	113	195.755	140.129	20.847	1.00	81.91	CS3	ATOM	3134	CG1	VAL	120	188.596	130.668	21.750	1.00	45.31	CS3
ATOM	3082	C	ALA	113	194.906	138.886	22.854	1.00	52.75	CS3	ATOM	3135	CG2	VAL	120	188.460	133.150	22.094	1.00	45.31	CS3
ATOM	3083	O	ALA	113	194.287	137.816	22.822	1.00	52.75	CS3	ATOM	3136	C	VAL	120	189.320	130.279	24.518	1.00	55.99	CS3
ATOM	3084	N	PRO	114	195.850	139.135	23.773	1.00	45.31	CS3	ATOM	3137	O	VAL	120	188.630	129.253	24.539	1.00	55.99	CS3
ATOM	3085	CD	PRO	114	196.637	140.369	23.954	1.00	41.95	CS3	ATOM	3138	N	ALA	121	190.601	130.294	24.869	1.00	60.33	CS3
ATOM	3086	CA	PRO	114	196.212	138.123	24.774	1.00	45.31	CS3	ATOM	3139	CA	ALA	121	191.264	129.086	25.340	1.00	60.33	CS3
ATOM	3087	CB	PRO	114	197.249	138.842	25.632	1.00	41.95	CS3	ATOM	3140	CB	ALA	121	192.654	129.419	25.823	1.00	27.90	CS3
ATOM	3088	CG	PRO	114	197.847	139.854	24.666	1.00	41.95	CS3	ATOM	3141	C	ALA	121	190.428	128.540	26.489	1.00	60.33	CS3
ATOM	3089	C	PRO	114	195.002	137.695	25.577	1.00	45.31	CS3	ATOM	3142	O	ALA	121	190.175	127.337	26.577	1.00	60.33	CS3
ATOM	3090	O	PRO	114	194.794	136.512	25.850	1.00	45.31	CS3	ATOM	3143	N	GLU	122	189.997	129.452	27.359	1.00	85.14	CS3
ATOM	3091	N	LEU	115	194.199	138.680	25.946	1.00	61.24	CS3	ATOM	3144	CA	GLU	122	189.167	129.120	28.515	1.00	85.14	CS3
ATOM	3092	CA	LEU	115	193.009	138.417	26.722	1.00	61.24	CS3	ATOM	3145	CB	GLU	122	188.719	130.396	29.222	1.00	162.69	CS3

ATOM	3146	CG	GLU	122	189.733	131.012	30.155	1.00162.69	CS3
ATOM	3147	CD	GLU	122	189.324	132.408	30.583	1.00162.69	CS3
ATOM	3148	OE1	GLU	122	188.101	132.663	30.679	1.00162.69	CS3
ATOM	3149	OE2	GLU	122	190.224	133.244	30.828	1.00162.69	CS3
ATOM	3150	C	GLU	122	187.922	128.346	28.102	1.00 85.14	CS3
ATOM	3151	O	GLU	122	187.761	127.166	28.442	1.00 85.14	CS3
ATOM	3152	N	GLN	123	187.041	129.032	27.373	1.00 56.81	CS3
ATOM	3153	CA	GLN	123	185.797	128.430	26.920	1.00 56.81	CS3
ATOM	3154	CB	GLN	123	185.137	129.303	25.849	1.00 59.97	CS3
ATOM	3155	CG	GLN	123	184.718	130.679	26.340	1.00 59.97	CS3
ATOM	3156	CD	GLN	123	183.746	131.372	25.387	1.00 59.97	CS3
ATOM	3157	OE1	GLN	123	182.626	130.888	25.156	1.00 59.97	CS3
ATOM	3158	NE2	GLN	123	184.169	132.510	24.823	1.00 59.97	CS3
ATOM	3159	C	GLN	123	186.060	127.034	26.376	1.00 56.81	CS3
ATOM	3160	O	GLN	123	185.305	126.095	26.655	1.00 56.81	CS3
ATOM	3161	N	ILE	124	187.151	126.899	25.627	1.00 60.09	CS3
ATOM	3162	CA	ILE	124	187.514	125.622	25.029	1.00 60.09	CS3
ATOM	3163	CB	ILE	124	188.714	125.799	24.079	1.00 68.70	CS3
ATOM	3164	CG2	ILE	124	189.086	124.467	23.442	1.00 68.70	CS3
ATOM	3165	CG1	ILE	124	188.348	126.813	22.992	1.00 68.70	CS3
ATOM	3166	CD1	ILE	124	189.478	127.136	22.035	1.00 68.70	CS3
ATOM	3167	C	ILE	124	187.840	124.567	26.088	1.00 60.09	CS3
ATOM	3168	O	ILE	124	187.460	123.388	25.964	1.00 60.09	CS3
ATOM	3169	N	GLU	125	188.536	124.997	27.136	1.00 82.45	CS3
ATOM	3170	CA	GLU	125	188.910	124.091	28.207	1.00 82.45	CS3
ATOM	3171	CB	GLU	125	189.822	124.801	29.196	1.00 96.15	CS3
ATOM	3172	CG	GLU	125	191.027	125.421	28.541	1.00 96.15	CS3
ATOM	3173	CD	GLU	125	192.261	125.307	29.396	1.00 96.15	CS3
ATOM	3174	OE1	GLU	125	192.257	125.835	30.529	1.00 96.15	CS3
ATOM	3175	OE2	GLU	125	193.238	124.682	28.939	1.00 96.15	CS3
ATOM	3176	C	GLU	125	187.655	123.610	28.905	1.00 82.45	CS3
ATOM	3177	O	GLU	125	187.591	122.473	29.380	1.00 82.45	CS3
ATOM	3178	N	ARG	126	186.652	124.483	28.949	1.00 86.79	CS3
ATOM	3179	CA	ARG	126	185.383	124.162	29.588	1.00 86.79	CS3
ATOM	3180	CB	ARG	126	184.663	125.442	29.988	1.00103.48	CS3
ATOM	3181	CG	ARG	126	185.336	126.183	31.113	1.00103.48	CS3
ATOM	3182	CD	ARG	126	184.630	127.488	31.366	1.00103.48	CS3
ATOM	3183	NE	ARG	126	185.323	128.277	32.373	1.00103.48	CS3
ATOM	3184	CZ	ARG	126	185.056	129.554	32.622	1.00103.48	CS3
ATOM	3185	NH1	ARG	126	184.108	130.177	31.930	1.00103.48	CS3
ATOM	3186	NH2	ARG	126	185.737	130.209	33.555	1.00103.48	CS3
ATOM	3187	C	ARG	126	184.471	123.314	28.709	1.00 86.79	CS3
ATOM	3188	O	ARG	126	183.460	122.795	29.185	1.00 86.79	CS3
ATOM	3189	N	ARG	127	184.835	123.181	27.434	1.00 67.80	CS3
ATOM	3190	CA	ARG	127	184.085	122.383	26.462	1.00 67.80	CS3
ATOM	3191	CB	ARG	127	183.531	121.125	27.123	1.00 68.88	CS3
ATOM	3192	CG	ARG	127	184.549	120.423	27.963	1.00 68.88	CS3
ATOM	3193	CD	ARG	127	183.995	119.188	28.618	1.00 68.88	CS3
ATOM	3194	NE	ARG	127	184.948	118.687	29.601	1.00 68.88	CS3
ATOM	3195	CZ	ARG	127	184.919	117.465	30.120	1.00 68.88	CS3
ATOM	3196	NH1	ARG	127	183.972	116.614	29.745	1.00 68.88	CS3
ATOM	3197	NH2	ARG	127	185.841	117.092	31.004	1.00 68.88	CS3
ATOM	3198	C	ARG	127	182.950	123.118	25.756	1.00 67.80	CS3
ATOM	3199	O	ARG	127	181.809	122.668	25.771	1.00 67.80	CS3
ATOM	3200	N	PHE	128	183.276	124.240	25.128	1.00 77.72	CS3
ATOM	3201	CA	PHE	128	182.295	125.029	24.395	1.00 77.72	CS3
ATOM	3202	CB	PHE	128	182.469	126.517	24.704	1.00103.74	CS3
ATOM	3203	CG	PHE	128	181.911	126.932	26.029	1.00103.74	CS3
ATOM	3204	CD1	PHE	128	182.092	126.138	27.158	1.00103.74	CS3
ATOM	3205	CD2	PHE	128	181.224	128.134	26.157	1.00103.74	CS3
ATOM	3206	CE1	PHE	128	181.595	126.537	28.399	1.00103.74	CS3
ATOM	3207	CE2	PHE	128	180.724	128.542	27.393	1.00103.74	CS3
ATOM	3208	CZ	PHE	128	180.910	127.742	28.516	1.00103.74	CS3
ATOM	3209	C	PHE	128	182.458	124.817	22.893	1.00 77.72	CS3
ATOM	3210	O	PHE	128	183.540	124.460	22.417	1.00 77.72	CS3
ATOM	3211	N	ALA	129	181.377	125.035	22.150	1.00 83.50	CS3
ATOM	3212	CA	ALA	129	181.423	124.898	20.703	1.00 83.50	CS3
ATOM	3213	CB	ALA	129	180.069	125.257	20.092	1.00111.33	CS3
ATOM	3214	C	ALA	129	182.498	125.874	20.235	1.00 83.50	CS3
ATOM	3215	O	ALA	129	182.325	127.100	20.304	1.00 83.50	CS3
ATOM	3216	N	VAL	130	183.613	125.322	19.770	1.00 50.32	CS3
ATOM	3217	CA	VAL	130	184.737	126.129	19.316	1.00 50.32	CS3
ATOM	3218	CB	VAL	130	185.800	125.243	18.688	1.00 37.22	CS3
ATOM	3219	CG1	VAL	130	187.127	125.981	18.665	1.00 37.22	CS3
ATOM	3220	CG2	VAL	130	185.882	123.911	19.465	1.00 37.22	CS3
ATOM	3221	C	VAL	130	184.359	127.221	18.325	1.00 50.32	CS3
ATOM	3222	O	VAL	130	184.519	128.405	18.613	1.00 50.32	CS3
ATOM	3223	N	ARG	131	183.850	126.823	17.164	1.00 72.35	CS3
ATOM	3224	CA	ARG	131	183.464	127.789	16.143	1.00 72.35	CS3
ATOM	3225	CB	ARG	131	182.684	127.096	15.023	1.00116.12	CS3
ATOM	3226	CG	ARG	131	182.610	127.897	13.730	1.00116.12	CS3
ATOM	3227	CD	ARG	131	182.094	127.036	12.597	1.00116.12	CS3
ATOM	3228	NE	ARG	131	182.895	125.824	12.450	1.00116.12	CS3
ATOM	3229	CZ	ARG	131	182.626	124.840	11.594	1.00116.12	CS3
ATOM	3230	NH1	ARG	131	181.565	124.916	10.796	1.00116.12	CS3
ATOM	3231	NH2	ARG	131	183.419	123.775	11.537	1.00116.12	CS3
ATOM	3232	C	ARG	131	182.616	128.890	16.771	1.00 72.35	CS3
ATOM	3233	O	ARG	131	182.770	130.074	16.451	1.00 72.35	CS3
ATOM	3234	N	ARG	132	181.725	128.487	17.676	1.00 80.03	CS3
ATOM	3235	CA	ARG	132	180.848	129.424	18.380	1.00 80.03	CS3
ATOM	3236	CB	ARG	132	179.895	128.655	19.295	1.00137.60	CS3
ATOM	3237	CG	ARG	132	179.028	129.533	20.177	1.00137.60	CS3
ATOM	3238	CD	ARG	132	178.315	128.698	21.232	1.00137.60	CS3
ATOM	3239	NE	ARG	132	177.266	127.845	20.674	1.00137.60	CS3
ATOM	3240	CZ	ARG	132	176.066	128.284	20.298	1.00137.60	CS3
ATOM	3241	NH1	ARG	132	175.754	129.570	20.419	1.00137.60	CS3
ATOM	3242	NH2	ARG	132	175.174	127.435	19.802	1.00137.60	CS3
ATOM	3243	C	ARG	132	181.679	130.397	19.213	1.00 80.03	CS3
ATOM	3244	O	ARG	132	181.662	131.611	18.979	1.00 80.03	CS3
ATOM	3245	N	ALA	133	182.406	129.844	20.182	1.00 62.99	CS3
ATOM	3246	CA	ALA	133	183.254	130.630	21.066	1.00 62.99	CS3
ATOM	3247	CB	ALA	133	184.139	129.708	21.869	1.00 47.28	CS3
ATOM	3248	C	ALA	133	184.109	131.611	20.271	1.00 62.99	CS3
ATOM	3249	O	ALA	133	184.395	132.725	20.720	1.00 62.99	CS3
ATOM	3250	N	ILE	134	184.510	131.179	19.082	1.00 54.66	CS3
ATOM	3251	CA	ILE	134	185.334	131.986	18.194	1.00 54.66	CS3

ATOM	3252	CB	ILE	134	185.869	131.148	17.023	1.00	60.43	CS3	ATOM	3305	NH2	ARG	140	182.298	135.301	24.345	1.00	80.76	CS3
ATOM	3253	CG2	ILE	134	186.788	131.994	16.178	1.00	60.43	CS3	ATOM	3306	C	ARG	140	184.137	142.399	20.268	1.00	69.18	CS3
ATOM	3254	CG1	ILE	134	186.603	129.914	17.550	1.00	60.43	CS3	ATOM	3307	O	ARG	140	183.905	143.611	20.236	1.00	69.18	CS3
ATOM	3255	CD1	ILE	134	186.947	128.914	16.483	1.00	60.43	CS3	ATOM	3308	N	VAL	141	185.337	141.858	20.056	1.00	52.11	CS3
ATOM	3256	C	ILE	134	184.541	133.140	17.606	1.00	54.66	CS3	ATOM	3309	CA	VAL	141	186.504	142.654	19.716	1.00	52.11	CS3
ATOM	3257	O	ILE	134	184.931	134.298	17.747	1.00	54.66	CS3	ATOM	3310	CB	VAL	141	187.632	141.766	19.151	1.00	71.43	CS3
ATOM	3258	N	LYS	135	183.438	132.814	16.932	1.00	68.39	CS3	ATOM	3311	CG1	VAL	141	188.809	142.637	18.703	1.00	71.43	CS3
ATOM	3259	CA	LYS	135	182.595	133.830	16.317	1.00	68.39	CS3	ATOM	3312	CG2	VAL	141	188.064	140.736	20.197	1.00	71.43	CS3
ATOM	3260	CB	LYS	135	181.346	133.194	15.719	1.00	78.70	CS3	ATOM	3313	C	VAL	141	186.036	143.582	18.613	1.00	52.11	CS3
ATOM	3261	CG	LYS	135	181.612	132.259	14.564	1.00	78.70	CS3	ATOM	3314	O	VAL	141	186.248	144.799	18.637	1.00	52.11	CS3
ATOM	3262	CD	LYS	135	180.298	131.775	13.961	1.00	78.70	CS3	ATOM	3315	N	MET	142	185.365	142.975	17.651	1.00	72.70	CS3
ATOM	3263	CE	LYS	135	180.497	130.941	12.694	1.00	78.70	CS3	ATOM	3316	CA	MET	142	184.855	143.700	16.512	1.00	72.70	CS3
ATOM	3264	NZ	LYS	135	179.202	130.640	11.987	1.00	78.70	CS3	ATOM	3317	CB	MET	142	184.357	142.691	15.465	1.00	70.49	CS3
ATOM	3265	C	LYS	135	182.201	134.863	17.368	1.00	68.39	CS3	ATOM	3318	CG	MET	142	184.482	143.150	14.025	1.00	70.49	CS3
ATOM	3266	O	LYS	135	182.217	136.076	17.100	1.00	68.39	CS3	ATOM	3319	SD	MET	142	186.012	144.071	13.729	1.00	70.49	CS3
ATOM	3267	N	GLN	136	181.847	134.372	18.559	1.00	60.32	CS3	ATOM	3320	CE	MET	142	185.330	145.560	12.882	1.00	70.49	CS3
ATOM	3268	CA	GLN	136	181.474	135.229	19.689	1.00	60.32	CS3	ATOM	3321	C	MET	142	183.731	144.617	16.983	1.00	72.70	CS3
ATOM	3269	CB	GLN	136	181.313	134.386	20.953	1.00	66.97	CS3	ATOM	3322	O	MET	142	183.652	145.789	16.581	1.00	72.70	CS3
ATOM	3270	CG	GLN	136	179.881	134.084	21.353	1.00	66.97	CS3	ATOM	3323	N	GLU	143	182.894	144.086	17.872	1.00	90.23	CS3
ATOM	3271	CD	GLN	136	179.765	132.781	22.130	1.00	66.97	CS3	ATOM	3324	CA	GLU	143	181.743	144.819	18.396	1.00	90.23	CS3
ATOM	3272	OE1	GLN	136	180.623	132.457	22.972	1.00	66.97	CS3	ATOM	3325	CB	GLU	143	180.753	143.821	19.000	1.00	124.30	CS3
ATOM	3273	NE2	GLN	136	178.697	132.023	21.857	1.00	66.97	CS3	ATOM	3326	CG	GLU	143	179.295	144.242	18.901	1.00	124.30	CS3
ATOM	3274	C	GLN	136	182.589	136.242	19.908	1.00	60.32	CS3	ATOM	3327	CD	GLU	143	178.344	143.053	18.985	1.00	124.30	CS3
ATOM	3275	O	GLN	136	182.371	137.456	19.848	1.00	60.32	CS3	ATOM	3328	OE1	GLU	143	178.360	142.340	20.014	1.00	124.30	CS3
ATOM	3276	N	ALA	137	183.784	135.704	20.153	1.00	50.68	CS3	ATOM	3329	OE2	GLU	143	177.584	142.829	18.016	1.00	124.30	CS3
ATOM	3277	CA	ALA	137	185.004	136.474	20.378	1.00	50.68	CS3	ATOM	3330	C	GLU	143	182.033	145.945	19.401	1.00	90.23	CS3
ATOM	3278	CB	ALA	137	186.201	135.536	20.366	1.00	26.92	CS3	ATOM	3331	O	GLU	143	181.102	146.577	19.898	1.00	90.23	CS3
ATOM	3279	C	ALA	137	185.221	137.587	19.350	1.00	50.68	CS3	ATOM	3332	N	SER	144	183.309	146.197	19.696	1.00	67.35	CS3
ATOM	3280	O	ALA	137	185.537	138.731	19.705	1.00	50.68	CS3	ATOM	3333	CA	SER	144	183.690	147.262	20.624	1.00	67.35	CS3
ATOM	3281	N	VAL	138	185.076	137.250	18.074	1.00	64.53	CS3	ATOM	3334	CB	SER	144	183.903	146.695	22.035	1.00	55.88	CS3
ATOM	3282	CA	VAL	138	185.264	138.247	17.035	1.00	64.53	CS3	ATOM	3335	OG	SER	144	185.121	145.985	22.158	1.00	55.88	CS3
ATOM	3283	CB	VAL	138	185.278	137.601	15.622	1.00	55.82	CS3	ATOM	3336	C	SER	144	184.962	147.967	20.140	1.00	67.35	CS3
ATOM	3284	CG1	VAL	138	185.581	138.660	14.551	1.00	55.82	CS3	ATOM	3337	O	SER	144	186.054	147.770	20.688	1.00	67.35	CS3
ATOM	3285	CG2	VAL	138	186.327	136.497	15.582	1.00	55.82	CS3	ATOM	3338	N	GLY	145	184.810	148.800	19.113	1.00	84.73	CS3
ATOM	3286	C	VAL	138	184.138	139.259	17.158	1.00	64.53	CS3	ATOM	3339	CA	GLY	145	185.948	149.504	18.551	1.00	84.73	CS3
ATOM	3287	O	VAL	138	184.382	140.463	17.162	1.00	64.53	CS3	ATOM	3340	C	GLY	145	186.555	148.631	17.473	1.00	84.73	CS3
ATOM	3288	N	GLN	139	182.909	138.773	17.286	1.00	86.74	CS3	ATOM	3341	O	GLY	145	185.831	148.136	16.608	1.00	84.73	CS3
ATOM	3289	CA	GLN	139	181.778	139.675	17.423	1.00	86.74	CS3	ATOM	3342	N	ALA	146	187.872	148.433	17.540	1.00	77.11	CS3
ATOM	3290	CB	GLN	139	180.466	138.953	17.131	1.00	79.22	CS3	ATOM	3343	CA	ALA	146	188.627	147.603	16.591	1.00	77.11	CS3
ATOM	3291	CG	GLN	139	179.927	139.209	15.725	1.00	79.22	CS3	ATOM	3344	CB	ALA	146	188.522	146.125	16.985	1.00	33.15	CS3
ATOM	3292	CD	GLN	139	179.693	140.693	15.431	1.00	79.22	CS3	ATOM	3345	C	ALA	146	188.239	147.762	15.125	1.00	77.11	CS3
ATOM	3293	OE1	GLN	139	179.092	141.047	14.410	1.00	79.22	CS3	ATOM	3346	O	ALA	146	187.073	147.628	14.761	1.00	77.11	CS3
ATOM	3294	NE2	GLN	139	180.174	141.563	16.317	1.00	79.22	CS3	ATOM	3347	N	LYS	147	189.225	148.040	14.279	1.00	64.32	CS3
ATOM	3295	C	GLN	139	181.722	140.307	18.804	1.00	86.74	CS3	ATOM	3348	CA	LYS	147	188.947	148.181	12.860	1.00	64.32	CS3
ATOM	3296	O	GLN	139	180.665	140.388	19.424	1.00	86.74	CS3	ATOM	3349	CB	LYS	147	189.860	149.239	12.218	1.00	84.37	CS3
ATOM	3297	N	ARG	140	182.884	140.738	19.277	1.00	69.18	CS3	ATOM	3350	CG	LYS	147	189.528	150.682	12.639	1.00	84.37	CS3
ATOM	3298	CA	ARG	140	183.047	141.397	20.570	1.00	69.18	CS3	ATOM	3351	CD	LYS	147	189.945	151.733	11.590	1.00	84.37	CS3
ATOM	3299	CB	ARG	140	183.575	140.443	21.637	1.00	80.76	CS3	ATOM	3352	CE	LYS	147	191.457	151.730	11.329	1.00	84.37	CS3
ATOM	3300	CG	ARG	140	182.578	139.507	22.251	1.00	80.76	CS3	ATOM	3353	NZ	LYS	147	191.933	152.732	10.320	1.00	84.37	CS3
ATOM	3301	CD	ARG	140	183.296	138.689	23.307	1.00	80.76	CS3	ATOM	3354	C	LYS	147	189.094	146.827	12.156	1.00	64.32	CS3
ATOM	3302	NE	ARG	140	182.531	137.520	23.728	1.00	80.76	CS3	ATOM	3355	O	LYS	147	189.024	146.747	10.930	1.00	64.32	CS3
ATOM	3303	CZ	ARG	140	183.071	136.324	23.971	1.00	80.76	CS3	ATOM	3356	N	GLY	148	189.276	145.770	12.949	1.00	47.67	CS3
ATOM	3304	NH1	ARG	140	184.387	136.149	23.830	1.00	80.76	CS3	ATOM	3357	CA	GLY	148	189.404	144.430	12.402	1.00	47.67	CS3

ATOM	3358	C	GLY	148	189.939	143.409	13.395	1.00	47.67	CS3	ATOM	3411	NE	ARG	156	192.425	114.703	19.312	1.00	46.62	CS3
ATOM	3359	O	GLY	148	190.675	143.769	14.316	1.00	47.67	CS3	ATOM	3412	CZ	ARG	156	192.457	113.533	19.952	1.00	46.62	CS3
ATOM	3360	N	ALA	149	189.590	142.136	13.214	1.00	36.50	CS3	ATOM	3413	NH1	ARG	156	193.437	113.254	20.810	1.00	46.62	CS3
ATOM	3361	CA	ALA	149	190.066	141.099	14.122	1.00	36.50	CS3	ATOM	3414	NH2	ARG	156	191.503	112.636	19.738	1.00	46.62	CS3
ATOM	3362	CB	ALA	149	189.338	141.200	15.442	1.00	34.71	CS3	ATOM	3415	C	ARG	156	190.154	119.078	18.325	1.00	53.20	CS3
ATOM	3363	C	ALA	149	189.910	139.693	13.560	1.00	36.50	CS3	ATOM	3416	O	ARG	156	189.720	118.816	19.438	1.00	53.20	CS3
ATOM	3364	O	ALA	149	189.057	139.458	12.698	1.00	36.50	CS3	ATOM	3417	N	ILE	157	189.624	119.984	17.514	1.00	59.69	CS3
ATOM	3365	N	LYS	150	190.734	138.767	14.058	1.00	50.27	CS3	ATOM	3418	CA	ILE	157	188.414	120.707	17.835	1.00	59.69	CS3
ATOM	3366	CA	LYS	150	190.718	137.361	13.632	1.00	50.27	CS3	ATOM	3419	CB	ILE	157	187.908	121.458	16.587	1.00	59.78	CS3
ATOM	3367	CB	LYS	150	191.739	137.105	12.512	1.00	131.39	CS3	ATOM	3420	CG2	ILE	157	186.491	121.933	16.793	1.00	59.78	CS3
ATOM	3368	CG	LYS	150	191.512	137.883	11.231	1.00	131.39	CS3	ATOM	3421	CG1	ILE	157	188.848	122.623	16.279	1.00	59.78	CS3
ATOM	3369	CD	LYS	150	192.516	137.507	10.133	1.00	131.39	CS3	ATOM	3422	CD1	ILE	157	188.392	123.497	15.111	1.00	59.78	CS3
ATOM	3370	CE	LYS	150	192.227	138.276	8.829	1.00	131.39	CS3	ATOM	3423	C	ILE	157	187.349	119.707	18.294	1.00	59.69	CS3
ATOM	3371	NZ	LYS	150	193.276	138.099	7.780	1.00	131.39	CS3	ATOM	3424	O	ILE	157	187.054	118.729	17.596	1.00	59.69	CS3
ATOM	3372	C	LYS	150	191.079	136.448	14.793	1.00	50.27	CS3	ATOM	3425	N	GLY	158	186.787	119.952	19.472	1.00	55.37	CS3
ATOM	3373	O	LYS	150	191.922	136.788	15.622	1.00	50.27	CS3	ATOM	3426	CA	GLY	158	185.765	119.066	19.989	1.00	55.37	CS3
ATOM	3374	N	VAL	151	190.458	135.281	14.850	1.00	61.67	CS3	ATOM	3427	C	GLY	158	186.279	117.668	20.264	1.00	55.37	CS3
ATOM	3375	CA	VAL	151	190.769	134.333	15.914	1.00	61.67	CS3	ATOM	3428	O	GLY	158	185.526	116.695	20.176	1.00	55.37	CS3
ATOM	3376	CB	VAL	151	189.591	134.164	16.902	1.00	37.80	CS3	ATOM	3429	N	GLY	159	187.565	117.566	20.590	1.00	58.48	CS3
ATOM	3377	CG1	VAL	151	189.959	133.181	18.000	1.00	37.80	CS3	ATOM	3430	CA	GLY	159	188.165	116.278	20.896	1.00	58.48	CS3
ATOM	3378	CG2	VAL	151	189.213	135.512	17.492	1.00	37.80	CS3	ATOM	3431	C	GLY	159	188.212	115.324	19.727	1.00	58.48	CS3
ATOM	3379	C	VAL	151	191.038	133.010	15.229	1.00	61.67	CS3	ATOM	3432	O	GLY	159	188.553	114.155	19.903	1.00	58.48	CS3
ATOM	3380	O	VAL	151	190.395	132.691	14.227	1.00	61.67	CS3	ATOM	3433	N	ALA	160	187.871	115.823	18.539	1.00	80.97	CS3
ATOM	3381	N	ILE	152	191.987	132.245	15.757	1.00	56.90	CS3	ATOM	3434	CA	ALA	160	187.868	115.022	17.314	1.00	80.97	CS3
ATOM	3382	CA	ILE	152	192.332	130.959	15.163	1.00	56.90	CS3	ATOM	3435	CB	ALA	160	187.481	115.903	16.126	1.00	72.17	CS3
ATOM	3383	CB	ILE	152	193.675	131.030	14.378	1.00	33.36	CS3	ATOM	3436	C	ALA	160	189.232	114.368	17.065	1.00	80.97	CS3
ATOM	3384	CG2	ILE	152	194.041	129.640	13.848	1.00	33.36	CS3	ATOM	3437	O	ALA	160	190.274	115.021	17.179	1.00	80.97	CS3
ATOM	3385	CG1	ILE	152	193.579	132.050	13.239	1.00	33.36	CS3	ATOM	3438	N	GLU	161	189.212	113.081	16.716	1.00	51.10	CS3
ATOM	3386	CD1	ILE	152	194.912	132.427	12.633	1.00	33.36	CS3	ATOM	3439	CA	GLU	161	190.430	112.311	16.463	1.00	51.10	CS3
ATOM	3387	C	ILE	152	192.505	129.898	16.230	1.00	56.90	CS3	ATOM	3440	CB	GLU	161	190.058	110.880	16.078	1.00	145.00	CS3
ATOM	3388	O	ILE	152	193.283	130.077	17.175	1.00	56.90	CS3	ATOM	3441	CG	GLU	161	191.213	109.900	16.105	1.00	145.00	CS3
ATOM	3389	N	VAL	153	191.784	128.794	16.092	1.00	52.09	CS3	ATOM	3442	CD	GLU	161	190.743	108.451	16.130	1.00	145.00	CS3
ATOM	3390	CA	VAL	153	191.941	127.717	17.053	1.00	52.09	CS3	ATOM	3443	OE1	GLU	161	191.597	107.543	16.010	1.00	145.00	CS3
ATOM	3391	CB	VAL	153	190.579	127.199	17.593	1.00	43.32	CS3	ATOM	3444	OE2	GLU	161	189.521	108.215	16.278	1.00	145.00	CS3
ATOM	3392	CG1	VAL	153	190.794	125.971	18.494	1.00	43.32	CS3	ATOM	3445	C	GLU	161	191.313	112.945	15.383	1.00	51.10	CS3
ATOM	3393	CG2	VAL	153	189.880	128.311	18.376	1.00	43.32	CS3	ATOM	3446	O	GLU	161	192.538	112.802	15.400	1.00	51.10	CS3
ATOM	3394	C	VAL	153	192.677	126.623	16.303	1.00	52.09	CS3	ATOM	3447	N	GLN	162	190.680	113.655	14.452	1.00	67.08	CS3
ATOM	3395	O	VAL	153	192.453	126.417	15.110	1.00	52.09	CS3	ATOM	3448	CA	GLN	162	191.377	114.339	13.361	1.00	67.08	CS3
ATOM	3396	N	SER	154	193.576	125.954	17.016	1.00	64.36	CS3	ATOM	3449	CB	GLN	162	190.566	114.209	12.070	1.00	102.75	CS3
ATOM	3397	CA	SER	154	194.409	124.887	16.479	1.00	64.36	CS3	ATOM	3450	CG	GLN	162	191.199	113.344	10.995	1.00	102.75	CS3
ATOM	3398	CB	SER	154	195.371	124.408	17.548	1.00	67.84	CS3	ATOM	3451	CD	GLN	162	192.461	113.958	10.432	1.00	102.75	CS3
ATOM	3399	OG	SER	154	194.649	123.691	18.538	1.00	67.84	CS3	ATOM	3452	OE1	GLN	162	192.526	115.168	10.219	1.00	102.75	CS3
ATOM	3400	C	SER	154	193.617	123.690	16.008	1.00	64.36	CS3	ATOM	3453	NE2	GLN	162	193.470	113.126	10.175	1.00	102.75	CS3
ATOM	3401	O	SER	154	192.742	123.809	15.154	1.00	64.36	CS3	ATOM	3454	C	GLN	162	191.536	115.818	13.716	1.00	67.08	CS3
ATOM	3402	N	GLY	155	193.923	122.531	16.590	1.00	53.06	CS3	ATOM	3455	O	GLN	162	190.542	116.533	13.887	1.00	67.08	CS3
ATOM	3403	CA	GLY	155	193.249	121.311	16.188	1.00	53.06	CS3	ATOM	3456	N	ALA	163	192.785	116.268	13.829	1.00	47.77	CS3
ATOM	3404	C	GLY	155	192.923	120.310	17.276	1.00	53.06	CS3	ATOM	3457	CA	ALA	163	193.082	117.663	14.167	1.00	47.77	CS3
ATOM	3405	O	GLY	155	193.542	120.282	18.339	1.00	53.06	CS3	ATOM	3458	CB	ALA	163	194.571	117.833	14.372	1.00	61.98	CS3
ATOM	3406	N	ARG	156	191.967	119.452	16.933	1.00	53.20	CS3	ATOM	3459	C	ALA	163	192.597	118.603	13.072	1.00	47.77	CS3
ATOM	3407	CA	ARG	156	191.384	118.408	17.768	1.00	53.20	CS3	ATOM	3460	O	ALA	163	192.877	118.390	11.895	1.00	47.77	CS3
ATOM	3408	CB	ARG	156	192.299	117.940	18.892	1.00	46.62	CS3	ATOM	3461	N	ARG	164	191.868	119.645	13.450	1.00	47.65	CS3
ATOM	3409	CG	ARG	156	193.258	116.877	18.444	1.00	46.62	CS3	ATOM	3462	CA	ARG	164	191.347	120.579	12.457	1.00	47.65	CS3
ATOM	3410	CD	ARG	156	193.420	115.760	19.476	1.00	46.62	CS3	ATOM	3463	CB	ARG	164	189.804	120.642	12.534	1.00	66.04	CS3

ATOM	3464	CG	ARG	164	189.133	119.270	12.725	1.00	66.04	CS3	ATOM	3517	OE1	GLN	170	182.110	141.487	12.176	1.00	84.45	CS3
ATOM	3465	CD	ARG	164	187.643	119.198	12.320	1.00	66.04	CS3	ATOM	3518	NE2	GLN	170	182.257	139.424	13.075	1.00	84.45	CS3
ATOM	3466	NE	ARG	164	186.725	119.981	13.149	1.00	66.04	CS3	ATOM	3519	C	GLN	170	186.962	142.010	10.133	1.00	37.86	CS3
ATOM	3467	CZ	ARG	164	186.501	121.284	12.990	1.00	66.04	CS3	ATOM	3520	O	GLN	170	187.920	142.233	10.878	1.00	37.86	CS3
ATOM	3468	NH1	ARG	164	187.130	121.952	12.033	1.00	66.04	CS3	ATOM	3521	N	GLY	171	186.624	142.818	9.126	1.00	49.22	CS3
ATOM	3469	NH2	ARG	164	185.644	121.922	13.777	1.00	66.04	CS3	ATOM	3522	CA	GLY	171	187.361	144.043	8.852	1.00	49.22	CS3
ATOM	3470	C	ARG	164	191.954	121.953	12.699	1.00	47.65	CS3	ATOM	3523	C	GLY	171	188.845	143.853	8.579	1.00	49.22	CS3
ATOM	3471	O	ARG	164	193.027	122.057	13.278	1.00	47.65	CS3	ATOM	3524	O	GLY	171	189.404	142.799	8.861	1.00	49.22	CS3
ATOM	3472	N	THR	165	191.272	122.997	12.241	1.00	50.41	CS3	ATOM	3525	N	ARG	172	189.494	144.881	8.038	1.00	48.62	CS3
ATOM	3473	CA	THR	165	191.732	124.366	12.422	1.00	50.41	CS3	ATOM	3526	CA	ARG	172	190.923	144.820	7.729	1.00	48.62	CS3
ATOM	3474	CB	THR	165	192.940	124.667	11.533	1.00	43.14	CS3	ATOM	3527	CB	ARG	172	191.457	146.212	7.373	1.00	77.50	CS3
ATOM	3475	OG1	THR	165	194.111	124.084	12.120	1.00	43.14	CS3	ATOM	3528	CG	ARG	172	190.706	146.903	6.247	1.00	77.50	CS3
ATOM	3476	CG2	THR	165	193.150	126.172	11.385	1.00	43.14	CS3	ATOM	3529	CD	ARG	172	191.635	147.505	5.183	1.00	77.50	CS3
ATOM	3477	C	THR	165	190.601	125.320	12.095	1.00	50.41	CS3	ATOM	3530	NE	ARG	172	192.485	148.605	5.647	1.00	77.50	CS3
ATOM	3478	O	THR	165	190.153	125.386	10.948	1.00	50.41	CS3	ATOM	3531	CZ	ARG	172	193.640	148.449	6.297	1.00	77.50	CS3
ATOM	3479	N	GLU	166	190.146	126.062	13.107	1.00	53.01	CS3	ATOM	3532	NH1	ARG	172	194.098	147.231	6.575	1.00	77.50	CS3
ATOM	3480	CA	GLU	166	189.039	126.987	12.926	1.00	53.01	CS3	ATOM	3533	NH2	ARG	172	194.355	149.513	6.651	1.00	77.50	CS3
ATOM	3481	CB	GLU	166	188.065	126.855	14.087	1.00	92.26	CS3	ATOM	3534	C	ARG	172	191.776	144.244	8.858	1.00	48.62	CS3
ATOM	3482	CG	GLU	166	186.614	126.815	13.636	1.00	92.26	CS3	ATOM	3535	O	ARG	172	191.605	144.595	10.020	1.00	48.62	CS3
ATOM	3483	CD	GLU	166	186.363	125.785	12.544	1.00	92.26	CS3	ATOM	3536	N	VAL	173	192.690	143.346	8.499	1.00	54.07	CS3
ATOM	3484	OE1	GLU	166	186.672	124.591	12.754	1.00	92.26	CS3	ATOM	3537	CA	VAL	173	193.618	142.724	9.446	1.00	54.07	CS3
ATOM	3485	OE2	GLU	166	185.854	126.176	11.473	1.00	92.26	CS3	ATOM	3538	CB	VAL	173	193.010	141.465	10.071	1.00	36.35	CS3
ATOM	3486	C	GLU	166	189.442	128.438	12.724	1.00	53.01	CS3	ATOM	3539	CG1	VAL	173	193.950	140.908	11.151	1.00	36.35	CS3
ATOM	3487	O	GLU	166	190.455	128.908	13.249	1.00	53.01	CS3	ATOM	3540	CG2	VAL	173	191.642	141.789	10.652	1.00	36.35	CS3
ATOM	3488	N	TRP	167	188.601	129.140	11.975	1.00	60.85	CS3	ATOM	3541	C	VAL	173	194.876	142.357	8.648	1.00	54.07	CS3
ATOM	3489	CA	TRP	167	188.819	130.528	11.577	1.00	60.85	CS3	ATOM	3542	O	VAL	173	195.300	141.199	8.618	1.00	54.07	CS3
ATOM	3490	CB	TRP	167	188.414	130.653	10.126	1.00	73.15	CS3	ATOM	3543	N	PRO	174	195.490	143.368	7.998	1.00	68.64	CS3
ATOM	3491	CG	TRP	167	189.531	130.861	9.235	1.00	73.15	CS3	ATOM	3544	CD	PRO	174	195.061	144.768	8.191	1.00	49.15	CS3
ATOM	3492	CD2	TRP	167	189.814	132.056	8.525	1.00	73.15	CS3	ATOM	3545	CA	PRO	174	196.691	143.331	7.151	1.00	68.64	CS3
ATOM	3493	CE2	TRP	167	190.966	131.820	7.769	1.00	73.15	CS3	ATOM	3546	CB	PRO	174	196.761	144.752	6.610	1.00	49.15	CS3
ATOM	3494	CE3	TRP	167	189.197	133.308	8.455	1.00	73.15	CS3	ATOM	3547	CG	PRO	174	196.279	145.544	7.775	1.00	49.15	CS3
ATOM	3495	CD1	TRP	167	190.492	129.967	8.903	1.00	73.15	CS3	ATOM	3548	C	PRO	174	198.006	142.930	7.792	1.00	68.64	CS3
ATOM	3496	NE1	TRP	167	191.362	130.534	8.019	1.00	73.15	CS3	ATOM	3549	O	PRO	174	198.836	143.791	8.081	1.00	68.64	CS3
ATOM	3497	CZ2	TRP	167	191.527	132.796	6.946	1.00	73.15	CS3	ATOM	3550	N	LEU	175	198.214	141.634	7.995	1.00	56.69	CS3
ATOM	3498	CZ3	TRP	167	189.748	134.278	7.639	1.00	73.15	CS3	ATOM	3551	CA	LEU	175	199.462	141.174	8.592	1.00	56.69	CS3
ATOM	3499	CH2	TRP	167	190.903	134.017	6.893	1.00	73.15	CS3	ATOM	3552	CB	LEU	175	199.511	139.643	8.658	1.00	37.52	CS3
ATOM	3500	C	TRP	167	188.151	131.670	12.330	1.00	60.85	CS3	ATOM	3553	CG	LEU	175	198.679	138.887	9.691	1.00	37.52	CS3
ATOM	3501	O	TRP	167	188.249	131.771	13.544	1.00	60.85	CS3	ATOM	3554	CD1	LEU	175	199.585	137.860	10.385	1.00	37.52	CS3
ATOM	3502	N	ALA	168	187.505	132.545	11.551	1.00	47.80	CS3	ATOM	3555	CD2	LEU	175	198.092	139.864	10.716	1.00	37.52	CS3
ATOM	3503	CA	ALA	168	186.766	133.738	12.014	1.00	47.80	CS3	ATOM	3556	C	LEU	175	200.681	141.672	7.814	1.00	56.69	CS3
ATOM	3504	CB	ALA	168	186.261	133.550	13.446	1.00	72.73	CS3	ATOM	3557	O	LEU	175	201.780	141.768	8.361	1.00	56.69	CS3
ATOM	3505	C	ALA	168	187.536	135.049	11.906	1.00	47.80	CS3	ATOM	3558	N	HIS	176	200.488	141.999	6.542	1.00	58.84	CS3
ATOM	3506	O	ALA	168	188.590	135.224	12.521	1.00	47.80	CS3	ATOM	3559	CA	HIS	176	201.602	142.453	5.727	1.00	58.84	CS3
ATOM	3507	N	ALA	169	186.981	135.978	11.135	1.00	43.25	CS3	ATOM	3560	CB	HIS	176	201.309	142.236	4.246	1.00	76.18	CS3
ATOM	3508	CA	ALA	169	187.616	137.268	10.943	1.00	43.25	CS3	ATOM	3561	CG	HIS	176	201.830	140.941	3.710	1.00	76.18	CS3
ATOM	3509	CB	ALA	169	188.747	137.107	9.985	1.00	46.68	CS3	ATOM	3562	CD2	HIS	176	202.883	140.673	2.903	1.00	76.18	CS3
ATOM	3510	C	ALA	169	186.654	138.351	10.432	1.00	43.25	CS3	ATOM	3563	ND1	HIS	176	201.238	139.727	3.988	1.00	76.18	CS3
ATOM	3511	O	ALA	169	185.675	138.046	9.753	1.00	43.25	CS3	ATOM	3564	CE1	HIS	176	201.901	138.767	3.369	1.00	76.18	CS3
ATOM	3512	N	GLN	170	186.934	139.614	10.764	1.00	37.86	CS3	ATOM	3565	NE2	HIS	176	202.903	139.315	2.703	1.00	76.18	CS3
ATOM	3513	CA	GLN	170	186.108	140.745	10.318	1.00	37.86	CS3	ATOM	3566	C	HIS	176	201.971	143.900	5.922	1.00	58.84	CS3
ATOM	3514	CB	GLN	170	184.973	141.018	11.321	1.00	84.45	CS3	ATOM	3567	O	HIS	176	203.149	144.255	5.896	1.00	58.84	CS3
ATOM	3515	CG	GLN	170	183.809	140.009	11.283	1.00	84.45	CS3	ATOM	3568	N	THR	177	200.959	144.734	6.112	1.00	71.67	CS3
ATOM	3516	CD	GLN	170	182.648	140.374	12.225	1.00	84.45	CS3	ATOM	3569	CA	THR	177	201.170	146.167	6.261	1.00	71.67	CS3

ATOM	3570	CB	THR	177	199.826	146.923	6.202	1.00	64.36	CS3	ATOM	3623	N	TYR	184	198.650	140.997	18.884	1.00	44.49	CS3
ATOM	3571	OG1	THR	177	200.055	148.271	5.779	1.00	64.36	CS3	ATOM	3624	CA	TYR	184	198.696	139.555	18.742	1.00	44.49	CS3
ATOM	3572	CG2	THR	177	199.172	146.952	7.575	1.00	64.36	CS3	ATOM	3625	CB	TYR	184	199.990	139.128	18.035	1.00	62.39	CS3
ATOM	3573	C	THR	177	201.915	146.629	7.513	1.00	71.67	CS3	ATOM	3626	CG	TYR	184	200.212	137.631	18.026	1.00	62.39	CS3
ATOM	3574	O	THR	177	202.747	147.541	7.429	1.00	71.67	CS3	ATOM	3627	CD1	TYR	184	199.595	136.816	17.076	1.00	62.39	CS3
ATOM	3575	N	LEU	178	201.632	145.991	8.653	1.00	77.59	CS3	ATOM	3628	CE1	TYR	184	199.756	135.419	17.106	1.00	62.39	CS3
ATOM	3576	CA	LEU	178	202.235	146.386	9.932	1.00	77.59	CS3	ATOM	3629	CD2	TYR	184	200.997	137.021	19.007	1.00	62.39	CS3
ATOM	3577	CB	LEU	178	203.179	145.295	10.475	1.00	56.80	CS3	ATOM	3630	CE2	TYR	184	201.163	135.630	19.049	1.00	62.39	CS3
ATOM	3578	CG	LEU	178	202.597	144.215	11.425	1.00	56.80	CS3	ATOM	3631	CZ	TYR	184	200.542	134.835	18.096	1.00	62.39	CS3
ATOM	3579	CD1	LEU	178	202.178	144.827	12.742	1.00	56.80	CS3	ATOM	3632	OH	TYR	184	200.718	133.465	18.126	1.00	62.39	CS3
ATOM	3580	CD2	LEU	178	201.425	143.524	10.778	1.00	56.80	CS3	ATOM	3633	C	TYR	184	198.652	138.912	20.111	1.00	44.49	CS3
ATOM	3581	C	LEU	178	202.894	147.787	9.832	1.00	77.59	CS3	ATOM	3634	O	TYR	184	199.297	139.372	21.050	1.00	44.49	CS3
ATOM	3582	O	LEU	178	204.021	148.013	9.345	1.00	77.59	CS3	ATOM	3635	N	GLY	185	197.900	137.837	20.233	1.00	49.39	CS3
ATOM	3583	N	ARG	179	202.051	148.706	10.277	1.00	79.63	CS3	ATOM	3636	CA	GLY	185	197.853	137.185	21.515	1.00	49.39	CS3
ATOM	3584	CA	ARG	179	202.177	150.147	10.344	1.00	79.63	CS3	ATOM	3637	C	GLY	185	197.661	135.707	21.327	1.00	49.39	CS3
ATOM	3585	CB	ARG	179	202.354	150.729	8.950	1.00	70.00	CS3	ATOM	3638	O	GLY	185	196.843	135.287	20.508	1.00	49.39	CS3
ATOM	3586	CG	ARG	179	202.332	152.242	8.855	1.00	70.00	CS3	ATOM	3639	N	PHE	186	198.409	134.913	22.079	1.00	52.17	CS3
ATOM	3587	CD	ARG	179	200.950	152.804	8.575	1.00	70.00	CS3	ATOM	3640	CA	PHE	186	198.289	133.476	21.976	1.00	52.17	CS3
ATOM	3588	NE	ARG	179	200.447	152.458	7.250	1.00	70.00	CS3	ATOM	3641	CB	PHE	186	199.598	132.856	21.502	1.00	58.02	CS3
ATOM	3589	CZ	ARG	179	199.707	153.268	6.489	1.00	70.00	CS3	ATOM	3642	CG	PHE	186	199.614	131.353	21.576	1.00	58.02	CS3
ATOM	3590	NH1	ARG	179	199.382	154.483	6.914	1.00	70.00	CS3	ATOM	3643	CD1	PHE	186	198.731	130.595	20.811	1.00	58.02	CS3
ATOM	3591	NH2	ARG	179	199.281	152.863	5.298	1.00	70.00	CS3	ATOM	3644	CD2	PHE	186	200.502	130.694	22.421	1.00	58.02	CS3
ATOM	3592	C	ARG	179	200.717	150.198	10.715	1.00	79.63	CS3	ATOM	3645	CE1	PHE	186	198.734	129.195	20.888	1.00	58.02	CS3
ATOM	3593	O	ARG	179	200.074	151.235	10.717	1.00	79.63	CS3	ATOM	3646	CE2	PHE	186	200.514	129.300	22.506	1.00	58.02	CS3
ATOM	3594	N	ALA	180	200.224	148.991	10.989	1.00	80.78	CS3	ATOM	3647	CZ	PHE	186	199.629	128.548	21.739	1.00	58.02	CS3
ATOM	3595	CA	ALA	180	198.851	148.701	11.349	1.00	80.78	CS3	ATOM	3648	C	PHE	186	197.911	132.864	23.302	1.00	52.17	CS3
ATOM	3596	CB	ALA	180	198.512	147.283	10.941	1.00	43.22	CS3	ATOM	3649	O	PHE	186	198.446	133.219	24.347	1.00	52.17	CS3
ATOM	3597	C	ALA	180	198.661	148.825	12.832	1.00	80.78	CS3	ATOM	3650	N	ALA	187	196.983	131.927	23.249	1.00	55.45	CS3
ATOM	3598	O	ALA	180	197.802	149.578	13.319	1.00	80.78	CS3	ATOM	3651	CA	ALA	187	196.549	131.234	24.442	1.00	55.45	CS3
ATOM	3599	N	ASN	181	199.492	148.072	13.540	1.00	57.79	CS3	ATOM	3652	CB	ALA	187	195.132	131.669	24.806	1.00	49.34	CS3
ATOM	3600	CA	ASN	181	199.418	148.010	14.985	1.00	57.79	CS3	ATOM	3653	C	ALA	187	196.602	129.727	24.181	1.00	55.45	CS3
ATOM	3601	CB	ASN	181	198.996	149.341	15.618	1.00	83.33	CS3	ATOM	3654	O	ALA	187	196.147	129.239	23.138	1.00	55.45	CS3
ATOM	3602	CG	ASN	181	198.554	149.179	17.059	1.00	83.33	CS3	ATOM	3655	N	LEU	188	197.179	128.999	25.127	1.00	47.30	CS3
ATOM	3603	OD1	ASN	181	199.113	148.376	17.811	1.00	83.33	CS3	ATOM	3656	CA	LEU	188	197.278	127.549	25.033	1.00	47.30	CS3
ATOM	3604	ND2	ASN	181	197.546	149.948	17.454	1.00	83.33	CS3	ATOM	3657	CB	LEU	188	198.287	127.052	26.068	1.00	57.80	CS3
ATOM	3605	C	ASN	181	198.339	146.980	15.166	1.00	57.79	CS3	ATOM	3658	CG	LEU	188	199.215	125.893	25.705	1.00	57.80	CS3
ATOM	3606	O	ASN	181	197.154	147.281	15.345	1.00	57.79	CS3	ATOM	3659	CD1	LEU	188	198.575	124.568	26.076	1.00	57.80	CS3
ATOM	3607	N	ILE	182	198.777	145.744	15.056	1.00	66.43	CS3	ATOM	3660	CD2	LEU	188	199.556	125.968	24.226	1.00	57.80	CS3
ATOM	3608	CA	ILE	182	197.897	144.621	15.196	1.00	66.43	CS3	ATOM	3661	C	LEU	188	195.874	127.000	25.314	1.00	47.30	CS3
ATOM	3609	CB	ILE	182	198.065	143.693	13.978	1.00	61.38	CS3	ATOM	3662	O	LEU	188	194.893	127.637	24.953	1.00	47.30	CS3
ATOM	3610	CG2	ILE	182	197.130	142.500	14.091	1.00	61.38	CS3	ATOM	3663	N	ALA	189	195.764	125.838	25.949	1.00	38.79	CS3
ATOM	3611	CG1	ILE	182	197.807	144.498	12.695	1.00	61.38	CS3	ATOM	3664	CA	ALA	189	194.452	125.255	26.258	1.00	38.79	CS3
ATOM	3612	CD1	ILE	182	197.984	143.718	11.409	1.00	61.38	CS3	ATOM	3665	CB	ALA	189	193.437	125.499	25.099	1.00	2.09	CS3
ATOM	3613	C	ILE	182	198.315	143.943	16.496	1.00	66.43	CS3	ATOM	3666	C	ALA	189	194.572	123.759	26.534	1.00	38.79	CS3
ATOM	3614	O	ILE	182	199.474	143.560	16.665	1.00	66.43	CS3	ATOM	3667	O	ALA	189	194.106	122.933	25.750	1.00	38.79	CS3
ATOM	3615	N	ASP	183	197.385	143.844	17.438	1.00	59.40	CS3	ATOM	3668	N	ARG	190	195.202	123.419	27.653	1.00	63.89	CS3
ATOM	3616	CA	ASP	183	197.712	143.205	18.696	1.00	59.40	CS3	ATOM	3669	CA	ARG	190	195.379	122.027	28.038	1.00	63.89	CS3
ATOM	3617	CB	ASP	183	196.766	143.672	19.807	1.00	97.01	CS3	ATOM	3670	CB	ARG	190	196.131	121.973	29.368	1.00	77.17	CS3
ATOM	3618	CG	ASP	183	197.215	143.214	21.188	1.00	97.01	CS3	ATOM	3671	CG	ARG	190	197.405	122.839	29.389	1.00	77.17	CS3
ATOM	3619	OD1	ASP	183	196.550	143.581	22.181	1.00	97.01	CS3	ATOM	3672	CD	ARG	190	198.212	122.694	30.696	1.00	77.17	CS3
ATOM	3620	OD2	ASP	183	198.229	142.486	21.281	1.00	97.01	CS3	ATOM	3673	NE	ARG	190	198.876	121.393	30.864	1.00	77.17	CS3
ATOM	3621	C	ASP	183	197.603	141.702	18.483	1.00	59.40	CS3	ATOM	3674	CZ	ARG	190	198.256	120.230	31.088	1.00	77.17	CS3
ATOM	3622	O	ASP	183	196.609	141.199	17.947	1.00	59.40	CS3	ATOM	3675	NH1	ARG	190	196.933	120.165	31.177	1.00	77.17	CS3

ATOM	3676	NH2	ARG	190	198.966	119.116	31.232	1.00	77.17	CS3	ATOM	3729	CA	VAL	198	194.524	129.818	20.309	1.00	49.03	CS3
ATOM	3677	C	ARG	190	194.008	121.330	28.136	1.00	63.89	CS3	ATOM	3730	CB	VAL	198	193.543	130.081	21.449	1.00	40.60	CS3
ATOM	3678	O	ARG	190	193.073	121.847	28.749	1.00	63.89	CS3	ATOM	3731	CG1	VAL	198	192.568	131.193	21.051	1.00	40.60	CS3
ATOM	3679	N	THR	191	193.897	120.158	27.521	1.00	76.60	CS3	ATOM	3732	CG2	VAL	198	192.798	128.792	21.788	1.00	40.60	CS3
ATOM	3680	CA	THR	191	192.640	119.410	27.495	1.00	76.60	CS3	ATOM	3733	C	VAL	198	195.186	131.140	19.932	1.00	49.03	CS3
ATOM	3681	CB	THR	191	191.985	119.475	26.110	1.00	60.24	CS3	ATOM	3734	O	VAL	198	195.906	131.735	20.729	1.00	49.03	CS3
ATOM	3682	OG1	THR	191	191.694	120.834	25.781	1.00	60.24	CS3	ATOM	3735	N	LYS	199	194.935	131.610	18.720	1.00	51.98	CS3
ATOM	3683	CG2	THR	191	190.717	118.651	26.079	1.00	60.24	CS3	ATOM	3736	CA	LYS	199	195.537	132.858	18.301	1.00	51.98	CS3
ATOM	3684	C	THR	191	192.826	117.937	27.788	1.00	76.60	CS3	ATOM	3737	CB	LYS	199	196.329	132.672	17.008	1.00	67.92	CS3
ATOM	3685	O	THR	191	193.938	117.420	27.774	1.00	76.60	CS3	ATOM	3738	CG	LYS	199	197.539	131.775	17.139	1.00	67.92	CS3
ATOM	3686	N	THR	192	191.714	117.262	28.033	1.00	65.37	CS3	ATOM	3739	CD	LYS	199	198.327	131.727	15.840	1.00	67.92	CS3
ATOM	3687	CA	THR	192	191.728	115.838	28.291	1.00	65.37	CS3	ATOM	3740	CE	LYS	199	199.099	130.419	15.729	1.00	67.92	CS3
ATOM	3688	CB	THR	192	190.296	115.328	28.495	1.00	68.03	CS3	ATOM	3741	NZ	LYS	199	199.853	130.333	14.453	1.00	67.92	CS3
ATOM	3689	OG1	THR	192	189.866	115.678	29.815	1.00	68.03	CS3	ATOM	3742	C	LYS	199	194.518	133.960	18.101	1.00	51.98	CS3
ATOM	3690	CG2	THR	192	190.212	113.811	28.279	1.00	68.03	CS3	ATOM	3743	O	LYS	199	193.448	133.738	17.523	1.00	51.98	CS3
ATOM	3691	C	THR	192	192.336	115.144	27.084	1.00	65.37	CS3	ATOM	3744	N	ILE	200	194.871	135.155	18.567	1.00	43.23	CS3
ATOM	3692	O	THR	192	193.148	114.228	27.216	1.00	65.37	CS3	ATOM	3745	CA	ILE	200	194.009	136.316	18.445	1.00	43.23	CS3
ATOM	3693	N	TYR	193	191.945	115.597	25.899	1.00	86.87	CS3	ATOM	3746	CB	ILE	200	193.547	136.816	19.818	1.00	172.65	CS3
ATOM	3694	CA	TYR	193	192.447	115.000	24.673	1.00	86.87	CS3	ATOM	3747	CG2	ILE	200	192.627	138.020	19.651	1.00	172.65	CS3
ATOM	3695	CB	TYR	193	191.344	114.998	23.610	1.00	79.57	CS3	ATOM	3748	CG1	ILE	200	192.852	135.686	20.575	1.00	172.65	CS3
ATOM	3696	CG	TYR	193	190.596	116.306	23.478	1.00	79.57	CS3	ATOM	3749	CD1	ILE	200	191.620	135.142	19.894	1.00	172.65	CS3
ATOM	3697	CD1	TYR	193	191.154	117.390	22.796	1.00	79.57	CS3	ATOM	3750	C	ILE	200	194.743	137.454	17.776	1.00	43.23	CS3
ATOM	3698	CE1	TYR	193	190.454	118.587	22.651	1.00	79.57	CS3	ATOM	3751	O	ILE	200	195.867	137.788	18.164	1.00	43.23	CS3
ATOM	3699	CD2	TYR	193	189.318	116.454	24.019	1.00	79.57	CS3	ATOM	3752	N	PHE	201	194.098	138.050	16.780	1.00	49.31	CS3
ATOM	3700	CE2	TYR	193	188.609	117.646	23.882	1.00	79.57	CS3	ATOM	3753	CA	PHE	201	194.667	139.179	16.049	1.00	49.31	CS3
ATOM	3701	CZ	TYR	193	189.180	118.707	23.196	1.00	79.57	CS3	ATOM	3754	CB	PHE	201	194.860	138.858	14.550	1.00	63.75	CS3
ATOM	3702	OH	TYR	193	188.471	119.879	23.045	1.00	79.57	CS3	ATOM	3755	CG	PHE	201	195.924	137.823	14.256	1.00	63.75	CS3
ATOM	3703	C	TYR	193	193.719	115.654	24.139	1.00	86.87	CS3	ATOM	3756	CD1	PHE	201	195.697	136.468	14.511	1.00	63.75	CS3
ATOM	3704	O	TYR	193	194.309	115.163	23.181	1.00	86.87	CS3	ATOM	3757	CD2	PHE	201	197.151	138.207	13.709	1.00	63.75	CS3
ATOM	3705	N	GLY	194	194.144	116.754	24.757	1.00	55.31	CS3	ATOM	3758	CE1	PHE	201	196.681	135.507	14.222	1.00	63.75	CS3
ATOM	3706	CA	GLY	194	195.364	117.409	24.317	1.00	55.31	CS3	ATOM	3759	CE2	PHE	201	198.140	137.255	13.418	1.00	63.75	CS3
ATOM	3707	C	GLY	194	195.354	118.920	24.152	1.00	55.31	CS3	ATOM	3760	CZ	PHE	201	197.904	135.903	13.674	1.00	63.75	CS3
ATOM	3708	O	GLY	194	194.307	119.569	24.208	1.00	55.31	CS3	ATOM	3761	C	PHE	201	193.691	140.338	16.137	1.00	49.31	CS3
ATOM	3709	N	VAL	195	196.548	119.469	23.927	1.00	53.39	CS3	ATOM	3762	O	PHE	201	192.526	140.184	15.763	1.00	49.31	CS3
ATOM	3710	CA	VAL	195	196.753	120.903	23.754	1.00	53.39	CS3	ATOM	3763	N	ILE	202	194.140	141.494	16.620	1.00	53.46	CS3
ATOM	3711	CB	VAL	195	198.256	121.235	23.679	1.00	102.70	CS3	ATOM	3764	CA	ILE	202	193.240	142.649	16.673	1.00	53.46	CS3
ATOM	3712	CG1	VAL	195	198.451	122.715	23.398	1.00	102.70	CS3	ATOM	3765	CB	ILE	202	192.872	143.036	18.123	1.00	66.90	CS3
ATOM	3713	CG2	VAL	195	198.940	120.845	24.972	1.00	102.70	CS3	ATOM	3766	CG2	ILE	202	191.698	144.026	18.096	1.00	66.90	CS3
ATOM	3714	C	VAL	195	196.107	121.435	22.488	1.00	53.39	CS3	ATOM	3767	CG1	ILE	202	192.491	141.779	18.921	1.00	66.90	CS3
ATOM	3715	O	VAL	195	196.130	120.772	21.460	1.00	53.39	CS3	ATOM	3768	CD1	ILE	202	191.983	142.048	20.328	1.00	66.90	CS3
ATOM	3716	N	LEU	196	195.525	122.628	22.563	1.00	44.88	CS3	ATOM	3769	C	ILE	202	193.845	143.857	15.965	1.00	53.46	CS3
ATOM	3717	CA	LEU	196	194.916	123.248	21.393	1.00	44.88	CS3	ATOM	3770	O	ILE	202	194.986	144.235	16.211	1.00	53.46	CS3
ATOM	3718	CB	LEU	196	193.396	123.025	21.362	1.00	48.09	CS3	ATOM	3771	N	PHE	203	193.073	144.457	15.076	1.00	72.24	CS3
ATOM	3719	CG	LEU	196	192.762	121.695	21.822	1.00	48.09	CS3	ATOM	3772	CA	PHE	203	193.553	145.602	14.322	1.00	72.24	CS3
ATOM	3720	CD1	LEU	196	191.343	121.655	21.272	1.00	48.09	CS3	ATOM	3773	CB	PHE	203	193.107	145.460	12.865	1.00	33.00	CS3
ATOM	3721	CD2	LEU	196	193.516	120.459	21.334	1.00	48.09	CS3	ATOM	3774	CG	PHE	203	193.525	146.590	11.986	1.00	33.00	CS3
ATOM	3722	C	LEU	196	195.224	124.744	21.453	1.00	44.88	CS3	ATOM	3775	CD1	PHE	203	194.802	147.127	12.079	1.00	33.00	CS3
ATOM	3723	O	LEU	196	194.638	125.475	22.243	1.00	44.88	CS3	ATOM	3776	CD2	PHE	203	192.656	147.086	11.021	1.00	33.00	CS3
ATOM	3724	N	GLY	197	196.154	125.194	20.622	1.00	47.56	CS3	ATOM	3777	CE1	PHE	203	195.219	148.147	11.214	1.00	33.00	CS3
ATOM	3725	CA	GLY	197	196.529	126.596	20.622	1.00	47.56	CS3	ATOM	3778	CE2	PHE	203	193.056	148.106	10.146	1.00	33.00	CS3
ATOM	3726	C	GLY	197	195.460	127.563	20.144	1.00	47.56	CS3	ATOM	3779	CZ	PHE	203	194.344	148.638	10.244	1.00	33.00	CS3
ATOM	3727	O	GLY	197	194.628	127.216	19.298	1.00	47.56	CS3	ATOM	3780	C	PHE	203	193.045	146.913	14.919	1.00	72.24	CS3
ATOM	3728	N	VAL	198	195.489	128.786	20.683	1.00	49.03	CS3	ATOM	3781	O	PHE	203	191.857	147.044	15.221	1.00	72.24	CS3

ATOM	3782	N	LEU	204	193.954	147.875	15.087	1.00	88.70	CS3	ATOM	3835	O	ASP	4	251.932	125.646	2.533	1.00	66.01	VTHX
ATOM	3783	CA	LEU	204	193.625	149.186	15.656	1.00	88.70	CS3	ATOM	3836	N	ARG	5	251.553	123.689	3.590	1.00	90.59	VTHX
ATOM	3784	CB	LEU	204	194.210	149.317	17.060	1.00	52.47	CS3	ATOM	3837	CA	ARG	5	251.648	124.310	4.897	1.00	90.59	VTHX
ATOM	3785	CG	LEU	204	194.088	148.119	17.993	1.00	52.47	CS3	ATOM	3838	CB	ARG	5	251.246	123.323	6.004	1.00	98.33	VTHX
ATOM	3786	CD1	LEU	204	195.019	148.283	19.189	1.00	52.47	CS3	ATOM	3839	CG	ARG	5	252.341	122.516	6.663	1.00	98.33	VTHX
ATOM	3787	CD2	LEU	204	192.648	147.982	18.437	1.00	52.47	CS3	ATOM	3840	CD	ARG	5	251.886	122.202	8.096	1.00	98.33	VTHX
ATOM	3788	C	LEU	204	194.211	150.303	14.804	1.00	88.70	CS3	ATOM	3841	NE	ARG	5	252.668	121.181	8.802	1.00	98.33	VTHX
ATOM	3789	O	LEU	204	195.405	150.300	14.500	1.00	88.70	CS3	ATOM	3842	CZ	ARG	5	252.473	120.831	10.077	1.00	98.33	VTHX
ATOM	3790	N	GLY	205	193.379	151.266	14.436	1.00	114.70	CS3	ATOM	3843	NH1	ARG	5	251.525	121.418	10.805	1.00	98.33	VTHX
ATOM	3791	CA	GLY	205	193.857	152.382	13.635	1.00	114.70	CS3	ATOM	3844	NH2	ARG	5	253.217	119.879	10.628	1.00	98.33	VTHX
ATOM	3792	C	GLY	205	194.825	152.046	12.504	1.00	114.70	CS3	ATOM	3845	C	ARG	5	252.992	124.957	5.183	1.00	90.59	VTHX
ATOM	3793	O	GLY	205	194.478	151.333	11.561	1.00	114.70	CS3	ATOM	3846	O	ARG	5	253.156	125.625	6.199	1.00	90.59	VTHX
ATOM	3794	N	GLU	206	196.045	152.565	12.595	1.00	83.65	CS3	ATOM	3847	N	ARG	6	253.954	124.789	4.282	1.00	79.50	VTHX
ATOM	3795	CA	GLU	206	197.049	152.335	11.572	1.00	83.65	CS3	ATOM	3848	CA	ARG	6	255.247	125.417	4.494	1.00	79.50	VTHX
ATOM	3796	CB	GLU	206	196.438	152.562	10.182	1.00	99.58	CS3	ATOM	3849	CB	ARG	6	256.353	124.368	4.691	1.00	63.83	VTHX
ATOM	3797	CG	GLU	206	197.268	152.034	9.013	1.00	99.58	CS3	ATOM	3850	CG	ARG	6	256.658	123.504	3.498	1.00	63.83	VTHX
ATOM	3798	CD	GLU	206	196.496	152.026	7.696	1.00	99.58	CS3	ATOM	3851	CD	ARG	6	257.983	122.751	3.688	1.00	63.83	VTHX
ATOM	3799	OE1	GLU	206	197.090	151.675	6.650	1.00	99.58	CS3	ATOM	3852	NE	ARG	6	257.884	121.573	4.549	1.00	63.83	VTHX
ATOM	3800	OE2	GLU	206	195.292	152.366	7.711	1.00	99.58	CS3	ATOM	3853	CZ	ARG	6	258.819	120.628	4.625	1.00	63.83	VTHX
ATOM	3801	C	GLU	206	198.247	153.267	11.789	1.00	83.65	CS3	ATOM	3854	NH1	ARG	6	259.925	120.723	3.899	1.00	63.83	VTHX
ATOM	3802	O	GLU	206	199.027	153.057	12.725	1.00	83.65	CS3	ATOM	3855	NH2	ARG	6	258.639	119.570	5.405	1.00	63.83	VTHX
ATOM	3803	N	VAL	207	198.368	154.296	10.942	1.00	94.28	CS3	ATOM	3856	C	ARG	6	255.601	126.401	3.377	1.00	79.50	VTHX
ATOM	3804	CA	VAL	207	199.479	155.271	10.966	1.00	94.28	CS3	ATOM	3857	O	ARG	6	256.642	126.300	2.720	1.00	79.50	VTHX
ATOM	3805	CB	VAL	207	198.956	156.726	10.755	1.00	66.20	CS3	ATOM	3858	N	THR	7	254.699	127.356	3.172	1.00	49.74	VTHX
ATOM	3806	CG1	VAL	207	200.110	157.730	10.877	1.00	66.20	CS3	ATOM	3859	CA	THR	7	254.881	128.426	2.190	1.00	49.74	VTHX
ATOM	3807	CG2	VAL	207	198.286	156.846	9.386	1.00	66.20	CS3	ATOM	3860	CB	THR	7	254.410	128.009	0.752	1.00	61.36	VTHX
ATOM	3808	C	VAL	207	200.408	155.271	12.189	1.00	94.28	CS3	ATOM	3861	OG1	THR	7	253.095	127.435	0.794	1.00	61.36	VTHX
ATOM	3809	O	VAL	207	199.916	155.113	13.325	1.00	94.28	CS3	ATOM	3862	CG2	THR	7	255.365	127.008	0.166	1.00	61.36	VTHX
ATOM	3810	OXT	VAL	207	201.632	155.455	11.988	1.00	66.20	CS3	ATOM	3863	C	THR	7	254.102	129.663	2.667	1.00	49.74	VTHX
ATOM	3811	C	GLY	1	249.054	126.672	-1.907	1.00	58.92	VTHX	ATOM	3864	O	THR	7	253.359	129.596	3.647	1.00	49.74	VTHX
ATOM	3812	O	GLY	1	249.672	126.378	-0.879	1.00	58.92	VTHX	ATOM	3865	N	ARG	8	254.281	130.791	1.990	1.00	68.27	VTHX
ATOM	3813	N	GLY	1	250.766	125.438	-3.200	1.00	58.92	VTHX	ATOM	3866	CA	ARG	8	253.583	132.011	2.373	1.00	68.27	VTHX
ATOM	3814	CA	GLY	1	249.702	126.485	-3.259	1.00	58.92	VTHX	ATOM	3867	CB	ARG	8	253.917	133.133	1.382	1.00	119.50	VTHX
ATOM	3815	N	LYS	2	247.812	127.150	-1.898	1.00	72.02	VTHX	ATOM	3868	CG	ARG	8	253.622	134.539	1.881	1.00	119.50	VTHX
ATOM	3816	CA	LYS	2	247.093	127.384	-0.649	1.00	72.02	VTHX	ATOM	3869	CD	ARG	8	254.515	134.909	3.059	1.00	119.50	VTHX
ATOM	3817	CB	LYS	2	245.616	127.689	-0.913	1.00	55.41	VTHX	ATOM	3870	NE	ARG	8	254.246	136.260	3.547	1.00	119.50	VTHX
ATOM	3818	CG	LYS	2	245.360	128.998	-1.633	1.00	55.41	VTHX	ATOM	3871	CZ	ARG	8	254.790	136.787	4.641	1.00	119.50	VTHX
ATOM	3819	CD	LYS	2	243.877	129.200	-1.893	1.00	55.41	VTHX	ATOM	3872	NH1	ARG	8	255.642	136.077	5.372	1.00	119.50	VTHX
ATOM	3820	CE	LYS	2	243.637	130.284	-2.952	1.00	55.41	VTHX	ATOM	3873	NH2	ARG	8	254.480	138.026	5.004	1.00	119.50	VTHX
ATOM	3821	NZ	LYS	2	242.188	130.399	-3.364	1.00	55.41	VTHX	ATOM	3874	C	ARG	8	252.070	131.749	2.385	1.00	68.27	VTHX
ATOM	3822	C	LYS	2	247.186	126.192	0.285	1.00	72.02	VTHX	ATOM	3875	O	ARG	8	251.420	131.843	3.433	1.00	68.27	VTHX
ATOM	3823	O	LYS	2	246.873	126.297	1.468	1.00	72.02	VTHX	ATOM	3876	N	ARG	9	251.526	131.403	1.216	1.00	65.13	VTHX
ATOM	3824	N	GLY	3	247.632	125.059	-0.238	1.00	40.92	VTHX	ATOM	3877	CA	ARG	9	250.101	131.128	1.065	1.00	65.13	VTHX
ATOM	3825	CA	GLY	3	247.715	123.877	0.592	1.00	40.92	VTHX	ATOM	3878	CB	ARG	9	249.781	130.823	-0.396	1.00	85.82	VTHX
ATOM	3826	C	GLY	3	249.058	123.493	1.173	1.00	40.92	VTHX	ATOM	3879	CG	ARG	9	249.919	132.042	-1.267	1.00	85.82	VTHX
ATOM	3827	O	GLY	3	249.094	122.666	2.084	1.00	40.92	VTHX	ATOM	3880	CD	ARG	9	249.546	131.788	-2.702	1.00	85.82	VTHX
ATOM	3828	N	ASP	4	250.154	124.044	0.650	1.00	66.01	VTHX	ATOM	3881	NE	ARG	9	249.666	133.020	-3.478	1.00	85.82	VTHX
ATOM	3829	CA	ASP	4	251.496	123.724	1.158	1.00	66.01	VTHX	ATOM	3882	CZ	ARG	9	249.376	133.130	-4.771	1.00	85.82	VTHX
ATOM	3830	CB	ASP	4	252.568	124.210	0.181	1.00	121.64	VTHX	ATOM	3883	NH1	ARG	9	248.943	132.077	-5.454	1.00	85.82	VTHX
ATOM	3831	CG	ASP	4	253.938	123.623	0.476	1.00	121.64	VTHX	ATOM	3884	NH2	ARG	9	249.520	134.298	-5.385	1.00	85.82	VTHX
ATOM	3832	OD1	ASP	4	254.269	123.450	1.669	1.00	121.64	VTHX	ATOM	3885	C	ARG	9	249.633	129.992	1.951	1.00	65.13	VTHX
ATOM	3833	OD2	ASP	4	254.686	123.348	-0.489	1.00	121.64	VTHX	ATOM	3886	O	ARG	9	248.558	130.053	2.536	1.00	65.13	VTHX
ATOM	3834	C	ASP	4	251.673	124.436	2.495	1.00	66.01	VTHX	ATOM	3887	N	GLY	10	250.441	128.950	2.052	1.00	64.76	VTHX

ATOM	3888	CA	GLY	10	250.072	127.834	2.896	1.00	64.76	VTHX	ATOM	3941	CG2	THR	16	248.191	128.630	11.559	1.00	55.88	VTHX
ATOM	3889	C	GLY	10	249.845	128.289	4.324	1.00	64.76	VTHX	ATOM	3942	C	THR	16	250.350	131.649	10.653	1.00	68.42	VTHX
ATOM	3890	O	GLY	10	249.007	127.737	5.038	1.00	64.76	VTHX	ATOM	3943	O	THR	16	250.439	132.352	9.637	1.00	68.42	VTHX
ATOM	3891	N	LYS	11	250.593	129.301	4.750	1.00	73.06	VTHX	ATOM	3944	N	TYR	17	251.340	131.477	11.523	1.00	66.14	VTHX
ATOM	3892	CA	LYS	11	250.458	129.813	6.107	1.00	73.06	VTHX	ATOM	3945	CA	TYR	17	252.641	132.089	11.366	1.00	66.14	VTHX
ATOM	3893	CB	LYS	11	251.741	130.542	6.533	1.00	44.74	VTHX	ATOM	3946	CB	TYR	17	252.775	133.287	12.287	1.00	50.40	VTHX
ATOM	3894	CG	LYS	11	252.559	129.809	7.600	1.00	44.74	VTHX	ATOM	3947	CG	TYR	17	251.821	134.398	11.961	1.00	50.40	VTHX
ATOM	3895	CD	LYS	11	252.908	128.403	7.147	1.00	44.74	VTHX	ATOM	3948	CD1	TYR	17	250.578	134.475	12.577	1.00	50.40	VTHX
ATOM	3896	CE	LYS	11	253.917	127.729	8.059	1.00	44.74	VTHX	ATOM	3949	CE1	TYR	17	249.698	135.508	12.285	1.00	50.40	VTHX
ATOM	3897	NZ	LYS	11	253.368	127.469	9.402	1.00	44.74	VTHX	ATOM	3950	CD2	TYR	17	252.164	135.382	11.035	1.00	50.40	VTHX
ATOM	3898	C	LYS	11	249.260	130.748	6.193	1.00	73.06	VTHX	ATOM	3951	CE2	TYR	17	251.295	136.419	10.730	1.00	50.40	VTHX
ATOM	3899	O	LYS	11	248.485	130.689	7.144	1.00	73.06	VTHX	ATOM	3952	CZ	TYR	17	250.061	136.479	11.361	1.00	50.40	VTHX
ATOM	3900	N	ILE	12	249.113	131.605	5.190	1.00	45.07	VTHX	ATOM	3953	OH	TYR	17	249.199	137.515	11.079	1.00	50.40	VTHX
ATOM	3901	CA	ILE	12	248.001	132.544	5.153	1.00	45.07	VTHX	ATOM	3954	C	TYR	17	253.696	131.071	11.721	1.00	66.14	VTHX
ATOM	3902	CB	ILE	12	248.059	133.439	3.899	1.00	36.63	VTHX	ATOM	3955	O	TYR	17	253.455	130.166	12.520	1.00	66.14	VTHX
ATOM	3903	CG2	ILE	12	246.855	134.363	3.857	1.00	36.63	VTHX	ATOM	3956	N	GLY	18	254.869	131.226	11.122	1.00	75.01	VTHX
ATOM	3904	CG1	ILE	12	249.350	134.246	3.890	1.00	36.63	VTHX	ATOM	3957	CA	GLY	18	255.962	130.310	11.379	1.00	75.01	VTHX
ATOM	3905	CD1	ILE	12	249.499	135.114	2.660	1.00	36.63	VTHX	ATOM	3958	C	GLY	18	257.186	130.749	10.609	1.00	75.01	VTHX
ATOM	3906	C	ILE	12	246.674	131.797	5.119	1.00	45.07	VTHX	ATOM	3959	O	GLY	18	257.321	131.924	10.264	1.00	75.01	VTHX
ATOM	3907	O	ILE	12	245.720	132.177	5.793	1.00	45.07	VTHX	ATOM	3960	N	LYS	19	258.080	129.811	10.323	1.00	75.98	VTHX
ATOM	3908	N	TRP	13	246.618	130.739	4.319	1.00	68.82	VTHX	ATOM	3961	CA	LYS	19	259.279	130.164	9.595	1.00	75.98	VTHX
ATOM	3909	CA	TRP	13	245.405	129.950	4.177	1.00	68.82	VTHX	ATOM	3962	CB	LYS	19	260.248	128.983	9.522	1.00	74.03	VTHX
ATOM	3910	CB	TRP	13	245.613	128.838	3.153	1.00	63.05	VTHX	ATOM	3963	CG	LYS	19	261.608	129.389	8.952	1.00	74.03	VTHX
ATOM	3911	CG	TRP	13	244.336	128.186	2.713	1.00	63.05	VTHX	ATOM	3964	CD	LYS	19	262.654	128.293	9.053	1.00	74.03	VTHX
ATOM	3912	CD2	TRP	13	243.751	126.995	3.250	1.00	63.05	VTHX	ATOM	3965	CE	LYS	19	262.454	127.233	8.000	1.00	74.03	VTHX
ATOM	3913	CE2	TRP	13	242.549	126.771	2.554	1.00	63.05	VTHX	ATOM	3966	NZ	LYS	19	263.559	126.253	8.076	1.00	74.03	VTHX
ATOM	3914	CE3	TRP	13	244.127	126.095	4.255	1.00	63.05	VTHX	ATOM	3967	C	LYS	19	258.954	130.636	8.191	1.00	75.98	VTHX
ATOM	3915	CD1	TRP	13	243.488	128.624	1.740	1.00	63.05	VTHX	ATOM	3968	O	LYS	19	259.793	131.259	7.542	1.00	75.98	VTHX
ATOM	3916	NE1	TRP	13	242.413	127.780	1.638	1.00	63.05	VTHX	ATOM	3969	N	TYR	20	257.738	130.359	7.723	1.00	91.93	VTHX
ATOM	3917	CZ2	TRP	13	241.720	125.688	2.827	1.00	63.05	VTHX	ATOM	3970	CA	TYR	20	257.358	130.754	6.373	1.00	91.93	VTHX
ATOM	3918	CZ3	TRP	13	243.303	125.018	4.527	1.00	63.05	VTHX	ATOM	3971	CB	TYR	20	256.745	129.571	5.654	1.00	54.49	VTHX
ATOM	3919	CH2	TRP	13	242.114	124.823	3.815	1.00	63.05	VTHX	ATOM	3972	CG	TYR	20	257.740	128.457	5.489	1.00	54.49	VTHX
ATOM	3920	C	TRP	13	245.028	129.333	5.507	1.00	68.82	VTHX	ATOM	3973	CD1	TYR	20	257.868	127.464	6.461	1.00	54.49	VTHX
ATOM	3921	O	TRP	13	243.860	129.332	5.897	1.00	68.82	VTHX	ATOM	3974	CE1	TYR	20	258.854	126.483	6.360	1.00	54.49	VTHX
ATOM	3922	N	ARG	14	246.021	128.793	6.198	1.00	54.91	VTHX	ATOM	3975	CD2	TYR	20	258.621	128.439	4.402	1.00	54.49	VTHX
ATOM	3923	CA	ARG	14	245.766	128.173	7.484	1.00	54.91	VTHX	ATOM	3976	CE2	TYR	20	259.613	127.467	4.294	1.00	54.49	VTHX
ATOM	3924	CB	ARG	14	246.840	127.128	7.792	1.00	61.75	VTHX	ATOM	3977	CZ	TYR	20	259.725	126.496	5.278	1.00	54.49	VTHX
ATOM	3925	CG	ARG	14	246.497	125.727	7.334	1.00	61.75	VTHX	ATOM	3978	OH	TYR	20	260.735	125.564	5.210	1.00	54.49	VTHX
ATOM	3926	CD	ARG	14	247.560	124.778	7.830	1.00	61.75	VTHX	ATOM	3979	C	TYR	20	256.454	131.966	6.241	1.00	91.93	VTHX
ATOM	3927	NE	ARG	14	247.173	123.365	7.803	1.00	61.75	VTHX	ATOM	3980	O	TYR	20	256.227	132.463	5.139	1.00	91.93	VTHX
ATOM	3928	CZ	ARG	14	247.982	122.365	8.166	1.00	61.75	VTHX	ATOM	3981	N	ARG	21	255.943	132.443	7.366	1.00	93.46	VTHX
ATOM	3929	NH1	ARG	14	249.218	122.614	8.578	1.00	61.75	VTHX	ATOM	3982	CA	ARG	21	255.088	133.620	7.384	1.00	93.46	VTHX
ATOM	3930	NH2	ARG	14	247.554	121.111	8.130	1.00	61.75	VTHX	ATOM	3983	CB	ARG	21	253.621	133.235	7.176	1.00	56.34	VTHX
ATOM	3931	C	ARG	14	245.699	129.214	8.600	1.00	54.91	VTHX	ATOM	3984	CG	ARG	21	252.672	134.425	6.987	1.00	56.34	VTHX
ATOM	3932	O	ARG	14	245.504	128.872	9.768	1.00	54.91	VTHX	ATOM	3985	CD	ARG	21	251.259	134.095	7.459	1.00	56.34	VTHX
ATOM	3933	N	GLY	15	245.852	130.484	8.234	1.00	69.21	VTHX	ATOM	3986	NE	ARG	21	250.318	135.187	7.224	1.00	56.34	VTHX
ATOM	3934	CA	GLY	15	245.802	131.556	9.216	1.00	69.21	VTHX	ATOM	3987	CZ	ARG	21	249.079	135.221	7.711	1.00	56.34	VTHX
ATOM	3935	C	GLY	15	246.779	131.354	10.358	1.00	69.21	VTHX	ATOM	3988	NH1	ARG	21	248.625	134.222	8.467	1.00	56.34	VTHX
ATOM	3936	O	GLY	15	246.411	131.407	11.530	1.00	69.21	VTHX	ATOM	3989	NH2	ARG	21	248.289	136.251	7.434	1.00	56.34	VTHX
ATOM	3937	N	THR	16	248.037	131.114	10.009	1.00	68.42	VTHX	ATOM	3990	C	ARG	21	255.281	134.177	8.779	1.00	93.46	VTHX
ATOM	3938	CA	THR	16	249.068	130.905	11.007	1.00	68.42	VTHX	ATOM	3991	O	ARG	21	254.374	134.134	9.606	1.00	93.46	VTHX
ATOM	3939	CB	THR	16	249.409	129.415	11.156	1.00	55.88	VTHX	ATOM	3992	N	PRO	22	256.483	134.693	9.067	1.00	116.10	VTHX
ATOM	3940	OG1	THR	16	249.895	128.916	9.908	1.00	55.88	VTHX	ATOM	3993	CD	PRO	22	257.644	134.834	8.176	1.00	68.58	VTHX

ATOM	3994	CA	PRO	22	256.771	135.248	10.391	1.00116.10	VTHX	ATOM	4047	CG2	ILE	4	107.542	76.464	11.136	1.00 35.36	PS16
ATOM	3995	CB	PRO	22	258.256	135.601	10.305	1.00 68.58	VTHX	ATOM	4048	CG1	ILE	4	106.582	75.350	9.085	1.00 35.36	PS16
ATOM	3996	CG	PRO	22	258.771	134.750	9.154	1.00 68.58	VTHX	ATOM	4049	CD1	ILE	4	105.150	75.861	9.312	1.00 35.36	PS16
ATOM	3997	C	PRO	22	255.904	136.467	10.672	1.00116.10	VTHX	ATOM	4050	C	ILE	4	109.534	74.220	11.249	1.00 38.96	PS16
ATOM	3998	O	PRO	22	255.287	137.019	9.759	1.00116.10	VTHX	ATOM	4051	O	ILE	4	108.998	73.466	12.055	1.00 38.96	PS16
ATOM	3999	N	ARG	23	255.856	136.882	11.935	1.00 98.48	VTHX	ATOM	4052	N	ARG	5	110.768	74.680	11.404	1.00 39.16	PS16
ATOM	4000	CA	ARG	23	255.064	138.043	12.326	1.00 98.48	VTHX	ATOM	4053	CA	ARG	5	111.550	74.298	12.575	1.00 39.16	PS16
ATOM	4001	CB	ARG	23	255.112	138.213	13.838	1.00104.12	VTHX	ATOM	4054	CB	ARG	5	112.338	73.021	12.270	1.00 55.46	PS16
ATOM	4002	CG	ARG	23	254.432	137.093	14.566	1.00104.12	VTHX	ATOM	4055	CG	ARG	5	113.513	73.227	11.341	1.00 55.46	PS16
ATOM	4003	CD	ARG	23	252.986	136.994	14.140	1.00104.12	VTHX	ATOM	4056	CD	ARG	5	113.873	71.945	10.630	1.00 55.46	PS16
ATOM	4004	NE	ARG	23	252.335	135.862	14.783	1.00104.12	VTHX	ATOM	4057	NE	ARG	5	115.169	72.024	9.958	1.00 55.46	PS16
ATOM	4005	CZ	ARG	23	252.092	135.784	16.087	1.00104.12	VTHX	ATOM	4058	CZ	ARG	5	115.572	71.192	8.998	1.00 55.46	PS16
ATOM	4006	NH1	ARG	23	252.441	136.784	16.887	1.00104.12	VTHX	ATOM	4059	NH1	ARG	5	114.783	70.209	8.584	1.00 55.46	PS16
ATOM	4007	NH2	ARG	23	251.518	134.699	16.595	1.00104.12	VTHX	ATOM	4060	NH2	ARG	5	116.768	71.346	8.450	1.00 55.46	PS16
ATOM	4008	C	ARG	23	255.525	139.329	11.643	1.00 98.48	VTHX	ATOM	4061	C	ARG	5	112.515	75.379	13.018	1.00 39.16	PS16
ATOM	4009	O	ARG	23	254.696	140.110	11.172	1.00 98.48	VTHX	ATOM	4062	O	ARG	5	112.551	76.461	12.444	1.00 39.16	PS16
ATOM	4010	N	LYS	24	256.844	139.534	11.611	1.00128.87	VTHX	ATOM	4063	N	LEU	6	113.299	75.063	14.038	1.00 48.70	PS16
ATOM	4011	CA	LYS	24	257.492	140.693	10.980	1.00128.87	VTHX	ATOM	4064	CA	LEU	6	114.287	75.986	14.568	1.00 48.70	PS16
ATOM	4012	CB	LYS	24	256.638	141.958	11.121	1.00124.00	VTHX	ATOM	4065	CB	LEU	6	114.432	75.782	16.078	1.00 52.65	PS16
ATOM	4013	CG	LYS	24	255.760	142.230	9.908	1.00124.00	VTHX	ATOM	4066	CG	LEU	6	113.303	76.344	16.946	1.00 52.65	PS16
ATOM	4014	CD	LYS	24	254.916	143.469	10.092	1.00124.00	VTHX	ATOM	4067	CD1	LEU	6	111.955	75.867	16.423	1.00 52.65	PS16
ATOM	4015	CE	LYS	24	254.059	143.715	8.867	1.00124.00	VTHX	ATOM	4068	CD2	LEU	6	113.522	75.930	18.391	1.00 52.65	PS16
ATOM	4016	NZ	LYS	24	253.304	144.991	8.983	1.00124.00	VTHX	ATOM	4069	C	LEU	6	115.645	75.801	13.890	1.00 48.70	PS16
ATOM	4017	C	LYS	24	258.888	140.962	11.537	1.00128.87	VTHX	ATOM	4070	O	LEU	6	115.953	74.717	13.388	1.00 48.70	PS16
ATOM	4018	O	LYS	24	259.302	140.231	12.460	1.00128.87	VTHX	ATOM	4071	N	ALA	7	116.441	76.871	13.867	1.00 36.37	PS16
ATOM	4019	OXT	LYS	24	259.553	141.898	11.040	1.00152.93	VTHX	ATOM	4072	CA	ALA	7	117.778	76.855	13.270	1.00 36.37	PS16
ATOM	4020	CB	MET	1	108.430	66.330	3.916	1.00 56.67	PS16	ATOM	4073	CB	ALA	7	117.765	77.617	11.984	1.00 9.90	PS16
ATOM	4021	CG	MET	1	107.179	66.876	4.555	1.00 56.67	PS16	ATOM	4074	C	ALA	7	118.740	77.504	14.259	1.00 36.37	PS16
ATOM	4022	SD	MET	1	106.867	66.033	6.107	1.00 56.67	PS16	ATOM	4075	O	ALA	7	118.623	78.687	14.582	1.00 36.37	PS16
ATOM	4023	CE	MET	1	108.193	66.733	7.106	1.00 56.67	PS16	ATOM	4076	N	ARG	8	119.683	76.724	14.761	1.00 61.71	PS16
ATOM	4024	C	MET	1	109.422	68.581	3.634	1.00 77.35	PS16	ATOM	4077	CA	ARG	8	120.636	77.236	15.733	1.00 61.71	PS16
ATOM	4025	O	MET	1	110.270	68.602	4.524	1.00 77.35	PS16	ATOM	4078	CB	ARG	8	121.625	76.150	16.124	1.00 48.05	PS16
ATOM	4026	N	MET	1	110.336	66.686	2.392	1.00 77.35	PS16	ATOM	4079	CG	ARG	8	121.560	75.754	17.562	1.00 48.05	PS16
ATOM	4027	CA	MET	1	109.080	67.282	2.927	1.00 77.35	PS16	ATOM	4080	CD	ARG	8	122.413	76.637	18.442	1.00 48.05	PS16
ATOM	4028	N	VAL	2	108.749	69.657	3.243	1.00 52.59	PS16	ATOM	4081	NE	ARG	8	122.452	76.094	19.796	1.00 48.05	PS16
ATOM	4029	CA	VAL	2	109.004	70.971	3.820	1.00 52.59	PS16	ATOM	4082	CZ	ARG	8	123.412	76.357	20.674	1.00 48.05	PS16
ATOM	4030	CB	VAL	2	108.346	72.069	2.970	1.00 59.16	PS16	ATOM	4083	NH1	ARG	8	124.414	77.163	20.331	1.00 48.05	PS16
ATOM	4031	CG1	VAL	2	107.015	71.569	2.432	1.00 59.16	PS16	ATOM	4084	NH2	ARG	8	123.387	75.802	21.882	1.00 48.05	PS16
ATOM	4032	CG2	VAL	2	108.165	73.334	3.797	1.00 59.16	PS16	ATOM	4085	C	ARG	8	121.398	78.407	15.173	1.00 61.71	PS16
ATOM	4033	C	VAL	2	108.546	71.095	5.262	1.00 52.59	PS16	ATOM	4086	O	ARG	8	122.163	78.255	14.223	1.00 61.71	PS16
ATOM	4034	O	VAL	2	107.417	70.743	5.604	1.00 52.59	PS16	ATOM	4087	N	PHE	9	121.197	79.579	15.761	1.00 49.33	PS16
ATOM	4035	N	LYS	3	109.435	71.606	6.105	1.00 44.06	PS16	ATOM	4088	CA	PHE	9	121.904	80.760	15.301	1.00 49.33	PS16
ATOM	4036	CA	LYS	3	109.133	71.769	7.515	1.00 44.06	PS16	ATOM	4089	CB	PHE	9	120.953	81.686	14.563	1.00 46.65	PS16
ATOM	4037	CB	LYS	3	110.052	70.875	8.339	1.00 63.83	PS16	ATOM	4090	CG	PHE	9	121.065	81.587	13.093	1.00 46.65	PS16
ATOM	4038	CG	LYS	3	109.795	69.391	8.203	1.00 63.83	PS16	ATOM	4091	CD1	PHE	9	122.068	82.258	12.425	1.00 46.65	PS16
ATOM	4039	CD	LYS	3	110.286	68.710	9.466	1.00 63.83	PS16	ATOM	4092	CD2	PHE	9	120.201	80.781	12.375	1.00 46.65	PS16
ATOM	4040	CE	LYS	3	110.497	67.225	9.285	1.00 63.83	PS16	ATOM	4093	CE1	PHE	9	122.213	82.133	11.053	1.00 46.65	PS16
ATOM	4041	NZ	LYS	3	111.212	66.646	10.461	1.00 63.83	PS16	ATOM	4094	CE2	PHE	9	120.330	80.641	11.001	1.00 46.65	PS16
ATOM	4042	C	LYS	3	109.231	73.195	8.068	1.00 44.06	PS16	ATOM	4095	CZ	PHE	9	121.343	81.319	10.336	1.00 46.65	PS16
ATOM	4043	O	LYS	3	109.718	74.116	7.412	1.00 44.06	PS16	ATOM	4096	C	PHE	9	122.576	81.514	16.424	1.00 49.33	PS16
ATOM	4044	N	ILE	4	108.737	73.362	9.288	1.00 38.96	PS16	ATOM	4097	O	PHE	9	123.235	82.523	16.187	1.00 49.33	PS16
ATOM	4045	CA	ILE	4	108.803	74.630	9.994	1.00 38.96	PS16	ATOM	4098	N	GLY	10	122.436	81.018	17.645	1.00 31.91	PS16
ATOM	4046	CB	ILE	4	107.412	75.160	10.363	1.00 35.36	PS16	ATOM	4099	CA	GLY	10	123.033	81.718	18.763	1.00 31.91	PS16

ATOM	4100	C	GLY	10	124.546	81.810	18.755	1.00	31.91	PS16	ATOM	4153	CA	TYR	17	116.942	79.877	17.050	1.00	39.90	PS16
ATOM	4101	O	GLY	10	125.161	82.480	17.925	1.00	31.91	PS16	ATOM	4154	CB	TYR	17	116.056	78.719	17.487	1.00	60.15	PS16
ATOM	4102	N	SER	11	125.129	81.124	19.727	1.00	58.11	PS16	ATOM	4155	CG	TYR	17	116.721	77.816	18.485	1.00	60.15	PS16
ATOM	4103	CA	SER	11	126.562	81.047	19.928	1.00	58.11	PS16	ATOM	4156	CD1	TYR	17	116.963	78.243	19.787	1.00	60.15	PS16
ATOM	4104	CB	SER	11	127.146	82.421	20.187	1.00	42.61	PS16	ATOM	4157	CE1	TYR	17	117.578	77.410	20.719	1.00	60.15	PS16
ATOM	4105	OG	SER	11	126.621	82.933	21.385	1.00	42.61	PS16	ATOM	4158	CD2	TYR	17	117.114	76.534	18.134	1.00	60.15	PS16
ATOM	4106	C	SER	11	126.690	80.180	21.168	1.00	58.11	PS16	ATOM	4159	CE2	TYR	17	117.730	75.692	19.058	1.00	60.15	PS16
ATOM	4107	O	SER	11	125.694	79.873	21.819	1.00	58.11	PS16	ATOM	4160	CZ	TYR	17	117.957	76.135	20.348	1.00	60.15	PS16
ATOM	4108	N	LYS	12	127.908	79.786	21.503	1.00	59.78	PS16	ATOM	4161	OH	TYR	17	118.551	75.297	21.263	1.00	60.15	PS16
ATOM	4109	CA	LYS	12	128.103	78.915	22.646	1.00	59.78	PS16	ATOM	4162	C	TYR	17	116.176	80.788	16.111	1.00	39.90	PS16
ATOM	4110	CB	LYS	12	129.589	78.712	22.900	1.00	50.87	PS16	ATOM	4163	O	TYR	17	115.806	81.901	16.477	1.00	39.90	PS16
ATOM	4111	CG	LYS	12	130.005	77.288	23.228	1.00	50.87	PS16	ATOM	4164	N	ARG	18	115.956	80.313	14.891	1.00	44.11	PS16
ATOM	4112	CD	LYS	12	131.350	77.349	23.927	1.00	50.87	PS16	ATOM	4165	CA	ARG	18	115.210	81.067	13.902	1.00	44.11	PS16
ATOM	4113	CE	LYS	12	132.274	76.222	23.544	1.00	50.87	PS16	ATOM	4166	CB	ARG	18	116.091	81.473	12.725	1.00	57.71	PS16
ATOM	4114	NZ	LYS	12	133.597	76.422	24.211	1.00	50.87	PS16	ATOM	4167	CG	ARG	18	116.993	82.638	12.972	1.00	57.71	PS16
ATOM	4115	C	LYS	12	127.426	79.458	23.896	1.00	59.78	PS16	ATOM	4168	CD	ARG	18	117.601	83.113	11.665	1.00	57.71	PS16
ATOM	4116	O	LYS	12	127.691	80.581	24.338	1.00	59.78	PS16	ATOM	4169	NE	ARG	18	118.527	84.227	11.864	1.00	57.71	PS16
ATOM	4117	N	HIS	13	126.543	78.637	24.453	1.00	67.22	PS16	ATOM	4170	CZ	ARG	18	119.205	84.821	10.886	1.00	57.71	PS16
ATOM	4118	CA	HIS	13	125.801	78.977	25.654	1.00	67.22	PS16	ATOM	4171	NH1	ARG	18	119.064	84.414	9.632	1.00	57.71	PS16
ATOM	4119	CB	HIS	13	126.757	79.171	26.823	1.00	82.60	PS16	ATOM	4172	NH2	ARG	18	120.027	85.819	11.162	1.00	57.71	PS16
ATOM	4120	CG	HIS	13	127.439	77.910	27.239	1.00	82.60	PS16	ATOM	4173	C	ARG	18	114.105	80.192	13.366	1.00	44.11	PS16
ATOM	4121	CD2	HIS	13	128.750	77.617	27.410	1.00	82.60	PS16	ATOM	4174	O	ARG	18	114.368	79.279	12.595	1.00	44.11	PS16
ATOM	4122	ND1	HIS	13	126.746	76.752	27.519	1.00	82.60	PS16	ATOM	4175	N	ILE	19	112.871	80.452	13.768	1.00	33.73	PS16
ATOM	4123	CE1	HIS	13	127.601	75.798	27.844	1.00	82.60	PS16	ATOM	4176	CA	ILE	19	111.750	79.664	13.265	1.00	33.73	PS16
ATOM	4124	NE2	HIS	13	128.824	76.298	27.785	1.00	82.60	PS16	ATOM	4177	CB	ILE	19	110.419	80.184	13.842	1.00	47.72	PS16
ATOM	4125	C	HIS	13	124.930	80.199	25.496	1.00	67.22	PS16	ATOM	4178	CG2	ILE	19	109.240	79.626	13.061	1.00	47.72	PS16
ATOM	4126	O	HIS	13	124.466	80.753	26.482	1.00	67.22	PS16	ATOM	4179	CG1	ILE	19	110.366	79.830	15.332	1.00	47.72	PS16
ATOM	4127	N	ASN	14	124.699	80.601	24.252	1.00	35.64	PS16	ATOM	4180	CD1	ILE	19	109.092	80.216	16.025	1.00	47.72	PS16
ATOM	4128	CA	ASN	14	123.877	81.770	23.941	1.00	35.64	PS16	ATOM	4181	C	ILE	19	111.799	79.793	11.747	1.00	33.73	PS16
ATOM	4129	CB	ASN	14	124.767	82.998	23.698	1.00	83.85	PS16	ATOM	4182	O	ILE	19	111.591	80.869	11.193	1.00	33.73	PS16
ATOM	4130	CG	ASN	14	123.971	84.285	23.570	1.00	83.85	PS16	ATOM	4183	N	VAL	20	112.055	78.676	11.084	1.00	50.10	PS16
ATOM	4131	OD1	ASN	14	123.107	84.579	24.397	1.00	83.85	PS16	ATOM	4184	CA	VAL	20	112.238	78.673	9.648	1.00	50.10	PS16
ATOM	4132	ND2	ASN	14	124.268	85.067	22.534	1.00	83.85	PS16	ATOM	4185	CB	VAL	20	113.718	78.423	9.387	1.00	37.21	PS16
ATOM	4133	C	ASN	14	123.050	81.459	22.697	1.00	35.64	PS16	ATOM	4186	CG1	VAL	20	113.906	77.666	8.107	1.00	37.21	PS16
ATOM	4134	O	ASN	14	123.031	82.222	21.731	1.00	35.64	PS16	ATOM	4187	CG2	VAL	20	114.456	79.735	9.388	1.00	37.21	PS16
ATOM	4135	N	PRO	15	122.340	80.323	22.722	1.00	44.40	PS16	ATOM	4188	C	VAL	20	111.427	77.674	8.841	1.00	50.10	PS16
ATOM	4136	CD	PRO	15	122.019	79.608	23.966	1.00	37.49	PS16	ATOM	4189	O	VAL	20	110.980	76.665	9.368	1.00	50.10	PS16
ATOM	4137	CA	PRO	15	121.490	79.838	21.634	1.00	44.40	PS16	ATOM	4190	N	VAL	21	111.256	77.960	7.554	1.00	35.98	PS16
ATOM	4138	CB	PRO	15	120.857	78.601	22.231	1.00	37.49	PS16	ATOM	4191	CA	VAL	21	110.544	77.062	6.646	1.00	35.98	PS16
ATOM	4139	CG	PRO	15	120.664	79.031	23.638	1.00	37.49	PS16	ATOM	4192	CB	VAL	21	109.484	77.797	5.805	1.00	47.03	PS16
ATOM	4140	C	PRO	15	120.437	80.846	21.271	1.00	44.40	PS16	ATOM	4193	CG1	VAL	21	108.888	76.850	4.762	1.00	47.03	PS16
ATOM	4141	O	PRO	15	119.908	81.518	22.145	1.00	44.40	PS16	ATOM	4194	CG2	VAL	21	108.404	78.351	6.708	1.00	47.03	PS16
ATOM	4142	N	HIS	16	120.139	80.935	19.980	1.00	38.39	PS16	ATOM	4195	C	VAL	21	111.576	76.505	5.673	1.00	35.98	PS16
ATOM	4143	CA	HIS	16	119.119	81.831	19.438	1.00	38.39	PS16	ATOM	4196	O	VAL	21	111.949	77.180	4.716	1.00	35.98	PS16
ATOM	4144	CB	HIS	16	119.696	83.214	19.104	1.00	58.21	PS16	ATOM	4197	N	THR	22	112.035	75.280	5.901	1.00	60.21	PS16
ATOM	4145	CG	HIS	16	119.801	84.128	20.283	1.00	58.21	PS16	ATOM	4198	CA	THR	22	113.044	74.689	5.031	1.00	60.21	PS16
ATOM	4146	CD2	HIS	16	119.006	85.144	20.696	1.00	58.21	PS16	ATOM	4199	CB	THR	22	114.406	74.598	5.784	1.00	53.47	PS16
ATOM	4147	ND1	HIS	16	120.808	84.026	21.220	1.00	58.21	PS16	ATOM	4200	OG1	THR	22	115.412	74.077	4.907	1.00	53.47	PS16
ATOM	4148	CE1	HIS	16	120.630	84.938	22.160	1.00	58.21	PS16	ATOM	4201	CG2	THR	22	114.290	73.716	7.012	1.00	53.47	PS16
ATOM	4149	NE2	HIS	16	119.544	85.630	21.865	1.00	58.21	PS16	ATOM	4202	C	THR	22	112.624	73.307	4.543	1.00	60.21	PS16
ATOM	4150	C	HIS	16	118.631	81.170	18.165	1.00	38.39	PS16	ATOM	4203	O	THR	22	111.527	72.850	4.840	1.00	60.21	PS16
ATOM	4151	O	HIS	16	119.316	81.204	17.146	1.00	38.39	PS16	ATOM	4204	N	ASP	23	113.481	72.661	3.762	1.00	34.97	PS16
ATOM	4152	N	TYR	17	117.453	80.566	18.217	1.00	39.90	PS16	ATOM	4205	CA	ASP	23	113.206	71.309	3.274	1.00	34.97	PS16

ATOM	4206	CB	ASP	23	113.887	71.094	1.908	1.00	43.04	PS16
ATOM	4207	CG	ASP	23	113.716	69.677	1.365	1.00	43.04	PS16
ATOM	4208	OD1	ASP	23	114.258	68.712	1.954	1.00	43.04	PS16
ATOM	4209	OD2	ASP	23	113.044	69.522	0.334	1.00	43.04	PS16
ATOM	4210	C	ASP	23	113.794	70.377	4.358	1.00	34.97	PS16
ATOM	4211	O	ASP	23	114.880	70.627	4.875	1.00	34.97	PS16
ATOM	4212	N	ALA	24	113.071	69.315	4.704	1.00	44.37	PS16
ATOM	4213	CA	ALA	24	113.505	68.386	5.745	1.00	44.37	PS16
ATOM	4214	CB	ALA	24	112.587	67.173	5.768	1.00	127.48	PS16
ATOM	4215	C	ALA	24	114.946	67.935	5.611	1.00	44.37	PS16
ATOM	4216	O	ALA	24	115.635	67.710	6.609	1.00	44.37	PS16
ATOM	4217	N	ARG	25	115.407	67.825	4.373	1.00	42.11	PS16
ATOM	4218	CA	ARG	25	116.757	67.356	4.091	1.00	42.11	PS16
ATOM	4219	CB	ARG	25	116.783	66.813	2.664	1.00	40.26	PS16
ATOM	4220	CG	ARG	25	115.817	65.678	2.456	1.00	40.26	PS16
ATOM	4221	CD	ARG	25	115.642	65.301	0.998	1.00	40.26	PS16
ATOM	4222	NE	ARG	25	114.926	66.337	0.262	1.00	40.26	PS16
ATOM	4223	CZ	ARG	25	114.432	66.186	-0.963	1.00	40.26	PS16
ATOM	4224	NH1	ARG	25	114.567	65.028	-1.602	1.00	40.26	PS16
ATOM	4225	NH2	ARG	25	113.812	67.204	-1.552	1.00	40.26	PS16
ATOM	4226	C	ARG	25	117.959	68.296	4.296	1.00	42.11	PS16
ATOM	4227	O	ARG	25	119.095	67.845	4.213	1.00	42.11	PS16
ATOM	4228	N	ARG	26	117.750	69.578	4.568	1.00	38.60	PS16
ATOM	4229	CA	ARG	26	118.901	70.457	4.715	1.00	38.60	PS16
ATOM	4230	CB	ARG	26	118.508	71.912	4.514	1.00	47.30	PS16
ATOM	4231	CG	ARG	26	118.396	72.266	3.078	1.00	47.30	PS16
ATOM	4232	CD	ARG	26	118.879	73.660	2.800	1.00	47.30	PS16
ATOM	4233	NE	ARG	26	118.591	73.963	1.406	1.00	47.30	PS16
ATOM	4234	CZ	ARG	26	119.332	73.550	0.389	1.00	47.30	PS16
ATOM	4235	NH1	ARG	26	120.424	72.833	0.622	1.00	47.30	PS16
ATOM	4236	NH2	ARG	26	118.955	73.814	-0.859	1.00	47.30	PS16
ATOM	4237	C	ARG	26	119.607	70.355	6.029	1.00	38.60	PS16
ATOM	4238	O	ARG	26	119.127	69.697	6.934	1.00	38.60	PS16
ATOM	4239	N	LYS	27	120.770	70.993	6.120	1.00	47.60	PS16
ATOM	4240	CA	LYS	27	121.496	71.035	7.378	1.00	47.60	PS16
ATOM	4241	CB	LYS	27	122.757	71.898	7.274	1.00	38.55	PS16
ATOM	4242	CG	LYS	27	123.745	71.560	6.170	1.00	38.55	PS16
ATOM	4243	CD	LYS	27	124.967	72.487	6.274	1.00	38.55	PS16
ATOM	4244	CE	LYS	27	126.013	72.099	5.265	1.00	38.55	PS16
ATOM	4245	NZ	LYS	27	125.359	71.800	3.950	1.00	38.55	PS16
ATOM	4246	C	LYS	27	120.485	71.798	8.229	1.00	47.60	PS16
ATOM	4247	O	LYS	27	119.632	72.502	7.678	1.00	47.60	PS16
ATOM	4248	N	ARG	28	120.561	71.688	9.549	1.00	62.24	PS16
ATOM	4249	CA	ARG	28	119.594	72.416	10.349	1.00	62.24	PS16
ATOM	4250	CB	ARG	28	119.610	71.960	11.813	1.00	26.53	PS16
ATOM	4251	CG	ARG	28	120.721	72.503	12.680	1.00	26.53	PS16
ATOM	4252	CD	ARG	28	120.212	72.619	14.102	1.00	26.53	PS16
ATOM	4253	NE	ARG	28	121.209	72.288	15.123	1.00	26.53	PS16
ATOM	4254	CZ	ARG	28	122.358	72.934	15.306	1.00	26.53	PS16
ATOM	4255	NH1	ARG	28	122.668	73.962	14.532	1.00	26.53	PS16
ATOM	4256	NH2	ARG	28	123.200	72.553	16.260	1.00	26.53	PS16
ATOM	4257	C	ARG	28	119.925	73.890	10.256	1.00	62.24	PS16
ATOM	4258	O	ARG	28	119.039	74.744	10.351	1.00	62.24	PS16
ATOM	4259	N	ASP	29	121.207	74.178	10.044	1.00	40.22	PS16
ATOM	4260	CA	ASP	29	121.681	75.555	9.950	1.00	40.22	PS16
ATOM	4261	CB	ASP	29	122.965	75.729	10.762	1.00	52.73	PS16
ATOM	4262	CG	ASP	29	122.718	75.731	12.260	1.00	52.73	PS16
ATOM	4263	OD1	ASP	29	123.711	75.805	13.017	1.00	52.73	PS16
ATOM	4264	OD2	ASP	29	121.538	75.669	12.681	1.00	52.73	PS16
ATOM	4265	C	ASP	29	121.942	75.997	8.522	1.00	40.22	PS16
ATOM	4266	O	ASP	29	122.614	77.004	8.295	1.00	40.22	PS16
ATOM	4267	N	GLY	30	121.399	75.249	7.566	1.00	54.67	PS16
ATOM	4268	CA	GLY	30	121.602	75.568	6.164	1.00	54.67	PS16
ATOM	4269	C	GLY	30	120.596	76.540	5.584	1.00	54.67	PS16
ATOM	4270	O	GLY	30	119.797	77.138	6.314	1.00	54.67	PS16
ATOM	4271	N	LYS	31	120.628	76.683	4.260	1.00	40.81	PS16
ATOM	4272	CA	LYS	31	119.737	77.593	3.548	1.00	40.81	PS16
ATOM	4273	CB	LYS	31	120.087	77.630	2.057	1.00	57.15	PS16
ATOM	4274	CG	LYS	31	119.122	78.480	1.248	1.00	57.15	PS16
ATOM	4275	CD	LYS	31	119.587	78.704	-0.168	1.00	57.15	PS16
ATOM	4276	CE	LYS	31	119.515	77.432	-0.979	1.00	57.15	PS16
ATOM	4277	NZ	LYS	31	120.085	77.605	-2.356	1.00	57.15	PS16
ATOM	4278	C	LYS	31	118.266	77.255	3.682	1.00	40.81	PS16
ATOM	4279	O	LYS	31	117.812	76.245	3.166	1.00	40.81	PS16
ATOM	4280	N	TYR	32	117.515	78.106	4.365	1.00	34.02	PS16
ATOM	4281	CA	TYR	32	116.088	77.867	4.498	1.00	34.02	PS16
ATOM	4282	CB	TYR	32	115.560	78.392	5.823	1.00	46.90	PS16
ATOM	4283	CG	TYR	32	116.129	79.716	6.276	1.00	46.90	PS16
ATOM	4284	CD1	TYR	32	117.224	79.763	7.141	1.00	46.90	PS16
ATOM	4285	CE1	TYR	32	117.717	80.980	7.617	1.00	46.90	PS16
ATOM	4286	CD2	TYR	32	115.543	80.920	5.885	1.00	46.90	PS16
ATOM	4287	CE2	TYR	32	116.030	82.143	6.350	1.00	46.90	PS16
ATOM	4288	CZ	TYR	32	117.112	82.165	7.216	1.00	46.90	PS16
ATOM	4289	OH	TYR	32	117.574	83.364	7.699	1.00	46.90	PS16
ATOM	4290	C	TYR	32	115.322	78.521	3.362	1.00	34.02	PS16
ATOM	4291	O	TYR	32	115.882	79.299	2.587	1.00	34.02	PS16
ATOM	4292	N	ILE	33	114.034	78.200	3.270	1.00	39.73	PS16
ATOM	4293	CA	ILE	33	113.165	78.732	2.220	1.00	39.73	PS16
ATOM	4294	CB	ILE	33	111.973	77.789	1.973	1.00	36.15	PS16
ATOM	4295	CG2	ILE	33	111.101	78.320	0.870	1.00	36.15	PS16
ATOM	4296	CG1	ILE	33	112.490	76.410	1.569	1.00	36.15	PS16
ATOM	4297	CD1	ILE	33	111.536	75.287	1.881	1.00	36.15	PS16
ATOM	4298	C	ILE	33	112.652	80.112	2.595	1.00	39.73	PS16
ATOM	4299	O	ILE	33	112.506	80.975	1.735	1.00	39.73	PS16
ATOM	4300	N	GLU	34	112.389	80.308	3.883	1.00	45.24	PS16
ATOM	4301	CA	GLU	34	111.910	81.578	4.397	1.00	45.24	PS16
ATOM	4302	CB	GLU	34	110.459	81.797	4.025	1.00	48.45	PS16
ATOM	4303	CG	GLU	34	109.942	83.136	4.475	1.00	48.45	PS16
ATOM	4304	CD	GLU	34	108.462	83.316	4.191	1.00	48.45	PS16
ATOM	4305	OE1	GLU	34	108.011	82.931	3.083	1.00	48.45	PS16
ATOM	4306	OE2	GLU	34	107.755	83.855	5.074	1.00	48.45	PS16
ATOM	4307	C	GLU	34	112.021	81.617	5.904	1.00	45.24	PS16
ATOM	4308	O	GLU	34	111.998	80.577	6.563	1.00	45.24	PS16
ATOM	4309	N	LYS	35	112.153	82.818	6.452	1.00	66.72	PS16
ATOM	4310	CA	LYS	35	112.233	82.981	7.895	1.00	66.72	PS16
ATOM	4311	CB	LYS	35	113.276	84.028	8.267	1.00	46.63	PS16

ATOM	4312	CG	LYS	35	113.488	84.166	9.764	1.00	46.63	PS16	ATOM	4365	CB	PRO	41	116.405	79.102	24.546	1.00	92.69	PS16
ATOM	4313	CD	LYS	35	114.512	85.250	10.106	1.00	46.63	PS16	ATOM	4366	CG	PRO	41	116.627	79.212	23.102	1.00	92.69	PS16
ATOM	4314	CE	LYS	35	114.826	85.264	11.602	1.00	46.63	PS16	ATOM	4367	C	PRO	41	115.328	80.616	26.218	1.00	57.46	PS16
ATOM	4315	NZ	LYS	35	115.821	86.306	12.019	1.00	46.63	PS16	ATOM	4368	O	PRO	41	114.539	80.218	27.070	1.00	57.46	PS16
ATOM	4316	C	LYS	35	110.858	83.464	8.300	1.00	66.72	PS16	ATOM	4369	N	ARG	42	116.269	81.512	26.467	1.00	58.83	PS16
ATOM	4317	O	LYS	35	110.277	84.310	7.627	1.00	66.72	PS16	ATOM	4370	CA	ARG	42	116.454	82.040	27.805	1.00	58.83	PS16
ATOM	4318	N	ILE	36	110.315	82.927	9.380	1.00	43.22	PS16	ATOM	4371	CB	ARG	42	117.950	82.155	28.070	1.00	52.25	PS16
ATOM	4319	CA	ILE	36	108.991	83.360	9.789	1.00	43.22	PS16	ATOM	4372	CG	ARG	42	118.680	80.900	27.646	1.00	52.25	PS16
ATOM	4320	CB	ILE	36	107.930	82.294	9.495	1.00	33.26	PS16	ATOM	4373	CD	ARG	42	120.112	80.956	28.020	1.00	52.25	PS16
ATOM	4321	CG2	ILE	36	107.794	82.105	7.992	1.00	33.26	PS16	ATOM	4374	NE	ARG	42	120.757	82.095	27.399	1.00	52.25	PS16
ATOM	4322	CG1	ILE	36	108.302	80.993	10.214	1.00	33.26	PS16	ATOM	4375	CZ	ARG	42	121.972	82.515	27.724	1.00	52.25	PS16
ATOM	4323	CD1	ILE	36	107.244	79.895	10.127	1.00	33.26	PS16	ATOM	4376	NH1	ARG	42	122.661	81.879	28.665	1.00	52.25	PS16
ATOM	4324	C	ILE	36	108.950	83.709	11.260	1.00	43.22	PS16	ATOM	4377	NH2	ARG	42	122.492	83.572	27.117	1.00	52.25	PS16
ATOM	4325	O	ILE	36	107.897	84.042	11.798	1.00	43.22	PS16	ATOM	4378	C	ARG	42	115.748	83.352	28.103	1.00	58.83	PS16
ATOM	4326	N	GLY	37	110.101	83.646	11.913	1.00	42.11	PS16	ATOM	4379	O	ARG	42	116.018	83.991	29.120	1.00	58.83	PS16
ATOM	4327	CA	GLY	37	110.133	84.000	13.317	1.00	42.11	PS16	ATOM	4380	N	LYS	43	114.833	83.739	27.224	1.00	69.88	PS16
ATOM	4328	C	GLY	37	111.474	83.710	13.935	1.00	42.11	PS16	ATOM	4381	CA	LYS	43	114.084	84.969	27.411	1.00	69.88	PS16
ATOM	4329	O	GLY	37	112.419	83.369	13.235	1.00	42.11	PS16	ATOM	4382	CB	LYS	43	112.912	84.732	28.365	1.00	54.55	PS16
ATOM	4330	N	TYR	38	111.556	83.860	15.248	1.00	57.35	PS16	ATOM	4383	CG	LYS	43	112.113	83.451	28.132	1.00	54.55	PS16
ATOM	4331	CA	TYR	38	112.776	83.578	15.972	1.00	57.35	PS16	ATOM	4384	CD	LYS	43	112.589	82.312	29.013	1.00	54.55	PS16
ATOM	4332	CB	TYR	38	113.745	84.760	15.894	1.00	58.46	PS16	ATOM	4385	CE	LYS	43	111.707	81.087	28.843	1.00	54.55	PS16
ATOM	4333	CG	TYR	38	113.258	86.059	16.490	1.00	58.46	PS16	ATOM	4386	NZ	LYS	43	112.244	79.955	29.653	1.00	54.55	PS16
ATOM	4334	CD1	TYR	38	113.243	86.254	17.871	1.00	58.46	PS16	ATOM	4387	C	LYS	43	114.992	86.037	28.012	1.00	69.88	PS16
ATOM	4335	CE1	TYR	38	112.854	87.474	18.424	1.00	58.46	PS16	ATOM	4388	O	LYS	43	114.704	86.557	29.094	1.00	69.88	PS16
ATOM	4336	CD2	TYR	38	112.863	87.117	15.670	1.00	58.46	PS16	ATOM	4389	N	THR	44	116.092	86.353	27.330	1.00	79.08	PS16
ATOM	4337	CE2	TYR	38	112.470	88.344	16.209	1.00	58.46	PS16	ATOM	4390	CA	THR	44	117.021	87.362	27.837	1.00	79.08	PS16
ATOM	4338	CZ	TYR	38	112.470	88.515	17.587	1.00	58.46	PS16	ATOM	4391	CB	THR	44	118.415	87.239	27.194	1.00	73.67	PS16
ATOM	4339	OH	TYR	38	112.102	89.727	18.129	1.00	58.46	PS16	ATOM	4392	OG1	THR	44	118.288	87.260	25.769	1.00	73.67	PS16
ATOM	4340	C	TYR	38	112.390	83.252	17.404	1.00	57.35	PS16	ATOM	4393	CG2	THR	44	119.093	85.961	27.636	1.00	73.67	PS16
ATOM	4341	O	TYR	38	111.267	83.515	17.829	1.00	57.35	PS16	ATOM	4394	C	THR	44	116.518	88.778	27.607	1.00	79.08	PS16
ATOM	4342	N	TYR	39	113.319	82.679	18.150	1.00	43.15	PS16	ATOM	4395	O	THR	44	117.117	89.740	28.090	1.00	79.08	PS16
ATOM	4343	CA	TYR	39	113.031	82.275	19.510	1.00	43.15	PS16	ATOM	4396	N	THR	45	115.425	88.903	26.862	1.00	64.02	PS16
ATOM	4344	CB	TYR	39	112.495	80.838	19.473	1.00	58.39	PS16	ATOM	4397	CA	THR	45	114.840	90.206	26.588	1.00	64.02	PS16
ATOM	4345	CG	TYR	39	112.529	80.103	20.793	1.00	58.39	PS16	ATOM	4398	CB	THR	45	115.286	90.729	25.234	1.00	65.12	PS16
ATOM	4346	CD1	TYR	39	111.758	80.529	21.866	1.00	58.39	PS16	ATOM	4399	OG1	THR	45	114.720	89.915	24.203	1.00	65.12	PS16
ATOM	4347	CE1	TYR	39	111.753	79.838	23.063	1.00	58.39	PS16	ATOM	4400	CG2	THR	45	116.806	90.689	25.139	1.00	65.12	PS16
ATOM	4348	CD2	TYR	39	113.305	78.965	20.958	1.00	58.39	PS16	ATOM	4401	C	THR	45	113.322	90.072	26.603	1.00	64.02	PS16
ATOM	4349	CE2	TYR	39	113.308	78.273	22.151	1.00	58.39	PS16	ATOM	4402	O	THR	45	112.790	88.987	26.377	1.00	64.02	PS16
ATOM	4350	CZ	TYR	39	112.526	78.712	23.199	1.00	58.39	PS16	ATOM	4403	N	PRO	46	112.603	91.180	26.858	1.00	63.00	PS16
ATOM	4351	OH	TYR	39	112.483	78.014	24.383	1.00	58.39	PS16	ATOM	4404	CD	PRO	46	113.103	92.563	26.770	1.00	65.17	PS16
ATOM	4352	C	TYR	39	114.257	82.353	20.403	1.00	43.15	PS16	ATOM	4405	CA	PRO	46	111.138	91.179	26.910	1.00	63.00	PS16
ATOM	4353	O	TYR	39	115.310	81.790	20.073	1.00	43.15	PS16	ATOM	4406	CB	PRO	46	110.807	92.649	27.113	1.00	65.17	PS16
ATOM	4354	N	ASP	40	114.121	83.052	21.529	1.00	49.65	PS16	ATOM	4407	CG	PRO	46	111.870	93.315	26.324	1.00	65.17	PS16
ATOM	4355	CA	ASP	40	115.217	83.179	22.491	1.00	49.65	PS16	ATOM	4408	C	PRO	46	110.524	90.633	25.640	1.00	63.00	PS16
ATOM	4356	CB	ASP	40	115.375	84.629	22.927	1.00	60.61	PS16	ATOM	4409	O	PRO	46	109.376	90.202	25.623	1.00	63.00	PS16
ATOM	4357	CG	ASP	40	116.464	84.809	23.953	1.00	60.61	PS16	ATOM	4410	N	ASP	47	111.308	90.662	24.573	1.00	78.00	PS16
ATOM	4358	OD1	ASP	40	116.657	85.956	24.415	1.00	60.61	PS16	ATOM	4411	CA	ASP	47	110.851	90.183	23.287	1.00	78.00	PS16
ATOM	4359	OD2	ASP	40	117.121	83.806	24.295	1.00	60.61	PS16	ATOM	4412	CB	ASP	47	111.081	91.262	22.236	1.00	109.05	PS16
ATOM	4360	C	ASP	40	114.877	82.298	23.696	1.00	49.65	PS16	ATOM	4413	CG	ASP	47	110.618	90.841	20.867	1.00	109.05	PS16
ATOM	4361	O	ASP	40	114.108	82.688	24.572	1.00	49.65	PS16	ATOM	4414	OD1	ASP	47	110.859	91.601	19.906	1.00	109.05	PS16
ATOM	4362	N	PRO	41	115.465	81.094	23.753	1.00	57.46	PS16	ATOM	4415	OD2	ASP	47	110.010	89.755	20.756	1.00	109.05	PS16
ATOM	4363	CD	PRO	41	116.572	80.693	22.871	1.00	92.69	PS16	ATOM	4416	C	ASP	47	111.606	88.922	22.901	1.00	78.00	PS16
ATOM	4364	CA	PRO	41	115.274	80.091	24.802	1.00	57.46	PS16	ATOM	4417	O	ASP	47	112.502	88.968	22.057	1.00	78.00	PS16

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ATOM   4418  N   TRP  48     111.246  87.794  23.508  1.00 53.73      PS16
ATOM   4419  CA  TRP  48     111.925  86.543  23.199  1.00 53.73      PS16
ATOM   4420  CB  TRP  48     112.332  85.807  24.484  1.00 69.57      PS16
ATOM   4421  CG  TRP  48     111.227  85.561  25.463  1.00 69.57      PS16
ATOM   4422  CD2 TRP  48     110.442  84.369  25.595  1.00 69.57      PS16
ATOM   4423  CE2 TRP  48     109.570  84.562  26.684  1.00 69.57      PS16
ATOM   4424  CE3 TRP  48     110.392  83.155  24.899  1.00 69.57      PS16
ATOM   4425  CD1 TRP  48     110.805  86.403  26.444  1.00 69.57      PS16
ATOM   4426  NE1 TRP  48     109.812  85.813  27.185  1.00 69.57      PS16
ATOM   4427  CZ2 TRP  48     108.661  83.587  27.098  1.00 69.57      PS16
ATOM   4428  CZ3 TRP  48     109.484  82.184  25.314  1.00 69.57      PS16
ATOM   4429  CH2 TRP  48     108.633  82.409  26.404  1.00 69.57      PS16
ATOM   4430  C   TRP  48     111.183  85.579  22.281  1.00 53.73      PS16
ATOM   4431  O   TRP  48     111.488  84.392  22.273  1.00 53.73      PS16
ATOM   4432  N   LEU  49     110.228  86.073  21.499  1.00 58.49      PS16
ATOM   4433  CA  LEU  49     109.508  85.193  20.583  1.00 58.49      PS16
ATOM   4434  CB  LEU  49     108.741  84.118  21.360  1.00 36.79      PS16
ATOM   4435  CG  LEU  49     108.022  83.124  20.440  1.00 36.79      PS16
ATOM   4436  CD1 LEU  49     108.995  82.045  20.027  1.00 36.79      PS16
ATOM   4437  CD2 LEU  49     106.828  82.511  21.139  1.00 36.79      PS16
ATOM   4438  C   LEU  49     108.536  85.881  19.632  1.00 58.49      PS16
ATOM   4439  O   LEU  49     107.400  86.171  19.995  1.00 58.49      PS16
ATOM   4440  N   LYS  50     108.976  86.136  18.408  1.00 41.62      PS16
ATOM   4441  CA  LYS  50     108.114  86.759  17.408  1.00 41.62      PS16
ATOM   4442  CB  LYS  50     108.896  87.815  16.614  1.00 93.76      PS16
ATOM   4443  CG  LYS  50     108.218  88.294  15.334  1.00 93.76      PS16
ATOM   4444  CD  LYS  50     109.169  89.143  14.485  1.00 93.76      PS16
ATOM   4445  CE  LYS  50     108.702  89.248  13.026  1.00 93.76      PS16
ATOM   4446  NZ  LYS  50     108.797  87.955  12.275  1.00 93.76      PS16
ATOM   4447  C   LYS  50     107.709  85.601  16.511  1.00 41.62      PS16
ATOM   4448  O   LYS  50     108.413  84.595  16.468  1.00 41.62      PS16
ATOM   4449  N   VAL  51     106.588  85.705  15.804  1.00 45.33      PS16
ATOM   4450  CA  VAL  51     106.213  84.586  14.953  1.00 45.33      PS16
ATOM   4451  CB  VAL  51     105.347  83.562  15.726  1.00 56.10      PS16
ATOM   4452  CG1 VAL  51     104.994  82.384  14.823  1.00 56.10      PS16
ATOM   4453  CG2 VAL  51     106.102  83.063  16.964  1.00 56.10      PS16
ATOM   4454  C   VAL  51     105.524  84.883  13.637  1.00 45.33      PS16
ATOM   4455  O   VAL  51     105.410  83.997  12.811  1.00 45.33      PS16
ATOM   4456  N   ASP  52     105.076  86.106  13.408  1.00 47.44      PS16
ATOM   4457  CA  ASP  52     104.401  86.404  12.136  1.00 47.44      PS16
ATOM   4458  CB  ASP  52     105.406  86.526  10.985  1.00 75.85      PS16
ATOM   4459  CG  ASP  52     104.727  86.550   9.617  1.00 75.85      PS16
ATOM   4460  OD1 ASP  52     104.043  87.536   9.271  1.00 75.85      PS16
ATOM   4461  OD2 ASP  52     104.871  85.559   8.889  1.00 75.85      PS16
ATOM   4462  C   ASP  52     103.429  85.285  11.813  1.00 47.44      PS16
ATOM   4463  O   ASP  52     103.569  84.582  10.805  1.00 47.44      PS16
ATOM   4464  N   VAL  53     102.441  85.130  12.681  1.00 63.20      PS16
ATOM   4465  CA  VAL  53     101.457  84.080  12.526  1.00 63.20      PS16
ATOM   4466  CB  VAL  53     100.361  84.199  13.589  1.00 36.16      PS16
ATOM   4467  CG1 VAL  53     100.929  84.888  14.833  1.00 36.16      PS16
ATOM   4468  CG2 VAL  53      99.148  84.914  13.019  1.00 36.16      PS16
ATOM   4469  C   VAL  53     100.806  84.044  11.156  1.00 63.20      PS16
ATOM   4470  O   VAL  53     100.192  83.047  10.793  1.00 63.20      PS16
ATOM   4471  N   GLU  54     100.934  85.114  10.385  1.00 63.24      PS16
ATOM   4472  CA  GLU  54     100.313  85.109   9.074  1.00 63.24      PS16
ATOM   4473  CB  GLU  54     100.282  86.509   8.467  1.00136.52      PS16
ATOM   4474  CG  GLU  54      99.531  86.517   7.147  1.00136.52      PS16
ATOM   4475  CD  GLU  54      98.295  85.619   7.194  1.00136.52      PS16
ATOM   4476  OE1 GLU  54      97.344  85.941   7.940  1.00136.52      PS16
ATOM   4477  OE2 GLU  54      98.279  84.581   6.496  1.00136.52      PS16
ATOM   4478  C   GLU  54     100.977  84.155   8.095  1.00 63.24      PS16
ATOM   4479  O   GLU  54     100.307  83.313   7.491  1.00 63.24      PS16
ATOM   4480  N   ARG  55     102.290  84.283   7.939  1.00 70.99      PS16
ATOM   4481  CA  ARG  55     103.025  83.433   7.012  1.00 70.99      PS16
ATOM   4482  CB  ARG  55     104.459  83.912   6.900  1.00 49.51      PS16
ATOM   4483  CG  ARG  55     104.623  85.222   6.161  1.00 49.51      PS16
ATOM   4484  CD  ARG  55     105.166  84.976   4.769  1.00 49.51      PS16
ATOM   4485  NE  ARG  55     104.140  84.545   3.828  1.00 49.51      PS16
ATOM   4486  CZ  ARG  55     104.408  83.890   2.707  1.00 49.51      PS16
ATOM   4487  NH1 ARG  55     105.661  83.585   2.407  1.00 49.51      PS16
ATOM   4488  NH2 ARG  55     103.433  83.572   1.871  1.00 49.51      PS16
ATOM   4489  C   ARG  55     103.011  81.961   7.398  1.00 70.99      PS16
ATOM   4490  O   ARG  55     102.865  81.091   6.535  1.00 70.99      PS16
ATOM   4491  N   ALA  56     103.183  81.674   8.684  1.00 63.20      PS16
ATOM   4492  CA  ALA  56     103.150  80.288   9.133  1.00 63.20      PS16
ATOM   4493  CB  ALA  56     103.068  80.229  10.648  1.00 26.46      PS16
ATOM   4494  C   ALA  56     101.911  79.641   8.519  1.00 63.20      PS16
ATOM   4495  O   ALA  56     102.011  78.718   7.710  1.00 63.20      PS16
ATOM   4496  N   ARG  57     100.748  80.160   8.906  1.00 56.20      PS16
ATOM   4497  CA  ARG  57      99.465  79.675   8.419  1.00 56.20      PS16
ATOM   4498  CB  ARG  57      98.347  80.666   8.747  1.00 66.69      PS16
ATOM   4499  CG  ARG  57      98.033  80.824  10.228  1.00 66.69      PS16
ATOM   4500  CD  ARG  57      97.069  81.989  10.436  1.00 66.69      PS16
ATOM   4501  NE  ARG  57      96.811  82.247  11.847  1.00 66.69      PS16
ATOM   4502  CZ  ARG  57      95.758  81.786  12.506  1.00 66.69      PS16
ATOM   4503  NH1 ARG  57      94.854  81.045  11.879  1.00 66.69      PS16
ATOM   4504  NH2 ARG  57      95.619  82.057  13.795  1.00 66.69      PS16
ATOM   4505  C   ARG  57      99.516  79.472   6.922  1.00 56.20      PS16
ATOM   4506  O   ARG  57      98.788  78.641   6.382  1.00 56.20      PS16
ATOM   4507  N   TYR  58     100.351  80.238   6.234  1.00 51.37      PS16
ATOM   4508  CA  TYR  58     100.439  80.040   4.800  1.00 51.37      PS16
ATOM   4509  CB  TYR  58     101.220  81.149   4.093  1.00 37.54      PS16
ATOM   4510  CG  TYR  58     101.584  80.724   2.683  1.00 37.54      PS16
ATOM   4511  CD1 TYR  58     102.892  80.359   2.350  1.00 37.54      PS16
ATOM   4512  CE1 TYR  58     103.207  79.879   1.065  1.00 37.54      PS16
ATOM   4513  CD2 TYR  58     100.600  80.605   1.700  1.00 37.54      PS16
ATOM   4514  CE2 TYR  58     100.901  80.130   0.420  1.00 37.54      PS16
ATOM   4515  CZ  TYR  58     102.202  79.765   0.106  1.00 37.54      PS16
ATOM   4516  OH  TYR  58     102.483  79.274  -1.159  1.00 37.54      PS16
ATOM   4517  C   TYR  58     101.149  78.724   4.546  1.00 51.37      PS16
ATOM   4518  O   TYR  58     100.640  77.866   3.835  1.00 51.37      PS16
ATOM   4519  N   TRP  59     102.333  78.576   5.130  1.00 57.75      PS16
ATOM   4520  CA  TRP  59     103.106  77.362   4.936  1.00 57.75      PS16
ATOM   4521  CB  TRP  59     104.457  77.474   5.650  1.00 52.55      PS16
ATOM   4522  CG  TRP  59     105.406  78.329   4.848  1.00 52.55      PS16
ATOM   4523  CD2 TRP  59     105.866  78.062   3.521  1.00 52.55      PS16
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ATOM	4524	CE2	TRP	59	106.622	79.176	3.108	1.00	52.55	PS16	ATOM	4577	C	PRO	66	106.982	70.784	13.140	1.00	50.30	PS16
ATOM	4525	CE3	TRP	59	105.707	76.991	2.640	1.00	52.55	PS16	ATOM	4578	O	PRO	66	106.355	69.790	13.515	1.00	50.30	PS16
ATOM	4526	CD1	TRP	59	105.899	79.563	5.183	1.00	52.55	PS16	ATOM	4579	N	THR	67	108.218	71.073	13.541	1.00	53.10	PS16
ATOM	4527	NE1	TRP	59	106.628	80.078	4.140	1.00	52.55	PS16	ATOM	4580	CA	THR	67	108.918	70.259	14.530	1.00	53.10	PS16
ATOM	4528	CZ2	TRP	59	107.216	79.247	1.849	1.00	52.55	PS16	ATOM	4581	CB	THR	67	110.240	70.887	14.970	1.00	55.56	PS16
ATOM	4529	CZ3	TRP	59	106.297	77.061	1.389	1.00	52.55	PS16	ATOM	4582	OG1	THR	67	111.140	70.978	13.861	1.00	55.56	PS16
ATOM	4530	CH2	TRP	59	107.042	78.180	1.005	1.00	52.55	PS16	ATOM	4583	CG2	THR	67	110.856	70.056	16.082	1.00	55.56	PS16
ATOM	4531	C	TRP	59	102.331	76.125	5.361	1.00	57.75	PS16	ATOM	4584	C	THR	67	108.020	70.340	15.750	1.00	53.10	PS16
ATOM	4532	O	TRP	59	102.260	75.144	4.608	1.00	57.75	PS16	ATOM	4585	O	THR	67	107.175	71.232	15.831	1.00	53.10	PS16
ATOM	4533	N	LEU	60	101.742	76.166	6.552	1.00	47.77	PS16	ATOM	4586	N	ASP	68	108.183	69.446	16.714	1.00	50.03	PS16
ATOM	4534	CA	LEU	60	100.928	75.051	7.014	1.00	47.77	PS16	ATOM	4587	CA	ASP	68	107.327	69.567	17.875	1.00	50.03	PS16
ATOM	4535	CB	LEU	60	100.266	75.411	8.323	1.00	32.42	PS16	ATOM	4588	CB	ASP	68	107.530	68.399	18.848	1.00	85.70	PS16
ATOM	4536	CG	LEU	60	101.238	75.665	9.456	1.00	32.42	PS16	ATOM	4589	CG	ASP	68	106.678	67.180	18.481	1.00	85.70	PS16
ATOM	4537	CD1	LEU	60	100.513	76.421	10.551	1.00	32.42	PS16	ATOM	4590	OD1	ASP	68	105.560	67.374	17.958	1.00	85.70	PS16
ATOM	4538	CD2	LEU	60	101.805	74.340	9.974	1.00	32.42	PS16	ATOM	4591	OD2	ASP	68	107.110	66.033	18.725	1.00	85.70	PS16
ATOM	4539	C	LEU	60	99.856	74.830	5.949	1.00	47.77	PS16	ATOM	4592	C	ASP	68	107.615	70.918	18.533	1.00	50.03	PS16
ATOM	4540	O	LEU	60	99.514	73.702	5.609	1.00	47.77	PS16	ATOM	4593	O	ASP	68	106.749	71.798	18.555	1.00	50.03	PS16
ATOM	4541	N	SER	61	99.330	75.930	5.425	1.00	53.64	PS16	ATOM	4594	N	THR	69	108.837	71.102	19.025	1.00	52.64	PS16
ATOM	4542	CA	SER	61	98.322	75.870	4.389	1.00	53.64	PS16	ATOM	4595	CA	THR	69	109.226	72.357	19.666	1.00	52.64	PS16
ATOM	4543	CB	SER	61	98.015	77.278	3.867	1.00	86.31	PS16	ATOM	4596	CB	THR	69	110.719	72.373	19.980	1.00	68.56	PS16
ATOM	4544	OG	SER	61	97.679	77.261	2.485	1.00	86.31	PS16	ATOM	4597	OG1	THR	69	111.031	71.250	20.809	1.00	68.56	PS16
ATOM	4545	C	SER	61	98.779	75.003	3.225	1.00	53.64	PS16	ATOM	4598	CG2	THR	69	111.102	73.657	20.702	1.00	68.56	PS16
ATOM	4546	O	SER	61	97.957	74.405	2.530	1.00	53.64	PS16	ATOM	4599	C	THR	69	108.902	73.595	18.831	1.00	52.64	PS16
ATOM	4547	N	VAL	62	100.085	74.914	3.006	1.00	64.45	PS16	ATOM	4600	O	THR	69	108.721	74.681	19.370	1.00	52.64	PS16
ATOM	4548	CA	VAL	62	100.551	74.140	1.872	1.00	64.45	PS16	ATOM	4601	N	ALA	70	108.838	73.442	17.516	1.00	54.36	PS16
ATOM	4549	CB	VAL	62	101.427	74.983	0.961	1.00	48.41	PS16	ATOM	4602	CA	ALA	70	108.513	74.573	16.664	1.00	54.36	PS16
ATOM	4550	CG1	VAL	62	101.171	74.574	-0.468	1.00	48.41	PS16	ATOM	4603	CB	ALA	70	108.899	74.279	15.226	1.00	42.78	PS16
ATOM	4551	CG2	VAL	62	101.142	76.460	1.168	1.00	48.41	PS16	ATOM	4604	C	ALA	70	107.020	74.858	16.755	1.00	54.36	PS16
ATOM	4552	C	VAL	62	101.276	72.832	2.133	1.00	64.45	PS16	ATOM	4605	O	ALA	70	106.613	76.013	16.847	1.00	54.36	PS16
ATOM	4553	O	VAL	62	101.675	72.159	1.188	1.00	64.45	PS16	ATOM	4606	N	ARG	71	106.208	73.802	16.734	1.00	61.38	PS16
ATOM	4554	N	GLY	63	101.457	72.462	3.394	1.00	48.27	PS16	ATOM	4607	CA	ARG	71	104.754	73.937	16.811	1.00	61.38	PS16
ATOM	4555	CA	GLY	63	102.116	71.200	3.675	1.00	48.27	PS16	ATOM	4608	CB	ARG	71	104.090	72.568	16.694	1.00	50.84	PS16
ATOM	4556	C	GLY	63	103.268	71.243	4.652	1.00	48.27	PS16	ATOM	4609	CG	ARG	71	102.603	72.608	16.948	1.00	50.84	PS16
ATOM	4557	O	GLY	63	103.853	70.213	4.955	1.00	48.27	PS16	ATOM	4610	CD	ARG	71	101.988	71.226	16.988	1.00	50.84	PS16
ATOM	4558	N	ALA	64	103.615	72.426	5.138	1.00	55.08	PS16	ATOM	4611	NE	ARG	71	101.469	70.811	15.685	1.00	50.84	PS16
ATOM	4559	CA	ALA	64	104.708	72.536	6.089	1.00	55.08	PS16	ATOM	4612	CZ	ARG	71	102.051	69.902	14.903	1.00	50.84	PS16
ATOM	4560	CB	ALA	64	104.939	73.995	6.459	1.00	85.30	PS16	ATOM	4613	NH1	ARG	71	103.183	69.315	15.303	1.00	50.84	PS16
ATOM	4561	C	ALA	64	104.360	71.716	7.333	1.00	55.08	PS16	ATOM	4614	NH2	ARG	71	101.500	69.574	13.732	1.00	50.84	PS16
ATOM	4562	O	ALA	64	103.231	71.763	7.834	1.00	55.08	PS16	ATOM	4615	C	ARG	71	104.321	74.583	18.120	1.00	61.38	PS16
ATOM	4563	N	GLN	65	105.334	70.954	7.816	1.00	47.06	PS16	ATOM	4616	O	ARG	71	103.399	75.401	18.157	1.00	61.38	PS16
ATOM	4564	CA	GLN	65	105.132	70.124	8.987	1.00	47.06	PS16	ATOM	4617	N	ARG	72	104.993	74.189	19.194	1.00	66.65	PS16
ATOM	4565	CB	GLN	65	105.454	68.672	8.664	1.00	41.95	PS16	ATOM	4618	CA	ARG	72	104.718	74.696	20.527	1.00	66.65	PS16
ATOM	4566	CG	GLN	65	104.524	67.686	9.333	1.00	41.95	PS16	ATOM	4619	CB	ARG	72	105.593	73.956	21.527	1.00	61.23	PS16
ATOM	4567	CD	GLN	65	103.120	67.754	8.763	1.00	41.95	PS16	ATOM	4620	CG	ARG	72	105.856	74.710	22.793	1.00	61.23	PS16
ATOM	4568	OE1	GLN	65	102.922	67.693	7.547	1.00	41.95	PS16	ATOM	4621	CD	ARG	72	107.226	74.348	23.276	1.00	61.23	PS16
ATOM	4569	NE2	GLN	65	102.135	67.876	9.639	1.00	41.95	PS16	ATOM	4622	NE	ARG	72	107.741	75.341	24.201	1.00	61.23	PS16
ATOM	4570	C	GLN	65	106.073	70.631	10.051	1.00	47.06	PS16	ATOM	4623	CZ	ARG	72	109.017	75.421	24.557	1.00	61.23	PS16
ATOM	4571	O	GLN	65	107.284	70.490	9.948	1.00	47.06	PS16	ATOM	4624	NH1	ARG	72	109.893	74.554	24.058	1.00	61.23	PS16
ATOM	4572	N	PRO	66	105.528	71.239	11.096	1.00	50.30	PS16	ATOM	4625	NH2	ARG	72	109.413	76.374	25.398	1.00	61.23	PS16
ATOM	4573	CD	PRO	66	104.131	71.680	11.224	1.00	38.52	PS16	ATOM	4626	C	ARG	72	104.971	76.196	20.632	1.00	66.65	PS16
ATOM	4574	CA	PRO	66	106.361	71.773	12.178	1.00	50.30	PS16	ATOM	4627	O	ARG	72	104.321	76.891	21.418	1.00	66.65	PS16
ATOM	4575	CB	PRO	66	105.413	72.721	12.905	1.00	38.52	PS16	ATOM	4628	N	LEU	73	105.939	76.689	19.863	1.00	64.96	PS16
ATOM	4576	CG	PRO	66	104.064	72.076	12.676	1.00	38.52	PS16	ATOM	4629	CA	LEU	73	106.253	78.112	19.865	1.00	64.96	PS16

ATOM	4630	CB	LEU	73	107.656	78.372	19.307	1.00	60.83	PS16	ATOM	4683	CG	PHE	80	98.148	75.758	15.824	1.00	51.78	PS16
ATOM	4631	CG	LEU	73	108.825	77.844	20.147	1.00	60.83	PS16	ATOM	4684	CD1	PHE	80	99.304	75.880	16.607	1.00	51.78	PS16
ATOM	4632	CD1	LEU	73	110.141	78.312	19.538	1.00	60.83	PS16	ATOM	4685	CD2	PHE	80	98.235	75.182	14.557	1.00	51.78	PS16
ATOM	4633	CD2	LEU	73	108.699	78.333	21.587	1.00	60.83	PS16	ATOM	4686	CE1	PHE	80	100.533	75.433	16.135	1.00	51.78	PS16
ATOM	4634	C	LEU	73	105.214	78.788	18.997	1.00	64.96	PS16	ATOM	4687	CE2	PHE	80	99.442	74.734	14.072	1.00	51.78	PS16
ATOM	4635	O	LEU	73	104.766	79.884	19.306	1.00	64.96	PS16	ATOM	4688	CZ	PHE	80	100.602	74.857	14.861	1.00	51.78	PS16
ATOM	4636	N	LEU	74	104.831	78.131	17.909	1.00	43.25	PS16	ATOM	4689	C	PHE	80	95.124	78.066	16.367	1.00	78.24	PS16
ATOM	4637	CA	LEU	74	103.816	78.692	17.046	1.00	43.25	PS16	ATOM	4690	O	PHE	80	94.061	77.661	15.899	1.00	78.24	PS16
ATOM	4638	CB	LEU	74	103.607	77.854	15.787	1.00	44.21	PS16	ATOM	4691	N	ARG	81	95.198	78.879	17.413	1.00	62.02	PS16
ATOM	4639	CG	LEU	74	104.745	77.633	14.805	1.00	44.21	PS16	ATOM	4692	CA	ARG	81	94.011	79.383	18.092	1.00	62.02	PS16
ATOM	4640	CD1	LEU	74	104.168	77.237	13.435	1.00	44.21	PS16	ATOM	4693	CB	ARG	81	94.401	80.588	18.949	1.00	73.21	PS16
ATOM	4641	CD2	LEU	74	105.549	78.899	14.695	1.00	44.21	PS16	ATOM	4694	CG	ARG	81	93.272	81.505	19.343	1.00	73.21	PS16
ATOM	4642	C	LEU	74	102.496	78.732	17.816	1.00	43.25	PS16	ATOM	4695	CD	ARG	81	93.742	82.424	20.438	1.00	73.21	PS16
ATOM	4643	O	LEU	74	101.690	79.659	17.643	1.00	43.25	PS16	ATOM	4696	NE	ARG	81	93.598	81.789	21.741	1.00	73.21	PS16
ATOM	4644	N	ARG	75	102.250	77.729	18.656	1.00	61.71	PS16	ATOM	4697	CZ	ARG	81	94.447	81.946	22.750	1.00	73.21	PS16
ATOM	4645	CA	ARG	75	101.004	77.732	19.408	1.00	61.71	PS16	ATOM	4698	NH1	ARG	81	95.521	82.718	22.605	1.00	73.21	PS16
ATOM	4646	CB	ARG	75	100.848	76.455	20.233	1.00	65.65	PS16	ATOM	4699	NH2	ARG	81	94.213	81.340	23.913	1.00	73.21	PS16
ATOM	4647	CG	ARG	75	99.428	76.235	20.778	1.00	65.65	PS16	ATOM	4700	C	ARG	81	92.899	79.748	17.108	1.00	62.02	PS16
ATOM	4648	CD	ARG	75	99.298	74.896	21.519	1.00	65.65	PS16	ATOM	4701	O	ARG	81	93.007	80.712	16.351	1.00	62.02	PS16
ATOM	4649	NE	ARG	75	99.578	73.743	20.663	1.00	65.65	PS16	ATOM	4702	N	GLN	82	91.833	78.954	17.126	1.00	113.89	PS16
ATOM	4650	CZ	ARG	75	98.875	73.424	19.580	1.00	65.65	PS16	ATOM	4703	CA	GLN	82	90.701	79.165	16.237	1.00	113.89	PS16
ATOM	4651	NH1	ARG	75	97.841	74.168	19.215	1.00	65.65	PS16	ATOM	4704	CB	GLN	82	90.083	77.831	15.825	1.00	82.65	PS16
ATOM	4652	NH2	ARG	75	99.214	72.371	18.852	1.00	65.65	PS16	ATOM	4705	CG	GLN	82	91.011	76.645	15.919	1.00	82.65	PS16
ATOM	4653	C	ARG	75	101.022	78.946	20.323	1.00	61.71	PS16	ATOM	4706	CD	GLN	82	90.356	75.368	15.438	1.00	82.65	PS16
ATOM	4654	O	ARG	75	100.075	79.725	20.332	1.00	61.71	PS16	ATOM	4707	OE1	GLN	82	89.890	75.291	14.298	1.00	82.65	PS16
ATOM	4655	N	GLN	76	102.110	79.107	21.075	1.00	52.14	PS16	ATOM	4708	NE2	GLN	82	90.317	74.355	16.299	1.00	82.65	PS16
ATOM	4656	CA	GLN	76	102.259	80.236	21.986	1.00	52.14	PS16	ATOM	4709	C	GLN	82	89.634	79.981	16.934	1.00	113.89	PS16
ATOM	4657	CB	GLN	76	103.699	80.363	22.458	1.00	66.19	PS16	ATOM	4710	O	GLN	82	88.446	79.749	16.722	1.00	113.89	PS16
ATOM	4658	CG	GLN	76	104.039	79.517	23.647	1.00	66.19	PS16	ATOM	4711	N	GLU	83	90.045	80.930	17.768	1.00	127.91	PS16
ATOM	4659	CD	GLN	76	105.300	80.006	24.332	1.00	66.19	PS16	ATOM	4712	CA	GLU	83	89.080	81.757	18.479	1.00	127.91	PS16
ATOM	4660	OE1	GLN	76	105.425	81.191	24.640	1.00	66.19	PS16	ATOM	4713	CB	GLU	83	89.790	82.738	19.412	1.00	162.27	PS16
ATOM	4661	NE2	GLN	76	106.242	79.097	24.577	1.00	66.19	PS16	ATOM	4714	CG	GLU	83	90.369	82.075	20.646	1.00	162.27	PS16
ATOM	4662	C	GLN	76	101.842	81.555	21.353	1.00	52.14	PS16	ATOM	4715	CD	GLU	83	89.374	81.153	21.322	1.00	162.27	PS16
ATOM	4663	O	GLN	76	101.197	82.384	21.992	1.00	52.14	PS16	ATOM	4716	OE1	GLU	83	88.256	81.616	21.632	1.00	162.27	PS16
ATOM	4664	N	ALA	77	102.223	81.763	20.099	1.00	52.95	PS16	ATOM	4717	OE2	GLU	83	89.711	79.969	21.541	1.00	162.27	PS16
ATOM	4665	CA	ALA	77	101.868	82.990	19.401	1.00	52.95	PS16	ATOM	4718	C	GLU	83	88.160	82.509	17.533	1.00	127.91	PS16
ATOM	4666	CB	ALA	77	102.947	83.361	18.396	1.00	32.43	PS16	ATOM	4719	O	GLU	83	87.716	83.617	17.828	1.00	127.91	PS16
ATOM	4667	C	ALA	77	100.557	82.754	18.691	1.00	52.95	PS16	ATOM	4720	N	ALA	84	87.884	81.894	16.388	1.00	184.01	PS16
ATOM	4668	O	ALA	77	100.342	83.247	17.594	1.00	52.95	PS16	ATOM	4721	CA	ALA	84	86.991	82.457	15.394	1.00	184.01	PS16
ATOM	4669	N	GLY	78	99.694	81.977	19.329	1.00	61.97	PS16	ATOM	4722	CB	ALA	84	87.117	81.686	14.080	1.00	76.63	PS16
ATOM	4670	CA	GLY	78	98.392	81.669	18.770	1.00	61.97	PS16	ATOM	4723	C	ALA	84	85.602	82.277	15.991	1.00	184.01	PS16
ATOM	4671	C	GLY	78	98.340	81.509	17.264	1.00	61.97	PS16	ATOM	4724	O	ALA	84	84.621	82.064	15.279	1.00	184.01	PS16
ATOM	4672	O	GLY	78	97.641	82.258	16.579	1.00	61.97	PS16	ATOM	4725	N	ARG	85	85.549	82.351	17.320	1.00	148.80	PS16
ATOM	4673	N	VAL	79	99.077	80.543	16.733	1.00	63.70	PS16	ATOM	4726	CA	ARG	85	84.319	82.201	18.084	1.00	148.80	PS16
ATOM	4674	CA	VAL	79	99.050	80.331	15.300	1.00	63.70	PS16	ATOM	4727	CB	ARG	85	83.275	83.213	17.600	1.00	190.55	PS16
ATOM	4675	CB	VAL	79	100.337	79.673	14.785	1.00	48.55	PS16	ATOM	4728	CG	ARG	85	83.760	84.660	17.647	1.00	190.55	PS16
ATOM	4676	CG1	VAL	79	100.220	79.440	13.283	1.00	48.55	PS16	ATOM	4729	CD	ARG	85	84.099	85.085	19.071	1.00	190.55	PS16
ATOM	4677	CG2	VAL	79	101.529	80.555	15.078	1.00	48.55	PS16	ATOM	4730	NE	ARG	85	84.755	86.390	19.132	1.00	190.55	PS16
ATOM	4678	C	VAL	79	97.890	79.405	14.989	1.00	63.70	PS16	ATOM	4731	CZ	ARG	85	84.233	87.520	18.664	1.00	190.55	PS16
ATOM	4679	O	VAL	79	97.325	79.442	13.894	1.00	63.70	PS16	ATOM	4732	NH1	ARG	85	83.038	87.516	18.090	1.00	190.55	PS16
ATOM	4680	N	PHE	80	97.527	78.580	15.965	1.00	78.24	PS16	ATOM	4733	NH2	ARG	85	84.905	88.658	18.776	1.00	190.55	PS16
ATOM	4681	CA	PHE	80	96.446	77.630	15.763	1.00	78.24	PS16	ATOM	4734	C	ARG	85	83.796	80.775	17.957	1.00	148.80	PS16
ATOM	4682	CB	PHE	80	96.836	76.269	16.331	1.00	51.78	PS16	ATOM	4735	O	ARG	85	84.466	79.829	18.372	1.00	148.80	PS16

ATOM	4736	N	GLU	86	82.604	80.626	17.386	1.00201.02	PS16	ATOM	4789	CB	LEU	6	120.508	87.072	-31.323	1.00 45.09	QS17
ATOM	4737	CA	GLU	86	81.985	79.316	17.194	1.00201.02	PS16	ATOM	4790	CG	LEU	6	120.912	86.650	-29.915	1.00 45.09	QS17
ATOM	4738	CB	GLU	86	82.771	78.508	16.153	1.00116.82	PS16	ATOM	4791	CD1	LEU	6	121.910	85.507	-30.025	1.00 45.09	QS17
ATOM	4739	CG	GLU	86	82.076	77.228	15.706	1.00116.82	PS16	ATOM	4792	CD2	LEU	6	121.506	87.817	-29.167	1.00 45.09	QS17
ATOM	4740	CD	GLU	86	80.784	77.499	14.951	1.00116.82	PS16	ATOM	4793	C	LEU	6	119.185	88.260	-33.040	1.00 44.90	QS17
ATOM	4741	OE1	GLU	86	80.860	78.018	13.817	1.00116.82	PS16	ATOM	4794	O	LEU	6	118.393	87.644	-33.754	1.00 44.90	QS17
ATOM	4742	OE2	GLU	86	79.697	77.199	15.492	1.00116.82	PS16	ATOM	4795	N	THR	7	119.997	89.212	-33.505	1.00 40.16	QS17
ATOM	4743	C	GLU	86	81.901	78.527	18.502	1.00201.02	PS16	ATOM	4796	CA	THR	7	120.024	89.586	-34.918	1.00 40.16	QS17
ATOM	4744	O	GLU	86	82.443	78.947	19.525	1.00201.02	PS16	ATOM	4797	CB	THR	7	119.586	91.031	-35.145	1.00 43.59	QS17
ATOM	4745	N	GLY	87	81.215	77.387	18.463	1.00161.65	PS16	ATOM	4798	OG1	THR	7	118.286	91.244	-34.584	1.00 43.59	QS17
ATOM	4746	CA	GLY	87	81.075	76.560	19.650	1.00161.65	PS16	ATOM	4799	CG2	THR	7	119.527	91.316	-36.619	1.00 43.59	QS17
ATOM	4747	C	GLY	87	79.649	76.484	20.163	1.00161.65	PS16	ATOM	4800	C	THR	7	121.428	89.450	-35.483	1.00 40.16	QS17
ATOM	4748	O	GLY	87	79.176	75.420	20.564	1.00161.65	PS16	ATOM	4801	O	THR	7	122.405	89.899	-34.886	1.00 40.16	QS17
ATOM	4749	N	ALA	88	78.964	77.622	20.157	1.00201.09	PS16	ATOM	4802	N	GLY	8	121.522	88.832	-36.648	1.00 41.81	QS17
ATOM	4750	CA	ALA	88	77.584	77.690	20.617	1.00201.09	PS16	ATOM	4803	CA	GLY	8	122.815	88.645	-37.267	1.00 41.81	QS17
ATOM	4751	CB	ALA	88	77.522	78.370	21.985	1.00 99.56	PS16	ATOM	4804	C	GLY	8	122.638	88.357	-38.735	1.00 41.81	QS17
ATOM	4752	C	ALA	88	76.746	78.459	19.600	1.00201.09	PS16	ATOM	4805	O	GLY	8	121.527	88.453	-39.248	1.00 41.81	QS17
ATOM	4753	O	ALA	88	76.189	79.516	19.965	1.00201.09	PS16	ATOM	4806	N	VAL	9	123.721	88.000	-39.417	1.00 46.53	QS17
ATOM	4754	OXT	ALA	88	76.662	77.994	18.442	1.00 99.56	PS16	ATOM	4807	CA	VAL	9	123.628	87.716	-40.837	1.00 46.53	QS17
ATOM	4755	CB	PRO	2	112.308	87.112	-22.494	1.00 53.26	QS17	ATOM	4808	CB	VAL	9	124.631	88.516	-41.653	1.00 48.46	QS17
ATOM	4756	CG	PRO	2	112.158	87.761	-21.152	1.00 53.26	QS17	ATOM	4809	CG1	VAL	9	124.165	88.586	-43.086	1.00 48.46	QS17
ATOM	4757	C	PRO	2	113.251	84.889	-22.986	1.00 49.21	QS17	ATOM	4810	CG2	VAL	9	124.802	89.890	-41.071	1.00 48.46	QS17
ATOM	4758	O	PRO	2	114.459	85.044	-22.806	1.00 49.21	QS17	ATOM	4811	C	VAL	9	123.939	86.273	-41.085	1.00 46.53	QS17
ATOM	4759	N	PRO	2	112.604	85.514	-20.711	1.00 49.21	QS17	ATOM	4812	O	VAL	9	124.642	85.643	-40.306	1.00 46.53	QS17
ATOM	4760	CD	PRO	2	112.883	86.849	-20.161	1.00 53.26	QS17	ATOM	4813	N	VAL	10	123.413	85.754	-42.184	1.00 49.10	QS17
ATOM	4761	CA	PRO	2	112.253	85.638	-22.135	1.00 49.21	QS17	ATOM	4814	CA	VAL	10	123.659	84.377	-42.565	1.00 49.10	QS17
ATOM	4762	N	LYS	3	112.752	84.066	-23.901	1.00 47.79	QS17	ATOM	4815	CB	VAL	10	122.585	83.848	-43.512	1.00 37.82	QS17
ATOM	4763	CA	LYS	3	113.641	83.358	-24.796	1.00 47.79	QS17	ATOM	4816	CG1	VAL	10	122.773	82.364	-43.719	1.00 37.82	QS17
ATOM	4764	CB	LYS	3	112.854	82.513	-25.793	1.00 41.16	QS17	ATOM	4817	CG2	VAL	10	121.222	84.159	-42.966	1.00 37.82	QS17
ATOM	4765	CG	LYS	3	112.234	81.275	-25.193	1.00 41.16	QS17	ATOM	4818	C	VAL	10	124.965	84.385	-43.330	1.00 49.10	QS17
ATOM	4766	CD	LYS	3	111.618	80.385	-26.275	1.00 41.16	QS17	ATOM	4819	O	VAL	10	125.039	84.914	-44.440	1.00 49.10	QS17
ATOM	4767	CE	LYS	3	111.096	79.078	-25.684	1.00 41.16	QS17	ATOM	4820	N	VAL	11	126.001	83.811	-42.743	1.00 41.29	QS17
ATOM	4768	NZ	LYS	3	110.140	79.297	-24.544	1.00 41.16	QS17	ATOM	4821	CA	VAL	11	127.276	83.785	-43.417	1.00 41.29	QS17
ATOM	4769	C	LYS	3	114.391	84.468	-25.524	1.00 47.79	QS17	ATOM	4822	CB	VAL	11	128.392	84.159	-42.450	1.00 28.20	QS17
ATOM	4770	O	LYS	3	113.776	85.345	-26.137	1.00 47.79	QS17	ATOM	4823	CG1	VAL	11	128.097	85.507	-41.855	1.00 28.20	QS17
ATOM	4771	N	LYS	4	115.717	84.428	-25.413	1.00 46.85	QS17	ATOM	4824	CG2	VAL	11	128.510	83.118	-41.350	1.00 28.20	QS17
ATOM	4772	CA	LYS	4	116.622	85.398	-26.014	1.00 46.85	QS17	ATOM	4825	C	VAL	11	127.529	82.407	-44.009	1.00 41.29	QS17
ATOM	4773	CB	LYS	4	118.055	85.000	-25.687	1.00 62.78	QS17	ATOM	4826	O	VAL	11	128.540	82.182	-44.668	1.00 41.29	QS17
ATOM	4774	CG	LYS	4	119.112	85.966	-26.157	1.00 62.78	QS17	ATOM	4827	N	SER	12	126.603	81.482	-43.784	1.00 74.58	QS17
ATOM	4775	CD	LYS	4	119.210	87.117	-25.203	1.00 62.78	QS17	ATOM	4828	CA	SER	12	126.758	80.138	-44.316	1.00 74.58	QS17
ATOM	4776	CE	LYS	4	120.411	87.967	-25.508	1.00 62.78	QS17	ATOM	4829	CB	SER	12	127.635	79.305	-43.391	1.00 51.11	QS17
ATOM	4777	NZ	LYS	4	120.557	89.039	-24.487	1.00 62.78	QS17	ATOM	4830	OG	SER	12	127.602	77.940	-43.769	1.00 51.11	QS17
ATOM	4778	C	LYS	4	116.469	85.499	-27.527	1.00 46.85	QS17	ATOM	4831	C	SER	12	125.442	79.412	-44.535	1.00 74.58	QS17
ATOM	4779	O	LYS	4	116.440	84.483	-28.228	1.00 46.85	QS17	ATOM	4832	O	SER	12	124.619	79.300	-43.622	1.00 74.58	QS17
ATOM	4780	N	VAL	5	116.377	86.730	-28.027	1.00 44.79	QS17	ATOM	4833	N	ASP	13	125.264	78.916	-45.758	1.00 90.97	QS17
ATOM	4781	CA	VAL	5	116.253	86.957	-29.462	1.00 44.79	QS17	ATOM	4834	CA	ASP	13	124.072	78.177	-46.148	1.00 90.97	QS17
ATOM	4782	CB	VAL	5	114.973	87.756	-29.788	1.00 32.60	QS17	ATOM	4835	CB	ASP	13	123.332	78.929	-47.256	1.00167.27	QS17
ATOM	4783	CG1	VAL	5	114.830	87.941	-31.290	1.00 32.60	QS17	ATOM	4836	CG	ASP	13	121.996	78.297	-47.605	1.00167.27	QS17
ATOM	4784	CG2	VAL	5	113.771	87.027	-29.249	1.00 32.60	QS17	ATOM	4837	OD1	ASP	13	121.280	78.874	-48.451	1.00167.27	QS17
ATOM	4785	C	VAL	5	117.482	87.731	-29.940	1.00 44.79	QS17	ATOM	4838	OD2	ASP	13	121.658	77.231	-47.041	1.00167.27	QS17
ATOM	4786	O	VAL	5	117.868	88.718	-29.322	1.00 44.79	QS17	ATOM	4839	C	ASP	13	124.534	76.815	-46.656	1.00 90.97	QS17
ATOM	4787	N	LEU	6	118.095	87.286	-31.032	1.00 44.90	QS17	ATOM	4840	O	ASP	13	123.841	76.152	-47.429	1.00 90.97	QS17
ATOM	4788	CA	LEU	6	119.285	87.953	-31.548	1.00 44.90	QS17	ATOM	4841	N	LYS	14	125.708	76.394	-46.202	1.00 63.90	QS17

ATOM	4842	CA	LYS	14	126.282	75.125	-46.631	1.00	63.90	QS17	ATOM	4895	C	THR	20	124.911	81.627	-39.597	1.00	43.81	QS17
ATOM	4843	CB	LYS	14	127.807	75.161	-46.458	1.00	96.72	QS17	ATOM	4896	O	THR	20	125.174	82.351	-40.548	1.00	43.81	QS17
ATOM	4844	CG	LYS	14	128.509	76.109	-47.421	1.00	96.72	QS17	ATOM	4897	N	VAL	21	124.380	82.072	-38.469	1.00	38.76	QS17
ATOM	4845	CD	LYS	14	130.017	76.004	-47.311	1.00	96.72	QS17	ATOM	4898	CA	VAL	21	124.118	83.485	-38.273	1.00	38.76	QS17
ATOM	4846	CE	LYS	14	130.703	76.860	-48.370	1.00	96.72	QS17	ATOM	4899	CB	VAL	21	122.799	83.721	-37.519	1.00	21.95	QS17
ATOM	4847	NZ	LYS	14	132.192	76.695	-48.376	1.00	96.72	QS17	ATOM	4900	CG1	VAL	21	122.555	85.217	-37.347	1.00	21.95	QS17
ATOM	4848	C	LYS	14	125.726	73.863	-45.971	1.00	63.90	QS17	ATOM	4901	CG2	VAL	21	121.663	83.080	-38.281	1.00	21.95	QS17
ATOM	4849	O	LYS	14	126.137	72.755	-46.317	1.00	63.90	QS17	ATOM	4902	C	VAL	21	125.273	84.093	-37.481	1.00	38.76	QS17
ATOM	4850	N	MET	15	124.795	74.014	-45.034	1.00	65.06	QS17	ATOM	4903	O	VAL	21	125.726	83.544	-36.471	1.00	38.76	QS17
ATOM	4851	CA	MET	15	124.231	72.852	-44.361	1.00	65.06	QS17	ATOM	4904	N	LEU	22	125.749	85.233	-37.959	1.00	40.11	QS17
ATOM	4852	CB	MET	15	124.388	72.979	-42.853	1.00	61.06	QS17	ATOM	4905	CA	LEU	22	126.852	85.915	-37.327	1.00	40.11	QS17
ATOM	4853	CG	MET	15	125.809	72.967	-42.364	1.00	61.06	QS17	ATOM	4906	CB	LEU	22	127.853	86.311	-38.401	1.00	32.36	QS17
ATOM	4854	SD	MET	15	125.829	73.028	-40.567	1.00	61.06	QS17	ATOM	4907	CG	LEU	22	129.034	87.176	-37.997	1.00	32.36	QS17
ATOM	4855	CE	MET	15	125.461	74.778	-40.261	1.00	61.06	QS17	ATOM	4908	CD1	LEU	22	129.797	86.552	-36.852	1.00	32.36	QS17
ATOM	4856	C	MET	15	122.765	72.634	-44.677	1.00	65.06	QS17	ATOM	4909	CD2	LEU	22	129.907	87.330	-39.208	1.00	32.36	QS17
ATOM	4857	O	MET	15	122.098	73.503	-45.252	1.00	65.06	QS17	ATOM	4910	C	LEU	22	126.340	87.131	-36.564	1.00	40.11	QS17
ATOM	4858	N	GLN	16	122.276	71.458	-44.289	1.00	61.30	QS17	ATOM	4911	O	LEU	22	126.165	88.204	-37.121	1.00	40.11	QS17
ATOM	4859	CA	GLN	16	120.887	71.070	-44.494	1.00	61.30	QS17	ATOM	4912	N	VAL	23	126.109	86.943	-35.274	1.00	42.48	QS17
ATOM	4860	CB	GLN	16	120.782	69.556	-44.621	1.00	60.33	QS17	ATOM	4913	CA	VAL	23	125.579	87.981	-34.393	1.00	42.48	QS17
ATOM	4861	CG	GLN	16	121.541	68.988	-45.796	1.00	60.33	QS17	ATOM	4914	CB	VAL	23	124.781	87.326	-33.226	1.00	42.30	QS17
ATOM	4862	CD	GLN	16	121.538	67.466	-45.820	1.00	60.33	QS17	ATOM	4915	CG1	VAL	23	124.430	88.350	-32.174	1.00	42.30	QS17
ATOM	4863	OE1	GLN	16	122.035	66.845	-46.765	1.00	60.33	QS17	ATOM	4916	CG2	VAL	23	123.527	86.670	-33.766	1.00	42.30	QS17
ATOM	4864	NE2	GLN	16	120.983	66.858	-44.778	1.00	60.33	QS17	ATOM	4917	C	VAL	23	126.644	88.889	-33.799	1.00	42.48	QS17
ATOM	4865	C	GLN	16	120.025	71.539	-43.327	1.00	61.30	QS17	ATOM	4918	O	VAL	23	127.534	88.418	-33.102	1.00	42.48	QS17
ATOM	4866	O	GLN	16	120.297	71.218	-42.175	1.00	61.30	QS17	ATOM	4919	N	GLU	24	126.534	90.191	-34.055	1.00	46.96	QS17
ATOM	4867	N	LYS	17	118.987	72.303	-43.645	1.00	53.95	QS17	ATOM	4920	CA	GLU	24	127.496	91.157	-33.520	1.00	46.96	QS17
ATOM	4868	CA	LYS	17	118.050	72.845	-42.664	1.00	53.95	QS17	ATOM	4921	CB	GLU	24	127.696	92.306	-34.513	1.00	84.41	QS17
ATOM	4869	CB	LYS	17	117.226	71.710	-42.054	1.00	83.08	QS17	ATOM	4922	CG	GLU	24	129.153	92.589	-34.867	1.00	84.41	QS17
ATOM	4870	CG	LYS	17	116.472	70.921	-43.106	1.00	83.08	QS17	ATOM	4923	CD	GLU	24	129.300	93.287	-36.219	1.00	84.41	QS17
ATOM	4871	CD	LYS	17	115.428	70.014	-42.509	1.00	83.08	QS17	ATOM	4924	OE1	GLU	24	128.775	92.747	-37.219	1.00	84.41	QS17
ATOM	4872	CE	LYS	17	114.646	69.332	-43.607	1.00	83.08	QS17	ATOM	4925	OE2	GLU	24	129.937	94.363	-36.292	1.00	84.41	QS17
ATOM	4873	NZ	LYS	17	113.479	68.618	-43.048	1.00	83.08	QS17	ATOM	4926	C	GLU	24	127.021	91.694	-32.162	1.00	46.96	QS17
ATOM	4874	C	LYS	17	118.720	73.670	-41.567	1.00	53.95	QS17	ATOM	4927	O	GLU	24	125.822	91.710	-31.865	1.00	46.96	QS17
ATOM	4875	O	LYS	17	118.109	73.979	-40.540	1.00	53.95	QS17	ATOM	4928	N	ARG	25	127.969	92.137	-31.345	1.00	47.32	QS17
ATOM	4876	N	THR	18	119.974	74.044	-41.801	1.00	54.08	QS17	ATOM	4929	CA	ARG	25	127.663	92.633	-30.010	1.00	47.32	QS17
ATOM	4877	CA	THR	18	120.727	74.824	-40.831	1.00	54.08	QS17	ATOM	4930	CB	ARG	25	127.754	91.467	-29.028	1.00	46.26	QS17
ATOM	4878	CB	THR	18	121.784	73.945	-40.142	1.00	64.57	QS17	ATOM	4931	CG	ARG	25	127.854	91.865	-27.569	1.00	46.26	QS17
ATOM	4879	OG1	THR	18	121.276	72.615	-39.982	1.00	64.57	QS17	ATOM	4932	CD	ARG	25	127.803	90.640	-26.671	1.00	46.26	QS17
ATOM	4880	CG2	THR	18	122.140	74.518	-38.780	1.00	64.57	QS17	ATOM	4933	NE	ARG	25	128.962	89.776	-26.860	1.00	46.26	QS17
ATOM	4881	C	THR	18	121.460	75.973	-41.519	1.00	54.08	QS17	ATOM	4934	CZ	ARG	25	130.007	89.763	-26.047	1.00	46.26	QS17
ATOM	4882	O	THR	18	121.847	75.856	-42.683	1.00	54.08	QS17	ATOM	4935	NH1	ARG	25	130.026	90.564	-24.990	1.00	46.26	QS17
ATOM	4883	N	VAL	19	121.635	77.084	-40.811	1.00	61.26	QS17	ATOM	4936	NH2	ARG	25	131.031	88.961	-26.294	1.00	46.26	QS17
ATOM	4884	CA	VAL	19	122.378	78.219	-41.358	1.00	61.26	QS17	ATOM	4937	C	ARG	25	128.648	93.708	-29.606	1.00	47.32	QS17
ATOM	4885	CB	VAL	19	121.467	79.346	-41.895	1.00	32.98	QS17	ATOM	4938	O	ARG	25	129.816	93.616	-29.942	1.00	47.32	QS17
ATOM	4886	CG1	VAL	19	120.689	78.866	-43.101	1.00	32.98	QS17	ATOM	4939	N	GLN	26	128.198	94.730	-28.890	1.00	37.50	QS17
ATOM	4887	CG2	VAL	19	120.563	79.826	-40.802	1.00	32.98	QS17	ATOM	4940	CA	GLN	26	129.113	95.787	-28.453	1.00	37.50	QS17
ATOM	4888	C	VAL	19	123.244	78.805	-40.253	1.00	61.26	QS17	ATOM	4941	CB	GLN	26	128.749	97.126	-29.077	1.00	65.64	QS17
ATOM	4889	O	VAL	19	122.981	78.587	-39.066	1.00	61.26	QS17	ATOM	4942	CG	GLN	26	128.571	97.052	-30.563	1.00	65.64	QS17
ATOM	4890	N	THR	20	124.286	79.533	-40.646	1.00	43.81	QS17	ATOM	4943	CD	GLN	26	128.739	98.394	-31.235	1.00	65.64	QS17
ATOM	4891	CA	THR	20	125.170	80.144	-39.673	1.00	43.81	QS17	ATOM	4944	OE1	GLN	26	128.159	99.396	-30.804	1.00	65.64	QS17
ATOM	4892	CB	THR	20	126.638	79.954	-40.029	1.00	55.85	QS17	ATOM	4945	NE2	GLN	26	129.529	98.423	-32.306	1.00	65.64	QS17
ATOM	4893	OG1	THR	20	126.934	78.554	-40.137	1.00	55.85	QS17	ATOM	4946	C	GLN	26	129.042	95.907	-26.952	1.00	37.50	QS17
ATOM	4894	CG2	THR	20	127.511	80.574	-38.950	1.00	55.85	QS17	ATOM	4947	O	GLN	26	128.180	95.314	-26.326	1.00	37.50	QS17

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ATOM   4948  N   PHE  27     129.940  96.685 -26.369  1.00 30.90      QS17
ATOM   4949  CA  PHE  27     129.963  96.858 -24.923  1.00 30.90      QS17
ATOM   4950  CB  PHE  27     129.857  95.513 -24.210  1.00 37.75      QS17
ATOM   4951  CG  PHE  27     131.040  94.625 -24.418  1.00 37.75      QS17
ATOM   4952  CD1 PHE  27     132.154  94.727 -23.603  1.00 37.75      QS17
ATOM   4953  CD2 PHE  27     131.038  93.672 -25.433  1.00 37.75      QS17
ATOM   4954  CE1 PHE  27     133.253  93.886 -23.791  1.00 37.75      QS17
ATOM   4955  CE2 PHE  27     132.138  92.826 -25.628  1.00 37.75      QS17
ATOM   4956  CZ  PHE  27     133.244  92.936 -24.804  1.00 37.75      QS17
ATOM   4957  C   PHE  27     131.251  97.510 -24.508  1.00 30.90      QS17
ATOM   4958  O   PHE  27     132.247  97.452 -25.215  1.00 30.90      QS17
ATOM   4959  N   PRO  28     131.250  98.127 -23.333  1.00 40.69      QS17
ATOM   4960  CD  PRO  28     130.096  98.298 -22.445  1.00 26.82      QS17
ATOM   4961  CA  PRO  28     132.416  98.810 -22.788  1.00 40.69      QS17
ATOM   4962  CB  PRO  28     131.810  99.755 -21.782  1.00 26.82      QS17
ATOM   4963  CG  PRO  28     130.738  98.925 -21.225  1.00 26.82      QS17
ATOM   4964  C   PRO  28     133.369  97.853 -22.132  1.00 40.69      QS17
ATOM   4965  O   PRO  28     132.983  97.000 -21.339  1.00 40.69      QS17
ATOM   4966  N   HIS  29     134.627  97.999 -22.485  1.00 24.31      QS17
ATOM   4967  CA  HIS  29     135.668  97.182 -21.917  1.00 24.31      QS17
ATOM   4968  CB  HIS  29     137.000  97.683 -22.448  1.00 50.65      QS17
ATOM   4969  CG  HIS  29     138.152  96.806 -22.107  1.00 50.65      QS17
ATOM   4970  CD2 HIS  29     138.865  95.946 -22.868  1.00 50.65      QS17
ATOM   4971  ND1 HIS  29     138.699  96.761 -20.846  1.00 50.65      QS17
ATOM   4972  CE1 HIS  29     139.706  95.910 -20.846  1.00 50.65      QS17
ATOM   4973  NE2 HIS  29     139.828  95.403 -22.061  1.00 50.65      QS17
ATOM   4974  C   HIS  29     135.586  97.372 -20.401  1.00 24.31      QS17
ATOM   4975  O   HIS  29     135.499  98.496 -19.908  1.00 24.31      QS17
ATOM   4976  N   PRO  30     135.598  96.274 -19.643  1.00 32.58      QS17
ATOM   4977  CD  PRO  30     135.627  94.871 -20.069  1.00 44.80      QS17
ATOM   4978  CA  PRO  30     135.520  96.369 -18.188  1.00 32.58      QS17
ATOM   4979  CB  PRO  30     135.554  94.910 -17.746  1.00 44.80      QS17
ATOM   4980  CG  PRO  30     136.238  94.220 -18.878  1.00 44.80      QS17
ATOM   4981  C   PRO  30     136.572  97.233 -17.493  1.00 32.58      QS17
ATOM   4982  O   PRO  30     136.321  97.734 -16.397  1.00 32.58      QS17
ATOM   4983  N   LEU  31     137.744  97.425 -18.090  1.00 28.44      QS17
ATOM   4984  CA  LEU  31     138.727  98.266 -17.415  1.00 28.44      QS17
ATOM   4985  CB  LEU  31     140.002  97.474 -17.094  1.00 29.35      QS17
ATOM   4986  CG  LEU  31     141.229  98.197 -16.490  1.00 29.35      QS17
ATOM   4987  CD1 LEU  31     140.894  99.000 -15.251  1.00 29.35      QS17
ATOM   4988  CD2 LEU  31     142.253  97.150 -16.156  1.00 29.35      QS17
ATOM   4989  C   LEU  31     139.098  99.537 -18.167  1.00 28.44      QS17
ATOM   4990  O   LEU  31     139.312 100.584 -17.547  1.00 28.44      QS17
ATOM   4991  N   TYR  32     139.165  99.450 -19.495  1.00 33.82      QS17
ATOM   4992  CA  TYR  32     139.539 100.596 -20.315  1.00 33.82      QS17
ATOM   4993  CB  TYR  32     140.499 100.134 -21.414  1.00 36.01      QS17
ATOM   4994  CG  TYR  32     141.715  99.448 -20.831  1.00 36.01      QS17
ATOM   4995  CD1 TYR  32     142.134  98.199 -21.283  1.00 36.01      QS17
ATOM   4996  CE1 TYR  32     143.209  97.548 -20.683  1.00 36.01      QS17
ATOM   4997  CD2 TYR  32     142.407 100.029 -19.773  1.00 36.01      QS17
ATOM   4998  CE2 TYR  32     143.480  99.390 -19.169  1.00 36.01      QS17
ATOM   4999  CZ  TYR  32     143.877  98.156 -19.620  1.00 36.01      QS17
ATOM   5000  OH  TYR  32     144.938  97.543 -18.986  1.00 36.01      QS17
ATOM   5001  C   TYR  32     138.344 101.333 -20.887  1.00 33.82      QS17
ATOM   5002  O   TYR  32     138.486 102.296 -21.627  1.00 33.82      QS17
ATOM   5003  N   GLY  33     137.160 100.864 -20.535  1.00 35.87      QS17
ATOM   5004  CA  GLY  33     135.936 101.510 -20.960  1.00 35.87      QS17
ATOM   5005  C   GLY  33     135.589 101.762 -22.413  1.00 35.87      QS17
ATOM   5006  O   GLY  33     134.413 101.940 -22.710  1.00 35.87      QS17
ATOM   5007  N   LYS  34     136.549 101.795 -23.326  1.00 27.55      QS17
ATOM   5008  CA  LYS  34     136.179 102.053 -24.717  1.00 27.55      QS17
ATOM   5009  CB  LYS  34     137.413 102.071 -25.626  1.00 34.53      QS17
ATOM   5010  CG  LYS  34     137.891 100.722 -26.119  1.00 34.53      QS17
ATOM   5011  CD  LYS  34     137.802 100.639 -27.644  1.00 34.53      QS17
ATOM   5012  CE  LYS  34     138.601 101.751 -28.306  1.00 34.53      QS17
ATOM   5013  NZ  LYS  34     138.528 101.708 -29.787  1.00 34.53      QS17
ATOM   5014  C   LYS  34     135.184 100.992 -25.181  1.00 27.55      QS17
ATOM   5015  O   LYS  34     135.202  99.862 -24.699  1.00 27.55      QS17
ATOM   5016  N   VAL  35     134.298 101.362 -26.095  1.00 39.73      QS17
ATOM   5017  CA  VAL  35     133.314 100.416 -26.590  1.00 39.73      QS17
ATOM   5018  CB  VAL  35     132.109 101.127 -27.238  1.00 32.03      QS17
ATOM   5019  CG1 VAL  35     131.167 100.093 -27.846  1.00 32.03      QS17
ATOM   5020  CG2 VAL  35     131.381 101.958 -26.201  1.00 32.03      QS17
ATOM   5021  C   VAL  35     133.963  99.512 -27.619  1.00 39.73      QS17
ATOM   5022  O   VAL  35     134.466  99.973 -28.640  1.00 39.73      QS17
ATOM   5023  N   ILE  36     133.952  98.218 -27.345  1.00 38.55      QS17
ATOM   5024  CA  ILE  36     134.558  97.264 -28.245  1.00 38.55      QS17
ATOM   5025  CB  ILE  36     135.532  96.362 -27.490  1.00 39.84      QS17
ATOM   5026  CG2 ILE  36     136.386  97.214 -26.540  1.00 39.84      QS17
ATOM   5027  CG1 ILE  36     134.765  95.339 -26.660  1.00 39.84      QS17
ATOM   5028  CD1 ILE  36     135.669  94.465 -25.811  1.00 39.84      QS17
ATOM   5029  C   ILE  36     133.451  96.446 -28.861  1.00 38.55      QS17
ATOM   5030  O   ILE  36     132.397  96.271 -28.259  1.00 38.55      QS17
ATOM   5031  N   LYS  37     133.688  95.956 -30.070  1.00 45.47      QS17
ATOM   5032  CA  LYS  37     132.695  95.175 -30.786  1.00 45.47      QS17
ATOM   5033  CB  LYS  37     132.434  95.814 -32.136  1.00 51.45      QS17
ATOM   5034  CG  LYS  37     131.403  95.127 -32.959  1.00 51.45      QS17
ATOM   5035  CD  LYS  37     131.609  95.476 -34.425  1.00 51.45      QS17
ATOM   5036  CE  LYS  37     131.707  96.988 -34.668  1.00 51.45      QS17
ATOM   5037  NZ  LYS  37     131.935  97.328 -36.116  1.00 51.45      QS17
ATOM   5038  C   LYS  37     133.243  93.774 -30.961  1.00 45.47      QS17
ATOM   5039  O   LYS  37     134.385  93.599 -31.362  1.00 45.47      QS17
ATOM   5040  N   ARG  38     132.423  92.782 -30.652  1.00 48.86      QS17
ATOM   5041  CA  ARG  38     132.817  91.386 -30.736  1.00 48.86      QS17
ATOM   5042  CB  ARG  38     132.930  90.832 -29.319  1.00 62.32      QS17
ATOM   5043  CG  ARG  38     134.023  89.807 -29.135  1.00 62.32      QS17
ATOM   5044  CD  ARG  38     135.240  90.362 -28.388  1.00 62.32      QS17
ATOM   5045  NE  ARG  38     135.852  91.504 -29.061  1.00 62.32      QS17
ATOM   5046  CZ  ARG  38     137.137  91.821 -28.949  1.00 62.32      QS17
ATOM   5047  NH1 ARG  38     137.919  91.066 -28.193  1.00 62.32      QS17
ATOM   5048  NH2 ARG  38     137.638  92.882 -29.575  1.00 62.32      QS17
ATOM   5049  C   ARG  38     131.742  90.635 -31.527  1.00 48.86      QS17
ATOM   5050  O   ARG  38     130.693  91.199 -31.837  1.00 48.86      QS17
ATOM   5051  N   SER  39     131.977  89.375 -31.865  1.00 59.96      QS17
ATOM   5052  CA  SER  39     130.964  88.652 -32.619  1.00 59.96      QS17
ATOM   5053  CB  SER  39     131.061  89.021 -34.090  1.00 52.08      QS17
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ATOM	5054	OG	SER	39	132.306	88.615	-34.605	1.00	52.08	QS17	ATOM	5107	NE2	HIS	45	114.468	72.453	-37.856	1.00	58.02	QS17
ATOM	5055	C	SER	39	131.021	87.135	-32.460	1.00	59.96	QS17	ATOM	5108	C	HIS	45	116.598	76.590	-38.739	1.00	47.04	QS17
ATOM	5056	O	SER	39	132.091	86.559	-32.249	1.00	59.96	QS17	ATOM	5109	O	HIS	45	115.755	77.442	-38.473	1.00	47.04	QS17
ATOM	5057	N	LYS	40	129.860	86.496	-32.587	1.00	40.83	QS17	ATOM	5110	N	ASP	46	116.837	76.157	-39.977	1.00	76.36	QS17
ATOM	5058	CA	LYS	40	129.730	85.056	-32.414	1.00	40.83	QS17	ATOM	5111	CA	ASP	46	116.117	76.657	-41.152	1.00	76.36	QS17
ATOM	5059	CB	LYS	40	129.161	84.807	-31.015	1.00	36.76	QS17	ATOM	5112	CB	ASP	46	117.085	77.388	-42.087	1.00	71.45	QS17
ATOM	5060	CG	LYS	40	128.791	83.372	-30.642	1.00	36.76	QS17	ATOM	5113	CG	ASP	46	116.396	77.955	-43.314	1.00	71.45	QS17
ATOM	5061	CD	LYS	40	128.365	83.361	-29.172	1.00	36.76	QS17	ATOM	5114	OD1	ASP	46	117.109	78.368	-44.260	1.00	71.45	QS17
ATOM	5062	CE	LYS	40	128.045	81.992	-28.649	1.00	36.76	QS17	ATOM	5115	OD2	ASP	46	115.144	77.990	-43.321	1.00	71.45	QS17
ATOM	5063	NZ	LYS	40	127.641	82.101	-27.237	1.00	36.76	QS17	ATOM	5116	C	ASP	46	115.489	75.476	-41.895	1.00	76.36	QS17
ATOM	5064	C	LYS	40	128.826	84.439	-33.477	1.00	40.83	QS17	ATOM	5117	O	ASP	46	116.028	75.004	-42.891	1.00	76.36	QS17
ATOM	5065	O	LYS	40	127.850	85.055	-33.892	1.00	40.83	QS17	ATOM	5118	N	PRO	47	114.332	74.997	-41.422	1.00	71.02	QS17
ATOM	5066	N	LYS	41	129.152	83.225	-33.916	1.00	39.77	QS17	ATOM	5119	CD	PRO	47	113.627	75.527	-40.245	1.00	63.77	QS17
ATOM	5067	CA	LYS	41	128.347	82.541	-34.927	1.00	39.77	QS17	ATOM	5120	CA	PRO	47	113.592	73.868	-41.997	1.00	71.02	QS17
ATOM	5068	CB	LYS	41	129.215	81.797	-35.952	1.00	35.10	QS17	ATOM	5121	CB	PRO	47	112.374	73.754	-41.090	1.00	63.77	QS17
ATOM	5069	CG	LYS	41	130.061	82.674	-36.859	1.00	35.10	QS17	ATOM	5122	CG	PRO	47	112.851	74.332	-39.796	1.00	63.77	QS17
ATOM	5070	CD	LYS	41	130.871	81.855	-37.859	1.00	35.10	QS17	ATOM	5123	C	PRO	47	113.182	74.020	-43.453	1.00	71.02	QS17
ATOM	5071	CE	LYS	41	131.804	80.895	-37.165	1.00	35.10	QS17	ATOM	5124	O	PRO	47	113.423	73.133	-44.273	1.00	71.02	QS17
ATOM	5072	NZ	LYS	41	132.629	80.130	-38.134	1.00	35.10	QS17	ATOM	5125	N	GLU	48	112.547	75.142	-43.763	1.00	87.76	QS17
ATOM	5073	C	LYS	41	127.467	81.514	-34.267	1.00	39.77	QS17	ATOM	5126	CA	GLU	48	112.078	75.409	-45.114	1.00	87.76	QS17
ATOM	5074	O	LYS	41	127.954	80.683	-33.494	1.00	39.77	QS17	ATOM	5127	CB	GLU	48	111.062	76.563	-45.081	1.00	115.81	QS17
ATOM	5075	N	TYR	42	126.174	81.574	-34.583	1.00	36.45	QS17	ATOM	5128	CG	GLU	48	109.880	76.341	-44.118	1.00	115.81	QS17
ATOM	5076	CA	TYR	42	125.197	80.618	-34.067	1.00	36.45	QS17	ATOM	5129	CD	GLU	48	109.004	77.583	-43.917	1.00	115.81	QS17
ATOM	5077	CB	TYR	42	124.020	81.339	-33.409	1.00	34.41	QS17	ATOM	5130	OE1	GLU	48	109.513	78.606	-43.407	1.00	115.81	QS17
ATOM	5078	CG	TYR	42	124.383	82.180	-32.222	1.00	34.41	QS17	ATOM	5131	OE2	GLU	48	107.803	77.532	-44.263	1.00	115.81	QS17
ATOM	5079	CD1	TYR	42	124.901	83.457	-32.382	1.00	34.41	QS17	ATOM	5132	C	GLU	48	113.228	75.754	-46.064	1.00	87.76	QS17
ATOM	5080	CE1	TYR	42	125.252	84.230	-31.278	1.00	34.41	QS17	ATOM	5133	O	GLU	48	112.980	76.134	-47.209	1.00	87.76	QS17
ATOM	5081	CD2	TYR	42	124.221	81.692	-30.931	1.00	34.41	QS17	ATOM	5134	N	GLU	49	114.474	75.609	-45.598	1.00	69.34	QS17
ATOM	5082	CE2	TYR	42	124.569	82.450	-29.816	1.00	34.41	QS17	ATOM	5135	CA	GLU	49	115.662	75.947	-46.401	1.00	69.34	QS17
ATOM	5083	CZ	TYR	42	125.087	83.718	-29.990	1.00	34.41	QS17	ATOM	5136	CB	GLU	49	115.796	75.019	-47.610	1.00	102.79	QS17
ATOM	5084	OH	TYR	42	125.475	84.460	-28.880	1.00	34.41	QS17	ATOM	5137	CG	GLU	49	116.449	73.682	-47.332	1.00	102.79	QS17
ATOM	5085	C	TYR	42	124.663	79.780	-35.231	1.00	36.45	QS17	ATOM	5138	CD	GLU	49	117.869	73.817	-46.817	1.00	102.79	QS17
ATOM	5086	O	TYR	42	124.520	80.276	-36.339	1.00	36.45	QS17	ATOM	5139	OE1	GLU	49	118.650	74.622	-47.366	1.00	102.79	QS17
ATOM	5087	N	LEU	43	124.397	78.505	-34.996	1.00	43.58	QS17	ATOM	5140	OE2	GLU	49	118.215	73.103	-45.862	1.00	102.79	QS17
ATOM	5088	CA	LEU	43	123.822	77.678	-36.042	1.00	43.58	QS17	ATOM	5141	C	GLU	49	115.498	77.379	-46.895	1.00	69.34	QS17
ATOM	5089	CB	LEU	43	124.354	76.257	-35.973	1.00	30.92	QS17	ATOM	5142	O	GLU	49	116.214	77.836	-47.781	1.00	69.34	QS17
ATOM	5090	CG	LEU	43	125.849	76.054	-36.186	1.00	30.92	QS17	ATOM	5143	N	LYS	50	114.537	78.064	-46.286	1.00	44.70	QS17
ATOM	5091	CD1	LEU	43	126.094	74.564	-36.462	1.00	30.92	QS17	ATOM	5144	CA	LYS	50	114.143	79.430	-46.593	1.00	44.70	QS17
ATOM	5092	CD2	LEU	43	126.337	76.884	-37.361	1.00	30.92	QS17	ATOM	5145	CB	LYS	50	113.162	79.886	-45.507	1.00	89.62	QS17
ATOM	5093	C	LEU	43	122.320	77.681	-35.769	1.00	43.58	QS17	ATOM	5146	CG	LYS	50	112.375	81.136	-45.819	1.00	89.62	QS17
ATOM	5094	O	LEU	43	121.859	77.171	-34.738	1.00	43.58	QS17	ATOM	5147	CD	LYS	50	111.239	81.312	-44.815	1.00	89.62	QS17
ATOM	5095	N	ALA	44	121.561	78.281	-36.680	1.00	41.63	QS17	ATOM	5148	CE	LYS	50	110.255	82.391	-45.266	1.00	89.62	QS17
ATOM	5096	CA	ALA	44	120.114	78.369	-36.527	1.00	41.63	QS17	ATOM	5149	NZ	LYS	50	109.089	82.520	-44.344	1.00	89.62	QS17
ATOM	5097	CB	ALA	44	119.645	79.781	-36.807	1.00	44.50	QS17	ATOM	5150	C	LYS	50	115.258	80.471	-46.759	1.00	44.70	QS17
ATOM	5098	C	ALA	44	119.374	77.391	-37.420	1.00	41.63	QS17	ATOM	5151	O	LYS	50	115.589	80.896	-47.873	1.00	44.70	QS17
ATOM	5099	O	ALA	44	119.800	77.089	-38.543	1.00	41.63	QS17	ATOM	5152	N	TYR	51	115.839	80.867	-45.636	1.00	49.31	QS17
ATOM	5100	N	HIS	45	118.246	76.916	-36.912	1.00	47.04	QS17	ATOM	5153	CA	TYR	51	116.865	81.891	-45.603	1.00	49.31	QS17
ATOM	5101	CA	HIS	45	117.435	75.957	-37.632	1.00	47.04	QS17	ATOM	5154	CB	TYR	51	117.144	82.219	-44.148	1.00	70.12	QS17
ATOM	5102	CB	HIS	45	116.531	75.232	-36.648	1.00	58.02	QS17	ATOM	5155	CG	TYR	51	115.849	82.450	-43.394	1.00	70.12	QS17
ATOM	5103	CG	HIS	45	115.841	74.045	-37.234	1.00	58.02	QS17	ATOM	5156	CD1	TYR	51	115.092	81.378	-42.929	1.00	70.12	QS17
ATOM	5104	CD2	HIS	45	114.566	73.607	-37.118	1.00	58.02	QS17	ATOM	5157	CE1	TYR	51	113.878	81.582	-42.290	1.00	70.12	QS17
ATOM	5105	ND1	HIS	45	116.489	73.140	-38.044	1.00	58.02	QS17	ATOM	5158	CD2	TYR	51	115.352	83.741	-43.197	1.00	70.12	QS17
ATOM	5106	CE1	HIS	45	115.641	72.194	-38.404	1.00	58.02	QS17	ATOM	5159	CE2	TYR	51	114.138	83.958	-42.558	1.00	70.12	QS17

ATOM	5160	CZ	TYR	51	113.406	82.875	-42.105	1.00	70.12	QS17	ATOM	5213	OE2	GLU	58	114.210	91.177	-34.163	1.00	68.61	QS17
ATOM	5161	OH	TYR	51	112.210	83.083	-41.450	1.00	70.12	QS17	ATOM	5214	C	GLU	58	116.335	85.856	-35.496	1.00	56.96	QS17
ATOM	5162	C	TYR	51	118.138	81.618	-46.376	1.00	49.31	QS17	ATOM	5215	O	GLU	58	115.561	85.045	-36.002	1.00	56.96	QS17
ATOM	5163	O	TYR	51	118.732	80.547	-46.276	1.00	49.31	QS17	ATOM	5216	N	ILE	59	117.246	85.534	-34.593	1.00	39.13	QS17
ATOM	5164	N	LYS	52	118.541	82.619	-47.157	1.00	65.39	QS17	ATOM	5217	CA	ILE	59	117.427	84.202	-34.056	1.00	39.13	QS17
ATOM	5165	CA	LYS	52	119.723	82.539	-48.008	1.00	65.39	QS17	ATOM	5218	CB	ILE	59	118.920	83.945	-33.842	1.00	59.21	QS17
ATOM	5166	CB	LYS	52	119.353	82.954	-49.439	1.00	106.39	QS17	ATOM	5219	CG2	ILE	59	119.138	82.664	-33.166	1.00	59.21	QS17
ATOM	5167	CG	LYS	52	118.233	82.111	-50.044	1.00	106.39	QS17	ATOM	5220	CG1	ILE	59	119.622	83.914	-35.191	1.00	59.21	QS17
ATOM	5168	CD	LYS	52	117.966	82.448	-51.510	1.00	106.39	QS17	ATOM	5221	CD1	ILE	59	118.938	83.036	-36.200	1.00	59.21	QS17
ATOM	5169	CE	LYS	52	116.877	81.536	-52.091	1.00	106.39	QS17	ATOM	5222	C	ILE	59	116.678	84.192	-32.730	1.00	39.13	QS17
ATOM	5170	NZ	LYS	52	116.589	81.787	-53.536	1.00	106.39	QS17	ATOM	5223	O	ILE	59	116.581	85.223	-32.043	1.00	39.13	QS17
ATOM	5171	C	LYS	52	120.913	83.359	-47.530	1.00	65.39	QS17	ATOM	5224	N	ILE	60	116.143	83.034	-32.365	1.00	33.09	QS17
ATOM	5172	O	LYS	52	120.789	84.253	-46.695	1.00	65.39	QS17	ATOM	5225	CA	ILE	60	115.377	82.945	-31.130	1.00	33.09	QS17
ATOM	5173	N	LEU	53	122.071	83.042	-48.093	1.00	60.32	QS17	ATOM	5226	CB	ILE	60	113.829	82.927	-31.480	1.00	43.29	QS17
ATOM	5174	CA	LEU	53	123.331	83.700	-47.763	1.00	60.32	QS17	ATOM	5227	CG2	ILE	60	113.384	81.526	-31.832	1.00	43.29	QS17
ATOM	5175	CB	LEU	53	124.447	83.071	-48.589	1.00	52.44	QS17	ATOM	5228	CG1	ILE	60	112.992	83.522	-30.341	1.00	43.29	QS17
ATOM	5176	CG	LEU	53	125.891	83.329	-48.186	1.00	52.44	QS17	ATOM	5229	CD1	ILE	60	112.982	82.716	-29.076	1.00	43.29	QS17
ATOM	5177	CD1	LEU	53	126.046	83.251	-46.675	1.00	52.44	QS17	ATOM	5230	C	ILE	60	115.807	81.715	-30.332	1.00	33.09	QS17
ATOM	5178	CD2	LEU	53	126.764	82.289	-48.877	1.00	52.44	QS17	ATOM	5231	O	ILE	60	115.944	80.631	-30.891	1.00	33.09	QS17
ATOM	5179	C	LEU	53	123.293	85.199	-48.015	1.00	60.32	QS17	ATOM	5232	N	GLU	61	116.054	81.900	-29.036	1.00	55.37	QS17
ATOM	5180	O	LEU	53	123.250	85.637	-49.162	1.00	60.32	QS17	ATOM	5233	CA	GLU	61	116.466	80.795	-28.169	1.00	55.37	QS17
ATOM	5181	N	GLY	54	123.317	85.980	-46.940	1.00	51.15	QS17	ATOM	5234	CB	GLU	61	116.591	81.259	-26.707	1.00	58.90	QS17
ATOM	5182	CA	GLY	54	123.278	87.425	-47.076	1.00	51.15	QS17	ATOM	5235	CG	GLU	61	116.980	80.150	-25.736	1.00	58.90	QS17
ATOM	5183	C	GLY	54	122.135	88.064	-46.308	1.00	51.15	QS17	ATOM	5236	CD	GLU	61	117.041	80.583	-24.259	1.00	58.90	QS17
ATOM	5184	O	GLY	54	122.099	89.289	-46.140	1.00	51.15	QS17	ATOM	5237	OE1	GLU	61	117.293	79.697	-23.409	1.00	58.90	QS17
ATOM	5185	N	ASP	55	121.205	87.235	-45.833	1.00	58.82	QS17	ATOM	5238	OE2	GLU	61	116.847	81.778	-23.932	1.00	58.90	QS17
ATOM	5186	CA	ASP	55	120.050	87.716	-45.076	1.00	58.82	QS17	ATOM	5239	C	GLU	61	115.413	79.704	-28.276	1.00	55.37	QS17
ATOM	5187	CB	ASP	55	118.959	86.645	-45.020	1.00	94.13	QS17	ATOM	5240	O	GLU	61	114.233	79.944	-28.044	1.00	55.37	QS17
ATOM	5188	CG	ASP	55	118.221	86.493	-46.319	1.00	94.13	QS17	ATOM	5241	N	SER	62	115.835	78.502	-28.636	1.00	42.63	QS17
ATOM	5189	OD1	ASP	55	117.769	87.520	-46.863	1.00	94.13	QS17	ATOM	5242	CA	SER	62	114.896	77.405	-28.773	1.00	42.63	QS17
ATOM	5190	OD2	ASP	55	118.080	85.346	-46.789	1.00	94.13	QS17	ATOM	5243	CB	SER	62	114.743	77.049	-30.248	1.00	56.95	QS17
ATOM	5191	C	ASP	55	120.346	88.129	-43.641	1.00	58.82	QS17	ATOM	5244	OG	SER	62	114.492	78.211	-31.009	1.00	56.95	QS17
ATOM	5192	O	ASP	55	121.137	87.497	-42.944	1.00	58.82	QS17	ATOM	5245	C	SER	62	115.339	76.173	-27.999	1.00	42.63	QS17
ATOM	5193	N	VAL	56	119.712	89.204	-43.200	1.00	52.52	QS17	ATOM	5246	O	SER	62	116.327	76.203	-27.262	1.00	42.63	QS17
ATOM	5194	CA	VAL	56	119.861	89.630	-41.815	1.00	52.52	QS17	ATOM	5247	N	ARG	63	114.586	75.091	-28.169	1.00	58.22	QS17
ATOM	5195	CB	VAL	56	119.729	91.161	-41.638	1.00	47.11	QS17	ATOM	5248	CA	ARG	63	114.894	73.816	-27.537	1.00	58.22	QS17
ATOM	5196	CG1	VAL	56	119.472	91.499	-40.177	1.00	47.11	QS17	ATOM	5249	CB	ARG	63	113.639	72.961	-27.455	1.00	52.08	QS17
ATOM	5197	CG2	VAL	56	121.005	91.845	-42.116	1.00	47.11	QS17	ATOM	5250	CG	ARG	63	113.907	71.513	-27.165	1.00	52.08	QS17
ATOM	5198	C	VAL	56	118.664	88.958	-41.181	1.00	52.52	QS17	ATOM	5251	CD	ARG	63	113.418	70.708	-28.328	1.00	52.08	QS17
ATOM	5199	O	VAL	56	117.577	88.962	-41.759	1.00	52.52	QS17	ATOM	5252	NE	ARG	63	112.011	70.997	-28.564	1.00	52.08	QS17
ATOM	5200	N	VAL	57	118.844	88.374	-40.005	1.00	41.02	QS17	ATOM	5253	CZ	ARG	63	111.317	70.532	-29.593	1.00	52.08	QS17
ATOM	5201	CA	VAL	57	117.731	87.684	-39.382	1.00	41.02	QS17	ATOM	5254	NH1	ARG	63	111.905	69.750	-30.494	1.00	52.08	QS17
ATOM	5202	CB	VAL	57	117.757	86.206	-39.768	1.00	29.46	QS17	ATOM	5255	NH2	ARG	63	110.031	70.842	-29.709	1.00	52.08	QS17
ATOM	5203	CG1	VAL	57	117.891	86.072	-41.264	1.00	29.46	QS17	ATOM	5256	C	ARG	63	115.944	73.143	-28.421	1.00	58.22	QS17
ATOM	5204	CG2	VAL	57	118.923	85.513	-39.078	1.00	29.46	QS17	ATOM	5257	O	ARG	63	115.863	73.201	-29.650	1.00	58.22	QS17
ATOM	5205	C	VAL	57	117.682	87.757	-37.870	1.00	41.02	QS17	ATOM	5258	N	PRO	64	116.940	72.487	-27.807	1.00	40.67	QS17
ATOM	5206	O	VAL	57	118.648	88.147	-37.209	1.00	41.02	QS17	ATOM	5259	CD	PRO	64	117.142	72.178	-26.378	1.00	26.36	QS17
ATOM	5207	N	GLU	58	116.526	87.378	-37.336	1.00	56.96	QS17	ATOM	5260	CA	PRO	64	117.966	71.846	-28.624	1.00	40.67	QS17
ATOM	5208	CA	GLU	58	116.333	87.325	-35.899	1.00	56.96	QS17	ATOM	5261	CB	PRO	64	118.677	70.943	-27.622	1.00	26.36	QS17
ATOM	5209	CB	GLU	58	115.018	87.967	-35.480	1.00	68.61	QS17	ATOM	5262	CG	PRO	64	118.591	71.757	-26.354	1.00	26.36	QS17
ATOM	5210	CG	GLU	58	114.987	89.464	-35.620	1.00	68.61	QS17	ATOM	5263	C	PRO	64	117.421	71.110	-29.839	1.00	40.67	QS17
ATOM	5211	CD	GLU	58	113.941	90.090	-34.721	1.00	68.61	QS17	ATOM	5264	O	PRO	64	116.406	70.420	-29.761	1.00	40.67	QS17
ATOM	5212	OE1	GLU	58	112.847	89.494	-34.577	1.00	68.61	QS17	ATOM	5265	N	ILE	65	118.109	71.288	-30.963	1.00	46.80	QS17

ATOM	5266	CA	ILE	65	117.744	70.676	-32.235	1.00	46.80	QS17	ATOM	5319	N	PHE	71	119.108	77.439	-31.580	1.00	47.52	QS17
ATOM	5267	CB	ILE	65	117.645	71.738	-33.323	1.00	43.55	QS17	ATOM	5320	CA	PHE	71	118.435	78.637	-32.067	1.00	47.52	QS17
ATOM	5268	CG2	ILE	65	117.387	71.082	-34.682	1.00	43.55	QS17	ATOM	5321	CB	PHE	71	119.456	79.759	-32.272	1.00	36.17	QS17
ATOM	5269	CG1	ILE	65	116.570	72.746	-32.932	1.00	43.55	QS17	ATOM	5322	CG	PHE	71	119.901	80.419	-30.990	1.00	36.17	QS17
ATOM	5270	CD1	ILE	65	116.618	74.031	-33.707	1.00	43.55	QS17	ATOM	5323	CD1	PHE	71	119.105	81.375	-30.370	1.00	36.17	QS17
ATOM	5271	C	ILE	65	118.837	69.702	-32.635	1.00	46.80	QS17	ATOM	5324	CD2	PHE	71	121.108	80.061	-30.385	1.00	36.17	QS17
ATOM	5272	O	ILE	65	118.571	68.603	-33.116	1.00	46.80	QS17	ATOM	5325	CE1	PHE	71	119.494	81.965	-29.172	1.00	36.17	QS17
ATOM	5273	N	SER	66	120.071	70.146	-32.440	1.00	46.02	QS17	ATOM	5326	CE2	PHE	71	121.510	80.646	-29.177	1.00	36.17	QS17
ATOM	5274	CA	SER	66	121.259	69.376	-32.742	1.00	46.02	QS17	ATOM	5327	CZ	PHE	71	120.698	81.600	-28.572	1.00	36.17	QS17
ATOM	5275	CB	SER	66	121.872	69.850	-34.053	1.00	90.98	QS17	ATOM	5328	C	PHE	71	117.643	78.407	-33.345	1.00	47.52	QS17
ATOM	5276	OG	SER	66	123.024	69.091	-34.348	1.00	90.98	QS17	ATOM	5329	O	PHE	71	118.019	77.599	-34.202	1.00	47.52	QS17
ATOM	5277	C	SER	66	122.204	69.686	-31.595	1.00	46.02	QS17	ATOM	5330	N	ARG	72	116.530	79.120	-33.458	1.00	45.35	QS17
ATOM	5278	O	SER	66	121.805	70.334	-30.631	1.00	46.02	QS17	ATOM	5331	CA	ARG	72	115.673	79.003	-34.623	1.00	45.35	QS17
ATOM	5279	N	LYS	67	123.437	69.204	-31.676	1.00	58.06	QS17	ATOM	5332	CB	ARG	72	114.318	78.424	-34.227	1.00	31.95	QS17
ATOM	5280	CA	LYS	67	124.441	69.490	-30.656	1.00	58.06	QS17	ATOM	5333	CG	ARG	72	114.375	77.001	-33.719	1.00	31.95	QS17
ATOM	5281	CB	LYS	67	125.531	68.440	-30.674	1.00	29.00	QS17	ATOM	5334	CD	ARG	72	112.984	76.451	-33.490	1.00	31.95	QS17
ATOM	5282	CG	LYS	67	126.830	68.903	-30.052	1.00	29.00	QS17	ATOM	5335	NE	ARG	72	112.276	77.204	-32.466	1.00	31.95	QS17
ATOM	5283	CD	LYS	67	127.916	67.958	-30.440	1.00	29.00	QS17	ATOM	5336	CZ	ARG	72	110.959	77.190	-32.318	1.00	31.95	QS17
ATOM	5284	CE	LYS	67	129.253	68.351	-29.879	1.00	29.00	QS17	ATOM	5337	NH1	ARG	72	110.211	76.459	-33.138	1.00	31.95	QS17
ATOM	5285	NZ	LYS	67	130.287	67.449	-30.475	1.00	29.00	QS17	ATOM	5338	NH2	ARG	72	110.395	77.901	-31.351	1.00	31.95	QS17
ATOM	5286	C	LYS	67	125.044	70.780	-31.137	1.00	58.06	QS17	ATOM	5339	C	ARG	72	115.470	80.337	-35.327	1.00	45.35	QS17
ATOM	5287	O	LYS	67	125.506	70.842	-32.269	1.00	58.06	QS17	ATOM	5340	O	ARG	72	115.608	81.412	-34.732	1.00	45.35	QS17
ATOM	5288	N	ARG	68	125.085	71.812	-30.317	1.00	66.58	QS17	ATOM	5341	N	TYR	73	115.133	80.233	-36.604	1.00	62.14	QS17
ATOM	5289	CA	ARG	68	125.640	73.053	-30.840	1.00	66.58	QS17	ATOM	5342	CA	TYR	73	114.903	81.369	-37.469	1.00	62.14	QS17
ATOM	5290	CB	ARG	68	127.007	72.785	-31.490	1.00	70.42	QS17	ATOM	5343	CB	TYR	73	114.842	80.886	-38.898	1.00198.41		QS17
ATOM	5291	CG	ARG	68	127.606	73.986	-32.158	1.00	70.42	QS17	ATOM	5344	CG	TYR	73	115.933	81.479	-39.684	1.00198.41		QS17
ATOM	5292	CD	ARG	68	129.011	73.742	-32.620	1.00	70.42	QS17	ATOM	5345	CD1	TYR	73	116.954	80.695	-40.197	1.00198.41		QS17
ATOM	5293	NE	ARG	68	129.635	75.024	-32.907	1.00	70.42	QS17	ATOM	5346	CE1	TYR	73	118.012	81.270	-40.861	1.00198.41		QS17
ATOM	5294	CZ	ARG	68	129.208	75.858	-33.847	1.00	70.42	QS17	ATOM	5347	CD2	TYR	73	115.993	82.847	-39.857	1.00198.41		QS17
ATOM	5295	NH1	ARG	68	128.166	75.530	-34.587	1.00	70.42	QS17	ATOM	5348	CE2	TYR	73	117.034	83.420	-40.509	1.00198.41		QS17
ATOM	5296	NH2	ARG	68	129.803	77.028	-34.036	1.00	70.42	QS17	ATOM	5349	CZ	TYR	73	118.049	82.640	-41.012	1.00198.41		QS17
ATOM	5297	C	ARG	68	124.649	73.533	-31.903	1.00	66.58	QS17	ATOM	5350	OH	TYR	73	119.104	83.238	-41.654	1.00198.41		QS17
ATOM	5298	O	ARG	68	124.969	73.578	-33.088	1.00	66.58	QS17	ATOM	5351	C	TYR	73	113.630	82.130	-37.168	1.00	62.14	QS17
ATOM	5299	N	LYS	69	123.443	73.865	-31.456	1.00	46.80	QS17	ATOM	5352	O	TYR	73	112.596	81.878	-37.792	1.00	62.14	QS17
ATOM	5300	CA	LYS	69	122.343	74.316	-32.309	1.00	46.80	QS17	ATOM	5353	N	LEU	74	113.682	83.078	-36.243	1.00	55.61	QS17
ATOM	5301	CB	LYS	69	122.065	73.292	-33.418	1.00	32.39	QS17	ATOM	5354	CA	LEU	74	112.469	83.815	-35.925	1.00	55.61	QS17
ATOM	5302	CG	LYS	69	121.024	73.736	-34.405	1.00	32.39	QS17	ATOM	5355	CB	LEU	74	112.721	84.866	-34.848	1.00	25.69	QS17
ATOM	5303	CD	LYS	69	121.062	72.928	-35.712	1.00	32.39	QS17	ATOM	5356	CG	LEU	74	111.520	85.147	-33.942	1.00	25.69	QS17
ATOM	5304	CE	LYS	69	119.880	73.358	-36.612	1.00	32.39	QS17	ATOM	5357	CD1	LEU	74	111.803	86.380	-33.092	1.00	25.69	QS17
ATOM	5305	NZ	LYS	69	119.695	72.595	-37.874	1.00	32.39	QS17	ATOM	5358	CD2	LEU	74	110.271	85.354	-34.775	1.00	25.69	QS17
ATOM	5306	C	LYS	69	121.135	74.434	-31.377	1.00	46.80	QS17	ATOM	5359	C	LEU	74	111.934	84.490	-37.175	1.00	55.61	QS17
ATOM	5307	O	LYS	69	120.382	73.478	-31.167	1.00	46.80	QS17	ATOM	5360	O	LEU	74	110.801	84.240	-37.567	1.00	55.61	QS17
ATOM	5308	N	ARG	70	120.993	75.624	-30.802	1.00	49.74	QS17	ATOM	5361	N	ARG	75	112.748	85.332	-37.807	1.00	58.75	QS17
ATOM	5309	CA	ARG	70	119.934	75.942	-29.855	1.00	49.74	QS17	ATOM	5362	CA	ARG	75	112.311	86.036	-39.010	1.00	58.75	QS17
ATOM	5310	CB	ARG	70	120.530	76.191	-28.469	1.00	43.02	QS17	ATOM	5363	CB	ARG	75	111.187	87.015	-38.666	1.00	59.59	QS17
ATOM	5311	CG	ARG	70	120.872	74.974	-27.649	1.00	43.02	QS17	ATOM	5364	CG	ARG	75	111.606	88.115	-37.739	1.00	59.59	QS17
ATOM	5312	CD	ARG	70	121.902	74.060	-28.272	1.00	43.02	QS17	ATOM	5365	CD	ARG	75	110.460	89.039	-37.480	1.00	59.59	QS17
ATOM	5313	NE	ARG	70	122.093	72.928	-27.372	1.00	43.02	QS17	ATOM	5366	NE	ARG	75	110.904	90.253	-36.802	1.00	59.59	QS17
ATOM	5314	CZ	ARG	70	122.521	71.724	-27.732	1.00	43.02	QS17	ATOM	5367	CZ	ARG	75	111.619	91.224	-37.372	1.00	59.59	QS17
ATOM	5315	NH1	ARG	70	122.823	71.467	-28.993	1.00	43.02	QS17	ATOM	5368	NH1	ARG	75	111.978	91.137	-38.647	1.00	59.59	QS17
ATOM	5316	NH2	ARG	70	122.618	70.766	-26.822	1.00	43.02	QS17	ATOM	5369	NH2	ARG	75	111.983	92.285	-36.663	1.00	59.59	QS17
ATOM	5317	C	ARG	70	119.206	77.206	-30.276	1.00	49.74	QS17	ATOM	5370	C	ARG	75	113.401	86.794	-39.762	1.00	58.75	QS17
ATOM	5318	O	ARG	70	118.747	77.972	-29.422	1.00	49.74	QS17	ATOM	5371	O	ARG	75	114.545	86.917	-39.310	1.00	58.75	QS17

ATOM	5372	N	LEU	76	113.016	87.323	-40.915	1.00	59.37	QS17	ATOM	5425	N	ASP	83	127.693	92.740	-48.406	1.00 61.55	QS17
ATOM	5373	CA	LEU	76	113.938	88.060	-41.763	1.00	59.37	QS17	ATOM	5426	CA	ASP	83	128.741	93.605	-47.894	1.00 61.55	QS17
ATOM	5374	CB	LEU	76	113.695	87.675	-43.221	1.00	52.84	QS17	ATOM	5427	CB	ASP	83	128.225	95.040	-47.751	1.00 91.36	QS17
ATOM	5375	CG	LEU	76	114.663	88.270	-44.235	1.00	52.84	QS17	ATOM	5428	CG	ASP	83	127.047	95.148	-46.807	1.00 91.36	QS17
ATOM	5376	CD1	LEU	76	114.460	87.598	-45.567	1.00	52.84	QS17	ATOM	5429	OD1	ASP	83	126.000	94.534	-47.090	1.00 91.36	QS17
ATOM	5377	CD2	LEU	76	114.448	89.770	-44.348	1.00	52.84	QS17	ATOM	5430	OD2	ASP	83	127.168	95.851	-45.784	1.00 91.36	QS17
ATOM	5378	C	LEU	76	113.798	89.566	-41.586	1.00	59.37	QS17	ATOM	5431	C	ASP	83	129.245	93.088	-46.548	1.00 61.55	QS17
ATOM	5379	O	LEU	76	112.738	90.124	-41.833	1.00	59.37	QS17	ATOM	5432	O	ASP	83	130.435	93.202	-46.241	1.00 61.55	QS17
ATOM	5380	N	VAL	77	114.878	90.223	-41.180	1.00	51.31	QS17	ATOM	5433	N	LEU	84	128.339	92.508	-45.759	1.00 64.14	QS17
ATOM	5381	CA	VAL	77	114.864	91.667	-40.969	1.00	51.31	QS17	ATOM	5434	CA	LEU	84	128.676	91.960	-44.442	1.00 64.14	QS17
ATOM	5382	CB	VAL	77	115.932	92.067	-39.950	1.00	42.65	QS17	ATOM	5435	CB	LEU	84	127.419	91.853	-43.585	1.00 49.27	QS17
ATOM	5383	CG1	VAL	77	115.941	93.565	-39.768	1.00	42.65	QS17	ATOM	5436	CG	LEU	84	126.990	93.173	-42.954	1.00 49.27	QS17
ATOM	5384	CG2	VAL	77	115.660	91.382	-38.637	1.00	42.65	QS17	ATOM	5437	CD1	LEU	84	125.671	93.006	-42.208	1.00 49.27	QS17
ATOM	5385	C	VAL	77	115.079	92.455	-42.267	1.00	51.31	QS17	ATOM	5438	CD2	LEU	84	128.096	93.640	-42.018	1.00 49.27	QS17
ATOM	5386	O	VAL	77	114.364	93.410	-42.546	1.00	51.31	QS17	ATOM	5439	C	LEU	84	129.336	90.591	-44.537	1.00 64.14	QS17
ATOM	5387	N	GLU	78	116.082	92.072	-43.043	1.00	58.83	QS17	ATOM	5440	O	LEU	84	130.335	90.308	-43.875	1.00 64.14	QS17
ATOM	5388	CA	GLU	78	116.350	92.723	-44.314	1.00	58.83	QS17	ATOM	5441	N	VAL	85	128.756	89.734	-45.358	1.00 42.67	QS17
ATOM	5389	CB	GLU	78	117.171	94.004	-44.135	1.00	94.32	QS17	ATOM	5442	CA	VAL	85	129.300	88.411	-45.552	1.00 42.67	QS17
ATOM	5390	CG	GLU	78	118.587	93.809	-43.657	1.00	94.32	QS17	ATOM	5443	CB	VAL	85	128.512	87.656	-46.639	1.00 75.82	QS17
ATOM	5391	CD	GLU	78	119.487	94.969	-44.048	1.00	94.32	QS17	ATOM	5444	CG1	VAL	85	129.090	86.265	-46.832	1.00 75.82	QS17
ATOM	5392	OE1	GLU	78	119.671	95.190	-45.265	1.00	94.32	QS17	ATOM	5445	CG2	VAL	85	127.044	87.577	-46.249	1.00 75.82	QS17
ATOM	5393	OE2	GLU	78	120.008	95.661	-43.146	1.00	94.32	QS17	ATOM	5446	C	VAL	85	130.765	88.529	-45.966	1.00 42.67	QS17
ATOM	5394	C	GLU	78	117.094	91.717	-45.177	1.00	58.83	QS17	ATOM	5447	O	VAL	85	131.606	87.778	-45.486	1.00 42.67	QS17
ATOM	5395	O	GLU	78	118.021	91.050	-44.716	1.00	58.83	QS17	ATOM	5448	N	GLU	86	131.069	89.482	-46.846	1.00 60.43	QS17
ATOM	5396	N	SER	79	116.674	91.597	-46.431	1.00	66.66	QS17	ATOM	5449	CA	GLU	86	132.440	89.672	-47.318	1.00 60.43	QS17
ATOM	5397	CA	SER	79	117.275	90.631	-47.337	1.00	66.66	QS17	ATOM	5450	CB	GLU	86	132.505	90.811	-48.330	1.00154.71	QS17
ATOM	5398	CB	SER	79	116.288	90.280	-48.456	1.00	77.53	QS17	ATOM	5451	CG	GLU	86	131.851	90.476	-49.649	1.00154.71	QS17
ATOM	5399	OG	SER	79	116.776	89.211	-49.252	1.00	77.53	QS17	ATOM	5452	CD	GLU	86	132.074	91.547	-50.691	1.00154.71	QS17
ATOM	5400	C	SER	79	118.597	91.053	-47.952	1.00	66.66	QS17	ATOM	5453	OE1	GLU	86	133.249	91.831	-51.005	1.00154.71	QS17
ATOM	5401	O	SER	79	119.028	92.203	-47.833	1.00	66.66	QS17	ATOM	5454	OE2	GLU	86	131.077	92.105	-51.197	1.00154.71	QS17
ATOM	5402	N	GLY	80	119.219	90.077	-48.605	1.00	95.44	QS17	ATOM	5455	C	GLU	86	133.419	89.935	-46.182	1.00 60.43	QS17
ATOM	5403	CA	GLY	80	120.487	90.251	-49.286	1.00	95.44	QS17	ATOM	5456	O	GLU	86	134.490	89.332	-46.141	1.00 60.43	QS17
ATOM	5404	C	GLY	80	121.307	91.494	-49.014	1.00	95.44	QS17	ATOM	5457	N	LYS	87	133.062	90.840	-45.271	1.00 63.51	QS17
ATOM	5405	O	GLY	80	120.890	92.614	-49.295	1.00	95.44	QS17	ATOM	5458	CA	LYS	87	133.927	91.136	-44.137	1.00 63.51	QS17
ATOM	5406	N	ARG	81	122.491	91.274	-48.460	1.00	69.73	QS17	ATOM	5459	CB	LYS	87	133.196	91.943	-43.065	1.00 76.44	QS17
ATOM	5407	CA	ARG	81	123.434	92.335	-48.163	1.00	69.73	QS17	ATOM	5460	CG	LYS	87	133.103	93.441	-43.262	1.00 76.44	QS17
ATOM	5408	CB	ARG	81	122.939	93.192	-47.010	1.00	63.96	QS17	ATOM	5461	CD	LYS	87	132.473	94.042	-42.005	1.00 76.44	QS17
ATOM	5409	CG	ARG	81	122.759	92.481	-45.722	1.00	63.96	QS17	ATOM	5462	CE	LYS	87	131.934	95.451	-42.217	1.00 76.44	QS17
ATOM	5410	CD	ARG	81	122.640	93.545	-44.699	1.00	63.96	QS17	ATOM	5463	NZ	LYS	87	130.898	95.800	-41.176	1.00 76.44	QS17
ATOM	5411	NE	ARG	81	123.767	94.452	-44.831	1.00	63.96	QS17	ATOM	5464	C	LYS	87	134.302	89.797	-43.534	1.00 63.51	QS17
ATOM	5412	CZ	ARG	81	123.740	95.726	-44.467	1.00	63.96	QS17	ATOM	5465	O	LYS	87	135.474	89.455	-43.431	1.00 63.51	QS17
ATOM	5413	NH1	ARG	81	122.635	96.245	-43.947	1.00	63.96	QS17	ATOM	5466	N	TYR	88	133.281	89.045	-43.140	1.00 80.67	QS17
ATOM	5414	NH2	ARG	81	124.819	96.479	-44.621	1.00	63.96	QS17	ATOM	5467	CA	TYR	88	133.466	87.734	-42.540	1.00 80.67	QS17
ATOM	5415	C	ARG	81	124.786	91.691	-47.850	1.00	69.73	QS17	ATOM	5468	CB	TYR	88	132.102	87.079	-42.290	1.00 56.06	QS17
ATOM	5416	O	ARG	81	125.228	91.580	-46.694	1.00	69.73	QS17	ATOM	5469	CG	TYR	88	132.208	85.624	-41.896	1.00 56.06	QS17
ATOM	5417	N	MET	82	125.415	91.264	-48.941	1.00	72.83	QS17	ATOM	5470	CD1	TYR	88	132.741	85.257	-40.663	1.00 56.06	QS17
ATOM	5418	CA	MET	82	126.705	90.595	-48.963	1.00	72.83	QS17	ATOM	5471	CE1	TYR	88	132.893	83.916	-40.315	1.00 56.06	QS17
ATOM	5419	CB	MET	82	127.013	90.195	-50.403	1.00	93.63	QS17	ATOM	5472	CD2	TYR	88	131.825	84.612	-42.778	1.00 56.06	QS17
ATOM	5420	CG	MET	82	125.851	89.508	-51.107	1.00	93.63	QS17	ATOM	5473	CE2	TYR	88	131.972	83.272	-42.444	1.00 56.06	QS17
ATOM	5421	SD	MET	82	125.453	87.909	-50.381	1.00	93.63	QS17	ATOM	5474	CZ	TYR	88	132.507	82.930	-41.209	1.00 56.06	QS17
ATOM	5422	CE	MET	82	126.658	86.839	-51.231	1.00	93.63	QS17	ATOM	5475	OH	TYR	88	132.651	81.606	-40.857	1.00 56.06	QS17
ATOM	5423	C	MET	82	127.854	91.426	-48.413	1.00	72.83	QS17	ATOM	5476	C	TYR	88	134.342	86.794	-43.383	1.00 80.67	QS17
ATOM	5424	O	MET	82	128.880	90.885	-48.017	1.00	72.83	QS17	ATOM	5477	O	TYR	88	135.264	86.160	-42.864	1.00 80.67	QS17

ATOM	5478	N	LEU	89	134.060	86.700	-44.678	1.00 41.88	QS17
ATOM	5479	CA	LEU	89	134.830	85.811	-45.552	1.00 41.88	QS17
ATOM	5480	CB	LEU	89	134.153	85.690	-46.929	1.00 45.68	QS17
ATOM	5481	CG	LEU	89	132.785	85.003	-47.019	1.00 45.68	QS17
ATOM	5482	CD1	LEU	89	132.248	85.103	-48.437	1.00 45.68	QS17
ATOM	5483	CD2	LEU	89	132.921	83.555	-46.591	1.00 45.68	QS17
ATOM	5484	C	LEU	89	136.271	86.274	-45.731	1.00 41.88	QS17
ATOM	5485	O	LEU	89	137.204	85.466	-45.713	1.00 41.88	QS17
ATOM	5486	N	ILE	90	136.443	87.577	-45.918	1.00 44.56	QS17
ATOM	5487	CA	ILE	90	137.765	88.148	-46.099	1.00 44.56	QS17
ATOM	5488	CB	ILE	90	137.686	89.662	-46.328	1.00 61.87	QS17
ATOM	5489	CG2	ILE	90	139.038	90.303	-46.092	1.00 61.87	QS17
ATOM	5490	CG1	ILE	90	137.177	89.930	-47.746	1.00 61.87	QS17
ATOM	5491	CD1	ILE	90	137.015	91.412	-48.095	1.00 61.87	QS17
ATOM	5492	C	ILE	90	138.606	87.866	-44.874	1.00 44.56	QS17
ATOM	5493	O	ILE	90	139.796	87.597	-44.988	1.00 44.56	QS17
ATOM	5494	N	ARG	91	137.986	87.914	-43.699	1.00 48.76	QS17
ATOM	5495	CA	ARG	91	138.714	87.653	-42.464	1.00 48.76	QS17
ATOM	5496	CB	ARG	91	137.869	88.030	-41.248	1.00105.71	QS17
ATOM	5497	CG	ARG	91	138.674	88.590	-40.086	1.00105.71	QS17
ATOM	5498	CD	ARG	91	137.808	88.685	-38.853	1.00105.71	QS17
ATOM	5499	NE	ARG	91	136.489	89.217	-39.180	1.00105.71	QS17
ATOM	5500	CZ	ARG	91	135.383	88.939	-38.496	1.00105.71	QS17
ATOM	5501	NH1	ARG	91	135.438	88.132	-37.439	1.00105.71	QS17
ATOM	5502	NH2	ARG	91	134.219	89.454	-38.881	1.00105.71	QS17
ATOM	5503	C	ARG	91	139.078	86.174	-42.405	1.00 48.76	QS17
ATOM	5504	O	ARG	91	140.123	85.801	-41.873	1.00 48.76	QS17
ATOM	5505	N	ARG	92	138.209	85.334	-42.955	1.00 60.16	QS17
ATOM	5506	CA	ARG	92	138.466	83.902	-42.976	1.00 60.16	QS17
ATOM	5507	CB	ARG	92	137.259	83.151	-43.538	1.00122.61	QS17
ATOM	5508	CG	ARG	92	137.470	81.650	-43.624	1.00122.61	QS17
ATOM	5509	CD	ARG	92	136.440	80.985	-44.512	1.00122.61	QS17
ATOM	5510	NE	ARG	92	135.081	81.174	-44.021	1.00122.61	QS17
ATOM	5511	CZ	ARG	92	134.000	80.684	-44.620	1.00122.61	QS17
ATOM	5512	NH1	ARG	92	134.124	79.974	-45.734	1.00122.61	QS17
ATOM	5513	NH2	ARG	92	132.797	80.901	-44.105	1.00122.61	QS17
ATOM	5514	C	ARG	92	139.679	83.662	-43.873	1.00 60.16	QS17
ATOM	5515	O	ARG	92	140.491	82.763	-43.631	1.00 60.16	QS17
ATOM	5516	N	GLN	93	139.790	84.491	-44.905	1.00 70.21	QS17
ATOM	5517	CA	GLN	93	140.873	84.409	-45.876	1.00 70.21	QS17
ATOM	5518	CB	GLN	93	140.586	85.366	-47.024	1.00 95.18	QS17
ATOM	5519	CG	GLN	93	140.839	84.782	-48.383	1.00 95.18	QS17
ATOM	5520	CD	GLN	93	140.010	85.467	-49.444	1.00 95.18	QS17
ATOM	5521	OE1	GLN	93	138.784	85.565	-49.324	1.00 95.18	QS17
ATOM	5522	NE2	GLN	93	140.668	85.943	-50.493	1.00 95.18	QS17
ATOM	5523	C	GLN	93	142.253	84.707	-45.294	1.00 70.21	QS17
ATOM	5524	O	GLN	93	143.201	83.962	-45.541	1.00 70.21	QS17
ATOM	5525	N	ASN	94	142.370	85.793	-44.528	1.00 58.87	QS17
ATOM	5526	CA	ASN	94	143.653	86.158	-43.935	1.00 58.87	QS17
ATOM	5527	CB	ASN	94	143.528	87.377	-43.018	1.00 74.90	QS17
ATOM	5528	CG	ASN	94	143.094	88.630	-43.754	1.00 74.90	QS17
ATOM	5529	OD1	ASN	94	143.407	88.829	-44.933	1.00 74.90	QS17
ATOM	5530	ND2	ASN	94	142.379	89.500	-43.047	1.00 74.90	QS17
ATOM	5531	C	ASN	94	144.238	85.008	-43.135	1.00 58.87	QS17
ATOM	5532	O	ASN	94	145.450	84.860	-43.054	1.00 58.87	QS17
ATOM	5533	N	TYR	95	143.380	84.189	-42.544	1.00 59.54	QS17
ATOM	5534	CA	TYR	95	143.854	83.061	-41.752	1.00 59.54	QS17
ATOM	5535	CB	TYR	95	142.656	82.210	-41.292	1.00 79.65	QS17
ATOM	5536	CG	TYR	95	141.876	82.913	-40.200	1.00 79.65	QS17
ATOM	5537	CD1	TYR	95	142.010	84.295	-40.030	1.00 79.65	QS17
ATOM	5538	CE1	TYR	95	141.350	84.977	-39.024	1.00 79.65	QS17
ATOM	5539	CD2	TYR	95	141.040	82.219	-39.322	1.00 79.65	QS17
ATOM	5540	CE2	TYR	95	140.362	82.897	-38.294	1.00 79.65	QS17
ATOM	5541	CZ	TYR	95	140.531	84.286	-38.156	1.00 79.65	QS17
ATOM	5542	OH	TYR	95	139.918	85.024	-37.164	1.00 79.65	QS17
ATOM	5543	C	TYR	95	144.878	82.239	-42.520	1.00 59.54	QS17
ATOM	5544	O	TYR	95	145.845	81.729	-41.942	1.00 59.54	QS17
ATOM	5545	N	GLN	96	144.681	82.151	-43.830	1.00 63.87	QS17
ATOM	5546	CA	GLN	96	145.583	81.405	-44.691	1.00 63.87	QS17
ATOM	5547	CB	GLN	96	145.078	81.472	-46.138	1.00168.42	QS17
ATOM	5548	CG	GLN	96	145.782	80.538	-47.109	1.00168.42	QS17
ATOM	5549	CD	GLN	96	147.098	81.095	-47.615	1.00168.42	QS17
ATOM	5550	OE1	GLN	96	147.132	82.136	-48.273	1.00168.42	QS17
ATOM	5551	NE2	GLN	96	148.190	80.402	-47.312	1.00168.42	QS17
ATOM	5552	C	GLN	96	146.999	81.979	-44.579	1.00 63.87	QS17
ATOM	5553	O	GLN	96	147.974	81.234	-44.446	1.00 63.87	QS17
ATOM	5554	N	SER	97	147.102	83.305	-44.598	1.00132.50	QS17
ATOM	5555	CA	SER	97	148.397	83.981	-44.531	1.00132.50	QS17
ATOM	5556	CB	SER	97	148.230	85.477	-44.821	1.00 85.59	QS17
ATOM	5557	OG	SER	97	147.700	86.170	-43.704	1.00 85.59	QS17
ATOM	5558	C	SER	97	149.169	83.819	-43.223	1.00132.50	QS17
ATOM	5559	O	SER	97	150.286	83.298	-43.221	1.00132.50	QS17
ATOM	5560	N	LEU	98	148.577	84.267	-42.119	1.00 55.97	QS17
ATOM	5561	CA	LEU	98	149.226	84.211	-40.804	1.00 55.97	QS17
ATOM	5562	CB	LEU	98	148.413	85.027	-39.785	1.00 55.15	QS17
ATOM	5563	CG	LEU	98	146.887	84.944	-39.793	1.00 55.15	QS17
ATOM	5564	CD1	LEU	98	146.449	83.512	-39.589	1.00 55.15	QS17
ATOM	5565	CD2	LEU	98	146.322	85.834	-38.711	1.00 55.15	QS17
ATOM	5566	C	LEU	98	149.583	82.850	-40.194	1.00 55.97	QS17
ATOM	5567	O	LEU	98	149.678	82.733	-38.970	1.00 55.97	QS17
ATOM	5568	N	SER	99	149.799	81.835	-41.032	1.00 78.12	QS17
ATOM	5569	CA	SER	99	150.175	80.507	-40.545	1.00 78.12	QS17
ATOM	5570	CB	SER	99	149.721	79.424	-41.529	1.00124.08	QS17
ATOM	5571	OG	SER	99	150.371	79.560	-42.779	1.00124.08	QS17
ATOM	5572	C	SER	99	151.696	80.462	-40.381	1.00 78.12	QS17
ATOM	5573	O	SER	99	152.310	81.474	-40.058	1.00 78.12	QS17
ATOM	5574	N	LYS	100	152.302	79.295	-40.586	1.00165.22	QS17
ATOM	5575	CA	LYS	100	153.757	79.158	-40.478	1.00165.22	QS17
ATOM	5576	CB	LYS	100	154.185	78.873	-39.036	1.00 62.49	QS17
ATOM	5577	CG	LYS	100	153.874	79.970	-38.037	1.00 62.49	QS17
ATOM	5578	CD	LYS	100	154.470	79.612	-36.681	1.00 62.49	QS17
ATOM	5579	CE	LYS	100	154.281	80.723	-35.653	1.00 62.49	QS17
ATOM	5580	NZ	LYS	100	154.975	80.430	-34.362	1.00 62.49	QS17
ATOM	5581	C	LYS	100	154.262	78.037	-41.379	1.00165.22	QS17
ATOM	5582	O	LYS	100	154.869	77.071	-40.914	1.00165.22	QS17
ATOM	5583	N	ARG	101	153.998	78.181	-42.672	1.00142.94	QS17

ATOM	5584	CA	ARG	101	154.405	77.209	-43.678	1.00142.94	QS17	ATOM	5637	NZ	LYS	21	179.676	140.147	-58.044	1.00 82.92	RS18
ATOM	5585	CB	ARG	101	155.914	76.953	-43.603	1.00157.03	QS17	ATOM	5638	C	LYS	21	180.498	139.583	-65.023	1.00 91.88	RS18
ATOM	5586	CG	ARG	101	156.514	76.522	-44.935	1.00157.03	QS17	ATOM	5639	O	LYS	21	180.361	140.500	-65.831	1.00 91.88	RS18
ATOM	5587	CD	ARG	101	156.258	77.592	-46.001	1.00157.03	QS17	ATOM	5640	N	VAL	22	180.630	138.313	-65.393	1.00 78.89	RS18
ATOM	5588	NE	ARG	101	156.735	77.215	-47.330	1.00157.03	QS17	ATOM	5641	CA	VAL	22	180.627	137.930	-66.802	1.00 78.89	RS18
ATOM	5589	CZ	ARG	101	156.233	76.221	-48.054	1.00157.03	QS17	ATOM	5642	CB	VAL	22	180.887	136.414	-66.967	1.00 64.33	RS18
ATOM	5590	NH1	ARG	101	155.231	75.490	-47.584	1.00157.03	QS17	ATOM	5643	CG1	VAL	22	180.602	135.984	-68.399	1.00 64.33	RS18
ATOM	5591	NH2	ARG	101	156.730	75.965	-49.256	1.00157.03	QS17	ATOM	5644	CG2	VAL	22	182.336	136.095	-66.605	1.00 64.33	RS18
ATOM	5592	C	ARG	101	153.653	75.895	-43.532	1.00142.94	QS17	ATOM	5645	C	VAL	22	179.311	138.288	-67.488	1.00 78.89	RS18
ATOM	5593	O	ARG	101	153.706	75.038	-44.418	1.00142.94	QS17	ATOM	5646	O	VAL	22	179.281	138.562	-68.689	1.00 78.89	RS18
ATOM	5594	N	GLY	102	152.952	75.742	-42.412	1.00189.95	QS17	ATOM	5647	N	LYS	23	178.228	138.288	-66.716	1.00100.87	RS18
ATOM	5595	CA	GLY	102	152.195	74.528	-42.172	1.00189.95	QS17	ATOM	5648	CA	LYS	23	176.901	138.612	-67.229	1.00100.87	RS18
ATOM	5596	C	GLY	102	151.215	74.257	-43.296	1.00189.95	QS17	ATOM	5649	CB	LYS	23	175.840	138.228	-66.197	1.00124.19	RS18
ATOM	5597	O	GLY	102	150.075	74.728	-43.256	1.00189.95	QS17	ATOM	5650	CG	LYS	23	174.430	138.589	-66.600	1.00124.19	RS18
ATOM	5598	N	GLY	103	151.659	73.493	-44.293	1.00141.20	QS17	ATOM	5651	CD	LYS	23	173.434	138.211	-65.527	1.00124.19	RS18
ATOM	5599	CA	GLY	103	150.813	73.182	-45.432	1.00141.20	QS17	ATOM	5652	CE	LYS	23	172.024	138.551	-65.971	1.00124.19	RS18
ATOM	5600	C	GLY	103	150.841	74.336	-46.413	1.00141.20	QS17	ATOM	5653	NZ	LYS	23	171.008	138.166	-64.956	1.00124.19	RS18
ATOM	5601	O	GLY	103	151.822	74.509	-47.137	1.00141.20	QS17	ATOM	5654	C	LYS	23	176.779	140.099	-67.563	1.00100.87	RS18
ATOM	5602	N	LYS	104	149.771	75.130	-46.430	1.00162.49	QS17	ATOM	5655	O	LYS	23	176.366	140.462	-68.663	1.00100.87	RS18
ATOM	5603	CA	LYS	104	149.684	76.286	-47.320	1.00162.49	QS17	ATOM	5656	N	ALA	24	177.133	140.952	-66.605	1.00107.41	RS18
ATOM	5604	CB	LYS	104	148.307	76.349	-47.999	1.00108.79	QS17	ATOM	5657	CA	ALA	24	177.073	142.398	-66.798	1.00107.41	RS18
ATOM	5605	CG	LYS	104	148.121	77.576	-48.897	1.00108.79	QS17	ATOM	5658	CB	ALA	24	177.688	143.110	-65.600	1.00103.06	RS18
ATOM	5606	CD	LYS	104	146.795	77.562	-49.645	1.00108.79	QS17	ATOM	5659	C	ALA	24	177.827	142.770	-68.065	1.00107.41	RS18
ATOM	5607	CE	LYS	104	146.744	76.443	-50.671	1.00108.79	QS17	ATOM	5660	O	ALA	24	177.302	143.457	-68.941	1.00107.41	RS18
ATOM	5608	NZ	LYS	104	145.460	76.465	-51.426	1.00108.79	QS17	ATOM	5661	N	THR	25	179.072	142.311	-68.142	1.00114.09	RS18
ATOM	5609	C	LYS	104	149.956	77.599	-46.576	1.00162.49	QS17	ATOM	5662	CA	THR	25	179.924	142.566	-69.294	1.00114.09	RS18
ATOM	5610	O	LYS	104	149.156	78.041	-45.745	1.00162.49	QS17	ATOM	5663	CB	THR	25	181.395	142.217	-68.978	1.00126.56	RS18
ATOM	5611	N	ALA	105	151.096	78.210	-46.886	1.00158.60	QS17	ATOM	5664	OG1	THR	25	181.826	142.958	-67.828	1.00126.56	RS18
ATOM	5612	CA	ALA	105	151.497	79.469	-46.273	1.00158.60	QS17	ATOM	5665	CG2	THR	25	182.292	142.555	-70.164	1.00126.56	RS18
ATOM	5613	CB	ALA	105	152.344	79.198	-45.035	1.00 92.76	QS17	ATOM	5666	C	THR	25	179.437	141.673	-70.426	1.00114.09	RS18
ATOM	5614	C	ALA	105	152.285	80.311	-47.273	1.00158.60	QS17	ATOM	5667	O	THR	25	180.120	140.726	-70.812	1.00114.09	RS18
ATOM	5615	O	ALA	105	151.765	81.367	-47.690	1.00158.60	QS17	ATOM	5668	N	LEU	26	178.251	141.978	-70.947	1.00 97.32	RS18
ATOM	5616	OXT	ALA	105	153.408	79.899	-47.636	1.00136.32	QS17	ATOM	5669	CA	LEU	26	177.656	141.189	-72.022	1.00 97.32	RS18
ATOM	5617	CB	LYS	19	187.768	142.854	-62.358	1.00125.18	RS18	ATOM	5670	CB	LEU	26	177.824	139.698	-71.707	1.00 77.49	RS18
ATOM	5618	CG	LYS	19	188.930	143.386	-61.539	1.00125.18	RS18	ATOM	5671	CG	LEU	26	177.187	138.614	-72.575	1.00 77.49	RS18
ATOM	5619	CD	LYS	19	190.083	143.801	-62.451	1.00125.18	RS18	ATOM	5672	CD1	LEU	26	177.436	138.870	-74.057	1.00 77.49	RS18
ATOM	5620	CE	LYS	19	191.269	144.347	-61.663	1.00125.18	RS18	ATOM	5673	CD2	LEU	26	177.766	137.279	-72.138	1.00 77.49	RS18
ATOM	5621	NZ	LYS	19	192.436	144.645	-62.546	1.00125.18	RS18	ATOM	5674	C	LEU	26	176.172	141.522	-72.213	1.00 97.32	RS18
ATOM	5622	C	LYS	19	185.388	142.134	-62.502	1.00 91.82	RS18	ATOM	5675	O	LEU	26	175.515	142.035	-71.306	1.00 97.32	RS18
ATOM	5623	O	LYS	19	185.517	141.339	-63.432	1.00 91.82	RS18	ATOM	5676	N	GLY	27	175.651	141.228	-73.400	1.00106.78	RS18
ATOM	5624	N	LYS	19	186.908	141.228	-60.700	1.00 91.82	RS18	ATOM	5677	CA	GLY	27	174.253	141.500	-73.679	1.00106.78	RS18
ATOM	5625	CA	LYS	19	186.552	142.407	-61.544	1.00 91.82	RS18	ATOM	5678	C	GLY	27	173.375	140.299	-73.389	1.00106.78	RS18
ATOM	5626	N	ALA	20	184.260	142.804	-62.266	1.00110.36	RS18	ATOM	5679	O	GLY	27	173.855	139.283	-72.892	1.00106.78	RS18
ATOM	5627	CA	ALA	20	183.058	142.682	-63.100	1.00110.36	RS18	ATOM	5680	N	GLU	28	172.087	140.406	-73.698	1.00109.87	RS18
ATOM	5628	CB	ALA	20	183.314	143.305	-64.472	1.00 74.76	RS18	ATOM	5681	CA	GLU	28	171.164	139.308	-73.453	1.00109.87	RS18
ATOM	5629	C	ALA	20	182.512	141.270	-63.281	1.00110.36	RS18	ATOM	5682	CB	GLU	28	169.719	139.808	-73.518	1.00167.47	RS18
ATOM	5630	O	ALA	20	183.268	140.306	-63.378	1.00110.36	RS18	ATOM	5683	CG	GLU	28	169.301	140.414	-74.844	1.00167.47	RS18
ATOM	5631	N	LYS	21	181.186	141.161	-63.329	1.00 91.88	RS18	ATOM	5684	CD	GLU	28	168.317	139.539	-75.595	1.00167.47	RS18
ATOM	5632	CA	LYS	21	180.520	139.875	-63.526	1.00 91.88	RS18	ATOM	5685	OE1	GLU	28	168.716	138.442	-76.038	1.00167.47	RS18
ATOM	5633	CB	LYS	21	179.080	139.922	-62.999	1.00 82.92	RS18	ATOM	5686	OE2	GLU	28	167.143	139.947	-75.734	1.00167.47	RS18
ATOM	5634	CG	LYS	21	178.848	139.233	-61.659	1.00 82.92	RS18	ATOM	5687	C	GLU	28	171.384	138.175	-74.446	1.00109.87	RS18
ATOM	5635	CD	LYS	21	179.488	139.982	-60.517	1.00 82.92	RS18	ATOM	5688	O	GLU	28	171.461	138.399	-75.654	1.00109.87	RS18
ATOM	5636	CE	LYS	21	179.145	139.346	-59.184	1.00 82.92	RS18	ATOM	5689	N	PHE	29	171.481	136.956	-73.924	1.00 65.52	RS18

ATOM	5690	CA	PHE	29	171.718	135.776	-74.748	1.00	65.52	RS18	ATOM	5743	CZ	TYR	34	172.520	121.813	-80.055	1.00	67.51	RS18
ATOM	5691	CB	PHE	29	173.188	135.403	-74.672	1.00	81.02	RS18	ATOM	5744	OH	TYR	34	171.763	121.204	-81.026	1.00	67.51	RS18
ATOM	5692	CG	PHE	29	173.689	135.269	-73.270	1.00	81.02	RS18	ATOM	5745	C	TYR	34	176.042	125.384	-78.282	1.00	65.96	RS18
ATOM	5693	CD1	PHE	29	173.647	134.047	-72.618	1.00	81.02	RS18	ATOM	5746	O	TYR	34	176.975	124.594	-78.435	1.00	65.96	RS18
ATOM	5694	CD2	PHE	29	174.170	136.382	-72.586	1.00	81.02	RS18	ATOM	5747	N	ARG	35	175.858	126.435	-79.074	1.00	85.81	RS18
ATOM	5695	CE1	PHE	29	174.078	133.935	-71.302	1.00	81.02	RS18	ATOM	5748	CA	ARG	35	176.764	126.683	-80.187	1.00	85.81	RS18
ATOM	5696	CE2	PHE	29	174.602	136.282	-71.271	1.00	81.02	RS18	ATOM	5749	CB	ARG	35	176.055	126.413	-81.509	1.00	82.75	RS18
ATOM	5697	CZ	PHE	29	174.556	135.057	-70.628	1.00	81.02	RS18	ATOM	5750	CG	ARG	35	175.776	124.953	-81.755	1.00	82.75	RS18
ATOM	5698	C	PHE	29	170.886	134.588	-74.310	1.00	65.52	RS18	ATOM	5751	CD	ARG	35	175.356	124.735	-83.193	1.00	82.75	RS18
ATOM	5699	O	PHE	29	170.294	134.588	-73.235	1.00	65.52	RS18	ATOM	5752	NE	ARG	35	174.075	125.365	-83.500	1.00	82.75	RS18
ATOM	5700	N	ASP	30	170.865	133.567	-75.153	1.00	73.16	RS18	ATOM	5753	CZ	ARG	35	173.573	125.480	-84.726	1.00	82.75	RS18
ATOM	5701	CA	ASP	30	170.109	132.357	-74.877	1.00	73.16	RS18	ATOM	5754	NH1	ARG	35	174.244	125.017	-85.774	1.00	82.75	RS18
ATOM	5702	CB	ASP	30	169.568	131.775	-76.185	1.00	76.23	RS18	ATOM	5755	NH2	ARG	35	172.383	126.035	-84.901	1.00	82.75	RS18
ATOM	5703	CG	ASP	30	168.819	130.482	-75.980	1.00	76.23	RS18	ATOM	5756	C	ARG	35	177.379	128.076	-80.224	1.00	85.81	RS18
ATOM	5704	OD1	ASP	30	168.129	130.354	-74.951	1.00	76.23	RS18	ATOM	5757	O	ARG	35	178.305	128.324	-81.001	1.00	85.81	RS18
ATOM	5705	OD2	ASP	30	168.905	129.595	-76.852	1.00	76.23	RS18	ATOM	5758	N	ASN	36	176.881	128.986	-79.391	1.00	56.79	RS18
ATOM	5706	C	ASP	30	170.993	131.339	-74.175	1.00	73.16	RS18	ATOM	5759	CA	ASN	36	177.420	130.334	-79.391	1.00	56.79	RS18
ATOM	5707	O	ASP	30	171.759	130.623	-74.817	1.00	73.16	RS18	ATOM	5760	CB	ASN	36	176.446	131.312	-78.737	1.00	88.27	RS18
ATOM	5708	N	LEU	31	170.883	131.283	-72.854	1.00	59.37	RS18	ATOM	5761	CG	ASN	36	176.822	132.763	-78.991	1.00	88.27	RS18
ATOM	5709	CA	LEU	31	171.676	130.363	-72.055	1.00	59.37	RS18	ATOM	5762	OD1	ASN	36	176.127	133.680	-78.553	1.00	88.27	RS18
ATOM	5710	CB	LEU	31	171.273	130.487	-70.589	1.00	76.82	RS18	ATOM	5763	ND2	ASN	36	177.928	132.977	-79.702	1.00	88.27	RS18
ATOM	5711	CG	LEU	31	171.928	131.633	-69.822	1.00	76.82	RS18	ATOM	5764	C	ASN	36	178.771	130.380	-78.685	1.00	56.79	RS18
ATOM	5712	CD1	LEU	31	171.184	131.891	-68.525	1.00	76.82	RS18	ATOM	5765	O	ASN	36	178.908	130.949	-77.595	1.00	56.79	RS18
ATOM	5713	CD2	LEU	31	173.384	131.277	-69.551	1.00	76.82	RS18	ATOM	5766	N	VAL	37	179.765	129.769	-79.326	1.00	42.43	RS18
ATOM	5714	C	LEU	31	171.553	128.906	-72.494	1.00	59.37	RS18	ATOM	5767	CA	VAL	37	181.124	129.730	-78.803	1.00	42.43	RS18
ATOM	5715	O	LEU	31	172.355	128.052	-72.099	1.00	59.37	RS18	ATOM	5768	CB	VAL	37	182.110	129.195	-79.857	1.00	65.05	RS18
ATOM	5716	N	ARG	32	170.563	128.628	-73.330	1.00	51.85	RS18	ATOM	5769	CG1	VAL	37	183.410	128.783	-79.187	1.00	65.05	RS18
ATOM	5717	CA	ARG	32	170.302	127.271	-73.793	1.00	51.85	RS18	ATOM	5770	CG2	VAL	37	181.485	128.033	-80.615	1.00	65.05	RS18
ATOM	5718	CB	ARG	32	168.793	127.103	-73.936	1.00	71.21	RS18	ATOM	5771	C	VAL	37	181.533	131.151	-78.445	1.00	42.43	RS18
ATOM	5719	CG	ARG	32	168.308	125.714	-74.195	1.00	71.21	RS18	ATOM	5772	O	VAL	37	182.319	131.378	-77.532	1.00	42.43	RS18
ATOM	5720	CD	ARG	32	166.901	125.593	-73.645	1.00	71.21	RS18	ATOM	5773	N	GLU	38	180.987	132.112	-79.174	1.00	73.98	RS18
ATOM	5721	NE	ARG	32	166.916	125.564	-72.183	1.00	71.21	RS18	ATOM	5774	CA	GLU	38	181.313	133.499	-78.922	1.00	73.98	RS18
ATOM	5722	CZ	ARG	32	165.982	126.100	-71.404	1.00	71.21	RS18	ATOM	5775	CB	GLU	38	180.522	134.406	-79.864	1.00	188.71	RS18
ATOM	5723	NH1	ARG	32	164.939	126.722	-71.935	1.00	71.21	RS18	ATOM	5776	CG	GLU	38	181.123	134.507	-81.248	1.00	188.71	RS18
ATOM	5724	NH2	ARG	32	166.098	126.014	-70.087	1.00	71.21	RS18	ATOM	5777	CD	GLU	38	182.515	135.112	-81.223	1.00	188.71	RS18
ATOM	5725	C	ARG	32	171.004	126.928	-75.099	1.00	51.85	RS18	ATOM	5778	OE1	GLU	38	183.417	134.519	-80.590	1.00	188.71	RS18
ATOM	5726	O	ARG	32	171.032	125.769	-75.498	1.00	51.85	RS18	ATOM	5779	OE2	GLU	38	182.706	136.185	-81.833	1.00	188.71	RS18
ATOM	5727	N	ASP	33	171.574	127.937	-75.754	1.00	80.74	RS18	ATOM	5780	C	GLU	38	181.036	133.886	-77.484	1.00	73.98	RS18
ATOM	5728	CA	ASP	33	172.271	127.755	-77.028	1.00	80.74	RS18	ATOM	5781	O	GLU	38	181.924	134.350	-76.770	1.00	73.98	RS18
ATOM	5729	CB	ASP	33	172.409	129.097	-77.742	1.00	87.17	RS18	ATOM	5782	N	VAL	39	179.798	133.678	-77.058	1.00	72.44	RS18
ATOM	5730	CG	ASP	33	173.222	128.997	-79.012	1.00	87.17	RS18	ATOM	5783	CA	VAL	39	179.403	134.040	-75.712	1.00	72.44	RS18
ATOM	5731	OD1	ASP	33	172.981	128.052	-79.795	1.00	87.17	RS18	ATOM	5784	CB	VAL	39	177.877	134.362	-75.673	1.00	59.86	RS18
ATOM	5732	OD2	ASP	33	174.091	129.868	-79.229	1.00	87.17	RS18	ATOM	5785	CG1	VAL	39	177.063	133.112	-75.890	1.00	59.86	RS18
ATOM	5733	C	ASP	33	173.649	127.137	-76.863	1.00	80.74	RS18	ATOM	5786	CG2	VAL	39	177.513	135.019	-74.367	1.00	59.86	RS18
ATOM	5734	O	ASP	33	174.581	127.793	-76.390	1.00	80.74	RS18	ATOM	5787	C	VAL	39	179.779	132.977	-74.671	1.00	72.44	RS18
ATOM	5735	N	TYR	34	173.784	125.884	-77.284	1.00	65.96	RS18	ATOM	5788	O	VAL	39	180.389	133.306	-73.654	1.00	72.44	RS18
ATOM	5736	CA	TYR	34	175.052	125.188	-77.146	1.00	65.96	RS18	ATOM	5789	N	LEU	40	179.445	131.713	-74.928	1.00	52.08	RS18
ATOM	5737	CB	TYR	34	174.806	123.697	-76.946	1.00	67.51	RS18	ATOM	5790	CA	LEU	40	179.765	130.642	-73.984	1.00	52.08	RS18
ATOM	5738	CG	TYR	34	174.012	123.050	-78.042	1.00	67.51	RS18	ATOM	5791	CB	LEU	40	179.571	129.273	-74.638	1.00	42.60	RS18
ATOM	5739	CD1	TYR	34	174.520	122.935	-79.331	1.00	67.51	RS18	ATOM	5792	CG	LEU	40	178.161	128.966	-75.143	1.00	42.60	RS18
ATOM	5740	CE1	TYR	34	173.780	122.319	-80.344	1.00	67.51	RS18	ATOM	5793	CD1	LEU	40	178.063	127.491	-75.505	1.00	42.60	RS18
ATOM	5741	CD2	TYR	34	172.750	122.535	-77.786	1.00	67.51	RS18	ATOM	5794	CD2	LEU	40	177.139	129.313	-74.074	1.00	42.60	RS18
ATOM	5742	CE2	TYR	34	172.005	121.918	-78.782	1.00	67.51	RS18	ATOM	5795	C	LEU	40	181.196	130.760	-73.464	1.00	52.08	RS18

ATOM	5796	O	LEU	40	181.428	130.783	-72.256	1.00 52.08	RS18	ATOM	5849	C	GLU	46	191.949	129.252	-68.338	1.00 74.39	RS18
ATOM	5797	N	LYS	41	182.142	130.823	-74.399	1.00 64.68	RS18	ATOM	5850	O	GLU	46	192.848	129.018	-69.140	1.00 74.39	RS18
ATOM	5798	CA	LYS	41	183.579	130.961	-74.129	1.00 64.68	RS18	ATOM	5851	N	THR	47	191.171	128.311	-67.816	1.00 74.19	RS18
ATOM	5799	CB	LYS	41	184.247	131.485	-75.404	1.00 87.97	RS18	ATOM	5852	CA	THR	47	191.254	126.897	-68.148	1.00 74.19	RS18
ATOM	5800	CG	LYS	41	185.718	131.818	-75.315	1.00 87.97	RS18	ATOM	5853	CB	THR	47	191.494	126.059	-66.887	1.00 42.42	RS18
ATOM	5801	CD	LYS	41	186.078	132.910	-76.341	1.00 87.97	RS18	ATOM	5854	OG1	THR	47	192.728	126.464	-66.278	1.00 42.42	RS18
ATOM	5802	CE	LYS	41	185.604	132.575	-77.763	1.00 87.97	RS18	ATOM	5855	CG2	THR	47	191.526	124.571	-67.222	1.00 42.42	RS18
ATOM	5803	NZ	LYS	41	185.872	133.664	-78.755	1.00 87.97	RS18	ATOM	5856	C	THR	47	189.873	126.569	-68.715	1.00 74.19	RS18
ATOM	5804	C	LYS	41	183.854	131.923	-72.963	1.00 64.68	RS18	ATOM	5857	O	THR	47	189.008	127.443	-68.794	1.00 74.19	RS18
ATOM	5805	O	LYS	41	184.838	131.783	-72.235	1.00 64.68	RS18	ATOM	5858	N	GLY	48	189.645	125.325	-69.104	1.00 81.52	RS18
ATOM	5806	N	ARG	42	182.964	132.898	-72.808	1.00 69.83	RS18	ATOM	5859	CA	GLY	48	188.344	124.986	-69.654	1.00 81.52	RS18
ATOM	5807	CA	ARG	42	183.057	133.909	-71.763	1.00 69.83	RS18	ATOM	5860	C	GLY	48	187.292	124.819	-68.579	1.00 81.52	RS18
ATOM	5808	CB	ARG	42	181.951	134.949	-71.962	1.00100.01	RS18	ATOM	5861	O	GLY	48	186.218	124.277	-68.827	1.00 81.52	RS18
ATOM	5809	CG	ARG	42	182.310	136.103	-72.869	1.00100.01	RS18	ATOM	5862	N	LYS	49	187.599	125.299	-67.381	1.00 57.84	RS18
ATOM	5810	CD	ARG	42	183.395	136.951	-72.224	1.00100.01	RS18	ATOM	5863	CA	LYS	49	186.695	125.175	-66.253	1.00 57.84	RS18
ATOM	5811	NE	ARG	42	183.375	138.330	-72.699	1.00100.01	RS18	ATOM	5864	CB	LYS	49	187.468	125.343	-64.954	1.00 76.25	RS18
ATOM	5812	CZ	ARG	42	182.338	139.152	-72.562	1.00100.01	RS18	ATOM	5865	CG	LYS	49	188.476	124.251	-64.709	1.00 76.25	RS18
ATOM	5813	NH1	ARG	42	181.229	138.734	-71.963	1.00100.01	RS18	ATOM	5866	CD	LYS	49	189.306	124.548	-63.487	1.00 76.25	RS18
ATOM	5814	NH2	ARG	42	182.410	140.395	-73.021	1.00100.01	RS18	ATOM	5867	CE	LYS	49	190.285	123.430	-63.211	1.00 76.25	RS18
ATOM	5815	C	ARG	42	182.965	133.364	-70.337	1.00 69.83	RS18	ATOM	5868	NZ	LYS	49	191.199	123.768	-62.083	1.00 76.25	RS18
ATOM	5816	O	ARG	42	183.562	133.920	-69.411	1.00 69.83	RS18	ATOM	5869	C	LYS	49	185.552	126.162	-66.282	1.00 57.84	RS18
ATOM	5817	N	PHE	43	182.209	132.285	-70.161	1.00 72.62	RS18	ATOM	5870	O	LYS	49	185.714	127.306	-66.694	1.00 57.84	RS18
ATOM	5818	CA	PHE	43	182.024	131.703	-68.840	1.00 72.62	RS18	ATOM	5871	N	ILE	50	184.390	125.697	-65.839	1.00 54.01	RS18
ATOM	5819	CB	PHE	43	180.632	131.092	-68.730	1.00 67.03	RS18	ATOM	5872	CA	ILE	50	183.197	126.522	-65.765	1.00 54.01	RS18
ATOM	5820	CG	PHE	43	179.525	132.062	-69.017	1.00 67.03	RS18	ATOM	5873	CB	ILE	50	181.954	125.681	-65.575	1.00 34.80	RS18
ATOM	5821	CD1	PHE	43	179.035	132.217	-70.306	1.00 67.03	RS18	ATOM	5874	CG2	ILE	50	180.734	126.588	-65.519	1.00 34.80	RS18
ATOM	5822	CD2	PHE	43	178.974	132.829	-67.997	1.00 67.03	RS18	ATOM	5875	CG1	ILE	50	181.861	124.648	-66.687	1.00 34.80	RS18
ATOM	5823	CE1	PHE	43	178.013	133.115	-70.574	1.00 67.03	RS18	ATOM	5876	CD1	ILE	50	180.615	123.824	-66.626	1.00 34.80	RS18
ATOM	5824	CE2	PHE	43	177.951	133.731	-68.263	1.00 67.03	RS18	ATOM	5877	C	ILE	50	183.341	127.392	-64.532	1.00 54.01	RS18
ATOM	5825	CZ	PHE	43	177.472	133.870	-69.554	1.00 67.03	RS18	ATOM	5878	O	ILE	50	183.526	126.889	-63.425	1.00 54.01	RS18
ATOM	5826	C	PHE	43	183.057	130.668	-68.446	1.00 72.62	RS18	ATOM	5879	N	LEU	51	183.243	128.697	-64.716	1.00 50.15	RS18
ATOM	5827	O	PHE	43	182.913	130.004	-67.424	1.00 72.62	RS18	ATOM	5880	CA	LEU	51	183.395	129.617	-63.604	1.00 50.15	RS18
ATOM	5828	N	LEU	44	184.099	130.516	-69.249	1.00 64.42	RS18	ATOM	5881	CB	LEU	51	183.443	131.045	-64.136	1.00 47.56	RS18
ATOM	5829	CA	LEU	44	185.131	129.554	-68.909	1.00 64.42	RS18	ATOM	5882	CG	LEU	51	184.739	131.332	-64.889	1.00 47.56	RS18
ATOM	5830	CB	LEU	44	185.574	128.780	-70.146	1.00 48.47	RS18	ATOM	5883	CD1	LEU	51	184.527	132.466	-65.867	1.00 47.56	RS18
ATOM	5831	CG	LEU	44	184.586	127.698	-70.586	1.00 48.47	RS18	ATOM	5884	CD2	LEU	51	185.843	131.643	-63.886	1.00 47.56	RS18
ATOM	5832	CD1	LEU	44	185.231	126.841	-71.665	1.00 48.47	RS18	ATOM	5885	C	LEU	51	182.321	129.487	-62.532	1.00 50.15	RS18
ATOM	5833	CD2	LEU	44	184.191	126.825	-69.386	1.00 48.47	RS18	ATOM	5886	O	LEU	51	181.174	129.123	-62.819	1.00 50.15	RS18
ATOM	5834	C	LEU	44	186.323	130.235	-68.263	1.00 64.42	RS18	ATOM	5887	N	PRO	52	182.694	129.774	-61.274	1.00 64.52	RS18
ATOM	5835	O	LEU	44	186.668	131.358	-68.608	1.00 64.42	RS18	ATOM	5888	CD	PRO	52	184.042	130.170	-60.848	1.00 62.44	RS18
ATOM	5836	N	SER	45	186.943	129.553	-67.310	1.00 67.57	RS18	ATOM	5889	CA	PRO	52	181.798	129.708	-60.122	1.00 64.52	RS18
ATOM	5837	CA	SER	45	188.095	130.107	-66.622	1.00 67.57	RS18	ATOM	5890	CB	PRO	52	182.711	130.059	-58.953	1.00 62.44	RS18
ATOM	5838	CB	SER	45	188.510	129.197	-65.458	1.00 75.99	RS18	ATOM	5891	CG	PRO	52	184.064	129.669	-59.443	1.00 62.44	RS18
ATOM	5839	OG	SER	45	188.634	127.843	-65.862	1.00 75.99	RS18	ATOM	5892	C	PRO	52	180.739	130.770	-60.339	1.00 64.52	RS18
ATOM	5840	C	SER	45	189.250	130.257	-67.592	1.00 67.57	RS18	ATOM	5893	O	PRO	52	180.959	131.705	-61.110	1.00 64.52	RS18
ATOM	5841	O	SER	45	189.078	130.133	-68.803	1.00 67.57	RS18	ATOM	5894	N	ARG	53	179.598	130.643	-59.673	1.00 69.19	RS18
ATOM	5842	N	GLU	46	190.427	130.539	-67.051	1.00 74.39	RS18	ATOM	5895	CA	ARG	53	178.556	131.634	-59.855	1.00 69.19	RS18
ATOM	5843	CA	GLU	46	191.634	130.676	-67.856	1.00 74.39	RS18	ATOM	5896	CB	ARG	53	177.316	131.263	-59.056	1.00 65.21	RS18
ATOM	5844	CB	GLU	46	192.764	131.241	-66.984	1.00112.55	RS18	ATOM	5897	CG	ARG	53	176.192	130.763	-59.933	1.00 65.21	RS18
ATOM	5845	CG	GLU	46	192.412	132.576	-66.290	1.00112.55	RS18	ATOM	5898	CD	ARG	53	174.881	131.373	-59.508	1.00 65.21	RS18
ATOM	5846	CD	GLU	46	191.221	132.480	-65.320	1.00112.55	RS18	ATOM	5899	NE	ARG	53	174.254	130.658	-58.407	1.00 65.21	RS18
ATOM	5847	OE1	GLU	46	191.343	131.809	-64.272	1.00112.55	RS18	ATOM	5900	CZ	ARG	53	173.440	131.234	-57.534	1.00 65.21	RS18
ATOM	5848	OE2	GLU	46	190.160	133.080	-65.604	1.00112.55	RS18	ATOM	5901	NH1	ARG	53	173.177	132.527	-57.634	1.00 65.21	RS18

ATOM	5902	NH2	ARG	53	172.860	130.518	-56.585	1.00	65.21	RS18	ATOM	5955	O	GLY	60	171.307	127.777	-61.355	1.00	47.11	RS18
ATOM	5903	C	ARG	53	179.034	133.020	-59.461	1.00	69.19	RS18	ATOM	5956	N	LYS	61	169.417	128.948	-61.043	1.00	58.49	RS18
ATOM	5904	O	ARG	53	178.615	134.019	-60.047	1.00	69.19	RS18	ATOM	5957	CA	LYS	61	168.765	128.371	-62.210	1.00	58.49	RS18
ATOM	5905	N	ARG	54	179.920	133.081	-58.475	1.00	59.61	RS18	ATOM	5958	CB	LYS	61	167.325	128.891	-62.327	1.00	45.60	RS18
ATOM	5906	CA	ARG	54	180.453	134.357	-58.019	1.00	59.61	RS18	ATOM	5959	CG	LYS	61	166.430	128.090	-63.277	1.00	45.60	RS18
ATOM	5907	CB	ARG	54	181.622	134.127	-57.079	1.00	96.94	RS18	ATOM	5960	CD	LYS	61	165.009	128.661	-63.318	1.00	45.60	RS18
ATOM	5908	CG	ARG	54	181.450	132.953	-56.147	1.00	96.94	RS18	ATOM	5961	CE	LYS	61	164.181	128.027	-64.434	1.00	45.60	RS18
ATOM	5909	CD	ARG	54	182.808	132.339	-55.916	1.00	96.94	RS18	ATOM	5962	NZ	LYS	61	162.821	128.623	-64.567	1.00	45.60	RS18
ATOM	5910	NE	ARG	54	183.821	133.388	-55.829	1.00	96.94	RS18	ATOM	5963	C	LYS	61	169.535	128.643	-63.497	1.00	58.49	RS18
ATOM	5911	CZ	ARG	54	185.127	133.187	-55.962	1.00	96.94	RS18	ATOM	5964	O	LYS	61	169.794	127.719	-64.269	1.00	58.49	RS18
ATOM	5912	NH1	ARG	54	185.599	131.965	-56.192	1.00	96.94	RS18	ATOM	5965	N	GLU	62	169.900	129.901	-63.732	1.00	62.35	RS18
ATOM	5913	NH2	ARG	54	185.962	134.214	-55.872	1.00	96.94	RS18	ATOM	5966	CA	GLU	62	170.643	130.251	-64.940	1.00	62.35	RS18
ATOM	5914	C	ARG	54	180.949	135.169	-59.210	1.00	59.61	RS18	ATOM	5967	CB	GLU	62	171.054	131.726	-64.915	1.00	83.41	RS18
ATOM	5915	O	ARG	54	180.696	136.366	-59.317	1.00	59.61	RS18	ATOM	5968	CG	GLU	62	169.914	132.728	-64.838	1.00	83.41	RS18
ATOM	5916	N	ARG	55	181.647	134.490	-60.110	1.00	49.92	RS18	ATOM	5969	CD	GLU	62	170.409	134.174	-64.811	1.00	83.41	RS18
ATOM	5917	CA	ARG	55	182.235	135.096	-61.295	1.00	49.92	RS18	ATOM	5970	OE1	GLU	62	171.224	134.516	-63.925	1.00	83.41	RS18
ATOM	5918	CB	ARG	55	183.474	134.298	-61.680	1.00	101.48	RS18	ATOM	5971	OE2	GLU	62	169.980	134.971	-65.675	1.00	83.41	RS18
ATOM	5919	CG	ARG	55	184.445	134.098	-60.533	1.00	101.48	RS18	ATOM	5972	C	GLU	62	171.906	129.394	-65.020	1.00	62.35	RS18
ATOM	5920	CD	ARG	55	185.491	135.192	-60.490	1.00	101.48	RS18	ATOM	5973	O	GLU	62	172.127	128.669	-65.992	1.00	62.35	RS18
ATOM	5921	NE	ARG	55	186.348	135.127	-61.669	1.00	101.48	RS18	ATOM	5974	N	GLN	63	172.721	129.493	-63.974	1.00	51.35	RS18
ATOM	5922	CZ	ARG	55	186.065	135.694	-62.837	1.00	101.48	RS18	ATOM	5975	CA	GLN	63	173.984	128.774	-63.851	1.00	51.35	RS18
ATOM	5923	NH1	ARG	55	184.941	136.387	-62.987	1.00	101.48	RS18	ATOM	5976	CB	GLN	63	174.573	129.040	-62.470	1.00	50.10	RS18
ATOM	5924	NH2	ARG	55	186.898	135.548	-63.859	1.00	101.48	RS18	ATOM	5977	CG	GLN	63	175.881	128.341	-62.180	1.00	50.10	RS18
ATOM	5925	C	ARG	55	181.306	135.189	-62.497	1.00	49.92	RS18	ATOM	5978	CD	GLN	63	177.040	129.020	-62.839	1.00	50.10	RS18
ATOM	5926	O	ARG	55	181.427	136.115	-63.290	1.00	49.92	RS18	ATOM	5979	OE1	GLN	63	177.076	130.245	-62.942	1.00	50.10	RS18
ATOM	5927	N	THR	56	180.389	134.240	-62.650	1.00	47.67	RS18	ATOM	5980	NE2	GLN	63	178.011	128.237	-63.275	1.00	50.10	RS18
ATOM	5928	CA	THR	56	179.490	134.287	-63.799	1.00	47.67	RS18	ATOM	5981	C	GLN	63	173.847	127.276	-64.061	1.00	51.35	RS18
ATOM	5929	CB	THR	56	178.920	132.887	-64.169	1.00	69.34	RS18	ATOM	5982	O	GLN	63	174.816	126.596	-64.383	1.00	51.35	RS18
ATOM	5930	OG1	THR	56	177.683	132.663	-63.482	1.00	69.34	RS18	ATOM	5983	N	ARG	64	172.648	126.754	-63.858	1.00	50.55	RS18
ATOM	5931	CG2	THR	56	179.900	131.797	-63.792	1.00	69.34	RS18	ATOM	5984	CA	ARG	64	172.421	125.331	-64.044	1.00	50.55	RS18
ATOM	5932	C	THR	56	178.314	135.233	-63.590	1.00	47.67	RS18	ATOM	5985	CB	ARG	64	171.131	124.908	-63.366	1.00	51.23	RS18
ATOM	5933	O	THR	56	177.567	135.520	-64.527	1.00	47.67	RS18	ATOM	5986	CG	ARG	64	171.308	124.331	-62.001	1.00	51.23	RS18
ATOM	5934	N	GLY	57	178.141	135.712	-62.363	1.00	70.45	RS18	ATOM	5987	CD	ARG	64	170.005	123.763	-61.538	1.00	51.23	RS18
ATOM	5935	CA	GLY	57	177.040	136.615	-62.086	1.00	70.45	RS18	ATOM	5988	NE	ARG	64	169.327	124.663	-60.626	1.00	51.23	RS18
ATOM	5936	C	GLY	57	175.664	136.067	-62.440	1.00	70.45	RS18	ATOM	5989	CZ	ARG	64	168.013	124.771	-60.558	1.00	51.23	RS18
ATOM	5937	O	GLY	57	174.680	136.808	-62.468	1.00	70.45	RS18	ATOM	5990	NH1	ARG	64	167.249	124.046	-61.358	1.00	51.23	RS18
ATOM	5938	N	LEU	58	175.588	134.776	-62.734	1.00	60.41	RS18	ATOM	5991	NH2	ARG	64	167.468	125.572	-59.667	1.00	51.23	RS18
ATOM	5939	CA	LEU	58	174.311	134.164	-63.048	1.00	60.41	RS18	ATOM	5992	C	ARG	64	172.321	124.985	-65.517	1.00	50.55	RS18
ATOM	5940	CB	LEU	58	174.495	132.896	-63.881	1.00	58.93	RS18	ATOM	5993	O	ARG	64	172.899	124.003	-65.978	1.00	50.55	RS18
ATOM	5941	CG	LEU	58	174.837	133.009	-65.365	1.00	58.93	RS18	ATOM	5994	N	ILE	65	171.558	125.800	-66.236	1.00	76.05	RS18
ATOM	5942	CD1	LEU	58	174.719	131.639	-66.017	1.00	58.93	RS18	ATOM	5995	CA	ILE	65	171.332	125.628	-67.660	1.00	76.05	RS18
ATOM	5943	CD2	LEU	58	173.882	133.974	-66.031	1.00	58.93	RS18	ATOM	5996	CB	ILE	65	170.280	126.614	-68.149	1.00	69.81	RS18
ATOM	5944	C	LEU	58	173.646	133.791	-61.733	1.00	60.41	RS18	ATOM	5997	CG2	ILE	65	169.806	126.218	-69.527	1.00	69.81	RS18
ATOM	5945	O	LEU	58	174.190	134.041	-60.653	1.00	60.41	RS18	ATOM	5998	CG1	ILE	65	169.102	126.620	-67.176	1.00	69.81	RS18
ATOM	5946	N	SER	59	172.471	133.184	-61.835	1.00	54.09	RS18	ATOM	5999	CD1	ILE	65	168.122	127.754	-67.397	1.00	69.81	RS18
ATOM	5947	CA	SER	59	171.717	132.760	-60.671	1.00	54.09	RS18	ATOM	6000	C	ILE	65	172.620	125.876	-68.423	1.00	76.05	RS18
ATOM	5948	CB	SER	59	170.271	133.205	-60.808	1.00	71.34	RS18	ATOM	6001	O	ILE	65	172.869	125.259	-69.456	1.00	76.05	RS18
ATOM	5949	OG	SER	59	169.667	132.554	-61.913	1.00	71.34	RS18	ATOM	6002	N	LEU	66	173.439	126.786	-67.909	1.00	48.68	RS18
ATOM	5950	C	SER	59	171.769	131.242	-60.635	1.00	54.09	RS18	ATOM	6003	CA	LEU	66	174.702	127.101	-68.554	1.00	48.68	RS18
ATOM	5951	O	SER	59	172.287	130.620	-61.560	1.00	54.09	RS18	ATOM	6004	CB	LEU	66	175.456	128.179	-67.787	1.00	48.24	RS18
ATOM	5952	N	GLY	60	171.224	130.652	-59.573	1.00	47.11	RS18	ATOM	6005	CG	LEU	66	176.806	128.555	-68.399	1.00	48.24	RS18
ATOM	5953	CA	GLY	60	171.214	129.209	-59.445	1.00	47.11	RS18	ATOM	6006	CD1	LEU	66	176.601	129.512	-69.557	1.00	48.24	RS18
ATOM	5954	C	GLY	60	170.642	128.574	-60.694	1.00	47.11	RS18	ATOM	6007	CD2	LEU	66	177.670	129.214	-67.355	1.00	48.24	RS18

ATOM	6008	C	LEU	66	175.544	125.857	-68.575	1.00	48.68	RS18	ATOM	6061	CB	ALA	73	179.496	123.919	-76.112	1.00	30.23	RS18
ATOM	6009	O	LEU	66	175.924	125.378	-69.629	1.00	48.68	RS18	ATOM	6062	C	ALA	73	180.830	121.816	-76.416	1.00	54.76	RS18
ATOM	6010	N	ALA	67	175.823	125.338	-67.388	1.00	63.69	RS18	ATOM	6063	O	ALA	73	181.618	121.966	-77.349	1.00	54.76	RS18
ATOM	6011	CA	ALA	67	176.646	124.150	-67.235	1.00	63.69	RS18	ATOM	6064	N	ARG	74	181.132	121.121	-75.327	1.00	56.48	RS18
ATOM	6012	CB	ALA	67	176.507	123.604	-65.822	1.00	50.99	RS18	ATOM	6065	CA	ARG	74	182.432	120.481	-75.190	1.00	56.48	RS18
ATOM	6013	C	ALA	67	176.329	123.062	-68.249	1.00	63.69	RS18	ATOM	6066	CB	ARG	74	182.712	120.141	-73.728	1.00	58.18	RS18
ATOM	6014	O	ALA	67	177.235	122.489	-68.853	1.00	63.69	RS18	ATOM	6067	CG	ARG	74	183.131	121.326	-72.878	1.00	58.18	RS18
ATOM	6015	N	LYS	68	175.045	122.785	-68.448	1.00	51.31	RS18	ATOM	6068	CD	ARG	74	183.144	120.917	-71.434	1.00	58.18	RS18
ATOM	6016	CA	LYS	68	174.639	121.742	-69.382	1.00	51.31	RS18	ATOM	6069	NE	ARG	74	183.761	121.900	-70.553	1.00	58.18	RS18
ATOM	6017	CB	LYS	68	173.145	121.472	-69.261	1.00	66.03	RS18	ATOM	6070	CZ	ARG	74	183.801	121.770	-69.229	1.00	58.18	RS18
ATOM	6018	CG	LYS	68	172.816	120.004	-69.292	1.00	66.03	RS18	ATOM	6071	NH1	ARG	74	183.255	120.702	-68.652	1.00	58.18	RS18
ATOM	6019	CD	LYS	68	171.331	119.795	-69.353	1.00	66.03	RS18	ATOM	6072	NH2	ARG	74	184.392	122.694	-68.483	1.00	58.18	RS18
ATOM	6020	CE	LYS	68	170.980	118.325	-69.288	1.00	66.03	RS18	ATOM	6073	C	ARG	74	182.486	119.219	-76.035	1.00	56.48	RS18
ATOM	6021	NZ	LYS	68	169.523	118.121	-69.524	1.00	66.03	RS18	ATOM	6074	O	ARG	74	183.483	118.949	-76.691	1.00	56.48	RS18
ATOM	6022	C	LYS	68	174.973	122.140	-70.807	1.00	51.31	RS18	ATOM	6075	N	ILE	75	181.415	118.443	-76.025	1.00	61.80	RS18
ATOM	6023	O	LYS	68	175.362	121.305	-71.621	1.00	51.31	RS18	ATOM	6076	CA	ILE	75	181.398	117.229	-76.822	1.00	61.80	RS18
ATOM	6024	N	THR	69	174.808	123.424	-71.100	1.00	45.39	RS18	ATOM	6077	CB	ILE	75	180.098	116.430	-76.602	1.00	84.43	RS18
ATOM	6025	CA	THR	69	175.109	123.969	-72.416	1.00	45.39	RS18	ATOM	6078	CG2	ILE	75	180.114	115.175	-77.445	1.00	84.43	RS18
ATOM	6026	CB	THR	69	174.602	125.415	-72.521	1.00	54.63	RS18	ATOM	6079	CG1	ILE	75	179.968	116.039	-75.133	1.00	84.43	RS18
ATOM	6027	OG1	THR	69	173.183	125.407	-72.717	1.00	54.63	RS18	ATOM	6080	CD1	ILE	75	178.758	115.168	-74.839	1.00	84.43	RS18
ATOM	6028	CG2	THR	69	175.282	126.139	-73.665	1.00	54.63	RS18	ATOM	6081	C	ILE	75	181.541	117.560	-78.316	1.00	61.80	RS18
ATOM	6029	C	THR	69	176.622	123.936	-72.646	1.00	45.39	RS18	ATOM	6082	O	ILE	75	182.308	116.911	-79.031	1.00	61.80	RS18
ATOM	6030	O	THR	69	177.090	123.463	-73.669	1.00	45.39	RS18	ATOM	6083	N	LEU	76	180.809	118.568	-78.783	1.00	71.60	RS18
ATOM	6031	N	ILE	70	177.385	124.433	-71.684	1.00	51.27	RS18	ATOM	6084	CA	LEU	76	180.878	118.959	-80.185	1.00	71.60	RS18
ATOM	6032	CA	ILE	70	178.831	124.434	-71.800	1.00	51.27	RS18	ATOM	6085	CB	LEU	76	179.851	120.045	-80.496	1.00	49.18	RS18
ATOM	6033	CB	ILE	70	179.473	125.096	-70.586	1.00	41.03	RS18	ATOM	6086	CG	LEU	76	178.378	119.636	-80.416	1.00	49.18	RS18
ATOM	6034	CG2	ILE	70	180.973	125.119	-70.725	1.00	41.03	RS18	ATOM	6087	CD1	LEU	76	177.531	120.754	-81.006	1.00	49.18	RS18
ATOM	6035	CG1	ILE	70	178.943	126.516	-70.460	1.00	41.03	RS18	ATOM	6088	CD2	LEU	76	178.137	118.336	-81.170	1.00	49.18	RS18
ATOM	6036	CD1	ILE	70	179.557	127.267	-69.331	1.00	41.03	RS18	ATOM	6089	C	LEU	76	182.262	119.460	-80.574	1.00	71.60	RS18
ATOM	6037	C	ILE	70	179.375	123.018	-71.928	1.00	51.27	RS18	ATOM	6090	O	LEU	76	182.529	119.694	-81.750	1.00	71.60	RS18
ATOM	6038	O	ILE	70	180.472	122.816	-72.455	1.00	51.27	RS18	ATOM	6091	N	GLY	77	183.133	119.631	-79.582	1.00	51.94	RS18
ATOM	6039	N	LYS	71	178.622	122.035	-71.443	1.00	54.03	RS18	ATOM	6092	CA	GLY	77	184.485	120.094	-79.842	1.00	51.94	RS18
ATOM	6040	CA	LYS	71	179.069	120.652	-71.545	1.00	54.03	RS18	ATOM	6093	C	GLY	77	184.611	121.600	-79.982	1.00	51.94	RS18
ATOM	6041	CB	LYS	71	178.415	119.785	-70.466	1.00	57.55	RS18	ATOM	6094	O	GLY	77	185.675	122.101	-80.334	1.00	51.94	RS18
ATOM	6042	CG	LYS	71	178.965	120.078	-69.078	1.00	57.55	RS18	ATOM	6095	N	LEU	78	183.538	122.329	-79.697	1.00	54.03	RS18
ATOM	6043	CD	LYS	71	178.302	119.266	-67.976	1.00	57.55	RS18	ATOM	6096	CA	LEU	78	183.556	123.783	-79.810	1.00	54.03	RS18
ATOM	6044	CE	LYS	71	178.776	119.762	-66.608	1.00	57.55	RS18	ATOM	6097	CB	LEU	78	182.136	124.301	-80.019	1.00	71.66	RS18
ATOM	6045	NZ	LYS	71	178.202	118.999	-65.458	1.00	57.55	RS18	ATOM	6098	CG	LEU	78	181.364	123.518	-81.084	1.00	71.66	RS18
ATOM	6046	C	LYS	71	178.759	120.115	-72.931	1.00	54.03	RS18	ATOM	6099	CD1	LEU	78	179.890	123.896	-81.041	1.00	71.66	RS18
ATOM	6047	O	LYS	71	179.605	119.478	-73.550	1.00	54.03	RS18	ATOM	6100	CD2	LEU	78	181.982	123.776	-82.456	1.00	71.66	RS18
ATOM	6048	N	ARG	72	177.552	120.381	-73.424	1.00	54.38	RS18	ATOM	6101	C	LEU	78	184.159	124.429	-78.572	1.00	54.03	RS18
ATOM	6049	CA	ARG	72	177.151	119.935	-74.759	1.00	54.38	RS18	ATOM	6102	O	LEU	78	184.716	125.524	-78.642	1.00	54.03	RS18
ATOM	6050	CB	ARG	72	175.768	120.486	-75.128	1.00	65.79	RS18	ATOM	6103	N	LEU	79	184.029	123.753	-77.433	1.00	61.98	RS18
ATOM	6051	CG	ARG	72	174.569	119.836	-74.461	1.00	65.79	RS18	ATOM	6104	CA	LEU	79	184.575	124.248	-76.167	1.00	61.98	RS18
ATOM	6052	CD	ARG	72	173.279	120.576	-74.864	1.00	65.79	RS18	ATOM	6105	CB	LEU	79	183.460	124.550	-75.159	1.00	61.84	RS18
ATOM	6053	NE	ARG	72	172.072	119.762	-74.714	1.00	65.79	RS18	ATOM	6106	CG	LEU	79	182.682	125.861	-75.271	1.00	61.84	RS18
ATOM	6054	CZ	ARG	72	170.850	120.155	-75.068	1.00	65.79	RS18	ATOM	6107	CD1	LEU	79	181.599	125.899	-74.202	1.00	61.84	RS18
ATOM	6055	NH1	ARG	72	170.654	121.359	-75.594	1.00	65.79	RS18	ATOM	6108	CD2	LEU	79	183.636	127.030	-75.114	1.00	61.84	RS18
ATOM	6056	NH2	ARG	72	169.819	119.332	-74.913	1.00	65.79	RS18	ATOM	6109	C	LEU	79	185.508	123.214	-75.569	1.00	61.98	RS18
ATOM	6057	C	ARG	72	178.161	120.485	-75.760	1.00	54.38	RS18	ATOM	6110	O	LEU	79	185.287	122.011	-75.691	1.00	61.98	RS18
ATOM	6058	O	ARG	72	178.610	119.785	-76.664	1.00	54.38	RS18	ATOM	6111	N	PRO	80	186.554	123.676	-74.888	1.00	40.94	RS18
ATOM	6059	N	ALA	73	178.507	121.754	-75.581	1.00	54.76	RS18	ATOM	6112	CD	PRO	80	186.792	125.086	-74.532	1.00	31.52	RS18
ATOM	6060	CA	ALA	73	179.438	122.432	-76.464	1.00	54.76	RS18	ATOM	6113	CA	PRO	80	187.548	122.807	-74.254	1.00	40.94	RS18

ATOM	6114	CB	PRO	80	188.686	123.763	-73.965	1.00	31.52	RS18	ATOM	6167	C	VAL	86	201.066	130.907	-67.271	1.00	94.19	RS18
ATOM	6115	CG	PRO	80	187.935	124.984	-73.508	1.00	31.52	RS18	ATOM	6168	O	VAL	86	200.438	130.896	-66.215	1.00	94.19	RS18
ATOM	6116	C	PRO	80	187.056	122.157	-72.965	1.00	40.94	RS18	ATOM	6169	N	ARG	87	202.148	131.665	-67.454	1.00	116.71	RS18
ATOM	6117	O	PRO	80	186.083	122.602	-72.345	1.00	40.94	RS18	ATOM	6170	CA	ARG	87	202.683	132.490	-66.373	1.00	116.71	RS18
ATOM	6118	N	PHE	81	187.735	121.093	-72.566	1.00	59.01	RS18	ATOM	6171	CB	ARG	87	201.562	133.305	-65.716	1.00	132.07	RS18
ATOM	6119	CA	PHE	81	187.399	120.444	-71.317	1.00	59.01	RS18	ATOM	6172	CG	ARG	87	201.242	134.609	-66.418	1.00	132.07	RS18
ATOM	6120	CB	PHE	81	187.566	118.931	-71.409	1.00	58.41	RS18	ATOM	6173	CD	ARG	87	202.321	135.632	-66.120	1.00	132.07	RS18
ATOM	6121	CG	PHE	81	186.425	118.240	-72.072	1.00	58.41	RS18	ATOM	6174	NE	ARG	87	202.093	136.914	-66.782	1.00	132.07	RS18
ATOM	6122	CD1	PHE	81	186.215	118.369	-73.434	1.00	58.41	RS18	ATOM	6175	CZ	ARG	87	202.157	137.100	-68.097	1.00	132.07	RS18
ATOM	6123	CD2	PHE	81	185.542	117.469	-71.328	1.00	58.41	RS18	ATOM	6176	NH1	ARG	87	202.439	136.084	-68.904	1.00	132.07	RS18
ATOM	6124	CE1	PHE	81	185.141	117.737	-74.047	1.00	58.41	RS18	ATOM	6177	NH2	ARG	87	201.951	138.309	-68.606	1.00	132.07	RS18
ATOM	6125	CE2	PHE	81	184.463	116.834	-71.934	1.00	58.41	RS18	ATOM	6178	C	ARG	87	203.294	131.510	-65.366	1.00	116.71	RS18
ATOM	6126	CZ	PHE	81	184.264	116.970	-73.294	1.00	58.41	RS18	ATOM	6179	O	ARG	87	203.876	130.503	-65.767	1.00	116.71	RS18
ATOM	6127	C	PHE	81	188.385	121.011	-70.311	1.00	59.01	RS18	ATOM	6180	N	LYS	88	203.167	131.798	-64.071	1.00	108.44	RS18
ATOM	6128	O	PHE	81	188.039	121.232	-69.151	1.00	59.01	RS18	ATOM	6181	CA	LYS	88	203.686	130.921	-63.011	1.00	108.44	RS18
ATOM	6129	N	THR	82	189.610	121.268	-70.773	1.00	64.31	RS18	ATOM	6182	CB	LYS	88	203.292	129.464	-63.288	1.00	63.67	RS18
ATOM	6130	CA	THR	82	190.646	121.803	-69.901	1.00	64.31	RS18	ATOM	6183	CG	LYS	88	203.547	128.521	-62.135	1.00	63.67	RS18
ATOM	6131	CB	THR	82	191.156	120.716	-68.949	1.00	84.35	RS18	ATOM	6184	CD	LYS	88	203.089	127.124	-62.489	1.00	63.67	RS18
ATOM	6132	OG1	THR	82	192.018	121.306	-67.970	1.00	84.35	RS18	ATOM	6185	CE	LYS	88	203.302	126.188	-61.310	1.00	63.67	RS18
ATOM	6133	CG2	THR	82	191.909	119.646	-69.719	1.00	84.35	RS18	ATOM	6186	NZ	LYS	88	203.065	124.744	-61.623	1.00	63.67	RS18
ATOM	6134	C	THR	82	191.840	122.393	-70.648	1.00	64.31	RS18	ATOM	6187	C	LYS	88	205.198	131.009	-62.795	1.00	108.44	RS18
ATOM	6135	O	THR	82	192.336	121.799	-71.596	1.00	64.31	RS18	ATOM	6188	O	LYS	88	205.815	131.952	-63.332	1.00	108.44	RS18
ATOM	6136	N	GLU	83	192.302	123.561	-70.204	1.00	69.07	RS18	ATOM	6189	OXT	LYS	88	205.742	130.142	-62.074	1.00	92.64	RS18
ATOM	6137	CA	GLU	83	193.440	124.240	-70.820	1.00	69.07	RS18	ATOM	6190	CB	PRO	2	255.642	114.084	15.255	1.00	87.09	SS19
ATOM	6138	CB	GLU	83	193.010	125.618	-71.324	1.00	133.90	RS18	ATOM	6191	CG	PRO	2	254.649	113.572	14.212	1.00	87.09	SS19
ATOM	6139	CG	GLU	83	191.782	125.579	-72.228	1.00	133.90	RS18	ATOM	6192	C	PRO	2	254.646	113.394	17.460	1.00	130.19	SS19
ATOM	6140	CD	GLU	83	191.998	124.767	-73.499	1.00	133.90	RS18	ATOM	6193	O	PRO	2	254.084	114.492	17.442	1.00	130.19	SS19
ATOM	6141	OE1	GLU	83	192.475	123.615	-73.411	1.00	133.90	RS18	ATOM	6194	N	PRO	2	255.141	111.755	15.618	1.00	130.19	SS19
ATOM	6142	OE2	GLU	83	191.678	125.281	-74.593	1.00	133.90	RS18	ATOM	6195	CD	PRO	2	254.857	112.050	14.200	1.00	87.09	SS19
ATOM	6143	C	GLU	83	194.610	124.376	-69.840	1.00	69.07	RS18	ATOM	6196	CA	PRO	2	255.579	112.989	16.313	1.00	130.19	SS19
ATOM	6144	O	GLU	83	194.428	124.324	-68.625	1.00	69.07	RS18	ATOM	6197	N	ARG	3	254.495	112.513	18.454	1.00	201.09	SS19
ATOM	6145	N	LYS	84	195.813	124.556	-70.379	1.00	66.65	RS18	ATOM	6198	CA	ARG	3	253.627	112.762	19.617	1.00	201.09	SS19
ATOM	6146	CA	LYS	84	197.023	124.675	-69.569	1.00	66.65	RS18	ATOM	6199	CB	ARG	3	253.598	111.521	20.531	1.00	142.86	SS19
ATOM	6147	CB	LYS	84	198.222	124.232	-70.404	1.00	82.95	RS18	ATOM	6200	CG	ARG	3	253.102	110.235	19.849	1.00	142.86	SS19
ATOM	6148	CG	LYS	84	197.911	123.001	-71.240	1.00	82.95	RS18	ATOM	6201	CD	ARG	3	252.895	109.084	20.850	1.00	142.86	SS19
ATOM	6149	CD	LYS	84	199.157	122.231	-71.679	1.00	82.95	RS18	ATOM	6202	NE	ARG	3	252.554	107.817	20.193	1.00	142.86	SS19
ATOM	6150	CE	LYS	84	198.766	120.859	-72.267	1.00	82.95	RS18	ATOM	6203	CZ	ARG	3	252.246	106.686	20.832	1.00	142.86	SS19
ATOM	6151	NZ	LYS	84	199.917	119.930	-72.484	1.00	82.95	RS18	ATOM	6204	NH1	ARG	3	252.229	106.646	22.159	1.00	142.86	SS19
ATOM	6152	C	LYS	84	197.230	126.090	-69.032	1.00	66.65	RS18	ATOM	6205	NH2	ARG	3	251.957	105.587	20.143	1.00	142.86	SS19
ATOM	6153	O	LYS	84	196.858	127.075	-69.681	1.00	66.65	RS18	ATOM	6206	C	ARG	3	254.070	114.006	20.410	1.00	201.09	SS19
ATOM	6154	N	LEU	85	197.827	126.188	-67.843	1.00	61.36	RS18	ATOM	6207	O	ARG	3	255.070	114.634	20.054	1.00	201.09	SS19
ATOM	6155	CA	LEU	85	198.066	127.487	-67.211	1.00	61.36	RS18	ATOM	6208	N	SER	4	253.344	114.366	21.476	1.00	84.91	SS19
ATOM	6156	CB	LEU	85	197.961	127.370	-65.687	1.00	74.14	RS18	ATOM	6209	CA	SER	4	253.707	115.563	22.245	1.00	84.91	SS19
ATOM	6157	CG	LEU	85	197.835	128.707	-64.942	1.00	74.14	RS18	ATOM	6210	CB	SER	4	253.515	116.797	21.376	1.00	70.81	SS19
ATOM	6158	CD1	LEU	85	196.532	129.390	-65.356	1.00	74.14	RS18	ATOM	6211	OG	SER	4	252.137	116.990	21.138	1.00	70.81	SS19
ATOM	6159	CD2	LEU	85	197.858	128.487	-63.433	1.00	74.14	RS18	ATOM	6212	C	SER	4	252.995	115.830	23.578	1.00	84.91	SS19
ATOM	6160	C	LEU	85	199.415	128.095	-67.565	1.00	61.36	RS18	ATOM	6213	O	SER	4	251.777	116.005	23.629	1.00	84.91	SS19
ATOM	6161	O	LEU	85	200.454	127.467	-67.379	1.00	61.36	RS18	ATOM	6214	N	LEU	5	253.786	115.909	24.643	1.00	103.40	SS19
ATOM	6162	N	VAL	86	199.387	129.325	-68.070	1.00	94.19	RS18	ATOM	6215	CA	LEU	5	253.288	116.184	25.984	1.00	103.40	SS19
ATOM	6163	CA	VAL	86	200.606	130.033	-68.440	1.00	94.19	RS18	ATOM	6216	CB	LEU	5	253.132	114.882	26.776	1.00	130.30	SS19
ATOM	6164	CB	VAL	86	200.379	130.899	-69.677	1.00	48.97	RS18	ATOM	6217	CG	LEU	5	252.266	113.770	26.176	1.00	130.30	SS19
ATOM	6165	CG1	VAL	86	201.718	131.364	-70.238	1.00	48.97	RS18	ATOM	6218	CD1	LEU	5	252.236	112.568	27.118	1.00	130.30	SS19
ATOM	6166	CG2	VAL	86	199.621	130.103	-70.716	1.00	48.97	RS18	ATOM	6219	CD2	LEU	5	250.863	114.298	25.934	1.00	130.30	SS19

ATOM	6220	C	LEU	5	254.313	117.090	26.670	1.00103.40	SS19	ATOM	6273	OD1	ASP	12	245.423	109.273	34.889	1.00138.70	SS19
ATOM	6221	O	LEU	5	255.033	116.662	27.570	1.00103.40	SS19	ATOM	6274	OD2	ASP	12	244.452	107.825	36.216	1.00138.70	SS19
ATOM	6222	N	LYS	6	254.380	118.337	26.215	1.00100.84	SS19	ATOM	6275	C	ASP	12	248.572	107.334	37.150	1.00112.76	SS19
ATOM	6223	CA	LYS	6	255.297	119.356	26.736	1.00100.84	SS19	ATOM	6276	O	ASP	12	249.236	106.325	36.915	1.00112.76	SS19
ATOM	6224	CB	LYS	6	254.477	120.525	27.294	1.00 88.09	SS19	ATOM	6277	N	ASP	13	248.395	107.806	38.377	1.00 76.78	SS19
ATOM	6225	CG	LYS	6	253.689	121.273	26.241	1.00 88.09	SS19	ATOM	6278	CA	ASP	13	249.006	107.145	39.520	1.00 76.79	SS19
ATOM	6226	CD	LYS	6	252.706	122.277	26.850	1.00 88.09	SS19	ATOM	6279	CB	ASP	13	249.619	108.191	40.460	1.00111.74	SS19
ATOM	6227	CE	LYS	6	251.449	121.610	27.413	1.00 88.09	SS19	ATOM	6280	CG	ASP	13	248.701	109.370	40.703	1.00112.06	SS19
ATOM	6228	NZ	LYS	6	250.405	122.611	27.818	1.00 88.09	SS19	ATOM	6281	OD1	ASP	13	249.179	110.377	41.269	1.00112.76	SS19
ATOM	6229	C	LYS	6	256.377	118.966	27.765	1.00100.84	SS19	ATOM	6282	OD2	ASP	13	247.511	109.288	40.330	1.00112.66	SS19
ATOM	6230	O	LYS	6	257.423	118.405	27.415	1.00100.84	SS19	ATOM	6283	C	ASP	13	248.136	106.167	40.308	1.00 76.79	SS19
ATOM	6231	N	LYS	7	256.112	119.285	29.031	1.00153.54	SS19	ATOM	6284	O	ASP	13	247.993	106.276	41.522	1.00 76.79	SS19
ATOM	6232	CA	LYS	7	257.042	119.035	30.129	1.00153.54	SS19	ATOM	6285	N	HIS	14	247.538	105.223	39.596	1.00 97.63	SS19
ATOM	6233	CB	LYS	7	257.049	120.252	31.052	1.00 57.54	SS19	ATOM	6286	CA	HIS	14	246.753	104.171	40.226	1.00 97.68	SS19
ATOM	6234	CG	LYS	7	257.300	121.550	30.306	1.00 57.54	SS19	ATOM	6287	CB	HIS	14	245.526	103.773	39.405	1.00119.25	SS19
ATOM	6235	CD	LYS	7	257.223	122.752	31.229	1.00 57.54	SS19	ATOM	6288	CG	HIS	14	244.612	104.906	39.086	1.00119.38	SS19
ATOM	6236	CE	LYS	7	257.328	124.086	30.464	1.00 57.54	SS19	ATOM	6289	CD2	HIS	14	244.032	105.278	37.922	1.00119.95	SS19
ATOM	6237	NZ	LYS	7	256.101	124.477	29.672	1.00 57.54	SS19	ATOM	6290	ND1	HIS	14	244.166	105.793	40.041	1.00120.17	SS19
ATOM	6238	C	LYS	7	256.801	117.773	30.957	1.00153.54	SS19	ATOM	6291	CE1	HIS	14	243.349	106.665	39.479	1.00120.11	SS19
ATOM	6239	O	LYS	7	257.444	116.750	30.729	1.00153.54	SS19	ATOM	6292	NE2	HIS	14	243.250	106.374	38.193	1.00119.82	SS19
ATOM	6240	N	GLY	8	255.883	117.848	31.918	1.00 85.45	SS19	ATOM	6293	C	HIS	14	247.771	103.085	40.038	1.00 97.64	SS19
ATOM	6241	CA	GLY	8	255.613	116.700	32.771	1.00 85.45	SS19	ATOM	6294	O	HIS	14	248.352	102.572	40.987	1.00 97.70	SS19
ATOM	6242	C	GLY	8	254.968	115.454	32.172	1.00 85.45	SS19	ATOM	6295	N	LEU	15	247.983	102.784	38.760	1.00142.28	SS19
ATOM	6243	O	GLY	8	253.744	115.398	32.045	1.00 85.45	SS19	ATOM	6296	CA	LEU	15	248.928	101.782	38.301	1.00142.31	SS19
ATOM	6244	N	VAL	9	255.776	114.447	31.827	1.00 70.79	SS19	ATOM	6297	CB	LEU	15	248.824	101.652	36.774	1.00109.88	SS19
ATOM	6245	CA	VAL	9	255.277	113.184	31.253	1.00 70.79	SS19	ATOM	6298	CG	LEU	15	248.812	102.965	35.966	1.00109.93	SS19
ATOM	6246	CB	VAL	9	256.396	112.123	31.167	1.00 67.76	SS19	ATOM	6299	CD1	LEU	15	250.197	103.580	35.902	1.00110.05	SS19
ATOM	6247	CG1	VAL	9	255.833	110.807	30.643	1.00 67.76	SS19	ATOM	6300	CD2	LEU	15	248.341	102.682	34.560	1.00110.06	SS19
ATOM	6248	CG2	VAL	9	257.525	112.631	30.286	1.00 67.76	SS19	ATOM	6301	C	LEU	15	250.346	102.171	38.704	1.00142.23	SS19
ATOM	6249	C	VAL	9	254.152	112.592	32.098	1.00 70.79	SS19	ATOM	6302	O	LEU	15	251.203	101.309	38.900	1.00142.24	SS19
ATOM	6250	O	VAL	9	254.400	112.006	33.149	1.00 70.79	SS19	ATOM	6303	N	LEU	16	250.587	103.473	38.831	1.00 91.84	SS19
ATOM	6251	N	PHE	10	252.918	112.713	31.622	1.00 92.41	SS19	ATOM	6304	CA	LEU	16	251.910	103.949	39.209	1.00 91.86	SS19
ATOM	6252	CA	PHE	10	251.768	112.223	32.371	1.00 92.41	SS19	ATOM	6305	CB	LEU	16	251.967	105.476	39.150	1.00 79.80	SS19
ATOM	6253	CB	PHE	10	250.487	112.830	31.795	1.00 75.15	SS19	ATOM	6306	CG	LEU	16	253.373	106.078	39.254	1.00 79.84	SS19
ATOM	6254	CG	PHE	10	249.248	112.515	32.595	1.00 75.15	SS19	ATOM	6307	CD1	LEU	16	254.333	105.338	38.311	1.00 80.12	SS19
ATOM	6255	CD1	PHE	10	248.520	113.535	33.191	1.00 75.15	SS19	ATOM	6308	CD2	LEU	16	253.316	107.574	38.925	1.00 80.13	SS19
ATOM	6256	CD2	PHE	10	248.798	111.202	32.738	1.00 75.15	SS19	ATOM	6309	C	LEU	16	252.202	103.461	40.617	1.00 91.84	SS19
ATOM	6257	CE1	PHE	10	247.362	113.257	33.915	1.00 75.15	SS19	ATOM	6310	O	LEU	16	252.982	102.526	40.800	1.00 91.88	SS19
ATOM	6258	CE2	PHE	10	247.648	110.913	33.459	1.00 75.15	SS19	ATOM	6311	N	GLU	17	251.565	104.090	41.604	1.00 98.51	SS19
ATOM	6259	CZ	PHE	10	246.926	111.944	34.048	1.00 75.15	SS19	ATOM	6312	CA	GLU	17	251.736	103.703	42.996	1.00 98.57	SS19
ATOM	6260	C	PHE	10	251.603	110.706	32.472	1.00 92.41	SS19	ATOM	6313	CB	GLU	17	250.671	104.377	43.864	1.00168.23	SS19
ATOM	6261	O	PHE	10	251.741	109.980	31.487	1.00 92.41	SS19	ATOM	6314	CG	GLU	17	249.254	103.894	43.559	1.00168.49	SS19
ATOM	6262	N	VAL	11	251.277	110.257	33.684	1.00 74.71	SS19	ATOM	6315	CD	GLU	17	248.238	104.358	44.584	1.00168.43	SS19
ATOM	6263	CA	VAL	11	251.037	108.851	34.000	1.00 74.71	SS19	ATOM	6316	OE1	GLU	17	247.070	103.912	44.517	1.00169.02	SS19
ATOM	6264	CB	VAL	11	252.328	108.116	34.431	1.00 85.50	SS19	ATOM	6317	OE2	GLU	17	248.606	105.175	45.457	1.00169.23	SS19
ATOM	6265	CG1	VAL	11	251.998	106.684	34.866	1.00 85.50	SS19	ATOM	6318	C	GLU	17	251.587	102.182	43.093	1.00 98.56	SS19
ATOM	6266	CG2	VAL	11	253.334	108.115	33.294	1.00 85.50	SS19	ATOM	6319	O	GLU	17	252.356	101.514	43.779	1.00 98.65	SS19
ATOM	6267	C	VAL	11	250.072	108.785	35.176	1.00 74.71	SS19	ATOM	6320	N	LYS	18	250.599	101.649	42.382	1.00 84.88	SS19
ATOM	6268	O	VAL	11	250.394	109.238	36.277	1.00 74.71	SS19	ATOM	6321	CA	LYS	18	250.299	100.218	42.374	1.00 84.90	SS19
ATOM	6269	N	ASP	12	248.889	108.229	34.947	1.00112.76	SS19	ATOM	6322	CB	LYS	18	249.086	99.956	41.486	1.00103.36	SS19
ATOM	6270	CA	ASP	12	247.911	108.106	36.019	1.00112.76	SS19	ATOM	6323	CG	LYS	18	248.157	98.842	41.930	1.00103.48	SS19
ATOM	6271	CB	ASP	12	246.675	107.354	35.533	1.00138.70	SS19	ATOM	6324	CD	LYS	18	246.803	99.034	41.251	1.00104.43	SS19
ATOM	6272	CG	ASP	12	245.429	108.212	35.547	1.00138.70	SS19	ATOM	6325	CE	LYS	18	246.265	100.450	41.523	1.00105.09	SS19

ATOM	6326	NZ	LYS	18	245.042	100.789	40.750	1.00106.00	SS19	ATOM	6379	CE	LYS	25	254.261	96.025	47.748	1.00121.64	SS19
ATOM	6327	C	LYS	18	251.468	99.388	41.871	1.00 84.90	SS19	ATOM	6380	NZ	LYS	25	255.096	96.999	48.517	1.00122.60	SS19
ATOM	6328	O	LYS	18	251.738	98.314	42.403	1.00 84.94	SS19	ATOM	6381	C	LYS	25	259.008	92.952	46.271	1.00109.55	SS19
ATOM	6329	N	VAL	19	252.152	99.875	40.839	1.00118.01	SS19	ATOM	6382	O	LYS	25	259.181	91.736	46.370	1.00109.67	SS19
ATOM	6330	CA	VAL	19	253.293	99.150	40.285	1.00118.05	SS19	ATOM	6383	N	GLY	26	259.409	93.660	45.220	1.00123.52	SS19
ATOM	6331	CB	VAL	19	253.592	99.568	38.811	1.00 98.83	SS19	ATOM	6384	CA	GLY	26	260.078	93.012	44.109	1.00123.62	SS19
ATOM	6332	CG1	VAL	19	253.966	101.049	38.729	1.00 99.23	SS19	ATOM	6385	C	GLY	26	259.054	92.459	43.138	1.00123.68	SS19
ATOM	6333	CG2	VAL	19	254.718	98.710	38.254	1.00 99.19	SS19	ATOM	6386	O	GLY	26	258.812	91.248	43.097	1.00123.80	SS19
ATOM	6334	C	VAL	19	254.556	99.350	41.129	1.00118.05	SS19	ATOM	6387	N	GLU	27	258.444	93.361	42.368	1.00158.09	SS19
ATOM	6335	O	VAL	19	255.209	98.376	41.515	1.00118.09	SS19	ATOM	6388	CA	GLU	27	257.433	93.007	41.374	1.00158.09	SS19
ATOM	6336	N	LEU	20	254.894	100.608	41.414	1.00111.76	SS19	ATOM	6389	CB	GLU	27	257.998	91.957	40.410	1.00159.50	SS19
ATOM	6337	CA	LEU	20	256.078	100.907	42.213	1.00111.80	SS19	ATOM	6390	CG	GLU	27	259.101	92.463	39.491	1.00159.50	SS19
ATOM	6338	CB	LEU	20	256.227	102.427	42.410	1.00 90.93	SS19	ATOM	6391	CD	GLU	27	258.562	93.066	38.209	1.00159.50	SS19
ATOM	6339	CG	LEU	20	255.052	103.259	42.939	1.00 91.80	SS19	ATOM	6392	OE1	GLU	27	257.875	92.341	37.459	1.00159.50	SS19
ATOM	6340	CD1	LEU	20	254.837	103.020	44.434	1.00 92.45	SS19	ATOM	6393	OE2	GLU	27	258.828	94.258	37.948	1.00159.50	SS19
ATOM	6341	CD2	LEU	20	255.334	104.733	42.693	1.00 92.51	SS19	ATOM	6394	C	GLU	27	256.122	92.488	41.969	1.00158.09	SS19
ATOM	6342	C	LEU	20	256.014	100.175	43.557	1.00111.78	SS19	ATOM	6395	O	GLU	27	255.765	92.791	43.110	1.00158.09	SS19
ATOM	6343	O	LEU	20	257.038	99.707	44.069	1.00111.83	SS19	ATOM	6396	N	LYS	28	255.417	91.711	41.153	1.00128.11	SS19
ATOM	6344	N	GLU	21	254.814	100.072	44.125	1.00103.13	SS19	ATOM	6397	CA	LYS	28	254.144	91.086	41.496	1.00128.11	SS19
ATOM	6345	CA	GLU	21	254.638	99.367	45.387	1.00103.16	SS19	ATOM	6398	CB	LYS	28	253.079	92.137	41.843	1.00134.41	SS19
ATOM	6346	CB	GLU	21	253.160	99.277	45.754	1.00147.78	SS19	ATOM	6399	CG	LYS	28	251.747	91.539	42.326	1.00134.41	SS19
ATOM	6347	CG	GLU	21	252.621	100.487	46.482	1.00148.27	SS19	ATOM	6400	CD	LYS	28	250.644	92.589	42.442	1.00134.41	SS19
ATOM	6348	CD	GLU	21	251.109	100.552	46.424	1.00149.13	SS19	ATOM	6401	CE	LYS	28	249.322	91.985	42.910	1.00134.41	SS19
ATOM	6349	OE1	GLU	21	250.465	99.496	46.588	1.00149.91	SS19	ATOM	6402	NZ	LYS	28	248.233	93.003	42.984	1.00134.41	SS19
ATOM	6350	OE2	GLU	21	250.561	101.656	46.216	1.00149.63	SS19	ATOM	6403	C	LYS	28	253.732	90.335	40.235	1.00128.11	SS19
ATOM	6351	C	GLU	21	255.188	97.969	45.189	1.00103.16	SS19	ATOM	6404	O	LYS	28	254.534	90.196	39.311	1.00128.11	SS19
ATOM	6352	O	GLU	21	256.007	97.499	45.976	1.00103.22	SS19	ATOM	6405	N	ARG	29	252.493	89.856	40.185	1.00169.77	SS19
ATOM	6353	N	LEU	22	254.737	97.321	44.118	1.00109.71	SS19	ATOM	6406	CA	ARG	29	252.027	89.137	39.008	1.00169.77	SS19
ATOM	6354	CA	LEU	22	255.166	95.970	43.784	1.00109.75	SS19	ATOM	6407	CB	ARG	29	251.313	87.847	39.423	1.00181.85	SS19
ATOM	6355	CB	LEU	22	254.441	95.493	42.532	1.00 83.78	SS19	ATOM	6408	CG	ARG	29	252.260	86.821	40.035	1.00181.85	SS19
ATOM	6356	CG	LEU	22	252.943	95.775	42.556	1.00 84.00	SS19	ATOM	6409	CD	ARG	29	251.697	85.407	39.981	1.00181.85	SS19
ATOM	6357	CD1	LEU	22	252.344	95.378	41.232	1.00 84.91	SS19	ATOM	6410	NE	ARG	29	252.683	84.417	40.412	1.00181.85	SS19
ATOM	6358	CD2	LEU	22	252.288	95.029	43.702	1.00 84.54	SS19	ATOM	6411	CZ	ARG	29	252.492	83.102	40.375	1.00181.85	SS19
ATOM	6359	C	LEU	22	256.668	95.936	43.548	1.00109.76	SS19	ATOM	6412	NH1	ARG	29	251.349	82.605	39.923	1.00181.85	SS19
ATOM	6360	O	LEU	22	257.316	94.915	43.787	1.00109.83	SS19	ATOM	6413	NH2	ARG	29	253.447	82.281	40.790	1.00181.85	SS19
ATOM	6361	N	ASN	23	257.217	97.053	43.073	1.00145.78	SS19	ATOM	6414	C	ARG	29	251.133	89.985	38.103	1.00169.77	SS19
ATOM	6362	CA	ASN	23	258.652	97.150	42.827	1.00145.82	SS19	ATOM	6415	O	ARG	29	251.634	90.716	37.248	1.00169.77	SS19
ATOM	6363	CB	ASN	23	259.013	98.506	42.206	1.00 77.49	SS19	ATOM	6416	N	LEU	30	249.819	89.899	38.283	1.00113.48	SS19
ATOM	6364	CG	ASN	23	258.571	98.626	40.757	1.00 77.53	SS19	ATOM	6417	CA	LEU	30	248.908	90.670	37.443	1.00113.48	SS19
ATOM	6365	OD1	ASN	23	258.164	97.643	40.133	1.00 77.69	SS19	ATOM	6418	CB	LEU	30	247.584	89.926	37.260	1.00 84.20	SS19
ATOM	6366	ND2	ASN	23	258.663	99.834	40.211	1.00 77.50	SS19	ATOM	6419	CG	LEU	30	247.263	89.458	35.839	1.00 84.20	SS19
ATOM	6367	C	ASN	23	259.388	96.981	44.154	1.00145.86	SS19	ATOM	6420	CD1	LEU	30	245.859	88.870	35.823	1.00 84.20	SS19
ATOM	6368	O	ASN	23	260.500	96.454	44.198	1.00145.92	SS19	ATOM	6421	CD2	LEU	30	247.375	90.623	34.861	1.00 84.20	SS19
ATOM	6369	N	ALA	24	258.756	97.433	45.234	1.00125.96	SS19	ATOM	6422	C	LEU	30	248.612	92.073	37.952	1.00113.48	SS19
ATOM	6370	CA	ALA	24	259.331	97.318	46.568	1.00126.03	SS19	ATOM	6423	O	LEU	30	248.968	92.434	39.069	1.00113.48	SS19
ATOM	6371	CB	ALA	24	258.463	98.062	47.576	1.00 46.10	SS19	ATOM	6424	N	ILE	31	247.954	92.851	37.099	1.00 97.94	SS19
ATOM	6372	C	ALA	24	259.443	95.840	46.950	1.00126.11	SS19	ATOM	6425	CA	ILE	31	247.550	94.227	37.385	1.00 97.94	SS19
ATOM	6373	O	ALA	24	260.542	95.331	47.171	1.00126.18	SS19	ATOM	6426	CB	ILE	31	248.659	95.250	37.023	1.00117.19	SS19
ATOM	6374	N	LYS	25	258.306	95.150	47.021	1.00109.45	SS19	ATOM	6427	CG2	ILE	31	248.184	96.673	37.316	1.00117.19	SS19
ATOM	6375	CA	LYS	25	258.296	93.730	47.368	1.00109.56	SS19	ATOM	6428	CG1	ILE	31	249.925	94.963	37.824	1.00117.19	SS19
ATOM	6376	CB	LYS	25	256.863	93.186	47.484	1.00119.33	SS19	ATOM	6429	CD1	ILE	31	249.767	95.190	39.305	1.00117.19	SS19
ATOM	6377	CG	LYS	25	255.858	94.122	48.132	1.00119.96	SS19	ATOM	6430	C	ILE	31	246.370	94.471	36.456	1.00 97.94	SS19
ATOM	6378	CD	LYS	25	255.115	94.949	47.090	1.00120.81	SS19	ATOM	6431	O	ILE	31	246.047	93.611	35.639	1.00 97.94	SS19

ATOM	6432	N	LYS	32	245.725	95.627	36.588	1.00124.72	SS19	ATOM	6485	CZ	ARG	37	241.744	110.562	27.178	1.00161.04	SS19
ATOM	6433	CA	LYS	32	244.600	95.993	35.730	1.00124.72	SS19	ATOM	6486	NH1	ARG	37	242.661	111.068	26.362	1.00161.04	SS19
ATOM	6434	CB	LYS	32	243.439	94.994	35.853	1.00 99.22	SS19	ATOM	6487	NH2	ARG	37	240.457	110.702	26.888	1.00161.04	SS19
ATOM	6435	CG	LYS	32	242.675	95.044	37.166	1.00 99.22	SS19	ATOM	6488	C	ARG	37	247.304	107.666	29.897	1.00101.32	SS19
ATOM	6436	CD	LYS	32	241.314	94.354	37.059	1.00 99.22	SS19	ATOM	6489	O	ARG	37	248.125	108.460	29.433	1.00101.32	SS19
ATOM	6437	CE	LYS	32	241.442	92.883	36.681	1.00 99.22	SS19	ATOM	6490	N	SER	38	247.608	106.747	30.810	1.00 96.94	SS19
ATOM	6438	NZ	LYS	32	240.118	92.200	36.638	1.00 99.22	SS19	ATOM	6491	CA	SER	38	248.940	106.620	31.387	1.00 96.94	SS19
ATOM	6439	C	LYS	32	244.104	97.382	36.084	1.00124.72	SS19	ATOM	6492	CB	SER	38	248.919	105.588	32.520	1.00 95.38	SS19
ATOM	6440	O	LYS	32	243.659	97.627	37.203	1.00124.72	SS19	ATOM	6493	OG	SER	38	248.672	104.287	32.018	1.00 95.38	SS19
ATOM	6441	N	THR	33	244.194	98.296	35.128	1.00 94.87	SS19	ATOM	6494	C	SER	38	250.067	106.273	30.425	1.00 96.94	SS19
ATOM	6442	CA	THR	33	243.745	99.657	35.353	1.00 94.87	SS19	ATOM	6495	O	SER	38	250.011	105.273	29.711	1.00 96.94	SS19
ATOM	6443	CB	THR	33	244.928	100.628	35.555	1.00141.44	SS19	ATOM	6496	N	THR	39	251.095	107.116	30.425	1.00 91.46	SS19
ATOM	6444	OG1	THR	33	245.896	100.035	36.428	1.00141.44	SS19	ATOM	6497	CA	THR	39	252.274	106.906	29.598	1.00 91.46	SS19
ATOM	6445	CG2	THR	33	244.442	101.932	36.177	1.00141.44	SS19	ATOM	6498	CB	THR	39	253.179	108.148	29.593	1.00 87.25	SS19
ATOM	6446	C	THR	33	242.959	100.121	34.144	1.00 94.87	SS19	ATOM	6499	OG1	THR	39	252.445	109.277	29.099	1.00 87.25	SS19
ATOM	6447	O	THR	33	243.165	99.632	33.035	1.00 94.87	SS19	ATOM	6500	CG2	THR	39	254.411	107.906	28.730	1.00 87.25	SS19
ATOM	6448	N	TRP	34	242.046	101.058	34.369	1.00102.08	SS19	ATOM	6501	C	THR	39	253.033	105.777	30.282	1.00 91.46	SS19
ATOM	6449	CA	TRP	34	241.246	101.613	33.291	1.00102.08	SS19	ATOM	6502	O	THR	39	252.935	105.619	31.499	1.00 91.46	SS19
ATOM	6450	CB	TRP	34	239.911	102.140	33.817	1.00 91.74	SS19	ATOM	6503	N	ILE	40	253.781	104.986	29.521	1.00 89.97	SS19
ATOM	6451	CG	TRP	34	238.890	101.092	34.121	1.00 91.74	SS19	ATOM	6504	CA	ILE	40	254.531	103.900	30.134	1.00 89.97	SS19
ATOM	6452	CD2	TRP	34	239.043	99.956	34.984	1.00 91.74	SS19	ATOM	6505	CB	ILE	40	254.696	102.712	29.188	1.00 61.29	SS19
ATOM	6453	CE2	TRP	34	237.798	99.287	35.016	1.00 91.74	SS19	ATOM	6506	CG2	ILE	40	255.333	101.550	29.933	1.00 61.29	SS19
ATOM	6454	CE3	TRP	34	240.106	99.439	35.736	1.00 91.74	SS19	ATOM	6507	CG1	ILE	40	253.330	102.289	28.650	1.00 61.29	SS19
ATOM	6455	CD1	TRP	34	237.602	101.063	33.676	1.00 91.74	SS19	ATOM	6508	CD1	ILE	40	253.393	101.168	27.642	1.00 61.29	SS19
ATOM	6456	NE1	TRP	34	236.939	99.984	34.209	1.00 91.74	SS19	ATOM	6509	C	ILE	40	255.904	104.405	30.532	1.00 89.97	SS19
ATOM	6457	CZ2	TRP	34	237.587	98.126	35.773	1.00 91.74	SS19	ATOM	6510	O	ILE	40	256.593	105.058	29.748	1.00 89.97	SS19
ATOM	6458	CZ3	TRP	34	239.894	98.285	36.488	1.00 91.74	SS19	ATOM	6511	N	VAL	41	256.290	104.104	31.765	1.00 77.56	SS19
ATOM	6459	CH2	TRP	34	238.644	97.643	36.500	1.00 91.74	SS19	ATOM	6512	CA	VAL	41	257.573	104.524	32.302	1.00 77.56	SS19
ATOM	6460	C	TRP	34	242.040	102.773	32.713	1.00102.08	SS19	ATOM	6513	CB	VAL	41	257.360	105.406	33.548	1.00 83.36	SS19
ATOM	6461	O	TRP	34	241.584	103.461	31.806	1.00102.08	SS19	ATOM	6514	CG1	VAL	41	256.570	106.650	33.165	1.00 83.36	SS19
ATOM	6462	N	SER	35	243.235	102.988	33.250	1.00137.82	SS19	ATOM	6515	CG2	VAL	41	256.604	104.633	34.615	1.00 83.36	SS19
ATOM	6463	CA	SER	35	244.073	104.082	32.792	1.00137.82	SS19	ATOM	6516	C	VAL	41	258.400	103.288	32.653	1.00 77.56	SS19
ATOM	6464	CB	SER	35	245.017	104.525	33.908	1.00 94.58	SS19	ATOM	6517	O	VAL	41	257.842	102.221	32.923	1.00 77.56	SS19
ATOM	6465	OG	SER	35	245.808	105.619	33.482	1.00 94.58	SS19	ATOM	6518	N	PRO	42	259.741	103.418	32.652	1.00 79.66	SS19
ATOM	6466	C	SER	35	244.882	103.763	31.542	1.00137.82	SS19	ATOM	6519	CD	PRO	42	260.475	104.691	32.515	1.00 83.84	SS19
ATOM	6467	O	SER	35	245.949	103.154	31.608	1.00137.82	SS19	ATOM	6520	CA	PRO	42	260.667	102.322	32.961	1.00 79.66	SS19
ATOM	6468	N	ARG	36	244.352	104.180	30.401	1.00 73.77	SS19	ATOM	6521	CB	PRO	42	261.920	103.061	33.404	1.00 83.84	SS19
ATOM	6469	CA	ARG	36	245.010	103.990	29.119	1.00 73.77	SS19	ATOM	6522	CG	PRO	42	261.925	104.234	32.478	1.00 83.84	SS19
ATOM	6470	CB	ARG	36	243.971	103.741	28.042	1.00165.56	SS19	ATOM	6523	C	PRO	42	260.170	101.321	34.002	1.00 79.66	SS19
ATOM	6471	CG	ARG	36	243.006	104.891	27.904	1.00165.56	SS19	ATOM	6524	O	PRO	42	260.001	100.140	33.696	1.00 79.66	SS19
ATOM	6472	CD	ARG	36	241.574	104.431	28.015	1.00165.56	SS19	ATOM	6525	N	GLU	43	259.935	101.793	35.224	1.00 94.04	SS19
ATOM	6473	NE	ARG	36	241.197	103.570	26.903	1.00165.56	SS19	ATOM	6526	CA	GLU	43	259.456	100.934	36.308	1.00 94.04	SS19
ATOM	6474	CZ	ARG	36	241.292	103.918	25.624	1.00165.56	SS19	ATOM	6527	CB	GLU	43	258.920	101.785	37.467	1.00 87.36	SS19
ATOM	6475	NH1	ARG	36	241.744	105.112	25.298	1.00165.56	SS19	ATOM	6528	CG	GLU	43	258.509	103.201	37.089	1.00 87.36	SS19
ATOM	6476	NH2	ARG	36	240.956	103.063	24.668	1.00165.56	SS19	ATOM	6529	CD	GLU	43	259.703	104.106	36.809	1.00 87.36	SS19
ATOM	6477	C	ARG	36	245.718	105.312	28.848	1.00 73.77	SS19	ATOM	6530	OE1	GLU	43	260.533	104.289	37.728	1.00 87.36	SS19
ATOM	6478	O	ARG	36	246.613	105.392	28.015	1.00 73.77	SS19	ATOM	6531	OE2	GLU	43	259.815	104.632	35.676	1.00 87.36	SS19
ATOM	6479	N	ARG	37	245.284	106.347	29.563	1.00101.32	SS19	ATOM	6532	C	GLU	43	258.375	99.964	35.841	1.00 94.04	SS19
ATOM	6480	CA	ARG	37	245.848	107.689	29.446	1.00101.32	SS19	ATOM	6533	O	GLU	43	258.186	98.890	36.421	1.00 94.04	SS19
ATOM	6481	CB	ARG	37	245.080	108.674	30.345	1.00161.04	SS19	ATOM	6534	N	MET	44	257.668	100.352	34.786	1.00119.81	SS19
ATOM	6482	CG	ARG	37	243.623	108.905	29.979	1.00161.04	SS19	ATOM	6535	CA	MET	44	256.609	99.531	34.227	1.00119.81	SS19
ATOM	6483	CD	ARG	37	243.501	109.692	28.681	1.00161.04	SS19	ATOM	6536	CB	MET	44	255.602	100.401	33.469	1.00 91.87	SS19
ATOM	6484	NE	ARG	37	242.112	109.911	28.279	1.00161.04	SS19	ATOM	6537	CG	MET	44	254.407	100.863	34.271	1.00 91.87	SS19

ATOM	6538	SD	MET	44	253.309	101.856	33.243	1.00	91.87	SS19	ATOM	6591	CA	TYR	52	240.523	97.946	29.772	1.00	93.90	SS19
ATOM	6539	CE	MET	44	253.506	103.489	33.987	1.00	91.87	SS19	ATOM	6592	CB	TYR	52	239.707	98.804	30.745	1.00	69.74	SS19
ATOM	6540	C	MET	44	257.160	98.496	33.269	1.00	119.81	SS19	ATOM	6593	CG	TYR	52	238.223	98.489	30.714	1.00	69.74	SS19
ATOM	6541	O	MET	44	256.692	98.404	32.147	1.00	119.81	SS19	ATOM	6594	CD1	TYR	52	237.773	97.181	30.916	1.00	69.74	SS19
ATOM	6542	N	VAL	45	258.160	97.729	33.678	1.00	82.60	SS19	ATOM	6595	CE1	TYR	52	236.424	96.864	30.869	1.00	69.74	SS19
ATOM	6543	CA	VAL	45	258.686	96.712	32.776	1.00	82.60	SS19	ATOM	6596	CD2	TYR	52	237.272	99.485	30.467	1.00	69.74	SS19
ATOM	6544	CB	VAL	45	260.202	96.919	32.474	1.00	50.27	SS19	ATOM	6597	CE2	TYR	52	235.909	99.175	30.420	1.00	69.74	SS19
ATOM	6545	CG1	VAL	45	260.717	95.786	31.579	1.00	50.27	SS19	ATOM	6598	CZ	TYR	52	235.496	97.856	30.622	1.00	69.74	SS19
ATOM	6546	CG2	VAL	45	260.421	98.256	31.776	1.00	50.27	SS19	ATOM	6599	OH	TYR	52	234.165	97.514	30.566	1.00	69.74	SS19
ATOM	6547	C	VAL	45	258.446	95.325	33.364	1.00	82.60	SS19	ATOM	6600	C	TYR	52	240.115	98.290	28.350	1.00	93.90	SS19
ATOM	6548	O	VAL	45	258.316	95.170	34.578	1.00	82.60	SS19	ATOM	6601	O	TYR	52	240.042	99.456	27.973	1.00	93.90	SS19
ATOM	6549	N	GLY	46	258.367	94.325	32.492	1.00	90.00	SS19	ATOM	6602	N	ASN	53	239.831	97.242	27.585	1.00	66.21	SS19
ATOM	6550	CA	GLY	46	258.125	92.971	32.942	1.00	90.00	SS19	ATOM	6603	CA	ASN	53	239.389	97.316	26.195	1.00	66.21	SS19
ATOM	6551	C	GLY	46	256.749	92.843	33.565	1.00	90.00	SS19	ATOM	6604	CB	ASN	53	238.893	95.936	25.785	1.00	86.21	SS19
ATOM	6552	O	GLY	46	256.169	91.758	33.584	1.00	90.00	SS19	ATOM	6605	CG	ASN	53	239.337	95.541	24.413	1.00	86.21	SS19
ATOM	6553	N	HIS	47	256.219	93.955	34.066	1.00	108.99	SS19	ATOM	6606	OD1	ASN	53	239.021	94.448	23.953	1.00	86.21	SS19
ATOM	6554	CA	HIS	47	254.910	93.960	34.708	1.00	108.99	SS19	ATOM	6607	ND2	ASN	53	240.078	96.420	23.743	1.00	86.21	SS19
ATOM	6555	CB	HIS	47	254.726	95.242	35.519	1.00	118.44	SS19	ATOM	6608	C	ASN	53	238.246	98.314	26.010	1.00	66.21	SS19
ATOM	6556	CG	HIS	47	255.097	95.099	36.962	1.00	118.44	SS19	ATOM	6609	O	ASN	53	238.037	98.854	24.929	1.00	66.21	SS19
ATOM	6557	CD2	HIS	47	255.967	95.793	37.734	1.00	118.44	SS19	ATOM	6610	N	GLY	54	237.522	98.559	27.092	1.00	72.89	SS19
ATOM	6558	ND1	HIS	47	254.526	94.151	37.785	1.00	118.44	SS19	ATOM	6611	CA	GLY	54	236.363	99.428	27.056	1.00	72.89	SS19
ATOM	6559	CE1	HIS	47	255.028	94.268	39.001	1.00	118.44	SS19	ATOM	6612	C	GLY	54	235.241	98.413	27.195	1.00	72.89	SS19
ATOM	6560	NE2	HIS	47	255.904	95.257	38.998	1.00	118.44	SS19	ATOM	6613	O	GLY	54	234.054	98.744	27.233	1.00	72.89	SS19
ATOM	6561	C	HIS	47	253.744	93.799	33.748	1.00	108.99	SS19	ATOM	6614	N	LYS	55	235.666	97.151	27.287	1.00	53.44	SS19
ATOM	6562	O	HIS	47	253.404	94.718	33.011	1.00	108.99	SS19	ATOM	6615	CA	LYS	55	234.786	95.996	27.410	1.00	53.44	SS19
ATOM	6563	N	THR	48	253.126	92.625	33.772	1.00	101.88	SS19	ATOM	6616	CB	LYS	55	234.379	95.509	26.012	1.00	69.78	SS19
ATOM	6564	CA	THR	48	251.989	92.350	32.908	1.00	101.88	SS19	ATOM	6617	CG	LYS	55	233.664	94.169	25.994	1.00	69.78	SS19
ATOM	6565	CB	THR	48	251.641	90.845	32.910	1.00	114.78	SS19	ATOM	6618	CD	LYS	55	233.319	93.731	24.583	1.00	69.78	SS19
ATOM	6566	OG1	THR	48	252.673	90.115	32.237	1.00	114.78	SS19	ATOM	6619	CE	LYS	55	232.591	92.395	24.596	1.00	69.78	SS19
ATOM	6567	CG2	THR	48	250.313	90.595	32.209	1.00	114.78	SS19	ATOM	6620	NZ	LYS	55	232.252	91.917	23.229	1.00	69.78	SS19
ATOM	6568	C	THR	48	250.760	93.138	33.346	1.00	101.88	SS19	ATOM	6621	C	LYS	55	235.478	94.856	28.161	1.00	53.44	SS19
ATOM	6569	O	THR	48	250.044	92.730	34.260	1.00	101.88	SS19	ATOM	6622	O	LYS	55	234.845	94.150	28.944	1.00	53.44	SS19
ATOM	6570	N	ILE	49	250.521	94.271	32.697	1.00	123.40	SS19	ATOM	6623	N	GLN	56	236.774	94.677	27.906	1.00	78.65	SS19
ATOM	6571	CA	ILE	49	249.362	95.093	33.018	1.00	123.40	SS19	ATOM	6624	CA	GLN	56	237.558	93.613	28.542	1.00	78.65	SS19
ATOM	6572	CB	ILE	49	249.670	96.588	32.919	1.00	57.02	SS19	ATOM	6625	CB	GLN	56	237.945	92.543	27.518	1.00	108.73	SS19
ATOM	6573	CG2	ILE	49	248.377	97.383	33.026	1.00	57.02	SS19	ATOM	6626	CG	GLN	56	236.785	91.969	26.746	1.00	108.73	SS19
ATOM	6574	CG1	ILE	49	250.666	96.987	34.009	1.00	57.02	SS19	ATOM	6627	CD	GLN	56	235.803	91.247	27.636	1.00	108.73	SS19
ATOM	6575	CD1	ILE	49	251.044	98.465	33.993	1.00	57.02	SS19	ATOM	6628	OE1	GLN	56	236.124	90.212	28.217	1.00	108.73	SS19
ATOM	6576	C	ILE	49	248.235	94.805	32.046	1.00	123.40	SS19	ATOM	6629	NE2	GLN	56	234.596	91.793	27.754	1.00	108.73	SS19
ATOM	6577	O	ILE	49	248.438	94.803	30.832	1.00	123.40	SS19	ATOM	6630	C	GLN	56	238.841	94.143	29.163	1.00	78.65	SS19
ATOM	6578	N	ALA	50	247.044	94.570	32.583	1.00	80.48	SS19	ATOM	6631	O	GLN	56	239.156	95.326	29.073	1.00	78.65	SS19
ATOM	6579	CA	ALA	50	245.885	94.296	31.750	1.00	80.48	SS19	ATOM	6632	N	HIS	57	239.582	93.245	29.796	1.00	96.03	SS19
ATOM	6580	CB	ALA	50	245.068	93.150	32.354	1.00	31.39	SS19	ATOM	6633	CA	HIS	57	240.854	93.592	30.407	1.00	96.03	SS19
ATOM	6581	C	ALA	50	245.042	95.572	31.629	1.00	80.48	SS19	ATOM	6634	CB	HIS	57	240.826	93.315	31.908	1.00	77.02	SS19
ATOM	6582	O	ALA	50	244.452	96.032	32.609	1.00	80.48	SS19	ATOM	6635	CG	HIS	57	240.329	94.468	32.721	1.00	77.02	SS19
ATOM	6583	N	VAL	51	245.007	96.136	30.419	1.00	104.06	SS19	ATOM	6636	CD2	HIS	57	239.229	94.605	33.499	1.00	77.02	SS19
ATOM	6584	CA	VAL	51	244.260	97.365	30.134	1.00	104.06	SS19	ATOM	6637	ND1	HIS	57	240.999	95.672	32.789	1.00	77.02	SS19
ATOM	6585	CB	VAL	51	244.915	98.170	28.980	1.00	73.95	SS19	ATOM	6638	CE1	HIS	57	240.334	96.500	33.575	1.00	77.02	SS19
ATOM	6586	CG1	VAL	51	244.208	99.503	28.804	1.00	73.95	SS19	ATOM	6639	NE2	HIS	57	239.257	95.877	34.018	1.00	77.02	SS19
ATOM	6587	CG2	VAL	51	246.391	98.396	29.267	1.00	73.95	SS19	ATOM	6640	C	HIS	57	241.894	92.728	29.727	1.00	96.03	SS19
ATOM	6588	C	VAL	51	242.800	97.095	29.766	1.00	104.06	SS19	ATOM	6641	O	HIS	57	242.011	91.536	30.010	1.00	96.03	SS19
ATOM	6589	O	VAL	51	242.459	96.034	29.232	1.00	104.06	SS19	ATOM	6642	N	VAL	58	242.638	93.336	28.812	1.00	97.16	SS19
ATOM	6590	N	TYR	52	241.945	98.075	30.045	1.00	93.90	SS19	ATOM	6643	CA	VAL	58	243.656	92.618	28.061	1.00	97.16	SS19

ATOM	6644	CB	VAL	58	243.744	93.139	26.617	1.00	68.91	SS19	ATOM	6697	C	GLU	64	261.203	98.769	25.989	1.00	92.79	SS19
ATOM	6645	CG1	VAL	58	242.664	92.489	25.767	1.00	68.91	SS19	ATOM	6698	O	GLU	64	260.823	99.944	26.006	1.00	92.79	SS19
ATOM	6646	CG2	VAL	58	243.596	94.660	26.604	1.00	68.91	SS19	ATOM	6699	N	ASN	65	261.334	98.055	24.874	1.00	98.70	SS19
ATOM	6647	C	VAL	58	245.051	92.657	28.661	1.00	97.16	SS19	ATOM	6700	CA	ASN	65	261.058	98.592	23.542	1.00	98.70	SS19
ATOM	6648	O	VAL	58	245.591	93.724	28.939	1.00	97.16	SS19	ATOM	6701	CB	ASN	65	261.150	97.466	22.506	1.00	103.05	SS19
ATOM	6649	N	PRO	59	245.655	91.477	28.859	1.00	79.59	SS19	ATOM	6702	CG	ASN	65	260.270	96.280	22.855	1.00	103.05	SS19
ATOM	6650	CD	PRO	59	245.058	90.167	28.554	1.00	70.70	SS19	ATOM	6703	OD1	ASN	65	260.255	95.816	23.993	1.00	103.05	SS19
ATOM	6651	CA	PRO	59	246.999	91.308	29.418	1.00	79.59	SS19	ATOM	6704	ND2	ASN	65	259.540	95.777	21.873	1.00	103.05	SS19
ATOM	6652	CB	PRO	59	247.081	89.804	29.639	1.00	70.70	SS19	ATOM	6705	C	ASN	65	259.713	99.300	23.415	1.00	98.70	SS19
ATOM	6653	CG	PRO	59	246.273	89.275	28.498	1.00	70.70	SS19	ATOM	6706	O	ASN	65	259.464	99.982	22.423	1.00	98.70	SS19
ATOM	6654	C	PRO	59	248.079	91.812	28.451	1.00	79.59	SS19	ATOM	6707	N	MET	66	258.852	99.144	24.417	1.00	107.32	SS19
ATOM	6655	O	PRO	59	248.270	91.257	27.363	1.00	79.59	SS19	ATOM	6708	CA	MET	66	257.542	99.781	24.389	1.00	107.32	SS19
ATOM	6656	N	VAL	60	248.790	92.856	28.865	1.00	108.12	SS19	ATOM	6709	CB	MET	66	256.430	98.725	24.298	1.00	76.73	SS19
ATOM	6657	CA	VAL	60	249.829	93.452	28.037	1.00	108.12	SS19	ATOM	6710	CG	MET	66	256.371	97.723	25.440	1.00	76.73	SS19
ATOM	6658	CB	VAL	60	249.510	94.932	27.749	1.00	60.08	SS19	ATOM	6711	SD	MET	66	255.082	96.460	25.213	1.00	76.73	SS19
ATOM	6659	CG1	VAL	60	250.433	95.467	26.674	1.00	60.08	SS19	ATOM	6712	CE	MET	66	256.023	95.172	24.367	1.00	76.73	SS19
ATOM	6660	CG2	VAL	60	248.064	95.078	27.342	1.00	60.08	SS19	ATOM	6713	C	MET	66	257.276	100.711	25.567	1.00	107.32	SS19
ATOM	6661	C	VAL	60	251.211	93.393	28.681	1.00	108.12	SS19	ATOM	6714	O	MET	66	256.702	100.311	26.577	1.00	107.32	SS19
ATOM	6662	O	VAL	60	251.546	94.241	29.507	1.00	108.12	SS19	ATOM	6715	N	VAL	67	257.706	101.959	25.422	1.00	72.76	SS19
ATOM	6663	N	TYR	61	252.014	92.399	28.307	1.00	122.77	SS19	ATOM	6716	CA	VAL	67	257.502	102.989	26.439	1.00	72.76	SS19
ATOM	6664	CA	TYR	61	253.364	92.290	28.853	1.00	122.77	SS19	ATOM	6717	CB	VAL	67	258.849	103.635	26.841	1.00	87.29	SS19
ATOM	6665	CB	TYR	61	254.062	91.036	28.315	1.00	106.47	SS19	ATOM	6718	CG1	VAL	67	258.641	104.649	27.954	1.00	87.29	SS19
ATOM	6666	CG	TYR	61	255.443	90.777	28.895	1.00	106.47	SS19	ATOM	6719	CG2	VAL	67	259.822	102.550	27.293	1.00	87.29	SS19
ATOM	6667	CD1	TYR	61	255.734	89.572	29.543	1.00	106.47	SS19	ATOM	6720	C	VAL	67	256.564	104.032	25.800	1.00	72.76	SS19
ATOM	6668	CE1	TYR	61	257.011	89.311	30.046	1.00	106.47	SS19	ATOM	6721	O	VAL	67	256.787	105.252	25.872	1.00	72.76	SS19
ATOM	6669	CD2	TYR	61	256.466	91.716	28.768	1.00	106.47	SS19	ATOM	6722	N	GLY	68	255.510	103.509	25.168	1.00	78.32	SS19
ATOM	6670	CE2	TYR	61	257.743	91.465	29.265	1.00	106.47	SS19	ATOM	6723	CA	GLY	68	254.525	104.323	24.479	1.00	78.32	SS19
ATOM	6671	CZ	TYR	61	258.008	90.262	29.900	1.00	106.47	SS19	ATOM	6724	C	GLY	68	253.483	104.970	25.360	1.00	78.32	SS19
ATOM	6672	OH	TYR	61	259.275	90.010	30.372	1.00	106.47	SS19	ATOM	6725	O	GLY	68	253.818	105.540	26.394	1.00	78.32	SS19
ATOM	6673	C	TYR	61	254.102	93.549	28.402	1.00	122.77	SS19	ATOM	6726	N	HIS	69	252.215	104.859	24.964	1.00	77.89	SS19
ATOM	6674	O	TYR	61	254.135	93.866	27.211	1.00	122.77	SS19	ATOM	6727	CA	HIS	69	251.126	105.493	25.703	1.00	77.89	SS19
ATOM	6675	N	ILE	62	254.691	94.262	29.355	1.00	108.03	SS19	ATOM	6728	CB	HIS	69	250.511	106.597	24.838	1.00	107.52	SS19
ATOM	6676	CA	ILE	62	255.392	95.502	29.049	1.00	108.03	SS19	ATOM	6729	CG	HIS	69	250.419	107.928	25.519	1.00	107.52	SS19
ATOM	6677	CB	ILE	62	255.026	96.585	30.088	1.00	86.83	SS19	ATOM	6730	CD2	HIS	69	251.042	109.104	25.263	1.00	107.52	SS19
ATOM	6678	CG2	ILE	62	255.387	96.104	31.479	1.00	86.83	SS19	ATOM	6731	ND1	HIS	69	249.589	108.161	26.593	1.00	107.52	SS19
ATOM	6679	CG1	ILE	62	255.704	97.909	29.731	1.00	86.83	SS19	ATOM	6732	CE1	HIS	69	249.703	109.424	26.968	1.00	107.52	SS19
ATOM	6680	CD1	ILE	62	255.149	98.571	28.496	1.00	86.83	SS19	ATOM	6733	NE2	HIS	69	250.578	110.018	26.177	1.00	107.52	SS19
ATOM	6681	C	ILE	62	256.917	95.368	28.967	1.00	108.03	SS19	ATOM	6734	C	HIS	69	250.001	104.601	26.220	1.00	77.89	SS19
ATOM	6682	O	ILE	62	257.594	95.196	29.981	1.00	108.03	SS19	ATOM	6735	O	HIS	69	248.889	105.088	26.413	1.00	77.89	SS19
ATOM	6683	N	THR	63	257.449	95.457	27.748	1.00	90.30	SS19	ATOM	6736	N	LYS	70	250.279	103.313	26.429	1.00	70.94	SS19
ATOM	6684	CA	THR	63	258.885	95.346	27.528	1.00	90.30	SS19	ATOM	6737	CA	LYS	70	249.295	102.345	26.959	1.00	70.94	SS19
ATOM	6685	CB	THR	63	259.199	94.479	26.301	1.00	95.81	SS19	ATOM	6738	CB	LYS	70	248.630	102.902	28.220	1.00	72.64	SS19
ATOM	6686	OG1	THR	63	258.379	93.308	26.323	1.00	95.81	SS19	ATOM	6739	CG	LYS	70	248.783	102.013	29.425	1.00	72.64	SS19
ATOM	6687	CG2	THR	63	260.662	94.048	26.321	1.00	95.81	SS19	ATOM	6740	CD	LYS	70	250.229	101.921	29.820	1.00	72.64	SS19
ATOM	6688	C	THR	63	259.503	96.721	27.319	1.00	90.30	SS19	ATOM	6741	CE	LYS	70	250.415	100.737	30.709	1.00	72.64	SS19
ATOM	6689	O	THR	63	258.798	97.693	27.052	1.00	90.30	SS19	ATOM	6742	NZ	LYS	70	249.786	99.564	30.053	1.00	72.64	SS19
ATOM	6690	N	GLU	64	260.825	96.792	27.442	1.00	92.79	SS19	ATOM	6743	C	LYS	70	248.202	101.849	26.005	1.00	70.94	SS19
ATOM	6691	CA	GLU	64	261.553	98.044	27.284	1.00	92.79	SS19	ATOM	6744	O	LYS	70	247.179	101.314	26.436	1.00	70.94	SS19
ATOM	6692	CB	GLU	64	263.062	97.781	27.327	1.00	146.99	SS19	ATOM	6745	N	LEU	71	248.433	102.040	24.712	1.00	83.49	SS19
ATOM	6693	CG	GLU	64	263.914	99.039	27.199	1.00	146.99	SS19	ATOM	6746	CA	LEU	71	247.521	101.603	23.662	1.00	83.49	SS19
ATOM	6694	CD	GLU	64	263.751	99.985	28.377	1.00	146.99	SS19	ATOM	6747	CB	LEU	71	247.821	102.382	22.388	1.00	47.13	SS19
ATOM	6695	OE1	GLU	64	264.221	99.645	29.484	1.00	146.99	SS19	ATOM	6748	CG	LEU	71	249.280	102.159	21.963	1.00	47.13	SS19
ATOM	6696	OE2	GLU	64	263.150	101.066	28.196	1.00	146.99	SS19	ATOM	6749	CD1	LEU	71	249.351	100.972	20.993	1.00	47.13	SS19

ATOM	6750	CD2	LEU	71	249.860	103.430	21.335	1.00 47.13	SS19	ATOM	6803	NH1	ARG	78	235.111	98.544	10.408	1.00201.09	SS19
ATOM	6751	C	LEU	71	247.842	100.128	23.437	1.00 83.49	SS19	ATOM	6804	NH2	ARG	78	233.378	98.602	11.914	1.00201.09	SS19
ATOM	6752	O	LEU	71	247.158	99.442	22.685	1.00 83.49	SS19	ATOM	6805	C	ARG	78	237.662	93.857	12.698	1.00 88.18	SS19
ATOM	6753	N	GLY	72	248.915	99.679	24.090	1.00106.56	SS19	ATOM	6806	O	ARG	78	238.829	94.116	12.410	1.00 88.18	SS19
ATOM	6754	CA	GLY	72	249.382	98.307	24.000	1.00106.56	SS19	ATOM	6807	N	THR	79	237.004	92.836	12.153	1.00143.13	SS19
ATOM	6755	C	GLY	72	248.441	97.357	23.294	1.00106.56	SS19	ATOM	6808	CA	THR	79	237.608	91.987	11.120	1.00143.13	SS19
ATOM	6756	O	GLY	72	248.347	97.378	22.068	1.00106.56	SS19	ATOM	6809	CB	THR	79	237.332	90.488	11.334	1.00103.89	SS19
ATOM	6757	N	GLU	73	247.741	96.530	24.066	1.00106.79	SS19	ATOM	6810	OG1	THR	79	237.767	90.092	12.642	1.00103.89	SS19
ATOM	6758	CA	GLU	73	246.804	95.557	23.508	1.00106.79	SS19	ATOM	6811	CG2	THR	79	238.081	89.667	10.287	1.00103.89	SS19
ATOM	6759	CB	GLU	73	246.781	94.289	24.365	1.00170.11	SS19	ATOM	6812	C	THR	79	236.857	92.450	9.877	1.00143.13	SS19
ATOM	6760	CG	GLU	73	248.035	93.434	24.246	1.00170.11	SS19	ATOM	6813	O	THR	79	236.204	93.489	9.934	1.00143.13	SS19
ATOM	6761	CD	GLU	73	248.274	92.944	22.828	1.00170.11	SS19	ATOM	6814	N	TYR	80	236.909	91.723	8.764	1.00123.77	SS19
ATOM	6762	OE1	GLU	73	247.350	92.338	22.243	1.00170.11	SS19	ATOM	6815	CA	TYR	80	236.182	92.220	7.596	1.00123.77	SS19
ATOM	6763	OE2	GLU	73	249.387	93.161	22.301	1.00170.11	SS19	ATOM	6816	CB	TYR	80	237.135	93.008	6.695	1.00117.13	SS19
ATOM	6764	C	GLU	73	245.382	96.091	23.339	1.00106.79	SS19	ATOM	6817	CG	TYR	80	237.537	94.320	7.320	1.00117.13	SS19
ATOM	6765	O	GLU	73	244.418	95.323	23.267	1.00106.79	SS19	ATOM	6818	CD1	TYR	80	238.481	94.365	8.346	1.00117.13	SS19
ATOM	6766	N	PHE	74	245.255	97.410	23.275	1.00 73.38	SS19	ATOM	6819	CE1	TYR	80	238.759	95.543	9.009	1.00117.13	SS19
ATOM	6767	CA	PHE	74	243.957	98.033	23.078	1.00 73.38	SS19	ATOM	6820	CD2	TYR	80	236.892	95.500	6.968	1.00117.13	SS19
ATOM	6768	CB	PHE	74	244.078	99.546	23.201	1.00121.59	SS19	ATOM	6821	CE2	TYR	80	237.164	96.682	7.627	1.00117.13	SS19
ATOM	6769	CG	PHE	74	243.225	100.113	24.270	1.00121.59	SS19	ATOM	6822	CZ	TYR	80	238.095	96.695	8.647	1.00117.13	SS19
ATOM	6770	CD1	PHE	74	243.700	101.121	25.088	1.00121.59	SS19	ATOM	6823	OH	TYR	80	238.344	97.857	9.325	1.00117.13	SS19
ATOM	6771	CD2	PHE	74	241.966	99.582	24.513	1.00121.59	SS19	ATOM	6824	C	TYR	80	235.341	91.284	6.741	1.00123.77	SS19
ATOM	6772	CE1	PHE	74	242.937	101.579	26.141	1.00121.59	SS19	ATOM	6825	O	TYR	80	235.527	90.067	6.735	1.00123.77	SS19
ATOM	6773	CE2	PHE	74	241.197	100.038	25.562	1.00121.59	SS19	ATOM	6826	N	ARG	81	234.408	91.905	6.019	1.00119.83	SS19
ATOM	6774	CZ	PHE	74	241.682	101.034	26.382	1.00121.59	SS19	ATOM	6827	CA	ARG	81	233.448	91.263	5.107	1.00119.83	SS19
ATOM	6775	C	PHE	74	243.476	97.684	21.683	1.00 73.38	SS19	ATOM	6828	CB	ARG	81	232.751	92.351	4.280	1.00 51.08	SS19
ATOM	6776	O	PHE	74	244.292	97.449	20.791	1.00 73.38	SS19	ATOM	6829	CG	ARG	81	233.734	93.299	3.578	1.00 51.08	SS19
ATOM	6777	N	ALA	75	242.165	97.648	21.473	1.00157.40	SS19	ATOM	6830	CD	ARG	81	234.389	94.284	4.531	1.00 51.08	SS19
ATOM	6778	CA	ALA	75	241.701	97.326	20.139	1.00157.40	SS19	ATOM	6831	NE	ARG	81	233.383	95.139	5.139	1.00 51.08	SS19
ATOM	6779	CB	ALA	75	242.449	96.072	19.638	1.00 47.89	SS19	ATOM	6832	CZ	ARG	81	233.613	96.367	5.580	1.00 51.08	SS19
ATOM	6780	C	ALA	75	240.199	97.164	19.896	1.00157.40	SS19	ATOM	6833	NH1	ARG	81	234.819	96.895	5.484	1.00 51.08	SS19
ATOM	6781	O	ALA	75	239.710	96.042	19.772	1.00157.40	SS19	ATOM	6834	NH2	ARG	81	232.629	97.072	6.110	1.00 51.08	SS19
ATOM	6782	N	PRO	76	239.443	98.279	19.843	1.00 80.12	SS19	ATOM	6835	C	ARG	81	233.965	90.167	4.155	1.00119.83	SS19
ATOM	6783	CD	PRO	76	239.766	99.621	20.379	1.00 55.41	SS19	ATOM	6836	O	ARG	81	233.287	89.125	4.047	1.00119.83	SS19
ATOM	6784	CA	PRO	76	238.000	98.154	19.588	1.00 80.12	SS19	ATOM	6837	OXT	ARG	81	235.012	90.358	3.502	1.00 80.05	SS19
ATOM	6785	CB	PRO	76	237.563	99.608	19.495	1.00 55.41	SS19	ATOM	6838	CB	GLU	1	243.085	180.688	-3.886	1.00128.37	IS9
ATOM	6786	CG	PRO	76	238.390	100.246	20.604	1.00 55.41	SS19	ATOM	6839	CG	GLU	1	244.557	180.284	-3.783	1.00128.37	IS9
ATOM	6787	C	PRO	76	237.697	97.330	18.302	1.00 80.12	SS19	ATOM	6840	CD	GLU	1	244.789	179.023	-2.957	1.00128.37	IS9
ATOM	6788	O	PRO	76	237.821	97.829	17.185	1.00 80.12	SS19	ATOM	6841	OE1	GLU	1	244.202	177.973	-3.282	1.00128.37	IS9
ATOM	6789	N	THR	77	237.307	96.068	18.520	1.00105.80	SS19	ATOM	6842	OE2	GLU	1	245.568	179.080	-1.981	1.00128.37	IS9
ATOM	6790	CA	THR	77	236.979	95.029	17.519	1.00105.80	SS19	ATOM	6843	C	GLU	1	242.324	178.706	-5.203	1.00151.83	IS9
ATOM	6791	CB	THR	77	235.815	94.146	18.017	1.00 72.48	SS19	ATOM	6844	O	GLU	1	243.240	178.057	-5.709	1.00151.83	IS9
ATOM	6792	OG1	THR	77	236.147	93.585	19.292	1.00 72.48	SS19	ATOM	6845	N	GLU	1	240.998	180.784	-5.224	1.00151.83	IS9
ATOM	6793	CG2	THR	77	235.541	93.016	17.029	1.00 72.48	SS19	ATOM	6846	CA	GLU	1	242.377	180.225	-5.169	1.00151.83	IS9
ATOM	6794	C	THR	77	236.648	95.369	16.072	1.00105.80	SS19	ATOM	6847	N	GLN	2	241.239	178.145	-4.679	1.00113.17	IS9
ATOM	6795	O	THR	77	235.924	96.322	15.808	1.00105.80	SS19	ATOM	6848	CA	GLN	2	241.085	176.695	-4.621	1.00113.17	IS9
ATOM	6796	N	ARG	78	237.139	94.539	15.145	1.00 88.18	SS19	ATOM	6849	CB	GLN	2	241.246	176.237	-3.174	1.00 83.82	IS9
ATOM	6797	CA	ARG	78	236.895	94.733	13.710	1.00 88.18	SS19	ATOM	6850	CG	GLN	2	242.066	174.979	-3.002	1.00 83.82	IS9
ATOM	6798	CB	ARG	78	237.145	96.197	13.333	1.00201.09	SS19	ATOM	6851	CD	GLN	2	242.277	174.640	-1.542	1.00 83.82	IS9
ATOM	6799	CG	ARG	78	237.134	96.450	11.836	1.00201.09	SS19	ATOM	6852	OE1	GLN	2	242.981	173.690	-1.211	1.00 83.82	IS9
ATOM	6800	CD	ARG	78	235.829	95.971	11.239	1.00201.09	SS19	ATOM	6853	NE2	GLN	2	241.661	175.419	-0.659	1.00 83.82	IS9
ATOM	6801	NE	ARG	78	234.710	96.736	11.769	1.00201.09	SS19	ATOM	6854	C	GLN	2	239.747	176.198	-5.162	1.00113.17	IS9
ATOM	6802	CZ	ARG	78	234.394	97.958	11.360	1.00201.09	SS19	ATOM	6855	O	GLN	2	238.836	176.983	-5.419	1.00113.17	IS9

ATOM	6856	N	TYR	3	239.646	174.882	-5.338	1.00119.60	IS9	ATOM	6909	CG	ARG	9	233.777	154.156	-8.050	1.00 85.84	IS9
ATOM	6857	CA	TYR	3	238.427	174.250	-5.837	1.00119.60	IS9	ATOM	6910	CD	ARG	9	232.424	154.001	-8.711	1.00 85.84	IS9
ATOM	6858	CB	TYR	3	238.451	174.207	-7.365	1.00 99.32	IS9	ATOM	6911	NE	ARG	9	232.015	152.603	-8.760	1.00 85.84	IS9
ATOM	6859	CG	TYR	3	238.519	175.596	-7.961	1.00 99.32	IS9	ATOM	6912	CZ	ARG	9	232.674	151.657	-9.415	1.00 85.84	IS9
ATOM	6860	CD1	TYR	3	239.745	176.215	-8.210	1.00 99.32	IS9	ATOM	6913	NH1	ARG	9	233.776	151.949	-10.090	1.00 85.84	IS9
ATOM	6861	CE1	TYR	3	239.806	177.523	-8.671	1.00 99.32	IS9	ATOM	6914	NH2	ARG	9	232.239	150.412	-9.377	1.00 85.84	IS9
ATOM	6862	CD2	TYR	3	237.356	176.326	-8.194	1.00 99.32	IS9	ATOM	6915	C	ARG	9	233.104	154.007	-5.249	1.00 55.14	IS9
ATOM	6863	CE2	TYR	3	237.411	177.633	-8.650	1.00 99.32	IS9	ATOM	6916	O	ARG	9	234.052	153.865	-4.479	1.00 55.14	IS9
ATOM	6864	CZ	TYR	3	238.633	178.224	-8.888	1.00 99.32	IS9	ATOM	6917	N	LYS	10	232.219	153.052	-5.514	1.00 89.97	IS9
ATOM	6865	OH	TYR	3	238.668	179.514	-9.360	1.00 99.32	IS9	ATOM	6918	CA	LYS	10	232.302	151.715	-4.943	1.00 89.97	IS9
ATOM	6866	C	TYR	3	238.245	172.858	-5.227	1.00119.60	IS9	ATOM	6919	CB	LYS	10	233.093	150.815	-5.903	1.00 64.88	IS9
ATOM	6867	O	TYR	3	239.221	172.209	-4.842	1.00119.60	IS9	ATOM	6920	CG	LYS	10	233.175	149.367	-5.477	1.00 64.88	IS9
ATOM	6868	N	TYR	4	236.996	172.399	-5.156	1.00105.22	IS9	ATOM	6921	CD	LYS	10	233.900	148.527	-6.505	1.00 64.88	IS9
ATOM	6869	CA	TYR	4	236.689	171.126	-4.505	1.00105.22	IS9	ATOM	6922	CE	LYS	10	234.026	147.104	-6.014	1.00 64.88	IS9
ATOM	6870	CB	TYR	4	236.035	171.451	-3.167	1.00 92.65	IS9	ATOM	6923	NZ	LYS	10	234.647	146.291	-7.062	1.00 64.88	IS9
ATOM	6871	CG	TYR	4	236.078	170.347	-2.163	1.00 92.65	IS9	ATOM	6924	C	LYS	10	232.938	151.705	-3.552	1.00 89.97	IS9
ATOM	6872	CD1	TYR	4	235.289	170.403	-1.023	1.00 92.65	IS9	ATOM	6925	O	LYS	10	233.759	150.847	-3.235	1.00 89.97	IS9
ATOM	6873	CE1	TYR	4	235.318	169.388	-0.089	1.00 92.65	IS9	ATOM	6926	N	GLU	11	232.548	152.667	-2.729	1.00 63.10	IS9
ATOM	6874	CD2	TYR	4	236.903	169.246	-2.345	1.00 92.65	IS9	ATOM	6927	CA	GLU	11	233.069	152.789	-1.369	1.00 63.10	IS9
ATOM	6875	CE2	TYR	4	236.941	168.224	-1.423	1.00 92.65	IS9	ATOM	6928	CB	GLU	11	233.012	151.452	-0.644	1.00 85.39	IS9
ATOM	6876	CZ	TYR	4	236.144	168.298	-0.295	1.00 92.65	IS9	ATOM	6929	CG	GLU	11	233.040	151.636	0.847	1.00 85.39	IS9
ATOM	6877	OH	TYR	4	236.163	167.270	0.616	1.00 92.65	IS9	ATOM	6930	CD	GLU	11	233.132	150.337	1.587	1.00 85.39	IS9
ATOM	6878	C	TYR	4	235.822	170.098	-5.254	1.00105.22	IS9	ATOM	6931	OE1	GLU	11	234.136	149.626	1.369	1.00 85.39	IS9
ATOM	6879	O	TYR	4	235.018	170.450	-6.115	1.00105.22	IS9	ATOM	6932	OE2	GLU	11	232.209	150.031	2.381	1.00 85.39	IS9
ATOM	6880	N	GLY	5	235.981	168.825	-4.888	1.00111.75	IS9	ATOM	6933	C	GLU	11	234.494	153.368	-1.248	1.00 63.10	IS9
ATOM	6881	CA	GLY	5	235.222	167.756	-5.514	1.00111.75	IS9	ATOM	6934	O	GLU	11	235.382	152.788	-0.599	1.00 63.10	IS9
ATOM	6882	C	GLY	5	234.570	166.755	-4.564	1.00111.75	IS9	ATOM	6935	N	ALA	12	234.674	154.538	-1.859	1.00 69.30	IS9
ATOM	6883	O	GLY	5	233.352	166.778	-4.377	1.00111.75	IS9	ATOM	6936	CA	ALA	12	235.932	155.265	-1.858	1.00 69.30	IS9
ATOM	6884	N	THR	6	235.382	165.875	-3.978	1.00189.34	IS9	ATOM	6937	CB	ALA	12	236.715	154.943	-3.109	1.00 30.81	IS9
ATOM	6885	CA	THR	6	234.939	164.823	-3.045	1.00189.34	IS9	ATOM	6938	C	ALA	12	235.599	156.751	-1.823	1.00 69.30	IS9
ATOM	6886	CB	THR	6	233.636	165.193	-2.287	1.00 67.04	IS9	ATOM	6939	O	ALA	12	234.621	157.190	-2.438	1.00 69.30	IS9
ATOM	6887	OG1	THR	6	233.917	166.204	-1.310	1.00 67.04	IS9	ATOM	6940	N	VAL	13	236.415	157.517	-1.098	1.00 80.22	IS9
ATOM	6888	CG2	THR	6	233.062	163.969	-1.582	1.00 67.04	IS9	ATOM	6941	CA	VAL	13	236.233	158.963	-0.973	1.00 80.22	IS9
ATOM	6889	C	THR	6	234.726	163.464	-3.719	1.00189.34	IS9	ATOM	6942	CB	VAL	13	235.902	159.354	0.471	1.00 89.63	IS9
ATOM	6890	O	THR	6	235.235	162.452	-3.238	1.00189.34	IS9	ATOM	6943	CG1	VAL	13	235.423	160.785	0.508	1.00 89.63	IS9
ATOM	6891	N	GLY	7	233.966	163.449	-4.814	1.00 97.35	IS9	ATOM	6944	CG2	VAL	13	234.855	158.416	1.042	1.00 89.63	IS9
ATOM	6892	CA	GLY	7	233.701	162.224	-5.560	1.00 97.35	IS9	ATOM	6945	C	VAL	13	237.520	159.680	-1.387	1.00 80.22	IS9
ATOM	6893	C	GLY	7	233.846	160.866	-4.880	1.00 97.35	IS9	ATOM	6946	O	VAL	13	238.597	159.380	-0.875	1.00 80.22	IS9
ATOM	6894	O	GLY	7	234.907	160.526	-4.353	1.00 97.35	IS9	ATOM	6947	N	ALA	14	237.408	160.630	-2.308	1.00142.26	IS9
ATOM	6895	N	ARG	8	232.777	160.073	-4.911	1.00 65.10	IS9	ATOM	6948	CA	ALA	14	238.584	161.345	-2.786	1.00142.26	IS9
ATOM	6896	CA	ARG	8	232.787	158.741	-4.308	1.00 65.10	IS9	ATOM	6949	CB	ALA	14	238.897	160.911	-4.211	1.00 49.25	IS9
ATOM	6897	CB	ARG	8	231.831	158.697	-3.114	1.00 73.93	IS9	ATOM	6950	C	ALA	14	238.449	162.862	-2.736	1.00142.26	IS9
ATOM	6898	CG	ARG	8	232.488	159.130	-1.821	1.00 73.93	IS9	ATOM	6951	O	ALA	14	237.714	163.446	-3.531	1.00142.26	IS9
ATOM	6899	CD	ARG	8	231.479	159.644	-0.812	1.00 73.93	IS9	ATOM	6952	N	ARG	15	239.166	163.502	-1.813	1.00 80.37	IS9
ATOM	6900	NE	ARG	8	230.809	160.851	-1.292	1.00 73.93	IS9	ATOM	6953	CA	ARG	15	239.114	164.955	-1.711	1.00 80.37	IS9
ATOM	6901	CZ	ARG	8	230.112	161.670	-0.514	1.00 73.93	IS9	ATOM	6954	CB	ARG	15	239.750	165.424	-0.411	1.00113.15	IS9
ATOM	6902	NH1	ARG	8	230.007	161.396	0.777	1.00 73.93	IS9	ATOM	6955	CG	ARG	15	239.286	164.686	0.813	1.00113.15	IS9
ATOM	6903	NH2	ARG	8	229.525	162.755	-1.016	1.00 73.93	IS9	ATOM	6956	CD	ARG	15	239.711	165.447	2.041	1.00113.15	IS9
ATOM	6904	C	ARG	8	232.454	157.619	-5.297	1.00 65.10	IS9	ATOM	6957	NE	ARG	15	239.803	164.597	3.219	1.00113.15	IS9
ATOM	6905	O	ARG	8	231.650	157.785	-6.217	1.00 65.10	IS9	ATOM	6958	CZ	ARG	15	240.129	165.049	4.423	1.00113.15	IS9
ATOM	6906	N	ARG	9	233.092	156.471	-5.100	1.00 55.14	IS9	ATOM	6959	NH1	ARG	15	240.384	166.341	4.590	1.00113.15	IS9
ATOM	6907	CA	ARG	9	232.878	155.324	-5.969	1.00 55.14	IS9	ATOM	6960	NH2	ARG	15	240.213	164.215	5.451	1.00113.15	IS9
ATOM	6908	CB	ARG	9	233.817	155.392	-7.176	1.00 85.84	IS9	ATOM	6961	C	ARG	15	239.893	165.527	-2.889	1.00 80.37	IS9

ATOM	6962	O	ARG	15	241.104	165.322	-3.001	1.00	80.37	IS9	ATOM	7015	OD1	ASN	22	254.351	171.314	-14.083	1.00108.99	IS9
ATOM	6963	N	VAL	16	239.200	166.234	-3.772	1.00101.28		IS9	ATOM	7016	ND2	ASN	22	252.717	171.862	-15.523	1.00108.99	IS9
ATOM	6964	CA	VAL	16	239.856	166.807	-4.934	1.00101.28		IS9	ATOM	7017	C	ASN	22	250.421	172.290	-14.291	1.00136.29	IS9
ATOM	6965	CB	VAL	16	239.086	166.467	-6.226	1.00	85.61	IS9	ATOM	7018	O	ASN	22	250.073	172.277	-15.471	1.00136.29	IS9
ATOM	6966	CG1	VAL	16	239.692	167.201	-7.414	1.00	85.61	IS9	ATOM	7019	N	GLY	23	250.060	171.357	-13.417	1.00126.45	IS9
ATOM	6967	CG2	VAL	16	239.140	164.969	-6.466	1.00	85.61	IS9	ATOM	7020	CA	GLY	23	249.207	170.256	-13.822	1.00126.45	IS9
ATOM	6968	C	VAL	16	240.011	168.314	-4.816	1.00101.28		IS9	ATOM	7021	C	GLY	23	249.556	168.965	-13.114	1.00126.45	IS9
ATOM	6969	O	VAL	16	239.024	169.049	-4.787	1.00101.28		IS9	ATOM	7022	O	GLY	23	249.052	167.900	-13.470	1.00126.45	IS9
ATOM	6970	N	PHE	17	241.264	168.760	-4.753	1.00	81.28	IS9	ATOM	7023	N	LYS	24	250.419	169.057	-12.109	1.00 89.43	IS9
ATOM	6971	CA	PHE	17	241.595	170.178	-4.635	1.00	81.28	IS9	ATOM	7024	CA	LYS	24	250.827	167.879	-11.359	1.00 89.43	IS9
ATOM	6972	CB	PHE	17	242.450	170.408	-3.384	1.00	70.71	IS9	ATOM	7025	CB	LYS	24	252.138	168.140	-10.611	1.00101.59	IS9
ATOM	6973	CG	PHE	17	241.690	170.284	-2.088	1.00	70.71	IS9	ATOM	7026	CG	LYS	24	252.052	169.189	-9.519	1.00101.59	IS9
ATOM	6974	CD1	PHE	17	242.353	169.942	-0.911	1.00	70.71	IS9	ATOM	7027	CD	LYS	24	253.381	169.331	-8.787	1.00101.59	IS9
ATOM	6975	CD2	PHE	17	240.321	170.541	-2.035	1.00	70.71	IS9	ATOM	7028	CE	LYS	24	254.494	169.791	-9.725	1.00101.59	IS9
ATOM	6976	CE1	PHE	17	241.663	169.859	0.303	1.00	70.71	IS9	ATOM	7029	NZ	LYS	24	255.786	169.992	-9.008	1.00101.59	IS9
ATOM	6977	CE2	PHE	17	239.628	170.461	-0.833	1.00	70.71	IS9	ATOM	7030	C	LYS	24	249.739	167.470	-10.375	1.00 89.43	IS9
ATOM	6978	CZ	PHE	17	240.301	170.120	0.339	1.00	70.71	IS9	ATOM	7031	O	LYS	24	248.806	168.231	-10.110	1.00 89.43	IS9
ATOM	6979	C	PHE	17	242.342	170.692	-5.858	1.00	81.28	IS9	ATOM	7032	N	VAL	25	249.865	166.261	-9.839	1.00 90.31	IS9
ATOM	6980	O	PHE	17	243.528	170.417	-6.032	1.00	81.28	IS9	ATOM	7033	CA	VAL	25	248.883	165.743	-8.900	1.00 90.31	IS9
ATOM	6981	N	LEU	18	241.640	171.431	-6.708	1.00103.32		IS9	ATOM	7034	CB	VAL	25	247.921	164.761	-9.595	1.00 57.69	IS9
ATOM	6982	CA	LEU	18	242.253	171.998	-7.901	1.00103.32		IS9	ATOM	7035	CG1	VAL	25	246.802	164.369	-8.632	1.00 57.69	IS9
ATOM	6983	CB	LEU	18	241.230	172.102	-9.036	1.00	99.02	IS9	ATOM	7036	CG2	VAL	25	247.364	165.384	-10.873	1.00 57.69	IS9
ATOM	6984	CG	LEU	18	240.727	170.797	-9.654	1.00	99.02	IS9	ATOM	7037	C	VAL	25	249.528	165.023	-7.723	1.00 90.31	IS9
ATOM	6985	CD1	LEU	18	239.658	171.087	-10.706	1.00	99.02	IS9	ATOM	7038	O	VAL	25	250.310	164.087	-7.895	1.00 90.31	IS9
ATOM	6986	CD2	LEU	18	241.903	170.058	-10.273	1.00	99.02	IS9	ATOM	7039	N	THR	26	249.187	165.465	-6.523	1.00 89.57	IS9
ATOM	6987	C	LEU	18	242.792	173.388	-7.571	1.00103.32		IS9	ATOM	7040	CA	THR	26	249.728	164.862	-5.321	1.00 89.57	IS9
ATOM	6988	O	LEU	18	242.241	174.089	-6.720	1.00103.32		IS9	ATOM	7041	CB	THR	26	250.138	165.930	-4.296	1.00187.37	IS9
ATOM	6989	N	ARG	19	243.872	173.783	-8.237	1.00101.91		IS9	ATOM	7042	OG1	THR	26	251.169	166.754	-4.851	1.00187.37	IS9
ATOM	6990	CA	ARG	19	244.478	175.089	-8.013	1.00101.91		IS9	ATOM	7043	CG2	THR	26	250.646	165.276	-3.021	1.00187.37	IS9
ATOM	6991	CB	ARG	19	245.427	175.033	-6.814	1.00104.72		IS9	ATOM	7044	C	THR	26	248.669	163.981	-4.693	1.00 89.57	IS9
ATOM	6992	CG	ARG	19	244.817	174.402	-5.574	1.00104.72		IS9	ATOM	7045	O	THR	26	247.877	164.441	-3.871	1.00 89.57	IS9
ATOM	6993	CD	ARG	19	245.767	174.436	-4.398	1.00104.72		IS9	ATOM	7046	N	VAL	27	248.644	162.714	-5.079	1.00 70.30	IS9
ATOM	6994	NE	ARG	19	245.340	173.547	-3.320	1.00104.72		IS9	ATOM	7047	CA	VAL	27	247.661	161.807	-4.508	1.00 70.30	IS9
ATOM	6995	CZ	ARG	19	245.997	173.396	-2.173	1.00104.72		IS9	ATOM	7048	CB	VAL	27	247.283	160.680	-5.488	1.00 72.27	IS9
ATOM	6996	NH1	ARG	19	247.112	174.079	-1.947	1.00104.72		IS9	ATOM	7049	CG1	VAL	27	246.162	159.832	-4.891	1.00 72.27	IS9
ATOM	6997	NH2	ARG	19	245.550	172.550	-1.255	1.00104.72		IS9	ATOM	7050	CG2	VAL	27	246.852	161.275	-6.824	1.00 72.27	IS9
ATOM	6998	C	ARG	19	245.256	175.458	-9.266	1.00101.91		IS9	ATOM	7051	C	VAL	27	248.198	161.188	-3.225	1.00 70.30	IS9
ATOM	6999	O	ARG	19	246.182	174.746	-9.651	1.00101.91		IS9	ATOM	7052	O	VAL	27	248.993	160.249	-3.264	1.00 70.30	IS9
ATOM	7000	N	PRO	20	244.889	176.576	-9.924	1.00115.26		IS9	ATOM	7053	N	ASN	28	247.761	161.736	-2.093	1.00 83.35	IS9
ATOM	7001	CD	PRO	20	243.900	177.590	-9.510	1.00101.75		IS9	ATOM	7054	CA	ASN	28	248.168	161.255	-0.778	1.00 83.35	IS9
ATOM	7002	CA	PRO	20	245.588	176.998	-11.144	1.00115.26		IS9	ATOM	7055	CB	ASN	28	247.831	159.770	-0.628	1.00 69.90	IS9
ATOM	7003	CB	PRO	20	245.152	178.450	-11.303	1.00101.75		IS9	ATOM	7056	CG	ASN	28	246.567	159.543	0.167	1.00 69.90	IS9
ATOM	7004	CG	PRO	20	243.750	178.429	-10.769	1.00101.75		IS9	ATOM	7057	OD1	ASN	28	245.508	160.080	-0.164	1.00 69.90	IS9
ATOM	7005	C	PRO	20	247.096	176.850	-10.999	1.00115.26		IS9	ATOM	7058	ND2	ASN	28	246.670	158.749	1.228	1.00 69.90	IS9
ATOM	7006	O	PRO	20	247.723	177.543	-10.197	1.00115.26		IS9	ATOM	7059	C	ASN	28	249.642	161.469	-0.502	1.00 83.35	IS9
ATOM	7007	N	GLY	21	247.669	175.932	-11.771	1.00107.90		IS9	ATOM	7060	O	ASN	28	250.253	160.728	0.269	1.00 83.35	IS9
ATOM	7008	CA	GLY	21	249.099	175.698	-11.699	1.00107.90		IS9	ATOM	7061	N	GLY	29	250.212	162.488	-1.129	1.00100.36	IS9
ATOM	7009	C	GLY	21	249.652	174.970	-12.906	1.00107.90		IS9	ATOM	7062	CA	GLY	29	251.619	162.761	-0.918	1.00100.36	IS9
ATOM	7010	O	GLY	21	249.153	175.145	-14.019	1.00107.90		IS9	ATOM	7063	C	GLY	29	252.469	162.273	-2.069	1.00100.36	IS9
ATOM	7011	N	ASN	22	250.683	174.155	-12.685	1.00136.29		IS9	ATOM	7064	O	GLY	29	253.390	162.966	-2.503	1.00100.36	IS9
ATOM	7012	CA	ASN	22	251.320	173.398	-13.760	1.00136.29		IS9	ATOM	7065	N	GLN	30	252.168	161.077	-2.567	1.00 77.74	IS9
ATOM	7013	CB	ASN	22	252.637	172.785	-13.275	1.00108.99		IS9	ATOM	7066	CA	GLN	30	252.923	160.522	-3.682	1.00 77.74	IS9
ATOM	7014	CG	ASN	22	253.310	171.920	-14.334	1.00108.99		IS9	ATOM	7067	CB	GLN	30	252.736	159.008	-3.751	1.00 98.65	IS9

ATOM	7068	CG	GLN	30	253.198	158.286	-2.505	1.00	98.65	IS9	ATOM	7121	O	TYR	35	249.714	153.828	-6.476	1.00	84.04	IS9
ATOM	7069	CD	GLN	30	253.150	156.782	-2.657	1.00	98.65	IS9	ATOM	7122	N	PHE	36	249.543	155.351	-8.136	1.00	85.27	IS9
ATOM	7070	OE1	GLN	30	252.090	156.205	-2.893	1.00	98.65	IS9	ATOM	7123	CA	PHE	36	248.966	154.444	-9.126	1.00	85.27	IS9
ATOM	7071	NE2	GLN	30	254.306	156.135	-2.526	1.00	98.65	IS9	ATOM	7124	CB	PHE	36	247.934	155.184	-9.982	1.00	92.37	IS9
ATOM	7072	C	GLN	30	252.450	161.167	-4.975	1.00	77.74	IS9	ATOM	7125	CG	PHE	36	246.785	155.754	-9.197	1.00	92.37	IS9
ATOM	7073	O	GLN	30	251.364	161.751	-5.028	1.00	77.74	IS9	ATOM	7126	CD1	PHE	36	246.105	156.879	-9.663	1.00	92.37	IS9
ATOM	7074	N	ASP	31	253.272	161.080	-6.014	1.00	66.77	IS9	ATOM	7127	CD2	PHE	36	246.373	155.165	-8.000	1.00	92.37	IS9
ATOM	7075	CA	ASP	31	252.900	161.665	-7.289	1.00	66.77	IS9	ATOM	7128	CE1	PHE	36	245.034	157.412	-8.951	1.00	92.37	IS9
ATOM	7076	CB	ASP	31	254.098	161.672	-8.240	1.00	110.33	IS9	ATOM	7129	CE2	PHE	36	245.302	155.689	-7.283	1.00	92.37	IS9
ATOM	7077	CG	ASP	31	253.902	162.615	-9.413	1.00	110.33	IS9	ATOM	7130	CZ	PHE	36	244.632	156.815	-7.758	1.00	92.37	IS9
ATOM	7078	OD1	ASP	31	253.022	162.356	-10.264	1.00	110.33	IS9	ATOM	7131	C	PHE	36	250.075	153.923	-10.030	1.00	85.27	IS9
ATOM	7079	OD2	ASP	31	254.629	163.627	-9.477	1.00	110.33	IS9	ATOM	7132	O	PHE	36	249.954	153.929	-11.256	1.00	85.27	IS9
ATOM	7080	C	ASP	31	251.763	160.834	-7.873	1.00	66.77	IS9	ATOM	7133	N	GLN	37	251.160	153.474	-9.416	1.00	115.33	IS9
ATOM	7081	O	ASP	31	251.608	159.661	-7.531	1.00	66.77	IS9	ATOM	7134	CA	GLN	37	252.297	152.963	-10.163	1.00	115.33	IS9
ATOM	7082	N	PHE	32	250.957	161.440	-8.740	1.00	104.74	IS9	ATOM	7135	CB	GLN	37	253.517	152.850	-9.242	1.00	98.89	IS9
ATOM	7083	CA	PHE	32	249.843	160.726	-9.353	1.00	104.74	IS9	ATOM	7136	CG	GLN	37	254.857	153.005	-9.941	1.00	98.89	IS9
ATOM	7084	CB	PHE	32	249.258	161.545	-10.502	1.00	91.01	IS9	ATOM	7137	CD	GLN	37	255.059	152.018	-11.076	1.00	98.89	IS9
ATOM	7085	CG	PHE	32	248.004	160.957	-11.091	1.00	91.01	IS9	ATOM	7138	OE1	GLN	37	254.346	152.046	-12.082	1.00	98.89	IS9
ATOM	7086	CD1	PHE	32	246.875	160.760	-10.300	1.00	91.01	IS9	ATOM	7139	NE2	GLN	37	256.041	151.140	-10.920	1.00	98.89	IS9
ATOM	7087	CD2	PHE	32	247.940	160.628	-12.441	1.00	91.01	IS9	ATOM	7140	C	GLN	37	251.976	151.599	-10.764	1.00	115.33	IS9
ATOM	7088	CE1	PHE	32	245.702	160.250	-10.846	1.00	91.01	IS9	ATOM	7141	O	GLN	37	251.957	150.588	-10.061	1.00	115.33	IS9
ATOM	7089	CE2	PHE	32	246.767	160.115	-12.995	1.00	91.01	IS9	ATOM	7142	N	GLY	38	251.722	151.577	-12.068	1.00	92.10	IS9
ATOM	7090	CZ	PHE	32	245.648	159.928	-12.196	1.00	91.01	IS9	ATOM	7143	CA	GLY	38	251.425	150.321	-12.728	1.00	92.10	IS9
ATOM	7091	C	PHE	32	250.324	159.381	-9.886	1.00	104.74	IS9	ATOM	7144	C	GLY	38	249.964	149.921	-12.681	1.00	92.10	IS9
ATOM	7092	O	PHE	32	249.697	158.347	-9.654	1.00	104.74	IS9	ATOM	7145	O	GLY	38	249.624	148.856	-12.172	1.00	92.10	IS9
ATOM	7093	N	ASN	33	251.453	159.415	-10.591	1.00	62.55	IS9	ATOM	7146	N	LEU	39	249.102	150.782	-13.212	1.00	56.46	IS9
ATOM	7094	CA	ASN	33	252.058	158.232	-11.193	1.00	62.55	IS9	ATOM	7147	CA	LEU	39	247.667	150.531	-13.264	1.00	56.46	IS9
ATOM	7095	CB	ASN	33	253.021	158.665	-12.289	1.00	91.79	IS9	ATOM	7148	CB	LEU	39	246.961	151.143	-12.052	1.00	47.39	IS9
ATOM	7096	CG	ASN	33	252.530	159.889	-13.038	1.00	91.79	IS9	ATOM	7149	CG	LEU	39	247.348	150.608	-10.668	1.00	47.39	IS9
ATOM	7097	OD1	ASN	33	251.534	159.836	-13.763	1.00	91.79	IS9	ATOM	7150	CD1	LEU	39	246.448	151.241	-9.628	1.00	47.39	IS9
ATOM	7098	ND2	ASN	33	253.222	161.009	-12.853	1.00	91.79	IS9	ATOM	7151	CD2	LEU	39	247.212	149.100	-10.615	1.00	47.39	IS9
ATOM	7099	C	ASN	33	252.805	157.402	-10.168	1.00	62.55	IS9	ATOM	7152	C	LEU	39	247.152	151.172	-14.542	1.00	56.46	IS9
ATOM	7100	O	ASN	33	253.295	156.331	-10.478	1.00	62.55	IS9	ATOM	7153	O	LEU	39	246.836	152.361	-14.567	1.00	56.46	IS9
ATOM	7101	N	GLU	34	252.888	157.892	-8.942	1.00	59.99	IS9	ATOM	7154	N	VAL	40	247.072	150.367	-15.597	1.00	74.13	IS9
ATOM	7102	CA	GLU	34	253.601	157.170	-7.904	1.00	59.99	IS9	ATOM	7155	CA	VAL	40	246.635	150.814	-16.918	1.00	74.13	IS9
ATOM	7103	CB	GLU	34	254.372	158.147	-7.015	1.00	134.46	IS9	ATOM	7156	CB	VAL	40	246.440	149.599	-17.857	1.00	113.13	IS9
ATOM	7104	CG	GLU	34	255.465	157.490	-6.189	1.00	134.46	IS9	ATOM	7157	CG1	VAL	40	246.516	150.039	-19.315	1.00	113.13	IS9
ATOM	7105	CD	GLU	34	256.406	156.650	-7.037	1.00	134.46	IS9	ATOM	7158	CG2	VAL	40	247.482	148.537	-17.554	1.00	113.13	IS9
ATOM	7106	OE1	GLU	34	256.948	157.174	-8.032	1.00	134.46	IS9	ATOM	7159	C	VAL	40	245.354	151.660	-16.964	1.00	74.13	IS9
ATOM	7107	OE2	GLU	34	256.605	155.463	-6.707	1.00	134.46	IS9	ATOM	7160	O	VAL	40	244.980	152.176	-18.023	1.00	74.13	IS9
ATOM	7108	C	GLU	34	252.663	156.321	-7.061	1.00	59.99	IS9	ATOM	7161	N	ARG	41	244.680	151.809	-15.830	1.00	79.30	IS9
ATOM	7109	O	GLU	34	253.033	155.221	-6.651	1.00	59.99	IS9	ATOM	7162	CA	ARG	41	243.440	152.575	-15.798	1.00	79.30	IS9
ATOM	7110	N	TYR	35	251.454	156.820	-6.799	1.00	84.04	IS9	ATOM	7163	CB	ARG	41	242.390	151.809	-15.006	1.00	74.68	IS9
ATOM	7111	CA	TYR	35	250.470	156.071	-6.009	1.00	84.04	IS9	ATOM	7164	CG	ARG	41	241.342	151.145	-15.874	1.00	74.68	IS9
ATOM	7112	CB	TYR	35	249.359	157.010	-5.499	1.00	85.44	IS9	ATOM	7165	CD	ARG	41	239.978	151.619	-15.452	1.00	74.68	IS9
ATOM	7113	CG	TYR	35	248.365	156.364	-4.535	1.00	85.44	IS9	ATOM	7166	NE	ARG	41	239.772	151.365	-14.033	1.00	74.68	IS9
ATOM	7114	CD1	TYR	35	248.774	155.885	-3.283	1.00	85.44	IS9	ATOM	7167	CZ	ARG	41	238.867	151.987	-13.292	1.00	74.68	IS9
ATOM	7115	CE1	TYR	35	247.863	155.279	-2.401	1.00	85.44	IS9	ATOM	7168	NH1	ARG	41	238.081	152.907	-13.831	1.00	74.68	IS9
ATOM	7116	CD2	TYR	35	247.019	156.222	-4.878	1.00	85.44	IS9	ATOM	7169	NH2	ARG	41	238.749	151.682	-12.010	1.00	74.68	IS9
ATOM	7117	CE2	TYR	35	246.102	155.617	-4.007	1.00	85.44	IS9	ATOM	7170	C	ARG	41	243.565	153.980	-15.232	1.00	79.30	IS9
ATOM	7118	CZ	TYR	35	246.533	155.148	-2.774	1.00	85.44	IS9	ATOM	7171	O	ARG	41	242.827	154.880	-15.631	1.00	79.30	IS9
ATOM	7119	OH	TYR	35	245.640	154.543	-1.920	1.00	85.44	IS9	ATOM	7172	N	ALA	42	244.500	154.152	-14.302	1.00	67.61	IS9
ATOM	7120	C	TYR	35	249.867	154.976	-6.899	1.00	84.04	IS9	ATOM	7173	CA	ALA	42	244.747	155.429	-13.636	1.00	67.61	IS9

ATOM	7174	CB	ALA	42	246.172	155.455	-13.099	1.00117.56	IS9	ATOM	7227	CA	ARG	50	241.347	166.434	-20.721	1.00 74.21	IS9
ATOM	7175	C	ALA	42	244.505	156.640	-14.522	1.00 67.61	IS9	ATOM	7228	CB	ARG	50	241.746	165.023	-21.161	1.00125.96	IS9
ATOM	7176	O	ALA	42	243.886	157.618	-14.098	1.00 67.61	IS9	ATOM	7229	CG	ARG	50	242.962	164.459	-20.469	1.00125.96	IS9
ATOM	7177	N	VAL	43	245.002	156.566	-15.751	1.00 72.30	IS9	ATOM	7230	CD	ARG	50	243.198	163.030	-20.904	1.00125.96	IS9
ATOM	7178	CA	VAL	43	244.850	157.645	-16.720	1.00 72.30	IS9	ATOM	7231	NE	ARG	50	244.469	162.517	-20.406	1.00125.96	IS9
ATOM	7179	CB	VAL	43	245.270	157.183	-18.114	1.00 93.93	IS9	ATOM	7232	CZ	ARG	50	244.970	161.325	-20.717	1.00125.96	IS9
ATOM	7180	CG1	VAL	43	245.070	158.305	-19.113	1.00 93.93	IS9	ATOM	7233	NH1	ARG	50	244.304	160.513	-21.529	1.00125.96	IS9
ATOM	7181	CG2	VAL	43	246.719	156.736	-18.088	1.00 93.93	IS9	ATOM	7234	NH2	ARG	50	246.146	160.949	-20.230	1.00125.96	IS9
ATOM	7182	C	VAL	43	243.414	158.138	-16.805	1.00 72.30	IS9	ATOM	7235	C	ARG	50	240.065	166.828	-21.447	1.00 74.21	IS9
ATOM	7183	O	VAL	43	243.158	159.254	-17.256	1.00 72.30	IS9	ATOM	7236	O	ARG	50	240.082	167.247	-22.609	1.00 74.21	IS9
ATOM	7184	N	ALA	44	242.484	157.295	-16.372	1.00 77.56	IS9	ATOM	7237	N	ALA	51	238.954	166.673	-20.740	1.00 84.67	IS9
ATOM	7185	CA	ALA	44	241.067	157.625	-16.398	1.00 77.56	IS9	ATOM	7238	CA	ALA	51	237.646	166.983	-21.269	1.00 84.67	IS9
ATOM	7186	CB	ALA	44	240.250	156.400	-16.009	1.00 87.77	IS9	ATOM	7239	CB	ALA	51	236.598	166.454	-20.336	1.00 74.65	IS9
ATOM	7187	C	ALA	44	240.713	158.802	-15.487	1.00 77.56	IS9	ATOM	7240	C	ALA	51	237.456	168.474	-21.462	1.00 84.67	IS9
ATOM	7188	O	ALA	44	240.068	159.758	-15.922	1.00 77.56	IS9	ATOM	7241	O	ALA	51	236.681	168.897	-22.319	1.00 84.67	IS9
ATOM	7189	N	ALA	45	241.139	158.725	-14.229	1.00 77.59	IS9	ATOM	7242	N	VAL	52	238.166	169.271	-20.670	1.00119.85	IS9
ATOM	7190	CA	ALA	45	240.867	159.767	-13.237	1.00 77.59	IS9	ATOM	7243	CA	VAL	52	238.046	170.722	-20.754	1.00119.85	IS9
ATOM	7191	CB	ALA	45	241.808	159.596	-12.051	1.00 54.32	IS9	ATOM	7244	CB	VAL	52	237.349	171.269	-19.489	1.00 95.05	IS9
ATOM	7192	C	ALA	45	240.956	161.206	-13.754	1.00 77.59	IS9	ATOM	7245	CG1	VAL	52	236.738	172.631	-19.776	1.00 95.05	IS9
ATOM	7193	O	ALA	45	240.129	162.051	-13.413	1.00 77.59	IS9	ATOM	7246	CG2	VAL	52	236.286	170.284	-19.019	1.00 95.05	IS9
ATOM	7194	N	LEU	46	241.959	161.475	-14.578	1.00 76.58	IS9	ATOM	7247	C	VAL	52	239.403	171.416	-20.933	1.00119.85	IS9
ATOM	7195	CA	LEU	46	242.178	162.813	-15.116	1.00 76.58	IS9	ATOM	7248	O	VAL	52	239.469	172.638	-21.091	1.00119.85	IS9
ATOM	7196	CB	LEU	46	243.677	163.038	-15.322	1.00 84.49	IS9	ATOM	7249	N	ASP	53	240.473	170.619	-20.912	1.00104.90	IS9
ATOM	7197	CG	LEU	46	244.569	162.829	-14.097	1.00 84.49	IS9	ATOM	7250	CA	ASP	53	241.856	171.087	-21.072	1.00104.90	IS9
ATOM	7198	CD1	LEU	46	246.018	162.721	-14.532	1.00 84.49	IS9	ATOM	7251	CB	ASP	53	241.932	172.232	-22.087	1.00121.22	IS9
ATOM	7199	CD2	LEU	46	244.372	163.978	-13.124	1.00 84.49	IS9	ATOM	7252	CG	ASP	53	241.541	171.797	-23.483	1.00121.22	IS9
ATOM	7200	C	LEU	46	241.450	163.117	-16.419	1.00 76.58	IS9	ATOM	7253	OD1	ASP	53	242.176	170.861	-24.019	1.00121.22	IS9
ATOM	7201	O	LEU	46	241.518	164.240	-16.914	1.00 76.58	IS9	ATOM	7254	OD2	ASP	53	240.599	172.392	-24.047	1.00121.22	IS9
ATOM	7202	N	GLU	47	240.758	162.138	-16.989	1.00 94.11	IS9	ATOM	7255	C	ASP	53	242.519	171.520	-19.769	1.00104.90	IS9
ATOM	7203	CA	GLU	47	240.056	162.401	-18.235	1.00 94.11	IS9	ATOM	7256	O	ASP	53	242.714	172.707	-19.527	1.00104.90	IS9
ATOM	7204	CB	GLU	47	239.380	161.141	-18.768	1.00133.34	IS9	ATOM	7257	N	ALA	54	242.877	170.547	-18.939	1.00105.10	IS9
ATOM	7205	CG	GLU	47	238.597	161.402	-20.046	1.00133.34	IS9	ATOM	7258	CA	ALA	54	243.519	170.832	-17.666	1.00105.10	IS9
ATOM	7206	CD	GLU	47	238.768	160.311	-21.079	1.00133.34	IS9	ATOM	7259	CB	ALA	54	243.210	169.757	-16.677	1.00105.40	IS9
ATOM	7207	OE1	GLU	47	239.920	160.072	-21.502	1.00133.34	IS9	ATOM	7260	C	ALA	54	245.019	170.946	-17.835	1.00105.10	IS9
ATOM	7208	OE2	GLU	47	237.751	159.698	-21.473	1.00133.34	IS9	ATOM	7261	O	ALA	54	245.528	170.858	-18.952	1.00105.10	IS9
ATOM	7209	C	GLU	47	239.033	163.535	-18.128	1.00 94.11	IS9	ATOM	7262	N	LEU	55	245.713	171.117	-16.709	1.00138.65	IS9
ATOM	7210	O	GLU	47	238.764	164.214	-19.119	1.00 94.11	IS9	ATOM	7263	CA	LEU	55	247.168	171.280	-16.672	1.00138.65	IS9
ATOM	7211	N	PRO	48	238.436	163.755	-16.938	1.00 86.54	IS9	ATOM	7264	CB	LEU	55	247.865	170.193	-17.503	1.00155.78	IS9
ATOM	7212	CD	PRO	48	238.575	163.130	-15.611	1.00 68.81	IS9	ATOM	7265	CG	LEU	55	249.390	170.055	-17.373	1.00155.78	IS9
ATOM	7213	CA	PRO	48	237.471	164.858	-16.887	1.00 86.54	IS9	ATOM	7266	CD1	LEU	55	249.823	168.752	-18.021	1.00155.78	IS9
ATOM	7214	CB	PRO	48	236.948	164.796	-15.451	1.00 68.81	IS9	ATOM	7267	CD2	LEU	55	250.106	171.237	-18.017	1.00155.78	IS9
ATOM	7215	CG	PRO	48	238.106	164.233	-14.692	1.00 68.81	IS9	ATOM	7268	C	LEU	55	247.471	172.667	-17.230	1.00138.65	IS9
ATOM	7216	C	PRO	48	238.192	166.167	-17.199	1.00 86.54	IS9	ATOM	7269	O	LEU	55	248.091	173.497	-16.563	1.00138.65	IS9
ATOM	7217	O	PRO	48	237.596	167.122	-17.700	1.00 86.54	IS9	ATOM	7270	N	GLY	56	247.025	172.909	-18.461	1.00132.64	IS9
ATOM	7218	N	LEU	49	239.489	166.189	-16.906	1.00 75.72	IS9	ATOM	7271	CA	GLY	56	247.211	174.206	-19.078	1.00132.64	IS9
ATOM	7219	CA	LEU	49	240.324	167.356	-17.164	1.00 75.72	IS9	ATOM	7272	C	GLY	56	246.178	175.076	-18.399	1.00132.64	IS9
ATOM	7220	CB	LEU	49	241.686	167.191	-16.491	1.00 80.21	IS9	ATOM	7273	O	GLY	56	245.501	175.891	-19.029	1.00132.64	IS9
ATOM	7221	CG	LEU	49	241.698	167.236	-14.958	1.00 80.21	IS9	ATOM	7274	N	ARG	57	246.057	174.866	-17.091	1.00139.28	IS9
ATOM	7222	CD1	LEU	49	243.069	166.832	-14.433	1.00 80.21	IS9	ATOM	7275	CA	ARG	57	245.114	175.586	-16.254	1.00139.28	IS9
ATOM	7223	CD2	LEU	49	241.312	168.636	-14.480	1.00 80.21	IS9	ATOM	7276	CB	ARG	57	243.682	175.285	-16.692	1.00131.18	IS9
ATOM	7224	C	LEU	49	240.502	167.488	-18.666	1.00 75.72	IS9	ATOM	7277	CG	ARG	57	242.984	176.414	-17.401	1.00131.18	IS9
ATOM	7225	O	LEU	49	240.084	168.483	-19.259	1.00 75.72	IS9	ATOM	7278	CD	ARG	57	242.988	177.679	-16.570	1.00131.18	IS9
ATOM	7226	N	ARG	50	241.111	166.469	-19.274	1.00 74.21	IS9	ATOM	7279	NE	ARG	57	242.062	178.658	-17.122	1.00131.18	IS9

ATOM	7280	CZ	ARG	57	242.011	178.999	-18.407	1.00131.18	IS9	ATOM	7333	CG2	THR	63	242.888	162.513	1.853	1.00105.66	IS9
ATOM	7281	NH1	ARG	57	242.837	178.441	-19.283	1.00131.18	IS9	ATOM	7334	C	THR	63	242.488	161.784	-0.908	1.00 99.82	IS9
ATOM	7282	NH2	ARG	57	241.125	179.896	-18.820	1.00131.18	IS9	ATOM	7335	O	THR	63	241.342	162.064	-1.265	1.00 99.82	IS9
ATOM	7283	C	ARG	57	245.251	175.218	-14.779	1.00139.28	IS9	ATOM	7336	N	VAL	64	242.933	160.538	-0.802	1.00 91.95	IS9
ATOM	7284	O	ARG	57	245.433	176.095	-13.931	1.00139.28	IS9	ATOM	7337	CA	VAL	64	242.077	159.405	-1.117	1.00 91.95	IS9
ATOM	7285	N	PHE	58	245.171	173.923	-14.476	1.00 90.30	IS9	ATOM	7338	CB	VAL	64	242.472	158.798	-2.482	1.00 86.56	IS9
ATOM	7286	CA	PHE	58	245.233	173.478	-13.088	1.00 90.30	IS9	ATOM	7339	CG1	VAL	64	243.816	158.086	-2.378	1.00 86.56	IS9
ATOM	7287	CB	PHE	58	243.966	172.717	-12.716	1.00 85.33	IS9	ATOM	7340	CG2	VAL	64	241.390	157.870	-2.963	1.00 86.56	IS9
ATOM	7288	CG	PHE	58	242.724	173.509	-12.884	1.00 85.33	IS9	ATOM	7341	C	VAL	64	242.150	158.341	-0.024	1.00 91.95	IS9
ATOM	7289	CD1	PHE	58	242.164	173.681	-14.145	1.00 85.33	IS9	ATOM	7342	O	VAL	64	243.232	157.901	0.364	1.00 91.95	IS9
ATOM	7290	CD2	PHE	58	242.125	174.117	-11.788	1.00 85.33	IS9	ATOM	7343	N	ARG	65	240.987	157.943	0.477	1.00 78.40	IS9
ATOM	7291	CE1	PHE	58	241.023	174.450	-14.318	1.00 85.33	IS9	ATOM	7344	CA	ARG	65	240.905	156.940	1.533	1.00 78.40	IS9
ATOM	7292	CE2	PHE	58	240.983	174.890	-11.946	1.00 85.33	IS9	ATOM	7345	CB	ARG	65	240.814	157.627	2.893	1.00112.97	IS9
ATOM	7293	CZ	PHE	58	240.430	175.058	-13.217	1.00 85.33	IS9	ATOM	7346	CG	ARG	65	240.620	156.675	4.057	1.00112.97	IS9
ATOM	7294	C	PHE	58	246.395	172.637	-12.631	1.00 90.30	IS9	ATOM	7347	CD	ARG	65	239.843	157.354	5.173	1.00112.97	IS9
ATOM	7295	O	PHE	58	247.328	172.341	-13.368	1.00 90.30	IS9	ATOM	7348	NE	ARG	65	240.468	158.601	5.605	1.00112.97	IS9
ATOM	7296	N	ASP	59	246.278	172.256	-11.368	1.00 63.83	IS9	ATOM	7349	CZ	ARG	65	241.600	158.670	6.296	1.00112.97	IS9
ATOM	7297	CA	ASP	59	247.224	171.429	-10.645	1.00 63.83	IS9	ATOM	7350	NH1	ARG	65	242.241	157.561	6.643	1.00112.97	IS9
ATOM	7298	CB	ASP	59	248.197	172.321	-9.872	1.00137.12	IS9	ATOM	7351	NH2	ARG	65	242.097	159.851	6.633	1.00112.97	IS9
ATOM	7299	CG	ASP	59	249.387	171.561	-9.335	1.00137.12	IS9	ATOM	7352	C	ARG	65	239.685	156.040	1.349	1.00 78.40	IS9
ATOM	7300	OD1	ASP	59	249.187	170.621	-8.538	1.00137.12	IS9	ATOM	7353	O	ARG	65	238.585	156.520	1.056	1.00 78.40	IS9
ATOM	7301	OD2	ASP	59	250.526	171.909	-9.711	1.00137.12	IS9	ATOM	7354	N	GLY	66	239.882	154.734	1.512	1.00 87.78	IS9
ATOM	7302	C	ASP	59	246.242	170.744	-9.697	1.00 63.83	IS9	ATOM	7355	CA	GLY	66	238.773	153.804	1.385	1.00 87.78	IS9
ATOM	7303	O	ASP	59	245.102	171.202	-9.578	1.00 63.83	IS9	ATOM	7356	C	GLY	66	238.650	153.062	0.070	1.00 87.78	IS9
ATOM	7304	N	ALA	60	246.638	169.666	-9.026	1.00 75.54	IS9	ATOM	7357	O	GLY	66	238.761	153.645	-1.011	1.00 87.78	IS9
ATOM	7305	CA	ALA	60	245.684	169.006	-8.135	1.00 75.54	IS9	ATOM	7358	N	GLY	67	238.417	151.757	0.178	1.00 86.36	IS9
ATOM	7306	CB	ALA	60	244.811	168.043	-8.941	1.00 92.68	IS9	ATOM	7359	CA	GLY	67	238.255	150.916	-0.996	1.00 86.36	IS9
ATOM	7307	C	ALA	60	246.239	168.284	-6.916	1.00 75.54	IS9	ATOM	7360	C	GLY	67	239.498	150.276	-1.591	1.00 86.36	IS9
ATOM	7308	O	ALA	60	247.113	167.416	-7.022	1.00 75.54	IS9	ATOM	7361	O	GLY	67	240.275	149.595	-0.910	1.00 86.36	IS9
ATOM	7309	N	TYR	61	245.716	168.660	-5.753	1.00 77.52	IS9	ATOM	7362	N	GLY	68	239.658	150.482	-2.893	1.00 57.16	IS9
ATOM	7310	CA	TYR	61	246.106	168.038	-4.502	1.00 77.52	IS9	ATOM	7363	CA	GLY	68	240.792	149.939	-3.617	1.00 57.16	IS9
ATOM	7311	CB	TYR	61	246.249	169.065	-3.387	1.00 74.72	IS9	ATOM	7364	C	GLY	68	241.212	150.935	-4.683	1.00 57.16	IS9
ATOM	7312	CG	TYR	61	246.724	168.444	-2.099	1.00 74.72	IS9	ATOM	7365	O	GLY	68	240.386	151.693	-5.204	1.00 57.16	IS9
ATOM	7313	CD1	TYR	61	247.965	167.817	-2.031	1.00 74.72	IS9	ATOM	7366	N	LYS	69	242.494	150.929	-5.024	1.00 66.25	IS9
ATOM	7314	CE1	TYR	61	248.394	167.192	-0.858	1.00 74.72	IS9	ATOM	7367	CA	LYS	69	243.015	151.866	-6.005	1.00 66.25	IS9
ATOM	7315	CD2	TYR	61	245.916	168.439	-0.960	1.00 74.72	IS9	ATOM	7368	CB	LYS	69	244.471	151.518	-6.335	1.00 80.79	IS9
ATOM	7316	CE2	TYR	61	246.334	167.817	0.217	1.00 74.72	IS9	ATOM	7369	CG	LYS	69	245.353	151.501	-5.084	1.00 80.79	IS9
ATOM	7317	CZ	TYR	61	247.573	167.195	0.259	1.00 74.72	IS9	ATOM	7370	CD	LYS	69	246.818	151.751	-5.383	1.00 80.79	IS9
ATOM	7318	OH	TYR	61	248.000	166.564	1.402	1.00 74.72	IS9	ATOM	7371	CE	LYS	69	247.625	151.739	-4.091	1.00 80.79	IS9
ATOM	7319	C	TYR	61	244.947	167.118	-4.192	1.00 77.52	IS9	ATOM	7372	NZ	LYS	69	249.069	152.097	-4.264	1.00 80.79	IS9
ATOM	7320	O	TYR	61	243.797	167.559	-4.156	1.00 77.52	IS9	ATOM	7373	C	LYS	69	242.178	151.997	-7.268	1.00 66.25	IS9
ATOM	7321	N	ILE	62	245.244	165.844	-3.965	1.00 76.76	IS9	ATOM	7374	O	LYS	69	242.298	152.980	-7.987	1.00 66.25	IS9
ATOM	7322	CA	ILE	62	244.191	164.877	-3.711	1.00 76.76	IS9	ATOM	7375	N	SER	70	241.319	151.023	-7.532	1.00 65.17	IS9
ATOM	7323	CB	ILE	62	243.923	164.048	-4.986	1.00 71.44	IS9	ATOM	7376	CA	SER	70	240.461	151.094	-8.708	1.00 65.17	IS9
ATOM	7324	CG2	ILE	62	242.901	162.972	-4.689	1.00 71.44	IS9	ATOM	7377	CB	SER	70	239.918	149.715	-9.069	1.00 86.04	IS9
ATOM	7325	CG1	ILE	62	243.457	164.974	-6.122	1.00 71.44	IS9	ATOM	7378	OG	SER	70	238.826	149.834	-9.956	1.00 86.04	IS9
ATOM	7326	CD1	ILE	62	243.270	164.299	-7.469	1.00 71.44	IS9	ATOM	7379	C	SER	70	239.301	152.032	-8.413	1.00 65.17	IS9
ATOM	7327	C	ILE	62	244.434	163.917	-2.557	1.00 76.76	IS9	ATOM	7380	O	SER	70	239.031	152.966	-9.169	1.00 65.17	IS9
ATOM	7328	O	ILE	62	245.498	163.312	-2.442	1.00 76.76	IS9	ATOM	7381	N	GLY	71	238.617	151.777	-7.304	1.00 73.85	IS9
ATOM	7329	N	THR	63	243.425	163.791	-1.703	1.00 99.82	IS9	ATOM	7382	CA	GLY	71	237.497	152.617	-6.925	1.00 73.85	IS9
ATOM	7330	CA	THR	63	243.471	162.880	-0.567	1.00 99.82	IS9	ATOM	7383	C	GLY	71	237.947	154.039	-6.654	1.00 73.85	IS9
ATOM	7331	CB	THR	63	243.002	163.544	0.735	1.00105.66	IS9	ATOM	7384	O	GLY	71	237.208	155.001	-6.891	1.00 73.85	IS9
ATOM	7332	OG1	THR	63	243.939	164.555	1.116	1.00105.66	IS9	ATOM	7385	N	GLN	72	239.169	154.167	-6.146	1.00 62.41	IS9

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ATOM   7386  CA  GLN    72     239.719 155.469  -5.852  1.00 62.41      IS9
ATOM   7387  CB  GLN    72     241.032 155.330  -5.091  1.00 57.71      IS9
ATOM   7388  CG  GLN    72     240.866 154.520  -3.820  1.00 57.71      IS9
ATOM   7389  CD  GLN    72     242.124 154.467  -2.963  1.00 57.71      IS9
ATOM   7390  OE1 GLN    72     243.249 154.518  -3.473  1.00 57.71      IS9
ATOM   7391  NE2 GLN    72     241.936 154.343  -1.647  1.00 57.71      IS9
ATOM   7392  C   GLN    72     239.919 156.190  -7.168  1.00 62.41      IS9
ATOM   7393  O   GLN    72     239.651 157.383  -7.253  1.00 62.41      IS9
ATOM   7394  N   ILE    73     240.355 155.476  -8.205  1.00 64.85      IS9
ATOM   7395  CA  ILE    73     240.552 156.124  -9.500  1.00 64.85      IS9
ATOM   7396  CB  ILE    73     241.105 155.174 -10.593  1.00 52.08      IS9
ATOM   7397  CG2 ILE    73     241.388 155.969 -11.879  1.00 52.08      IS9
ATOM   7398  CG1 ILE    73     242.412 154.534 -10.135  1.00 52.08      IS9
ATOM   7399  CD1 ILE    73     243.007 153.577 -11.146  1.00 52.08      IS9
ATOM   7400  C   ILE    73     239.239 156.688 -10.023  1.00 64.85      IS9
ATOM   7401  O   ILE    73     239.249 157.637 -10.805  1.00 64.85      IS9
ATOM   7402  N   ASP    74     238.112 156.108  -9.611  1.00 66.62      IS9
ATOM   7403  CA  ASP    74     236.811 156.604 -10.066  1.00 66.62      IS9
ATOM   7404  CB  ASP    74     235.797 155.465 -10.152  1.00151.75      IS9
ATOM   7405  CG  ASP    74     236.047 154.558 -11.337  1.00151.75      IS9
ATOM   7406  OD1 ASP    74     236.181 155.082 -12.464  1.00151.75      IS9
ATOM   7407  OD2 ASP    74     236.104 153.326 -11.148  1.00151.75      IS9
ATOM   7408  C   ASP    74     236.272 157.720  -9.170  1.00 66.62      IS9
ATOM   7409  O   ASP    74     235.555 158.612  -9.633  1.00 66.62      IS9
ATOM   7410  N   ALA    75     236.622 157.665  -7.889  1.00 78.45      IS9
ATOM   7411  CA  ALA    75     236.201 158.681  -6.932  1.00 78.45      IS9
ATOM   7412  CB  ALA    75     236.577 158.242  -5.524  1.00 33.17      IS9
ATOM   7413  C   ALA    75     236.945 159.959  -7.305  1.00 78.45      IS9
ATOM   7414  O   ALA    75     236.358 161.042  -7.431  1.00 78.45      IS9
ATOM   7415  N   ILE    76     238.253 159.801  -7.481  1.00 59.58      IS9
ATOM   7416  CA  ILE    76     239.141 160.883  -7.864  1.00 59.58      IS9
ATOM   7417  CB  ILE    76     240.600 160.363  -7.941  1.00 54.45      IS9
ATOM   7418  CG2 ILE    76     241.432 161.228  -8.870  1.00 54.45      IS9
ATOM   7419  CG1 ILE    76     241.179 160.282  -6.522  1.00 54.45      IS9
ATOM   7420  CD1 ILE    76     242.565 159.674  -6.431  1.00 54.45      IS9
ATOM   7421  C   ILE    76     238.693 161.449  -9.211  1.00 59.58      IS9
ATOM   7422  O   ILE    76     238.735 162.657  -9.434  1.00 59.58      IS9
ATOM   7423  N   LYS    77     238.250 160.573 -10.105  1.00 65.00      IS9
ATOM   7424  CA  LYS    77     237.785 161.005 -11.415  1.00 65.00      IS9
ATOM   7425  CB  LYS    77     237.456 159.789 -12.280  1.00 82.82      IS9
ATOM   7426  CG  LYS    77     237.196 160.105 -13.745  1.00 82.82      IS9
ATOM   7427  CD  LYS    77     235.771 159.746 -14.167  1.00 82.82      IS9
ATOM   7428  CE  LYS    77     235.418 158.285 -13.863  1.00 82.82      IS9
ATOM   7429  NZ  LYS    77     236.302 157.281 -14.535  1.00 82.82      IS9
ATOM   7430  C   LYS    77     236.543 161.883 -11.252  1.00 65.00      IS9
ATOM   7431  O   LYS    77     236.325 162.811 -12.038  1.00 65.00      IS9
ATOM   7432  N   LEU    78     235.738 161.595 -10.228  1.00 76.35      IS9
ATOM   7433  CA  LEU    78     234.522 162.367  -9.974  1.00 76.35      IS9
ATOM   7434  CB  LEU    78     233.559 161.610  -9.051  1.00 52.76      IS9
ATOM   7435  CG  LEU    78     232.034 161.854  -9.154  1.00 52.76      IS9
ATOM   7436  CD1 LEU    78     231.457 161.833  -7.757  1.00 52.76      IS9
ATOM   7437  CD2 LEU    78     231.698 163.172  -9.848  1.00 52.76      IS9
ATOM   7438  C   LEU    78     234.883 163.687  -9.315  1.00 76.35      IS9
ATOM   7439  O   LEU    78     234.336 164.734  -9.672  1.00 76.35      IS9
ATOM   7440  N   GLY    79     235.787 163.633  -8.339  1.00 82.90      IS9
ATOM   7441  CA  GLY    79     236.197 164.854  -7.669  1.00 82.90      IS9
ATOM   7442  C   GLY    79     236.652 165.872  -8.700  1.00 82.90      IS9
ATOM   7443  O   GLY    79     236.067 166.951  -8.830  1.00 82.90      IS9
ATOM   7444  N   ILE    80     237.696 165.506  -9.442  1.00 62.07      IS9
ATOM   7445  CA  ILE    80     238.268 166.335 -10.494  1.00 62.07      IS9
ATOM   7446  CB  ILE    80     239.315 165.527 -11.295  1.00 63.89      IS9
ATOM   7447  CG2 ILE    80     239.765 166.300 -12.523  1.00 63.89      IS9
ATOM   7448  CG1 ILE    80     240.497 165.183 -10.379  1.00 63.89      IS9
ATOM   7449  CD1 ILE    80     241.604 164.385 -11.048  1.00 63.89      IS9
ATOM   7450  C   ILE    80     237.194 166.849 -11.449  1.00 62.07      IS9
ATOM   7451  O   ILE    80     237.370 167.879 -12.104  1.00 62.07      IS9
ATOM   7452  N   ALA    81     236.079 166.129 -11.523  1.00 90.31      IS9
ATOM   7453  CA  ALA    81     234.977 166.509 -12.399  1.00 90.31      IS9
ATOM   7454  CB  ALA    81     234.205 165.265 -12.828  1.00117.52      IS9
ATOM   7455  C   ALA    81     234.042 167.505 -11.719  1.00 90.31      IS9
ATOM   7456  O   ALA    81     233.496 168.393 -12.373  1.00 90.31      IS9
ATOM   7457  N   ARG    82     233.855 167.347 -10.409  1.00 80.99      IS9
ATOM   7458  CA  ARG    82     232.997 168.241  -9.635  1.00 80.99      IS9
ATOM   7459  CB  ARG    82     232.711 167.657  -8.253  1.00 78.75      IS9
ATOM   7460  CG  ARG    82     231.568 166.657  -8.201  1.00 78.75      IS9
ATOM   7461  CD  ARG    82     231.459 166.040  -6.804  1.00 78.75      IS9
ATOM   7462  NE  ARG    82     230.188 165.349  -6.586  1.00 78.75      IS9
ATOM   7463  CZ  ARG    82     229.837 164.781  -5.436  1.00 78.75      IS9
ATOM   7464  NH1 ARG    82     230.669 164.822  -4.402  1.00 78.75      IS9
ATOM   7465  NH2 ARG    82     228.652 164.190  -5.314  1.00 78.75      IS9
ATOM   7466  C   ARG    82     233.685 169.586  -9.468  1.00 80.99      IS9
ATOM   7467  O   ARG    82     233.122 170.629  -9.804  1.00 80.99      IS9
ATOM   7468  N   ALA    83     234.905 169.558  -8.940  1.00 79.75      IS9
ATOM   7469  CA  ALA    83     235.667 170.779  -8.743  1.00 79.75      IS9
ATOM   7470  CB  ALA    83     237.077 170.455  -8.306  1.00 56.55      IS9
ATOM   7471  C   ALA    83     235.698 171.580 -10.032  1.00 79.75      IS9
ATOM   7472  O   ALA    83     235.386 172.767 -10.037  1.00 79.75      IS9
ATOM   7473  N   LEU    84     236.066 170.926 -11.127  1.00 72.84      IS9
ATOM   7474  CA  LEU    84     236.139 171.584 -12.428  1.00 72.84      IS9
ATOM   7475  CB  LEU    84     236.406 170.539 -13.518  1.00101.11      IS9
ATOM   7476  CG  LEU    84     237.441 170.899 -14.584  1.00101.11      IS9
ATOM   7477  CD1 LEU    84     238.788 171.075 -13.915  1.00101.11      IS9
ATOM   7478  CD2 LEU    84     237.523 169.807 -15.634  1.00101.11      IS9
ATOM   7479  C   LEU    84     234.856 172.367 -12.760  1.00 72.84      IS9
ATOM   7480  O   LEU    84     234.811 173.102 -13.755  1.00 72.84      IS9
ATOM   7481  N   VAL    85     233.823 172.202 -11.930  1.00106.07      IS9
ATOM   7482  CA  VAL    85     232.539 172.885 -12.120  1.00106.07      IS9
ATOM   7483  CB  VAL    85     231.348 171.944 -11.815  1.00 63.22      IS9
ATOM   7484  CG1 VAL    85     230.038 172.696 -11.965  1.00 63.22      IS9
ATOM   7485  CG2 VAL    85     231.369 170.766 -12.763  1.00 63.22      IS9
ATOM   7486  C   VAL    85     232.414 174.139 -11.248  1.00106.07      IS9
ATOM   7487  O   VAL    85     231.736 175.101 -11.624  1.00106.07      IS9
ATOM   7488  N   GLN    86     233.054 174.117 -10.080  1.00114.56      IS9
ATOM   7489  CA  GLN    86     233.035 175.267  -9.181  1.00114.56      IS9
ATOM   7490  CB  GLN    86     233.609 174.909  -7.814  1.00104.72      IS9
ATOM   7491  CG  GLN    86     232.692 174.084  -6.946  1.00104.72      IS9
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ATOM	7492	CD	GLN	86	233.180	174.023	-5.513	1.00104.72	IS9	ATOM	7545	CA	ARG	92	227.537	171.393	-19.742	1.00 67.36	IS9
ATOM	7493	OE1	GLN	86	234.319	173.635	-5.251	1.00104.72	IS9	ATOM	7546	CB	ARG	92	227.152	172.738	-20.356	1.00166.71	IS9
ATOM	7494	NE2	GLN	86	232.321	174.409	-4.574	1.00104.72	IS9	ATOM	7547	CG	ARG	92	226.502	173.706	-19.394	1.00166.71	IS9
ATOM	7495	C	GLN	86	233.893	176.351	-9.806	1.00114.56	IS9	ATOM	7548	CD	ARG	92	226.473	175.098	-19.991	1.00166.71	IS9
ATOM	7496	O	GLN	86	233.606	177.539	-9.689	1.00114.56	IS9	ATOM	7549	NE	ARG	92	225.768	176.042	-19.133	1.00166.71	IS9
ATOM	7497	N	TYR	87	234.963	175.926	-10.461	1.00100.55	IS9	ATOM	7550	CZ	ARG	92	225.710	177.349	-19.358	1.00166.71	IS9
ATOM	7498	CA	TYR	87	235.849	176.857	-11.126	1.00100.55	IS9	ATOM	7551	NH1	ARG	92	226.320	177.866	-20.417	1.00166.71	IS9
ATOM	7499	CB	TYR	87	237.012	176.118	-11.772	1.00112.52	IS9	ATOM	7552	NH2	ARG	92	225.038	178.139	-18.530	1.00166.71	IS9
ATOM	7500	CG	TYR	87	237.902	177.024	-12.578	1.00112.52	IS9	ATOM	7553	C	ARG	92	228.327	170.587	-20.766	1.00 67.36	IS9
ATOM	7501	CD1	TYR	87	238.800	177.881	-11.953	1.00112.52	IS9	ATOM	7554	O	ARG	92	227.872	170.388	-21.890	1.00 67.36	IS9
ATOM	7502	CE1	TYR	87	239.605	178.736	-12.684	1.00112.52	IS9	ATOM	7555	N	ALA	93	229.523	170.155	-20.363	1.00107.24	IS9
ATOM	7503	CD2	TYR	87	237.827	177.044	-13.967	1.00112.52	IS9	ATOM	7556	CA	ALA	93	230.429	169.368	-21.199	1.00107.24	IS9
ATOM	7504	CE2	TYR	87	238.626	177.897	-14.714	1.00112.52	IS9	ATOM	7557	CB	ALA	93	231.720	170.147	-21.447	1.00 65.81	IS9
ATOM	7505	CZ	TYR	87	239.515	178.741	-14.066	1.00112.52	IS9	ATOM	7558	C	ALA	93	230.746	168.052	-20.497	1.00107.24	IS9
ATOM	7506	OH	TYR	87	240.318	179.585	-14.802	1.00112.52	IS9	ATOM	7559	O	ALA	93	231.127	167.070	-21.133	1.00107.24	IS9
ATOM	7507	C	TYR	87	235.056	177.570	-12.199	1.00100.55	IS9	ATOM	7560	N	LYS	94	230.586	168.048	-19.179	1.00106.02	IS9
ATOM	7508	O	TYR	87	235.321	178.721	-12.518	1.00100.55	IS9	ATOM	7561	CA	LYS	94	230.841	166.867	-18.366	1.00106.02	IS9
ATOM	7509	N	ASN	88	234.080	176.868	-12.755	1.00 86.85	IS9	ATOM	7562	CB	LYS	94	231.194	167.291	-16.944	1.00127.50	IS9
ATOM	7510	CA	ASN	88	233.233	177.422	-13.797	1.00 86.85	IS9	ATOM	7563	CG	LYS	94	232.169	168.442	-16.899	1.00127.50	IS9
ATOM	7511	CB	ASN	88	234.076	177.851	-15.005	1.00 85.08	IS9	ATOM	7564	CD	LYS	94	233.468	168.067	-17.569	1.00127.50	IS9
ATOM	7512	CG	ASN	88	233.246	178.020	-16.280	1.00 85.08	IS9	ATOM	7565	CE	LYS	94	234.574	167.948	-16.541	1.00127.50	IS9
ATOM	7513	OD1	ASN	88	232.106	178.492	-16.245	1.00 85.08	IS9	ATOM	7566	NZ	LYS	94	234.172	167.088	-15.391	1.00127.50	IS9
ATOM	7514	ND2	ASN	88	233.828	177.645	-17.415	1.00 85.08	IS9	ATOM	7567	C	LYS	94	229.605	165.971	-18.349	1.00106.02	IS9
ATOM	7515	C	ASN	88	232.214	176.387	-14.228	1.00 86.85	IS9	ATOM	7568	O	LYS	94	229.546	164.976	-19.069	1.00106.02	IS9
ATOM	7516	O	ASN	88	232.551	175.220	-14.434	1.00 86.85	IS9	ATOM	7569	N	LEU	95	228.616	166.330	-17.532	1.00144.41	IS9
ATOM	7517	N	PRO	89	230.942	176.790	-14.342	1.00 95.80	IS9	ATOM	7570	CA	LEU	95	227.384	165.551	-17.431	1.00144.41	IS9
ATOM	7518	CD	PRO	89	230.305	177.968	-13.726	1.00 59.14	IS9	ATOM	7571	CB	LEU	95	226.333	166.301	-16.602	1.00153.31	IS9
ATOM	7519	CA	PRO	89	229.936	175.816	-14.764	1.00 95.80	IS9	ATOM	7572	CG	LEU	95	224.969	165.645	-16.317	1.00153.31	IS9
ATOM	7520	CB	PRO	89	228.624	176.530	-14.467	1.00 59.14	IS9	ATOM	7573	CD1	LEU	95	224.046	165.765	-17.524	1.00153.31	IS9
ATOM	7521	CG	PRO	89	228.979	177.411	-13.295	1.00 59.14	IS9	ATOM	7574	CD2	LEU	95	225.177	164.189	-15.914	1.00153.31	IS9
ATOM	7522	C	PRO	89	230.084	175.439	-16.245	1.00 95.80	IS9	ATOM	7575	C	LEU	95	226.833	165.253	-18.817	1.00144.41	IS9
ATOM	7523	O	PRO	89	229.305	175.871	-17.099	1.00 95.80	IS9	ATOM	7576	O	LEU	95	226.067	164.308	-18.995	1.00144.41	IS9
ATOM	7524	N	ASP	90	231.116	174.657	-16.546	1.00150.32	IS9	ATOM	7577	N	LYS	96	227.222	166.063	-19.798	1.00 71.30	IS9
ATOM	7525	CA	ASP	90	231.337	174.184	-17.906	1.00150.32	IS9	ATOM	7578	CA	LYS	96	226.781	165.857	-21.174	1.00 71.30	IS9
ATOM	7526	CB	ASP	90	232.801	174.392	-18.361	1.00 99.71	IS9	ATOM	7579	CB	LYS	96	227.389	166.935	-22.075	1.00101.14	IS9
ATOM	7527	CG	ASP	90	233.837	173.971	-17.314	1.00 99.71	IS9	ATOM	7580	CG	LYS	96	226.464	168.122	-22.347	1.00101.14	IS9
ATOM	7528	OD1	ASP	90	233.463	173.376	-16.278	1.00 99.71	IS9	ATOM	7581	CD	LYS	96	225.524	167.871	-23.524	1.00101.14	IS9
ATOM	7529	OD2	ASP	90	235.041	174.238	-17.544	1.00 99.71	IS9	ATOM	7582	CE	LYS	96	224.778	169.138	-23.917	1.00101.14	IS9
ATOM	7530	C	ASP	90	230.968	172.707	-17.912	1.00150.32	IS9	ATOM	7583	NZ	LYS	96	224.044	168.969	-25.198	1.00101.14	IS9
ATOM	7531	O	ASP	90	231.335	171.956	-18.818	1.00150.32	IS9	ATOM	7584	C	LYS	96	227.244	164.458	-21.584	1.00 71.30	IS9
ATOM	7532	N	TYR	91	230.223	172.309	-16.881	1.00101.57	IS9	ATOM	7585	O	LYS	96	227.814	163.744	-20.762	1.00 71.30	IS9
ATOM	7533	CA	TYR	91	229.776	170.934	-16.727	1.00101.57	IS9	ATOM	7586	N	PRO	97	227.005	164.043	-22.846	1.00201.09	IS9
ATOM	7534	CB	TYR	91	229.089	170.730	-15.367	1.00140.05	IS9	ATOM	7587	CD	PRO	97	226.602	164.872	-24.002	1.00156.48	IS9
ATOM	7535	CG	TYR	91	227.688	171.302	-15.221	1.00140.05	IS9	ATOM	7588	CA	PRO	97	227.414	162.713	-23.309	1.00201.09	IS9
ATOM	7536	CD1	TYR	91	226.682	171.001	-16.144	1.00140.05	IS9	ATOM	7589	CB	PRO	97	227.949	163.008	-24.701	1.00156.48	IS9
ATOM	7537	CE1	TYR	91	225.390	171.472	-15.984	1.00140.05	IS9	ATOM	7590	CG	PRO	97	226.909	163.972	-25.208	1.00156.48	IS9
ATOM	7538	CD2	TYR	91	227.354	172.097	-14.125	1.00140.05	IS9	ATOM	7591	C	PRO	97	228.398	161.924	-22.434	1.00201.09	IS9
ATOM	7539	CE2	TYR	91	226.058	172.572	-13.953	1.00140.05	IS9	ATOM	7592	O	PRO	97	228.281	160.704	-22.316	1.00201.09	IS9
ATOM	7540	CZ	TYR	91	225.083	172.255	-14.887	1.00140.05	IS9	ATOM	7593	N	LEU	98	229.358	162.613	-21.824	1.00 80.51	IS9
ATOM	7541	OH	TYR	91	223.800	172.721	-14.732	1.00140.05	IS9	ATOM	7594	CA	LEU	98	230.342	161.962	-20.957	1.00 80.51	IS9
ATOM	7542	C	TYR	91	228.827	170.578	-17.855	1.00101.57	IS9	ATOM	7595	CB	LEU	98	231.499	162.919	-20.658	1.00 85.03	IS9
ATOM	7543	O	TYR	91	228.451	169.420	-18.030	1.00101.57	IS9	ATOM	7596	CG	LEU	98	232.435	163.315	-21.801	1.00 85.03	IS9
ATOM	7544	N	ARG	92	228.420	171.593	-18.604	1.00 67.36	IS9	ATOM	7597	CD1	LEU	98	233.075	162.056	-22.375	1.00 85.03	IS9

ATOM	7598	CD2	LEU	98	231.665	164.087	-22.870	1.00	85.03	IS9	ATOM	7651	CA	ALA	105	225.980	153.542	-7.477	1.00	58.20	IS9
ATOM	7599	C	LEU	98	229.724	161.495	-19.640	1.00	80.51	IS9	ATOM	7652	CB	ALA	105	224.510	153.920	-7.391	1.00	44.61	IS9
ATOM	7600	O	LEU	98	229.805	160.321	-19.285	1.00	80.51	IS9	ATOM	7653	C	ALA	105	226.149	152.022	-7.295	1.00	58.20	IS9
ATOM	7601	N	GLY	99	229.127	162.431	-18.912	1.00	79.51	IS9	ATOM	7654	O	ALA	105	225.574	151.425	-6.377	1.00	58.20	IS9
ATOM	7602	CA	GLY	99	228.493	162.106	-17.648	1.00	79.51	IS9	ATOM	7655	N	ARG	106	226.951	151.408	-8.160	1.00	53.07	IS9
ATOM	7603	C	GLY	99	229.424	161.725	-16.516	1.00	79.51	IS9	ATOM	7656	CA	ARG	106	227.199	149.978	-8.097	1.00	53.07	IS9
ATOM	7604	O	GLY	99	229.206	160.711	-15.863	1.00	79.51	IS9	ATOM	7657	CB	ARG	106	227.851	149.528	-9.403	1.00	66.94	IS9
ATOM	7605	N	PHE	100	230.460	162.525	-16.278	1.00	98.47	IS9	ATOM	7658	CG	ARG	106	227.028	149.964	-10.607	1.00	66.94	IS9
ATOM	7606	CA	PHE	100	231.389	162.245	-15.184	1.00	98.47	IS9	ATOM	7659	CD	ARG	106	227.487	149.352	-11.905	1.00	66.94	IS9
ATOM	7607	CB	PHE	100	232.731	162.957	-15.387	1.00	100.25	IS9	ATOM	7660	NE	ARG	106	228.821	149.790	-12.292	1.00	66.94	IS9
ATOM	7608	CG	PHE	100	233.503	162.497	-16.588	1.00	100.25	IS9	ATOM	7661	CZ	ARG	106	229.836	148.961	-12.499	1.00	66.94	IS9
ATOM	7609	CD1	PHE	100	233.350	163.129	-17.816	1.00	100.25	IS9	ATOM	7662	NH1	ARG	106	229.656	147.655	-12.350	1.00	66.94	IS9
ATOM	7610	CD2	PHE	100	234.420	161.460	-16.478	1.00	100.25	IS9	ATOM	7663	NH2	ARG	106	231.022	149.434	-12.858	1.00	66.94	IS9
ATOM	7611	CE1	PHE	100	234.105	162.737	-18.917	1.00	100.25	IS9	ATOM	7664	C	ARG	106	228.070	149.658	-6.892	1.00	53.07	IS9
ATOM	7612	CE2	PHE	100	235.178	161.059	-17.573	1.00	100.25	IS9	ATOM	7665	O	ARG	106	229.180	150.162	-6.767	1.00	53.07	IS9
ATOM	7613	CZ	PHE	100	235.020	161.702	-18.798	1.00	100.25	IS9	ATOM	7666	N	VAL	107	227.546	148.818	-6.004	1.00	45.54	IS9
ATOM	7614	C	PHE	100	230.781	162.745	-13.877	1.00	98.47	IS9	ATOM	7667	CA	VAL	107	228.222	148.426	-4.765	1.00	45.54	IS9
ATOM	7615	O	PHE	100	231.281	162.445	-12.789	1.00	98.47	IS9	ATOM	7668	CB	VAL	107	227.543	149.116	-3.549	1.00	48.52	IS9
ATOM	7616	N	LEU	101	229.707	163.522	-14.001	1.00	105.79	IS9	ATOM	7669	CG1	VAL	107	228.384	148.952	-2.289	1.00	48.52	IS9
ATOM	7617	CA	LEU	101	229.023	164.089	-12.844	1.00	105.79	IS9	ATOM	7670	CG2	VAL	107	227.314	150.572	-3.855	1.00	48.52	IS9
ATOM	7618	CB	LEU	101	228.415	165.444	-13.201	1.00	87.47	IS9	ATOM	7671	C	VAL	107	228.129	146.912	-4.555	1.00	45.54	IS9
ATOM	7619	CG	LEU	101	229.396	166.553	-13.591	1.00	87.47	IS9	ATOM	7672	O	VAL	107	227.277	146.257	-5.144	1.00	45.54	IS9
ATOM	7620	CD1	LEU	101	228.593	167.750	-14.059	1.00	87.47	IS9	ATOM	7673	N	VAL	108	228.996	146.355	-3.716	1.00	57.57	IS9
ATOM	7621	CD2	LEU	101	230.307	166.922	-12.418	1.00	87.47	IS9	ATOM	7674	CA	VAL	108	228.955	144.922	-3.440	1.00	57.57	IS9
ATOM	7622	C	LEU	101	227.934	163.168	-12.329	1.00	105.79	IS9	ATOM	7675	CB	VAL	108	229.903	144.528	-2.283	1.00	37.50	IS9
ATOM	7623	O	LEU	101	226.872	163.617	-11.912	1.00	105.79	IS9	ATOM	7676	CG1	VAL	108	229.818	143.035	-2.011	1.00	37.50	IS9
ATOM	7624	N	THR	102	228.217	161.874	-12.360	1.00	75.03	IS9	ATOM	7677	CG2	VAL	108	231.316	144.917	-2.615	1.00	37.50	IS9
ATOM	7625	CA	THR	102	227.286	160.856	-11.899	1.00	75.03	IS9	ATOM	7678	C	VAL	108	227.540	144.564	-3.006	1.00	57.57	IS9
ATOM	7626	CB	THR	102	226.872	159.939	-13.055	1.00	82.86	IS9	ATOM	7679	O	VAL	108	226.896	145.336	-2.279	1.00	57.57	IS9
ATOM	7627	OG1	THR	102	226.383	160.727	-14.149	1.00	82.86	IS9	ATOM	7680	N	GLU	109	227.062	143.399	-3.451	1.00	49.29	IS9
ATOM	7628	CG2	THR	102	225.801	158.976	-12.596	1.00	82.86	IS9	ATOM	7681	CA	GLU	109	225.728	142.926	-3.096	1.00	49.29	IS9
ATOM	7629	C	THR	102	228.026	160.017	-10.871	1.00	75.03	IS9	ATOM	7682	CB	GLU	109	225.096	142.149	-4.247	1.00	82.85	IS9
ATOM	7630	O	THR	102	229.242	159.855	-10.969	1.00	75.03	IS9	ATOM	7683	CG	GLU	109	223.721	141.605	-3.920	1.00	82.85	IS9
ATOM	7631	N	ARG	103	227.324	159.490	-9.876	1.00	88.53	IS9	ATOM	7684	CD	GLU	109	223.007	141.071	-5.142	1.00	82.85	IS9
ATOM	7632	CA	ARG	103	228.016	158.663	-8.902	1.00	88.53	IS9	ATOM	7685	OE1	GLU	109	222.798	141.856	-6.092	1.00	82.85	IS9
ATOM	7633	CB	ARG	103	227.697	159.082	-7.468	1.00	69.75	IS9	ATOM	7686	OE2	GLU	109	222.655	139.873	-5.155	1.00	82.85	IS9
ATOM	7634	CG	ARG	103	228.755	158.587	-6.483	1.00	69.75	IS9	ATOM	7687	C	GLU	109	225.795	142.042	-1.862	1.00	49.29	IS9
ATOM	7635	CD	ARG	103	228.220	157.613	-5.449	1.00	69.75	IS9	ATOM	7688	O	GLU	109	226.657	141.173	-1.741	1.00	49.29	IS9
ATOM	7636	NE	ARG	103	229.185	156.559	-5.135	1.00	69.75	IS9	ATOM	7689	N	ARG	110	224.874	142.291	-0.943	1.00	61.74	IS9
ATOM	7637	CZ	ARG	103	229.192	155.855	-4.004	1.00	69.75	IS9	ATOM	7690	CA	ARG	110	224.806	141.554	0.303	1.00	61.74	IS9
ATOM	7638	NH1	ARG	103	228.289	156.095	-3.062	1.00	69.75	IS9	ATOM	7691	CB	ARG	110	223.519	141.924	1.041	1.00	83.27	IS9
ATOM	7639	NH2	ARG	103	230.090	154.892	-3.813	1.00	69.75	IS9	ATOM	7692	CG	ARG	110	223.388	141.330	2.423	1.00	83.27	IS9
ATOM	7640	C	ARG	103	227.648	157.203	-9.101	1.00	88.53	IS9	ATOM	7693	CD	ARG	110	222.881	139.911	2.367	1.00	83.27	IS9
ATOM	7641	O	ARG	103	226.613	156.741	-8.617	1.00	88.53	IS9	ATOM	7694	NE	ARG	110	222.017	139.623	3.501	1.00	83.27	IS9
ATOM	7642	N	ASP	104	228.498	156.489	-9.833	1.00	74.36	IS9	ATOM	7695	CZ	ARG	110	221.000	140.398	3.864	1.00	83.27	IS9
ATOM	7643	CA	ASP	104	228.286	155.078	-10.099	1.00	74.36	IS9	ATOM	7696	NH1	ARG	110	220.727	141.507	3.184	1.00	83.27	IS9
ATOM	7644	CB	ASP	104	229.592	154.463	-10.605	1.00	104.30	IS9	ATOM	7697	NH2	ARG	110	220.253	140.065	4.906	1.00	83.27	IS9
ATOM	7645	CG	ASP	104	229.422	153.043	-11.089	1.00	104.30	IS9	ATOM	7698	C	ARG	110	224.865	140.061	0.051	1.00	61.74	IS9
ATOM	7646	OD1	ASP	104	229.249	152.144	-10.240	1.00	104.30	IS9	ATOM	7699	O	ARG	110	224.414	139.581	-0.979	1.00	61.74	IS9
ATOM	7647	OD2	ASP	104	229.461	152.830	-12.320	1.00	104.30	IS9	ATOM	7700	N	LYS	111	225.440	139.340	1.000	1.00	53.99	IS9
ATOM	7648	C	ASP	104	227.842	154.440	-8.782	1.00	74.36	IS9	ATOM	7701	CA	LYS	111	225.565	137.899	0.911	1.00	53.99	IS9
ATOM	7649	O	ASP	104	228.648	154.253	-7.864	1.00	74.36	IS9	ATOM	7702	CB	LYS	111	226.842	137.463	1.630	1.00	47.40	IS9
ATOM	7650	N	ALA	105	226.551	154.122	-8.693	1.00	58.20	IS9	ATOM	7703	CG	LYS	111	227.229	136.004	1.473	1.00	47.40	IS9

ATOM	7704	CD	LYS	111	226.360	135.096	2.297	1.00	47.40	IS9
ATOM	7705	CE	LYS	111	226.837	133.650	2.231	1.00	47.40	IS9
ATOM	7706	NZ	LYS	111	225.984	132.730	3.044	1.00	47.40	IS9
ATOM	7707	C	LYS	111	224.342	137.312	1.599	1.00	53.99	IS9
ATOM	7708	O	LYS	111	224.261	137.321	2.824	1.00	53.99	IS9
ATOM	7709	N	LYS	112	223.383	136.822	0.819	1.00	38.48	IS9
ATOM	7710	CA	LYS	112	222.168	136.240	1.385	1.00	38.48	IS9
ATOM	7711	CB	LYS	112	221.058	136.212	0.348	1.00	41.53	IS9
ATOM	7712	CG	LYS	112	220.551	137.571	-0.043	1.00	41.53	IS9
ATOM	7713	CD	LYS	112	221.534	138.283	-0.906	1.00	41.53	IS9
ATOM	7714	CE	LYS	112	220.851	139.379	-1.690	1.00	41.53	IS9
ATOM	7715	NZ	LYS	112	221.684	139.695	-2.887	1.00	41.53	IS9
ATOM	7716	C	LYS	112	222.378	134.828	1.916	1.00	38.48	IS9
ATOM	7717	O	LYS	112	223.195	134.079	1.399	1.00	38.48	IS9
ATOM	7718	N	TYR	113	221.632	134.455	2.949	1.00	59.54	IS9
ATOM	7719	CA	TYR	113	221.795	133.126	3.515	1.00	59.54	IS9
ATOM	7720	CB	TYR	113	221.124	133.038	4.891	1.00	78.19	IS9
ATOM	7721	CG	TYR	113	219.643	133.306	4.903	1.00	78.19	IS9
ATOM	7722	CD1	TYR	113	218.732	132.299	4.607	1.00	78.19	IS9
ATOM	7723	CE1	TYR	113	217.359	132.535	4.641	1.00	78.19	IS9
ATOM	7724	CD2	TYR	113	219.148	134.564	5.231	1.00	78.19	IS9
ATOM	7725	CE2	TYR	113	217.779	134.812	5.268	1.00	78.19	IS9
ATOM	7726	CZ	TYR	113	216.889	133.793	4.973	1.00	78.19	IS9
ATOM	7727	OH	TYR	113	215.532	134.023	5.007	1.00	78.19	IS9
ATOM	7728	C	TYR	113	221.240	132.096	2.559	1.00	59.54	IS9
ATOM	7729	O	TYR	113	220.523	132.443	1.626	1.00	59.54	IS9
ATOM	7730	N	GLY	114	221.601	130.836	2.780	1.00	50.71	IS9
ATOM	7731	CA	GLY	114	221.141	129.758	1.919	1.00	50.71	IS9
ATOM	7732	C	GLY	114	221.921	129.671	0.620	1.00	50.71	IS9
ATOM	7733	O	GLY	114	221.980	128.626	-0.014	1.00	50.71	IS9
ATOM	7734	N	LYS	115	222.520	130.784	0.220	1.00	59.05	IS9
ATOM	7735	CA	LYS	115	223.298	130.833	-1.001	1.00	59.05	IS9
ATOM	7736	CB	LYS	115	222.708	131.878	-1.928	1.00	39.95	IS9
ATOM	7737	CG	LYS	115	221.304	131.491	-2.317	1.00	39.95	IS9
ATOM	7738	CD	LYS	115	220.831	132.308	-3.480	1.00	39.95	IS9
ATOM	7739	CE	LYS	115	219.919	131.499	-4.393	1.00	39.95	IS9
ATOM	7740	NZ	LYS	115	219.996	132.034	-5.806	1.00	39.95	IS9
ATOM	7741	C	LYS	115	224.763	131.111	-0.709	1.00	59.05	IS9
ATOM	7742	O	LYS	115	225.102	131.766	0.275	1.00	59.05	IS9
ATOM	7743	N	HIS	116	225.632	130.595	-1.568	1.00	47.05	IS9
ATOM	7744	CA	HIS	116	227.068	130.748	-1.400	1.00	47.05	IS9
ATOM	7745	CB	HIS	116	227.793	129.885	-2.411	1.00	57.45	IS9
ATOM	7746	CG	HIS	116	227.832	128.444	-2.038	1.00	57.45	IS9
ATOM	7747	CD2	HIS	116	227.403	127.340	-2.693	1.00	57.45	IS9
ATOM	7748	ND1	HIS	116	228.395	128.001	-0.861	1.00	57.45	IS9
ATOM	7749	CE1	HIS	116	228.315	126.684	-0.809	1.00	57.45	IS9
ATOM	7750	NE2	HIS	116	227.717	126.257	-1.909	1.00	57.45	IS9
ATOM	7751	C	HIS	116	227.625	132.147	-1.484	1.00	47.05	IS9
ATOM	7752	O	HIS	116	228.627	132.441	-0.851	1.00	47.05	IS9
ATOM	7753	N	LYS	117	226.990	133.015	-2.252	1.00	46.49	IS9
ATOM	7754	CA	LYS	117	227.526	134.348	-2.387	1.00	46.49	IS9
ATOM	7755	CB	LYS	117	228.596	134.359	-3.474	1.00	28.73	IS9
ATOM	7756	CG	LYS	117	229.700	133.305	-3.426	1.00	28.73	IS9
ATOM	7757	CD	LYS	117	230.829	133.718	-4.393	1.00	28.73	IS9
ATOM	7758	CE	LYS	117	230.282	134.698	-5.451	1.00	28.73	IS9
ATOM	7759	NZ	LYS	117	231.251	135.144	-6.467	1.00	28.73	IS9
ATOM	7760	C	LYS	117	226.523	135.442	-2.743	1.00	46.49	IS9
ATOM	7761	O	LYS	117	226.886	136.379	-3.469	1.00	46.49	IS9
ATOM	7762	N	ALA	118	225.294	135.354	-2.253	1.00	86.25	IS9
ATOM	7763	CA	ALA	118	224.275	136.356	-2.581	1.00	86.25	IS9
ATOM	7764	CB	ALA	118	224.908	137.670	-3.048	1.00	25.94	IS9
ATOM	7765	C	ALA	118	223.411	135.803	-3.694	1.00	86.25	IS9
ATOM	7766	O	ALA	118	222.179	135.820	-3.620	1.00	86.25	IS9
ATOM	7767	N	ARG	119	224.065	135.334	-4.745	1.00	46.50	IS9
ATOM	7768	CA	ARG	119	223.336	134.758	-5.851	1.00	46.50	IS9
ATOM	7769	CB	ARG	119	223.538	135.594	-7.099	1.00	30.63	IS9
ATOM	7770	CG	ARG	119	223.000	136.957	-6.923	1.00	30.63	IS9
ATOM	7771	CD	ARG	119	222.644	137.602	-8.228	1.00	30.63	IS9
ATOM	7772	NE	ARG	119	222.288	138.982	-7.959	1.00	30.63	IS9
ATOM	7773	CZ	ARG	119	221.819	139.835	-8.856	1.00	30.63	IS9
ATOM	7774	NH1	ARG	119	221.637	139.466	-10.116	1.00	30.63	IS9
ATOM	7775	NH2	ARG	119	221.529	141.071	-8.483	1.00	30.63	IS9
ATOM	7776	C	ARG	119	223.778	133.333	-6.083	1.00	46.50	IS9
ATOM	7777	O	ARG	119	222.964	132.414	-6.104	1.00	46.50	IS9
ATOM	7778	N	ARG	120	225.079	133.162	-6.243	1.00	51.51	IS9
ATOM	7779	CA	ARG	120	225.642	131.853	-6.471	1.00	51.51	IS9
ATOM	7780	CB	ARG	120	227.144	131.923	-6.215	1.00	98.38	IS9
ATOM	7781	CG	ARG	120	227.926	130.752	-6.728	1.00	98.38	IS9
ATOM	7782	CD	ARG	120	228.052	129.683	-5.673	1.00	98.38	IS9
ATOM	7783	NE	ARG	120	229.324	128.993	-5.828	1.00	98.38	IS9
ATOM	7784	CZ	ARG	120	229.626	128.209	-6.857	1.00	98.38	IS9
ATOM	7785	NH1	ARG	120	228.737	127.998	-7.828	1.00	98.38	IS9
ATOM	7786	NH2	ARG	120	230.835	127.666	-6.929	1.00	98.38	IS9
ATOM	7787	C	ARG	120	224.944	130.866	-5.530	1.00	51.51	IS9
ATOM	7788	O	ARG	120	225.176	130.876	-4.321	1.00	51.51	IS9
ATOM	7789	N	ALA	121	224.067	130.033	-6.089	1.00	40.47	IS9
ATOM	7790	CA	ALA	121	223.325	129.051	-5.304	1.00	40.47	IS9
ATOM	7791	CB	ALA	121	221.936	128.872	-5.889	1.00	98.43	IS9
ATOM	7792	C	ALA	121	224.050	127.715	-5.277	1.00	40.47	IS9
ATOM	7793	O	ALA	121	224.658	127.320	-6.263	1.00	40.47	IS9
ATOM	7794	N	PRO	122	224.006	127.004	-4.142	1.00	48.73	IS9
ATOM	7795	CD	PRO	122	223.365	127.364	-2.870	1.00	35.18	IS9
ATOM	7796	CA	PRO	122	224.679	125.703	-4.040	1.00	48.73	IS9
ATOM	7797	CB	PRO	122	224.407	125.278	-2.593	1.00	35.18	IS9
ATOM	7798	CG	PRO	122	223.162	126.020	-2.236	1.00	35.18	IS9
ATOM	7799	C	PRO	122	224.129	124.720	-5.064	1.00	48.73	IS9
ATOM	7800	O	PRO	122	222.975	124.845	-5.474	1.00	48.73	IS9
ATOM	7801	N	GLN	123	224.951	123.753	-5.477	1.00	56.61	IS9
ATOM	7802	CA	GLN	123	224.544	122.769	-6.487	1.00	56.61	IS9
ATOM	7803	CB	GLN	123	225.685	122.469	-7.474	1.00	43.69	IS9
ATOM	7804	CG	GLN	123	226.656	121.378	-7.005	1.00	43.69	IS9
ATOM	7805	CD	GLN	123	227.454	120.763	-8.148	1.00	43.69	IS9
ATOM	7806	OE1	GLN	123	227.889	121.466	-9.070	1.00	43.69	IS9
ATOM	7807	NE2	GLN	123	227.661	119.448	-8.086	1.00	43.69	IS9
ATOM	7808	C	GLN	123	224.081	121.449	-5.912	1.00	56.61	IS9
ATOM	7809	O	GLN	123	224.422	121.094	-4.782	1.00	56.61	IS9

ATOM	7810	N	TYR	124	223.332	120.713	-6.728	1.00	56.98	IS9
ATOM	7811	CA	TYR	124	222.793	119.412	-6.347	1.00	56.98	IS9
ATOM	7812	CB	TYR	124	221.317	119.566	-6.054	1.00	65.45	IS9
ATOM	7813	CG	TYR	124	220.640	120.271	-7.176	1.00	65.45	IS9
ATOM	7814	CD1	TYR	124	220.065	119.557	-8.213	1.00	65.45	IS9
ATOM	7815	CE1	TYR	124	219.522	120.204	-9.314	1.00	65.45	IS9
ATOM	7816	CD2	TYR	124	220.658	121.659	-7.253	1.00	65.45	IS9
ATOM	7817	CE2	TYR	124	220.121	122.324	-8.348	1.00	65.45	IS9
ATOM	7818	CZ	TYR	124	219.552	121.588	-9.380	1.00	65.45	IS9
ATOM	7819	OH	TYR	124	219.016	122.227	-10.479	1.00	65.45	IS9
ATOM	7820	C	TYR	124	222.980	118.399	-7.471	1.00	56.98	IS9
ATOM	7821	O	TYR	124	223.373	118.751	-8.584	1.00	56.98	IS9
ATOM	7822	N	SER	125	222.691	117.140	-7.164	1.00	95.94	IS9
ATOM	7823	CA	SER	125	222.799	116.056	-8.131	1.00	95.94	IS9
ATOM	7824	CB	SER	125	223.788	115.004	-7.658	1.00	163.27	IS9
ATOM	7825	OG	SER	125	223.171	114.178	-6.681	1.00	163.27	IS9
ATOM	7826	C	SER	125	221.432	115.406	-8.201	1.00	95.94	IS9
ATOM	7827	O	SER	125	220.492	115.867	-7.549	1.00	95.94	IS9
ATOM	7828	N	LYS	126	221.346	114.322	-8.968	1.00	89.15	IS9
ATOM	7829	CA	LYS	126	220.113	113.556	-9.156	1.00	89.15	IS9
ATOM	7830	CB	LYS	126	220.322	112.104	-8.720	1.00	82.95	IS9
ATOM	7831	CG	LYS	126	221.428	111.352	-9.467	1.00	82.95	IS9
ATOM	7832	CD	LYS	126	222.825	111.860	-9.121	1.00	82.95	IS9
ATOM	7833	CE	LYS	126	223.884	111.100	-9.899	1.00	82.95	IS9
ATOM	7834	NZ	LYS	126	225.258	111.533	-9.557	1.00	82.95	IS9
ATOM	7835	C	LYS	126	218.913	114.135	-8.416	1.00	89.15	IS9
ATOM	7836	O	LYS	126	218.304	113.471	-7.576	1.00	89.15	IS9
ATOM	7837	N	ARG	127	218.587	115.382	-8.743	1.00	109.90	IS9
ATOM	7838	CA	ARG	127	217.468	116.077	-8.135	1.00	109.90	IS9
ATOM	7839	CB	ARG	127	217.517	117.568	-8.479	1.00	113.62	IS9
ATOM	7840	CG	ARG	127	216.624	118.437	-7.605	1.00	113.62	IS9
ATOM	7841	CD	ARG	127	216.675	119.907	-8.002	1.00	113.62	IS9
ATOM	7842	NE	ARG	127	216.521	120.795	-6.849	1.00	113.62	IS9
ATOM	7843	CZ	ARG	127	216.531	122.125	-6.916	1.00	113.62	IS9
ATOM	7844	NH1	ARG	127	216.685	122.728	-8.085	1.00	113.62	IS9
ATOM	7845	NH2	ARG	127	216.393	122.854	-5.815	1.00	113.62	IS9
ATOM	7846	C	ARG	127	216.201	115.460	-8.703	1.00	109.90	IS9
ATOM	7847	O	ARG	127	216.320	114.424	-9.395	1.00	109.90	IS9
ATOM	7848	OXT	ARG	127	215.110	116.013	-8.450	1.00	142.59	IS9
ATOM	7849	CB	ASP	5	154.439	137.492	14.248	1.00	126.21	ES5
ATOM	7850	CG	ASP	5	155.757	137.920	14.863	1.00	126.21	ES5
ATOM	7851	OD1	ASP	5	155.806	138.081	16.102	1.00	126.21	ES5
ATOM	7852	OD2	ASP	5	156.741	138.091	14.111	1.00	126.21	ES5
ATOM	7853	C	ASP	5	154.601	135.058	13.631	1.00	133.66	ES5
ATOM	7854	O	ASP	5	153.981	134.021	13.390	1.00	133.66	ES5
ATOM	7855	N	ASP	5	154.474	135.781	16.036	1.00	133.66	ES5
ATOM	7856	CA	ASP	5	154.040	136.065	14.639	1.00	133.66	ES5
ATOM	7857	N	PHE	6	155.763	135.354	13.047	1.00	73.74	ES5
ATOM	7858	CA	PHE	6	156.371	134.455	12.062	1.00	73.74	ES5
ATOM	7859	CB	PHE	6	157.289	135.223	11.097	1.00	54.01	ES5
ATOM	7860	CG	PHE	6	156.568	135.850	9.922	1.00	54.01	ES5
ATOM	7861	CD1	PHE	6	157.229	136.747	9.085	1.00	54.01	ES5
ATOM	7862	CD2	PHE	6	155.235	135.556	9.655	1.00	54.01	ES5
ATOM	7863	CE1	PHE	6	156.572	137.343	8.006	1.00	54.01	ES5
ATOM	7864	CE2	PHE	6	154.573	136.150	8.578	1.00	54.01	ES5
ATOM	7865	CZ	PHE	6	155.244	137.042	7.757	1.00	54.01	ES5
ATOM	7866	C	PHE	6	157.159	133.315	12.682	1.00	73.74	ES5
ATOM	7867	O	PHE	6	158.268	133.516	13.177	1.00	73.74	ES5
ATOM	7868	N	GLU	7	156.564	132.122	12.656	1.00	52.89	ES5
ATOM	7869	CA	GLU	7	157.206	130.925	13.171	1.00	52.89	ES5
ATOM	7870	CB	GLU	7	156.186	129.806	13.375	1.00	101.77	ES5
ATOM	7871	CG	GLU	7	156.762	128.559	14.035	1.00	101.77	ES5
ATOM	7872	CD	GLU	7	155.685	127.619	14.559	1.00	101.77	ES5
ATOM	7873	OE1	GLU	7	156.021	126.471	14.938	1.00	101.77	ES5
ATOM	7874	OE2	GLU	7	154.505	128.033	14.598	1.00	101.77	ES5
ATOM	7875	C	GLU	7	158.195	130.577	12.074	1.00	52.89	ES5
ATOM	7876	O	GLU	7	158.066	131.058	10.947	1.00	52.89	ES5
ATOM	7877	N	GLU	8	159.169	129.732	12.378	1.00	65.49	ES5
ATOM	7878	CA	GLU	8	160.194	129.425	11.392	1.00	65.49	ES5
ATOM	7879	CB	GLU	8	161.342	130.396	11.653	1.00	94.50	ES5
ATOM	7880	CG	GLU	8	162.418	130.489	10.624	1.00	94.50	ES5
ATOM	7881	CD	GLU	8	163.442	131.543	11.013	1.00	94.50	ES5
ATOM	7882	OE1	GLU	8	163.916	131.498	12.170	1.00	94.50	ES5
ATOM	7883	OE2	GLU	8	163.773	132.411	10.174	1.00	94.50	ES5
ATOM	7884	C	GLU	8	160.671	127.969	11.434	1.00	65.49	ES5
ATOM	7885	O	GLU	8	161.398	127.571	12.338	1.00	65.49	ES5
ATOM	7886	N	LYS	9	160.252	127.174	10.456	1.00	62.10	ES5
ATOM	7887	CA	LYS	9	160.657	125.770	10.392	1.00	62.10	ES5
ATOM	7888	CB	LYS	9	159.446	124.876	10.108	1.00	106.12	ES5
ATOM	7889	CG	LYS	9	158.289	125.089	11.079	1.00	106.12	ES5
ATOM	7890	CD	LYS	9	157.122	124.143	10.822	1.00	106.12	ES5
ATOM	7891	CE	LYS	9	157.466	122.723	11.219	1.00	106.12	ES5
ATOM	7892	NZ	LYS	9	156.336	121.797	10.955	1.00	106.12	ES5
ATOM	7893	C	LYS	9	161.709	125.594	9.298	1.00	62.10	ES5
ATOM	7894	O	LYS	9	161.613	126.197	8.221	1.00	62.10	ES5
ATOM	7895	N	MET	10	162.714	124.768	9.578	1.00	58.90	ES5
ATOM	7896	CA	MET	10	163.799	124.529	8.631	1.00	58.90	ES5
ATOM	7897	CB	MET	10	165.139	124.688	9.345	1.00	98.73	ES5
ATOM	7898	CG	MET	10	166.337	124.590	8.439	1.00	98.73	ES5
ATOM	7899	SD	MET	10	167.267	123.099	8.770	1.00	98.73	ES5
ATOM	7900	CE	MET	10	168.447	123.707	9.976	1.00	98.73	ES5
ATOM	7901	C	MET	10	163.705	123.155	7.972	1.00	58.90	ES5
ATOM	7902	O	MET	10	164.017	122.139	8.583	1.00	58.90	ES5
ATOM	7903	N	ILE	11	163.279	123.148	6.713	1.00	64.48	ES5
ATOM	7904	CA	ILE	11	163.105	121.929	5.929	1.00	64.48	ES5
ATOM	7905	CB	ILE	11	162.638	122.275	4.510	1.00	55.58	ES5
ATOM	7906	CG2	ILE	11	162.427	121.010	3.702	1.00	55.58	ES5
ATOM	7907	CG1	ILE	11	161.342	123.071	4.597	1.00	55.58	ES5
ATOM	7908	CD1	ILE	11	160.348	122.466	5.564	1.00	55.58	ES5
ATOM	7909	C	ILE	11	164.333	121.030	5.838	1.00	64.48	ES5
ATOM	7910	O	ILE	11	164.300	119.878	6.278	1.00	64.48	ES5
ATOM	7911	N	LEU	12	165.405	121.537	5.239	1.00	52.50	ES5
ATOM	7912	CA	LEU	12	166.630	120.752	5.140	1.00	52.50	ES5
ATOM	7913	CB	LEU	12	166.535	119.705	4.014	1.00	51.72	ES5
ATOM	7914	CG	LEU	12	166.671	120.099	2.536	1.00	51.72	ES5
ATOM	7915	CD1	LEU	12	165.715	121.235	2.262	1.00	51.72	ES5

ATOM	7916	CD2	LEU	12	168.097	120.513	2.191	1.00	51.72	ES5	ATOM	7969	NH2	ARG	18	179.225	121.549	-9.603	1.00	200.59	ES5
ATOM	7917	C	LEU	12	167.840	121.627	4.907	1.00	52.50	ES5	ATOM	7970	C	ARG	18	182.568	121.414	-3.881	1.00	76.47	ES5
ATOM	7918	O	LEU	12	167.738	122.707	4.324	1.00	52.50	ES5	ATOM	7971	O	ARG	18	183.239	121.795	-2.929	1.00	76.47	ES5
ATOM	7919	N	ILE	13	168.982	121.159	5.395	1.00	56.60	ES5	ATOM	7972	N	MET	19	182.708	121.899	-5.110	1.00	51.86	ES5
ATOM	7920	CA	ILE	13	170.242	121.854	5.200	1.00	56.60	ES5	ATOM	7973	CA	MET	19	183.686	122.915	-5.452	1.00	51.86	ES5
ATOM	7921	CB	ILE	13	170.824	122.411	6.503	1.00	61.09	ES5	ATOM	7974	CB	MET	19	183.627	124.095	-4.459	1.00	61.45	ES5
ATOM	7922	CG2	ILE	13	170.060	123.635	6.932	1.00	61.09	ES5	ATOM	7975	CG	MET	19	183.855	125.490	-5.083	1.00	61.45	ES5
ATOM	7923	CG1	ILE	13	170.795	121.339	7.580	1.00	61.09	ES5	ATOM	7976	SD	MET	19	184.565	126.833	-3.997	1.00	61.45	ES5
ATOM	7924	CD1	ILE	13	171.465	121.774	8.852	1.00	61.09	ES5	ATOM	7977	CE	MET	19	183.191	127.178	-2.875	1.00	61.45	ES5
ATOM	7925	C	ILE	13	171.190	120.801	4.670	1.00	56.60	ES5	ATOM	7978	C	MET	19	185.035	122.191	-5.354	1.00	51.86	ES5
ATOM	7926	O	ILE	13	171.270	119.707	5.232	1.00	56.60	ES5	ATOM	7979	O	MET	19	185.404	121.663	-4.301	1.00	51.86	ES5
ATOM	7927	N	ARG	14	171.886	121.116	3.580	1.00	28.32	ES5	ATOM	7980	N	GLN	20	185.742	122.105	-6.471	1.00	33.23	ES5
ATOM	7928	CA	ARG	14	172.823	120.172	2.997	1.00	28.32	ES5	ATOM	7981	CA	GLN	20	187.058	121.495	-6.473	1.00	33.23	ES5
ATOM	7929	CB	ARG	14	172.372	119.765	1.606	1.00	39.24	ES5	ATOM	7982	CB	GLN	20	187.176	120.471	-7.589	1.00	40.36	ES5
ATOM	7930	CG	ARG	14	172.224	120.894	0.645	1.00	39.24	ES5	ATOM	7983	CG	GLN	20	186.401	119.237	-7.338	1.00	40.36	ES5
ATOM	7931	CD	ARG	14	171.546	120.370	-0.563	1.00	39.24	ES5	ATOM	7984	CD	GLN	20	186.752	118.632	-6.021	1.00	40.36	ES5
ATOM	7932	NE	ARG	14	171.522	121.337	-1.638	1.00	39.24	ES5	ATOM	7985	OE1	GLN	20	187.880	118.226	-5.797	1.00	40.36	ES5
ATOM	7933	CZ	ARG	14	170.953	121.095	-2.816	1.00	39.24	ES5	ATOM	7986	NE2	GLN	20	185.783	118.578	-5.126	1.00	40.36	ES5
ATOM	7934	NH1	ARG	14	170.372	119.915	-3.023	1.00	39.24	ES5	ATOM	7987	C	GLN	20	188.022	122.648	-6.729	1.00	33.23	ES5
ATOM	7935	NH2	ARG	14	170.980	122.011	-3.790	1.00	39.24	ES5	ATOM	7988	O	GLN	20	187.595	123.691	-7.241	1.00	33.23	ES5
ATOM	7936	C	ARG	14	174.187	120.805	2.939	1.00	28.32	ES5	ATOM	7989	N	ALA	21	189.303	122.465	-6.391	1.00	88.83	ES5
ATOM	7937	O	ARG	14	174.309	122.033	2.879	1.00	28.32	ES5	ATOM	7990	CA	ALA	21	190.327	123.498	-6.586	1.00	88.83	ES5
ATOM	7938	N	ARG	15	175.213	119.963	2.957	1.00	57.22	ES5	ATOM	7991	CB	ALA	21	189.810	124.861	-6.084	1.00	15.33	ES5
ATOM	7939	CA	ARG	15	176.572	120.451	2.952	1.00	57.22	ES5	ATOM	7992	C	ALA	21	191.571	123.119	-5.801	1.00	88.83	ES5
ATOM	7940	CB	ARG	15	177.484	119.485	3.703	1.00	52.55	ES5	ATOM	7993	O	ALA	21	191.736	123.613	-4.682	1.00	88.83	ES5
ATOM	7941	CG	ARG	15	178.753	120.135	4.245	1.00	52.55	ES5	ATOM	7994	N	GLY	22	192.458	122.286	-6.364	1.00	40.50	ES5
ATOM	7942	CD	ARG	15	179.881	120.026	3.274	1.00	52.55	ES5	ATOM	7995	CA	GLY	22	193.633	121.869	-5.600	1.00	40.50	ES5
ATOM	7943	NE	ARG	15	180.365	118.655	3.193	1.00	52.55	ES5	ATOM	7996	C	GLY	22	193.151	121.408	-4.209	1.00	40.50	ES5
ATOM	7944	CZ	ARG	15	181.284	118.138	4.003	1.00	52.55	ES5	ATOM	7997	O	GLY	22	193.893	121.401	-3.223	1.00	40.50	ES5
ATOM	7945	NH1	ARG	15	181.823	118.889	4.958	1.00	52.55	ES5	ATOM	7998	N	GLY	23	191.868	121.036	-4.141	1.00	70.07	ES5
ATOM	7946	NH2	ARG	15	181.670	116.874	3.854	1.00	52.55	ES5	ATOM	7999	CA	GLY	23	191.245	120.595	-2.901	1.00	70.07	ES5
ATOM	7947	C	ARG	15	177.133	120.705	1.581	1.00	57.22	ES5	ATOM	8000	C	GLY	23	189.716	120.707	-2.950	1.00	70.07	ES5
ATOM	7948	O	ARG	15	178.248	121.207	1.475	1.00	57.22	ES5	ATOM	8001	O	GLY	23	189.149	121.267	-3.894	1.00	70.07	ES5
ATOM	7949	N	THR	16	176.379	120.377	0.532	1.00	35.10	ES5	ATOM	8002	N	ARG	24	189.054	120.175	-1.922	1.00	50.26	ES5
ATOM	7950	CA	THR	16	176.862	120.603	-0.838	1.00	35.10	ES5	ATOM	8003	CA	ARG	24	187.591	120.176	-1.785	1.00	50.26	ES5
ATOM	7951	CB	THR	16	176.352	121.975	-1.433	1.00	51.49	ES5	ATOM	8004	CB	ARG	24	187.172	118.873	-1.086	1.00	76.36	ES5
ATOM	7952	OG1	THR	16	176.781	122.102	-2.792	1.00	51.49	ES5	ATOM	8005	CG	ARG	24	185.876	118.260	-1.567	1.00	76.36	ES5
ATOM	7953	CG2	THR	16	176.889	123.162	-0.657	1.00	51.49	ES5	ATOM	8006	CD	ARG	24	185.528	116.953	-0.828	1.00	76.36	ES5
ATOM	7954	C	THR	16	178.396	120.562	-0.814	1.00	35.10	ES5	ATOM	8007	NE	ARG	24	186.377	115.818	-1.198	1.00	76.36	ES5
ATOM	7955	O	THR	16	179.098	121.540	-1.115	1.00	35.10	ES5	ATOM	8008	CZ	ARG	24	186.423	115.264	-2.412	1.00	76.36	ES5
ATOM	7956	N	ALA	17	178.893	119.405	-0.398	1.00	201.09	ES5	ATOM	8009	NH1	ARG	24	185.666	115.740	-3.391	1.00	76.36	ES5
ATOM	7957	CA	ALA	17	180.317	119.161	-0.300	1.00	201.09	ES5	ATOM	8010	NH2	ARG	24	187.223	114.228	-2.655	1.00	76.36	ES5
ATOM	7958	CB	ALA	17	180.559	117.821	0.399	1.00	89.83	ES5	ATOM	8011	C	ARG	24	187.147	121.400	-0.949	1.00	50.26	ES5
ATOM	7959	C	ALA	17	180.928	119.144	-1.695	1.00	201.09	ES5	ATOM	8012	O	ARG	24	187.724	121.688	0.098	1.00	50.26	ES5
ATOM	7960	O	ALA	17	181.373	118.094	-2.160	1.00	201.09	ES5	ATOM	8013	N	ARG	25	186.121	122.117	-1.398	1.00	51.01	ES5
ATOM	7961	N	ARG	18	180.953	120.293	-2.367	1.00	76.47	ES5	ATOM	8014	CA	ARG	25	185.660	123.301	-0.670	1.00	51.01	ES5
ATOM	7962	CA	ARG	18	181.519	120.330	-3.704	1.00	76.47	ES5	ATOM	8015	CB	ARG	25	186.267	124.534	-1.309	1.00	46.91	ES5
ATOM	7963	CB	ARG	18	180.412	120.493	-4.738	1.00	200.59	ES5	ATOM	8016	CG	ARG	25	187.753	124.503	-1.206	1.00	46.91	ES5
ATOM	7964	CG	ARG	18	179.977	121.900	-4.952	1.00	200.59	ES5	ATOM	8017	CD	ARG	25	188.345	125.850	-1.461	1.00	46.91	ES5
ATOM	7965	CD	ARG	18	180.492	122.407	-6.282	1.00	200.59	ES5	ATOM	8018	NE	ARG	25	189.753	125.833	-1.086	1.00	46.91	ES5
ATOM	7966	NE	ARG	18	179.833	121.752	-7.400	1.00	200.59	ES5	ATOM	8019	CZ	ARG	25	190.576	126.868	-1.204	1.00	46.91	ES5
ATOM	7967	CZ	ARG	18	179.880	122.193	-8.650	1.00	200.59	ES5	ATOM	8020	NH1	ARG	25	190.130	128.025	-1.692	1.00	46.91	ES5
ATOM	7968	NH1	ARG	18	180.563	123.291	-8.939	1.00	200.59	ES5	ATOM	8021	NH2	ARG	25	191.849	126.731	-0.839	1.00	46.91	ES5

ATOM	8022	C	ARG	25	184.143	123.446	-0.567	1.00	51.01	ES5	ATOM	8075	CA	VAL	32	163.460	127.551	5.395	1.00	50.63	ES5
ATOM	8023	O	ARG	25	183.480	123.878	-1.516	1.00	51.01	ES5	ATOM	8076	CB	VAL	32	164.238	128.702	6.062	1.00	53.13	ES5
ATOM	8024	N	PHE	26	183.619	123.141	0.621	1.00	43.48	ES5	ATOM	8077	CG1	VAL	32	163.417	129.309	7.163	1.00	53.13	ES5
ATOM	8025	CA	PHE	26	182.182	123.132	0.868	1.00	43.48	ES5	ATOM	8078	CG2	VAL	32	165.547	128.186	6.623	1.00	53.13	ES5
ATOM	8026	CB	PHE	26	181.871	122.186	2.021	1.00	42.42	ES5	ATOM	8079	C	VAL	32	162.044	128.019	5.089	1.00	50.63	ES5
ATOM	8027	CG	PHE	26	182.887	121.103	2.216	1.00	42.42	ES5	ATOM	8080	O	VAL	32	161.811	128.759	4.122	1.00	50.63	ES5
ATOM	8028	CD1	PHE	26	184.085	121.361	2.854	1.00	42.42	ES5	ATOM	8081	N	VAL	33	161.103	127.565	5.918	1.00	55.36	ES5
ATOM	8029	CD2	PHE	26	182.633	119.811	1.796	1.00	42.42	ES5	ATOM	8082	CA	VAL	33	159.707	127.964	5.788	1.00	55.36	ES5
ATOM	8030	CE1	PHE	26	185.015	120.333	3.074	1.00	42.42	ES5	ATOM	8083	CB	VAL	33	158.733	126.811	5.953	1.00	41.81	ES5
ATOM	8031	CE2	PHE	26	183.554	118.782	2.012	1.00	42.42	ES5	ATOM	8084	CG1	VAL	33	157.381	127.218	5.413	1.00	41.81	ES5
ATOM	8032	CZ	PHE	26	184.743	119.045	2.653	1.00	42.42	ES5	ATOM	8085	CG2	VAL	33	159.248	125.599	5.243	1.00	41.81	ES5
ATOM	8033	C	PHE	26	181.406	124.418	1.109	1.00	43.48	ES5	ATOM	8086	C	VAL	33	159.417	128.943	6.905	1.00	55.36	ES5
ATOM	8034	O	PHE	26	181.962	125.446	1.476	1.00	43.48	ES5	ATOM	8087	O	VAL	33	159.899	128.790	8.029	1.00	55.36	ES5
ATOM	8035	N	ARG	27	180.094	124.314	0.886	1.00	46.23	ES5	ATOM	8088	N	VAL	34	158.622	129.948	6.584	1.00	57.06	ES5
ATOM	8036	CA	ARG	27	179.118	125.383	1.083	1.00	46.23	ES5	ATOM	8089	CA	VAL	34	158.273	130.972	7.540	1.00	57.06	ES5
ATOM	8037	CB	ARG	27	178.664	125.970	-0.243	1.00	97.62	ES5	ATOM	8090	CB	VAL	34	159.042	132.263	7.243	1.00	59.40	ES5
ATOM	8038	CG	ARG	27	179.547	127.040	-0.775	1.00	97.62	ES5	ATOM	8091	CG1	VAL	34	158.711	133.307	8.267	1.00	59.40	ES5
ATOM	8039	CD	ARG	27	178.725	127.939	-1.643	1.00	97.62	ES5	ATOM	8092	CG2	VAL	34	160.526	131.987	7.241	1.00	59.40	ES5
ATOM	8040	NE	ARG	27	179.526	129.001	-2.223	1.00	97.62	ES5	ATOM	8093	C	VAL	34	156.791	131.233	7.398	1.00	57.06	ES5
ATOM	8041	CZ	ARG	27	179.016	130.041	-2.871	1.00	97.62	ES5	ATOM	8094	O	VAL	34	156.311	131.542	6.302	1.00	57.06	ES5
ATOM	8042	NH1	ARG	27	177.698	130.153	-3.014	1.00	97.62	ES5	ATOM	8095	N	GLY	35	156.064	131.097	8.502	1.00	54.58	ES5
ATOM	8043	NH2	ARG	27	179.824	130.967	-3.379	1.00	97.62	ES5	ATOM	8096	CA	GLY	35	154.632	131.328	8.461	1.00	54.58	ES5
ATOM	8044	C	ARG	27	177.902	124.758	1.772	1.00	46.23	ES5	ATOM	8097	C	GLY	35	154.082	131.840	9.772	1.00	54.58	ES5
ATOM	8045	O	ARG	27	177.798	123.534	1.864	1.00	46.23	ES5	ATOM	8098	O	GLY	35	154.730	131.720	10.807	1.00	54.58	ES5
ATOM	8046	N	PHE	28	176.982	125.584	2.264	1.00	36.50	ES5	ATOM	8099	N	ASP	36	152.887	132.423	9.725	1.00	70.07	ES5
ATOM	8047	CA	PHE	28	175.792	125.049	2.918	1.00	36.50	ES5	ATOM	8100	CA	ASP	36	152.235	132.939	10.926	1.00	70.07	ES5
ATOM	8048	CB	PHE	28	175.855	125.234	4.427	1.00	40.39	ES5	ATOM	8101	CB	ASP	36	151.658	134.337	10.674	1.00	67.74	ES5
ATOM	8049	CG	PHE	28	176.994	124.512	5.066	1.00	40.39	ES5	ATOM	8102	CG	ASP	36	150.670	134.369	9.525	1.00	67.74	ES5
ATOM	8050	CD1	PHE	28	178.292	125.011	4.968	1.00	40.39	ES5	ATOM	8103	OD1	ASP	36	149.996	133.347	9.272	1.00	67.74	ES5
ATOM	8051	CD2	PHE	28	176.782	123.303	5.724	1.00	40.39	ES5	ATOM	8104	OD2	ASP	36	150.558	135.437	8.887	1.00	67.74	ES5
ATOM	8052	CE1	PHE	28	179.356	124.313	5.509	1.00	40.39	ES5	ATOM	8105	C	ASP	36	151.118	131.989	11.363	1.00	70.07	ES5
ATOM	8053	CE2	PHE	28	177.844	122.596	6.271	1.00	40.39	ES5	ATOM	8106	O	ASP	36	150.402	132.238	12.328	1.00	70.07	ES5
ATOM	8054	CZ	PHE	28	179.134	123.099	6.163	1.00	40.39	ES5	ATOM	8107	N	ARG	37	150.987	130.890	10.639	1.00	60.69	ES5
ATOM	8055	C	PHE	28	174.571	125.727	2.387	1.00	36.50	ES5	ATOM	8108	CA	ARG	37	149.974	129.901	10.929	1.00	60.69	ES5
ATOM	8056	O	PHE	28	174.585	126.920	2.090	1.00	36.50	ES5	ATOM	8109	CB	ARG	37	150.159	129.358	12.345	1.00	47.50	ES5
ATOM	8057	N	GLY	29	173.512	124.948	2.255	1.00	38.70	ES5	ATOM	8110	CG	ARG	37	151.287	128.346	12.457	1.00	47.50	ES5
ATOM	8058	CA	GLY	29	172.265	125.484	1.756	1.00	38.70	ES5	ATOM	8111	CD	ARG	37	151.513	127.913	13.890	1.00	47.50	ES5
ATOM	8059	C	GLY	29	171.185	125.072	2.720	1.00	38.70	ES5	ATOM	8112	NE	ARG	37	152.434	126.781	13.995	1.00	47.50	ES5
ATOM	8060	O	GLY	29	171.197	123.947	3.230	1.00	38.70	ES5	ATOM	8113	CZ	ARG	37	152.170	125.546	13.558	1.00	47.50	ES5
ATOM	8061	N	ALA	30	170.256	125.976	2.984	1.00	33.43	ES5	ATOM	8114	NH1	ARG	37	150.997	125.278	12.979	1.00	47.50	ES5
ATOM	8062	CA	ALA	30	169.195	125.659	3.912	1.00	33.43	ES5	ATOM	8115	NH2	ARG	37	153.080	124.573	13.695	1.00	47.50	ES5
ATOM	8063	CB	ALA	30	169.473	126.334	5.250	1.00	45.35	ES5	ATOM	8116	C	ARG	37	148.583	130.474	10.739	1.00	60.69	ES5
ATOM	8064	C	ALA	30	167.842	126.088	3.373	1.00	33.43	ES5	ATOM	8117	O	ARG	37	147.605	129.910	11.219	1.00	60.69	ES5
ATOM	8065	O	ALA	30	167.677	127.209	2.880	1.00	33.43	ES5	ATOM	8118	N	GLN	38	148.503	131.596	10.028	1.00	53.47	ES5
ATOM	8066	N	LEU	31	166.873	125.187	3.435	1.00	35.48	ES5	ATOM	8119	CA	GLN	38	147.226	132.237	9.734	1.00	53.47	ES5
ATOM	8067	CA	LEU	31	165.539	125.536	2.982	1.00	35.48	ES5	ATOM	8120	CB	GLN	38	147.018	133.474	10.598	1.00	79.34	ES5
ATOM	8068	CB	LEU	31	164.840	124.355	2.312	1.00	30.86	ES5	ATOM	8121	CG	GLN	38	146.524	133.173	11.982	1.00	79.34	ES5
ATOM	8069	CG	LEU	31	164.399	124.612	0.871	1.00	30.86	ES5	ATOM	8122	CD	GLN	38	147.506	133.621	13.027	1.00	79.34	ES5
ATOM	8070	CD1	LEU	31	163.256	123.663	0.516	1.00	30.86	ES5	ATOM	8123	OE1	GLN	38	147.835	134.807	13.112	1.00	79.34	ES5
ATOM	8071	CD2	LEU	31	163.969	126.068	0.719	1.00	30.86	ES5	ATOM	8124	NE2	GLN	38	147.992	132.679	13.830	1.00	79.34	ES5
ATOM	8072	C	LEU	31	164.797	125.911	4.247	1.00	35.48	ES5	ATOM	8125	C	GLN	38	147.106	132.636	8.269	1.00	53.47	ES5
ATOM	8073	O	LEU	31	164.789	125.159	5.228	1.00	35.48	ES5	ATOM	8126	O	GLN	38	146.762	133.764	7.961	1.00	53.47	ES5
ATOM	8074	N	VAL	32	164.175	127.081	4.228	1.00	50.63	ES5	ATOM	8127	N	GLY	39	147.404	131.719	7.362	1.00	70.28	ES5

ATOM	8128	CA	GLY	39	147.276	132.041	5.954	1.00	70.28	ES5	ATOM	8181	CA	LYS	47	173.292	129.437	0.804	1.00 55.32	ES5
ATOM	8129	C	GLY	39	148.429	132.751	5.267	1.00	70.28	ES5	ATOM	8182	CB	LYS	47	173.698	129.017	-0.603	1.00 65.08	ES5
ATOM	8130	O	GLY	39	148.242	133.277	4.168	1.00	70.28	ES5	ATOM	8183	CG	LYS	47	172.687	128.138	-1.297	1.00 65.08	ES5
ATOM	8131	N	ARG	40	149.611	132.781	5.885	1.00	43.77	ES5	ATOM	8184	CD	LYS	47	172.008	128.893	-2.408	1.00 65.08	ES5
ATOM	8132	CA	ARG	40	150.773	133.427	5.264	1.00	43.77	ES5	ATOM	8185	CE	LYS	47	170.973	128.026	-3.081	1.00 65.08	ES5
ATOM	8133	CB	ARG	40	150.979	134.823	5.859	1.00	80.18	ES5	ATOM	8186	NZ	LYS	47	170.387	128.702	-4.277	1.00 65.08	ES5
ATOM	8134	CG	ARG	40	149.679	135.505	6.254	1.00	80.18	ES5	ATOM	8187	C	LYS	47	174.338	130.365	1.358	1.00 55.32	ES5
ATOM	8135	CD	ARG	40	149.693	136.996	5.979	1.00	80.18	ES5	ATOM	8188	O	LYS	47	174.305	131.570	1.121	1.00 55.32	ES5
ATOM	8136	NE	ARG	40	150.937	137.635	6.388	1.00	80.18	ES5	ATOM	8189	N	ALA	48	175.278	129.785	2.090	1.00 25.03	ES5
ATOM	8137	CZ	ARG	40	151.833	138.137	5.543	1.00	80.18	ES5	ATOM	8190	CA	ALA	48	176.350	130.550	2.702	1.00 25.03	ES5
ATOM	8138	NH1	ARG	40	151.632	138.077	4.233	1.00	80.18	ES5	ATOM	8191	CB	ALA	48	175.814	131.348	3.889	1.00 72.90	ES5
ATOM	8139	NH2	ARG	40	152.933	138.712	6.014	1.00	80.18	ES5	ATOM	8192	C	ALA	48	177.480	129.631	3.155	1.00 25.03	ES5
ATOM	8140	C	ARG	40	152.055	132.589	5.421	1.00	43.77	ES5	ATOM	8193	O	ALA	48	177.287	128.421	3.345	1.00 25.03	ES5
ATOM	8141	O	ARG	40	152.505	132.314	6.539	1.00	43.77	ES5	ATOM	8194	N	PRO	49	178.690	130.195	3.310	1.00 34.10	ES5
ATOM	8142	N	VAL	41	152.629	132.169	4.294	1.00	52.28	ES5	ATOM	8195	CD	PRO	49	179.071	131.571	2.950	1.00 44.90	ES5
ATOM	8143	CA	VAL	41	153.855	131.368	4.308	1.00	52.28	ES5	ATOM	8196	CA	PRO	49	179.862	129.434	3.743	1.00 34.10	ES5
ATOM	8144	CB	VAL	41	153.638	129.896	3.923	1.00	43.97	ES5	ATOM	8197	CB	PRO	49	180.977	130.474	3.718	1.00 44.90	ES5
ATOM	8145	CG1	VAL	41	153.865	129.002	5.123	1.00	43.97	ES5	ATOM	8198	CG	PRO	49	180.239	131.792	3.843	1.00 44.90	ES5
ATOM	8146	CG2	VAL	41	152.255	129.714	3.315	1.00	43.97	ES5	ATOM	8199	C	PRO	49	179.705	128.772	5.105	1.00 34.10	ES5
ATOM	8147	C	VAL	41	154.862	131.870	3.318	1.00	52.28	ES5	ATOM	8200	O	PRO	49	180.570	128.023	5.523	1.00 34.10	ES5
ATOM	8148	O	VAL	41	154.508	132.408	2.256	1.00	52.28	ES5	ATOM	8201	N	GLU	50	178.606	129.041	5.801	1.00 76.30	ES5
ATOM	8149	N	GLY	42	156.121	131.645	3.681	1.00	58.62	ES5	ATOM	8202	CA	GLU	50	178.383	128.428	7.110	1.00 76.30	ES5
ATOM	8150	CA	GLY	42	157.246	132.033	2.860	1.00	58.62	ES5	ATOM	8203	CB	GLU	50	178.958	129.302	8.220	1.00138.42	ES5
ATOM	8151	C	GLY	42	158.232	130.884	2.830	1.00	58.62	ES5	ATOM	8204	CG	GLU	50	180.462	129.403	8.198	1.00138.42	ES5
ATOM	8152	O	GLY	42	158.378	130.148	3.812	1.00	58.62	ES5	ATOM	8205	CD	GLU	50	180.998	130.148	9.393	1.00138.42	ES5
ATOM	8153	N	LEU	43	158.901	130.727	1.692	1.00	53.21	ES5	ATOM	8206	OE1	GLU	50	180.579	131.306	9.603	1.00138.42	ES5
ATOM	8154	CA	LEU	43	159.883	129.665	1.491	1.00	53.21	ES5	ATOM	8207	OE2	GLU	50	181.838	129.574	10.121	1.00138.42	ES5
ATOM	8155	CB	LEU	43	159.324	128.630	0.506	1.00	43.92	ES5	ATOM	8208	C	GLU	50	176.912	128.186	7.376	1.00 76.30	ES5
ATOM	8156	CG	LEU	43	160.022	127.284	0.344	1.00	43.92	ES5	ATOM	8209	O	GLU	50	176.059	128.978	6.968	1.00 76.30	ES5
ATOM	8157	CD1	LEU	43	161.252	127.452	-0.489	1.00	43.92	ES5	ATOM	8210	N	VAL	51	176.625	127.092	8.074	1.00 56.29	ES5
ATOM	8158	CD2	LEU	43	160.367	126.720	1.703	1.00	43.92	ES5	ATOM	8211	CA	VAL	51	175.251	126.713	8.400	1.00 56.29	ES5
ATOM	8159	C	LEU	43	161.118	130.326	0.920	1.00	53.21	ES5	ATOM	8212	CB	VAL	51	175.226	125.603	9.446	1.00 32.03	ES5
ATOM	8160	O	LEU	43	161.035	131.066	-0.054	1.00	53.21	ES5	ATOM	8213	CG1	VAL	51	173.845	125.038	9.543	1.00 32.03	ES5
ATOM	8161	N	GLY	44	162.265	130.077	1.527	1.00	38.44	ES5	ATOM	8214	CG2	VAL	51	176.242	124.541	9.098	1.00 32.03	ES5
ATOM	8162	CA	GLY	44	163.472	130.699	1.029	1.00	38.44	ES5	ATOM	8215	C	VAL	51	174.384	127.867	8.913	1.00 56.29	ES5
ATOM	8163	C	GLY	44	164.649	129.756	1.089	1.00	38.44	ES5	ATOM	8216	O	VAL	51	173.317	128.147	8.357	1.00 56.29	ES5
ATOM	8164	O	GLY	44	164.852	129.051	2.083	1.00	38.44	ES5	ATOM	8217	N	PRO	52	174.819	128.542	9.994	1.00 55.20	ES5
ATOM	8165	N	PHE	45	165.433	129.731	0.020	1.00	74.39	ES5	ATOM	8218	CD	PRO	52	175.893	128.161	10.930	1.00 44.76	ES5
ATOM	8166	CA	PHE	45	166.596	128.863	-0.021	1.00	74.39	ES5	ATOM	8219	CA	PRO	52	174.055	129.657	10.546	1.00 55.20	ES5
ATOM	8167	CB	PHE	45	166.605	128.051	-1.315	1.00	54.46	ES5	ATOM	8220	CB	PRO	52	174.919	130.098	11.710	1.00 44.76	ES5
ATOM	8168	CG	PHE	45	167.505	126.858	-1.268	1.00	54.46	ES5	ATOM	8221	CG	PRO	52	175.445	128.797	12.212	1.00 44.76	ES5
ATOM	8169	CD1	PHE	45	167.710	126.174	-0.075	1.00	54.46	ES5	ATOM	8222	C	PRO	52	173.778	130.783	9.557	1.00 55.20	ES5
ATOM	8170	CD2	PHE	45	168.123	126.395	-2.417	1.00	54.46	ES5	ATOM	8223	O	PRO	52	172.631	131.193	9.382	1.00 55.20	ES5
ATOM	8171	CE1	PHE	45	168.519	125.046	-0.031	1.00	54.46	ES5	ATOM	8224	N	LEU	53	174.812	131.288	8.902	1.00 44.41	ES5
ATOM	8172	CE2	PHE	45	168.935	125.264	-2.381	1.00	54.46	ES5	ATOM	8225	CA	LEU	53	174.587	132.370	7.952	1.00 44.41	ES5
ATOM	8173	CZ	PHE	45	169.131	124.592	-1.188	1.00	54.46	ES5	ATOM	8226	CB	LEU	53	175.899	132.802	7.302	1.00 76.13	ES5
ATOM	8174	C	PHE	45	167.837	129.726	0.070	1.00	74.39	ES5	ATOM	8227	CG	LEU	53	177.126	132.847	8.205	1.00 76.13	ES5
ATOM	8175	O	PHE	45	168.170	130.453	-0.865	1.00	74.39	ES5	ATOM	8228	CD1	LEU	53	178.219	133.587	7.471	1.00 76.13	ES5
ATOM	8176	N	GLY	46	168.517	129.645	1.205	1.00	39.88	ES5	ATOM	8229	CD2	LEU	53	176.811	133.534	9.519	1.00 76.13	ES5
ATOM	8177	CA	GLY	46	169.706	130.454	1.404	1.00	39.88	ES5	ATOM	8230	C	LEU	53	173.610	131.921	6.864	1.00 44.41	ES5
ATOM	8178	C	GLY	46	170.994	129.683	1.566	1.00	39.88	ES5	ATOM	8231	O	LEU	53	172.897	132.739	6.265	1.00 44.41	ES5
ATOM	8179	O	GLY	46	171.087	128.755	2.379	1.00	39.88	ES5	ATOM	8232	N	ALA	54	173.589	130.616	6.615	1.00 45.02	ES5
ATOM	8180	N	LYS	47	171.993	130.086	0.786	1.00	55.32	ES5	ATOM	8233	CA	ALA	54	172.722	130.044	5.601	1.00 45.02	ES5

ATOM	8234	CB	ALA	54	173.153	128.628	5.320	1.00	53.01	ES5	ATOM	8287	CD1	TYR	61	167.923	135.373	1.178	1.00	86.88	ES5
ATOM	8235	C	ALA	54	171.263	130.075	6.049	1.00	45.02	ES5	ATOM	8288	CE1	TYR	61	169.049	135.850	0.530	1.00	86.88	ES5
ATOM	8236	O	ALA	54	170.385	130.603	5.350	1.00	45.02	ES5	ATOM	8289	CD2	TYR	61	167.151	134.402	-0.856	1.00	86.88	ES5
ATOM	8237	N	VAL	55	171.007	129.492	7.217	1.00	48.75	ES5	ATOM	8290	CE2	TYR	61	168.272	134.874	-1.512	1.00	86.88	ES5
ATOM	8238	CA	VAL	55	169.659	129.470	7.768	1.00	48.75	ES5	ATOM	8291	CZ	TYR	61	169.216	135.600	-0.812	1.00	86.88	ES5
ATOM	8239	CB	VAL	55	169.640	128.838	9.164	1.00	32.46	ES5	ATOM	8292	OH	TYR	61	170.321	136.095	-1.458	1.00	86.88	ES5
ATOM	8240	CG1	VAL	55	168.221	128.454	9.532	1.00	32.46	ES5	ATOM	8293	C	TYR	61	163.424	134.702	1.877	1.00	49.98	ES5
ATOM	8241	CG2	VAL	55	170.572	127.630	9.198	1.00	32.46	ES5	ATOM	8294	O	TYR	61	162.668	135.079	0.993	1.00	49.98	ES5
ATOM	8242	C	VAL	55	169.210	130.918	7.887	1.00	48.75	ES5	ATOM	8295	N	ALA	62	163.043	133.873	2.843	1.00	40.22	ES5
ATOM	8243	O	VAL	55	168.125	131.290	7.443	1.00	48.75	ES5	ATOM	8296	CA	ALA	62	161.675	133.365	2.894	1.00	40.22	ES5
ATOM	8244	N	GLN	56	170.066	131.741	8.481	1.00	46.49	ES5	ATOM	8297	CB	ALA	62	161.565	132.247	3.929	1.00	50.46	ES5
ATOM	8245	CA	GLN	56	169.746	133.143	8.633	1.00	46.49	ES5	ATOM	8298	C	ALA	62	160.698	134.483	3.230	1.00	40.22	ES5
ATOM	8246	CB	GLN	56	170.913	133.900	9.258	1.00	136.56	ES5	ATOM	8299	O	ALA	62	159.612	134.577	2.648	1.00	40.22	ES5
ATOM	8247	CG	GLN	56	170.437	134.983	10.195	1.00	136.56	ES5	ATOM	8300	N	ARG	63	161.106	135.326	4.176	1.00	56.56	ES5
ATOM	8248	CD	GLN	56	169.310	134.488	11.089	1.00	136.56	ES5	ATOM	8301	CA	ARG	63	160.303	136.446	4.646	1.00	56.56	ES5
ATOM	8249	OE1	GLN	56	169.448	133.474	11.777	1.00	136.56	ES5	ATOM	8302	CB	ARG	63	161.109	137.260	5.639	1.00	70.67	ES5
ATOM	8250	NE2	GLN	56	168.185	135.198	11.078	1.00	136.56	ES5	ATOM	8303	CG	ARG	63	160.266	137.932	6.677	1.00	70.67	ES5
ATOM	8251	C	GLN	56	169.398	133.731	7.274	1.00	46.49	ES5	ATOM	8304	CD	ARG	63	161.018	137.937	7.983	1.00	70.67	ES5
ATOM	8252	O	GLN	56	168.370	134.380	7.125	1.00	46.49	ES5	ATOM	8305	NE	ARG	63	161.096	136.601	8.563	1.00	70.67	ES5
ATOM	8253	N	LYS	57	170.237	133.479	6.275	1.00	56.61	ES5	ATOM	8306	CZ	ARG	63	162.104	136.176	9.313	1.00	70.67	ES5
ATOM	8254	CA	LYS	57	169.985	134.000	4.936	1.00	56.61	ES5	ATOM	8307	NH1	ARG	63	163.129	136.982	9.570	1.00	70.67	ES5
ATOM	8255	CB	LYS	57	171.148	133.624	3.997	1.00	56.47	ES5	ATOM	8308	NH2	ARG	63	162.081	134.951	9.819	1.00	70.67	ES5
ATOM	8256	CG	LYS	57	171.271	134.522	2.751	1.00	56.47	ES5	ATOM	8309	C	ARG	63	159.865	137.309	3.480	1.00	56.56	ES5
ATOM	8257	CD	LYS	57	172.593	134.310	2.002	1.00	56.47	ES5	ATOM	8310	O	ARG	63	158.783	137.890	3.494	1.00	56.56	ES5
ATOM	8258	CE	LYS	57	173.798	134.789	2.819	1.00	56.47	ES5	ATOM	8311	N	ARG	64	160.730	137.408	2.479	1.00	69.54	ES5
ATOM	8259	NZ	LYS	57	175.115	134.398	2.232	1.00	56.47	ES5	ATOM	8312	CA	ARG	64	160.410	138.145	1.270	1.00	69.54	ES5
ATOM	8260	C	LYS	57	168.645	133.478	4.391	1.00	56.61	ES5	ATOM	8313	CB	ARG	64	161.662	138.817	0.720	1.00	113.78	ES5
ATOM	8261	O	LYS	57	167.838	134.237	3.847	1.00	56.61	ES5	ATOM	8314	CG	ARG	64	162.338	139.663	1.775	1.00	113.78	ES5
ATOM	8262	N	ALA	58	168.401	132.182	4.551	1.00	36.24	ES5	ATOM	8315	CD	ARG	64	163.318	140.645	1.197	1.00	113.78	ES5
ATOM	8263	CA	ALA	58	167.156	131.594	4.075	1.00	36.24	ES5	ATOM	8316	NE	ARG	64	163.747	141.585	2.227	1.00	113.78	ES5
ATOM	8264	CB	ALA	58	167.132	130.102	4.384	1.00	71.96	ES5	ATOM	8317	CZ	ARG	64	164.565	142.609	2.012	1.00	113.78	ES5
ATOM	8265	C	ALA	58	165.973	132.298	4.740	1.00	36.24	ES5	ATOM	8318	NH1	ARG	64	165.050	142.828	0.796	1.00	113.78	ES5
ATOM	8266	O	ALA	58	165.082	132.797	4.053	1.00	36.24	ES5	ATOM	8319	NH2	ARG	64	164.905	143.412	3.015	1.00	113.78	ES5
ATOM	8267	N	GLY	59	165.976	132.334	6.076	1.00	46.81	ES5	ATOM	8320	C	ARG	64	159.951	136.987	0.403	1.00	69.54	ES5
ATOM	8268	CA	GLY	59	164.909	132.988	6.815	1.00	46.81	ES5	ATOM	8321	O	ARG	64	160.550	135.913	0.459	1.00	69.54	ES5
ATOM	8269	C	GLY	59	164.548	134.301	6.146	1.00	46.81	ES5	ATOM	8322	N	ASN	65	158.881	137.180	-0.365	1.00	94.47	ES5
ATOM	8270	O	GLY	59	163.416	134.506	5.704	1.00	46.81	ES5	ATOM	8323	CA	ASN	65	158.317	136.104	-1.187	1.00	94.47	ES5
ATOM	8271	N	TYR	60	165.534	135.187	6.060	1.00	49.46	ES5	ATOM	8324	CB	ASN	65	159.429	135.202	-1.754	1.00	101.39	ES5
ATOM	8272	CA	TYR	60	165.377	136.493	5.429	1.00	49.46	ES5	ATOM	8325	CG	ASN	65	158.965	133.776	-2.001	1.00	101.39	ES5
ATOM	8273	CB	TYR	60	166.741	137.181	5.372	1.00	88.17	ES5	ATOM	8326	OD1	ASN	65	158.031	133.532	-2.766	1.00	101.39	ES5
ATOM	8274	CG	TYR	60	166.821	138.366	4.444	1.00	88.17	ES5	ATOM	8327	ND2	ASN	65	159.616	132.825	-1.341	1.00	101.39	ES5
ATOM	8275	CD1	TYR	60	166.097	139.531	4.690	1.00	88.17	ES5	ATOM	8328	C	ASN	65	157.357	135.288	-0.306	1.00	94.47	ES5
ATOM	8276	CE1	TYR	60	166.200	140.633	3.841	1.00	88.17	ES5	ATOM	8329	O	ASN	65	157.602	134.122	0.016	1.00	94.47	ES5
ATOM	8277	CD2	TYR	60	167.642	138.327	3.327	1.00	88.17	ES5	ATOM	8330	N	MET	66	156.267	135.929	0.098	1.00	52.20	ES5
ATOM	8278	CE2	TYR	60	167.752	139.415	2.473	1.00	88.17	ES5	ATOM	8331	CA	MET	66	155.267	135.287	0.935	1.00	52.20	ES5
ATOM	8279	CZ	TYR	60	167.036	140.566	2.731	1.00	88.17	ES5	ATOM	8332	CB	MET	66	154.887	136.200	2.098	1.00	59.77	ES5
ATOM	8280	OH	TYR	60	167.187	141.645	1.881	1.00	88.17	ES5	ATOM	8333	CG	MET	66	156.039	136.618	2.978	1.00	59.77	ES5
ATOM	8281	C	TYR	60	164.799	136.359	4.020	1.00	49.46	ES5	ATOM	8334	SD	MET	66	156.329	135.507	4.365	1.00	59.77	ES5
ATOM	8282	O	TYR	60	163.903	137.107	3.628	1.00	49.46	ES5	ATOM	8335	CE	MET	66	154.701	135.463	5.063	1.00	59.77	ES5
ATOM	8283	N	TYR	61	165.325	135.402	3.261	1.00	49.98	ES5	ATOM	8336	C	MET	66	154.024	135.014	0.103	1.00	52.20	ES5
ATOM	8284	CA	TYR	61	164.866	135.166	1.899	1.00	49.98	ES5	ATOM	8337	O	MET	66	153.757	135.717	-0.877	1.00	52.20	ES5
ATOM	8285	CB	TYR	61	165.736	134.110	1.212	1.00	86.88	ES5	ATOM	8338	N	VAL	67	153.263	133.995	0.487	1.00	61.59	ES5
ATOM	8286	CG	TYR	61	166.958	134.643	0.499	1.00	86.88	ES5	ATOM	8339	CA	VAL	67	152.037	133.693	-0.229	1.00	61.59	ES5

ATOM	8340	CB	VAL	67	152.083	132.304	-0.876	1.00	35.41	ES5	ATOM	8393	N	GLY	74	140.465	126.051	8.290	1.00	47.38	ES5
ATOM	8341	CG1	VAL	67	150.802	132.032	-1.630	1.00	35.41	ES5	ATOM	8394	CA	GLY	74	141.647	125.221	8.482	1.00	47.38	ES5
ATOM	8342	CG2	VAL	67	153.242	132.221	-1.819	1.00	35.41	ES5	ATOM	8395	C	GLY	74	142.024	124.331	7.310	1.00	47.38	ES5
ATOM	8343	C	VAL	67	150.875	133.743	0.749	1.00	61.59	ES5	ATOM	8396	O	GLY	74	143.026	123.620	7.352	1.00	47.38	ES5
ATOM	8344	O	VAL	67	151.023	133.365	1.915	1.00	61.59	ES5	ATOM	8397	N	THR	75	141.213	124.349	6.263	1.00	45.03	ES5
ATOM	8345	N	GLU	68	149.729	134.222	0.268	1.00	50.65	ES5	ATOM	8398	CA	THR	75	141.514	123.549	5.101	1.00	45.03	ES5
ATOM	8346	CA	GLU	68	148.517	134.318	1.074	1.00	50.65	ES5	ATOM	8399	CB	THR	75	140.484	122.442	4.876	1.00	57.41	ES5
ATOM	8347	CB	GLU	68	147.768	135.616	0.754	1.00	106.43	ES5	ATOM	8400	OG1	THR	75	141.027	121.461	3.985	1.00	57.41	ES5
ATOM	8348	CG	GLU	68	147.955	136.730	1.776	1.00	106.43	ES5	ATOM	8401	CG2	THR	75	139.225	123.008	4.264	1.00	57.41	ES5
ATOM	8349	CD	GLU	68	149.412	137.031	2.064	1.00	106.43	ES5	ATOM	8402	C	THR	75	141.570	124.440	3.876	1.00	45.03	ES5
ATOM	8350	OE1	GLU	68	150.176	137.329	1.120	1.00	106.43	ES5	ATOM	8403	O	THR	75	141.601	125.658	3.973	1.00	45.03	ES5
ATOM	8351	OE2	GLU	68	149.794	136.972	3.246	1.00	106.43	ES5	ATOM	8404	N	ILE	76	141.543	123.816	2.716	1.00	51.55	ES5
ATOM	8352	C	GLU	68	147.604	133.117	0.819	1.00	50.65	ES5	ATOM	8405	CA	ILE	76	141.680	124.533	1.475	1.00	51.55	ES5
ATOM	8353	O	GLU	68	146.930	133.038	-0.208	1.00	50.65	ES5	ATOM	8406	CB	ILE	76	142.961	124.007	0.795	1.00	46.31	ES5
ATOM	8354	N	VAL	69	147.583	132.193	1.773	1.00	51.78	ES5	ATOM	8407	CG2	ILE	76	142.732	123.633	-0.649	1.00	46.31	ES5
ATOM	8355	CA	VAL	69	146.775	130.989	1.674	1.00	51.78	ES5	ATOM	8408	CG1	ILE	76	144.059	125.026	1.008	1.00	46.31	ES5
ATOM	8356	CB	VAL	69	147.331	129.897	2.572	1.00	55.57	ES5	ATOM	8409	CD1	ILE	76	145.406	124.530	0.602	1.00	46.31	ES5
ATOM	8357	CG1	VAL	69	146.853	128.536	2.081	1.00	55.57	ES5	ATOM	8410	C	ILE	76	140.457	124.464	0.569	1.00	51.55	ES5
ATOM	8358	CG2	VAL	69	148.856	129.991	2.617	1.00	55.57	ES5	ATOM	8411	O	ILE	76	139.695	123.503	0.602	1.00	51.55	ES5
ATOM	8359	C	VAL	69	145.336	131.242	2.090	1.00	51.78	ES5	ATOM	8412	N	PRO	77	140.249	125.504	-0.246	1.00	45.58	ES5
ATOM	8360	O	VAL	69	145.076	131.669	3.210	1.00	51.78	ES5	ATOM	8413	CD	PRO	77	141.030	126.745	-0.227	1.00	19.53	ES5
ATOM	8361	N	PRO	70	144.385	130.984	1.185	1.00	53.71	ES5	ATOM	8414	CA	PRO	77	139.132	125.619	-1.180	1.00	45.58	ES5
ATOM	8362	CD	PRO	70	144.694	130.807	-0.238	1.00	45.95	ES5	ATOM	8415	CB	PRO	77	139.323	126.999	-1.786	1.00	19.53	ES5
ATOM	8363	CA	PRO	70	142.940	131.152	1.367	1.00	53.71	ES5	ATOM	8416	CG	PRO	77	140.757	127.274	-1.589	1.00	19.53	ES5
ATOM	8364	CB	PRO	70	142.394	131.031	-0.046	1.00	45.95	ES5	ATOM	8417	C	PRO	77	138.965	124.556	-2.241	1.00	45.58	ES5
ATOM	8365	CG	PRO	70	143.533	131.495	-0.877	1.00	45.95	ES5	ATOM	8418	O	PRO	77	137.840	124.272	-2.640	1.00	45.58	ES5
ATOM	8366	C	PRO	70	142.330	130.097	2.259	1.00	53.71	ES5	ATOM	8419	N	HIS	78	140.050	123.967	-2.718	1.00	44.58	ES5
ATOM	8367	O	PRO	70	141.387	129.427	1.848	1.00	53.71	ES5	ATOM	8420	CA	HIS	78	139.910	122.939	-3.746	1.00	44.58	ES5
ATOM	8368	N	LEU	71	142.854	129.950	3.469	1.00	71.40	ES5	ATOM	8421	CB	HIS	78	139.433	123.562	-5.057	1.00	47.96	ES5
ATOM	8369	CA	LEU	71	142.348	128.953	4.408	1.00	71.40	ES5	ATOM	8422	CG	HIS	78	140.348	124.618	-5.590	1.00	47.96	ES5
ATOM	8370	CB	LEU	71	143.115	129.048	5.726	1.00	52.19	ES5	ATOM	8423	CD2	HIS	78	140.142	125.932	-5.838	1.00	47.96	ES5
ATOM	8371	CG	LEU	71	144.571	128.595	5.622	1.00	52.19	ES5	ATOM	8424	ND1	HIS	78	141.656	124.362	-5.944	1.00	47.96	ES5
ATOM	8372	CD1	LEU	71	145.365	128.981	6.863	1.00	52.19	ES5	ATOM	8425	CE1	HIS	78	142.215	125.473	-6.387	1.00	47.96	ES5
ATOM	8373	CD2	LEU	71	144.584	127.091	5.406	1.00	52.19	ES5	ATOM	8426	NE2	HIS	78	141.318	126.440	-6.334	1.00	47.96	ES5
ATOM	8374	C	LEU	71	140.855	129.076	4.681	1.00	71.40	ES5	ATOM	8427	C	HIS	78	141.208	122.205	-3.982	1.00	44.58	ES5
ATOM	8375	O	LEU	71	140.388	130.098	5.160	1.00	71.40	ES5	ATOM	8428	O	HIS	78	142.242	122.586	-3.442	1.00	44.58	ES5
ATOM	8376	N	GLN	72	140.104	128.033	4.361	1.00	52.61	ES5	ATOM	8429	N	GLU	79	141.160	121.152	-4.792	1.00	45.98	ES5
ATOM	8377	CA	GLN	72	138.674	128.036	4.612	1.00	52.61	ES5	ATOM	8430	CA	GLU	79	142.359	120.376	-5.068	1.00	45.98	ES5
ATOM	8378	CB	GLN	72	137.885	127.719	3.345	1.00	81.89	ES5	ATOM	8431	CB	GLU	79	142.015	118.923	-5.407	1.00	121.33	ES5
ATOM	8379	CG	GLN	72	138.138	128.659	2.192	1.00	81.89	ES5	ATOM	8432	CG	GLU	79	140.758	118.383	-4.763	1.00	121.33	ES5
ATOM	8380	CD	GLN	72	137.147	128.443	1.065	1.00	81.89	ES5	ATOM	8433	CD	GLU	79	139.523	118.652	-5.598	1.00	121.33	ES5
ATOM	8381	OE1	GLN	72	136.741	127.313	0.794	1.00	81.89	ES5	ATOM	8434	OE1	GLU	79	139.165	119.836	-5.769	1.00	121.33	ES5
ATOM	8382	NE2	GLN	72	136.760	129.524	0.394	1.00	81.89	ES5	ATOM	8435	OE2	GLU	79	138.912	117.677	-6.089	1.00	121.33	ES5
ATOM	8383	C	GLN	72	138.405	126.964	5.656	1.00	52.61	ES5	ATOM	8436	C	GLU	79	143.135	120.969	-6.227	1.00	45.98	ES5
ATOM	8384	O	GLN	72	138.271	125.784	5.339	1.00	52.61	ES5	ATOM	8437	O	GLU	79	142.557	121.354	-7.238	1.00	45.98	ES5
ATOM	8385	N	ASN	73	138.345	127.382	6.910	1.00	56.27	ES5	ATOM	8438	N	ILE	80	144.447	121.059	-6.057	1.00	46.54	ES5
ATOM	8386	CA	ASN	73	138.089	126.469	8.012	1.00	56.27	ES5	ATOM	8439	CA	ILE	80	145.327	121.548	-7.110	1.00	46.54	ES5
ATOM	8387	CB	ASN	73	136.794	125.691	7.764	1.00	67.31	ES5	ATOM	8440	CB	ILE	80	146.104	122.864	-6.763	1.00	53.30	ES5
ATOM	8388	CG	ASN	73	136.255	125.033	9.025	1.00	67.31	ES5	ATOM	8441	CG2	ILE	80	145.817	123.966	-7.778	1.00	53.30	ES5
ATOM	8389	OD1	ASN	73	135.288	124.264	8.974	1.00	67.31	ES5	ATOM	8442	CG1	ILE	80	145.825	123.249	-5.326	1.00	53.30	ES5
ATOM	8390	ND2	ASN	73	136.874	125.337	10.168	1.00	67.31	ES5	ATOM	8443	CD1	ILE	80	146.412	122.269	-4.363	1.00	53.30	ES5
ATOM	8391	C	ASN	73	139.254	125.502	8.197	1.00	56.27	ES5	ATOM	8444	C	ILE	80	146.402	120.500	-7.210	1.00	46.54	ES5
ATOM	8392	O	ASN	73	139.058	124.284	8.249	1.00	56.27	ES5	ATOM	8445	O	ILE	80	146.764	119.876	-6.207	1.00	46.54	ES5

ATOM	8446	N	GLU	81	146.892	120.306	-8.426	1.00	40.31	ES5	ATOM	8499	CB	LYS	88	153.802	115.805	-9.634	1.00	47.66	ES5
ATOM	8447	CA	GLU	81	147.994	119.404	-8.673	1.00	40.31	ES5	ATOM	8500	CG	LYS	88	152.421	116.133	-10.123	1.00	47.66	ES5
ATOM	8448	CB	GLU	81	147.590	118.267	-9.606	1.00	115.35	ES5	ATOM	8501	CD	LYS	88	151.874	115.046	-11.024	1.00	47.66	ES5
ATOM	8449	CG	GLU	81	146.965	117.097	-8.881	1.00	115.35	ES5	ATOM	8502	CE	LYS	88	150.568	115.510	-11.645	1.00	47.66	ES5
ATOM	8450	CD	GLU	81	146.777	115.898	-9.779	1.00	115.35	ES5	ATOM	8503	NZ	LYS	88	149.618	114.381	-11.878	1.00	47.66	ES5
ATOM	8451	OE1	GLU	81	147.737	115.544	-10.496	1.00	115.35	ES5	ATOM	8504	C	LYS	88	153.877	116.834	-7.367	1.00	40.04	ES5
ATOM	8452	OE2	GLU	81	145.676	115.306	-9.762	1.00	115.35	ES5	ATOM	8505	O	LYS	88	154.155	115.888	-6.646	1.00	40.04	ES5
ATOM	8453	C	GLU	81	148.996	120.319	-9.346	1.00	40.31	ES5	ATOM	8506	N	ILE	89	153.118	117.843	-6.950	1.00	44.02	ES5
ATOM	8454	O	GLU	81	148.649	121.066	-10.258	1.00	40.31	ES5	ATOM	8507	CA	ILE	89	152.535	117.832	-5.609	1.00	44.02	ES5
ATOM	8455	N	VAL	82	150.233	120.304	-8.887	1.00	45.42	ES5	ATOM	8508	CB	ILE	89	152.985	119.075	-4.764	1.00	40.07	ES5
ATOM	8456	CA	VAL	82	151.205	121.166	-9.514	1.00	45.42	ES5	ATOM	8509	CG2	ILE	89	152.000	120.210	-4.908	1.00	40.07	ES5
ATOM	8457	CB	VAL	82	151.455	122.406	-8.661	1.00	29.50	ES5	ATOM	8510	CG1	ILE	89	153.153	118.688	-3.284	1.00	40.07	ES5
ATOM	8458	CG1	VAL	82	152.778	123.032	-9.044	1.00	29.50	ES5	ATOM	8511	CD1	ILE	89	151.984	117.977	-2.653	1.00	40.07	ES5
ATOM	8459	CG2	VAL	82	150.326	123.404	-8.859	1.00	29.50	ES5	ATOM	8512	C	ILE	89	151.030	117.841	-5.785	1.00	44.02	ES5
ATOM	8460	C	VAL	82	152.516	120.466	-9.774	1.00	45.42	ES5	ATOM	8513	O	ILE	89	150.509	118.474	-6.698	1.00	44.02	ES5
ATOM	8461	O	VAL	82	153.060	119.802	-8.895	1.00	45.42	ES5	ATOM	8514	N	VAL	90	150.335	117.114	-4.925	1.00	48.31	ES5
ATOM	8462	N	GLU	83	153.017	120.610	-10.994	1.00	47.14	ES5	ATOM	8515	CA	VAL	90	148.885	117.059	-4.991	1.00	48.31	ES5
ATOM	8463	CA	GLU	83	154.293	120.013	-11.359	1.00	47.14	ES5	ATOM	8516	CB	VAL	90	148.385	115.671	-5.331	1.00	23.32	ES5
ATOM	8464	CB	GLU	83	154.239	119.396	-12.749	1.00	90.68	ES5	ATOM	8517	CG1	VAL	90	146.869	115.651	-5.179	1.00	23.32	ES5
ATOM	8465	CG	GLU	83	153.535	118.078	-12.837	1.00	90.68	ES5	ATOM	8518	CG2	VAL	90	148.821	115.279	-6.741	1.00	23.32	ES5
ATOM	8466	CD	GLU	83	153.820	117.391	-14.150	1.00	90.68	ES5	ATOM	8519	C	VAL	90	148.250	117.415	-3.663	1.00	48.31	ES5
ATOM	8467	OE1	GLU	83	155.007	117.086	-14.407	1.00	90.68	ES5	ATOM	8520	O	VAL	90	148.558	116.804	-2.636	1.00	48.31	ES5
ATOM	8468	OE2	GLU	83	152.863	117.164	-14.923	1.00	90.68	ES5	ATOM	8521	N	LEU	91	147.349	118.389	-3.692	1.00	41.75	ES5
ATOM	8469	C	GLU	83	155.357	121.085	-11.380	1.00	47.14	ES5	ATOM	8522	CA	LEU	91	146.651	118.808	-2.484	1.00	41.75	ES5
ATOM	8470	O	GLU	83	155.156	122.145	-11.956	1.00	47.14	ES5	ATOM	8523	CB	LEU	91	146.970	120.270	-2.157	1.00	25.10	ES5
ATOM	8471	N	PHE	84	156.486	120.817	-10.745	1.00	37.80	ES5	ATOM	8524	CG	LEU	91	148.455	120.651	-2.136	1.00	25.10	ES5
ATOM	8472	CA	PHE	84	157.595	121.758	-10.752	1.00	37.80	ES5	ATOM	8525	CD1	LEU	91	148.626	122.161	-1.946	1.00	25.10	ES5
ATOM	8473	CB	PHE	84	157.763	122.421	-9.407	1.00	27.01	ES5	ATOM	8526	CD2	LEU	91	149.146	119.876	-1.031	1.00	25.10	ES5
ATOM	8474	CG	PHE	84	158.776	123.497	-9.406	1.00	27.01	ES5	ATOM	8527	C	LEU	91	145.143	118.618	-2.661	1.00	41.75	ES5
ATOM	8475	CD1	PHE	84	158.469	124.758	-9.897	1.00	27.01	ES5	ATOM	8528	O	LEU	91	144.564	118.932	-3.709	1.00	41.75	ES5
ATOM	8476	CD2	PHE	84	160.046	123.264	-8.912	1.00	27.01	ES5	ATOM	8529	N	LYS	92	144.521	118.089	-1.616	1.00	32.54	ES5
ATOM	8477	CE1	PHE	84	159.423	125.788	-9.892	1.00	27.01	ES5	ATOM	8530	CA	LYS	92	143.092	117.821	-1.599	1.00	32.54	ES5
ATOM	8478	CE2	PHE	84	161.012	124.288	-8.902	1.00	27.01	ES5	ATOM	8531	CB	LYS	92	142.876	116.324	-1.717	1.00	61.49	ES5
ATOM	8479	CZ	PHE	84	160.693	125.553	-9.394	1.00	27.01	ES5	ATOM	8532	CG	LYS	92	141.523	115.908	-2.177	1.00	61.49	ES5
ATOM	8480	C	PHE	84	158.800	120.892	-11.041	1.00	37.80	ES5	ATOM	8533	CD	LYS	92	141.519	114.408	-2.364	1.00	61.49	ES5
ATOM	8481	O	PHE	84	159.257	120.143	-10.177	1.00	37.80	ES5	ATOM	8534	CE	LYS	92	140.475	113.992	-3.373	1.00	61.49	ES5
ATOM	8482	N	GLY	85	159.307	120.984	-12.264	1.00	27.68	ES5	ATOM	8535	NZ	LYS	92	140.620	112.557	-3.711	1.00	61.49	ES5
ATOM	8483	CA	GLY	85	160.425	120.151	-12.641	1.00	27.68	ES5	ATOM	8536	C	LYS	92	142.557	118.314	-0.260	1.00	32.54	ES5
ATOM	8484	C	GLY	85	159.808	118.787	-12.820	1.00	27.68	ES5	ATOM	8537	O	LYS	92	143.154	118.058	0.785	1.00	32.54	ES5
ATOM	8485	O	GLY	85	158.813	118.642	-13.531	1.00	27.68	ES5	ATOM	8538	N	PRO	93	141.440	119.052	-0.271	1.00	32.47	ES5
ATOM	8486	N	ALA	86	160.383	117.782	-12.174	1.00	47.26	ES5	ATOM	8539	CD	PRO	93	140.708	119.591	-1.432	1.00	17.79	ES5
ATOM	8487	CA	ALA	86	159.844	116.436	-12.272	1.00	47.26	ES5	ATOM	8540	CA	PRO	93	140.871	119.552	0.988	1.00	32.47	ES5
ATOM	8488	CB	ALA	86	160.967	115.443	-12.457	1.00	58.94	ES5	ATOM	8541	CB	PRO	93	139.839	120.571	0.512	1.00	17.79	ES5
ATOM	8489	C	ALA	86	159.064	116.132	-10.992	1.00	47.26	ES5	ATOM	8542	CG	PRO	93	139.414	120.040	-0.807	1.00	17.79	ES5
ATOM	8490	O	ALA	86	158.603	115.013	-10.786	1.00	47.26	ES5	ATOM	8543	C	PRO	93	140.259	118.445	1.859	1.00	32.47	ES5
ATOM	8491	N	SER	87	158.925	117.146	-10.141	1.00	37.64	ES5	ATOM	8544	O	PRO	93	139.748	117.447	1.347	1.00	32.47	ES5
ATOM	8492	CA	SER	87	158.212	117.023	-8.881	1.00	37.64	ES5	ATOM	8545	N	ALA	94	140.321	118.620	3.175	1.00	53.23	ES5
ATOM	8493	CB	SER	87	158.855	117.909	-7.828	1.00	35.30	ES5	ATOM	8546	CA	ALA	94	139.774	117.625	4.095	1.00	53.23	ES5
ATOM	8494	OG	SER	87	160.172	117.480	-7.560	1.00	35.30	ES5	ATOM	8547	CB	ALA	94	140.905	116.831	4.744	1.00	29.80	ES5
ATOM	8495	C	SER	87	156.778	117.451	-9.093	1.00	37.64	ES5	ATOM	8548	C	ALA	94	138.898	118.241	5.179	1.00	53.23	ES5
ATOM	8496	O	SER	87	156.517	118.510	-9.666	1.00	37.64	ES5	ATOM	8549	O	ALA	94	138.959	119.447	5.434	1.00	53.23	ES5
ATOM	8497	N	LYS	88	155.853	116.622	-8.632	1.00	40.04	ES5	ATOM	8550	N	ALA	95	138.085	117.402	5.815	1.00	47.83	ES5
ATOM	8498	CA	LYS	88	154.438	116.892	-8.773	1.00	40.04	ES5	ATOM	8551	CA	ALA	95	137.214	117.863	6.883	1.00	47.83	ES5

ATOM	8552	CB	ALA	95	136.128	116.857	7.124	1.00	43.50	ES5	ATOM	8605	O	ALA	104	156.727	118.603	5.417	1.00	46.99	ES5
ATOM	8553	C	ALA	95	138.043	118.048	8.143	1.00	47.83	ES5	ATOM	8606	N	VAL	105	158.399	117.878	4.133	1.00	36.25	ES5
ATOM	8554	O	ALA	95	139.248	117.802	8.146	1.00	47.83	ES5	ATOM	8607	CA	VAL	105	158.475	119.130	3.388	1.00	36.25	ES5
ATOM	8555	N	PRO	96	137.422	118.524	9.226	1.00	38.90	ES5	ATOM	8608	CB	VAL	105	159.218	118.931	2.051	1.00	28.40	ES5
ATOM	8556	CD	PRO	96	136.251	119.409	9.243	1.00	33.73	ES5	ATOM	8609	CG1	VAL	105	159.398	120.279	1.338	1.00	28.40	ES5
ATOM	8557	CA	PRO	96	138.205	118.702	10.449	1.00	38.90	ES5	ATOM	8610	CG2	VAL	105	160.574	118.264	2.311	1.00	28.40	ES5
ATOM	8558	CB	PRO	96	137.342	119.639	11.270	1.00	33.73	ES5	ATOM	8611	C	VAL	105	157.093	119.740	3.133	1.00	36.25	ES5
ATOM	8559	CG	PRO	96	136.685	120.456	10.229	1.00	33.73	ES5	ATOM	8612	O	VAL	105	156.810	120.846	3.585	1.00	36.25	ES5
ATOM	8560	C	PRO	96	138.428	117.371	11.141	1.00	38.90	ES5	ATOM	8613	N	PRO	106	156.212	119.035	2.410	1.00	40.52	ES5
ATOM	8561	O	PRO	96	137.584	116.478	11.059	1.00	38.90	ES5	ATOM	8614	CD	PRO	106	156.376	117.750	1.713	1.00	35.97	ES5
ATOM	8562	N	GLY	97	139.569	117.241	11.813	1.00	73.47	ES5	ATOM	8615	CA	PRO	106	154.879	119.599	2.161	1.00	40.52	ES5
ATOM	8563	CA	GLY	97	139.886	116.009	12.510	1.00	73.47	ES5	ATOM	8616	CB	PRO	106	154.143	118.450	1.483	1.00	35.97	ES5
ATOM	8564	C	GLY	97	140.702	115.084	11.633	1.00	73.47	ES5	ATOM	8617	CG	PRO	106	155.226	117.778	0.735	1.00	35.97	ES5
ATOM	8565	O	GLY	97	141.120	114.005	12.058	1.00	73.47	ES5	ATOM	8618	C	PRO	106	154.180	120.024	3.459	1.00	40.52	ES5
ATOM	8566	N	THR	98	140.924	115.515	10.396	1.00	37.12	ES5	ATOM	8619	O	PRO	106	153.541	121.074	3.527	1.00	40.52	ES5
ATOM	8567	CA	THR	98	141.698	114.740	9.432	1.00	37.12	ES5	ATOM	8620	N	ARG	107	154.302	119.190	4.484	1.00	49.63	ES5
ATOM	8568	CB	THR	98	141.372	115.176	7.992	1.00	29.64	ES5	ATOM	8621	CA	ARG	107	153.684	119.462	5.773	1.00	49.63	ES5
ATOM	8569	OG1	THR	98	139.980	114.960	7.726	1.00	29.64	ES5	ATOM	8622	CB	ARG	107	153.969	118.299	6.735	1.00	66.74	ES5
ATOM	8570	CG2	THR	98	142.181	114.375	7.006	1.00	29.64	ES5	ATOM	8623	CG	ARG	107	154.035	118.681	8.196	1.00	66.74	ES5
ATOM	8571	C	THR	98	143.205	114.895	9.684	1.00	37.12	ES5	ATOM	8624	CD	ARG	107	154.428	117.501	9.020	1.00	66.74	ES5
ATOM	8572	O	THR	98	143.951	113.918	9.652	1.00	37.12	ES5	ATOM	8625	NE	ARG	107	153.305	116.592	9.178	1.00	66.74	ES5
ATOM	8573	N	GLY	99	143.638	116.124	9.953	1.00	47.31	ES5	ATOM	8626	CZ	ARG	107	153.403	115.266	9.118	1.00	66.74	ES5
ATOM	8574	CA	GLY	99	145.042	116.387	10.213	1.00	47.31	ES5	ATOM	8627	NH1	ARG	107	154.588	114.698	8.894	1.00	66.74	ES5
ATOM	8575	C	GLY	99	145.759	116.806	8.947	1.00	47.31	ES5	ATOM	8628	NH2	ARG	107	152.320	114.504	9.294	1.00	66.74	ES5
ATOM	8576	O	GLY	99	145.198	116.739	7.846	1.00	47.31	ES5	ATOM	8629	C	ARG	107	154.169	120.782	6.364	1.00	49.63	ES5
ATOM	8577	N	VAL	100	146.993	117.274	9.092	1.00	36.91	ES5	ATOM	8630	O	ARG	107	153.390	121.728	6.514	1.00	49.63	ES5
ATOM	8578	CA	VAL	100	147.766	117.657	7.923	1.00	36.91	ES5	ATOM	8631	N	ALA	108	155.457	120.835	6.689	1.00	33.03	ES5
ATOM	8579	CB	VAL	100	148.815	118.721	8.240	1.00	39.32	ES5	ATOM	8632	CA	ALA	108	156.080	122.016	7.271	1.00	33.03	ES5
ATOM	8580	CG1	VAL	100	149.486	119.164	6.951	1.00	39.32	ES5	ATOM	8633	CB	ALA	108	157.580	121.926	7.115	1.00	46.75	ES5
ATOM	8581	CG2	VAL	100	148.169	119.907	8.946	1.00	39.32	ES5	ATOM	8634	C	ALA	108	155.576	123.327	6.668	1.00	33.03	ES5
ATOM	8582	C	VAL	100	148.474	116.379	7.560	1.00	36.91	ES5	ATOM	8635	O	ALA	108	155.469	124.338	7.354	1.00	33.03	ES5
ATOM	8583	O	VAL	100	149.469	116.012	8.189	1.00	36.91	ES5	ATOM	8636	N	ILE	109	155.288	123.321	5.380	1.00	41.85	ES5
ATOM	8584	N	ILE	101	147.940	115.681	6.565	1.00	31.70	ES5	ATOM	8637	CA	ILE	109	154.787	124.517	4.747	1.00	41.85	ES5
ATOM	8585	CA	ILE	101	148.509	114.408	6.122	1.00	31.70	ES5	ATOM	8638	CB	ILE	109	154.925	124.429	3.236	1.00	27.64	ES5
ATOM	8586	CB	ILE	101	147.383	113.408	5.859	1.00	40.79	ES5	ATOM	8639	CG2	ILE	109	154.047	125.482	2.568	1.00	27.64	ES5
ATOM	8587	CG2	ILE	101	147.914	112.110	5.268	1.00	40.79	ES5	ATOM	8640	CG1	ILE	109	156.403	124.558	2.868	1.00	27.64	ES5
ATOM	8588	CG1	ILE	101	146.700	113.131	7.184	1.00	40.79	ES5	ATOM	8641	CD1	ILE	109	156.688	124.329	1.409	1.00	27.64	ES5
ATOM	8589	CD1	ILE	101	145.491	112.279	7.031	1.00	40.79	ES5	ATOM	8642	C	ILE	109	153.324	124.670	5.112	1.00	41.85	ES5
ATOM	8590	C	ILE	101	149.386	114.576	4.892	1.00	31.70	ES5	ATOM	8643	O	ILE	109	152.923	125.684	5.675	1.00	41.85	ES5
ATOM	8591	O	ILE	101	148.914	114.564	3.755	1.00	31.70	ES5	ATOM	8644	N	LEU	110	152.531	123.656	4.799	1.00	32.33	ES5
ATOM	8592	N	ALA	102	150.679	114.721	5.138	1.00	37.24	ES5	ATOM	8645	CA	LEU	110	151.105	123.676	5.092	1.00	32.33	ES5
ATOM	8593	CA	ALA	102	151.603	114.934	4.050	1.00	37.24	ES5	ATOM	8646	CB	LEU	110	150.502	122.313	4.750	1.00	15.90	ES5
ATOM	8594	CB	ALA	102	151.536	116.397	3.614	1.00	33.39	ES5	ATOM	8647	CG	LEU	110	150.508	122.034	3.249	1.00	15.90	ES5
ATOM	8595	C	ALA	102	153.027	114.582	4.450	1.00	37.24	ES5	ATOM	8648	CD1	LEU	110	150.095	120.601	2.989	1.00	15.90	ES5
ATOM	8596	O	ALA	102	153.333	114.429	5.638	1.00	37.24	ES5	ATOM	8649	CD2	LEU	110	149.593	123.022	2.554	1.00	15.90	ES5
ATOM	8597	N	GLY	103	153.890	114.451	3.443	1.00	44.04	ES5	ATOM	8650	C	LEU	110	150.777	124.060	6.543	1.00	32.33	ES5
ATOM	8598	CA	GLY	103	155.282	114.171	3.716	1.00	44.04	ES5	ATOM	8651	O	LEU	110	149.796	124.765	6.794	1.00	32.33	ES5
ATOM	8599	C	GLY	103	155.846	115.403	4.398	1.00	44.04	ES5	ATOM	8652	N	GLU	111	151.597	123.605	7.489	1.00	44.06	ES5
ATOM	8600	O	GLY	103	155.300	116.489	4.241	1.00	44.04	ES5	ATOM	8653	CA	GLU	111	151.381	123.925	8.897	1.00	44.06	ES5
ATOM	8601	N	ALA	104	156.934	115.254	5.140	1.00	46.99	ES5	ATOM	8654	CB	GLU	111	152.362	123.161	9.780	1.00	99.68	ES5
ATOM	8602	CA	ALA	104	157.517	116.380	5.850	1.00	46.99	ES5	ATOM	8655	CG	GLU	111	152.361	121.669	9.534	1.00	99.68	ES5
ATOM	8603	CB	ALA	104	158.898	116.036	6.270	1.00	23.42	ES5	ATOM	8656	CD	GLU	111	152.769	120.876	10.761	1.00	99.68	ES5
ATOM	8604	C	ALA	104	157.517	117.718	5.107	1.00	46.99	ES5	ATOM	8657	OE1	GLU	111	153.840	121.166	11.338	1.00	99.68	ES5

ATOM	8658	OE2	GLU	111	152.011	119.956	11.144	1.00	99.68	ES5	ATOM	8711	CG	LEU	119	143.013	114.007	2.467	1.00 45.05	ES5
ATOM	8659	C	GLU	111	151.543	125.422	9.128	1.00	44.06	ES5	ATOM	8712	CD1	LEU	119	141.912	113.218	1.786	1.00 45.05	ES5
ATOM	8660	O	GLU	111	150.605	126.101	9.533	1.00	44.06	ES5	ATOM	8713	CD2	LEU	119	143.764	113.120	3.448	1.00 45.05	ES5
ATOM	8661	N	LEU	112	152.731	125.947	8.872	1.00	39.88	ES5	ATOM	8714	C	LEU	119	146.202	115.684	1.032	1.00 44.13	ES5
ATOM	8662	CA	LEU	112	152.940	127.369	9.059	1.00	39.88	ES5	ATOM	8715	O	LEU	119	145.960	116.533	0.171	1.00 44.13	ES5
ATOM	8663	CB	LEU	112	154.375	127.767	8.718	1.00	20.05	ES5	ATOM	8716	N	THR	120	147.362	115.059	1.123	1.00 48.94	ES5
ATOM	8664	CG	LEU	112	155.453	126.967	9.451	1.00	20.05	ES5	ATOM	8717	CA	THR	120	148.483	115.386	0.271	1.00 48.94	ES5
ATOM	8665	CD1	LEU	112	156.766	127.716	9.387	1.00	20.05	ES5	ATOM	8718	CB	THR	120	149.599	115.941	1.165	1.00 41.31	ES5
ATOM	8666	CD2	LEU	112	155.051	126.758	10.899	1.00	20.05	ES5	ATOM	8719	OG1	THR	120	149.603	117.365	1.066	1.00 41.31	ES5
ATOM	8667	C	LEU	112	151.979	128.108	8.151	1.00	39.88	ES5	ATOM	8720	CG2	THR	120	150.975	115.341	0.820	1.00 41.31	ES5
ATOM	8668	O	LEU	112	151.614	129.253	8.411	1.00	39.88	ES5	ATOM	8721	C	THR	120	149.006	114.198	-0.494	1.00 48.94	ES5
ATOM	8669	N	ALA	113	151.561	127.462	7.075	1.00	45.54	ES5	ATOM	8722	O	THR	120	148.563	113.083	-0.276	1.00 48.94	ES5
ATOM	8670	CA	ALA	113	150.644	128.129	6.174	1.00	45.54	ES5	ATOM	8723	N	LYS	121	149.948	114.453	-1.398	1.00 57.68	ES5
ATOM	8671	CB	ALA	113	150.437	127.295	4.923	1.00	59.65	ES5	ATOM	8724	CA	LYS	121	150.599	113.396	-2.154	1.00 57.68	ES5
ATOM	8672	C	ALA	113	149.329	128.330	6.912	1.00	45.54	ES5	ATOM	8725	CB	LYS	121	149.591	112.612	-2.972	1.00 42.52	ES5
ATOM	8673	O	ALA	113	148.457	129.073	6.471	1.00	45.54	ES5	ATOM	8726	CG	LYS	121	150.215	111.393	-3.636	1.00 42.52	ES5
ATOM	8674	N	GLY	114	149.190	127.673	8.052	1.00	44.69	ES5	ATOM	8727	CD	LYS	121	151.132	110.651	-2.683	1.00 42.52	ES5
ATOM	8675	CA	GLY	114	147.958	127.809	8.797	1.00	44.69	ES5	ATOM	8728	CE	LYS	121	151.612	109.373	-3.311	1.00 42.52	ES5
ATOM	8676	C	GLY	114	146.992	126.684	8.479	1.00	44.69	ES5	ATOM	8729	NZ	LYS	121	152.780	108.822	-2.569	1.00 42.52	ES5
ATOM	8677	O	GLY	114	145.937	126.570	9.101	1.00	44.69	ES5	ATOM	8730	C	LYS	121	151.703	113.872	-3.074	1.00 57.68	ES5
ATOM	8678	N	VAL	115	147.331	125.854	7.500	1.00	52.58	ES5	ATOM	8731	O	LYS	121	151.471	114.677	-3.973	1.00 57.68	ES5
ATOM	8679	CA	VAL	115	146.452	124.741	7.179	1.00	52.58	ES5	ATOM	8732	N	GLU	122	152.911	113.372	-2.834	1.00 45.69	ES5
ATOM	8680	CB	VAL	115	146.904	123.943	5.967	1.00	33.03	ES5	ATOM	8733	CA	GLU	122	154.072	113.708	-3.658	1.00 45.69	ES5
ATOM	8681	CG1	VAL	115	145.972	122.742	5.805	1.00	33.03	ES5	ATOM	8734	CB	GLU	122	155.356	113.710	-2.829	1.00 54.94	ES5
ATOM	8682	CG2	VAL	115	146.892	124.828	4.720	1.00	33.03	ES5	ATOM	8735	CG	GLU	122	155.498	114.870	-1.901	1.00 54.94	ES5
ATOM	8683	C	VAL	115	146.464	123.804	8.357	1.00	52.58	ES5	ATOM	8736	CD	GLU	122	156.735	114.759	-1.037	1.00 54.94	ES5
ATOM	8684	O	VAL	115	147.445	123.716	9.084	1.00	52.58	ES5	ATOM	8737	OE1	GLU	122	157.836	114.544	-1.593	1.00 54.94	ES5
ATOM	8685	N	THR	116	145.380	123.078	8.535	1.00	50.81	ES5	ATOM	8738	OE2	GLU	122	156.612	114.895	0.202	1.00 54.94	ES5
ATOM	8686	CA	THR	116	145.309	122.191	9.670	1.00	50.81	ES5	ATOM	8739	C	GLU	122	154.222	112.687	-4.785	1.00 45.69	ES5
ATOM	8687	CB	THR	116	144.534	122.901	10.798	1.00	33.19	ES5	ATOM	8740	O	GLU	122	154.289	111.468	-4.570	1.00 45.69	ES5
ATOM	8688	OG1	THR	116	144.906	122.337	12.056	1.00	33.19	ES5	ATOM	8741	N	LEU	123	154.270	113.181	-6.003	1.00 40.47	ES5
ATOM	8689	CG2	THR	116	143.028	122.774	10.584	1.00	33.19	ES5	ATOM	8742	CA	LEU	123	154.422	112.289	-7.120	1.00 40.47	ES5
ATOM	8690	C	THR	116	144.665	120.854	9.300	1.00	50.81	ES5	ATOM	8743	CB	LEU	123	153.132	112.297	-7.944	1.00 30.12	ES5
ATOM	8691	O	THR	116	144.768	119.877	10.037	1.00	50.81	ES5	ATOM	8744	CG	LEU	123	151.936	111.628	-7.246	1.00 30.12	ES5
ATOM	8692	N	ASP	117	144.021	120.816	8.141	1.00	52.62	ES5	ATOM	8745	CD1	LEU	123	150.835	111.417	-8.247	1.00 30.12	ES5
ATOM	8693	CA	ASP	117	143.375	119.604	7.679	1.00	52.62	ES5	ATOM	8746	CD2	LEU	123	152.331	110.283	-6.654	1.00 30.12	ES5
ATOM	8694	CB	ASP	117	141.904	119.591	8.113	1.00	88.85	ES5	ATOM	8747	C	LEU	123	155.638	112.738	-7.925	1.00 40.47	ES5
ATOM	8695	CG	ASP	117	141.727	119.381	9.603	1.00	88.85	ES5	ATOM	8748	O	LEU	123	156.100	113.862	-7.755	1.00 40.47	ES5
ATOM	8696	OD1	ASP	117	141.904	118.240	10.071	1.00	88.85	ES5	ATOM	8749	N	GLY	124	156.176	111.858	-8.767	1.00 35.18	ES5
ATOM	8697	OD2	ASP	117	141.406	120.356	10.311	1.00	88.85	ES5	ATOM	8750	CA	GLY	124	157.342	112.207	-9.567	1.00 35.18	ES5
ATOM	8698	C	ASP	117	143.427	119.444	6.160	1.00	52.62	ES5	ATOM	8751	C	GLY	124	158.607	112.366	-8.739	1.00 35.18	ES5
ATOM	8699	O	ASP	117	142.659	120.110	5.455	1.00	52.62	ES5	ATOM	8752	O	GLY	124	158.819	111.654	-7.755	1.00 35.18	ES5
ATOM	8700	N	ILE	118	144.343	118.598	5.662	1.00	43.63	ES5	ATOM	8753	N	SER	125	159.464	113.296	-9.138	1.00 40.34	ES5
ATOM	8701	CA	ILE	118	144.424	118.284	4.226	1.00	43.63	ES5	ATOM	8754	CA	SER	125	160.691	113.537	-8.396	1.00 40.34	ES5
ATOM	8702	CB	ILE	118	145.285	119.223	3.364	1.00	44.29	ES5	ATOM	8755	CB	SER	125	161.513	114.638	-9.047	1.00 46.25	ES5
ATOM	8703	CG2	ILE	118	144.412	120.127	2.551	1.00	44.29	ES5	ATOM	8756	OG	SER	125	162.427	115.166	-8.106	1.00 46.25	ES5
ATOM	8704	CG1	ILE	118	146.290	119.970	4.201	1.00	44.29	ES5	ATOM	8757	C	SER	125	160.345	113.984	-6.995	1.00 40.34	ES5
ATOM	8705	CD1	ILE	118	147.049	120.977	3.349	1.00	44.29	ES5	ATOM	8758	O	SER	125	159.499	114.860	-6.800	1.00 40.34	ES5
ATOM	8706	C	ILE	118	144.974	116.926	3.909	1.00	43.63	ES5	ATOM	8759	N	ARG	126	161.007	113.407	-6.009	1.00 38.70	ES5
ATOM	8707	O	ILE	118	145.603	116.276	4.745	1.00	43.63	ES5	ATOM	8760	CA	ARG	126	160.716	113.802	-4.651	1.00 38.70	ES5
ATOM	8708	N	LEU	119	144.712	116.529	2.665	1.00	44.13	ES5	ATOM	8761	CB	ARG	126	160.370	112.566	-3.842	1.00 45.44	ES5
ATOM	8709	CA	LEU	119	145.164	115.278	2.076	1.00	44.13	ES5	ATOM	8762	CG	ARG	126	159.132	111.928	-4.391	1.00 45.44	ES5
ATOM	8710	CB	LEU	119	143.997	114.542	1.432	1.00	45.05	ES5	ATOM	8763	CD	ARG	126	158.585	110.944	-3.421	1.00 45.44	ES5

ATOM	8764	NE	ARG	126	157.428	110.243	-3.959	1.00	45.44	ES5	ATOM	8817	CG	TYR	133	161.043	125.767	-5.499	1.00	75.69	ES5
ATOM	8765	CZ	ARG	126	156.933	109.147	-3.403	1.00	45.44	ES5	ATOM	8818	CD1	TYR	133	162.176	125.552	-6.282	1.00	75.69	ES5
ATOM	8766	NH1	ARG	126	157.511	108.662	-2.305	1.00	45.44	ES5	ATOM	8819	CE1	TYR	133	163.411	126.111	-5.961	1.00	75.69	ES5
ATOM	8767	NH2	ARG	126	155.881	108.536	-3.938	1.00	45.44	ES5	ATOM	8820	CD2	TYR	133	161.171	126.577	-4.363	1.00	75.69	ES5
ATOM	8768	C	ARG	126	161.825	114.622	-4.007	1.00	38.70	ES5	ATOM	8821	CE2	TYR	133	162.408	127.152	-4.024	1.00	75.69	ES5
ATOM	8769	O	ARG	126	162.071	114.553	-2.800	1.00	38.70	ES5	ATOM	8822	CZ	TYR	133	163.531	126.907	-4.838	1.00	75.69	ES5
ATOM	8770	N	ASN	127	162.483	115.425	-4.826	1.00	47.71	ES5	ATOM	8823	OH	TYR	133	164.788	127.428	-4.568	1.00	75.69	ES5
ATOM	8771	CA	ASN	127	163.535	116.267	-4.309	1.00	47.71	ES5	ATOM	8824	C	TYR	133	157.339	124.636	-5.369	1.00	38.15	ES5
ATOM	8772	CB	ASN	127	164.293	116.952	-5.436	1.00	67.76	ES5	ATOM	8825	O	TYR	133	156.462	125.470	-5.616	1.00	38.15	ES5
ATOM	8773	CG	ASN	127	165.505	117.690	-4.933	1.00	67.76	ES5	ATOM	8826	N	ALA	134	157.182	123.337	-5.588	1.00	40.69	ES5
ATOM	8774	OD1	ASN	127	165.396	118.603	-4.112	1.00	67.76	ES5	ATOM	8827	CA	ALA	134	155.948	122.809	-6.140	1.00	40.69	ES5
ATOM	8775	ND2	ASN	127	166.674	117.291	-5.410	1.00	67.76	ES5	ATOM	8828	CB	ALA	134	156.061	121.324	-6.310	1.00	50.88	ES5
ATOM	8776	C	ASN	127	162.873	117.320	-3.443	1.00	47.71	ES5	ATOM	8829	C	ALA	134	154.789	123.135	-5.213	1.00	40.69	ES5
ATOM	8777	O	ASN	127	162.173	118.190	-3.957	1.00	47.71	ES5	ATOM	8830	O	ALA	134	153.731	123.582	-5.655	1.00	40.69	ES5
ATOM	8778	N	PRO	128	163.095	117.265	-2.120	1.00	41.44	ES5	ATOM	8831	N	THR	135	154.981	122.907	-3.921	1.00	43.23	ES5
ATOM	8779	CD	PRO	128	164.171	116.550	-1.418	1.00	24.18	ES5	ATOM	8832	CA	THR	135	153.932	123.203	-2.971	1.00	43.23	ES5
ATOM	8780	CA	PRO	128	162.481	118.253	-1.235	1.00	41.44	ES5	ATOM	8833	CB	THR	135	154.378	122.893	-1.569	1.00	33.27	ES5
ATOM	8781	CB	PRO	128	163.324	118.155	0.038	1.00	24.18	ES5	ATOM	8834	OG1	THR	135	154.434	121.473	-1.412	1.00	33.27	ES5
ATOM	8782	CG	PRO	128	164.622	117.581	-0.434	1.00	24.18	ES5	ATOM	8835	CG2	THR	135	153.416	123.482	-0.564	1.00	33.27	ES5
ATOM	8783	C	PRO	128	162.456	119.654	-1.817	1.00	41.44	ES5	ATOM	8836	C	THR	135	153.524	124.663	-3.065	1.00	43.23	ES5
ATOM	8784	O	PRO	128	161.389	120.257	-1.944	1.00	41.44	ES5	ATOM	8837	O	THR	135	152.387	124.961	-3.415	1.00	43.23	ES5
ATOM	8785	N	ILE	129	163.618	120.166	-2.195	1.00	38.62	ES5	ATOM	8838	N	MET	136	154.447	125.571	-2.766	1.00	52.34	ES5
ATOM	8786	CA	ILE	129	163.680	121.509	-2.747	1.00	38.62	ES5	ATOM	8839	CA	MET	136	154.163	126.999	-2.844	1.00	52.34	ES5
ATOM	8787	CB	ILE	129	165.081	121.845	-3.207	1.00	34.32	ES5	ATOM	8840	CB	MET	136	155.458	127.777	-2.814	1.00	51.35	ES5
ATOM	8788	CG2	ILE	129	165.171	123.334	-3.529	1.00	34.32	ES5	ATOM	8841	CG	MET	136	156.200	127.606	-1.521	1.00	51.35	ES5
ATOM	8789	CG1	ILE	129	166.065	121.457	-2.098	1.00	34.32	ES5	ATOM	8842	SD	MET	136	155.444	128.534	-0.197	1.00	51.35	ES5
ATOM	8790	CD1	ILE	129	167.504	121.695	-2.445	1.00	34.32	ES5	ATOM	8843	CE	MET	136	156.434	130.077	-0.270	1.00	51.35	ES5
ATOM	8791	C	ILE	129	162.716	121.730	-3.900	1.00	38.62	ES5	ATOM	8844	C	MET	136	153.377	127.378	-4.097	1.00	52.34	ES5
ATOM	8792	O	ILE	129	162.148	122.811	-4.034	1.00	38.62	ES5	ATOM	8845	O	MET	136	152.387	128.114	-4.016	1.00	52.34	ES5
ATOM	8793	N	ASN	130	162.523	120.716	-4.734	1.00	34.62	ES5	ATOM	8846	N	GLU	137	153.807	126.894	-5.261	1.00	32.30	ES5
ATOM	8794	CA	ASN	130	161.596	120.864	-5.840	1.00	34.62	ES5	ATOM	8847	CA	GLU	137	153.080	127.211	-6.486	1.00	32.30	ES5
ATOM	8795	CB	ASN	130	161.982	119.955	-6.999	1.00	48.03	ES5	ATOM	8848	CB	GLU	137	153.733	126.584	-7.709	1.00	53.39	ES5
ATOM	8796	CG	ASN	130	163.135	120.516	-7.799	1.00	48.03	ES5	ATOM	8849	CG	GLU	137	154.472	127.604	-8.562	1.00	53.39	ES5
ATOM	8797	OD1	ASN	130	163.288	121.740	-7.921	1.00	48.03	ES5	ATOM	8850	CD	GLU	137	153.622	128.832	-8.898	1.00	53.39	ES5
ATOM	8798	ND2	ASN	130	163.950	119.628	-8.365	1.00	48.03	ES5	ATOM	8851	OE1	GLU	137	152.480	128.656	-9.383	1.00	53.39	ES5
ATOM	8799	C	ASN	130	160.156	120.614	-5.427	1.00	34.62	ES5	ATOM	8852	OE2	GLU	137	154.106	129.970	-8.682	1.00	53.39	ES5
ATOM	8800	O	ASN	130	159.226	121.162	-6.022	1.00	34.62	ES5	ATOM	8853	C	GLU	137	151.665	126.717	-6.365	1.00	32.30	ES5
ATOM	8801	N	ILE	131	159.964	119.786	-4.411	1.00	33.58	ES5	ATOM	8854	O	GLU	137	150.738	127.425	-6.712	1.00	32.30	ES5
ATOM	8802	CA	ILE	131	158.620	119.512	-3.923	1.00	33.58	ES5	ATOM	8855	N	ALA	138	151.501	125.500	-5.862	1.00	38.82	ES5
ATOM	8803	CB	ILE	131	158.615	118.303	-2.956	1.00	37.10	ES5	ATOM	8856	CA	ALA	138	150.172	124.942	-5.689	1.00	38.82	ES5
ATOM	8804	CG2	ILE	131	157.523	118.455	-1.913	1.00	37.10	ES5	ATOM	8857	CB	ALA	138	150.258	123.583	-5.046	1.00	30.16	ES5
ATOM	8805	CG1	ILE	131	158.439	117.015	-3.755	1.00	37.10	ES5	ATOM	8858	C	ALA	138	149.350	125.890	-4.820	1.00	38.82	ES5
ATOM	8806	CD1	ILE	131	157.141	116.982	-4.561	1.00	37.10	ES5	ATOM	8859	O	ALA	138	148.188	126.171	-5.118	1.00	38.82	ES5
ATOM	8807	C	ILE	131	158.141	120.773	-3.206	1.00	33.58	ES5	ATOM	8860	N	LEU	139	149.954	126.391	-3.749	1.00	54.12	ES5
ATOM	8808	O	ILE	131	156.963	121.147	-3.289	1.00	33.58	ES5	ATOM	8861	CA	LEU	139	149.249	127.316	-2.879	1.00	54.12	ES5
ATOM	8809	N	ALA	132	159.069	121.433	-2.514	1.00	40.33	ES5	ATOM	8862	CB	LEU	139	150.091	127.661	-1.646	1.00	26.67	ES5
ATOM	8810	CA	ALA	132	158.749	122.668	-1.807	1.00	40.33	ES5	ATOM	8863	CG	LEU	139	150.358	126.507	-0.671	1.00	26.67	ES5
ATOM	8811	CB	ALA	132	159.980	123.202	-1.092	1.00	30.87	ES5	ATOM	8864	CD1	LEU	139	151.060	127.053	0.549	1.00	26.67	ES5
ATOM	8812	C	ALA	132	158.240	123.690	-2.819	1.00	40.33	ES5	ATOM	8865	CD2	LEU	139	149.050	125.833	-0.250	1.00	26.67	ES5
ATOM	8813	O	ALA	132	157.088	124.105	-2.752	1.00	40.33	ES5	ATOM	8866	C	LEU	139	148.892	128.585	-3.648	1.00	54.12	ES5
ATOM	8814	N	TYR	133	159.092	124.084	-3.763	1.00	38.15	ES5	ATOM	8867	O	LEU	139	147.722	128.957	-3.710	1.00	54.12	ES5
ATOM	8815	CA	TYR	133	158.683	125.050	-4.778	1.00	38.15	ES5	ATOM	8868	N	ARG	140	149.881	129.247	-4.246	1.00	36.00	ES5
ATOM	8816	CB	TYR	133	159.721	125.137	-5.891	1.00	75.69	ES5	ATOM	8869	CA	ARG	140	149.600	130.464	-5.002	1.00	36.00	ES5

ATOM	8870	CB	ARG	140	150.782	130.866	-5.863	1.00	49.67	ES5
ATOM	8871	CG	ARG	140	151.959	131.381	-5.131	1.00	49.67	ES5
ATOM	8872	CD	ARG	140	152.822	132.194	-6.080	1.00	49.67	ES5
ATOM	8873	NE	ARG	140	154.066	132.563	-5.424	1.00	49.67	ES5
ATOM	8874	CZ	ARG	140	155.044	131.703	-5.167	1.00	49.67	ES5
ATOM	8875	NH1	ARG	140	154.916	130.432	-5.533	1.00	49.67	ES5
ATOM	8876	NH2	ARG	140	156.129	132.106	-4.510	1.00	49.67	ES5
ATOM	8877	C	ARG	140	148.405	130.335	-5.936	1.00	36.00	ES5
ATOM	8878	O	ARG	140	147.597	131.255	-6.056	1.00	36.00	ES5
ATOM	8879	N	GLN	141	148.301	129.192	-6.606	1.00	29.80	ES5
ATOM	8880	CA	GLN	141	147.231	128.981	-7.558	1.00	29.80	ES5
ATOM	8881	CB	GLN	141	147.583	127.806	-8.457	1.00	50.67	ES5
ATOM	8882	CG	GLN	141	149.037	127.784	-8.840	1.00	50.67	ES5
ATOM	8883	CD	GLN	141	149.278	127.207	-10.215	1.00	50.67	ES5
ATOM	8884	OE1	GLN	141	148.653	126.220	-10.616	1.00	50.67	ES5
ATOM	8885	NE2	GLN	141	150.202	127.817	-10.950	1.00	50.67	ES5
ATOM	8886	C	GLN	141	145.834	128.793	-6.968	1.00	29.80	ES5
ATOM	8887	O	GLN	141	144.838	128.884	-7.703	1.00	29.80	ES5
ATOM	8888	N	LEU	142	145.749	128.522	-5.665	1.00	39.89	ES5
ATOM	8889	CA	LEU	142	144.451	128.353	-5.014	1.00	39.89	ES5
ATOM	8890	CB	LEU	142	144.606	128.200	-3.503	1.00	30.99	ES5
ATOM	8891	CG	LEU	142	145.235	126.905	-3.011	1.00	30.99	ES5
ATOM	8892	CD1	LEU	142	145.568	127.015	-1.538	1.00	30.99	ES5
ATOM	8893	CD2	LEU	142	144.276	125.764	-3.285	1.00	30.99	ES5
ATOM	8894	C	LEU	142	143.591	129.580	-5.277	1.00	39.89	ES5
ATOM	8895	O	LEU	142	144.079	130.715	-5.263	1.00	39.89	ES5
ATOM	8896	N	ARG	143	142.307	129.346	-5.515	1.00	35.56	ES5
ATOM	8897	CA	ARG	143	141.375	130.423	-5.773	1.00	35.56	ES5
ATOM	8898	CB	ARG	143	141.037	130.490	-7.260	1.00	47.33	ES5
ATOM	8899	CG	ARG	143	142.196	130.952	-8.112	1.00	47.33	ES5
ATOM	8900	CD	ARG	143	142.644	132.323	-7.671	1.00	47.33	ES5
ATOM	8901	NE	ARG	143	144.090	132.406	-7.519	1.00	47.33	ES5
ATOM	8902	CZ	ARG	143	144.947	132.423	-8.531	1.00	47.33	ES5
ATOM	8903	NH1	ARG	143	144.497	132.362	-9.778	1.00	47.33	ES5
ATOM	8904	NH2	ARG	143	146.251	132.503	-8.295	1.00	47.33	ES5
ATOM	8905	C	ARG	143	140.118	130.170	-4.968	1.00	35.56	ES5
ATOM	8906	O	ARG	143	139.824	129.034	-4.609	1.00	35.56	ES5
ATOM	8907	N	THR	144	139.380	131.236	-4.685	1.00	63.71	ES5
ATOM	8908	CA	THR	144	138.154	131.142	-3.915	1.00	63.71	ES5
ATOM	8909	CB	THR	144	138.134	132.180	-2.821	1.00	70.69	ES5
ATOM	8910	OG1	THR	144	139.276	131.987	-1.985	1.00	70.69	ES5
ATOM	8911	CG2	THR	144	136.868	132.064	-1.997	1.00	70.69	ES5
ATOM	8912	C	THR	144	136.960	131.390	-4.798	1.00	63.71	ES5
ATOM	8913	O	THR	144	137.058	132.118	-5.779	1.00	63.71	ES5
ATOM	8914	N	LYS	145	135.831	130.783	-4.445	1.00	55.45	ES5
ATOM	8915	CA	LYS	145	134.597	130.966	-5.201	1.00	55.45	ES5
ATOM	8916	CB	LYS	145	133.412	130.416	-4.400	1.00	68.82	ES5
ATOM	8917	CG	LYS	145	132.100	130.381	-5.153	1.00	68.82	ES5
ATOM	8918	CD	LYS	145	131.014	129.747	-4.289	1.00	68.82	ES5
ATOM	8919	CE	LYS	145	129.631	129.772	-4.964	1.00	68.82	ES5
ATOM	8920	NZ	LYS	145	128.523	129.271	-4.074	1.00	68.82	ES5
ATOM	8921	C	LYS	145	134.440	132.471	-5.434	1.00	55.45	ES5
ATOM	8922	O	LYS	145	133.872	132.907	-6.436	1.00	55.45	ES5
ATOM	8923	N	ALA	146	134.964	133.258	-4.496	1.00	49.42	ES5
ATOM	8924	CA	ALA	146	134.910	134.704	-4.595	1.00	49.42	ES5
ATOM	8925	CB	ALA	146	135.546	135.330	-3.376	1.00	39.60	ES5
ATOM	8926	C	ALA	146	135.675	135.101	-5.844	1.00	49.42	ES5
ATOM	8927	O	ALA	146	135.088	135.622	-6.797	1.00	49.42	ES5
ATOM	8928	N	ASP	147	136.986	134.832	-5.823	1.00	38.82	ES5
ATOM	8929	CA	ASP	147	137.903	135.136	-6.925	1.00	38.82	ES5
ATOM	8930	CB	ASP	147	139.259	134.498	-6.668	1.00	55.55	ES5
ATOM	8931	CG	ASP	147	139.741	134.712	-5.261	1.00	55.55	ES5
ATOM	8932	OD1	ASP	147	139.772	135.878	-4.820	1.00	55.55	ES5
ATOM	8933	OD2	ASP	147	140.097	133.717	-4.595	1.00	55.55	ES5
ATOM	8934	C	ASP	147	137.385	134.621	-8.256	1.00	38.82	ES5
ATOM	8935	O	ASP	147	137.415	135.322	-9.259	1.00	38.82	ES5
ATOM	8936	N	VAL	148	136.934	133.375	-8.260	1.00	33.08	ES5
ATOM	8937	CA	VAL	148	136.410	132.753	-9.458	1.00	33.08	ES5
ATOM	8938	CB	VAL	148	135.984	131.307	-9.176	1.00	59.95	ES5
ATOM	8939	CG1	VAL	148	135.422	130.672	-10.431	1.00	59.95	ES5
ATOM	8940	CG2	VAL	148	137.177	130.522	-8.657	1.00	59.95	ES5
ATOM	8941	C	VAL	148	135.219	133.530	-9.969	1.00	33.08	ES5
ATOM	8942	O	VAL	148	135.157	133.855	-11.150	1.00	33.08	ES5
ATOM	8943	N	GLU	149	134.271	133.824	-9.082	1.00	51.77	ES5
ATOM	8944	CA	GLU	149	133.068	134.574	-9.449	1.00	51.77	ES5
ATOM	8945	CB	GLU	149	132.160	134.751	-8.233	1.00	150.80	ES5
ATOM	8946	CG	GLU	149	130.979	135.675	-8.488	1.00	150.80	ES5
ATOM	8947	CD	GLU	149	130.439	136.295	-7.215	1.00	150.80	ES5
ATOM	8948	OE1	GLU	149	131.207	137.004	-6.529	1.00	150.80	ES5
ATOM	8949	OE2	GLU	149	129.249	136.077	-6.902	1.00	150.80	ES5
ATOM	8950	C	GLU	149	133.478	135.946	-9.963	1.00	51.77	ES5
ATOM	8951	O	GLU	149	132.958	136.446	-10.963	1.00	51.77	ES5
ATOM	8952	N	ARG	150	134.418	136.543	-9.244	1.00	45.70	ES5
ATOM	8953	CA	ARG	150	134.954	137.851	-9.565	1.00	45.70	ES5
ATOM	8954	CB	ARG	150	135.939	138.253	-8.475	1.00	108.01	ES5
ATOM	8955	CG	ARG	150	135.590	139.527	-7.772	1.00	108.01	ES5
ATOM	8956	CD	ARG	150	136.167	140.706	-8.513	1.00	108.01	ES5
ATOM	8957	NE	ARG	150	136.691	141.690	-7.573	1.00	108.01	ES5
ATOM	8958	CZ	ARG	150	137.559	141.407	-6.603	1.00	108.01	ES5
ATOM	8959	NH1	ARG	150	138.001	140.163	-6.441	1.00	108.01	ES5
ATOM	8960	NH2	ARG	150	137.987	142.368	-5.791	1.00	108.01	ES5
ATOM	8961	C	ARG	150	135.650	137.843	-10.924	1.00	45.70	ES5
ATOM	8962	O	ARG	150	135.652	138.842	-11.625	1.00	45.70	ES5
ATOM	8963	N	LEU	151	136.239	136.710	-11.295	1.00	53.66	ES5
ATOM	8964	CA	LEU	151	136.942	136.579	-12.567	1.00	53.66	ES5
ATOM	8965	CB	LEU	151	137.879	135.383	-12.536	1.00	42.78	ES5
ATOM	8966	CG	LEU	151	139.335	135.625	-12.175	1.00	42.78	ES5
ATOM	8967	CD1	LEU	151	140.075	134.306	-12.274	1.00	42.78	ES5
ATOM	8968	CD2	LEU	151	139.941	136.643	-13.116	1.00	42.78	ES5
ATOM	8969	C	LEU	151	136.033	136.411	-13.759	1.00	53.66	ES5
ATOM	8970	O	LEU	151	136.421	136.723	-14.878	1.00	53.66	ES5
ATOM	8971	N	ARG	152	134.830	135.905	-13.524	1.00	49.86	ES5
ATOM	8972	CA	ARG	152	133.902	135.683	-14.612	1.00	49.86	ES5
ATOM	8973	CB	ARG	152	133.333	134.288	-14.511	1.00	57.67	ES5
ATOM	8974	CG	ARG	152	134.328	133.258	-14.099	1.00	57.67	ES5
ATOM	8975	CD	ARG	152	133.639	131.930	-14.082	1.00	57.67	ES5

ATOM	8976	NE	ARG	152	134.448	130.876	-13.491	1.00 57.67	ES5	ATOM	9029	CG2	VAL	14	218.720	119.980	-81.262	1.00 57.81	KS11
ATOM	8977	CZ	ARG	152	133.962	129.683	-13.164	1.00 57.67	ES5	ATOM	9030	C	VAL	14	218.949	123.713	-80.428	1.00 93.72	KS11
ATOM	8978	NH1	ARG	152	132.670	129.420	-13.376	1.00 57.67	ES5	ATOM	9031	O	VAL	14	218.841	123.649	-79.210	1.00 93.72	KS11
ATOM	8979	NH2	ARG	152	134.759	128.756	-12.637	1.00 57.67	ES5	ATOM	9032	N	ALA	15	218.903	124.858	-81.093	1.00 69.46	KS11
ATOM	8980	C	ARG	152	132.753	136.679	-14.673	1.00 49.86	ES5	ATOM	9033	CA	ALA	15	218.762	126.124	-80.389	1.00 69.46	KS11
ATOM	8981	O	ARG	152	131.735	136.402	-15.305	1.00 49.86	ES5	ATOM	9034	CB	ALA	15	218.841	127.264	-81.376	1.00 84.95	KS11
ATOM	8982	N	LYS	153	132.910	137.829	-14.018	1.00 78.39	ES5	ATOM	9035	C	ALA	15	217.506	126.267	-79.533	1.00 69.46	KS11
ATOM	8983	CA	LYS	153	131.879	138.869	-14.020	1.00 78.39	ES5	ATOM	9036	O	ALA	15	217.598	126.551	-78.340	1.00 69.46	KS11
ATOM	8984	CB	LYS	153	132.215	139.952	-12.992	1.00154.91	ES5	ATOM	9037	N	SER	16	216.342	126.072	-80.148	1.00 83.05	KS11
ATOM	8985	CG	LYS	153	131.918	139.576	-11.553	1.00154.91	ES5	ATOM	9038	CA	SER	16	215.045	126.198	-79.478	1.00 83.05	KS11
ATOM	8986	CD	LYS	153	130.423	139.565	-11.285	1.00154.91	ES5	ATOM	9039	CB	SER	16	213.998	126.640	-80.494	1.00106.34	KS11
ATOM	8987	CE	LYS	153	130.130	139.290	-9.818	1.00154.91	ES5	ATOM	9040	OG	SER	16	213.911	125.698	-81.553	1.00106.34	KS11
ATOM	8988	NZ	LYS	153	128.683	139.439	-9.506	1.00154.91	ES5	ATOM	9041	C	SER	16	214.578	124.898	-78.835	1.00 83.05	KS11
ATOM	8989	C	LYS	153	131.749	139.507	-15.401	1.00 78.39	ES5	ATOM	9042	O	SER	16	214.507	123.862	-79.500	1.00 83.05	KS11
ATOM	8990	O	LYS	153	131.506	138.822	-16.390	1.00 78.39	ES5	ATOM	9043	N	GLY	17	214.220	124.957	-77.555	1.00 78.84	KS11
ATOM	8991	N	GLY	154	131.912	140.824	-15.465	1.00127.73	ES5	ATOM	9044	CA	GLY	17	213.779	123.746	-76.884	1.00 78.84	KS11
ATOM	8992	CA	GLY	154	131.809	141.525	-16.733	1.00127.73	ES5	ATOM	9045	C	GLY	17	212.681	123.831	-75.836	1.00 78.84	KS11
ATOM	8993	C	GLY	154	130.471	141.343	-17.427	1.00127.73	ES5	ATOM	9046	O	GLY	17	212.124	124.896	-75.566	1.00 78.84	KS11
ATOM	8994	O	GLY	154	129.651	140.530	-16.951	1.00127.73	ES5	ATOM	9047	N	ARG	18	212.391	122.673	-75.244	1.00 53.41	KS11
ATOM	8995	OXT	GLY	154	130.241	142.013	-18.455	1.00102.63	ES5	ATOM	9048	CA	ARG	18	211.369	122.518	-74.218	1.00 53.41	KS11
ATOM	8996	CB	LYS	11	222.494	113.993	-81.387	1.00144.49	KS11	ATOM	9049	CB	ARG	18	210.316	121.530	-74.713	1.00 63.38	KS11
ATOM	8997	CG	LYS	11	223.277	112.843	-80.748	1.00144.49	KS11	ATOM	9050	CG	ARG	18	208.910	122.036	-74.577	1.00 63.38	KS11
ATOM	8998	CD	LYS	11	224.629	113.270	-80.189	1.00144.49	KS11	ATOM	9051	CD	ARG	18	208.113	121.824	-75.853	1.00 63.38	KS11
ATOM	8999	CE	LYS	11	225.370	112.073	-79.605	1.00144.49	KS11	ATOM	9052	NE	ARG	18	207.636	120.454	-76.002	1.00 63.38	KS11
ATOM	9000	NZ	LYS	11	226.736	112.418	-79.129	1.00144.49	KS11	ATOM	9053	CZ	ARG	18	206.929	120.023	-77.043	1.00 63.38	KS11
ATOM	9001	C	LYS	11	223.779	116.002	-82.147	1.00167.41	KS11	ATOM	9054	NH1	ARG	18	206.626	120.859	-78.026	1.00 63.38	KS11
ATOM	9002	O	LYS	11	224.622	116.042	-81.249	1.00167.41	KS11	ATOM	9055	NH2	ARG	18	206.513	118.760	-77.104	1.00 63.38	KS11
ATOM	9003	N	LYS	11	224.204	113.752	-83.173	1.00167.41	KS11	ATOM	9056	C	ARG	18	211.991	121.998	-72.915	1.00 53.41	KS11
ATOM	9004	CA	LYS	11	223.180	114.667	-82.584	1.00167.41	KS11	ATOM	9057	O	ARG	18	212.920	121.194	-72.941	1.00 53.41	KS11
ATOM	9005	N	ARG	12	223.341	117.091	-82.780	1.00 76.21	KS11	ATOM	9058	N	ALA	19	211.495	122.464	-71.773	1.00 63.71	KS11
ATOM	9006	CA	ARG	12	223.853	118.409	-82.432	1.00 76.21	KS11	ATOM	9059	CA	ALA	19	212.020	122.001	-70.490	1.00 63.71	KS11
ATOM	9007	CB	ARG	12	225.261	118.609	-83.008	1.00141.95	KS11	ATOM	9060	CB	ALA	19	212.813	123.098	-69.812	1.00 23.83	KS11
ATOM	9008	CG	ARG	12	226.378	118.130	-82.091	1.00141.95	KS11	ATOM	9061	C	ALA	19	210.886	121.541	-69.580	1.00 63.71	KS11
ATOM	9009	CD	ARG	12	226.287	118.809	-80.731	1.00141.95	KS11	ATOM	9062	O	ALA	19	210.050	122.342	-69.167	1.00 63.71	KS11
ATOM	9010	NE	ARG	12	227.224	118.249	-79.760	1.00141.95	KS11	ATOM	9063	N	TYR	20	210.867	120.244	-69.283	1.00 50.05	KS11
ATOM	9011	CZ	ARG	12	227.263	118.591	-78.475	1.00141.95	KS11	ATOM	9064	CA	TYR	20	209.847	119.667	-68.431	1.00 50.05	KS11
ATOM	9012	NH1	ARG	12	226.413	119.493	-78.003	1.00141.95	KS11	ATOM	9065	CB	TYR	20	209.418	118.299	-68.960	1.00 57.40	KS11
ATOM	9013	NH2	ARG	12	228.148	118.033	-77.659	1.00141.95	KS11	ATOM	9066	CG	TYR	20	208.631	118.361	-70.245	1.00 57.40	KS11
ATOM	9014	C	ARG	12	222.998	119.605	-82.818	1.00 76.21	KS11	ATOM	9067	CD1	TYR	20	209.269	118.433	-71.475	1.00 57.40	KS11
ATOM	9015	O	ARG	12	222.060	119.505	-83.601	1.00 76.21	KS11	ATOM	9068	CE1	TYR	20	208.541	118.522	-72.663	1.00 57.40	KS11
ATOM	9016	N	GLN	13	223.361	120.736	-82.222	1.00 86.11	KS11	ATOM	9069	CD2	TYR	20	207.241	118.379	-70.231	1.00 57.40	KS11
ATOM	9017	CA	GLN	13	222.746	122.044	-82.417	1.00 86.11	KS11	ATOM	9070	CE2	TYR	20	206.507	118.469	-71.410	1.00 57.40	KS11
ATOM	9018	CB	GLN	13	223.424	122.729	-83.600	1.00 90.60	KS11	ATOM	9071	CZ	TYR	20	207.168	118.540	-72.620	1.00 57.40	KS11
ATOM	9019	CG	GLN	13	224.956	122.625	-83.543	1.00 90.60	KS11	ATOM	9072	OH	TYR	20	206.453	118.633	-73.785	1.00 57.40	KS11
ATOM	9020	CD	GLN	13	225.556	123.096	-82.213	1.00 90.60	KS11	ATOM	9073	C	TYR	20	210.330	119.521	-66.997	1.00 50.05	KS11
ATOM	9021	OE1	GLN	13	225.508	124.286	-81.882	1.00 90.60	KS11	ATOM	9074	O	TYR	20	211.331	118.853	-66.722	1.00 50.05	KS11
ATOM	9022	NE2	GLN	13	226.119	122.155	-81.443	1.00 90.60	KS11	ATOM	9075	N	ILE	21	209.615	120.156	-66.078	1.00 58.55	KS11
ATOM	9023	C	GLN	13	221.226	122.134	-82.538	1.00 86.11	KS11	ATOM	9076	CA	ILE	21	209.964	120.073	-64.678	1.00 58.55	KS11
ATOM	9024	O	GLN	13	220.652	122.059	-83.625	1.00 86.11	KS11	ATOM	9077	CB	ILE	21	209.988	121.449	-64.035	1.00 52.02	KS11
ATOM	9025	N	VAL	14	220.595	122.316	-81.384	1.00 93.72	KS11	ATOM	9078	CG2	ILE	21	210.458	121.340	-62.588	1.00 52.02	KS11
ATOM	9026	CA	VAL	14	219.149	122.454	-81.250	1.00 93.72	KS11	ATOM	9079	CG1	ILE	21	210.926	122.351	-64.833	1.00 52.02	KS11
ATOM	9027	CB	VAL	14	218.548	121.275	-80.470	1.00 57.81	KS11	ATOM	9080	CD1	ILE	21	211.165	123.699	-64.207	1.00 52.02	KS11
ATOM	9028	CG1	VAL	14	217.089	121.550	-80.175	1.00 57.81	KS11	ATOM	9081	C	ILE	21	208.914	119.216	-64.014	1.00 58.55	KS11

ATOM	9082	O	ILE	21	207.739	119.553	-64.000	1.00	58.55	KS11	ATOM	9135	OG1	THR	28	213.950	111.949	-57.217	1.00 34.05	KS11
ATOM	9083	N	HIS	22	209.356	118.089	-63.481	1.00	41.00	KS11	ATOM	9136	CG2	THR	28	215.202	113.901	-57.775	1.00 34.05	KS11
ATOM	9084	CA	HIS	22	208.491	117.132	-62.811	1.00	41.00	KS11	ATOM	9137	C	THR	28	212.175	115.080	-57.221	1.00 54.43	KS11
ATOM	9085	CB	HIS	22	208.743	115.748	-63.395	1.00	64.05	KS11	ATOM	9138	O	THR	28	210.985	115.260	-56.953	1.00 54.43	KS11
ATOM	9086	CG	HIS	22	208.040	114.654	-62.665	1.00	64.05	KS11	ATOM	9139	N	ILE	29	212.851	115.667	-58.189	1.00 55.56	KS11
ATOM	9087	CD2	HIS	22	208.499	113.731	-61.790	1.00	64.05	KS11	ATOM	9140	CA	ILE	29	212.309	116.579	-59.142	1.00 55.56	KS11
ATOM	9088	ND1	HIS	22	206.685	114.435	-62.780	1.00	64.05	KS11	ATOM	9141	CB	ILE	29	212.437	118.032	-58.650	1.00 63.60	KS11
ATOM	9089	CE1	HIS	22	206.339	113.421	-62.010	1.00	64.05	KS11	ATOM	9142	CG2	ILE	29	213.619	118.168	-57.706	1.00 63.60	KS11
ATOM	9090	NE2	HIS	22	207.422	112.976	-61.398	1.00	64.05	KS11	ATOM	9143	CG1	ILE	29	212.495	118.970	-59.848	1.00 63.60	KS11
ATOM	9091	C	HIS	22	208.725	117.096	-61.293	1.00	41.00	KS11	ATOM	9144	CD1	ILE	29	212.539	120.424	-59.476	1.00 63.60	KS11
ATOM	9092	O	HIS	22	209.511	116.287	-60.792	1.00	41.00	KS11	ATOM	9145	C	ILE	29	213.230	116.262	-60.315	1.00 55.56	KS11
ATOM	9093	N	ALA	23	208.029	117.966	-60.568	1.00	47.60	KS11	ATOM	9146	O	ILE	29	214.449	116.390	-60.217	1.00 55.56	KS11
ATOM	9094	CA	ALA	23	208.146	118.038	-59.116	1.00	47.60	KS11	ATOM	9147	N	VAL	30	212.622	115.772	-61.391	1.00 41.75	KS11
ATOM	9095	CB	ALA	23	207.623	119.375	-58.622	1.00	45.83	KS11	ATOM	9148	CA	VAL	30	213.310	115.384	-62.608	1.00 41.75	KS11
ATOM	9096	C	ALA	23	207.409	116.894	-58.411	1.00	47.60	KS11	ATOM	9149	CB	VAL	30	212.692	114.076	-63.142	1.00 44.04	KS11
ATOM	9097	O	ALA	23	206.430	116.347	-58.932	1.00	47.60	KS11	ATOM	9150	CG1	VAL	30	213.297	113.708	-64.481	1.00 44.04	KS11
ATOM	9098	N	SER	24	207.889	116.550	-57.217	1.00	41.97	KS11	ATOM	9151	CG2	VAL	30	212.901	112.963	-62.130	1.00 44.04	KS11
ATOM	9099	CA	SER	24	207.326	115.467	-56.412	1.00	41.97	KS11	ATOM	9152	C	VAL	30	213.173	116.495	-63.653	1.00 41.75	KS11
ATOM	9100	CB	SER	24	208.014	114.152	-56.792	1.00	59.41	KS11	ATOM	9153	O	VAL	30	212.145	117.152	-63.725	1.00 41.75	KS11
ATOM	9101	OG	SER	24	207.750	113.122	-55.859	1.00	59.41	KS11	ATOM	9154	N	THR	31	214.204	116.720	-64.458	1.00 40.80	KS11
ATOM	9102	C	SER	24	207.516	115.749	-54.918	1.00	41.97	KS11	ATOM	9155	CA	THR	31	214.116	117.763	-65.472	1.00 40.80	KS11
ATOM	9103	O	SER	24	208.622	116.045	-54.466	1.00	41.97	KS11	ATOM	9156	CB	THR	31	214.972	118.977	-65.118	1.00 54.88	KS11
ATOM	9104	N	TYR	25	206.438	115.683	-54.146	1.00	122.68	KS11	ATOM	9157	OG1	THR	31	214.751	119.341	-63.752	1.00 54.88	KS11
ATOM	9105	CA	TYR	25	206.550	115.929	-52.711	1.00	122.68	KS11	ATOM	9158	CG2	THR	31	214.595	120.148	-66.004	1.00 54.88	KS11
ATOM	9106	CB	TYR	25	205.168	115.924	-52.061	1.00	112.74	KS11	ATOM	9159	C	THR	31	214.587	117.241	-66.804	1.00 40.80	KS11
ATOM	9107	CG	TYR	25	204.567	117.298	-51.916	1.00	112.74	KS11	ATOM	9160	O	THR	31	215.703	116.759	-66.917	1.00 40.80	KS11
ATOM	9108	CD1	TYR	25	203.211	117.513	-52.153	1.00	112.74	KS11	ATOM	9161	N	ILE	32	213.731	117.350	-67.812	1.00 44.71	KS11
ATOM	9109	CE1	TYR	25	202.649	118.776	-52.008	1.00	112.74	KS11	ATOM	9162	CA	ILE	32	214.041	116.874	-69.151	1.00 44.71	KS11
ATOM	9110	CD2	TYR	25	205.353	118.386	-51.528	1.00	112.74	KS11	ATOM	9163	CB	ILE	32	212.975	115.898	-69.644	1.00 46.76	KS11
ATOM	9111	CE2	TYR	25	204.804	119.654	-51.379	1.00	112.74	KS11	ATOM	9164	CG2	ILE	32	213.396	115.271	-70.951	1.00 46.76	KS11
ATOM	9112	CZ	TYR	25	203.450	119.842	-51.621	1.00	112.74	KS11	ATOM	9165	CG1	ILE	32	212.732	114.819	-68.602	1.00 46.76	KS11
ATOM	9113	OH	TYR	25	202.895	121.092	-51.480	1.00	112.74	KS11	ATOM	9166	CD1	ILE	32	213.960	114.179	-68.079	1.00 46.76	KS11
ATOM	9114	C	TYR	25	207.407	114.832	-52.115	1.00	122.68	KS11	ATOM	9167	C	ILE	32	214.034	118.041	-70.103	1.00 44.71	KS11
ATOM	9115	O	TYR	25	207.248	114.455	-50.952	1.00	122.68	KS11	ATOM	9168	O	ILE	32	213.309	119.006	-69.874	1.00 44.71	KS11
ATOM	9116	N	ASN	26	208.332	114.338	-52.928	1.00	52.24	KS11	ATOM	9169	N	THR	33	214.818	117.959	-71.178	1.00 64.33	KS11
ATOM	9117	CA	ASN	26	209.208	113.247	-52.528	1.00	52.24	KS11	ATOM	9170	CA	THR	33	214.839	119.040	-72.166	1.00 64.33	KS11
ATOM	9118	CB	ASN	26	208.498	111.914	-52.758	1.00	67.31	KS11	ATOM	9171	CB	THR	33	216.196	119.811	-72.115	1.00 42.89	KS11
ATOM	9119	CG	ASN	26	209.253	110.755	-52.186	1.00	67.31	KS11	ATOM	9172	OG1	THR	33	216.496	120.199	-70.760	1.00 42.89	KS11
ATOM	9120	OD1	ASN	26	210.025	110.916	-51.250	1.00	67.31	KS11	ATOM	9173	CG2	THR	33	216.110	121.068	-72.962	1.00 42.89	KS11
ATOM	9121	ND2	ASN	26	209.019	109.569	-52.728	1.00	67.31	KS11	ATOM	9174	C	THR	33	214.550	118.489	-73.586	1.00 64.33	KS11
ATOM	9122	C	ASN	26	210.545	113.232	-53.251	1.00	52.24	KS11	ATOM	9175	O	THR	33	215.132	117.493	-73.998	1.00 64.33	KS11
ATOM	9123	O	ASN	26	210.692	113.756	-54.353	1.00	52.24	KS11	ATOM	9176	N	ASP	34	213.634	119.133	-74.312	1.00 57.44	KS11
ATOM	9124	N	ASN	27	211.511	112.610	-52.597	1.00	130.12	KS11	ATOM	9177	CA	ASP	34	213.225	118.713	-75.661	1.00 57.44	KS11
ATOM	9125	CA	ASN	27	212.860	112.500	-53.098	1.00	130.12	KS11	ATOM	9178	CB	ASP	34	211.722	118.455	-75.701	1.00 132.60	KS11
ATOM	9126	CB	ASN	27	213.210	111.046	-53.342	1.00	91.86	KS11	ATOM	9179	CG	ASP	34	211.342	117.168	-75.049	1.00 132.60	KS11
ATOM	9127	CG	ASN	27	213.513	110.344	-52.075	1.00	91.86	KS11	ATOM	9180	OD1	ASP	34	212.209	116.279	-74.962	1.00 132.60	KS11
ATOM	9128	OD1	ASN	27	212.631	109.783	-51.447	1.00	91.86	KS11	ATOM	9181	OD2	ASP	34	210.173	117.037	-74.639	1.00 132.60	KS11
ATOM	9129	ND2	ASN	27	214.763	110.406	-51.654	1.00	91.86	KS11	ATOM	9182	C	ASP	34	213.528	119.702	-76.787	1.00 57.44	KS11
ATOM	9130	C	ASN	27	213.289	113.315	-54.288	1.00	130.12	KS11	ATOM	9183	O	ASP	34	214.093	120.768	-76.550	1.00 57.44	KS11
ATOM	9131	O	ASN	27	214.336	113.921	-54.235	1.00	130.12	KS11	ATOM	9184	N	PRO	35	213.154	119.342	-78.039	1.00 64.21	KS11
ATOM	9132	N	THR	28	212.540	113.354	-55.377	1.00	54.43	KS11	ATOM	9185	CD	PRO	35	213.011	117.916	-78.411	1.00 70.63	KS11
ATOM	9133	CA	THR	28	213.072	114.162	-56.461	1.00	54.43	KS11	ATOM	9186	CA	PRO	35	213.336	120.141	-79.257	1.00 64.21	KS11
ATOM	9134	CB	THR	28	213.835	113.332	-57.572	1.00	34.05	KS11	ATOM	9187	CB	PRO	35	214.010	119.145	-80.191	1.00 70.63	KS11

ATOM	9188	CG	PRO	35	213.209	117.906	-79.939	1.00	70.63	KS11	ATOM	9241	NE1	TRP	42	218.540	110.429	-68.467	1.00	46.01	KS11
ATOM	9189	C	PRO	35	211.963	120.583	-79.793	1.00	64.21	KS11	ATOM	9242	CZ2	TRP	42	218.580	109.559	-66.109	1.00	46.01	KS11
ATOM	9190	O	PRO	35	211.818	121.614	-80.464	1.00	64.21	KS11	ATOM	9243	CZ3	TRP	42	217.550	111.097	-64.539	1.00	46.01	KS11
ATOM	9191	N	ASP	36	210.980	119.745	-79.483	1.00	94.62	KS11	ATOM	9244	CH2	TRP	42	218.205	109.878	-64.829	1.00	46.01	KS11
ATOM	9192	CA	ASP	36	209.583	119.893	-79.859	1.00	94.62	KS11	ATOM	9245	C	TRP	42	218.655	114.874	-67.100	1.00	58.70	KS11
ATOM	9193	CB	ASP	36	209.421	120.079	-81.367	1.00	99.30	KS11	ATOM	9246	O	TRP	42	219.770	114.354	-67.082	1.00	58.70	KS11
ATOM	9194	CG	ASP	36	209.600	118.773	-82.139	1.00	99.30	KS11	ATOM	9247	N	SER	43	218.095	115.428	-66.029	1.00	48.64	KS11
ATOM	9195	OD1	ASP	36	209.064	118.660	-83.262	1.00	99.30	KS11	ATOM	9248	CA	SER	43	218.751	115.432	-64.726	1.00	48.64	KS11
ATOM	9196	OD2	ASP	36	210.283	117.860	-81.626	1.00	99.30	KS11	ATOM	9249	CB	SER	43	219.500	116.737	-64.499	1.00	38.49	KS11
ATOM	9197	C	ASP	36	208.960	118.549	-79.464	1.00	94.62	KS11	ATOM	9250	OG	SER	43	220.208	116.664	-63.274	1.00	38.49	KS11
ATOM	9198	O	ASP	36	207.922	118.145	-79.999	1.00	94.62	KS11	ATOM	9251	C	SER	43	217.745	115.245	-63.601	1.00	48.64	KS11
ATOM	9199	N	GLY	37	209.622	117.841	-78.550	1.00	69.47	KS11	ATOM	9252	O	SER	43	216.543	115.347	-63.806	1.00	48.64	KS11
ATOM	9200	CA	GLY	37	209.100	116.564	-78.112	1.00	69.47	KS11	ATOM	9253	N	SER	44	218.245	114.980	-62.405	1.00	33.28	KS11
ATOM	9201	C	GLY	37	210.093	115.576	-77.528	1.00	69.47	KS11	ATOM	9254	CA	SER	44	217.378	114.789	-61.252	1.00	33.28	KS11
ATOM	9202	O	GLY	37	209.945	115.152	-76.381	1.00	69.47	KS11	ATOM	9255	CB	SER	44	216.808	113.376	-61.254	1.00	37.58	KS11
ATOM	9203	N	ASN	38	211.114	115.207	-78.295	1.00	61.93	KS11	ATOM	9256	OG	SER	44	217.810	112.442	-60.885	1.00	37.58	KS11
ATOM	9204	CA	ASN	38	212.077	114.212	-77.825	1.00	61.93	KS11	ATOM	9257	C	SER	44	218.166	114.993	-59.967	1.00	33.28	KS11
ATOM	9205	CB	ASN	38	212.656	113.475	-79.028	1.00	70.80	KS11	ATOM	9258	O	SER	44	219.339	115.334	-59.999	1.00	33.28	KS11
ATOM	9206	CG	ASN	38	211.607	113.238	-80.104	1.00	70.80	KS11	ATOM	9259	N	GLY	45	217.518	114.772	-58.833	1.00	55.68	KS11
ATOM	9207	OD1	ASN	38	211.365	114.109	-80.938	1.00	70.80	KS11	ATOM	9260	CA	GLY	45	218.201	114.913	-57.560	1.00	55.68	KS11
ATOM	9208	ND2	ASN	38	210.954	112.076	-80.066	1.00	70.80	KS11	ATOM	9261	C	GLY	45	219.146	113.743	-57.367	1.00	55.68	KS11
ATOM	9209	C	ASN	38	213.178	114.760	-76.931	1.00	61.93	KS11	ATOM	9262	O	GLY	45	220.115	113.820	-56.614	1.00	55.68	KS11
ATOM	9210	O	ASN	38	213.747	115.808	-77.194	1.00	61.93	KS11	ATOM	9263	N	GLY	46	218.855	112.646	-58.053	1.00	70.12	KS11
ATOM	9211	N	PRO	39	213.493	114.046	-75.845	1.00	47.51	KS11	ATOM	9264	CA	GLY	46	219.702	111.478	-57.953	1.00	70.12	KS11
ATOM	9212	CD	PRO	39	212.848	112.836	-75.300	1.00	42.40	KS11	ATOM	9265	C	GLY	46	220.862	111.589	-58.926	1.00	70.12	KS11
ATOM	9213	CA	PRO	39	214.540	114.541	-74.947	1.00	47.51	KS11	ATOM	9266	O	GLY	46	221.993	111.225	-58.597	1.00	70.12	KS11
ATOM	9214	CB	PRO	39	214.416	113.619	-73.730	1.00	42.40	KS11	ATOM	9267	N	VAL	47	220.578	112.084	-60.131	1.00	69.41	KS11
ATOM	9215	CG	PRO	39	213.871	112.349	-74.307	1.00	42.40	KS11	ATOM	9268	CA	VAL	47	221.604	112.258	-61.153	1.00	69.41	KS11
ATOM	9216	C	PRO	39	215.960	114.622	-75.483	1.00	47.51	KS11	ATOM	9269	CB	VAL	47	221.120	113.193	-62.278	1.00	76.71	KS11
ATOM	9217	O	PRO	39	216.409	113.777	-76.245	1.00	47.51	KS11	ATOM	9270	CG1	VAL	47	222.303	113.725	-63.068	1.00	76.71	KS11
ATOM	9218	N	ILE	40	216.655	115.673	-75.078	1.00	55.89	KS11	ATOM	9271	CG2	VAL	47	220.179	112.441	-63.197	1.00	76.71	KS11
ATOM	9219	CA	ILE	40	218.042	115.882	-75.454	1.00	55.89	KS11	ATOM	9272	C	VAL	47	222.815	112.873	-60.485	1.00	69.41	KS11
ATOM	9220	CB	ILE	40	218.332	117.366	-75.699	1.00	65.76	KS11	ATOM	9273	O	VAL	47	223.950	112.469	-60.727	1.00	69.41	KS11
ATOM	9221	CG2	ILE	40	219.814	117.635	-75.573	1.00	65.76	KS11	ATOM	9274	N	ILE	48	222.560	113.859	-59.638	1.00	64.12	KS11
ATOM	9222	CG1	ILE	40	217.804	117.779	-77.066	1.00	65.76	KS11	ATOM	9275	CA	ILE	48	223.627	114.512	-58.906	1.00	64.12	KS11
ATOM	9223	CD1	ILE	40	217.926	119.273	-77.335	1.00	65.76	KS11	ATOM	9276	CB	ILE	48	223.340	115.974	-58.713	1.00	40.60	KS11
ATOM	9224	C	ILE	40	218.896	115.408	-74.272	1.00	55.89	KS11	ATOM	9277	CG2	ILE	48	224.620	116.678	-58.268	1.00	40.60	KS11
ATOM	9225	O	ILE	40	219.856	114.648	-74.445	1.00	55.89	KS11	ATOM	9278	CG1	ILE	48	222.778	116.556	-60.007	1.00	40.60	KS11
ATOM	9226	N	THR	41	218.534	115.870	-73.076	1.00	75.56	KS11	ATOM	9279	CD1	ILE	48	221.987	117.820	-59.791	1.00	40.60	KS11
ATOM	9227	CA	THR	41	219.235	115.512	-71.847	1.00	75.56	KS11	ATOM	9280	C	ILE	48	223.702	113.868	-57.528	1.00	64.12	KS11
ATOM	9228	CB	THR	41	220.405	116.466	-71.542	1.00	70.83	KS11	ATOM	9281	O	ILE	48	222.831	113.077	-57.149	1.00	64.12	KS11
ATOM	9229	OG1	THR	41	219.926	117.814	-71.528	1.00	70.83	KS11	ATOM	9282	N	GLY	49	224.732	114.226	-56.774	1.00	43.44	KS11
ATOM	9230	CG2	THR	41	221.499	116.327	-72.574	1.00	70.83	KS11	ATOM	9283	CA	GLY	49	224.924	113.663	-55.444	1.00	43.44	KS11
ATOM	9231	C	THR	41	218.286	115.600	-70.672	1.00	75.56	KS11	ATOM	9284	C	GLY	49	223.756	112.969	-54.764	1.00	43.44	KS11
ATOM	9232	O	THR	41	217.272	116.297	-70.739	1.00	75.56	KS11	ATOM	9285	O	GLY	49	223.578	111.769	-54.915	1.00	43.44	KS11
ATOM	9233	N	TRP	42	218.632	114.904	-69.592	1.00	58.70	KS11	ATOM	9286	N	TYR	50	222.977	113.750	-54.018	1.00	69.10	KS11
ATOM	9234	CA	TRP	42	217.826	114.912	-68.379	1.00	58.70	KS11	ATOM	9287	CA	TYR	50	221.804	113.321	-53.242	1.00	69.10	KS11
ATOM	9235	CB	TRP	42	216.868	113.729	-68.367	1.00	46.01	KS11	ATOM	9288	CB	TYR	50	220.775	114.444	-53.284	1.00	52.48	KS11
ATOM	9236	CG	TRP	42	217.507	112.396	-68.125	1.00	46.01	KS11	ATOM	9289	CG	TYR	50	221.354	115.774	-52.848	1.00	52.48	KS11
ATOM	9237	CD2	TRP	42	217.636	111.713	-66.866	1.00	46.01	KS11	ATOM	9290	CD1	TYR	50	220.768	116.973	-53.234	1.00	52.48	KS11
ATOM	9238	CE2	TRP	42	218.289	110.485	-67.122	1.00	46.01	KS11	ATOM	9291	CE1	TYR	50	221.312	118.197	-52.850	1.00	52.48	KS11
ATOM	9239	CE3	TRP	42	217.263	112.020	-65.549	1.00	46.01	KS11	ATOM	9292	CD2	TYR	50	222.501	115.834	-52.059	1.00	52.48	KS11
ATOM	9240	CD1	TRP	42	218.071	111.579	-69.061	1.00	46.01	KS11	ATOM	9293	CE2	TYR	50	223.050	117.054	-51.669	1.00	52.48	KS11

ATOM	9294	CZ	TYR	50	222.451	118.228	-52.068	1.00	52.48	KS11	ATOM	9347	O	THR	57	215.864	120.001	-53.384	1.00	61.98	KS11
ATOM	9295	OH	TYR	50	222.986	119.437	-51.683	1.00	52.48	KS11	ATOM	9348	N	PRO	58	214.618	121.570	-52.367	1.00	65.78	KS11
ATOM	9296	C	TYR	50	221.139	111.983	-53.575	1.00	69.10	KS11	ATOM	9349	CD	PRO	58	214.017	122.174	-51.170	1.00	45.27	KS11
ATOM	9297	O	TYR	50	220.653	111.770	-54.687	1.00	69.10	KS11	ATOM	9350	CA	PRO	58	214.699	122.555	-53.448	1.00	65.78	KS11
ATOM	9298	N	LYS	51	221.104	111.096	-52.583	1.00	63.28	KS11	ATOM	9351	CB	PRO	58	214.105	123.813	-52.816	1.00	45.27	KS11
ATOM	9299	CA	LYS	51	220.527	109.769	-52.753	1.00	63.28	KS11	ATOM	9352	CG	PRO	58	214.376	123.622	-51.360	1.00	45.27	KS11
ATOM	9300	CB	LYS	51	221.489	108.703	-52.223	1.00	58.54	KS11	ATOM	9353	C	PRO	58	216.120	122.778	-53.953	1.00	65.78	KS11
ATOM	9301	CG	LYS	51	221.993	107.746	-53.294	1.00	58.54	KS11	ATOM	9354	O	PRO	58	216.330	123.112	-55.124	1.00	65.78	KS11
ATOM	9302	CD	LYS	51	222.430	106.390	-52.717	1.00	58.54	KS11	ATOM	9355	N	TYR	59	217.101	122.606	-53.076	1.00	63.47	KS11
ATOM	9303	CE	LYS	51	221.227	105.543	-52.232	1.00	58.54	KS11	ATOM	9356	CA	TYR	59	218.467	122.790	-53.517	1.00	63.47	KS11
ATOM	9304	NZ	LYS	51	221.608	104.180	-51.725	1.00	58.54	KS11	ATOM	9357	CB	TYR	59	219.462	122.523	-52.400	1.00	69.66	KS11
ATOM	9305	C	LYS	51	219.154	109.541	-52.112	1.00	63.28	KS11	ATOM	9358	CG	TYR	59	220.864	122.866	-52.815	1.00	69.66	KS11
ATOM	9306	O	LYS	51	218.190	109.182	-52.797	1.00	63.28	KS11	ATOM	9359	CD1	TYR	59	221.130	124.059	-53.485	1.00	69.66	KS11
ATOM	9307	N	GLY	52	219.061	109.717	-50.798	1.00	57.03	KS11	ATOM	9360	CE1	TYR	59	222.426	124.404	-53.864	1.00	69.66	KS11
ATOM	9308	CA	GLY	52	217.788	109.481	-50.141	1.00	57.03	KS11	ATOM	9361	CD2	TYR	59	221.932	122.014	-52.530	1.00	69.66	KS11
ATOM	9309	C	GLY	52	216.919	110.710	-50.110	1.00	57.03	KS11	ATOM	9362	CE2	TYR	59	223.239	122.345	-52.901	1.00	69.66	KS11
ATOM	9310	O	GLY	52	216.781	111.415	-51.103	1.00	57.03	KS11	ATOM	9363	CZ	TYR	59	223.481	123.547	-53.569	1.00	69.66	KS11
ATOM	9311	N	SER	53	216.321	110.958	-48.957	1.00	59.02	KS11	ATOM	9364	OH	TYR	59	224.769	123.904	-53.927	1.00	69.66	KS11
ATOM	9312	CA	SER	53	215.475	112.120	-48.774	1.00	59.02	KS11	ATOM	9365	C	TYR	59	218.702	121.819	-54.651	1.00	63.47	KS11
ATOM	9313	CB	SER	53	215.256	112.329	-47.280	1.00	53.53	KS11	ATOM	9366	O	TYR	59	219.069	122.234	-55.747	1.00	63.47	KS11
ATOM	9314	OG	SER	53	214.963	113.688	-47.010	1.00	53.53	KS11	ATOM	9367	N	ALA	60	218.475	120.530	-54.392	1.00	44.55	KS11
ATOM	9315	C	SER	53	216.048	113.412	-49.393	1.00	59.02	KS11	ATOM	9368	CA	ALA	60	218.649	119.512	-55.424	1.00	44.55	KS11
ATOM	9316	O	SER	53	215.365	114.115	-50.136	1.00	59.02	KS11	ATOM	9369	CB	ALA	60	218.116	118.192	-54.959	1.00	18.89	KS11
ATOM	9317	N	ARG	54	217.305	113.706	-49.065	1.00	61.63	KS11	ATOM	9370	C	ALA	60	217.911	119.950	-56.684	1.00	44.55	KS11
ATOM	9318	CA	ARG	54	218.017	114.900	-49.525	1.00	61.63	KS11	ATOM	9371	O	ALA	60	218.476	119.962	-57.771	1.00	44.55	KS11
ATOM	9319	CB	ARG	54	219.522	114.663	-49.403	1.00	105.85	KS11	ATOM	9372	N	ALA	61	216.645	120.311	-56.541	1.00	43.96	KS11
ATOM	9320	CG	ARG	54	219.941	114.012	-48.094	1.00	105.85	KS11	ATOM	9373	CA	ALA	61	215.881	120.778	-57.684	1.00	43.96	KS11
ATOM	9321	CD	ARG	54	220.119	115.030	-46.976	1.00	105.85	KS11	ATOM	9374	CB	ALA	61	214.592	121.419	-57.221	1.00	80.08	KS11
ATOM	9322	NE	ARG	54	221.530	115.264	-46.677	1.00	105.85	KS11	ATOM	9375	C	ALA	61	216.732	121.799	-58.427	1.00	43.96	KS11
ATOM	9323	CZ	ARG	54	222.410	115.753	-47.547	1.00	105.85	KS11	ATOM	9376	O	ALA	61	216.850	121.750	-59.645	1.00	43.96	KS11
ATOM	9324	NH1	ARG	54	222.026	116.065	-48.776	1.00	105.85	KS11	ATOM	9377	N	GLN	62	217.336	122.723	-57.693	1.00	59.11	KS11
ATOM	9325	NH2	ARG	54	223.677	115.924	-47.191	1.00	105.85	KS11	ATOM	9378	CA	GLN	62	218.168	123.725	-58.336	1.00	59.11	KS11
ATOM	9326	C	ARG	54	217.685	115.273	-50.961	1.00	61.63	KS11	ATOM	9379	CB	GLN	62	218.756	124.685	-57.312	1.00	71.82	KS11
ATOM	9327	O	ARG	54	217.654	116.438	-51.332	1.00	61.63	KS11	ATOM	9380	CG	GLN	62	219.597	125.773	-57.945	1.00	71.82	KS11
ATOM	9328	N	LYS	55	217.441	114.250	-51.759	1.00	45.27	KS11	ATOM	9381	CD	GLN	62	220.061	126.794	-56.939	1.00	71.82	KS11
ATOM	9329	CA	LYS	55	217.135	114.367	-53.177	1.00	45.27	KS11	ATOM	9382	OE1	GLN	62	220.892	126.504	-56.080	1.00	71.82	KS11
ATOM	9330	CB	LYS	55	216.874	112.941	-53.690	1.00	24.64	KS11	ATOM	9383	NE2	GLN	62	219.518	128.002	-57.033	1.00	71.82	KS11
ATOM	9331	CG	LYS	55	216.773	112.744	-55.179	1.00	24.64	KS11	ATOM	9384	C	GLN	62	219.302	123.063	-59.098	1.00	59.11	KS11
ATOM	9332	CD	LYS	55	216.197	111.353	-55.495	1.00	24.64	KS11	ATOM	9385	O	GLN	62	219.390	123.175	-60.318	1.00	59.11	KS11
ATOM	9333	CE	LYS	55	217.049	110.225	-54.926	1.00	24.64	KS11	ATOM	9386	N	LEU	63	220.177	122.376	-58.377	1.00	60.75	KS11
ATOM	9334	NZ	LYS	55	216.385	108.878	-54.942	1.00	24.64	KS11	ATOM	9387	CA	LEU	63	221.291	121.707	-59.016	1.00	60.75	KS11
ATOM	9335	C	LYS	55	215.953	115.303	-53.506	1.00	45.27	KS11	ATOM	9388	CB	LEU	63	221.989	120.771	-58.020	1.00	41.35	KS11
ATOM	9336	O	LYS	55	215.883	115.889	-54.596	1.00	45.27	KS11	ATOM	9389	CG	LEU	63	222.764	121.470	-56.886	1.00	41.35	KS11
ATOM	9337	N	GLY	56	215.012	115.427	-52.574	1.00	84.48	KS11	ATOM	9390	CD1	LEU	63	223.670	120.478	-56.170	1.00	41.35	KS11
ATOM	9338	CA	GLY	56	213.844	116.260	-52.819	1.00	84.48	KS11	ATOM	9391	CD2	LEU	63	223.611	122.593	-57.448	1.00	41.35	KS11
ATOM	9339	C	GLY	56	214.088	117.740	-52.661	1.00	84.48	KS11	ATOM	9392	C	LEU	63	220.842	120.935	-60.260	1.00	60.75	KS11
ATOM	9340	O	GLY	56	213.738	118.541	-53.528	1.00	84.48	KS11	ATOM	9393	O	LEU	63	221.412	121.095	-61.339	1.00	60.75	KS11
ATOM	9341	N	THR	57	214.692	118.090	-51.535	1.00	61.98	KS11	ATOM	9394	N	ALA	64	219.806	120.118	-60.123	1.00	45.93	KS11
ATOM	9342	CA	THR	57	215.016	119.465	-51.203	1.00	61.98	KS11	ATOM	9395	CA	ALA	64	219.316	119.337	-61.254	1.00	45.93	KS11
ATOM	9343	CB	THR	57	216.301	119.535	-50.362	1.00	78.59	KS11	ATOM	9396	CB	ALA	64	218.139	118.440	-60.814	1.00	19.77	KS11
ATOM	9344	OG1	THR	57	216.554	120.896	-50.004	1.00	78.59	KS11	ATOM	9397	C	ALA	64	218.899	120.234	-62.423	1.00	45.93	KS11
ATOM	9345	CG2	THR	57	217.488	119.017	-51.146	1.00	78.59	KS11	ATOM	9398	O	ALA	64	219.144	119.914	-63.590	1.00	45.93	KS11
ATOM	9346	C	THR	57	215.199	120.366	-52.416	1.00	61.98	KS11	ATOM	9399	N	ALA	65	218.265	121.357	-62.114	1.00	49.58	KS11

ATOM	9400	CA	ALA	65	217.840	122.273	-63.161	1.00	49.58	KS11	ATOM	9453	N	MET	73	223.131	123.061	-72.836	1.00	73.84	KS11
ATOM	9401	CB	ALA	65	217.201	123.525	-62.547	1.00	33.75	KS11	ATOM	9454	CA	MET	73	223.834	124.202	-73.416	1.00	73.84	KS11
ATOM	9402	C	ALA	65	219.075	122.655	-63.959	1.00	49.58	KS11	ATOM	9455	CB	MET	73	224.695	124.901	-72.355	1.00	107.94	KS11
ATOM	9403	O	ALA	65	219.148	122.428	-65.172	1.00	49.58	KS11	ATOM	9456	CG	MET	73	223.930	125.424	-71.145	1.00	107.94	KS11
ATOM	9404	N	LEU	66	220.046	123.225	-63.250	1.00	57.71	KS11	ATOM	9457	SD	MET	73	222.908	126.861	-71.504	1.00	107.94	KS11
ATOM	9405	CA	LEU	66	221.302	123.672	-63.839	1.00	57.71	KS11	ATOM	9458	CE	MET	73	223.665	128.111	-70.461	1.00	107.94	KS11
ATOM	9406	CB	LEU	66	222.229	124.188	-62.743	1.00	49.03	KS11	ATOM	9459	C	MET	73	224.731	123.660	-74.527	1.00	73.84	KS11
ATOM	9407	CG	LEU	66	221.538	125.146	-61.767	1.00	49.03	KS11	ATOM	9460	O	MET	73	224.909	124.290	-75.572	1.00	73.84	KS11
ATOM	9408	CD1	LEU	66	222.458	125.437	-60.598	1.00	49.03	KS11	ATOM	9461	N	ALA	74	225.286	122.476	-74.285	1.00	90.31	KS11
ATOM	9409	CD2	LEU	66	221.138	126.426	-62.486	1.00	49.03	KS11	ATOM	9462	CA	ALA	74	226.157	121.818	-75.245	1.00	90.31	KS11
ATOM	9410	C	LEU	66	221.978	122.549	-64.606	1.00	57.71	KS11	ATOM	9463	CB	ALA	74	226.546	120.454	-74.730	1.00	61.72	KS11
ATOM	9411	O	LEU	66	222.337	122.720	-65.768	1.00	57.71	KS11	ATOM	9464	C	ALA	74	225.464	121.685	-76.597	1.00	90.31	KS11
ATOM	9412	N	ASP	67	222.148	121.400	-63.956	1.00	54.13	KS11	ATOM	9465	O	ALA	74	225.922	122.252	-77.590	1.00	90.31	KS11
ATOM	9413	CA	ASP	67	222.770	120.255	-64.605	1.00	54.13	KS11	ATOM	9466	N	TYR	75	224.363	120.935	-76.635	1.00	62.47	KS11
ATOM	9414	CB	ASP	67	222.639	118.997	-63.745	1.00	73.96	KS11	ATOM	9467	CA	TYR	75	223.606	120.737	-77.871	1.00	62.47	KS11
ATOM	9415	CG	ASP	67	223.296	117.777	-64.387	1.00	73.96	KS11	ATOM	9468	CB	TYR	75	222.345	119.906	-77.612	1.00	92.26	KS11
ATOM	9416	OD1	ASP	67	222.799	116.644	-64.191	1.00	73.96	KS11	ATOM	9469	CG	TYR	75	222.552	118.416	-77.430	1.00	92.26	KS11
ATOM	9417	OD2	ASP	67	224.319	117.950	-65.080	1.00	73.96	KS11	ATOM	9470	CD1	TYR	75	223.499	117.921	-76.530	1.00	92.26	KS11
ATOM	9418	C	ASP	67	222.074	120.012	-65.933	1.00	54.13	KS11	ATOM	9471	CE1	TYR	75	223.625	116.542	-76.293	1.00	92.26	KS11
ATOM	9419	O	ASP	67	222.719	119.812	-66.952	1.00	54.13	KS11	ATOM	9472	CD2	TYR	75	221.736	117.496	-78.099	1.00	92.26	KS11
ATOM	9420	N	ALA	68	220.749	120.035	-65.923	1.00	52.09	KS11	ATOM	9473	CE2	TYR	75	221.848	116.120	-77.867	1.00	92.26	KS11
ATOM	9421	CA	ALA	68	220.006	119.797	-67.147	1.00	52.09	KS11	ATOM	9474	CZ	TYR	75	222.793	115.649	-76.962	1.00	92.26	KS11
ATOM	9422	CB	ALA	68	218.525	119.684	-66.850	1.00	77.13	KS11	ATOM	9475	OH	TYR	75	222.896	114.296	-76.715	1.00	92.26	KS11
ATOM	9423	C	ALA	68	220.261	120.908	-68.146	1.00	52.09	KS11	ATOM	9476	C	TYR	75	223.191	122.065	-78.507	1.00	62.47	KS11
ATOM	9424	O	ALA	68	220.458	120.646	-69.326	1.00	52.09	KS11	ATOM	9477	O	TYR	75	222.372	122.085	-79.426	1.00	62.47	KS11
ATOM	9425	N	ALA	69	220.269	122.150	-67.677	1.00	61.10	KS11	ATOM	9478	N	GLY	76	223.738	123.169	-78.002	1.00	69.50	KS11
ATOM	9426	CA	ALA	69	220.495	123.278	-68.571	1.00	61.10	KS11	ATOM	9479	CA	GLY	76	223.427	124.477	-78.551	1.00	69.50	KS11
ATOM	9427	CB	ALA	69	220.308	124.576	-67.820	1.00	40.07	KS11	ATOM	9480	C	GLY	76	222.106	125.081	-78.117	1.00	69.50	KS11
ATOM	9428	C	ALA	69	221.888	123.219	-69.198	1.00	61.10	KS11	ATOM	9481	O	GLY	76	221.591	125.973	-78.789	1.00	69.50	KS11
ATOM	9429	O	ALA	69	222.017	123.191	-70.421	1.00	61.10	KS11	ATOM	9482	N	MET	77	221.549	124.606	-77.005	1.00	76.64	KS11
ATOM	9430	N	LYS	70	222.925	123.194	-68.361	1.00	68.75	KS11	ATOM	9483	CA	MET	77	220.282	125.142	-76.507	1.00	76.64	KS11
ATOM	9431	CA	LYS	70	224.305	123.126	-68.838	1.00	68.75	KS11	ATOM	9484	CB	MET	77	219.798	124.373	-75.267	1.00	97.68	KS11
ATOM	9432	CB	LYS	70	225.257	122.880	-67.670	1.00	113.48	KS11	ATOM	9485	CG	MET	77	218.995	123.091	-75.538	1.00	97.68	KS11
ATOM	9433	CG	LYS	70	225.199	123.980	-66.627	1.00	113.48	KS11	ATOM	9486	SD	MET	77	217.312	123.364	-76.168	1.00	97.68	KS11
ATOM	9434	CD	LYS	70	226.006	123.644	-65.382	1.00	113.48	KS11	ATOM	9487	CE	MET	77	216.508	123.857	-74.707	1.00	97.68	KS11
ATOM	9435	CE	LYS	70	225.785	124.697	-64.300	1.00	113.48	KS11	ATOM	9488	C	MET	77	220.471	126.597	-76.129	1.00	76.64	KS11
ATOM	9436	NZ	LYS	70	226.471	124.357	-63.024	1.00	113.48	KS11	ATOM	9489	O	MET	77	221.523	126.982	-75.621	1.00	76.64	KS11
ATOM	9437	C	LYS	70	224.451	122.024	-69.876	1.00	68.75	KS11	ATOM	9490	N	GLN	78	219.449	127.405	-76.377	1.00	91.28	KS11
ATOM	9438	O	LYS	70	224.794	122.299	-71.017	1.00	68.75	KS11	ATOM	9491	CA	GLN	78	219.508	128.816	-76.034	1.00	91.28	KS11
ATOM	9439	N	LYS	71	224.180	120.781	-69.490	1.00	54.87	KS11	ATOM	9492	CB	GLN	78	219.861	129.642	-77.268	1.00	98.39	KS11
ATOM	9440	CA	LYS	71	224.276	119.659	-70.426	1.00	54.87	KS11	ATOM	9493	CG	GLN	78	221.249	129.350	-77.787	1.00	98.39	KS11
ATOM	9441	CB	LYS	71	223.621	118.399	-69.852	1.00	47.26	KS11	ATOM	9494	CD	GLN	78	221.837	130.514	-78.541	1.00	98.39	KS11
ATOM	9442	CG	LYS	71	224.358	117.728	-68.709	1.00	47.26	KS11	ATOM	9495	OE1	GLN	78	221.939	131.622	-78.012	1.00	98.39	KS11
ATOM	9443	CD	LYS	71	223.661	116.420	-68.319	1.00	47.26	KS11	ATOM	9496	NE2	GLN	78	222.236	130.273	-79.782	1.00	98.39	KS11
ATOM	9444	CE	LYS	71	224.441	115.646	-67.257	1.00	47.26	KS11	ATOM	9497	C	GLN	78	218.198	129.307	-75.422	1.00	91.28	KS11
ATOM	9445	NZ	LYS	71	223.846	114.298	-66.991	1.00	47.26	KS11	ATOM	9498	O	GLN	78	218.203	130.007	-74.408	1.00	91.28	KS11
ATOM	9446	C	LYS	71	223.589	119.993	-71.747	1.00	54.87	KS11	ATOM	9499	N	SER	79	217.082	128.928	-76.038	1.00	76.87	KS11
ATOM	9447	O	LYS	71	224.054	119.604	-72.818	1.00	54.87	KS11	ATOM	9500	CA	SER	79	215.757	129.316	-75.567	1.00	76.87	KS11
ATOM	9448	N	ALA	72	222.478	120.712	-71.665	1.00	55.60	KS11	ATOM	9501	CB	SER	79	215.023	130.111	-76.653	1.00	120.64	KS11
ATOM	9449	CA	ALA	72	221.733	121.078	-72.858	1.00	55.60	KS11	ATOM	9502	OG	SER	79	213.727	130.496	-76.226	1.00	120.64	KS11
ATOM	9450	CB	ALA	72	220.300	121.443	-72.491	1.00	106.43	KS11	ATOM	9503	C	SER	79	214.963	128.064	-75.222	1.00	76.87	KS11
ATOM	9451	C	ALA	72	222.399	122.235	-73.582	1.00	55.60	KS11	ATOM	9504	O	SER	79	215.061	127.051	-75.913	1.00	76.87	KS11
ATOM	9452	O	ALA	72	222.241	122.382	-74.794	1.00	55.60	KS11	ATOM	9505	N	VAL	80	214.174	128.137	-74.154	1.00	80.98	KS11

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ATOM  9506  CA  VAL  80     213.374 126.995 -73.732  1.00 80.98      KS11
ATOM  9507  CB  VAL  80     214.058 126.222 -72.598  1.00 72.01      KS11
ATOM  9508  CG1 VAL  80     213.542 124.799 -72.563  1.00 72.01      KS11
ATOM  9509  CG2 VAL  80     215.561 126.261 -72.766  1.00 72.01      KS11
ATOM  9510  C   VAL  80     212.016 127.419 -73.206  1.00 80.98      KS11
ATOM  9511  O   VAL  80     211.845 128.554 -72.773  1.00 80.98      KS11
ATOM  9512  N   ASP  81     211.055 126.497 -73.251  1.00 72.19      KS11
ATOM  9513  CA  ASP  81     209.706 126.728 -72.731  1.00 72.19      KS11
ATOM  9514  CB  ASP  81     208.645 126.397 -73.773  1.00 95.47      KS11
ATOM  9515  CG  ASP  81     208.765 127.253 -75.007  1.00 95.47      KS11
ATOM  9516  OD1 ASP  81     209.814 127.160 -75.681  1.00 95.47      KS11
ATOM  9517  OD2 ASP  81     207.821 128.021 -75.299  1.00 95.47      KS11
ATOM  9518  C   ASP  81     209.574 125.783 -71.556  1.00 72.19      KS11
ATOM  9519  O   ASP  81     209.678 124.568 -71.709  1.00 72.19      KS11
ATOM  9520  N   VAL  82     209.367 126.337 -70.374  1.00 52.90      KS11
ATOM  9521  CA  VAL  82     209.260 125.501 -69.195  1.00 52.90      KS11
ATOM  9522  CB  VAL  82     209.751 126.246 -67.946  1.00 60.35      KS11
ATOM  9523  CG1 VAL  82     209.760 125.303 -66.756  1.00 60.35      KS11
ATOM  9524  CG2 VAL  82     211.138 126.804 -68.195  1.00 60.35      KS11
ATOM  9525  C   VAL  82     207.845 124.991 -68.963  1.00 52.90      KS11
ATOM  9526  O   VAL  82     206.866 125.711 -69.142  1.00 52.90      KS11
ATOM  9527  N   ILE  83     207.764 123.724 -68.577  1.00 48.60      KS11
ATOM  9528  CA  ILE  83     206.503 123.059 -68.311  1.00 48.60      KS11
ATOM  9529  CB  ILE  83     206.200 122.032 -69.384  1.00 49.26      KS11
ATOM  9530  CG2 ILE  83     204.863 121.381 -69.100  1.00 49.26      KS11
ATOM  9531  CG1 ILE  83     206.219 122.712 -70.751  1.00 49.26      KS11
ATOM  9532  CD1 ILE  83     206.049 121.759 -71.898  1.00 49.26      KS11
ATOM  9533  C   ILE  83     206.594 122.358 -66.963  1.00 48.60      KS11
ATOM  9534  O   ILE  83     207.320 121.378 -66.789  1.00 48.60      KS11
ATOM  9535  N   VAL  84     205.847 122.884 -66.006  1.00 47.44      KS11
ATOM  9536  CA  VAL  84     205.843 122.357 -64.660  1.00 47.44      KS11
ATOM  9537  CB  VAL  84     205.684 123.505 -63.667  1.00 49.78      KS11
ATOM  9538  CG1 VAL  84     207.005 123.787 -62.993  1.00 49.78      KS11
ATOM  9539  CG2 VAL  84     205.226 124.754 -64.408  1.00 49.78      KS11
ATOM  9540  C   VAL  84     204.736 121.341 -64.479  1.00 47.44      KS11
ATOM  9541  O   VAL  84     203.595 121.572 -64.852  1.00 47.44      KS11
ATOM  9542  N   ARG  85     205.088 120.196 -63.923  1.00 49.26      KS11
ATOM  9543  CA  ARG  85     204.115 119.153 -63.700  1.00 49.26      KS11
ATOM  9544  CB  ARG  85     204.341 117.981 -64.651  1.00 65.11      KS11
ATOM  9545  CG  ARG  85     203.908 118.231 -66.070  1.00 65.11      KS11
ATOM  9546  CD  ARG  85     203.394 116.941 -66.678  1.00 65.11      KS11
ATOM  9547  NE  ARG  85     202.814 117.138 -68.001  1.00 65.11      KS11
ATOM  9548  CZ  ARG  85     203.497 117.052 -69.136  1.00 65.11      KS11
ATOM  9549  NH1 ARG  85     204.789 116.768 -69.112  1.00 65.11      KS11
ATOM  9550  NH2 ARG  85     202.889 117.243 -70.297  1.00 65.11      KS11
ATOM  9551  C   ARG  85     204.234 118.659 -62.279  1.00 49.26      KS11
ATOM  9552  O   ARG  85     205.301 118.196 -61.861  1.00 49.26      KS11
ATOM  9553  N   GLY  86     203.133 118.770 -61.540  1.00 49.41      KS11
ATOM  9554  CA  GLY  86     203.099 118.309 -60.166  1.00 49.41      KS11
ATOM  9555  C   GLY  86     203.513 119.338 -59.146  1.00 49.41      KS11
ATOM  9556  O   GLY  86     204.270 120.248 -59.435  1.00 49.41      KS11
ATOM  9557  N   THR  87     202.988 119.201 -57.940  1.00 91.97      KS11
ATOM  9558  CA  THR  87     203.340 120.112 -56.873  1.00 91.97      KS11
ATOM  9559  CB  THR  87     202.245 120.200 -55.827  1.00 91.06      KS11
ATOM  9560  OG1 THR  87     200.965 120.192 -56.474  1.00 91.06      KS11
ATOM  9561  CG2 THR  87     202.411 121.476 -55.012  1.00 91.06      KS11
ATOM  9562  C   THR  87     204.517 119.423 -56.242  1.00 91.97      KS11
ATOM  9563  O   THR  87     204.711 118.229 -56.456  1.00 91.97      KS11
ATOM  9564  N   GLY  88     205.308 120.149 -55.467  1.00 56.37      KS11
ATOM  9565  CA  GLY  88     206.436 119.491 -54.844  1.00 56.37      KS11
ATOM  9566  C   GLY  88     207.469 120.386 -54.212  1.00 56.37      KS11
ATOM  9567  O   GLY  88     207.473 121.603 -54.408  1.00 56.37      KS11
ATOM  9568  N   ALA  89     208.346 119.762 -53.437  1.00101.53     KS11
ATOM  9569  CA  ALA  89     209.420 120.469 -52.768  1.00101.53     KS11
ATOM  9570  CB  ALA  89     210.251 119.484 -51.934  1.00 65.79      KS11
ATOM  9571  C   ALA  89     210.282 121.106 -53.849  1.00101.53     KS11
ATOM  9572  O   ALA  89     210.706 120.433 -54.794  1.00101.53     KS11
ATOM  9573  N   GLY  90     210.517 122.407 -53.728  1.00 60.68      KS11
ATOM  9574  CA  GLY  90     211.348 123.089 -54.705  1.00 60.68      KS11
ATOM  9575  C   GLY  90     211.041 122.878 -56.184  1.00 60.68      KS11
ATOM  9576  O   GLY  90     211.881 122.421 -56.960  1.00 60.68      KS11
ATOM  9577  N   ARG  91     209.822 123.202 -56.582  1.00 67.90      KS11
ATOM  9578  CA  ARG  91     209.447 123.096 -57.975  1.00 67.90      KS11
ATOM  9579  CB  ARG  91     207.945 122.850 -58.111  1.00 81.55      KS11
ATOM  9580  CG  ARG  91     207.407 123.160 -59.493  1.00 81.55      KS11
ATOM  9581  CD  ARG  91     206.223 124.101 -59.412  1.00 81.55      KS11
ATOM  9582  NE  ARG  91     205.067 123.457 -58.800  1.00 81.55      KS11
ATOM  9583  CZ  ARG  91     203.970 124.097 -58.409  1.00 81.55      KS11
ATOM  9584  NH1 ARG  91     203.874 125.409 -58.562  1.00 81.55      KS11
ATOM  9585  NH2 ARG  91     202.966 123.424 -57.863  1.00 81.55      KS11
ATOM  9586  C   ARG  91     209.803 124.464 -58.534  1.00 67.90      KS11
ATOM  9587  O   ARG  91     210.383 124.580 -59.608  1.00 67.90      KS11
ATOM  9588  N   GLU  92     209.465 125.501 -57.775  1.00 69.25      KS11
ATOM  9589  CA  GLU  92     209.734 126.869 -58.186  1.00 69.25      KS11
ATOM  9590  CB  GLU  92     209.030 127.855 -57.255  1.00 85.57      KS11
ATOM  9591  CG  GLU  92     208.067 128.809 -57.970  1.00 85.57      KS11
ATOM  9592  CD  GLU  92     206.975 128.085 -58.761  1.00 85.57      KS11
ATOM  9593  OE1 GLU  92     206.427 127.084 -58.250  1.00 85.57      KS11
ATOM  9594  OE2 GLU  92     206.655 128.525 -59.890  1.00 85.57      KS11
ATOM  9595  C   GLU  92     211.225 127.156 -58.212  1.00 69.25      KS11
ATOM  9596  O   GLU  92     211.684 127.959 -59.020  1.00 69.25      KS11
ATOM  9597  N   GLN  93     211.979 126.502 -57.332  1.00 73.63      KS11
ATOM  9598  CA  GLN  93     213.427 126.690 -57.278  1.00 73.63      KS11
ATOM  9599  CB  GLN  93     214.016 125.931 -56.093  1.00 97.01      KS11
ATOM  9600  CG  GLN  93     214.555 126.837 -55.012  1.00 97.01      KS11
ATOM  9601  CD  GLN  93     215.788 127.587 -55.460  1.00 97.01      KS11
ATOM  9602  OE1 GLN  93     216.842 126.991 -55.675  1.00 97.01      KS11
ATOM  9603  NE2 GLN  93     215.664 128.901 -55.612  1.00 97.01      KS11
ATOM  9604  C   GLN  93     214.058 126.197 -58.573  1.00 73.63      KS11
ATOM  9605  O   GLN  93     215.075 126.727 -59.026  1.00 73.63      KS11
ATOM  9606  N   ALA  94     213.443 125.176 -59.164  1.00 64.06      KS11
ATOM  9607  CA  ALA  94     213.915 124.612 -60.416  1.00 64.06      KS11
ATOM  9608  CB  ALA  94     213.198 123.313 -60.701  1.00 14.00      KS11
ATOM  9609  C   ALA  94     213.614 125.619 -61.509  1.00 64.06      KS11
ATOM  9610  O   ALA  94     214.458 125.920 -62.341  1.00 64.06      KS11
ATOM  9611  N   ILE  95     212.396 126.139 -61.500  1.00 56.80      KS11
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ATOM	9612	CA	ILE	95	211.987	127.122	-62.489	1.00	56.80	KS11	ATOM	9665	C	GLY	102	220.647	131.075	-70.087	1.00	98.83	KS11
ATOM	9613	CB	ILE	95	210.532	127.563	-62.261	1.00	52.54	KS11	ATOM	9666	O	GLY	102	220.522	132.006	-70.886	1.00	98.83	KS11
ATOM	9614	CG2	ILE	95	210.134	128.608	-63.294	1.00	52.54	KS11	ATOM	9667	N	LEU	103	219.913	129.970	-70.129	1.00	77.36	KS11
ATOM	9615	CG1	ILE	95	209.609	126.348	-62.328	1.00	52.54	KS11	ATOM	9668	CA	LEU	103	218.876	129.770	-71.132	1.00	77.36	KS11
ATOM	9616	CD1	ILE	95	208.147	126.692	-62.227	1.00	52.54	KS11	ATOM	9669	CB	LEU	103	218.245	128.390	-70.962	1.00	45.15	KS11
ATOM	9617	C	ILE	95	212.875	128.356	-62.396	1.00	56.80	KS11	ATOM	9670	CG	LEU	103	219.210	127.218	-71.067	1.00	45.15	KS11
ATOM	9618	O	ILE	95	212.974	129.134	-63.341	1.00	56.80	KS11	ATOM	9671	CD1	LEU	103	218.571	125.958	-70.494	1.00	45.15	KS11
ATOM	9619	N	ARG	96	213.516	128.540	-61.247	1.00	74.80	KS11	ATOM	9672	CD2	LEU	103	219.596	127.035	-72.526	1.00	45.15	KS11
ATOM	9620	CA	ARG	96	214.380	129.691	-61.042	1.00	74.80	KS11	ATOM	9673	C	LEU	103	217.789	130.830	-70.995	1.00	77.36	KS11
ATOM	9621	CB	ARG	96	214.468	130.014	-59.546	1.00	132.67	KS11	ATOM	9674	O	LEU	103	217.345	131.155	-69.892	1.00	77.36	KS11
ATOM	9622	CG	ARG	96	213.189	130.650	-59.015	1.00	132.67	KS11	ATOM	9675	N	GLN	104	217.373	131.383	-72.122	1.00	69.34	KS11
ATOM	9623	CD	ARG	96	212.962	130.409	-57.526	1.00	132.67	KS11	ATOM	9676	CA	GLN	104	216.318	132.367	-72.094	1.00	69.34	KS11
ATOM	9624	NE	ARG	96	213.904	131.123	-56.669	1.00	132.67	KS11	ATOM	9677	CB	GLN	104	216.274	133.151	-73.404	1.00	103.58	KS11
ATOM	9625	CZ	ARG	96	213.808	131.177	-55.343	1.00	132.67	KS11	ATOM	9678	CG	GLN	104	215.196	134.218	-73.431	1.00	103.58	KS11
ATOM	9626	NH1	ARG	96	212.809	130.559	-54.725	1.00	132.67	KS11	ATOM	9679	CD	GLN	104	214.815	134.627	-74.840	1.00	103.58	KS11
ATOM	9627	NH2	ARG	96	214.710	131.846	-54.633	1.00	132.67	KS11	ATOM	9680	OE1	GLN	104	214.487	133.781	-75.672	1.00	103.58	KS11
ATOM	9628	C	ARG	96	215.755	129.438	-61.626	1.00	74.80	KS11	ATOM	9681	NE2	GLN	104	214.849	135.928	-75.115	1.00	103.58	KS11
ATOM	9629	O	ARG	96	216.260	130.231	-62.422	1.00	74.80	KS11	ATOM	9682	C	GLN	104	215.045	131.546	-71.938	1.00	69.34	KS11
ATOM	9630	N	ALA	97	216.355	128.319	-61.244	1.00	61.68	KS11	ATOM	9683	O	GLN	104	214.789	130.636	-72.730	1.00	69.34	KS11
ATOM	9631	CA	ALA	97	217.677	127.981	-61.747	1.00	61.68	KS11	ATOM	9684	N	VAL	105	214.270	131.843	-70.899	1.00	53.78	KS11
ATOM	9632	CB	ALA	97	218.124	126.633	-61.202	1.00	55.20	KS11	ATOM	9685	CA	VAL	105	213.019	131.141	-70.666	1.00	53.78	KS11
ATOM	9633	C	ALA	97	217.678	127.960	-63.270	1.00	61.68	KS11	ATOM	9686	CB	VAL	105	212.704	131.035	-69.177	1.00	47.04	KS11
ATOM	9634	O	ALA	97	218.692	128.265	-63.886	1.00	61.68	KS11	ATOM	9687	CG1	VAL	105	211.342	130.363	-68.992	1.00	47.04	KS11
ATOM	9635	N	LEU	98	216.549	127.599	-63.876	1.00	69.59	KS11	ATOM	9688	CG2	VAL	105	213.803	130.253	-68.466	1.00	47.04	KS11
ATOM	9636	CA	LEU	98	216.476	127.567	-65.329	1.00	69.59	KS11	ATOM	9689	C	VAL	105	211.889	131.910	-71.337	1.00	53.78	KS11
ATOM	9637	CB	LEU	98	215.157	126.974	-65.823	1.00	44.32	KS11	ATOM	9690	O	VAL	105	211.576	133.030	-70.944	1.00	53.78	KS11
ATOM	9638	CG	LEU	98	215.118	125.452	-65.987	1.00	44.32	KS11	ATOM	9691	N	LYS	106	211.288	131.302	-72.355	1.00	69.08	KS11
ATOM	9639	CD1	LEU	98	213.960	125.050	-66.904	1.00	44.32	KS11	ATOM	9692	CA	LYS	106	210.194	131.919	-73.100	1.00	69.08	KS11
ATOM	9640	CD2	LEU	98	216.437	124.982	-66.585	1.00	44.32	KS11	ATOM	9693	CB	LYS	106	209.975	131.186	-74.427	1.00	139.00	KS11
ATOM	9641	C	LEU	98	216.607	128.965	-65.871	1.00	69.59	KS11	ATOM	9694	CG	LYS	106	211.035	131.456	-75.476	1.00	139.00	KS11
ATOM	9642	O	LEU	98	217.453	129.232	-66.720	1.00	69.59	KS11	ATOM	9695	CD	LYS	106	211.102	132.938	-75.792	1.00	139.00	KS11
ATOM	9643	N	GLN	99	215.769	129.866	-65.379	1.00	81.95	KS11	ATOM	9696	CE	LYS	106	212.041	133.222	-76.947	1.00	139.00	KS11
ATOM	9644	CA	GLN	99	215.814	131.242	-65.839	1.00	81.95	KS11	ATOM	9697	NZ	LYS	106	212.176	134.687	-77.191	1.00	139.00	KS11
ATOM	9645	CB	GLN	99	214.840	132.089	-65.032	1.00	70.77	KS11	ATOM	9698	C	LYS	106	208.897	131.909	-72.309	1.00	69.08	KS11
ATOM	9646	CG	GLN	99	213.404	131.745	-65.333	1.00	70.77	KS11	ATOM	9699	O	LYS	106	208.107	132.852	-72.373	1.00	69.08	KS11
ATOM	9647	CD	GLN	99	212.431	132.586	-64.556	1.00	70.77	KS11	ATOM	9700	N	SER	107	208.680	130.841	-71.554	1.00	73.07	KS11
ATOM	9648	OE1	GLN	99	212.395	132.531	-63.328	1.00	70.77	KS11	ATOM	9701	CA	SER	107	207.458	130.731	-70.782	1.00	73.07	KS11
ATOM	9649	NE2	GLN	99	211.634	133.378	-65.264	1.00	70.77	KS11	ATOM	9702	CB	SER	107	206.291	130.463	-71.718	1.00	50.36	KS11
ATOM	9650	C	GLN	99	217.216	131.816	-65.747	1.00	81.95	KS11	ATOM	9703	OG	SER	107	206.417	129.168	-72.277	1.00	50.36	KS11
ATOM	9651	O	GLN	99	217.647	132.551	-66.634	1.00	81.95	KS11	ATOM	9704	C	SER	107	207.484	129.627	-69.747	1.00	73.07	KS11
ATOM	9652	N	ALA	100	217.932	131.458	-64.685	1.00	81.41	KS11	ATOM	9705	O	SER	107	208.251	128.670	-69.835	1.00	73.07	KS11
ATOM	9653	CA	ALA	100	219.289	131.949	-64.474	1.00	81.41	KS11	ATOM	9706	N	ILE	108	206.617	129.779	-68.761	1.00	50.06	KS11
ATOM	9654	CB	ALA	100	219.580	132.023	-62.984	1.00	28.40	KS11	ATOM	9707	CA	ILE	108	206.465	128.793	-67.714	1.00	50.06	KS11
ATOM	9655	C	ALA	100	220.372	131.122	-65.173	1.00	81.41	KS11	ATOM	9708	CB	ILE	108	206.837	129.374	-66.346	1.00	44.57	KS11
ATOM	9656	O	ALA	100	221.411	131.652	-65.566	1.00	81.41	KS11	ATOM	9709	CG2	ILE	108	206.944	128.247	-65.319	1.00	44.57	KS11
ATOM	9657	N	SER	101	220.129	129.826	-65.323	1.00	90.50	KS11	ATOM	9710	CG1	ILE	108	208.188	130.092	-66.458	1.00	44.57	KS11
ATOM	9658	CA	SER	101	221.083	128.923	-65.960	1.00	90.50	KS11	ATOM	9711	CD1	ILE	108	208.585	130.943	-65.242	1.00	44.57	KS11
ATOM	9659	CB	SER	101	220.362	127.679	-66.461	1.00	57.25	KS11	ATOM	9712	C	ILE	108	204.983	128.427	-67.787	1.00	50.06	KS11
ATOM	9660	OG	SER	101	219.586	127.997	-67.602	1.00	57.25	KS11	ATOM	9713	O	ILE	108	204.117	129.297	-67.906	1.00	50.06	KS11
ATOM	9661	C	SER	101	221.795	129.574	-67.138	1.00	90.50	KS11	ATOM	9714	N	VAL	109	204.701	127.131	-67.748	1.00	56.83	KS11
ATOM	9662	O	SER	101	222.954	129.276	-67.425	1.00	90.50	KS11	ATOM	9715	CA	VAL	109	203.339	126.647	-67.868	1.00	56.83	KS11
ATOM	9663	N	GLY	102	221.087	130.461	-67.822	1.00	98.83	KS11	ATOM	9716	CB	VAL	109	203.057	126.267	-69.346	1.00	32.41	KS11
ATOM	9664	CA	GLY	102	221.662	131.129	-68.971	1.00	98.83	KS11	ATOM	9717	CG1	VAL	109	201.750	125.546	-69.478	1.00	32.41	KS11

ATOM	9718	CG2	VAL	109	203.038	127.513	-70.186	1.00	32.41	KS11	ATOM	9771	CE1	HIS	116	190.002	116.997	-66.140	1.00	45.31	KS11
ATOM	9719	C	VAL	109	203.059	125.448	-66.969	1.00	56.83	KS11	ATOM	9772	NE2	HIS	116	189.210	117.049	-67.194	1.00	45.31	KS11
ATOM	9720	O	VAL	109	203.755	124.430	-67.036	1.00	56.83	KS11	ATOM	9773	C	HIS	116	187.467	113.057	-62.942	1.00	44.54	KS11
ATOM	9721	N	ASP	110	202.047	125.577	-66.115	1.00	56.95	KS11	ATOM	9774	O	HIS	116	186.311	112.709	-63.161	1.00	44.54	KS11
ATOM	9722	CA	ASP	110	201.677	124.477	-65.248	1.00	56.95	KS11	ATOM	9775	N	ASN	117	188.237	112.571	-61.963	1.00	55.99	KS11
ATOM	9723	CB	ASP	110	200.974	124.962	-63.988	1.00	126.19	KS11	ATOM	9776	CA	ASN	117	187.894	111.523	-61.018	1.00	55.99	KS11
ATOM	9724	CG	ASP	110	200.470	123.809	-63.137	1.00	126.19	KS11	ATOM	9777	CB	ASN	117	186.634	111.892	-60.269	1.00	88.11	KS11
ATOM	9725	OD1	ASP	110	199.647	123.010	-63.637	1.00	126.19	KS11	ATOM	9778	CG	ASN	117	186.900	112.946	-59.235	1.00	88.11	KS11
ATOM	9726	OD2	ASP	110	200.897	123.691	-61.972	1.00	126.19	KS11	ATOM	9779	OD1	ASN	117	187.535	112.681	-58.210	1.00	88.11	KS11
ATOM	9727	C	ASP	110	200.728	123.598	-66.036	1.00	56.95	KS11	ATOM	9780	ND2	ASN	117	186.448	114.163	-59.505	1.00	88.11	KS11
ATOM	9728	O	ASP	110	199.645	124.034	-66.416	1.00	56.95	KS11	ATOM	9781	C	ASN	117	187.751	110.218	-61.750	1.00	55.99	KS11
ATOM	9729	N	ASP	111	201.153	122.367	-66.291	1.00	51.87	KS11	ATOM	9782	O	ASN	117	186.696	109.939	-62.300	1.00	55.99	KS11
ATOM	9730	CA	ASP	111	200.358	121.402	-67.030	1.00	51.87	KS11	ATOM	9783	N	GLY	118	188.826	109.428	-61.770	1.00	41.00	KS11
ATOM	9731	CB	ASP	111	201.008	121.107	-68.384	1.00	93.32	KS11	ATOM	9784	CA	GLY	118	188.794	108.167	-62.486	1.00	41.00	KS11
ATOM	9732	CG	ASP	111	200.226	120.094	-69.201	1.00	93.32	KS11	ATOM	9785	C	GLY	118	189.261	106.918	-61.755	1.00	41.00	KS11
ATOM	9733	OD1	ASP	111	198.984	120.214	-69.269	1.00	93.32	KS11	ATOM	9786	O	GLY	118	188.541	105.907	-61.724	1.00	41.00	KS11
ATOM	9734	OD2	ASP	111	200.852	119.183	-69.784	1.00	93.32	KS11	ATOM	9787	N	CYS	119	190.463	106.955	-61.181	1.00	35.77	KS11
ATOM	9735	C	ASP	111	200.265	120.127	-66.194	1.00	51.87	KS11	ATOM	9788	CA	CYS	119	190.986	105.787	-60.468	1.00	35.77	KS11
ATOM	9736	O	ASP	111	200.223	119.005	-66.719	1.00	51.87	KS11	ATOM	9789	CB	CYS	119	192.385	105.435	-60.978	1.00	54.95	KS11
ATOM	9737	N	THR	112	200.239	120.306	-64.877	1.00	69.92	KS11	ATOM	9790	SG	CYS	119	192.449	104.883	-62.684	1.00	54.95	KS11
ATOM	9738	CA	THR	112	200.141	119.172	-63.975	1.00	69.92	KS11	ATOM	9791	C	CYS	119	191.047	105.982	-58.966	1.00	35.77	KS11
ATOM	9739	CB	THR	112	200.108	119.616	-62.511	1.00	57.85	KS11	ATOM	9792	O	CYS	119	191.508	107.026	-58.493	1.00	35.77	KS11
ATOM	9740	OG1	THR	112	201.230	120.470	-62.231	1.00	57.85	KS11	ATOM	9793	N	ARG	120	190.585	104.984	-58.209	1.00	31.46	KS11
ATOM	9741	CG2	THR	112	200.159	118.395	-61.609	1.00	57.85	KS11	ATOM	9794	CA	ARG	120	190.635	105.109	-56.760	1.00	31.46	KS11
ATOM	9742	C	THR	112	198.841	118.448	-64.282	1.00	69.92	KS11	ATOM	9795	CB	ARG	120	190.053	103.883	-56.037	1.00	42.73	KS11
ATOM	9743	O	THR	112	197.779	119.061	-64.306	1.00	69.92	KS11	ATOM	9796	CG	ARG	120	190.576	103.758	-54.585	1.00	42.73	KS11
ATOM	9744	N	PRO	113	198.907	117.132	-64.518	1.00	72.31	KS11	ATOM	9797	CD	ARG	120	189.888	102.717	-53.694	1.00	42.73	KS11
ATOM	9745	CD	PRO	113	200.103	116.275	-64.431	1.00	47.14	KS11	ATOM	9798	NE	ARG	120	188.601	103.195	-53.185	1.00	42.73	KS11
ATOM	9746	CA	PRO	113	197.721	116.329	-64.825	1.00	72.31	KS11	ATOM	9799	CZ	ARG	120	188.039	102.817	-52.032	1.00	42.73	KS11
ATOM	9747	CB	PRO	113	198.322	114.995	-65.245	1.00	47.14	KS11	ATOM	9800	NH1	ARG	120	188.629	101.944	-51.223	1.00	42.73	KS11
ATOM	9748	CG	PRO	113	199.504	114.885	-64.335	1.00	47.14	KS11	ATOM	9801	NH2	ARG	120	186.863	103.313	-51.681	1.00	42.73	KS11
ATOM	9749	C	PRO	113	196.757	116.173	-63.647	1.00	72.31	KS11	ATOM	9802	C	ARG	120	192.105	105.221	-56.449	1.00	31.46	KS11
ATOM	9750	O	PRO	113	197.148	116.214	-62.483	1.00	72.31	KS11	ATOM	9803	O	ARG	120	192.912	104.439	-56.953	1.00	31.46	KS11
ATOM	9751	N	VAL	114	195.487	115.988	-63.957	1.00	57.67	KS11	ATOM	9804	N	PRO	121	192.489	106.228	-55.664	1.00	34.86	KS11
ATOM	9752	CA	VAL	114	194.494	115.805	-62.920	1.00	57.67	KS11	ATOM	9805	CD	PRO	121	191.765	107.466	-55.369	1.00	34.33	KS11
ATOM	9753	CB	VAL	114	193.978	117.143	-62.402	1.00	43.75	KS11	ATOM	9806	CA	PRO	121	193.901	106.373	-55.328	1.00	34.86	KS11
ATOM	9754	CG1	VAL	114	193.505	118.003	-63.554	1.00	43.75	KS11	ATOM	9807	CB	PRO	121	194.020	107.852	-54.990	1.00	34.33	KS11
ATOM	9755	CG2	VAL	114	192.835	116.904	-61.444	1.00	43.75	KS11	ATOM	9808	CG	PRO	121	192.710	108.166	-54.434	1.00	34.33	KS11
ATOM	9756	C	VAL	114	193.341	115.015	-63.505	1.00	57.67	KS11	ATOM	9809	C	PRO	121	194.221	105.471	-54.156	1.00	34.86	KS11
ATOM	9757	O	VAL	114	192.832	115.334	-64.574	1.00	57.67	KS11	ATOM	9810	O	PRO	121	193.303	105.017	-53.462	1.00	34.86	KS11
ATOM	9758	N	PRO	115	192.907	113.968	-62.809	1.00	50.61	KS11	ATOM	9811	N	LYS	122	195.509	105.189	-53.952	1.00	31.26	KS11
ATOM	9759	CD	PRO	115	193.259	113.498	-61.469	1.00	28.81	KS11	ATOM	9812	CA	LYS	122	195.913	104.328	-52.846	1.00	31.26	KS11
ATOM	9760	CA	PRO	115	191.803	113.183	-63.346	1.00	50.61	KS11	ATOM	9813	CB	LYS	122	197.403	104.011	-52.919	1.00	63.91	KS11
ATOM	9761	CB	PRO	115	191.799	111.926	-62.477	1.00	28.81	KS11	ATOM	9814	CG	LYS	122	198.238	105.116	-53.532	1.00	63.91	KS11
ATOM	9762	CG	PRO	115	193.066	112.025	-61.628	1.00	28.81	KS11	ATOM	9815	CD	LYS	122	199.726	104.786	-53.459	1.00	63.91	KS11
ATOM	9763	C	PRO	115	190.526	113.945	-63.154	1.00	50.61	KS11	ATOM	9816	CE	LYS	122	200.074	103.473	-54.151	1.00	63.91	KS11
ATOM	9764	O	PRO	115	190.460	114.874	-62.354	1.00	50.61	KS11	ATOM	9817	NZ	LYS	122	201.490	103.093	-53.882	1.00	63.91	KS11
ATOM	9765	N	HIS	116	189.510	113.543	-63.894	1.00	44.54	KS11	ATOM	9818	C	LYS	122	195.583	105.033	-51.545	1.00	31.26	KS11
ATOM	9766	CA	HIS	116	188.196	114.133	-63.761	1.00	44.54	KS11	ATOM	9819	O	LYS	122	195.559	106.276	-51.484	1.00	31.26	KS11
ATOM	9767	CB	HIS	116	187.658	114.393	-65.161	1.00	45.31	KS11	ATOM	9820	N	LYS	123	195.304	104.227	-50.524	1.00	32.41	KS11
ATOM	9768	CG	HIS	116	188.440	115.457	-65.884	1.00	45.31	KS11	ATOM	9821	CA	LYS	123	194.946	104.717	-49.195	1.00	32.41	KS11
ATOM	9769	CD2	HIS	116	188.228	116.092	-67.064	1.00	45.31	KS11	ATOM	9822	CB	LYS	123	195.291	103.668	-48.141	1.00	35.54	KS11
ATOM	9770	ND1	HIS	116	189.564	116.043	-65.335	1.00	45.31	KS11	ATOM	9823	CG	LYS	123	194.926	104.052	-46.735	1.00	35.54	KS11

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ATOM   9824  CD  LYS   123     195.088 102.862 -45.811  1.00 35.54      KS11
ATOM   9825  CE  LYS   123     195.116 103.270 -44.339  1.00 35.54      KS11
ATOM   9826  NZ  LYS   123     195.176 102.084 -43.403  1.00 35.54      KS11
ATOM   9827  C   LYS   123     195.632 106.029 -48.879  1.00 32.41      KS11
ATOM   9828  O   LYS   123     194.966 107.014 -48.621  1.00 32.41      KS11
ATOM   9829  N   LYS   124     196.959 106.046 -48.907  1.00 37.72      KS11
ATOM   9830  CA  LYS   124     197.727 107.263 -48.650  1.00 37.72      KS11
ATOM   9831  CB  LYS   124     199.103 107.154 -49.308  1.00127.62      KS11
ATOM   9832  CG  LYS   124     200.263 106.985 -48.364  1.00127.62      KS11
ATOM   9833  CD  LYS   124     200.703 108.301 -47.756  1.00127.62      KS11
ATOM   9834  CE  LYS   124     201.962 108.108 -46.913  1.00127.62      KS11
ATOM   9835  NZ  LYS   124     202.499 109.383 -46.358  1.00127.62      KS11
ATOM   9836  C   LYS   124     197.035 108.509 -49.203  1.00 37.72      KS11
ATOM   9837  O   LYS   124     196.474 109.301 -48.462  1.00 37.72      KS11
ATOM   9838  N   PHE   125     197.062 108.660 -50.521  1.00 57.60      KS11
ATOM   9839  CA  PHE   125     196.501 109.828 -51.190  1.00 57.60      KS11
ATOM   9840  CB  PHE   125     197.124 109.952 -52.582  1.00 54.94      KS11
ATOM   9841  CG  PHE   125     198.621 109.929 -52.564  1.00 54.94      KS11
ATOM   9842  CD1 PHE   125     199.303 108.782 -52.181  1.00 54.94      KS11
ATOM   9843  CD2 PHE   125     199.349 111.077 -52.842  1.00 54.94      KS11
ATOM   9844  CE1 PHE   125     200.691 108.776 -52.061  1.00 54.94      KS11
ATOM   9845  CE2 PHE   125     200.739 111.091 -52.731  1.00 54.94      KS11
ATOM   9846  CZ  PHE   125     201.414 109.935 -52.336  1.00 54.94      KS11
ATOM   9847  C   PHE   125     194.994 109.821 -51.295  1.00 57.60      KS11
ATOM   9848  O   PHE   125     194.398 110.663 -51.971  1.00 57.60      KS11
ATOM   9849  N   ARG   126     194.370 108.887 -50.600  1.00 59.51      KS11
ATOM   9850  CA  ARG   126     192.925 108.779 -50.650  1.00 59.51      KS11
ATOM   9851  CB  ARG   126     192.542 107.319 -50.876  1.00 61.23      KS11
ATOM   9852  CG  ARG   126     191.145 107.117 -51.355  1.00 61.23      KS11
ATOM   9853  CD  ARG   126     190.396 106.215 -50.440  1.00 61.23      KS11
ATOM   9854  NE  ARG   126     188.985 106.269 -50.777  1.00 61.23      KS11
ATOM   9855  CZ  ARG   126     188.024 105.751 -50.027  1.00 61.23      KS11
ATOM   9856  NH1 ARG   126     188.329 105.133 -48.890  1.00 61.23      KS11
ATOM   9857  NH2 ARG   126     186.761 105.870 -50.411  1.00 61.23      KS11
ATOM   9858  C   ARG   126     192.289 109.276 -49.371  1.00 59.51      KS11
ATOM   9859  O   ARG   126     192.338 108.591 -48.353  1.00 59.51      KS11
ATOM   9860  N   LYS   127     191.699 110.464 -49.410  1.00128.86      KS11
ATOM   9861  CA  LYS   127     191.041 111.003 -48.225  1.00128.86      KS11
ATOM   9862  CB  LYS   127     192.046 111.205 -47.078  1.00100.62      KS11
ATOM   9863  CG  LYS   127     191.875 110.197 -45.940  1.00100.62      KS11
ATOM   9864  CD  LYS   127     190.423 110.176 -45.445  1.00100.62      KS11
ATOM   9865  CE  LYS   127     190.127 108.964 -44.571  1.00100.62      KS11
ATOM   9866  NZ  LYS   127     190.923 108.968 -43.316  1.00100.62      KS11
ATOM   9867  C   LYS   127     190.288 112.299 -48.482  1.00128.86      KS11
ATOM   9868  O   LYS   127     189.925 113.011 -47.544  1.00128.86      KS11
ATOM   9869  N   ALA   128     190.046 112.600 -49.753  1.00201.09      KS11
ATOM   9870  CA  ALA   128     189.315 113.808 -50.107  1.00201.09      KS11
ATOM   9871  CB  ALA   128     189.275 113.971 -51.622  1.00124.81      KS11
ATOM   9872  C   ALA   128     187.897 113.710 -49.543  1.00201.09      KS11
ATOM   9873  O   ALA   128     187.486 112.651 -49.065  1.00201.09      KS11
ATOM   9874  N   SER   129     187.161 114.817 -49.598  1.00201.09      KS11
ATOM   9875  CA  SER   129     185.789 114.882 -49.093  1.00201.09      KS11
ATOM   9876  CB  SER   129     184.845 114.084 -50.007  1.00123.91      KS11
ATOM   9877  OG  SER   129     185.171 112.705 -50.030  1.00123.91      KS11
ATOM   9878  C   SER   129     185.665 114.383 -47.650  1.00201.09      KS11
ATOM   9879  O   SER   129     186.690 113.962 -47.070  1.00201.09      KS11
ATOM   9880  OXT SER   129     184.539 114.427 -47.109  1.00152.88      KS11
ATOM   9881  CB  ALA     2     216.201 137.284 -23.252  1.00 20.75      GS7
ATOM   9882  C   ALA     2     213.864 136.510 -22.819  1.00 41.99      GS7
ATOM   9883  O   ALA     2     213.739 136.543 -24.036  1.00 41.99      GS7
ATOM   9884  N   ALA     2     215.875 135.527 -21.563  1.00 41.99      GS7
ATOM   9885  CA  ALA     2     215.252 136.732 -22.192  1.00 41.99      GS7
ATOM   9886  N   ARG     3     212.819 136.300 -22.019  1.00 69.88      GS7
ATOM   9887  CA  ARG     3     211.492 136.107 -22.615  1.00 69.88      GS7
ATOM   9888  CB  ARG     3     210.521 135.452 -21.624  1.00 32.79      GS7
ATOM   9889  CG  ARG     3     210.245 133.983 -21.904  1.00 32.79      GS7
ATOM   9890  CD  ARG     3     209.528 133.333 -20.732  1.00 32.79      GS7
ATOM   9891  NE  ARG     3     209.761 131.886 -20.649  1.00 32.79      GS7
ATOM   9892  CZ  ARG     3     209.518 131.032 -21.637  1.00 32.79      GS7
ATOM   9893  NH1 ARG     3     209.031 131.475 -22.794  1.00 32.79      GS7
ATOM   9894  NH2 ARG     3     209.761 129.741 -21.471  1.00 32.79      GS7
ATOM   9895  C   ARG     3     210.897 137.416 -23.136  1.00 69.88      GS7
ATOM   9896  O   ARG     3     209.851 137.419 -23.779  1.00 69.88      GS7
ATOM   9897  N   ARG     4     211.569 138.525 -22.855  1.00117.67      GS7
ATOM   9898  CA  ARG     4     211.130 139.836 -23.319  1.00117.67      GS7
ATOM   9899  CB  ARG     4     210.098 140.420 -22.357  1.00 75.23      GS7
ATOM   9900  CG  ARG     4     210.286 140.031 -20.905  1.00 75.23      GS7
ATOM   9901  CD  ARG     4     209.066 140.471 -20.102  1.00 75.23      GS7
ATOM   9902  NE  ARG     4     209.045 139.942 -18.737  1.00 75.23      GS7
ATOM   9903  CZ  ARG     4     207.973 139.959 -17.941  1.00 75.23      GS7
ATOM   9904  NH1 ARG     4     206.825 140.479 -18.370  1.00 75.23      GS7
ATOM   9905  NH2 ARG     4     208.043 139.451 -16.714  1.00 75.23      GS7
ATOM   9906  C   ARG     4     212.348 140.745 -23.438  1.00117.67      GS7
ATOM   9907  O   ARG     4     213.420 140.402 -22.944  1.00117.67      GS7
ATOM   9908  N   ARG     5     212.197 141.891 -24.099  1.00 94.79      GS7
ATOM   9909  CA  ARG     5     213.317 142.821 -24.286  1.00 94.79      GS7
ATOM   9910  CB  ARG     5     213.982 143.190 -22.955  1.00165.33      GS7
ATOM   9911  CG  ARG     5     213.221 144.109 -22.020  1.00165.33      GS7
ATOM   9912  CD  ARG     5     214.070 144.318 -20.769  1.00165.33      GS7
ATOM   9913  NE  ARG     5     213.453 145.182 -19.768  1.00165.33      GS7
ATOM   9914  CZ  ARG     5     213.999 145.452 -18.585  1.00165.33      GS7
ATOM   9915  NH1 ARG     5     215.171 144.924 -18.258  1.00165.33      GS7
ATOM   9916  NH2 ARG     5     213.378 146.249 -17.725  1.00165.33      GS7
ATOM   9917  C   ARG     5     214.387 142.172 -25.147  1.00 94.79      GS7
ATOM   9918  O   ARG     5     214.424 140.956 -25.303  1.00 94.79      GS7
ATOM   9919  N   ARG     6     215.268 142.993 -25.697  1.00 66.30      GS7
ATOM   9920  CA  ARG     6     216.363 142.487 -26.505  1.00 66.30      GS7
ATOM   9921  CB  ARG     6     216.459 143.249 -27.826  1.00136.01      GS7
ATOM   9922  CG  ARG     6     215.876 142.519 -29.018  1.00136.01      GS7
ATOM   9923  CD  ARG     6     216.135 143.311 -30.286  1.00136.01      GS7
ATOM   9924  NE  ARG     6     215.709 142.602 -31.488  1.00136.01      GS7
ATOM   9925  CZ  ARG     6     215.893 143.056 -32.724  1.00136.01      GS7
ATOM   9926  NH1 ARG     6     216.495 144.223 -32.920  1.00136.01      GS7
ATOM   9927  NH2 ARG     6     215.484 142.344 -33.767  1.00136.01      GS7
ATOM   9928  C   ARG     6     217.650 142.681 -25.708  1.00 66.30      GS7
ATOM   9929  O   ARG     6     218.630 143.229 -26.222  1.00 66.30      GS7
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ATOM	9930	N	ALA	7	217.627	142.242	-24.451	1.00111.18	GS7
ATOM	9931	CA	ALA	7	218.774	142.356	-23.551	1.00111.18	GS7
ATOM	9932	CB	ALA	7	219.365	140.970	-23.284	1.00 63.58	GS7
ATOM	9933	C	ALA	7	219.849	143.284	-24.110	1.00111.18	GS7
ATOM	9934	O	ALA	7	220.952	142.843	-24.427	1.00111.18	GS7
ATOM	9935	N	GLU	8	219.514	144.567	-24.235	1.00118.01	GS7
ATOM	9936	CA	GLU	8	220.430	145.578	-24.763	1.00118.01	GS7
ATOM	9937	CB	GLU	8	220.109	146.952	-24.157	1.00156.92	GS7
ATOM	9938	CG	GLU	8	219.482	146.934	-22.759	1.00156.92	GS7
ATOM	9939	CD	GLU	8	220.371	146.316	-21.695	1.00156.92	GS7
ATOM	9940	OE1	GLU	8	220.582	145.084	-21.721	1.00156.92	GS7
ATOM	9941	OE2	GLU	8	220.859	147.067	-20.825	1.00156.92	GS7
ATOM	9942	C	GLU	8	221.913	145.265	-24.571	1.00118.01	GS7
ATOM	9943	O	GLU	8	222.364	144.937	-23.472	1.00118.01	GS7
ATOM	9944	N	VAL	9	222.669	145.373	-25.657	1.00 63.71	GS7
ATOM	9945	CA	VAL	9	224.094	145.099	-25.621	1.00 63.71	GS7
ATOM	9946	CB	VAL	9	224.717	145.257	-27.011	1.00 71.94	GS7
ATOM	9947	CG1	VAL	9	226.131	144.704	-27.012	1.00 71.94	GS7
ATOM	9948	CG2	VAL	9	223.861	144.555	-28.045	1.00 71.94	GS7
ATOM	9949	C	VAL	9	224.819	146.044	-24.678	1.00 63.71	GS7
ATOM	9950	O	VAL	9	224.688	147.260	-24.795	1.00 63.71	GS7
ATOM	9951	N	ARG	10	225.581	145.486	-23.743	1.00 73.69	GS7
ATOM	9952	CA	ARG	10	226.344	146.305	-22.810	1.00 73.69	GS7
ATOM	9953	CB	ARG	10	227.088	145.422	-21.802	1.00 66.17	GS7
ATOM	9954	CG	ARG	10	226.235	144.757	-20.751	1.00 66.17	GS7
ATOM	9955	CD	ARG	10	227.094	143.943	-19.798	1.00 66.17	GS7
ATOM	9956	NE	ARG	10	226.323	143.454	-18.657	1.00 66.17	GS7
ATOM	9957	CZ	ARG	10	226.221	144.087	-17.489	1.00 66.17	GS7
ATOM	9958	NH1	ARG	10	226.853	145.239	-17.301	1.00 66.17	GS7
ATOM	9959	NH2	ARG	10	225.479	143.580	-16.508	1.00 66.17	GS7
ATOM	9960	C	ARG	10	227.373	147.114	-23.602	1.00 73.69	GS7
ATOM	9961	O	ARG	10	228.226	146.532	-24.273	1.00 73.69	GS7
ATOM	9962	N	GLN	11	227.290	148.443	-23.543	1.00 75.74	GS7
ATOM	9963	CA	GLN	11	228.256	149.299	-24.240	1.00 75.74	GS7
ATOM	9964	CB	GLN	11	227.651	150.668	-24.551	1.00 89.13	GS7
ATOM	9965	CG	GLN	11	227.510	150.961	-26.030	1.00 89.13	GS7
ATOM	9966	CD	GLN	11	226.348	150.229	-26.658	1.00 89.13	GS7
ATOM	9967	OE1	GLN	11	225.197	150.466	-26.306	1.00 89.13	GS7
ATOM	9968	NE2	GLN	11	226.640	149.333	-27.590	1.00 89.13	GS7
ATOM	9969	C	GLN	11	229.444	149.471	-23.299	1.00 75.74	GS7
ATOM	9970	O	GLN	11	229.268	149.884	-22.158	1.00 75.74	GS7
ATOM	9971	N	LEU	12	230.651	149.163	-23.761	1.00 85.77	GS7
ATOM	9972	CA	LEU	12	231.818	149.275	-22.889	1.00 85.77	GS7
ATOM	9973	CB	LEU	12	232.717	148.042	-23.028	1.00 77.22	GS7
ATOM	9974	CG	LEU	12	232.152	146.823	-23.757	1.00 77.22	GS7
ATOM	9975	CD1	LEU	12	232.008	147.147	-25.247	1.00 77.22	GS7
ATOM	9976	CD2	LEU	12	233.078	145.631	-23.557	1.00 77.22	GS7
ATOM	9977	C	LEU	12	232.650	150.526	-23.113	1.00 85.77	GS7
ATOM	9978	O	LEU	12	232.709	151.062	-24.221	1.00 85.77	GS7
ATOM	9979	N	GLN	13	233.300	150.979	-22.046	1.00 79.79	GS7
ATOM	9980	CA	GLN	13	234.137	152.168	-22.111	1.00 79.79	GS7
ATOM	9981	CB	GLN	13	234.570	152.581	-20.703	1.00110.09	GS7
ATOM	9982	CG	GLN	13	233.457	153.243	-19.908	1.00110.09	GS7
ATOM	9983	CD	GLN	13	233.021	154.573	-20.513	1.00110.09	GS7
ATOM	9984	OE1	GLN	13	233.755	155.561	-20.462	1.00110.09	GS7
ATOM	9985	NE2	GLN	13	231.827	154.598	-21.097	1.00110.09	GS7
ATOM	9986	C	GLN	13	235.354	151.925	-22.987	1.00 79.79	GS7
ATOM	9987	O	GLN	13	236.054	150.933	-22.821	1.00 79.79	GS7
ATOM	9988	N	PRO	14	235.622	152.832	-23.940	1.00 59.58	GS7
ATOM	9989	CD	PRO	14	234.842	154.034	-24.270	1.00 70.82	GS7
ATOM	9990	CA	PRO	14	236.770	152.696	-24.843	1.00 59.58	GS7
ATOM	9991	CB	PRO	14	236.721	153.985	-25.682	1.00 70.82	GS7
ATOM	9992	CG	PRO	14	235.900	154.925	-24.863	1.00 70.82	GS7
ATOM	9993	C	PRO	14	238.134	152.443	-24.196	1.00 59.58	GS7
ATOM	9994	O	PRO	14	238.295	152.527	-22.979	1.00 59.58	GS7
ATOM	9995	N	ASP	15	239.107	152.117	-25.039	1.00 77.10	GS7
ATOM	9996	CA	ASP	15	240.454	151.807	-24.596	1.00 77.10	GS7
ATOM	9997	CB	ASP	15	241.251	151.231	-25.769	1.00118.05	GS7
ATOM	9998	CG	ASP	15	242.553	150.596	-25.333	1.00118.05	GS7
ATOM	9999	OD1	ASP	15	243.471	151.328	-24.922	1.00118.05	GS7
ATOM	10000	OD2	ASP	15	242.660	149.357	-25.394	1.00118.05	GS7
ATOM	10001	C	ASP	15	241.180	153.011	-24.009	1.00 77.10	GS7
ATOM	10002	O	ASP	15	240.936	154.152	-24.407	1.00 77.10	GS7
ATOM	10003	N	LEU	16	242.071	152.741	-23.055	1.00104.27	GS7
ATOM	10004	CA	LEU	16	242.864	153.774	-22.389	1.00104.27	GS7
ATOM	10005	CB	LEU	16	243.482	153.224	-21.099	1.00120.33	GS7
ATOM	10006	CG	LEU	16	242.609	153.000	-19.861	1.00120.33	GS7
ATOM	10007	CD1	LEU	16	242.288	154.341	-19.223	1.00120.33	GS7
ATOM	10008	CD2	LEU	16	241.339	152.238	-20.240	1.00120.33	GS7
ATOM	10009	C	LEU	16	243.992	154.260	-23.287	1.00104.27	GS7
ATOM	10010	O	LEU	16	244.549	155.329	-23.071	1.00104.27	GS7
ATOM	10011	N	VAL	17	244.326	153.468	-24.296	1.00 85.28	GS7
ATOM	10012	CA	VAL	17	245.409	153.808	-25.206	1.00 85.28	GS7
ATOM	10013	CB	VAL	17	246.442	152.664	-25.262	1.00 64.45	GS7
ATOM	10014	CG1	VAL	17	247.564	153.022	-26.223	1.00 64.45	GS7
ATOM	10015	CG2	VAL	17	246.983	152.389	-23.868	1.00 64.45	GS7
ATOM	10016	C	VAL	17	244.963	154.136	-26.628	1.00 85.28	GS7
ATOM	10017	O	VAL	17	245.485	155.064	-27.243	1.00 85.28	GS7
ATOM	10018	N	TYR	18	244.018	153.370	-27.159	1.00 66.66	GS7
ATOM	10019	CA	TYR	18	243.533	153.620	-28.507	1.00 66.66	GS7
ATOM	10020	CB	TYR	18	243.561	152.340	-29.340	1.00 81.93	GS7
ATOM	10021	CG	TYR	18	244.923	151.706	-29.446	1.00 81.93	GS7
ATOM	10022	CD1	TYR	18	245.493	151.048	-28.358	1.00 81.93	GS7
ATOM	10023	CE1	TYR	18	246.757	150.457	-28.451	1.00 81.93	GS7
ATOM	10024	CD2	TYR	18	245.647	151.763	-30.635	1.00 81.93	GS7
ATOM	10025	CE2	TYR	18	246.912	151.177	-30.742	1.00 81.93	GS7
ATOM	10026	CZ	TYR	18	247.459	150.527	-29.646	1.00 81.93	GS7
ATOM	10027	OH	TYR	18	248.705	149.953	-29.740	1.00 81.93	GS7
ATOM	10028	C	TYR	18	242.112	154.163	-28.465	1.00 66.66	GS7
ATOM	10029	O	TYR	18	241.525	154.462	-29.509	1.00 66.66	GS7
ATOM	10030	N	GLY	19	241.568	154.286	-27.254	1.00 76.80	GS7
ATOM	10031	CA	GLY	19	240.216	154.793	-27.085	1.00 76.80	GS7
ATOM	10032	C	GLY	19	239.227	154.020	-27.931	1.00 76.80	GS7
ATOM	10033	O	GLY	19	238.130	154.493	-28.233	1.00 76.80	GS7
ATOM	10034	N	ASP	20	239.629	152.814	-28.312	1.00127.42	GS7
ATOM	10035	CA	ASP	20	238.801	151.950	-29.134	1.00127.42	GS7

ATOM	10036	CB	ASP	20	239.675	151.216	-30.147	1.00	99.11	GS7	ATOM	10089	CB	ILE	27	241.339	144.025	-23.074	1.00	59.27	GS7
ATOM	10037	CG	ASP	20	238.868	150.468	-31.180	1.00	99.11	GS7	ATOM	10090	CG2	ILE	27	242.314	143.944	-21.893	1.00	59.27	GS7
ATOM	10038	OD1	ASP	20	238.192	149.482	-30.822	1.00	99.11	GS7	ATOM	10091	CG1	ILE	27	241.966	144.821	-24.223	1.00	59.27	GS7
ATOM	10039	OD2	ASP	20	238.908	150.872	-32.358	1.00	99.11	GS7	ATOM	10092	CD1	ILE	27	242.139	146.289	-23.942	1.00	59.27	GS7
ATOM	10040	C	ASP	20	238.069	150.949	-28.253	1.00	127.42	GS7	ATOM	10093	C	ILE	27	240.148	141.871	-22.531	1.00	56.50	GS7
ATOM	10041	O	ASP	20	238.687	150.243	-27.455	1.00	127.42	GS7	ATOM	10094	O	ILE	27	240.682	141.125	-21.712	1.00	56.50	GS7
ATOM	10042	N	VAL	21	236.750	150.898	-28.406	1.00	84.74	GS7	ATOM	10095	N	ASN	28	238.833	142.077	-22.575	1.00	54.74	GS7
ATOM	10043	CA	VAL	21	235.904	149.995	-27.629	1.00	84.74	GS7	ATOM	10096	CA	ASN	28	237.935	141.412	-21.636	1.00	54.74	GS7
ATOM	10044	CB	VAL	21	234.425	150.353	-27.810	1.00	72.01	GS7	ATOM	10097	CB	ASN	28	236.524	142.001	-21.708	1.00	61.21	GS7
ATOM	10045	CG1	VAL	21	234.145	151.723	-27.206	1.00	72.01	GS7	ATOM	10098	CG	ASN	28	236.439	143.375	-21.090	1.00	61.21	GS7
ATOM	10046	CG2	VAL	21	234.077	150.343	-29.287	1.00	72.01	GS7	ATOM	10099	OD1	ASN	28	237.049	143.639	-20.055	1.00	61.21	GS7
ATOM	10047	C	VAL	21	236.101	148.527	-27.999	1.00	84.74	GS7	ATOM	10100	ND2	ASN	28	235.668	144.255	-21.710	1.00	61.21	GS7
ATOM	10048	O	VAL	21	236.022	147.645	-27.140	1.00	84.74	GS7	ATOM	10101	C	ASN	28	237.874	139.913	-21.910	1.00	54.74	GS7
ATOM	10049	N	LEU	22	236.347	148.269	-29.280	1.00	74.11	GS7	ATOM	10102	O	ASN	28	237.668	139.116	-20.996	1.00	54.74	GS7
ATOM	10050	CA	LEU	22	236.572	146.908	-29.748	1.00	74.11	GS7	ATOM	10103	N	LYS	29	238.050	139.536	-23.171	1.00	52.71	GS7
ATOM	10051	CB	LEU	22	236.829	146.882	-31.252	1.00	63.50	GS7	ATOM	10104	CA	LYS	29	238.036	138.133	-23.536	1.00	52.71	GS7
ATOM	10052	CG	LEU	22	237.184	145.469	-31.719	1.00	63.50	GS7	ATOM	10105	CB	LYS	29	237.776	137.975	-25.034	1.00	59.19	GS7
ATOM	10053	CD1	LEU	22	235.973	144.562	-31.561	1.00	63.50	GS7	ATOM	10106	CG	LYS	29	236.297	137.810	-25.387	1.00	59.19	GS7
ATOM	10054	CD2	LEU	22	237.645	145.493	-33.156	1.00	63.50	GS7	ATOM	10107	CD	LYS	29	235.743	136.546	-24.737	1.00	59.19	GS7
ATOM	10055	C	LEU	22	237.776	146.295	-29.042	1.00	74.11	GS7	ATOM	10108	CE	LYS	29	234.313	136.234	-25.155	1.00	59.19	GS7
ATOM	10056	O	LEU	22	237.823	145.087	-28.803	1.00	74.11	GS7	ATOM	10109	NZ	LYS	29	233.795	135.023	-24.429	1.00	59.19	GS7
ATOM	10057	N	VAL	23	238.759	147.127	-28.718	1.00	54.77	GS7	ATOM	10110	C	LYS	29	239.354	137.488	-23.133	1.00	52.71	GS7
ATOM	10058	CA	VAL	23	239.939	146.627	-28.041	1.00	54.77	GS7	ATOM	10111	O	LYS	29	239.417	136.286	-22.901	1.00	52.71	GS7
ATOM	10059	CB	VAL	23	241.036	147.684	-27.944	1.00	43.07	GS7	ATOM	10112	N	ILE	30	240.411	138.285	-23.039	1.00	49.74	GS7
ATOM	10060	CG1	VAL	23	242.214	147.102	-27.192	1.00	43.07	GS7	ATOM	10113	CA	ILE	30	241.702	137.747	-22.617	1.00	49.74	GS7
ATOM	10061	CG2	VAL	23	241.467	148.129	-29.327	1.00	43.07	GS7	ATOM	10114	CB	ILE	30	242.903	138.670	-22.972	1.00	42.62	GS7
ATOM	10062	C	VAL	23	239.592	146.170	-26.635	1.00	54.77	GS7	ATOM	10115	CG2	ILE	30	244.192	138.112	-22.349	1.00	42.62	GS7
ATOM	10063	O	VAL	23	239.983	145.077	-26.220	1.00	54.77	GS7	ATOM	10116	CG1	ILE	30	243.040	138.811	-24.491	1.00	42.62	GS7
ATOM	10064	N	THR	24	238.856	147.009	-25.907	1.00	69.88	GS7	ATOM	10117	CD1	ILE	30	244.065	139.840	-24.906	1.00	42.62	GS7
ATOM	10065	CA	THR	24	238.457	146.676	-24.542	1.00	69.88	GS7	ATOM	10118	C	ILE	30	241.623	137.686	-21.109	1.00	49.74	GS7
ATOM	10066	CB	THR	24	237.442	147.672	-23.988	1.00	56.73	GS7	ATOM	10119	O	ILE	30	241.990	136.678	-20.495	1.00	49.74	GS7
ATOM	10067	OG1	THR	24	237.948	149.000	-24.143	1.00	56.73	GS7	ATOM	10120	N	MET	31	241.137	138.782	-20.523	1.00	67.52	GS7
ATOM	10068	CG2	THR	24	237.199	147.401	-22.507	1.00	56.73	GS7	ATOM	10121	CA	MET	31	241.003	138.878	-19.079	1.00	67.52	GS7
ATOM	10069	C	THR	24	237.809	145.307	-24.547	1.00	69.88	GS7	ATOM	10122	CB	MET	31	240.107	140.033	-18.663	1.00	72.55	GS7
ATOM	10070	O	THR	24	238.128	144.442	-23.730	1.00	69.88	GS7	ATOM	10123	CG	MET	31	239.978	140.139	-17.153	1.00	72.55	GS7
ATOM	10071	N	ALA	25	236.886	145.131	-25.481	1.00	43.42	GS7	ATOM	10124	SD	MET	31	238.696	141.270	-16.643	1.00	72.55	GS7
ATOM	10072	CA	ALA	25	236.185	143.877	-25.647	1.00	43.42	GS7	ATOM	10125	CE	MET	31	237.482	140.113	-16.017	1.00	72.55	GS7
ATOM	10073	CB	ALA	25	235.373	143.923	-26.930	1.00	40.82	GS7	ATOM	10126	C	MET	31	240.374	137.613	-18.591	1.00	67.52	GS7
ATOM	10074	C	ALA	25	237.197	142.732	-25.696	1.00	43.42	GS7	ATOM	10127	O	MET	31	239.522	137.033	-19.251	1.00	67.52	GS7
ATOM	10075	O	ALA	25	237.132	141.798	-24.894	1.00	43.42	GS7	ATOM	10128	N	ARG	32	240.785	137.181	-17.421	1.00	51.03	GS7
ATOM	10076	N	PHE	26	238.138	142.817	-26.634	1.00	64.53	GS7	ATOM	10129	CA	ARG	32	240.235	135.961	-16.905	1.00	51.03	GS7
ATOM	10077	CA	PHE	26	239.168	141.789	-26.797	1.00	64.53	GS7	ATOM	10130	CB	ARG	32	241.012	134.765	-17.467	1.00	76.28	GS7
ATOM	10078	CB	PHE	26	240.146	142.180	-27.908	1.00	55.91	GS7	ATOM	10131	CG	ARG	32	242.033	134.139	-16.518	1.00	76.28	GS7
ATOM	10079	CG	PHE	26	241.187	141.132	-28.197	1.00	55.91	GS7	ATOM	10132	CD	ARG	32	243.186	133.483	-17.276	1.00	76.28	GS7
ATOM	10080	CD1	PHE	26	240.857	139.984	-28.904	1.00	55.91	GS7	ATOM	10133	NE	ARG	32	242.807	132.989	-18.602	1.00	76.28	GS7
ATOM	10081	CD2	PHE	26	242.491	141.294	-27.765	1.00	55.91	GS7	ATOM	10134	CZ	ARG	32	243.607	132.286	-19.402	1.00	76.28	GS7
ATOM	10082	CE1	PHE	26	241.812	139.017	-29.178	1.00	55.91	GS7	ATOM	10135	NH1	ARG	32	244.841	131.979	-19.017	1.00	76.28	GS7
ATOM	10083	CE2	PHE	26	243.452	140.332	-28.034	1.00	55.91	GS7	ATOM	10136	NH2	ARG	32	243.175	131.896	-20.595	1.00	76.28	GS7
ATOM	10084	CZ	PHE	26	243.113	139.193	-28.740	1.00	55.91	GS7	ATOM	10137	C	ARG	32	240.403	136.044	-15.423	1.00	51.03	GS7
ATOM	10085	C	PHE	26	239.958	141.574	-25.517	1.00	64.53	GS7	ATOM	10138	O	ARG	32	241.486	136.404	-14.951	1.00	51.03	GS7
ATOM	10086	O	PHE	26	240.326	140.449	-25.182	1.00	64.53	GS7	ATOM	10139	N	ASP	33	239.325	135.751	-14.694	1.00	57.89	GS7
ATOM	10087	N	ILE	27	240.234	142.668	-24.816	1.00	56.50	GS7	ATOM	10140	CA	ASP	33	239.379	135.767	-13.249	1.00	57.89	GS7
ATOM	10088	CA	ILE	27	240.986	142.604	-23.573	1.00	56.50	GS7	ATOM	10141	CB	ASP	33	240.693	135.131	-12.836	1.00	62.34	GS7

ATOM	10142	CG	ASP	33	240.511	134.063	-11.844	1.00	62.34	GS7
ATOM	10143	OD1	ASP	33	240.248	134.435	-10.697	1.00	62.34	GS7
ATOM	10144	OD2	ASP	33	240.625	132.874	-12.201	1.00	62.34	GS7
ATOM	10145	C	ASP	33	239.260	137.186	-12.680	1.00	57.89	GS7
ATOM	10146	O	ASP	33	239.501	137.413	-11.492	1.00	57.89	GS7
ATOM	10147	N	GLY	34	238.892	138.137	-13.535	1.00	72.80	GS7
ATOM	10148	CA	GLY	34	238.748	139.510	-13.092	1.00	72.80	GS7
ATOM	10149	C	GLY	34	240.043	140.298	-13.005	1.00	72.80	GS7
ATOM	10150	O	GLY	34	240.015	141.498	-12.739	1.00	72.80	GS7
ATOM	10151	N	LYS	35	241.175	139.635	-13.223	1.00	63.73	GS7
ATOM	10152	CA	LYS	35	242.474	140.298	-13.164	1.00	63.73	GS7
ATOM	10153	CB	LYS	35	243.579	139.267	-12.969	1.00	41.51	GS7
ATOM	10154	CG	LYS	35	243.354	138.391	-11.757	1.00	41.51	GS7
ATOM	10155	CD	LYS	35	244.466	137.383	-11.570	1.00	41.51	GS7
ATOM	10156	CE	LYS	35	245.774	138.065	-11.190	1.00	41.51	GS7
ATOM	10157	NZ	LYS	35	246.949	137.124	-11.174	1.00	41.51	GS7
ATOM	10158	C	LYS	35	242.717	141.097	-14.437	1.00	63.73	GS7
ATOM	10159	O	LYS	35	243.664	140.839	-15.192	1.00	63.73	GS7
ATOM	10160	N	LYS	36	241.841	142.078	-14.645	1.00	71.30	GS7
ATOM	10161	CA	LYS	36	241.851	142.973	-15.798	1.00	71.30	GS7
ATOM	10162	CB	LYS	36	240.701	143.969	-15.672	1.00	51.90	GS7
ATOM	10163	CG	LYS	36	240.439	144.807	-16.906	1.00	51.90	GS7
ATOM	10164	CD	LYS	36	239.480	145.948	-16.575	1.00	51.90	GS7
ATOM	10165	CE	LYS	36	238.910	146.610	-17.832	1.00	51.90	GS7
ATOM	10166	NZ	LYS	36	237.853	145.792	-18.509	1.00	51.90	GS7
ATOM	10167	C	LYS	36	243.144	143.753	-16.007	1.00	71.30	GS7
ATOM	10168	O	LYS	36	243.404	144.227	-17.109	1.00	71.30	GS7
ATOM	10169	N	ASN	37	243.952	143.905	-14.962	1.00	85.69	GS7
ATOM	10170	CA	ASN	37	245.187	144.663	-15.114	1.00	85.69	GS7
ATOM	10171	CB	ASN	37	245.850	144.915	-13.761	1.00	75.86	GS7
ATOM	10172	CG	ASN	37	246.826	146.084	-13.800	1.00	75.86	GS7
ATOM	10173	OD1	ASN	37	247.817	146.096	-13.070	1.00	75.86	GS7
ATOM	10174	ND2	ASN	37	246.540	147.076	-14.642	1.00	75.86	GS7
ATOM	10175	C	ASN	37	246.145	143.910	-16.019	1.00	85.69	GS7
ATOM	10176	O	ASN	37	246.459	144.371	-17.119	1.00	85.69	GS7
ATOM	10177	N	LEU	38	246.604	142.748	-15.558	1.00	68.25	GS7
ATOM	10178	CA	LEU	38	247.524	141.948	-16.350	1.00	68.25	GS7
ATOM	10179	CB	LEU	38	247.843	140.629	-15.628	1.00	44.38	GS7
ATOM	10180	CG	LEU	38	247.272	139.270	-16.052	1.00	44.38	GS7
ATOM	10181	CD1	LEU	38	247.661	138.962	-17.482	1.00	44.38	GS7
ATOM	10182	CD2	LEU	38	247.816	138.175	-15.119	1.00	44.38	GS7
ATOM	10183	C	LEU	38	246.898	141.697	-17.722	1.00	68.25	GS7
ATOM	10184	O	LEU	38	247.588	141.657	-18.741	1.00	68.25	GS7
ATOM	10185	N	ALA	39	245.582	141.541	-17.741	1.00	63.89	GS7
ATOM	10186	CA	ALA	39	244.867	141.320	-18.988	1.00	63.89	GS7
ATOM	10187	CB	ALA	39	243.376	141.239	-18.719	1.00	87.57	GS7
ATOM	10188	C	ALA	39	245.159	142.444	-19.981	1.00	63.89	GS7
ATOM	10189	O	ALA	39	245.461	142.186	-21.144	1.00	63.89	GS7
ATOM	10190	N	ALA	40	245.059	143.688	-19.516	1.00	70.82	GS7
ATOM	10191	CA	ALA	40	245.315	144.850	-20.361	1.00	70.82	GS7
ATOM	10192	CB	ALA	40	245.052	146.131	-19.591	1.00	33.63	GS7
ATOM	10193	C	ALA	40	246.760	144.811	-20.814	1.00	70.82	GS7
ATOM	10194	O	ALA	40	247.055	144.951	-22.004	1.00	70.82	GS7
ATOM	10195	N	ARG	41	247.660	144.626	-19.853	1.00	78.27	GS7
ATOM	10196	CA	ARG	41	249.079	144.545	-20.153	1.00	78.27	GS7
ATOM	10197	CB	ARG	41	249.840	144.013	-18.951	1.00	91.95	GS7
ATOM	10198	CG	ARG	41	249.946	145.017	-17.859	1.00	91.95	GS7
ATOM	10199	CD	ARG	41	250.714	144.469	-16.700	1.00	91.95	GS7
ATOM	10200	NE	ARG	41	251.213	145.557	-15.872	1.00	91.95	GS7
ATOM	10201	CZ	ARG	41	251.846	145.385	-14.719	1.00	91.95	GS7
ATOM	10202	NH1	ARG	41	252.050	144.157	-14.254	1.00	91.95	GS7
ATOM	10203	NH2	ARG	41	252.288	146.437	-14.043	1.00	91.95	GS7
ATOM	10204	C	ARG	41	249.314	143.627	-21.338	1.00	78.27	GS7
ATOM	10205	O	ARG	41	249.742	144.075	-22.401	1.00	78.27	GS7
ATOM	10206	N	ILE	42	249.022	142.344	-21.149	1.00	56.65	GS7
ATOM	10207	CA	ILE	42	249.202	141.359	-22.203	1.00	56.65	GS7
ATOM	10208	CB	ILE	42	248.345	140.101	-21.962	1.00	54.20	GS7
ATOM	10209	CG2	ILE	42	248.468	139.162	-23.161	1.00	54.20	GS7
ATOM	10210	CG1	ILE	42	248.799	139.399	-20.677	1.00	54.20	GS7
ATOM	10211	CD1	ILE	42	248.227	137.997	-20.493	1.00	54.20	GS7
ATOM	10212	C	ILE	42	248.868	141.903	-23.582	1.00	56.65	GS7
ATOM	10213	O	ILE	42	249.689	141.842	-24.486	1.00	56.65	GS7
ATOM	10214	N	PHE	43	247.673	142.447	-23.754	1.00	47.18	GS7
ATOM	10215	CA	PHE	43	247.311	142.966	-25.061	1.00	47.18	GS7
ATOM	10216	CB	PHE	43	245.881	143.462	-25.091	1.00	40.21	GS7
ATOM	10217	CG	PHE	43	245.535	144.122	-26.377	1.00	40.21	GS7
ATOM	10218	CD1	PHE	43	245.420	143.368	-27.541	1.00	40.21	GS7
ATOM	10219	CD2	PHE	43	245.397	145.495	-26.448	1.00	40.21	GS7
ATOM	10220	CE1	PHE	43	245.171	143.969	-28.763	1.00	40.21	GS7
ATOM	10221	CE2	PHE	43	245.149	146.111	-27.662	1.00	40.21	GS7
ATOM	10222	CZ	PHE	43	245.034	145.346	-28.828	1.00	40.21	GS7
ATOM	10223	C	PHE	43	248.194	144.104	-25.548	1.00	47.18	GS7
ATOM	10224	O	PHE	43	248.349	144.312	-26.753	1.00	47.18	GS7
ATOM	10225	N	TYR	44	248.748	144.865	-24.616	1.00	64.39	GS7
ATOM	10226	CA	TYR	44	249.607	145.976	-24.985	1.00	64.39	GS7
ATOM	10227	CB	TYR	44	249.591	147.009	-23.871	1.00	54.54	GS7
ATOM	10228	CG	TYR	44	248.236	147.669	-23.735	1.00	54.54	GS7
ATOM	10229	CD1	TYR	44	247.633	147.807	-22.487	1.00	54.54	GS7
ATOM	10230	CE1	TYR	44	246.383	148.418	-22.348	1.00	54.54	GS7
ATOM	10231	CD2	TYR	44	247.555	148.161	-24.856	1.00	54.54	GS7
ATOM	10232	CE2	TYR	44	246.301	148.777	-24.728	1.00	54.54	GS7
ATOM	10233	CZ	TYR	44	245.724	148.898	-23.464	1.00	54.54	GS7
ATOM	10234	OH	TYR	44	244.489	149.490	-23.298	1.00	54.54	GS7
ATOM	10235	C	TYR	44	251.014	145.488	-25.293	1.00	64.39	GS7
ATOM	10236	O	TYR	44	251.597	145.893	-26.293	1.00	64.39	GS7
ATOM	10237	N	ASP	45	251.552	144.611	-24.448	1.00	58.68	GS7
ATOM	10238	CA	ASP	45	252.877	144.055	-24.687	1.00	58.68	GS7
ATOM	10239	CB	ASP	45	253.193	142.922	-23.711	1.00	86.35	GS7
ATOM	10240	CG	ASP	45	253.501	143.416	-22.313	1.00	86.35	GS7
ATOM	10241	OD1	ASP	45	254.496	144.151	-22.140	1.00	86.35	GS7
ATOM	10242	OD2	ASP	45	252.748	143.057	-21.384	1.00	86.35	GS7
ATOM	10243	C	ASP	45	252.831	143.477	-26.089	1.00	58.68	GS7
ATOM	10244	O	ASP	45	253.769	143.625	-26.874	1.00	58.68	GS7
ATOM	10245	N	ALA	46	251.717	142.822	-26.397	1.00	74.09	GS7
ATOM	10246	CA	ALA	46	251.519	142.211	-27.703	1.00	74.09	GS7
ATOM	10247	CB	ALA	46	250.174	141.507	-27.745	1.00	99.69	GS7

ATOM	10248	C	ALA	46	251.596	143.251	-28.815	1.00	74.09	GS7	ATOM	10301	CB	LYS	53	257.992	140.819	-35.161	1.00	91.43	GS7
ATOM	10249	O	ALA	46	252.303	143.065	-29.803	1.00	74.09	GS7	ATOM	10302	CG	LYS	53	258.840	140.388	-33.970	1.00	91.43	GS7
ATOM	10250	N	CYS	47	250.863	144.345	-28.654	1.00	66.73	GS7	ATOM	10303	CD	LYS	53	258.384	139.058	-33.405	1.00	91.43	GS7
ATOM	10251	CA	CYS	47	250.866	145.397	-29.657	1.00	66.73	GS7	ATOM	10304	CE	LYS	53	259.091	138.741	-32.097	1.00	91.43	GS7
ATOM	10252	CB	CYS	47	249.982	146.550	-29.204	1.00	77.64	GS7	ATOM	10305	NZ	LYS	53	258.720	137.389	-31.600	1.00	91.43	GS7
ATOM	10253	SG	CYS	47	248.249	146.120	-29.177	1.00	77.64	GS7	ATOM	10306	C	LYS	53	257.160	142.860	-36.408	1.00	114.80	GS7
ATOM	10254	C	CYS	47	252.274	145.902	-29.920	1.00	66.73	GS7	ATOM	10307	O	LYS	53	256.076	143.036	-35.856	1.00	114.80	GS7
ATOM	10255	O	CYS	47	252.566	146.419	-31.006	1.00	66.73	GS7	ATOM	10308	N	THR	54	257.398	143.205	-37.675	1.00	130.78	GS7
ATOM	10256	N	LYS	48	253.144	145.755	-28.925	1.00	91.62	GS7	ATOM	10309	CA	THR	54	256.416	143.859	-38.565	1.00	130.78	GS7
ATOM	10257	CA	LYS	48	254.521	146.195	-29.067	1.00	91.62	GS7	ATOM	10310	CB	THR	54	255.007	143.187	-38.535	1.00	141.86	GS7
ATOM	10258	CB	LYS	48	255.095	146.599	-27.711	1.00	96.55	GS7	ATOM	10311	OG1	THR	54	254.238	143.707	-37.444	1.00	141.86	GS7
ATOM	10259	CG	LYS	48	254.281	147.727	-27.089	1.00	96.55	GS7	ATOM	10312	CG2	THR	54	255.135	141.680	-38.395	1.00	141.86	GS7
ATOM	10260	CD	LYS	48	255.033	148.524	-26.034	1.00	96.55	GS7	ATOM	10313	C	THR	54	256.263	145.338	-38.190	1.00	130.78	GS7
ATOM	10261	CE	LYS	48	254.159	149.667	-25.495	1.00	96.55	GS7	ATOM	10314	O	THR	54	255.778	145.675	-37.109	1.00	130.78	GS7
ATOM	10262	NZ	LYS	48	253.679	150.602	-26.562	1.00	96.55	GS7	ATOM	10315	N	GLY	55	256.675	146.221	-39.092	1.00	81.11	GS7
ATOM	10263	C	LYS	48	255.349	145.106	-29.721	1.00	91.62	GS7	ATOM	10316	CA	GLY	55	256.606	147.641	-38.809	1.00	81.11	GS7
ATOM	10264	O	LYS	48	256.409	145.383	-30.277	1.00	91.62	GS7	ATOM	10317	C	GLY	55	255.253	148.284	-39.011	1.00	81.11	GS7
ATOM	10265	N	ILE	49	254.860	143.869	-29.663	1.00	72.12	GS7	ATOM	10318	O	GLY	55	255.161	149.401	-39.529	1.00	81.11	GS7
ATOM	10266	CA	ILE	49	255.543	142.747	-30.307	1.00	72.12	GS7	ATOM	10319	N	GLN	56	254.197	147.595	-38.591	1.00	107.66	GS7
ATOM	10267	CB	ILE	49	255.144	141.384	-29.667	1.00	50.90	GS7	ATOM	10320	CA	GLN	56	252.849	148.125	-38.742	1.00	107.66	GS7
ATOM	10268	CG2	ILE	49	255.756	140.222	-30.456	1.00	50.90	GS7	ATOM	10321	CB	GLN	56	251.939	147.075	-39.374	1.00	119.73	GS7
ATOM	10269	CG1	ILE	49	255.629	141.334	-28.217	1.00	50.90	GS7	ATOM	10322	CG	GLN	56	252.537	146.342	-40.558	1.00	119.73	GS7
ATOM	10270	CD1	ILE	49	255.354	140.013	-27.504	1.00	50.90	GS7	ATOM	10323	CD	GLN	56	251.516	145.467	-41.265	1.00	119.73	GS7
ATOM	10271	C	ILE	49	255.109	142.781	-31.776	1.00	72.12	GS7	ATOM	10324	OE1	GLN	56	250.562	145.967	-41.864	1.00	119.73	GS7
ATOM	10272	O	ILE	49	255.762	142.219	-32.654	1.00	72.12	GS7	ATOM	10325	NE2	GLN	56	251.707	144.154	-41.193	1.00	119.73	GS7
ATOM	10273	N	ILE	50	253.996	143.459	-32.029	1.00	63.02	GS7	ATOM	10326	C	GLN	56	252.270	148.527	-37.394	1.00	107.66	GS7
ATOM	10274	CA	ILE	50	253.478	143.603	-33.378	1.00	63.02	GS7	ATOM	10327	O	GLN	56	252.643	147.967	-36.364	1.00	107.66	GS7
ATOM	10275	CB	ILE	50	251.959	143.829	-33.362	1.00	71.43	GS7	ATOM	10328	N	GLU	57	251.362	149.500	-37.404	1.00	111.57	GS7
ATOM	10276	CG2	ILE	50	251.420	143.954	-34.785	1.00	71.43	GS7	ATOM	10329	CA	GLU	57	250.715	149.942	-36.173	1.00	111.57	GS7
ATOM	10277	CG1	ILE	50	251.289	142.661	-32.649	1.00	71.43	GS7	ATOM	10330	CB	GLU	57	249.851	151.183	-36.426	1.00	148.77	GS7
ATOM	10278	CD1	ILE	50	249.791	142.760	-32.606	1.00	71.43	GS7	ATOM	10331	CG	GLU	57	248.869	151.524	-35.297	1.00	148.77	GS7
ATOM	10279	C	ILE	50	254.169	144.805	-34.019	1.00	63.02	GS7	ATOM	10332	CD	GLU	57	249.545	151.942	-33.997	1.00	148.77	GS7
ATOM	10280	O	ILE	50	254.064	145.029	-35.228	1.00	63.02	GS7	ATOM	10333	OE1	GLU	57	250.270	152.958	-33.995	1.00	148.77	GS7
ATOM	10281	N	GLN	51	254.866	145.587	-33.195	1.00	111.23	GS7	ATOM	10334	OE2	GLU	57	249.345	151.259	-32.972	1.00	148.77	GS7
ATOM	10282	CA	GLN	51	255.599	146.749	-33.686	1.00	111.23	GS7	ATOM	10335	C	GLU	57	249.837	148.786	-35.713	1.00	111.57	GS7
ATOM	10283	CB	GLN	51	255.671	147.850	-32.627	1.00	87.39	GS7	ATOM	10336	O	GLU	57	248.952	148.341	-36.444	1.00	111.57	GS7
ATOM	10284	CG	GLN	51	254.503	148.811	-32.700	1.00	87.39	GS7	ATOM	10337	N	PRO	58	250.070	148.283	-34.494	1.00	93.97	GS7
ATOM	10285	CD	GLN	51	254.399	149.496	-34.055	1.00	87.39	GS7	ATOM	10338	CD	PRO	58	250.919	148.830	-33.425	1.00	74.50	GS7
ATOM	10286	OE1	GLN	51	254.651	148.888	-35.100	1.00	87.39	GS7	ATOM	10339	CA	PRO	58	249.264	147.167	-33.996	1.00	93.97	GS7
ATOM	10287	NE2	GLN	51	254.006	150.764	-34.042	1.00	87.39	GS7	ATOM	10340	CB	PRO	58	249.671	147.079	-32.518	1.00	74.50	GS7
ATOM	10288	C	GLN	51	256.996	146.318	-34.074	1.00	111.23	GS7	ATOM	10341	CG	PRO	58	250.141	148.460	-32.196	1.00	74.50	GS7
ATOM	10289	O	GLN	51	257.428	146.546	-35.205	1.00	111.23	GS7	ATOM	10342	C	PRO	58	247.754	147.325	-34.202	1.00	93.97	GS7
ATOM	10290	N	GLU	52	257.701	145.702	-33.130	1.00	74.96	GS7	ATOM	10343	O	PRO	58	247.117	146.454	-34.795	1.00	93.97	GS7
ATOM	10291	CA	GLU	52	259.038	145.214	-33.402	1.00	74.96	GS7	ATOM	10344	N	LEU	59	247.194	148.438	-33.733	1.00	93.46	GS7
ATOM	10292	CB	GLU	52	259.560	144.417	-32.207	1.00	144.05	GS7	ATOM	10345	CA	LEU	59	245.761	148.688	-33.862	1.00	93.46	GS7
ATOM	10293	CG	GLU	52	259.756	145.291	-30.972	1.00	144.05	GS7	ATOM	10346	CB	LEU	59	245.442	150.160	-33.595	1.00	89.39	GS7
ATOM	10294	CD	GLU	52	260.306	144.534	-29.778	1.00	144.05	GS7	ATOM	10347	CG	LEU	59	243.962	150.535	-33.768	1.00	89.39	GS7
ATOM	10295	OE1	GLU	52	261.380	143.911	-29.909	1.00	144.05	GS7	ATOM	10348	CD1	LEU	59	243.087	149.623	-32.913	1.00	89.39	GS7
ATOM	10296	OE2	GLU	52	259.667	144.568	-28.703	1.00	144.05	GS7	ATOM	10349	CD2	LEU	59	243.756	151.994	-33.388	1.00	89.39	GS7
ATOM	10297	C	GLU	52	258.896	144.343	-34.643	1.00	74.96	GS7	ATOM	10350	C	LEU	59	245.156	148.294	-35.207	1.00	93.46	GS7
ATOM	10298	O	GLU	52	259.111	144.810	-35.757	1.00	74.96	GS7	ATOM	10351	O	LEU	59	243.981	147.924	-35.268	1.00	93.46	GS7
ATOM	10299	N	LYS	53	258.514	143.089	-34.471	1.00	114.80	GS7	ATOM	10352	N	LYS	60	245.938	148.381	-36.282	1.00	74.27	GS7
ATOM	10300	CA	LYS	53	258.327	142.231	-35.631	1.00	114.80	GS7	ATOM	10353	CA	LYS	60	245.432	148.020	-37.606	1.00	74.27	GS7

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ATOM  10354  CB  LYS    60     246.103 148.856 -38.696  1.00 96.15      GS7
ATOM  10355  CG  LYS    60     245.549 148.561 -40.075  1.00 96.15      GS7
ATOM  10356  CD  LYS    60     246.224 149.372 -41.162  1.00 96.15      GS7
ATOM  10357  CE  LYS    60     245.709 148.948 -42.533  1.00 96.15      GS7
ATOM  10358  NZ  LYS    60     246.257 149.776 -43.643  1.00 96.15      GS7
ATOM  10359  C   LYS    60     245.629 146.534 -37.905  1.00 74.27      GS7
ATOM  10360  O   LYS    60     244.857 145.940 -38.659  1.00 74.27      GS7
ATOM  10361  N   VAL    61     246.664 145.938 -37.321  1.00 82.99      GS7
ATOM  10362  CA  VAL    61     246.918 144.516 -37.520  1.00 82.99      GS7
ATOM  10363  CB  VAL    61     248.259 144.078 -36.889  1.00 66.55      GS7
ATOM  10364  CG1 VAL    61     248.469 142.583 -37.089  1.00 66.55      GS7
ATOM  10365  CG2 VAL    61     249.396 144.845 -37.505  1.00 66.55      GS7
ATOM  10366  C   VAL    61     245.792 143.771 -36.813  1.00 82.99      GS7
ATOM  10367  O   VAL    61     245.300 142.746 -37.289  1.00 82.99      GS7
ATOM  10368  N   PHE    62     245.397 144.312 -35.664  1.00 78.77      GS7
ATOM  10369  CA  PHE    62     244.331 143.750 -34.844  1.00 78.77      GS7
ATOM  10370  CB  PHE    62     244.235 144.532 -33.527  1.00 66.64      GS7
ATOM  10371  CG  PHE    62     243.060 144.156 -32.678  1.00 66.64      GS7
ATOM  10372  CD1 PHE    62     242.926 142.864 -32.182  1.00 66.64      GS7
ATOM  10373  CD2 PHE    62     242.084 145.099 -32.370  1.00 66.64      GS7
ATOM  10374  CE1 PHE    62     241.835 142.514 -31.390  1.00 66.64      GS7
ATOM  10375  CE2 PHE    62     240.989 144.761 -31.580  1.00 66.64      GS7
ATOM  10376  CZ  PHE    62     240.865 143.466 -31.088  1.00 66.64      GS7
ATOM  10377  C   PHE    62     243.002 143.806 -35.590  1.00 78.77      GS7
ATOM  10378  O   PHE    62     242.385 142.774 -35.858  1.00 78.77      GS7
ATOM  10379  N   LYS    63     242.569 145.013 -35.933  1.00 78.26      GS7
ATOM  10380  CA  LYS    63     241.314 145.181 -36.643  1.00 78.26      GS7
ATOM  10381  CB  LYS    63     241.074 146.654 -36.948  1.00 99.73      GS7
ATOM  10382  CG  LYS    63     240.871 147.471 -35.699  1.00 99.73      GS7
ATOM  10383  CD  LYS    63     240.055 148.703 -35.992  1.00 99.73      GS7
ATOM  10384  CE  LYS    63     239.692 149.419 -34.712  1.00 99.73      GS7
ATOM  10385  NZ  LYS    63     238.750 150.535 -34.981  1.00 99.73      GS7
ATOM  10386  C   LYS    63     241.246 144.363 -37.923  1.00 78.26      GS7
ATOM  10387  O   LYS    63     240.160 144.004 -38.374  1.00 78.26      GS7
ATOM  10388  N   GLN    64     242.403 144.069 -38.507  1.00 88.92      GS7
ATOM  10389  CA  GLN    64     242.449 143.269 -39.725  1.00 88.92      GS7
ATOM  10390  CB  GLN    64     243.822 143.383 -40.391  1.00138.54      GS7
ATOM  10391  CG  GLN    64     243.940 142.603 -41.691  1.00138.54      GS7
ATOM  10392  CD  GLN    64     243.048 143.156 -42.784  1.00138.54      GS7
ATOM  10393  OE1 GLN    64     243.265 144.263 -43.277  1.00138.54      GS7
ATOM  10394  NE2 GLN    64     242.033 142.389 -43.166  1.00138.54      GS7
ATOM  10395  C   GLN    64     242.189 141.820 -39.335  1.00 88.92      GS7
ATOM  10396  O   GLN    64     241.474 141.092 -40.026  1.00 88.92      GS7
ATOM  10397  N   ALA    65     242.778 141.414 -38.214  1.00 84.68      GS7
ATOM  10398  CA  ALA    65     242.624 140.060 -37.699  1.00 84.68      GS7
ATOM  10399  CB  ALA    65     243.382 139.913 -36.384  1.00 61.96      GS7
ATOM  10400  C   ALA    65     241.145 139.763 -37.493  1.00 84.68      GS7
ATOM  10401  O   ALA    65     240.582 138.900 -38.165  1.00 84.68      GS7
ATOM  10402  N   VAL    66     240.523 140.486 -36.564  1.00 69.50      GS7
ATOM  10403  CA  VAL    66     239.103 140.312 -36.277  1.00 69.50      GS7
ATOM  10404  CB  VAL    66     238.494 141.580 -35.632  1.00 40.65      GS7
ATOM  10405  CG1 VAL    66     236.996 141.409 -35.460  1.00 40.65      GS7
ATOM  10406  CG2 VAL    66     239.143 141.843 -34.282  1.00 40.65      GS7
ATOM  10407  C   VAL    66     238.367 140.038 -37.577  1.00 69.50      GS7
ATOM  10408  O   VAL    66     237.625 139.064 -37.697  1.00 69.50      GS7
ATOM  10409  N   GLU    67     238.599 140.904 -38.554  1.00 63.07      GS7
ATOM  10410  CA  GLU    67     237.973 140.782 -39.857  1.00 63.07      GS7
ATOM  10411  CB  GLU    67     238.575 141.814 -40.807  1.00 83.40      GS7
ATOM  10412  CG  GLU    67     237.961 141.796 -42.191  1.00 83.40      GS7
ATOM  10413  CD  GLU    67     236.469 142.090 -42.179  1.00 83.40      GS7
ATOM  10414  OE1 GLU    67     235.841 141.964 -43.255  1.00 83.40      GS7
ATOM  10415  OE2 GLU    67     235.930 142.450 -41.103  1.00 83.40      GS7
ATOM  10416  C   GLU    67     238.074 139.383 -40.484  1.00 63.07      GS7
ATOM  10417  O   GLU    67     237.065 138.794 -40.878  1.00 63.07      GS7
ATOM  10418  N   ASN    68     239.284 138.848 -40.584  1.00 87.74      GS7
ATOM  10419  CA  ASN    68     239.466 137.529 -41.188  1.00 87.74      GS7
ATOM  10420  CB  ASN    68     240.954 137.241 -41.407  1.00 61.30      GS7
ATOM  10421  CG  ASN    68     241.604 138.216 -42.351  1.00 61.30      GS7
ATOM  10422  OD1 ASN    68     241.090 138.480 -43.436  1.00 61.30      GS7
ATOM  10423  ND2 ASN    68     242.751 138.750 -41.950  1.00 61.30      GS7
ATOM  10424  C   ASN    68     238.871 136.382 -40.376  1.00 87.74      GS7
ATOM  10425  O   ASN    68     238.564 135.325 -40.924  1.00 87.74      GS7
ATOM  10426  N   VAL    69     238.707 136.596 -39.075  1.00 66.73      GS7
ATOM  10427  CA  VAL    69     238.190 135.569 -38.177  1.00 66.73      GS7
ATOM  10428  CB  VAL    69     238.968 135.634 -36.846  1.00 48.84      GS7
ATOM  10429  CG1 VAL    69     238.532 134.540 -35.901  1.00 48.84      GS7
ATOM  10430  CG2 VAL    69     240.438 135.500 -37.133  1.00 48.84      GS7
ATOM  10431  C   VAL    69     236.676 135.630 -37.915  1.00 66.73      GS7
ATOM  10432  O   VAL    69     236.153 134.920 -37.056  1.00 66.73      GS7
ATOM  10433  N   LYS    70     235.964 136.466 -38.662  1.00 54.18      GS7
ATOM  10434  CA  LYS    70     234.520 136.578 -38.481  1.00 54.18      GS7
ATOM  10435  CB  LYS    70     234.041 137.996 -38.778  1.00 57.22      GS7
ATOM  10436  CG  LYS    70     234.457 139.055 -37.795  1.00 57.22      GS7
ATOM  10437  CD  LYS    70     233.931 140.390 -38.286  1.00 57.22      GS7
ATOM  10438  CE  LYS    70     234.249 141.515 -37.322  1.00 57.22      GS7
ATOM  10439  NZ  LYS    70     233.791 142.832 -37.851  1.00 57.22      GS7
ATOM  10440  C   LYS    70     233.780 135.635 -39.410  1.00 54.18      GS7
ATOM  10441  O   LYS    70     233.859 135.767 -40.626  1.00 54.18      GS7
ATOM  10442  N   PRO    71     233.061 134.656 -38.856  1.00 70.95      GS7
ATOM  10443  CD  PRO    71     232.868 134.279 -37.446  1.00 39.38      GS7
ATOM  10444  CA  PRO    71     232.336 133.754 -39.753  1.00 70.95      GS7
ATOM  10445  CB  PRO    71     231.901 132.629 -38.825  1.00 39.38      GS7
ATOM  10446  CG  PRO    71     231.681 133.347 -37.532  1.00 39.38      GS7
ATOM  10447  C   PRO    71     231.159 134.548 -40.309  1.00 70.95      GS7
ATOM  10448  O   PRO    71     230.640 135.432 -39.632  1.00 70.95      GS7
ATOM  10449  N   ARG    72     230.747 134.264 -41.538  1.00 60.96      GS7
ATOM  10450  CA  ARG    72     229.634 134.999 -42.121  1.00 60.96      GS7
ATOM  10451  CB  ARG    72     230.074 135.668 -43.424  1.00 98.57      GS7
ATOM  10452  CG  ARG    72     230.823 134.753 -44.345  1.00 98.57      GS7
ATOM  10453  CD  ARG    72     231.153 135.438 -45.651  1.00 98.57      GS7
ATOM  10454  NE  ARG    72     231.623 134.475 -46.645  1.00 98.57      GS7
ATOM  10455  CZ  ARG    72     232.832 133.921 -46.650  1.00 98.57      GS7
ATOM  10456  NH1 ARG    72     233.720 134.238 -45.712  1.00 98.57      GS7
ATOM  10457  NH2 ARG    72     233.150 133.037 -47.589  1.00 98.57      GS7
ATOM  10458  C   ARG    72     228.429 134.088 -42.343  1.00 60.96      GS7
ATOM  10459  O   ARG    72     227.333 134.546 -42.667  1.00 60.96      GS7
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ATOM	10460	N	MET	73	228.647	132.794	-42.157	1.00	72.52	GS7	ATOM	10513	CA	ARG	79	215.000	119.361	-34.858	1.00	79.04	GS7
ATOM	10461	CA	MET	73	227.598	131.788	-42.286	1.00	72.52	GS7	ATOM	10514	CB	ARG	79	214.425	118.863	-33.530	1.00	144.05	GS7
ATOM	10462	CB	MET	73	227.607	131.145	-43.670	1.00	77.27	GS7	ATOM	10515	CG	ARG	79	213.845	117.455	-33.606	1.00	144.05	GS7
ATOM	10463	CG	MET	73	227.070	132.026	-44.778	1.00	77.27	GS7	ATOM	10516	CD	ARG	79	213.153	117.058	-32.313	1.00	144.05	GS7
ATOM	10464	SD	MET	73	225.296	132.306	-44.655	1.00	77.27	GS7	ATOM	10517	NE	ARG	79	212.681	115.675	-32.341	1.00	144.05	GS7
ATOM	10465	CE	MET	73	224.639	130.956	-45.670	1.00	77.27	GS7	ATOM	10518	CZ	ARG	79	213.478	114.611	-32.345	1.00	144.05	GS7
ATOM	10466	C	MET	73	227.938	130.743	-41.244	1.00	72.52	GS7	ATOM	10519	NH1	ARG	79	214.797	114.764	-32.324	1.00	144.05	GS7
ATOM	10467	O	MET	73	229.093	130.342	-41.118	1.00	72.52	GS7	ATOM	10520	NH2	ARG	79	212.956	113.391	-32.365	1.00	144.05	GS7
ATOM	10468	N	GLU	74	226.953	130.309	-40.477	1.00	65.46	GS7	ATOM	10521	C	ARG	79	213.870	119.586	-35.851	1.00	79.04	GS7
ATOM	10469	CA	GLU	74	227.227	129.314	-39.464	1.00	65.46	GS7	ATOM	10522	O	ARG	79	213.021	120.457	-35.657	1.00	79.04	GS7
ATOM	10470	CB	GLU	74	227.406	129.974	-38.092	1.00	67.85	GS7	ATOM	10523	N	VAL	80	213.875	118.809	-36.925	1.00	131.52	GS7
ATOM	10471	CG	GLU	74	226.105	130.220	-37.327	1.00	67.85	GS7	ATOM	10524	CA	VAL	80	212.844	118.921	-37.943	1.00	131.52	GS7
ATOM	10472	CD	GLU	74	226.299	131.075	-36.078	1.00	67.85	GS7	ATOM	10525	CB	VAL	80	213.389	119.590	-39.222	1.00	100.60	GS7
ATOM	10473	OE1	GLU	74	227.267	130.825	-35.325	1.00	67.85	GS7	ATOM	10526	CG1	VAL	80	212.294	119.681	-40.268	1.00	100.60	GS7
ATOM	10474	OE2	GLU	74	225.474	131.991	-35.847	1.00	67.85	GS7	ATOM	10527	CG2	VAL	80	213.909	120.976	-38.898	1.00	100.60	GS7
ATOM	10475	C	GLU	74	226.057	128.369	-39.433	1.00	65.46	GS7	ATOM	10528	C	VAL	80	212.332	117.529	-38.279	1.00	131.52	GS7
ATOM	10476	O	GLU	74	224.950	128.724	-39.834	1.00	65.46	GS7	ATOM	10529	O	VAL	80	213.096	116.669	-38.723	1.00	131.52	GS7
ATOM	10477	N	VAL	75	226.308	127.159	-38.964	1.00	54.17	GS7	ATOM	10530	N	GLY	81	211.037	117.318	-38.051	1.00	107.51	GS7
ATOM	10478	CA	VAL	75	225.269	126.161	-38.862	1.00	54.17	GS7	ATOM	10531	CA	GLY	81	210.424	116.033	-38.324	1.00	107.51	GS7
ATOM	10479	CB	VAL	75	225.835	124.778	-39.165	1.00	61.88	GS7	ATOM	10532	C	GLY	81	211.395	114.877	-38.202	1.00	107.51	GS7
ATOM	10480	CG1	VAL	75	224.911	123.716	-38.652	1.00	61.88	GS7	ATOM	10533	O	GLY	81	211.931	114.407	-39.205	1.00	107.51	GS7
ATOM	10481	CG2	VAL	75	226.021	124.624	-40.649	1.00	61.88	GS7	ATOM	10534	N	GLY	82	211.637	114.429	-36.973	1.00	108.35	GS7
ATOM	10482	C	VAL	75	224.672	126.163	-37.455	1.00	54.17	GS7	ATOM	10535	CA	GLY	82	212.546	113.319	-36.758	1.00	108.35	GS7
ATOM	10483	O	VAL	75	225.400	126.146	-36.463	1.00	54.17	GS7	ATOM	10536	C	GLY	82	213.941	113.716	-36.309	1.00	108.35	GS7
ATOM	10484	N	ARG	76	223.345	126.207	-37.379	1.00	72.70	GS7	ATOM	10537	O	GLY	82	214.165	114.007	-35.135	1.00	108.35	GS7
ATOM	10485	CA	ARG	76	222.628	126.179	-36.103	1.00	72.70	GS7	ATOM	10538	N	ALA	83	214.884	113.731	-37.246	1.00	122.49	GS7
ATOM	10486	CB	ARG	76	221.741	127.413	-35.946	1.00	88.63	GS7	ATOM	10539	CA	ALA	83	216.268	114.073	-36.937	1.00	122.49	GS7
ATOM	10487	CG	ARG	76	222.426	128.646	-35.386	1.00	88.63	GS7	ATOM	10540	CB	ALA	83	217.185	113.574	-38.052	1.00	84.48	GS7
ATOM	10488	CD	ARG	76	221.393	129.751	-35.223	1.00	88.63	GS7	ATOM	10541	C	ALA	83	216.496	115.564	-36.709	1.00	122.49	GS7
ATOM	10489	NE	ARG	76	221.850	130.881	-34.421	1.00	88.63	GS7	ATOM	10542	O	ALA	83	215.608	116.389	-36.939	1.00	122.49	GS7
ATOM	10490	CZ	ARG	76	221.056	131.876	-34.034	1.00	88.63	GS7	ATOM	10543	N	ASN	84	217.704	115.893	-36.254	1.00	115.51	GS7
ATOM	10491	NH1	ARG	76	219.774	131.871	-34.381	1.00	88.63	GS7	ATOM	10544	CA	ASN	84	218.096	117.271	-35.985	1.00	115.51	GS7
ATOM	10492	NH2	ARG	76	221.535	132.870	-33.293	1.00	88.63	GS7	ATOM	10545	CB	ASN	84	218.825	117.361	-34.642	1.00	119.32	GS7
ATOM	10493	C	ARG	76	221.754	124.928	-36.097	1.00	72.70	GS7	ATOM	10546	CG	ASN	84	217.989	116.831	-33.494	1.00	119.32	GS7
ATOM	10494	O	ARG	76	221.057	124.648	-37.071	1.00	72.70	GS7	ATOM	10547	OD1	ASN	84	216.875	117.292	-33.261	1.00	119.32	GS7
ATOM	10495	N	SER	77	221.789	124.170	-35.009	1.00	96.72	GS7	ATOM	10548	ND2	ASN	84	218.525	115.856	-32.769	1.00	119.32	GS7
ATOM	10496	CA	SER	77	220.990	122.958	-34.945	1.00	96.72	GS7	ATOM	10549	C	ASN	84	219.007	117.760	-37.104	1.00	115.51	GS7
ATOM	10497	CB	SER	77	221.285	122.191	-33.656	1.00	73.34	GS7	ATOM	10550	O	ASN	84	220.209	117.498	-37.102	1.00	115.51	GS7
ATOM	10498	OG	SER	77	220.646	120.928	-33.669	1.00	73.34	GS7	ATOM	10551	N	TYR	85	218.417	118.470	-38.059	1.00	106.08	GS7
ATOM	10499	C	SER	77	219.501	123.282	-35.033	1.00	96.72	GS7	ATOM	10552	CA	TYR	85	219.152	118.992	-39.205	1.00	106.08	GS7
ATOM	10500	O	SER	77	219.097	124.446	-34.980	1.00	96.72	GS7	ATOM	10553	CB	TYR	85	218.191	119.265	-40.367	1.00	113.44	GS7
ATOM	10501	N	ARG	78	218.692	122.241	-35.181	1.00	115.04	GS7	ATOM	10554	CG	TYR	85	217.451	118.045	-40.880	1.00	113.44	GS7
ATOM	10502	CA	ARG	78	217.247	122.390	-35.276	1.00	115.04	GS7	ATOM	10555	CD1	TYR	85	216.366	118.185	-41.743	1.00	113.44	GS7
ATOM	10503	CB	ARG	78	216.872	123.377	-36.388	1.00	109.49	GS7	ATOM	10556	CE1	TYR	85	215.676	117.076	-42.219	1.00	113.44	GS7
ATOM	10504	CG	ARG	78	215.381	123.393	-36.720	1.00	109.49	GS7	ATOM	10557	CD2	TYR	85	217.831	116.755	-40.505	1.00	113.44	GS7
ATOM	10505	CD	ARG	78	215.008	124.544	-37.651	1.00	109.49	GS7	ATOM	10558	CE2	TYR	85	217.147	115.636	-40.976	1.00	113.44	GS7
ATOM	10506	NE	ARG	78	213.606	124.489	-38.075	1.00	109.49	GS7	ATOM	10559	CZ	TYR	85	216.069	115.805	-41.833	1.00	113.44	GS7
ATOM	10507	CZ	ARG	78	212.975	125.470	-38.720	1.00	109.49	GS7	ATOM	10560	OH	TYR	85	215.379	114.707	-42.303	1.00	113.44	GS7
ATOM	10508	NH1	ARG	78	213.613	126.595	-39.021	1.00	109.49	GS7	ATOM	10561	C	TYR	85	219.906	120.268	-38.868	1.00	106.08	GS7
ATOM	10509	NH2	ARG	78	211.705	125.327	-39.074	1.00	109.49	GS7	ATOM	10562	O	TYR	85	219.333	121.219	-38.340	1.00	106.08	GS7
ATOM	10510	C	ARG	78	216.606	121.039	-35.556	1.00	115.04	GS7	ATOM	10563	N	GLN	86	221.195	120.277	-39.187	1.00	76.70	GS7
ATOM	10511	O	ARG	78	216.942	120.375	-36.538	1.00	115.04	GS7	ATOM	10564	CA	GLN	86	222.051	121.429	-38.935	1.00	76.70	GS7
ATOM	10512	N	ARG	79	215.693	120.628	-34.681	1.00	79.04	GS7	ATOM	10565	CB	GLN	86	223.519	120.998	-38.956	1.00	92.03	GS7

ATOM	10566	CG	GLN	86	223.903	120.007	-37.864	1.00	92.03	GS7	ATOM	10619	CB	PRO	93	226.446	142.980	-37.246	1.00	94.38	GS7
ATOM	10567	CD	GLN	86	223.798	120.587	-36.460	1.00	92.03	GS7	ATOM	10620	CG	PRO	93	225.088	142.985	-36.590	1.00	94.38	GS7
ATOM	10568	OE1	GLN	86	223.993	119.882	-35.470	1.00	92.03	GS7	ATOM	10621	C	PRO	93	227.489	141.440	-35.535	1.00	59.48	GS7
ATOM	10569	NE2	GLN	86	223.494	121.875	-36.369	1.00	92.03	GS7	ATOM	10622	O	PRO	93	228.699	141.302	-35.332	1.00	59.48	GS7
ATOM	10570	C	GLN	86	221.801	122.492	-39.999	1.00	76.70	GS7	ATOM	10623	N	ARG	94	226.579	141.465	-34.566	1.00	56.37	GS7
ATOM	10571	O	GLN	86	222.376	122.446	-41.078	1.00	76.70	GS7	ATOM	10624	CA	ARG	94	226.932	141.355	-33.159	1.00	56.37	GS7
ATOM	10572	N	VAL	87	220.941	123.451	-39.683	1.00	58.95	GS7	ATOM	10625	CB	ARG	94	225.657	141.451	-32.311	1.00	67.21	GS7
ATOM	10573	CA	VAL	87	220.597	124.510	-40.622	1.00	58.95	GS7	ATOM	10626	CG	ARG	94	225.790	140.992	-30.866	1.00	67.21	GS7
ATOM	10574	CB	VAL	87	219.204	125.087	-40.306	1.00	65.48	GS7	ATOM	10627	CD	ARG	94	226.653	141.919	-30.036	1.00	67.21	GS7
ATOM	10575	CG1	VAL	87	218.891	126.250	-41.243	1.00	65.48	GS7	ATOM	10628	NE	ARG	94	226.830	141.391	-28.685	1.00	67.21	GS7
ATOM	10576	CG2	VAL	87	218.157	123.997	-40.436	1.00	65.48	GS7	ATOM	10629	CZ	ARG	94	227.728	141.837	-27.810	1.00	67.21	GS7
ATOM	10577	C	VAL	87	221.591	125.667	-40.682	1.00	58.95	GS7	ATOM	10630	NH1	ARG	94	228.541	142.832	-28.132	1.00	67.21	GS7
ATOM	10578	O	VAL	87	221.937	126.264	-39.667	1.00	58.95	GS7	ATOM	10631	NH2	ARG	94	227.830	141.273	-26.616	1.00	67.21	GS7
ATOM	10579	N	PRO	88	222.046	126.008	-41.892	1.00	65.00	GS7	ATOM	10632	C	ARG	94	227.665	140.046	-32.870	1.00	56.37	GS7
ATOM	10580	CD	PRO	88	221.626	125.411	-43.170	1.00	43.75	GS7	ATOM	10633	O	ARG	94	228.773	140.045	-32.324	1.00	56.37	GS7
ATOM	10581	CA	PRO	88	222.996	127.087	-42.141	1.00	65.00	GS7	ATOM	10634	N	ARG	95	227.048	138.933	-33.260	1.00	51.80	GS7
ATOM	10582	CB	PRO	88	223.456	126.800	-43.546	1.00	43.75	GS7	ATOM	10635	CA	ARG	95	227.621	137.607	-33.024	1.00	51.80	GS7
ATOM	10583	CG	PRO	88	222.171	126.410	-44.179	1.00	43.75	GS7	ATOM	10636	CB	ARG	95	226.597	136.528	-33.427	1.00	48.73	GS7
ATOM	10584	C	PRO	88	222.249	128.391	-42.101	1.00	65.00	GS7	ATOM	10637	CG	ARG	95	226.923	135.123	-32.924	1.00	48.73	GS7
ATOM	10585	O	PRO	88	221.035	128.406	-42.268	1.00	65.00	GS7	ATOM	10638	CD	ARG	95	225.881	134.096	-33.329	1.00	48.73	GS7
ATOM	10586	N	MET	89	222.977	129.484	-41.906	1.00	71.30	GS7	ATOM	10639	NE	ARG	95	226.327	132.747	-33.007	1.00	48.73	GS7
ATOM	10587	CA	MET	89	222.370	130.803	-41.871	1.00	71.30	GS7	ATOM	10640	CZ	ARG	95	226.711	132.365	-31.794	1.00	48.73	GS7
ATOM	10588	CB	MET	89	221.224	130.827	-40.873	1.00	102.31	GS7	ATOM	10641	NH1	ARG	95	226.699	133.234	-30.790	1.00	48.73	GS7
ATOM	10589	CG	MET	89	221.572	130.223	-39.547	1.00	102.31	GS7	ATOM	10642	NH2	ARG	95	227.117	131.119	-31.575	1.00	48.73	GS7
ATOM	10590	SD	MET	89	220.063	130.030	-38.654	1.00	102.31	GS7	ATOM	10643	C	ARG	95	228.953	137.388	-33.757	1.00	51.80	GS7
ATOM	10591	CE	MET	89	219.765	131.732	-38.151	1.00	102.31	GS7	ATOM	10644	O	ARG	95	229.831	136.673	-33.272	1.00	51.80	GS7
ATOM	10592	C	MET	89	223.369	131.883	-41.529	1.00	71.30	GS7	ATOM	10645	N	GLN	96	229.101	137.996	-34.928	1.00	69.39	GS7
ATOM	10593	O	MET	89	224.425	131.610	-40.958	1.00	71.30	GS7	ATOM	10646	CA	GLN	96	230.335	137.857	-35.685	1.00	69.39	GS7
ATOM	10594	N	GLU	90	223.013	133.113	-41.890	1.00	60.60	GS7	ATOM	10647	CB	GLN	96	230.281	138.712	-36.943	1.00	88.20	GS7
ATOM	10595	CA	GLU	90	223.847	134.278	-41.661	1.00	60.60	GS7	ATOM	10648	CG	GLN	96	229.496	138.092	-38.063	1.00	88.20	GS7
ATOM	10596	CB	GLU	90	223.076	135.543	-42.012	1.00	130.29	GS7	ATOM	10649	CD	GLN	96	229.381	139.017	-39.248	1.00	88.20	GS7
ATOM	10597	CG	GLU	90	222.440	135.513	-43.380	1.00	130.29	GS7	ATOM	10650	OE1	GLN	96	230.357	139.648	-39.653	1.00	88.20	GS7
ATOM	10598	CD	GLU	90	221.492	136.674	-43.594	1.00	130.29	GS7	ATOM	10651	NE2	GLN	96	228.187	139.102	-39.819	1.00	88.20	GS7
ATOM	10599	OE1	GLU	90	220.918	136.779	-44.699	1.00	130.29	GS7	ATOM	10652	C	GLN	96	231.517	138.286	-34.826	1.00	69.39	GS7
ATOM	10600	OE2	GLU	90	221.317	137.482	-42.653	1.00	130.29	GS7	ATOM	10653	O	GLN	96	232.539	137.605	-34.759	1.00	69.39	GS7
ATOM	10601	C	GLU	90	224.280	134.352	-40.214	1.00	60.60	GS7	ATOM	10654	N	GLN	97	231.375	139.421	-34.160	1.00	59.12	GS7
ATOM	10602	O	GLU	90	223.908	133.515	-39.392	1.00	60.60	GS7	ATOM	10655	CA	GLN	97	232.451	139.896	-33.318	1.00	59.12	GS7
ATOM	10603	N	VAL	91	225.083	135.359	-39.907	1.00	55.24	GS7	ATOM	10656	CB	GLN	97	232.121	141.281	-32.774	1.00	85.12	GS7
ATOM	10604	CA	VAL	91	225.544	135.556	-38.550	1.00	55.24	GS7	ATOM	10657	CG	GLN	97	233.216	141.861	-31.909	1.00	85.12	GS7
ATOM	10605	CB	VAL	91	227.025	135.175	-38.399	1.00	48.44	GS7	ATOM	10658	CD	GLN	97	232.960	143.303	-31.572	1.00	85.12	GS7
ATOM	10606	CG1	VAL	91	227.468	135.345	-36.955	1.00	48.44	GS7	ATOM	10659	OE1	GLN	97	232.872	144.150	-32.462	1.00	85.12	GS7
ATOM	10607	CG2	VAL	91	227.227	133.735	-38.826	1.00	48.44	GS7	ATOM	10660	NE2	GLN	97	232.833	143.597	-30.281	1.00	85.12	GS7
ATOM	10608	C	VAL	91	225.349	137.031	-38.283	1.00	55.24	GS7	ATOM	10661	C	GLN	97	232.732	138.938	-32.165	1.00	59.12	GS7
ATOM	10609	O	VAL	91	225.756	137.870	-39.088	1.00	55.24	GS7	ATOM	10662	O	GLN	97	233.834	138.399	-32.054	1.00	59.12	GS7
ATOM	10610	N	SER	92	224.691	137.342	-37.171	1.00	74.02	GS7	ATOM	10663	N	SER	98	231.734	138.723	-31.313	1.00	91.53	GS7
ATOM	10611	CA	SER	92	224.430	138.727	-36.801	1.00	74.02	GS7	ATOM	10664	CA	SER	98	231.880	137.838	-30.158	1.00	91.53	GS7
ATOM	10612	CB	SER	92	223.763	138.806	-35.434	1.00	89.26	GS7	ATOM	10665	CB	SER	98	230.501	137.419	-29.641	1.00	77.22	GS7
ATOM	10613	OG	SER	92	224.747	138.748	-34.415	1.00	89.26	GS7	ATOM	10666	OG	SER	98	229.672	138.541	-29.401	1.00	77.22	GS7
ATOM	10614	C	SER	92	225.738	139.483	-36.719	1.00	74.02	GS7	ATOM	10667	C	SER	98	232.692	136.588	-30.489	1.00	91.53	GS7
ATOM	10615	O	SER	92	226.773	138.916	-36.376	1.00	74.02	GS7	ATOM	10668	O	SER	98	233.601	136.199	-29.748	1.00	91.53	GS7
ATOM	10616	N	PRO	93	225.705	140.786	-37.011	1.00	59.48	GS7	ATOM	10669	N	LEU	99	232.357	135.969	-31.615	1.00	56.99	GS7
ATOM	10617	CD	PRO	93	224.522	141.663	-37.059	1.00	94.38	GS7	ATOM	10670	CA	LEU	99	233.025	134.756	-32.063	1.00	56.99	GS7
ATOM	10618	CA	PRO	93	226.935	141.573	-36.947	1.00	59.48	GS7	ATOM	10671	CB	LEU	99	232.227	134.122	-33.204	1.00	48.52	GS7

ATOM	10672	CG	LEU	99	230.801	133.715	-32.841	1.00	48.52	GS7	ATOM	10725	CB	VAL	105	241.189	134.876	-26.542	1.00	48.85	GS7
ATOM	10673	CD1	LEU	99	230.042	133.358	-34.086	1.00	48.52	GS7	ATOM	10726	CG1	VAL	105	241.874	134.483	-25.219	1.00	48.85	GS7
ATOM	10674	CD2	LEU	99	230.840	132.545	-31.891	1.00	48.52	GS7	ATOM	10727	CG2	VAL	105	241.007	136.382	-26.647	1.00	48.85	GS7
ATOM	10675	C	LEU	99	234.454	135.022	-32.514	1.00	56.99	GS7	ATOM	10728	C	VAL	105	242.167	132.858	-27.544	1.00	42.65	GS7
ATOM	10676	O	LEU	99	235.363	134.251	-32.210	1.00	56.99	GS7	ATOM	10729	O	VAL	105	243.169	132.398	-27.005	1.00	42.65	GS7
ATOM	10677	N	ALA	100	234.645	136.115	-33.245	1.00	57.92	GS7	ATOM	10730	N	GLN	106	241.166	132.098	-27.975	1.00	55.16	GS7
ATOM	10678	CA	ALA	100	235.968	136.477	-33.735	1.00	57.92	GS7	ATOM	10731	CA	GLN	106	241.216	130.648	-27.827	1.00	55.16	GS7
ATOM	10679	CB	ALA	100	235.887	137.776	-34.533	1.00	49.79	GS7	ATOM	10732	CB	GLN	106	239.950	130.002	-28.383	1.00	85.53	GS7
ATOM	10680	C	ALA	100	236.924	136.636	-32.555	1.00	57.92	GS7	ATOM	10733	CG	GLN	106	238.675	130.332	-27.651	1.00	85.53	GS7
ATOM	10681	O	ALA	100	237.933	135.926	-32.445	1.00	57.92	GS7	ATOM	10734	CD	GLN	106	237.505	129.525	-28.176	1.00	85.53	GS7
ATOM	10682	N	LEU	101	236.593	137.569	-31.669	1.00	51.10	GS7	ATOM	10735	OE1	GLN	106	236.352	129.872	-27.949	1.00	85.53	GS7
ATOM	10683	CA	LEU	101	237.406	137.825	-30.490	1.00	51.10	GS7	ATOM	10736	NE2	GLN	106	237.798	128.434	-28.876	1.00	85.53	GS7
ATOM	10684	CB	LEU	101	236.758	138.917	-29.635	1.00	58.51	GS7	ATOM	10737	C	GLN	106	242.422	130.049	-28.537	1.00	55.16	GS7
ATOM	10685	CG	LEU	101	236.461	140.257	-30.310	1.00	58.51	GS7	ATOM	10738	O	GLN	106	243.228	129.339	-27.931	1.00	55.16	GS7
ATOM	10686	CD1	LEU	101	235.827	141.195	-29.299	1.00	58.51	GS7	ATOM	10739	N	ALA	107	242.529	130.329	-29.831	1.00	85.05	GS7
ATOM	10687	CD2	LEU	101	237.739	140.860	-30.857	1.00	58.51	GS7	ATOM	10740	CA	ALA	107	243.631	129.825	-30.640	1.00	85.05	GS7
ATOM	10688	C	LEU	101	237.579	136.552	-29.659	1.00	51.10	GS7	ATOM	10741	CB	ALA	107	243.461	130.280	-32.063	1.00	28.46	GS7
ATOM	10689	O	LEU	101	238.678	136.244	-29.191	1.00	51.10	GS7	ATOM	10742	C	ALA	107	244.948	130.342	-30.086	1.00	85.05	GS7
ATOM	10690	N	ARG	102	236.495	135.810	-29.466	1.00	53.67	GS7	ATOM	10743	O	ALA	107	245.928	129.602	-29.961	1.00	85.05	GS7
ATOM	10691	CA	ARG	102	236.607	134.599	-28.689	1.00	53.67	GS7	ATOM	10744	N	ALA	108	244.957	131.627	-29.759	1.00	46.41	GS7
ATOM	10692	CB	ARG	102	235.250	133.909	-28.550	1.00	43.81	GS7	ATOM	10745	CA	ALA	108	246.132	132.273	-29.212	1.00	46.41	GS7
ATOM	10693	CG	ARG	102	235.320	132.620	-27.726	1.00	43.81	GS7	ATOM	10746	CB	ALA	108	245.797	133.694	-28.827	1.00	15.47	GS7
ATOM	10694	CD	ARG	102	233.972	131.926	-27.600	1.00	43.81	GS7	ATOM	10747	C	ALA	108	246.640	131.509	-27.999	1.00	46.41	GS7
ATOM	10695	NE	ARG	102	232.998	132.810	-26.973	1.00	43.81	GS7	ATOM	10748	O	ALA	108	247.846	131.324	-27.826	1.00	46.41	GS7
ATOM	10696	CZ	ARG	102	231.786	133.049	-27.460	1.00	43.81	GS7	ATOM	10749	N	ASN	109	245.720	131.063	-27.156	1.00	44.12	GS7
ATOM	10697	NH1	ARG	102	231.398	132.453	-28.578	1.00	43.81	GS7	ATOM	10750	CA	ASN	109	246.114	130.335	-25.964	1.00	44.12	GS7
ATOM	10698	NH2	ARG	102	230.988	133.926	-26.864	1.00	43.81	GS7	ATOM	10751	CB	ASN	109	245.080	130.522	-24.863	1.00	79.01	GS7
ATOM	10699	C	ARG	102	237.606	133.671	-29.378	1.00	53.67	GS7	ATOM	10752	CG	ASN	109	245.257	131.832	-24.132	1.00	79.01	GS7
ATOM	10700	O	ARG	102	238.594	133.249	-28.772	1.00	53.67	GS7	ATOM	10753	OD1	ASN	109	246.247	132.026	-23.429	1.00	79.01	GS7
ATOM	10701	N	TRP	103	237.366	133.368	-30.648	1.00	66.46	GS7	ATOM	10754	ND2	ASN	109	244.305	132.745	-24.304	1.00	79.01	GS7
ATOM	10702	CA	TRP	103	238.255	132.470	-31.370	1.00	66.46	GS7	ATOM	10755	C	ASN	109	246.348	128.865	-26.227	1.00	44.12	GS7
ATOM	10703	CB	TRP	103	237.805	132.309	-32.826	1.00	58.86	GS7	ATOM	10756	O	ASN	109	246.594	128.088	-25.303	1.00	44.12	GS7
ATOM	10704	CG	TRP	103	236.523	131.546	-32.978	1.00	58.86	GS7	ATOM	10757	N	GLN	110	246.271	128.481	-27.492	1.00	68.10	GS7
ATOM	10705	CD2	TRP	103	235.647	131.540	-34.115	1.00	58.86	GS7	ATOM	10758	CA	GLN	110	246.523	127.101	-27.838	1.00	68.10	GS7
ATOM	10706	CE2	TRP	103	234.575	130.681	-33.812	1.00	58.86	GS7	ATOM	10759	CB	GLN	110	245.370	126.515	-28.641	1.00	121.05	GS7
ATOM	10707	CE3	TRP	103	235.664	132.178	-35.361	1.00	58.86	GS7	ATOM	10760	CG	GLN	110	244.703	125.369	-27.909	1.00	121.05	GS7
ATOM	10708	CD1	TRP	103	235.962	130.709	-32.064	1.00	58.86	GS7	ATOM	10761	CD	GLN	110	243.909	124.475	-28.826	1.00	121.05	GS7
ATOM	10709	NE1	TRP	103	234.792	130.188	-32.553	1.00	58.86	GS7	ATOM	10762	OE1	GLN	110	243.386	123.444	-28.401	1.00	121.05	GS7
ATOM	10710	CZ2	TRP	103	233.526	130.443	-34.712	1.00	58.86	GS7	ATOM	10763	NE2	GLN	110	243.814	124.858	-30.096	1.00	121.05	GS7
ATOM	10711	CZ3	TRP	103	234.620	131.937	-36.253	1.00	58.86	GS7	ATOM	10764	C	GLN	110	247.822	127.032	-28.621	1.00	68.10	GS7
ATOM	10712	CH2	TRP	103	233.570	131.079	-35.923	1.00	58.86	GS7	ATOM	10765	O	GLN	110	248.190	125.991	-29.166	1.00	68.10	GS7
ATOM	10713	C	TRP	103	239.709	132.916	-31.324	1.00	66.46	GS7	ATOM	10766	N	ARG	111	248.517	128.162	-28.665	1.00	70.82	GS7
ATOM	10714	O	TRP	103	240.606	132.091	-31.144	1.00	66.46	GS7	ATOM	10767	CA	ARG	111	249.798	128.251	-29.345	1.00	70.82	GS7
ATOM	10715	N	LEU	104	239.953	134.213	-31.483	1.00	61.79	GS7	ATOM	10768	CB	ARG	111	250.105	129.706	-29.687	1.00	55.20	GS7
ATOM	10716	CA	LEU	104	241.326	134.701	-31.443	1.00	61.79	GS7	ATOM	10769	CG	ARG	111	249.690	130.086	-31.074	1.00	55.20	GS7
ATOM	10717	CB	LEU	104	241.375	136.223	-31.603	1.00	50.28	GS7	ATOM	10770	CD	ARG	111	249.733	131.581	-31.310	1.00	55.20	GS7
ATOM	10718	CG	LEU	104	241.072	136.755	-33.008	1.00	50.28	GS7	ATOM	10771	NE	ARG	111	249.717	131.867	-32.743	1.00	55.20	GS7
ATOM	10719	CD1	LEU	104	241.196	138.262	-33.010	1.00	50.28	GS7	ATOM	10772	CZ	ARG	111	250.804	131.901	-33.511	1.00	55.20	GS7
ATOM	10720	CD2	LEU	104	242.036	136.157	-34.013	1.00	50.28	GS7	ATOM	10773	NH1	ARG	111	252.006	131.679	-32.984	1.00	55.20	GS7
ATOM	10721	C	LEU	104	241.995	134.290	-30.142	1.00	61.79	GS7	ATOM	10774	NH2	ARG	111	250.686	132.139	-34.813	1.00	55.20	GS7
ATOM	10722	O	LEU	104	242.994	133.582	-30.156	1.00	61.79	GS7	ATOM	10775	C	ARG	111	250.884	127.693	-28.434	1.00	70.82	GS7
ATOM	10723	N	VAL	105	241.441	134.717	-29.016	1.00	42.65	GS7	ATOM	10776	O	ARG	111	250.646	127.436	-27.250	1.00	70.82	GS7
ATOM	10724	CA	VAL	105	242.023	134.360	-27.728	1.00	42.65	GS7	ATOM	10777	N	PRO	112	252.093	127.490	-28.977	1.00	81.36	GS7

ATOM	10778	CD	PRO	112	252.374	127.389	-30.420	1.00	42.44	GS7	ATOM	10831	O	VAL	118	252.153	136.238	-29.394	1.00	77.05	GS7
ATOM	10779	CA	PRO	112	253.214	126.960	-28.196	1.00	81.36	GS7	ATOM	10832	N	ARG	119	251.805	134.878	-27.624	1.00	68.87	GS7
ATOM	10780	CB	PRO	112	254.072	126.284	-29.255	1.00	42.44	GS7	ATOM	10833	CA	ARG	119	250.801	134.078	-28.300	1.00	68.87	GS7
ATOM	10781	CG	PRO	112	253.865	127.144	-30.439	1.00	42.44	GS7	ATOM	10834	CB	ARG	119	250.161	133.101	-27.331	1.00	54.00	GS7
ATOM	10782	C	PRO	112	254.015	127.953	-27.343	1.00	81.36	GS7	ATOM	10835	CG	ARG	119	251.109	132.051	-26.838	1.00	54.00	GS7
ATOM	10783	O	PRO	112	254.174	127.729	-26.143	1.00	81.36	GS7	ATOM	10836	CD	ARG	119	250.336	130.964	-26.153	1.00	54.00	GS7
ATOM	10784	N	GLU	113	254.518	129.033	-27.942	1.00	63.87	GS7	ATOM	10837	NE	ARG	119	249.602	131.487	-25.007	1.00	54.00	GS7
ATOM	10785	CA	GLU	113	255.318	130.008	-27.193	1.00	63.87	GS7	ATOM	10838	CZ	ARG	119	250.154	131.770	-23.828	1.00	54.00	GS7
ATOM	10786	CB	GLU	113	255.291	131.375	-27.871	1.00	59.19	GS7	ATOM	10839	NH1	ARG	119	251.456	131.578	-23.627	1.00	54.00	GS7
ATOM	10787	CG	GLU	113	253.988	131.693	-28.555	1.00	59.19	GS7	ATOM	10840	NH2	ARG	119	249.396	132.249	-22.850	1.00	54.00	GS7
ATOM	10788	CD	GLU	113	253.995	131.300	-30.014	1.00	59.19	GS7	ATOM	10841	C	ARG	119	249.736	134.955	-28.912	1.00	68.87	GS7
ATOM	10789	OE1	GLU	113	254.689	131.969	-30.810	1.00	59.19	GS7	ATOM	10842	O	ARG	119	249.202	134.646	-29.973	1.00	68.87	GS7
ATOM	10790	OE2	GLU	113	253.308	130.321	-30.364	1.00	59.19	GS7	ATOM	10843	N	ILE	120	249.426	136.055	-28.243	1.00	52.23	GS7
ATOM	10791	C	GLU	113	254.876	130.153	-25.741	1.00	63.87	GS7	ATOM	10844	CA	ILE	120	248.422	136.965	-28.758	1.00	52.23	GS7
ATOM	10792	O	GLU	113	253.695	130.352	-25.460	1.00	63.87	GS7	ATOM	10845	CB	ILE	120	247.939	137.925	-27.665	1.00	70.46	GS7
ATOM	10793	N	ARG	114	255.838	130.062	-24.826	1.00	54.28	GS7	ATOM	10846	CG2	ILE	120	246.927	138.917	-28.233	1.00	70.46	GS7
ATOM	10794	CA	ARG	114	255.567	130.142	-23.396	1.00	54.28	GS7	ATOM	10847	CG1	ILE	120	247.313	137.116	-26.536	1.00	70.46	GS7
ATOM	10795	CB	ARG	114	256.858	129.911	-22.606	1.00	64.48	GS7	ATOM	10848	CD1	ILE	120	246.673	137.962	-25.489	1.00	70.46	GS7
ATOM	10796	CG	ARG	114	257.735	128.724	-23.002	1.00	64.48	GS7	ATOM	10849	C	ILE	120	249.009	137.760	-29.914	1.00	52.23	GS7
ATOM	10797	CD	ARG	114	258.883	128.689	-21.999	1.00	64.48	GS7	ATOM	10850	O	ILE	120	248.373	137.928	-30.968	1.00	52.23	GS7
ATOM	10798	NE	ARG	114	259.944	127.699	-22.205	1.00	64.48	GS7	ATOM	10851	N	ALA	121	250.234	138.234	-29.710	1.00	64.01	GS7
ATOM	10799	CZ	ARG	114	259.750	126.415	-22.490	1.00	64.48	GS7	ATOM	10852	CA	ALA	121	250.935	139.014	-30.717	1.00	64.01	GS7
ATOM	10800	NH1	ARG	114	258.516	125.938	-22.633	1.00	64.48	GS7	ATOM	10853	CB	ALA	121	252.340	139.348	-30.235	1.00	77.85	GS7
ATOM	10801	NH2	ARG	114	260.794	125.590	-22.571	1.00	64.48	GS7	ATOM	10854	C	ALA	121	250.999	138.220	-32.009	1.00	64.01	GS7
ATOM	10802	C	ARG	114	254.917	131.447	-22.893	1.00	54.28	GS7	ATOM	10855	O	ALA	121	250.537	138.674	-33.056	1.00	64.01	GS7
ATOM	10803	O	ARG	114	254.173	131.427	-21.910	1.00	54.28	GS7	ATOM	10856	N	HIS	122	251.562	137.021	-31.923	1.00	50.18	GS7
ATOM	10804	N	ARG	115	255.194	132.574	-23.550	1.00	62.04	GS7	ATOM	10857	CA	HIS	122	251.696	136.162	-33.091	1.00	50.18	GS7
ATOM	10805	CA	ARG	115	254.646	133.868	-23.121	1.00	62.04	GS7	ATOM	10858	CB	HIS	122	252.562	134.951	-32.741	1.00	78.36	GS7
ATOM	10806	CB	ARG	115	255.609	134.996	-23.486	1.00	115.38	GS7	ATOM	10859	CG	HIS	122	254.012	135.283	-32.594	1.00	78.36	GS7
ATOM	10807	CG	ARG	115	256.739	135.209	-22.501	1.00	115.38	GS7	ATOM	10860	CD2	HIS	122	254.762	136.260	-33.158	1.00	78.36	GS7
ATOM	10808	CD	ARG	115	257.544	136.415	-22.924	1.00	115.38	GS7	ATOM	10861	ND1	HIS	122	254.864	134.563	-31.785	1.00	78.36	GS7
ATOM	10809	NE	ARG	115	256.674	137.565	-23.152	1.00	115.38	GS7	ATOM	10862	CE1	HIS	122	256.076	135.084	-31.855	1.00	78.36	GS7
ATOM	10810	CZ	ARG	115	257.024	138.644	-23.844	1.00	115.38	GS7	ATOM	10863	NE2	HIS	122	256.041	136.114	-32.681	1.00	78.36	GS7
ATOM	10811	NH1	ARG	115	258.232	138.726	-24.383	1.00	115.38	GS7	ATOM	10864	C	HIS	122	250.365	135.710	-33.678	1.00	50.18	GS7
ATOM	10812	NH2	ARG	115	256.164	139.641	-24.004	1.00	115.38	GS7	ATOM	10865	O	HIS	122	250.207	135.667	-34.896	1.00	50.18	GS7
ATOM	10813	C	ARG	115	253.255	134.240	-23.629	1.00	62.04	GS7	ATOM	10866	N	GLU	123	249.408	135.382	-32.815	1.00	55.90	GS7
ATOM	10814	O	ARG	115	253.030	134.382	-24.832	1.00	62.04	GS7	ATOM	10867	CA	GLU	123	248.108	134.931	-33.279	1.00	55.90	GS7
ATOM	10815	N	ALA	116	252.329	134.423	-22.696	1.00	51.13	GS7	ATOM	10868	CB	GLU	123	247.191	134.632	-32.097	1.00	69.86	GS7
ATOM	10816	CA	ALA	116	250.965	134.795	-23.034	1.00	51.13	GS7	ATOM	10869	CG	GLU	123	245.895	133.970	-32.517	1.00	69.86	GS7
ATOM	10817	CB	ALA	116	250.228	135.236	-21.787	1.00	34.59	GS7	ATOM	10870	CD	GLU	123	246.127	132.716	-33.348	1.00	69.86	GS7
ATOM	10818	C	ALA	116	250.951	135.917	-24.060	1.00	51.13	GS7	ATOM	10871	OE1	GLU	123	245.157	132.233	-33.974	1.00	69.86	GS7
ATOM	10819	O	ALA	116	250.470	135.745	-25.178	1.00	51.13	GS7	ATOM	10872	OE2	GLU	123	247.273	132.210	-33.377	1.00	69.86	GS7
ATOM	10820	N	ALA	117	251.497	137.062	-23.665	1.00	60.21	GS7	ATOM	10873	C	GLU	123	247.483	135.993	-34.169	1.00	55.90	GS7
ATOM	10821	CA	ALA	117	251.544	138.247	-24.515	1.00	60.21	GS7	ATOM	10874	O	GLU	123	247.072	135.706	-35.297	1.00	55.90	GS7
ATOM	10822	CB	ALA	117	252.404	139.307	-23.862	1.00	41.39	GS7	ATOM	10875	N	LEU	124	247.423	137.222	-33.661	1.00	57.23	GS7
ATOM	10823	C	ALA	117	252.035	137.983	-25.930	1.00	60.21	GS7	ATOM	10876	CA	LEU	124	246.860	138.336	-34.418	1.00	57.23	GS7
ATOM	10824	O	ALA	117	251.641	138.682	-26.863	1.00	60.21	GS7	ATOM	10877	CB	LEU	124	247.080	139.643	-33.659	1.00	59.28	GS7
ATOM	10825	N	VAL	118	252.901	136.986	-26.088	1.00	77.05	GS7	ATOM	10878	CG	LEU	124	246.156	139.832	-32.459	1.00	59.28	GS7
ATOM	10826	CA	VAL	118	253.434	136.645	-27.405	1.00	77.05	GS7	ATOM	10879	CD1	LEU	124	246.563	141.051	-31.672	1.00	59.28	GS7
ATOM	10827	CB	VAL	118	254.679	135.744	-27.306	1.00	43.08	GS7	ATOM	10880	CD2	LEU	124	244.728	139.974	-32.947	1.00	59.28	GS7
ATOM	10828	CG1	VAL	118	255.137	135.351	-28.698	1.00	43.08	GS7	ATOM	10881	C	LEU	124	247.477	138.431	-35.812	1.00	57.23	GS7
ATOM	10829	CG2	VAL	118	255.782	136.460	-26.556	1.00	43.08	GS7	ATOM	10882	O	LEU	124	246.761	138.453	-36.815	1.00	57.23	GS7
ATOM	10830	C	VAL	118	252.399	135.901	-28.232	1.00	77.05	GS7	ATOM	10883	N	MET	125	248.807	138.479	-35.864	1.00	61.65	GS7

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ATOM  10884  CA  MET  125     249.538 138.560 -37.124  1.00 61.65      GS7
ATOM  10885  CB  MET  125     251.039 138.504 -36.851  1.00 81.65      GS7
ATOM  10886  CG  MET  125     251.490 139.640 -35.957  1.00 81.65      GS7
ATOM  10887  SD  MET  125     253.265 139.796 -35.762  1.00 81.65      GS7
ATOM  10888  CE  MET  125     253.511 139.087 -34.140  1.00 81.65      GS7
ATOM  10889  C   MET  125     249.124 137.442 -38.074  1.00 61.65      GS7
ATOM  10890  O   MET  125     248.657 137.708 -39.185  1.00 61.65      GS7
ATOM  10891  N   ASP  126     249.292 136.194 -37.639  1.00 61.38      GS7
ATOM  10892  CA  ASP  126     248.907 135.040 -38.452  1.00 61.38      GS7
ATOM  10893  CB  ASP  126     248.962 133.750 -37.620  1.00 89.46      GS7
ATOM  10894  CG  ASP  126     250.347 133.124 -37.588  1.00 89.46      GS7
ATOM  10895  OD1 ASP  126     251.335 133.849 -37.357  1.00 89.46      GS7
ATOM  10896  OD2 ASP  126     250.445 131.894 -37.783  1.00 89.46      GS7
ATOM  10897  C   ASP  126     247.480 135.253 -38.957  1.00 61.38      GS7
ATOM  10898  O   ASP  126     247.177 135.029 -40.134  1.00 61.38      GS7
ATOM  10899  N   ALA  127     246.610 135.694 -38.051  1.00 64.34      GS7
ATOM  10900  CA  ALA  127     245.216 135.944 -38.381  1.00 64.34      GS7
ATOM  10901  CB  ALA  127     244.470 136.395 -37.141  1.00 47.50      GS7
ATOM  10902  C   ALA  127     245.128 137.004 -39.476  1.00 64.34      GS7
ATOM  10903  O   ALA  127     244.365 136.868 -40.434  1.00 64.34      GS7
ATOM  10904  N   ALA  128     245.916 138.063 -39.333  1.00 73.31      GS7
ATOM  10905  CA  ALA  128     245.922 139.122 -40.329  1.00 73.31      GS7
ATOM  10906  CB  ALA  128     246.908 140.212 -39.926  1.00 39.23      GS7
ATOM  10907  C   ALA  128     246.309 138.527 -41.684  1.00 73.31      GS7
ATOM  10908  O   ALA  128     245.599 138.707 -42.677  1.00 73.31      GS7
ATOM  10909  N   GLU  129     247.431 137.810 -41.714  1.00 81.12      GS7
ATOM  10910  CA  GLU  129     247.919 137.182 -42.940  1.00 81.12      GS7
ATOM  10911  CB  GLU  129     249.194 136.384 -42.658  1.00137.30      GS7
ATOM  10912  CG  GLU  129     250.400 137.249 -42.347  1.00137.30      GS7
ATOM  10913  CD  GLU  129     250.814 138.104 -43.529  1.00137.30      GS7
ATOM  10914  OE1 GLU  129     251.330 137.542 -44.518  1.00137.30      GS7
ATOM  10915  OE2 GLU  129     250.617 139.336 -43.474  1.00137.30      GS7
ATOM  10916  C   GLU  129     246.869 136.266 -43.551  1.00 81.12      GS7
ATOM  10917  O   GLU  129     246.758 136.161 -44.773  1.00 81.12      GS7
ATOM  10918  N   GLY  130     246.102 135.603 -42.693  1.00 60.02      GS7
ATOM  10919  CA  GLY  130     245.066 134.708 -43.169  1.00 60.02      GS7
ATOM  10920  C   GLY  130     245.293 133.280 -42.726  1.00 60.02      GS7
ATOM  10921  O   GLY  130     244.643 132.362 -43.217  1.00 60.02      GS7
ATOM  10922  N   LYS  131     246.217 133.085 -41.795  1.00 67.69      GS7
ATOM  10923  CA  LYS  131     246.522 131.751 -41.296  1.00 67.69      GS7
ATOM  10924  CB  LYS  131     247.981 131.413 -41.619  1.00 94.81      GS7
ATOM  10925  CG  LYS  131     248.950 132.512 -41.210  1.00 94.81      GS7
ATOM  10926  CD  LYS  131     250.323 132.351 -41.843  1.00 94.81      GS7
ATOM  10927  CE  LYS  131     251.216 133.546 -41.507  1.00 94.81      GS7
ATOM  10928  NZ  LYS  131     252.518 133.517 -42.233  1.00 94.81      GS7
ATOM  10929  C   LYS  131     246.279 131.700 -39.790  1.00 67.69      GS7
ATOM  10930  O   LYS  131     245.697 132.618 -39.218  1.00 67.69      GS7
ATOM  10931  N   GLY  132     246.715 130.624 -39.149  1.00 87.02      GS7
ATOM  10932  CA  GLY  132     246.534 130.511 -37.714  1.00 87.02      GS7
ATOM  10933  C   GLY  132     245.265 129.795 -37.296  1.00 87.02      GS7
ATOM  10934  O   GLY  132     244.253 129.836 -38.000  1.00 87.02      GS7
ATOM  10935  N   GLY  133     245.323 129.145 -36.136  1.00 83.11      GS7
ATOM  10936  CA  GLY  133     244.178 128.407 -35.624  1.00 83.11      GS7
ATOM  10937  C   GLY  133     242.886 129.197 -35.571  1.00 83.11      GS7
ATOM  10938  O   GLY  133     241.796 128.627 -35.630  1.00 83.11      GS7
ATOM  10939  N   ALA  134     243.010 130.513 -35.452  1.00 50.75      GS7
ATOM  10940  CA  ALA  134     241.851 131.385 -35.394  1.00 50.75      GS7
ATOM  10941  CB  ALA  134     242.303 132.815 -35.196  1.00 79.28      GS7
ATOM  10942  C   ALA  134     241.030 131.266 -36.675  1.00 50.75      GS7
ATOM  10943  O   ALA  134     239.872 130.857 -36.652  1.00 50.75      GS7
ATOM  10944  N   VAL  135     241.640 131.621 -37.798  1.00 65.82      GS7
ATOM  10945  CA  VAL  135     240.947 131.561 -39.071  1.00 65.82      GS7
ATOM  10946  CB  VAL  135     241.801 132.161 -40.196  1.00 53.16      GS7
ATOM  10947  CG1 VAL  135     241.119 131.956 -41.535  1.00 53.16      GS7
ATOM  10948  CG2 VAL  135     242.007 133.641 -39.940  1.00 53.16      GS7
ATOM  10949  C   VAL  135     240.536 130.148 -39.454  1.00 65.82      GS7
ATOM  10950  O   VAL  135     239.602 129.968 -40.234  1.00 65.82      GS7
ATOM  10951  N   LYS  136     241.223 129.142 -38.921  1.00 66.14      GS7
ATOM  10952  CA  LYS  136     240.844 127.777 -39.251  1.00 66.14      GS7
ATOM  10953  CB  LYS  136     241.706 126.760 -38.516  1.00 95.91      GS7
ATOM  10954  CG  LYS  136     241.278 125.318 -38.786  1.00 95.91      GS7
ATOM  10955  CD  LYS  136     241.410 124.451 -37.543  1.00 95.91      GS7
ATOM  10956  CE  LYS  136     242.859 124.353 -37.076  1.00 95.91      GS7
ATOM  10957  NZ  LYS  136     242.982 123.808 -35.688  1.00 95.91      GS7
ATOM  10958  C   LYS  136     239.393 127.590 -38.828  1.00 66.14      GS7
ATOM  10959  O   LYS  136     238.534 127.270 -39.649  1.00 66.14      GS7
ATOM  10960  N   LYS  137     239.124 127.802 -37.543  1.00 49.64      GS7
ATOM  10961  CA  LYS  137     237.773 127.654 -37.020  1.00 49.64      GS7
ATOM  10962  CB  LYS  137     237.702 128.124 -35.557  1.00 98.46      GS7
ATOM  10963  CG  LYS  137     238.777 127.492 -34.672  1.00 98.46      GS7
ATOM  10964  CD  LYS  137     238.638 127.824 -33.181  1.00 98.46      GS7
ATOM  10965  CE  LYS  137     239.795 127.189 -32.394  1.00 98.46      GS7
ATOM  10966  NZ  LYS  137     239.593 127.190 -30.927  1.00 98.46      GS7
ATOM  10967  C   LYS  137     236.808 128.457 -37.878  1.00 49.64      GS7
ATOM  10968  O   LYS  137     235.772 127.945 -38.289  1.00 49.64      GS7
ATOM  10969  N   LYS  138     237.155 129.705 -38.171  1.00 52.00      GS7
ATOM  10970  CA  LYS  138     236.281 130.544 -38.972  1.00 52.00      GS7
ATOM  10971  CB  LYS  138     236.916 131.913 -39.201  1.00 49.48      GS7
ATOM  10972  CG  LYS  138     236.105 132.832 -40.118  1.00 49.48      GS7
ATOM  10973  CD  LYS  138     236.409 132.602 -41.606  1.00 49.48      GS7
ATOM  10974  CE  LYS  138     235.770 133.695 -42.476  1.00 49.48      GS7
ATOM  10975  NZ  LYS  138     236.210 133.708 -43.913  1.00 49.48      GS7
ATOM  10976  C   LYS  138     235.920 129.918 -40.313  1.00 52.00      GS7
ATOM  10977  O   LYS  138     234.742 129.798 -40.656  1.00 52.00      GS7
ATOM  10978  N   GLU  139     236.931 129.527 -41.078  1.00 58.03      GS7
ATOM  10979  CA  GLU  139     236.690 128.933 -42.384  1.00 58.03      GS7
ATOM  10980  CB  GLU  139     237.980 128.950 -43.204  1.00 78.69      GS7
ATOM  10981  CG  GLU  139     238.524 130.363 -43.361  1.00 78.69      GS7
ATOM  10982  CD  GLU  139     239.691 130.472 -44.325  1.00 78.69      GS7
ATOM  10983  OE1 GLU  139     240.743 129.836 -44.080  1.00 78.69      GS7
ATOM  10984  OE2 GLU  139     239.550 131.211 -45.328  1.00 78.69      GS7
ATOM  10985  C   GLU  139     236.152 127.522 -42.231  1.00 58.03      GS7
ATOM  10986  O   GLU  139     235.542 126.976 -43.151  1.00 58.03      GS7
ATOM  10987  N   ASP  140     236.366 126.947 -41.051  1.00 75.68      GS7
ATOM  10988  CA  ASP  140     235.900 125.602 -40.746  1.00 75.68      GS7
ATOM  10989  CB  ASP  140     236.624 125.068 -39.508  1.00156.25      GS7
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ATOM	10990	CG	ASP	140	236.395	123.589	-39.295	1.00156.25	GS7	ATOM	11043	O	GLU	146	228.627	124.154	-48.539	1.00100.05	GS7
ATOM	10991	OD1	ASP	140	236.794	122.796	-40.173	1.00156.25	GS7	ATOM	11044	N	ALA	147	227.755	123.067	-46.772	1.00 76.30	GS7
ATOM	10992	OD2	ASP	140	235.816	123.217	-38.253	1.00156.25	GS7	ATOM	11045	CA	ALA	147	228.515	121.844	-47.016	1.00 76.30	GS7
ATOM	10993	C	ASP	140	234.390	125.648	-40.496	1.00 75.68	GS7	ATOM	11046	CB	ALA	147	229.747	121.809	-46.146	1.00 97.69	GS7
ATOM	10994	O	ASP	140	233.681	124.649	-40.656	1.00 75.68	GS7	ATOM	11047	C	ALA	147	227.676	120.602	-46.762	1.00 76.30	GS7
ATOM	10995	N	VAL	141	233.910	126.824	-40.101	1.00 63.84	GS7	ATOM	11048	O	ALA	147	226.576	120.469	-47.293	1.00 76.30	GS7
ATOM	10996	CA	VAL	141	232.496	127.039	-39.830	1.00 63.84	GS7	ATOM	11049	N	ASN	148	228.211	119.680	-45.965	1.00200.50	GS7
ATOM	10997	CB	VAL	141	232.286	128.277	-38.920	1.00 39.85	GS7	ATOM	11050	CA	ASN	148	227.495	118.450	-45.638	1.00200.50	GS7
ATOM	10998	CG1	VAL	141	230.804	128.613	-38.813	1.00 39.85	GS7	ATOM	11051	CB	ASN	148	228.120	117.773	-44.409	1.00191.21	GS7
ATOM	10999	CG2	VAL	141	232.854	128.001	-37.538	1.00 39.85	GS7	ATOM	11052	CG	ASN	148	229.583	117.410	-44.616	1.00191.21	GS7
ATOM	11000	C	VAL	141	231.771	127.253	-41.153	1.00 63.84	GS7	ATOM	11053	OD1	ASN	148	229.921	116.627	-45.504	1.00191.21	GS7
ATOM	11001	O	VAL	141	230.825	126.535	-41.476	1.00 63.84	GS7	ATOM	11054	ND2	ASN	148	230.456	117.979	-43.791	1.00191.21	GS7
ATOM	11002	N	GLU	142	232.216	128.246	-41.917	1.00 52.40	GS7	ATOM	11055	C	ASN	148	226.061	118.862	-45.330	1.00200.50	GS7
ATOM	11003	CA	GLU	142	231.602	128.527	-43.205	1.00 52.40	GS7	ATOM	11056	O	ASN	148	225.100	118.263	-45.818	1.00200.50	GS7
ATOM	11004	CB	GLU	142	232.420	129.557	-43.970	1.00 90.71	GS7	ATOM	11057	N	ARG	149	225.941	119.911	-44.522	1.00110.21	GS7
ATOM	11005	CG	GLU	142	232.083	130.976	-43.603	1.00 90.71	GS7	ATOM	11058	CA	ARG	149	224.655	120.457	-44.133	1.00110.21	GS7
ATOM	11006	CD	GLU	142	233.273	131.892	-43.700	1.00 90.71	GS7	ATOM	11059	CB	ARG	149	224.605	120.631	-42.616	1.00146.30	GS7
ATOM	11007	OE1	GLU	142	233.085	133.120	-43.589	1.00 90.71	GS7	ATOM	11060	CG	ARG	149	225.897	121.145	-42.016	1.00146.30	GS7
ATOM	11008	OE2	GLU	142	234.399	131.382	-43.876	1.00 90.71	GS7	ATOM	11061	CD	ARG	149	226.196	120.436	-40.703	1.00146.30	GS7
ATOM	11009	C	GLU	142	231.559	127.229	-43.968	1.00 52.40	GS7	ATOM	11062	NE	ARG	149	226.366	118.995	-40.884	1.00146.30	GS7
ATOM	11010	O	GLU	142	230.586	126.944	-44.657	1.00 52.40	GS7	ATOM	11063	CZ	ARG	149	226.568	118.132	-39.892	1.00146.30	GS7
ATOM	11011	N	ARG	143	232.626	126.442	-43.825	1.00 59.83	GS7	ATOM	11064	NH1	ARG	149	226.626	118.556	-38.637	1.00146.30	GS7
ATOM	11012	CA	ARG	143	232.735	125.148	-44.493	1.00 59.83	GS7	ATOM	11065	NH2	ARG	149	226.717	116.841	-40.156	1.00146.30	GS7
ATOM	11013	CB	ARG	143	234.047	124.459	-44.113	1.00142.87	GS7	ATOM	11066	C	ARG	149	224.508	121.790	-44.844	1.00110.21	GS7
ATOM	11014	CG	ARG	143	234.382	123.250	-44.971	1.00142.87	GS7	ATOM	11067	O	ARG	149	223.993	122.754	-44.289	1.00110.21	GS7
ATOM	11015	CD	ARG	143	235.682	122.599	-44.525	1.00142.87	GS7	ATOM	11068	N	ALA	150	224.985	121.824	-46.085	1.00102.50	GS7
ATOM	11016	NE	ARG	143	235.601	122.087	-43.158	1.00142.87	GS7	ATOM	11069	CA	ALA	150	224.922	123.012	-46.925	1.00102.50	GS7
ATOM	11017	CZ	ARG	143	234.792	121.105	-42.767	1.00142.87	GS7	ATOM	11070	CB	ALA	150	225.462	122.698	-48.317	1.00107.19	GS7
ATOM	11018	NH1	ARG	143	233.985	120.513	-43.640	1.00142.87	GS7	ATOM	11071	C	ALA	150	223.489	123.446	-47.046	1.00102.50	GS7
ATOM	11019	NH2	ARG	143	234.786	120.718	-41.499	1.00142.87	GS7	ATOM	11072	O	ALA	150	222.745	123.500	-46.069	1.00102.50	GS7
ATOM	11020	C	ARG	143	231.549	124.298	-44.063	1.00 59.83	GS7	ATOM	11073	N	TYR	151	223.105	123.757	-48.274	1.00 67.21	GS7
ATOM	11021	O	ARG	143	230.807	123.814	-44.897	1.00 59.83	GS7	ATOM	11074	CA	TYR	151	221.741	124.146	-48.546	1.00 67.21	GS7
ATOM	11022	N	MET	144	231.382	124.128	-42.756	1.00 62.90	GS7	ATOM	11075	CB	TYR	151	221.605	124.601	-49.998	1.00115.72	GS7
ATOM	11023	CA	MET	144	230.263	123.371	-42.197	1.00 62.90	GS7	ATOM	11076	CG	TYR	151	222.724	125.519	-50.437	1.00115.72	GS7
ATOM	11024	CB	MET	144	230.204	123.595	-40.686	1.00110.78	GS7	ATOM	11077	CD1	TYR	151	222.478	126.850	-50.766	1.00115.72	GS7
ATOM	11025	CG	MET	144	231.068	122.652	-39.893	1.00110.78	GS7	ATOM	11078	CE1	TYR	151	223.515	127.684	-51.194	1.00115.72	GS7
ATOM	11026	SD	MET	144	230.360	121.012	-39.999	1.00110.78	GS7	ATOM	11079	CD2	TYR	151	224.034	125.044	-50.542	1.00115.72	GS7
ATOM	11027	CE	MET	144	228.971	121.177	-38.863	1.00110.78	GS7	ATOM	11080	CE2	TYR	151	225.070	125.862	-50.966	1.00115.72	GS7
ATOM	11028	C	MET	144	228.930	123.794	-42.835	1.00 62.90	GS7	ATOM	11081	CZ	TYR	151	224.809	127.178	-51.293	1.00115.72	GS7
ATOM	11029	O	MET	144	228.133	122.958	-43.269	1.00 62.90	GS7	ATOM	11082	OH	TYR	151	225.844	127.973	-51.731	1.00115.72	GS7
ATOM	11030	N	ALA	145	228.677	125.097	-42.864	1.00 61.75	GS7	ATOM	11083	C	TYR	151	220.989	122.846	-48.290	1.00 67.21	GS7
ATOM	11031	CA	ALA	145	227.463	125.605	-43.479	1.00 61.75	GS7	ATOM	11084	O	TYR	151	221.514	121.962	-47.616	1.00 67.21	GS7
ATOM	11032	CB	ALA	145	227.288	127.073	-43.152	1.00 32.39	GS7	ATOM	11085	N	ALA	152	219.786	122.704	-48.829	1.00 89.57	GS7
ATOM	11033	C	ALA	145	227.753	125.434	-44.948	1.00 61.75	GS7	ATOM	11086	CA	ALA	152	219.011	121.492	-48.587	1.00 89.57	GS7
ATOM	11034	O	ALA	145	228.908	125.240	-45.315	1.00 61.75	GS7	ATOM	11087	CB	ALA	152	219.870	120.234	-48.809	1.00 47.42	GS7
ATOM	11035	N	GLU	146	226.740	125.488	-45.799	1.00100.05	GS7	ATOM	11088	C	ALA	152	218.585	121.587	-47.135	1.00 89.57	GS7
ATOM	11036	CA	GLU	146	227.000	125.354	-47.230	1.00100.05	GS7	ATOM	11089	O	ALA	152	218.011	120.658	-46.574	1.00 89.57	GS7
ATOM	11037	CB	GLU	146	227.692	126.621	-47.743	1.00127.24	GS7	ATOM	11090	N	HIS	153	218.893	122.729	-46.534	1.00105.82	GS7
ATOM	11038	CG	GLU	146	227.810	126.728	-49.253	1.00127.24	GS7	ATOM	11091	CA	HIS	153	218.554	122.993	-45.151	1.00105.82	GS7
ATOM	11039	CD	GLU	146	228.529	127.989	-49.681	1.00127.24	GS7	ATOM	11092	CB	HIS	153	219.674	122.505	-44.228	1.00 86.86	GS7
ATOM	11040	OE1	GLU	146	229.777	128.018	-49.620	1.00127.24	GS7	ATOM	11093	CG	HIS	153	219.925	121.029	-44.319	1.00 86.86	GS7
ATOM	11041	OE2	GLU	146	227.841	128.959	-50.063	1.00127.24	GS7	ATOM	11094	CD2	HIS	153	221.075	120.321	-44.426	1.00 86.86	GS7
ATOM	11042	C	GLU	146	227.867	124.129	-47.569	1.00100.05	GS7	ATOM	11095	ND1	HIS	153	218.907	120.099	-44.304	1.00 86.86	GS7

ATOM	11096	CE1	HIS	153	219.418	118.883	-44.399	1.00	86.86	GS7	ATOM	11149	CB	ILE	2	232.202	167.137	33.174	1.00	132.98	JS10
ATOM	11097	NE2	HIS	153	220.732	118.990	-44.474	1.00	86.86	GS7	ATOM	11150	CG2	ILE	2	231.235	165.969	33.152	1.00	132.98	JS10
ATOM	11098	C	HIS	153	218.320	124.489	-45.006	1.00	105.82	GS7	ATOM	11151	CG1	ILE	2	232.499	167.572	34.610	1.00	132.98	JS10
ATOM	11099	O	HIS	153	218.910	125.156	-44.170	1.00	105.82	GS7	ATOM	11152	CD1	ILE	2	231.269	167.986	35.397	1.00	132.98	JS10
ATOM	11100	N	TYR	154	217.456	124.991	-45.876	1.00	134.39	GS7	ATOM	11153	C	ILE	2	233.185	165.988	31.177	1.00	117.11	JS10
ATOM	11101	CA	TYR	154	217.031	126.386	-45.931	1.00	134.39	GS7	ATOM	11154	O	ILE	2	232.445	166.485	30.324	1.00	117.11	JS10
ATOM	11102	CB	TYR	154	216.154	126.556	-47.173	1.00	74.18	GS7	ATOM	11155	N	ARG	3	233.727	164.775	31.053	1.00	103.30	JS10
ATOM	11103	CG	TYR	154	215.338	125.300	-47.388	1.00	74.18	GS7	ATOM	11156	CA	ARG	3	233.474	163.940	29.878	1.00	103.30	JS10
ATOM	11104	CD1	TYR	154	214.148	125.083	-46.690	1.00	74.18	GS7	ATOM	11157	CB	ARG	3	234.733	163.179	29.461	1.00	97.31	JS10
ATOM	11105	CE1	TYR	154	213.534	123.828	-46.692	1.00	74.18	GS7	ATOM	11158	CG	ARG	3	234.523	162.340	28.212	1.00	97.31	JS10
ATOM	11106	CD2	TYR	154	215.873	124.230	-48.111	1.00	74.18	GS7	ATOM	11159	CD	ARG	3	235.688	161.401	27.941	1.00	97.31	JS10
ATOM	11107	CE2	TYR	154	215.269	122.979	-48.114	1.00	74.18	GS7	ATOM	11160	NE	ARG	3	236.758	162.016	27.160	1.00	97.31	JS10
ATOM	11108	CZ	TYR	154	214.110	122.780	-47.402	1.00	74.18	GS7	ATOM	11161	CZ	ARG	3	237.887	161.390	26.835	1.00	97.31	JS10
ATOM	11109	OH	TYR	154	213.564	121.520	-47.373	1.00	74.18	GS7	ATOM	11162	NH1	ARG	3	238.080	160.137	27.234	1.00	97.31	JS10
ATOM	11110	C	TYR	154	216.198	126.649	-44.674	1.00	134.39	GS7	ATOM	11163	NH2	ARG	3	238.819	162.004	26.113	1.00	97.31	JS10
ATOM	11111	O	TYR	154	216.251	127.732	-44.082	1.00	134.39	GS7	ATOM	11164	C	ARG	3	232.352	162.943	30.132	1.00	103.30	JS10
ATOM	11112	N	ARG	155	215.434	125.629	-44.286	1.00	88.97	GS7	ATOM	11165	O	ARG	3	232.490	162.018	30.940	1.00	103.30	JS10
ATOM	11113	CA	ARG	155	214.544	125.653	-43.129	1.00	88.97	GS7	ATOM	11166	N	ILE	4	231.252	163.130	29.412	1.00	140.90	JS10
ATOM	11114	CB	ARG	155	214.468	124.255	-42.526	1.00	91.87	GS7	ATOM	11167	CA	ILE	4	230.084	162.276	29.557	1.00	140.90	JS10
ATOM	11115	CG	ARG	155	214.700	123.185	-43.548	1.00	91.87	GS7	ATOM	11168	CB	ILE	4	228.809	163.134	29.644	1.00	101.06	JS10
ATOM	11116	CD	ARG	155	214.330	121.820	-43.048	1.00	91.87	GS7	ATOM	11169	CG2	ILE	4	227.658	162.303	30.198	1.00	101.06	JS10
ATOM	11117	NE	ARG	155	214.762	120.819	-44.014	1.00	91.87	GS7	ATOM	11170	CG1	ILE	4	229.067	164.345	30.540	1.00	101.06	JS10
ATOM	11118	CZ	ARG	155	214.248	119.600	-44.115	1.00	91.87	GS7	ATOM	11171	CD1	ILE	4	227.906	165.311	30.617	1.00	101.06	JS10
ATOM	11119	NH1	ARG	155	213.270	119.221	-43.305	1.00	91.87	GS7	ATOM	11172	C	ILE	4	229.915	161.294	28.397	1.00	140.90	JS10
ATOM	11120	NH2	ARG	155	214.715	118.761	-45.029	1.00	91.87	GS7	ATOM	11173	O	ILE	4	229.868	161.702	27.242	1.00	140.90	JS10
ATOM	11121	C	ARG	155	214.896	126.653	-42.032	1.00	88.97	GS7	ATOM	11174	N	LYS	5	229.835	160.000	28.704	1.00	107.61	JS10
ATOM	11122	O	ARG	155	215.771	126.405	-41.206	1.00	88.97	GS7	ATOM	11175	CA	LYS	5	229.631	158.987	27.670	1.00	107.61	JS10
ATOM	11123	N	TRP	156	214.195	127.781	-42.042	1.00	132.56	GS7	ATOM	11176	CB	LYS	5	230.744	157.928	27.687	1.00	97.60	JS10
ATOM	11124	CA	TRP	156	214.359	128.846	-41.060	1.00	132.56	GS7	ATOM	11177	CG	LYS	5	231.940	158.272	26.796	1.00	97.60	JS10
ATOM	11125	CB	TRP	156	215.835	129.097	-40.732	1.00	139.89	GS7	ATOM	11178	CD	LYS	5	232.688	157.021	26.331	1.00	97.60	JS10
ATOM	11126	CG	TRP	156	216.020	129.918	-39.474	1.00	139.89	GS7	ATOM	11179	CE	LYS	5	233.675	157.315	25.191	1.00	97.60	JS10
ATOM	11127	CD2	TRP	156	216.195	129.417	-38.138	1.00	139.89	GS7	ATOM	11180	NZ	LYS	5	234.808	158.225	25.556	1.00	97.60	JS10
ATOM	11128	CE2	TRP	156	216.276	130.536	-37.279	1.00	139.89	GS7	ATOM	11181	C	LYS	5	228.271	158.320	27.854	1.00	107.61	JS10
ATOM	11129	CE3	TRP	156	216.292	128.130	-37.586	1.00	139.89	GS7	ATOM	11182	O	LYS	5	228.097	157.445	28.707	1.00	107.61	JS10
ATOM	11130	CD1	TRP	156	216.004	131.284	-39.369	1.00	139.89	GS7	ATOM	11183	N	LEU	6	227.310	158.760	27.045	1.00	93.45	JS10
ATOM	11131	NE1	TRP	156	216.157	131.661	-38.054	1.00	139.89	GS7	ATOM	11184	CA	LEU	6	225.944	158.244	27.069	1.00	93.45	JS10
ATOM	11132	CZ2	TRP	156	216.450	130.407	-35.897	1.00	139.89	GS7	ATOM	11185	CB	LEU	6	224.960	159.374	26.757	1.00	111.10	JS10
ATOM	11133	CZ3	TRP	156	216.464	128.004	-36.216	1.00	139.89	GS7	ATOM	11186	CG	LEU	6	224.471	160.179	27.957	1.00	111.10	JS10
ATOM	11134	CH2	TRP	156	216.542	129.137	-35.387	1.00	139.89	GS7	ATOM	11187	CD1	LEU	6	223.570	161.319	27.522	1.00	111.10	JS10
ATOM	11135	C	TRP	156	213.743	130.108	-41.635	1.00	132.56	GS7	ATOM	11188	CD2	LEU	6	223.723	159.236	28.871	1.00	111.10	JS10
ATOM	11136	O	TRP	156	213.316	130.052	-42.808	1.00	132.56	GS7	ATOM	11189	C	LEU	6	225.727	157.106	26.075	1.00	93.45	JS10
ATOM	11137	OXT	TRP	156	213.690	131.127	-40.915	1.00	139.89	GS7	ATOM	11190	O	LEU	6	226.117	157.209	24.911	1.00	93.45	JS10
ATOM	11138	CB	LYS	1	237.771	169.158	31.689	1.00	138.75	JS10	ATOM	11191	N	ARG	7	225.099	156.026	26.530	1.00	90.41	JS10
ATOM	11139	CG	LYS	1	238.479	170.490	31.487	1.00	138.75	JS10	ATOM	11192	CA	ARG	7	224.837	154.890	25.651	1.00	90.41	JS10
ATOM	11140	CD	LYS	1	239.929	170.356	31.069	1.00	138.75	JS10	ATOM	11193	CB	ARG	7	225.840	153.759	25.907	1.00	92.12	JS10
ATOM	11141	CE	LYS	1	240.537	171.745	30.875	1.00	138.75	JS10	ATOM	11194	CG	ARG	7	225.525	152.915	27.124	1.00	92.12	JS10
ATOM	11142	NZ	LYS	1	241.988	171.715	30.544	1.00	138.75	JS10	ATOM	11195	CD	ARG	7	226.458	151.718	27.246	1.00	92.12	JS10
ATOM	11143	C	LYS	1	235.627	168.006	32.329	1.00	117.89	JS10	ATOM	11196	NE	ARG	7	227.843	152.075	27.547	1.00	92.12	JS10
ATOM	11144	O	LYS	1	236.298	167.051	32.723	1.00	117.89	JS10	ATOM	11197	CZ	ARG	7	228.760	152.388	26.638	1.00	92.12	JS10
ATOM	11145	N	LYS	1	236.120	170.318	33.110	1.00	117.89	JS10	ATOM	11198	NH1	ARG	7	228.453	152.392	25.349	1.00	92.12	JS10
ATOM	11146	CA	LYS	1	236.281	169.344	31.991	1.00	117.89	JS10	ATOM	11199	NH2	ARG	7	229.990	152.694	27.022	1.00	92.12	JS10
ATOM	11147	N	ILE	2	234.308	167.957	32.168	1.00	117.11	JS10	ATOM	11200	C	ARG	7	223.419	154.360	25.840	1.00	90.41	JS10
ATOM	11148	CA	ILE	2	233.522	166.760	32.453	1.00	117.11	JS10	ATOM	11201	O	ARG	7	222.843	154.464	26.921	1.00	90.41	JS10

ATOM	11202	N	GLY	8	222.867	153.786	24.776	1.00144.98	JS10	ATOM	11255	CD1	LEU	14	222.918	157.100	22.906	1.00 87.19	JS10
ATOM	11203	CA	GLY	8	221.524	153.243	24.833	1.00144.98	JS10	ATOM	11256	CD2	LEU	14	221.650	157.292	25.058	1.00 87.19	JS10
ATOM	11204	C	GLY	8	221.155	152.479	23.574	1.00144.98	JS10	ATOM	11257	C	LEU	14	219.674	160.396	23.442	1.00111.13	JS10
ATOM	11205	O	GLY	8	221.856	152.534	22.558	1.00144.98	JS10	ATOM	11258	O	LEU	14	219.926	161.240	24.298	1.00111.13	JS10
ATOM	11206	N	PHE	9	220.042	151.757	23.646	1.00118.91	JS10	ATOM	11259	N	ASP	15	219.376	160.703	22.182	1.00 89.63	JS10
ATOM	11207	CA	PHE	9	219.559	150.974	22.521	1.00118.91	JS10	ATOM	11260	CA	ASP	15	219.311	162.093	21.747	1.00 89.63	JS10
ATOM	11208	CB	PHE	9	218.766	149.781	23.040	1.00 71.33	JS10	ATOM	11261	CB	ASP	15	218.685	162.202	20.357	1.00134.83	JS10
ATOM	11209	CG	PHE	9	219.610	148.760	23.734	1.00 71.33	JS10	ATOM	11262	CG	ASP	15	219.590	161.661	19.274	1.00134.83	JS10
ATOM	11210	CD1	PHE	9	219.075	147.956	24.729	1.00 71.33	JS10	ATOM	11263	OD1	ASP	15	220.769	162.068	19.235	1.00134.83	JS10
ATOM	11211	CD2	PHE	9	220.942	148.580	23.369	1.00 71.33	JS10	ATOM	11264	OD2	ASP	15	219.125	160.839	18.458	1.00134.83	JS10
ATOM	11212	CE1	PHE	9	219.855	146.974	25.359	1.00 71.33	JS10	ATOM	11265	C	ASP	15	218.488	162.887	22.752	1.00 89.63	JS10
ATOM	11213	CE2	PHE	9	221.734	147.607	23.985	1.00 71.33	JS10	ATOM	11266	O	ASP	15	218.978	163.864	23.313	1.00 89.63	JS10
ATOM	11214	CZ	PHE	9	221.189	146.798	24.986	1.00 71.33	JS10	ATOM	11267	N	ALA	16	217.246	162.463	22.987	1.00113.61	JS10
ATOM	11215	C	PHE	9	218.696	151.826	21.612	1.00118.91	JS10	ATOM	11268	CA	ALA	16	216.383	163.135	23.959	1.00113.61	JS10
ATOM	11216	O	PHE	9	218.784	151.731	20.389	1.00118.91	JS10	ATOM	11269	CB	ALA	16	215.134	162.304	24.217	1.00 80.87	JS10
ATOM	11217	N	ASP	10	217.866	152.664	22.221	1.00 85.48	JS10	ATOM	11270	C	ALA	16	217.176	163.306	25.255	1.00113.61	JS10
ATOM	11218	CA	ASP	10	216.989	153.550	21.469	1.00 85.48	JS10	ATOM	11271	O	ALA	16	217.344	164.424	25.748	1.00113.61	JS10
ATOM	11219	CB	ASP	10	215.771	153.922	22.313	1.00107.16	JS10	ATOM	11272	N	SER	17	217.662	162.186	25.788	1.00 67.18	JS10
ATOM	11220	CG	ASP	10	214.717	154.666	21.515	1.00107.16	JS10	ATOM	11273	CA	SER	17	218.462	162.173	27.004	1.00 67.18	JS10
ATOM	11221	OD1	ASP	10	215.066	155.654	20.832	1.00107.16	JS10	ATOM	11274	CB	SER	17	218.995	160.763	27.253	1.00102.06	JS10
ATOM	11222	OD2	ASP	10	213.536	154.262	21.576	1.00107.16	JS10	ATOM	11275	OG	SER	17	220.019	160.781	28.230	1.00102.06	JS10
ATOM	11223	C	ASP	10	217.757	154.814	21.094	1.00 85.48	JS10	ATOM	11276	C	SER	17	219.633	163.163	26.942	1.00 67.18	JS10
ATOM	11224	O	ASP	10	218.276	155.508	21.965	1.00 85.48	JS10	ATOM	11277	O	SER	17	219.576	164.240	27.535	1.00 67.18	JS10
ATOM	11225	N	HIS	11	217.819	155.115	19.802	1.00 81.73	JS10	ATOM	11278	N	ALA	18	220.696	162.805	26.229	1.00 96.50	JS10
ATOM	11226	CA	HIS	11	218.542	156.295	19.346	1.00 81.73	JS10	ATOM	11279	CA	ALA	18	221.856	163.686	26.120	1.00 96.50	JS10
ATOM	11227	CB	HIS	11	218.833	156.204	17.848	1.00 95.11	JS10	ATOM	11280	CB	ALA	18	222.832	163.155	25.074	1.00 66.65	JS10
ATOM	11228	CG	HIS	11	217.697	156.658	16.988	1.00 95.11	JS10	ATOM	11281	C	ALA	18	221.464	165.119	25.778	1.00 96.50	JS10
ATOM	11229	CD2	HIS	11	217.481	157.831	16.348	1.00 95.11	JS10	ATOM	11282	O	ALA	18	222.022	166.062	26.332	1.00 96.50	JS10
ATOM	11230	ND1	HIS	11	216.585	155.879	16.746	1.00 95.11	JS10	ATOM	11283	N	GLN	19	220.500	165.280	24.876	1.00 98.56	JS10
ATOM	11231	CE1	HIS	11	215.735	156.554	15.991	1.00 95.11	JS10	ATOM	11284	CA	GLN	19	220.060	166.611	24.469	1.00 98.56	JS10
ATOM	11232	NE2	HIS	11	216.256	157.742	15.737	1.00 95.11	JS10	ATOM	11285	CB	GLN	19	218.970	166.518	23.405	1.00146.94	JS10
ATOM	11233	C	HIS	11	217.788	157.596	19.620	1.00 81.73	JS10	ATOM	11286	CG	GLN	19	218.600	167.844	22.776	1.00146.94	JS10
ATOM	11234	O	HIS	11	218.302	158.681	19.354	1.00 81.73	JS10	ATOM	11287	CD	GLN	19	217.721	167.674	21.552	1.00146.94	JS10
ATOM	11235	N	LYS	12	216.564	157.495	20.125	1.00 83.89	JS10	ATOM	11288	OE1	GLN	19	216.651	167.063	21.616	1.00146.94	JS10
ATOM	11236	CA	LYS	12	215.788	158.692	20.426	1.00 83.89	JS10	ATOM	11289	NE2	GLN	19	218.170	168.214	20.424	1.00146.94	JS10
ATOM	11237	CB	LYS	12	214.342	158.509	19.974	1.00123.42	JS10	ATOM	11290	C	GLN	19	219.562	167.431	25.650	1.00 98.56	JS10
ATOM	11238	CG	LYS	12	214.215	158.176	18.499	1.00123.42	JS10	ATOM	11291	O	GLN	19	219.525	168.657	25.577	1.00 98.56	JS10
ATOM	11239	CD	LYS	12	212.777	158.284	18.020	1.00123.42	JS10	ATOM	11292	N	LYS	20	219.167	166.763	26.732	1.00142.34	JS10
ATOM	11240	CE	LYS	12	212.281	159.729	18.088	1.00123.42	JS10	ATOM	11293	CA	LYS	20	218.721	167.480	27.926	1.00142.34	JS10
ATOM	11241	NZ	LYS	12	210.849	159.880	17.686	1.00123.42	JS10	ATOM	11294	CB	LYS	20	218.062	166.545	28.950	1.00104.79	JS10
ATOM	11242	C	LYS	12	215.852	158.926	21.932	1.00 83.89	JS10	ATOM	11295	CG	LYS	20	216.786	165.846	28.533	1.00104.79	JS10
ATOM	11243	O	LYS	12	215.812	160.062	22.413	1.00 83.89	JS10	ATOM	11296	CD	LYS	20	216.177	165.139	29.746	1.00104.79	JS10
ATOM	11244	N	THR	13	215.973	157.826	22.665	1.00 86.88	JS10	ATOM	11297	CE	LYS	20	215.157	164.078	29.350	1.00104.79	JS10
ATOM	11245	CA	THR	13	216.062	157.852	24.111	1.00 86.88	JS10	ATOM	11298	NZ	LYS	20	215.793	162.816	28.851	1.00104.79	JS10
ATOM	11246	CB	THR	13	215.683	156.455	24.671	1.00 64.23	JS10	ATOM	11299	C	LYS	20	219.995	168.025	28.557	1.00142.34	JS10
ATOM	11247	OG1	THR	13	214.464	156.573	25.406	1.00 64.23	JS10	ATOM	11300	O	LYS	20	220.188	169.236	28.693	1.00142.34	JS10
ATOM	11248	CG2	THR	13	216.781	155.866	25.558	1.00 64.23	JS10	ATOM	11301	N	ILE	21	220.860	167.091	28.936	1.00 78.49	JS10
ATOM	11249	C	THR	13	217.474	158.299	24.527	1.00 86.88	JS10	ATOM	11302	CA	ILE	21	222.140	167.388	29.561	1.00 78.49	JS10
ATOM	11250	O	THR	13	217.772	158.502	25.714	1.00 86.88	JS10	ATOM	11303	CB	ILE	21	223.028	166.106	29.588	1.00 65.13	JS10
ATOM	11251	N	LEU	14	218.344	158.447	23.535	1.00111.13	JS10	ATOM	11304	CG2	ILE	21	224.451	166.437	29.996	1.00 65.13	JS10
ATOM	11252	CA	LEU	14	219.690	158.926	23.788	1.00111.13	JS10	ATOM	11305	CG1	ILE	21	222.432	165.086	30.562	1.00 65.13	JS10
ATOM	11253	CB	LEU	14	220.722	158.226	22.913	1.00 87.19	JS10	ATOM	11306	CD1	ILE	21	221.060	164.572	30.165	1.00 65.13	JS10
ATOM	11254	CG	LEU	14	221.532	157.099	23.550	1.00 87.19	JS10	ATOM	11307	C	ILE	21	222.877	168.531	28.856	1.00 78.49	JS10

ATOM	11308	O	ILE	21	223.682	169.232	29.470	1.00 78.49	JS10	ATOM	11361	C	SER	28	226.988	176.318	34.584	1.00109.32	JS10
ATOM	11309	N	VAL	22	222.595	168.733	27.574	1.00137.47	JS10	ATOM	11362	O	SER	28	227.735	176.338	35.569	1.00109.32	JS10
ATOM	11310	CA	VAL	22	223.257	169.801	26.834	1.00137.47	JS10	ATOM	11363	N	GLY	29	227.447	176.338	33.334	1.00151.90	JS10
ATOM	11311	CB	VAL	22	223.065	169.647	25.307	1.00141.16	JS10	ATOM	11364	CA	GLY	29	228.877	176.388	33.069	1.00151.90	JS10
ATOM	11312	CG1	VAL	22	224.104	170.486	24.565	1.00141.16	JS10	ATOM	11365	C	GLY	29	229.216	176.848	31.661	1.00151.90	JS10
ATOM	11313	CG2	VAL	22	223.177	168.188	24.906	1.00141.16	JS10	ATOM	11366	O	GLY	29	228.662	177.835	31.171	1.00151.90	JS10
ATOM	11314	C	VAL	22	222.733	171.174	27.253	1.00137.47	JS10	ATOM	11367	N	ALA	30	230.129	176.128	31.010	1.00144.01	JS10
ATOM	11315	O	VAL	22	223.515	172.083	27.520	1.00137.47	JS10	ATOM	11368	CA	ALA	30	230.554	176.448	29.647	1.00144.01	JS10
ATOM	11316	N	GLU	23	221.411	171.315	27.310	1.00124.06	JS10	ATOM	11369	CB	ALA	30	231.684	175.512	29.229	1.00 64.55	JS10
ATOM	11317	CA	GLU	23	220.779	172.575	27.697	1.00124.06	JS10	ATOM	11370	C	ALA	30	229.393	176.355	28.648	1.00144.01	JS10
ATOM	11318	CB	GLU	23	219.263	172.472	27.543	1.00159.90	JS10	ATOM	11371	O	ALA	30	228.233	176.549	29.015	1.00144.01	JS10
ATOM	11319	CG	GLU	23	218.800	172.155	26.140	1.00159.90	JS10	ATOM	11372	N	GLN	31	229.712	176.060	27.387	1.00157.76	JS10
ATOM	11320	CD	GLU	23	217.293	172.036	26.050	1.00159.90	JS10	ATOM	11373	CA	GLN	31	228.699	175.943	26.332	1.00157.76	JS10
ATOM	11321	OE1	GLU	23	216.599	173.045	26.301	1.00159.90	JS10	ATOM	11374	CB	GLN	31	229.094	176.769	25.103	1.00146.69	JS10
ATOM	11322	OE2	GLU	23	216.803	170.932	25.731	1.00159.90	JS10	ATOM	11375	CG	GLN	31	228.382	178.105	24.986	1.00146.69	JS10
ATOM	11323	C	GLU	23	221.102	172.962	29.139	1.00124.06	JS10	ATOM	11376	CD	GLN	31	228.677	178.801	23.673	1.00146.69	JS10
ATOM	11324	O	GLU	23	221.320	174.137	29.447	1.00124.06	JS10	ATOM	11377	OE1	GLN	31	228.462	178.242	22.596	1.00146.69	JS10
ATOM	11325	N	ALA	24	221.112	171.969	30.022	1.00141.87	JS10	ATOM	11378	NE2	GLN	31	229.173	180.029	23.755	1.00146.69	JS10
ATOM	11326	CA	ALA	24	221.410	172.195	31.431	1.00141.87	JS10	ATOM	11379	C	GLN	31	228.441	174.507	25.885	1.00157.76	JS10
ATOM	11327	CB	ALA	24	221.521	170.860	32.162	1.00 74.19	JS10	ATOM	11380	O	GLN	31	227.527	174.256	25.093	1.00157.76	JS10
ATOM	11328	C	ALA	24	222.709	172.977	31.576	1.00141.87	JS10	ATOM	11381	N	VAL	32	229.248	173.572	26.386	1.00124.67	JS10
ATOM	11329	O	ALA	24	222.694	174.184	31.817	1.00141.87	JS10	ATOM	11382	CA	VAL	32	229.098	172.165	26.036	1.00124.67	JS10
ATOM	11330	N	ALA	25	223.831	172.282	31.413	1.00120.69	JS10	ATOM	11383	CB	VAL	32	227.614	171.738	26.141	1.00 70.47	JS10
ATOM	11331	CA	ALA	25	225.149	172.892	31.530	1.00120.69	JS10	ATOM	11384	CG1	VAL	32	227.482	170.255	25.910	1.00 70.47	JS10
ATOM	11332	CB	ALA	25	226.210	171.898	31.082	1.00 70.72	JS10	ATOM	11385	CG2	VAL	32	227.057	172.119	27.505	1.00 70.47	JS10
ATOM	11333	C	ALA	25	225.325	174.225	30.782	1.00120.69	JS10	ATOM	11386	C	VAL	32	229.602	171.929	24.607	1.00124.67	JS10
ATOM	11334	O	ALA	25	226.045	175.101	31.260	1.00120.69	JS10	ATOM	11387	O	VAL	32	229.389	172.762	23.721	1.00124.67	JS10
ATOM	11335	N	ARG	26	224.681	174.385	29.623	1.00134.82	JS10	ATOM	11388	N	SER	33	230.270	170.794	24.390	1.00129.26	JS10
ATOM	11336	CA	ARG	26	224.788	175.629	28.840	1.00134.82	JS10	ATOM	11389	CA	SER	33	230.817	170.448	23.072	1.00129.26	JS10
ATOM	11337	CB	ARG	26	223.874	175.579	27.616	1.00124.49	JS10	ATOM	11390	CB	SER	33	231.909	169.376	23.199	1.00120.51	JS10
ATOM	11338	CG	ARG	26	224.310	174.629	26.526	1.00124.49	JS10	ATOM	11391	OG	SER	33	232.920	169.732	24.122	1.00120.51	JS10
ATOM	11339	CD	ARG	26	223.124	174.268	25.632	1.00124.49	JS10	ATOM	11392	C	SER	33	229.757	169.926	22.104	1.00129.26	JS10
ATOM	11340	NE	ARG	26	223.511	173.402	24.521	1.00124.49	JS10	ATOM	11393	O	SER	33	230.094	169.349	21.068	1.00129.26	JS10
ATOM	11341	CZ	ARG	26	224.193	173.811	23.453	1.00124.49	JS10	ATOM	11394	N	GLY	34	228.484	170.131	22.433	1.00136.33	JS10
ATOM	11342	NH1	ARG	26	224.567	175.083	23.340	1.00124.49	JS10	ATOM	11395	CA	GLY	34	227.417	169.646	21.576	1.00136.33	JS10
ATOM	11343	NH2	ARG	26	224.510	172.945	22.498	1.00124.49	JS10	ATOM	11396	C	GLY	34	227.445	168.131	21.601	1.00136.33	JS10
ATOM	11344	C	ARG	26	224.397	176.844	29.673	1.00134.82	JS10	ATOM	11397	O	GLY	34	228.513	167.543	21.437	1.00136.33	JS10
ATOM	11345	O	ARG	26	224.517	177.992	29.234	1.00134.82	JS10	ATOM	11398	N	PRO	35	226.301	167.459	21.806	1.00132.83	JS10
ATOM	11346	N	ARG	27	223.924	176.576	30.882	1.00130.83	JS10	ATOM	11399	CD	PRO	35	224.908	167.939	21.824	1.00108.39	JS10
ATOM	11347	CA	ARG	27	223.496	177.623	31.790	1.00130.83	JS10	ATOM	11400	CA	PRO	35	226.354	165.993	21.830	1.00132.83	JS10
ATOM	11348	CB	ARG	27	222.041	177.348	32.189	1.00124.27	JS10	ATOM	11401	CB	PRO	35	224.890	165.595	22.026	1.00108.39	JS10
ATOM	11349	CG	ARG	27	221.220	176.768	31.030	1.00124.27	JS10	ATOM	11402	CG	PRO	35	224.141	166.713	21.359	1.00108.39	JS10
ATOM	11350	CD	ARG	27	219.765	176.479	31.399	1.00124.27	JS10	ATOM	11403	C	PRO	35	226.971	165.399	20.563	1.00132.83	JS10
ATOM	11351	NE	ARG	27	219.025	175.900	30.274	1.00124.27	JS10	ATOM	11404	O	PRO	35	226.404	165.495	19.474	1.00132.83	JS10
ATOM	11352	CZ	ARG	27	217.699	175.791	30.217	1.00124.27	JS10	ATOM	11405	N	ILE	36	228.149	164.804	20.716	1.00 83.49	JS10
ATOM	11353	NH1	ARG	27	216.948	176.224	31.220	1.00124.27	JS10	ATOM	11406	CA	ILE	36	228.841	164.185	19.595	1.00 83.49	JS10
ATOM	11354	NH2	ARG	27	217.115	175.249	29.156	1.00124.27	JS10	ATOM	11407	CB	ILE	36	230.363	164.195	19.801	1.00 93.43	JS10
ATOM	11355	C	ARG	27	224.411	177.637	33.023	1.00130.83	JS10	ATOM	11408	CG2	ILE	36	230.908	165.603	19.627	1.00 93.43	JS10
ATOM	11356	O	ARG	27	224.913	178.684	33.438	1.00130.83	JS10	ATOM	11409	CG1	ILE	36	230.694	163.646	21.190	1.00 93.43	JS10
ATOM	11357	N	SER	28	224.642	176.451	33.574	1.00109.32	JS10	ATOM	11410	CD1	ILE	36	232.165	163.746	21.563	1.00 93.43	JS10
ATOM	11358	CA	SER	28	225.462	176.263	34.766	1.00109.32	JS10	ATOM	11411	C	ILE	36	228.367	162.742	19.495	1.00 83.49	JS10
ATOM	11359	CB	SER	28	225.078	174.934	35.401	1.00102.35	JS10	ATOM	11412	O	ILE	36	228.330	162.019	20.498	1.00 83.49	JS10
ATOM	11360	OG	SER	28	225.219	173.869	34.477	1.00102.35	JS10	ATOM	11413	N	PRO	37	227.993	162.306	18.279	1.00113.45	JS10

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ATOM  11414  CD  PRO  37     228.069 163.092  17.034  1.00 65.14      JS10
ATOM  11415  CA  PRO  37     227.509 160.947  18.007  1.00113.45      JS10
ATOM  11416  CB  PRO  37     227.340 160.935  16.482  1.00 65.14      JS10
ATOM  11417  CG  PRO  37     228.269 162.016  16.008  1.00 65.14      JS10
ATOM  11418  C   PRO  37     228.399 159.814  18.513  1.00113.45      JS10
ATOM  11419  O   PRO  37     228.450 159.554  19.710  1.00113.45      JS10
ATOM  11420  N   LEU  38     229.079 159.152  17.583  1.00 90.93      JS10
ATOM  11421  CA  LEU  38     229.982 158.018  17.834  1.00 90.93      JS10
ATOM  11422  CB  LEU  38     230.229 157.769  19.330  1.00 80.51      JS10
ATOM  11423  CG  LEU  38     231.251 158.651  20.066  1.00 80.51      JS10
ATOM  11424  CD1 LEU  38     231.618 157.990  21.390  1.00 80.51      JS10
ATOM  11425  CD2 LEU  38     232.505 158.826  19.228  1.00 80.51      JS10
ATOM  11426  C   LEU  38     229.479 156.719  17.196  1.00 90.93      JS10
ATOM  11427  O   LEU  38     228.304 156.359  17.326  1.00 90.93      JS10
ATOM  11428  N   PRO  39     230.377 155.995  16.500  1.00102.73      JS10
ATOM  11429  CD  PRO  39     231.841 156.135  16.551  1.00 70.83      JS10
ATOM  11430  CA  PRO  39     230.020 154.740  15.843  1.00102.73      JS10
ATOM  11431  CB  PRO  39     231.384 154.112  15.547  1.00 70.83      JS10
ATOM  11432  CG  PRO  39     232.280 154.701  16.582  1.00 70.83      JS10
ATOM  11433  C   PRO  39     229.134 153.860  16.712  1.00102.73      JS10
ATOM  11434  O   PRO  39     229.317 153.780  17.928  1.00102.73      JS10
ATOM  11435  N   THR  40     228.179 153.197  16.070  1.00 66.31      JS10
ATOM  11436  CA  THR  40     227.232 152.335  16.765  1.00 66.31      JS10
ATOM  11437  CB  THR  40     225.832 152.557  16.196  1.00 74.87      JS10
ATOM  11438  OG1 THR  40     225.663 153.949  15.902  1.00 74.87      JS10
ATOM  11439  CG2 THR  40     224.774 152.107  17.187  1.00 74.87      JS10
ATOM  11440  C   THR  40     227.579 150.860  16.600  1.00 66.31      JS10
ATOM  11441  O   THR  40     227.377 150.310  15.527  1.00 66.31      JS10
ATOM  11442  N   ARG  41     228.084 150.202  17.637  1.00 95.33      JS10
ATOM  11443  CA  ARG  41     228.416 148.783  17.489  1.00 95.33      JS10
ATOM  11444  CB  ARG  41     229.297 148.302  18.646  1.00102.81      JS10
ATOM  11445  CG  ARG  41     230.740 148.778  18.526  1.00102.81      JS10
ATOM  11446  CD  ARG  41     231.681 147.996  19.432  1.00102.81      JS10
ATOM  11447  NE  ARG  41     233.077 148.376  19.214  1.00102.81      JS10
ATOM  11448  CZ  ARG  41     234.116 147.819  19.835  1.00102.81      JS10
ATOM  11449  NH1 ARG  41     233.925 146.848  20.723  1.00102.81      JS10
ATOM  11450  NH2 ARG  41     235.351 148.233  19.566  1.00102.81      JS10
ATOM  11451  C   ARG  41     227.171 147.901  17.373  1.00 95.33      JS10
ATOM  11452  O   ARG  41     226.275 147.967  18.222  1.00 95.33      JS10
ATOM  11453  N   VAL  42     227.119 147.082  16.316  1.00 62.74      JS10
ATOM  11454  CA  VAL  42     225.972 146.195  16.080  1.00 62.74      JS10
ATOM  11455  CB  VAL  42     225.449 146.314  14.634  1.00 57.55      JS10
ATOM  11456  CG1 VAL  42     224.184 145.498  14.490  1.00 57.55      JS10
ATOM  11457  CG2 VAL  42     225.191 147.775  14.272  1.00 57.55      JS10
ATOM  11458  C   VAL  42     226.260 144.717  16.337  1.00 62.74      JS10
ATOM  11459  O   VAL  42     227.379 144.249  16.160  1.00 62.74      JS10
ATOM  11460  N   ARG  43     225.230 143.990  16.745  1.00 87.83      JS10
ATOM  11461  CA  ARG  43     225.340 142.566  17.023  1.00 87.83      JS10
ATOM  11462  CB  ARG  43     224.922 142.284  18.455  1.00 88.86      JS10
ATOM  11463  CG  ARG  43     226.017 142.422  19.452  1.00 88.86      JS10
ATOM  11464  CD  ARG  43     226.965 141.254  19.333  1.00 88.86      JS10
ATOM  11465  NE  ARG  43     227.866 141.169  20.484  1.00 88.86      JS10
ATOM  11466  CZ  ARG  43     227.450 141.024  21.739  1.00 88.86      JS10
ATOM  11467  NH1 ARG  43     226.149 140.949  21.990  1.00 88.86      JS10
ATOM  11468  NH2 ARG  43     228.330 140.954  22.732  1.00 88.86      JS10
ATOM  11469  C   ARG  43     224.438 141.762  16.100  1.00 87.83      JS10
ATOM  11470  O   ARG  43     223.318 142.179  15.810  1.00 87.83      JS10
ATOM  11471  N   ARG  44     224.925 140.614  15.636  1.00 64.69      JS10
ATOM  11472  CA  ARG  44     224.122 139.750  14.776  1.00 64.69      JS10
ATOM  11473  CB  ARG  44     224.763 139.542  13.400  1.00 81.95      JS10
ATOM  11474  CG  ARG  44     225.048 140.793  12.594  1.00 81.95      JS10
ATOM  11475  CD  ARG  44     223.842 141.684  12.445  1.00 81.95      JS10
ATOM  11476  NE  ARG  44     224.032 142.632  11.353  1.00 81.95      JS10
ATOM  11477  CZ  ARG  44     223.312 143.737  11.184  1.00 81.95      JS10
ATOM  11478  NH1 ARG  44     222.347 144.052  12.041  1.00 81.95      JS10
ATOM  11479  NH2 ARG  44     223.548 144.523  10.141  1.00 81.95      JS10
ATOM  11480  C   ARG  44     223.962 138.386  15.427  1.00 64.69      JS10
ATOM  11481  O   ARG  44     224.878 137.870  16.079  1.00 64.69      JS10
ATOM  11482  N   PHE  45     222.772 137.827  15.262  1.00 93.96      JS10
ATOM  11483  CA  PHE  45     222.450 136.507  15.765  1.00 93.96      JS10
ATOM  11484  CB  PHE  45     221.541 136.579  16.983  1.00 80.43      JS10
ATOM  11485  CG  PHE  45     222.032 137.501  18.042  1.00 80.43      JS10
ATOM  11486  CD1 PHE  45     221.781 138.869  17.959  1.00 80.43      JS10
ATOM  11487  CD2 PHE  45     222.765 137.012  19.121  1.00 80.43      JS10
ATOM  11488  CE1 PHE  45     222.253 139.745  18.941  1.00 80.43      JS10
ATOM  11489  CE2 PHE  45     223.246 137.876  20.112  1.00 80.43      JS10
ATOM  11490  CZ  PHE  45     222.988 139.246  20.020  1.00 80.43      JS10
ATOM  11491  C   PHE  45     221.697 135.901  14.605  1.00 93.96      JS10
ATOM  11492  O   PHE  45     220.551 136.268  14.337  1.00 93.96      JS10
ATOM  11493  N   THR  46     222.356 135.009  13.880  1.00 53.58      JS10
ATOM  11494  CA  THR  46     221.708 134.382  12.752  1.00 53.58      JS10
ATOM  11495  CB  THR  46     222.643 134.308  11.558  1.00 58.34      JS10
ATOM  11496  OG1 THR  46     222.932 135.647  11.122  1.00 58.34      JS10
ATOM  11497  CG2 THR  46     221.998 133.524  10.426  1.00 58.34      JS10
ATOM  11498  C   THR  46     221.293 133.021  13.236  1.00 53.58      JS10
ATOM  11499  O   THR  46     222.128 132.187  13.585  1.00 53.58      JS10
ATOM  11500  N   VAL  47     219.977 132.821  13.252  1.00 76.19      JS10
ATOM  11501  CA  VAL  47     219.376 131.609  13.772  1.00 76.19      JS10
ATOM  11502  CB  VAL  47     218.573 131.982  15.022  1.00 53.16      JS10
ATOM  11503  CG1 VAL  47     218.066 130.739  15.718  1.00 53.16      JS10
ATOM  11504  CG2 VAL  47     219.437 132.815  15.941  1.00 53.16      JS10
ATOM  11505  C   VAL  47     218.465 130.800  12.849  1.00 76.19      JS10
ATOM  11506  O   VAL  47     217.451 131.297  12.388  1.00 76.19      JS10
ATOM  11507  N   ILE  48     218.818 129.545  12.603  1.00 44.83      JS10
ATOM  11508  CA  ILE  48     217.987 128.668  11.784  1.00 44.83      JS10
ATOM  11509  CB  ILE  48     218.355 127.199  12.058  1.00 33.26      JS10
ATOM  11510  CG2 ILE  48     217.255 126.258  11.555  1.00 33.26      JS10
ATOM  11511  CG1 ILE  48     219.731 126.905  11.465  1.00 33.26      JS10
ATOM  11512  CD1 ILE  48     220.229 125.525  11.795  1.00 33.26      JS10
ATOM  11513  C   ILE  48     216.539 128.894  12.227  1.00 44.83      JS10
ATOM  11514  O   ILE  48     216.238 128.740  13.407  1.00 44.83      JS10
ATOM  11515  N   ARG  49     215.645 129.245  11.302  1.00 57.64      JS10
ATOM  11516  CA  ARG  49     214.249 129.517  11.653  1.00 57.64      JS10
ATOM  11517  CB  ARG  49     213.435 129.851  10.420  1.00 34.60      JS10
ATOM  11518  CG  ARG  49     213.261 131.316  10.221  1.00 34.60      JS10
ATOM  11519  CD  ARG  49     213.172 131.617   8.772  1.00 34.60      JS10
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ATOM	11520	NE	ARG	49	213.125	133.046	8.518	1.00	34.60	JS10	ATOM	11573	NZ	LYS	55	223.680	123.952	2.810	1.00	96.45	JS10
ATOM	11521	CZ	ARG	49	212.060	133.793	8.780	1.00	34.60	JS10	ATOM	11574	C	LYS	55	219.462	125.928	6.684	1.00	47.52	JS10
ATOM	11522	NH1	ARG	49	210.971	133.227	9.308	1.00	34.60	JS10	ATOM	11575	O	LYS	55	220.303	126.776	6.965	1.00	47.52	JS10
ATOM	11523	NH2	ARG	49	212.074	135.092	8.493	1.00	34.60	JS10	ATOM	11576	N	ASP	56	218.486	126.165	5.814	1.00	44.66	JS10
ATOM	11524	C	ARG	49	213.484	128.483	12.444	1.00	57.64	JS10	ATOM	11577	CA	ASP	56	218.457	127.441	5.112	1.00	44.66	JS10
ATOM	11525	O	ARG	49	212.944	128.794	13.505	1.00	57.64	JS10	ATOM	11578	CB	ASP	56	218.426	127.199	3.609	1.00	64.44	JS10
ATOM	11526	N	GLY	50	213.392	127.262	11.951	1.00	36.37	JS10	ATOM	11579	CG	ASP	56	219.496	126.232	3.154	1.00	64.44	JS10
ATOM	11527	CA	GLY	50	212.644	126.289	12.726	1.00	36.37	JS10	ATOM	11580	OD1	ASP	56	220.634	126.681	2.869	1.00	64.44	JS10
ATOM	11528	C	GLY	50	213.553	125.360	13.491	1.00	36.37	JS10	ATOM	11581	OD2	ASP	56	219.190	125.015	3.099	1.00	64.44	JS10
ATOM	11529	O	GLY	50	214.778	125.473	13.376	1.00	36.37	JS10	ATOM	11582	C	ASP	56	217.365	128.434	5.442	1.00	44.66	JS10
ATOM	11530	N	PRO	51	213.005	124.464	14.323	1.00	48.53	JS10	ATOM	11583	O	ASP	56	216.831	129.069	4.537	1.00	44.66	JS10
ATOM	11531	CD	PRO	51	211.610	124.315	14.767	1.00	34.96	JS10	ATOM	11584	N	SER	57	217.040	128.606	6.717	1.00	77.95	JS10
ATOM	11532	CA	PRO	51	213.894	123.548	15.045	1.00	48.53	JS10	ATOM	11585	CA	SER	57	216.005	129.564	7.084	1.00	77.95	JS10
ATOM	11533	CB	PRO	51	213.012	123.021	16.155	1.00	34.96	JS10	ATOM	11586	CB	SER	57	215.033	128.902	8.045	1.00	111.33	JS10
ATOM	11534	CG	PRO	51	211.646	122.978	15.498	1.00	34.96	JS10	ATOM	11587	OG	SER	57	214.379	127.810	7.419	1.00	111.33	JS10
ATOM	11535	C	PRO	51	214.212	122.469	14.019	1.00	48.53	JS10	ATOM	11588	C	SER	57	216.654	130.808	7.703	1.00	77.95	JS10
ATOM	11536	O	PRO	51	214.000	122.671	12.825	1.00	48.53	JS10	ATOM	11589	O	SER	57	216.421	131.940	7.261	1.00	77.95	JS10
ATOM	11537	N	PHE	52	214.689	121.322	14.468	1.00	59.83	JS10	ATOM	11590	N	ARG	58	217.444	130.604	8.747	1.00	93.83	JS10
ATOM	11538	CA	PHE	52	215.014	120.214	13.563	1.00	59.83	JS10	ATOM	11591	CA	ARG	58	218.181	131.703	9.352	1.00	93.83	JS10
ATOM	11539	CB	PHE	52	213.960	119.133	13.686	1.00	68.43	JS10	ATOM	11592	CB	ARG	58	219.144	132.258	8.300	1.00	66.81	JS10
ATOM	11540	CG	PHE	52	214.464	117.786	13.339	1.00	68.43	JS10	ATOM	11593	CG	ARG	58	220.425	131.444	8.168	1.00	66.81	JS10
ATOM	11541	CD1	PHE	52	215.130	117.019	14.288	1.00	68.43	JS10	ATOM	11594	CD	ARG	58	220.149	129.956	8.223	1.00	66.81	JS10
ATOM	11542	CD2	PHE	52	214.286	117.277	12.069	1.00	68.43	JS10	ATOM	11595	NE	ARG	58	221.238	129.206	8.848	1.00	66.81	JS10
ATOM	11543	CE1	PHE	52	215.612	115.757	13.979	1.00	68.43	JS10	ATOM	11596	CZ	ARG	58	222.386	128.892	8.252	1.00	66.81	JS10
ATOM	11544	CE2	PHE	52	214.763	116.017	11.745	1.00	68.43	JS10	ATOM	11597	NH1	ARG	58	222.623	129.257	6.999	1.00	66.81	JS10
ATOM	11545	CZ	PHE	52	215.428	115.254	12.707	1.00	68.43	JS10	ATOM	11598	NH2	ARG	58	223.300	128.195	8.910	1.00	66.81	JS10
ATOM	11546	C	PHE	52	215.201	120.524	12.062	1.00	59.83	JS10	ATOM	11599	C	ARG	58	217.523	132.875	10.094	1.00	93.83	JS10
ATOM	11547	O	PHE	52	214.226	120.786	11.339	1.00	59.83	JS10	ATOM	11600	O	ARG	58	217.747	133.015	11.296	1.00	93.83	JS10
ATOM	11548	N	LYS	53	216.461	120.460	11.615	1.00	60.03	JS10	ATOM	11601	N	GLU	59	216.748	133.736	9.429	1.00	52.09	JS10
ATOM	11549	CA	LYS	53	216.890	120.697	10.229	1.00	60.03	JS10	ATOM	11602	CA	GLU	59	216.168	134.888	10.163	1.00	52.09	JS10
ATOM	11550	CB	LYS	53	216.552	119.490	9.349	1.00	54.18	JS10	ATOM	11603	CB	GLU	59	215.057	134.422	11.122	1.00	69.20	JS10
ATOM	11551	CG	LYS	53	215.089	119.215	9.077	1.00	54.18	JS10	ATOM	11604	CG	GLU	59	214.718	135.437	12.215	1.00	69.20	JS10
ATOM	11552	CD	LYS	53	214.986	117.857	8.378	1.00	54.18	JS10	ATOM	11605	CD	GLU	59	213.306	135.998	12.114	1.00	69.20	JS10
ATOM	11553	CE	LYS	53	213.559	117.480	7.965	1.00	54.18	JS10	ATOM	11606	OE1	GLU	59	212.362	135.339	12.598	1.00	69.20	JS10
ATOM	11554	NZ	LYS	53	213.012	118.333	6.872	1.00	54.18	JS10	ATOM	11607	OE2	GLU	59	213.140	137.103	11.547	1.00	69.20	JS10
ATOM	11555	C	LYS	53	216.442	121.980	9.539	1.00	60.03	JS10	ATOM	11608	C	GLU	59	217.244	135.669	10.978	1.00	52.09	JS10
ATOM	11556	O	LYS	53	216.201	122.981	10.197	1.00	60.03	JS10	ATOM	11609	O	GLU	59	217.804	135.158	11.959	1.00	52.09	JS10
ATOM	11557	N	HIS	54	216.357	121.946	8.210	1.00	53.70	JS10	ATOM	11610	N	HIS	60	217.503	136.912	10.575	1.00	57.06	JS10
ATOM	11558	CA	HIS	54	215.976	123.114	7.409	1.00	53.70	JS10	ATOM	11611	CA	HIS	60	218.505	137.770	11.222	1.00	57.06	JS10
ATOM	11559	CB	HIS	54	214.674	123.743	7.925	1.00	68.98	JS10	ATOM	11612	CB	HIS	60	219.222	138.593	10.154	1.00	69.32	JS10
ATOM	11560	CG	HIS	54	213.466	122.867	7.774	1.00	68.98	JS10	ATOM	11613	CG	HIS	60	220.253	137.821	9.400	1.00	69.32	JS10
ATOM	11561	CD2	HIS	54	212.513	122.503	8.664	1.00	68.98	JS10	ATOM	11614	CD2	HIS	60	220.937	136.700	9.729	1.00	69.32	JS10
ATOM	11562	ND1	HIS	54	213.111	122.284	6.578	1.00	68.98	JS10	ATOM	11615	ND1	HIS	60	220.696	138.190	8.147	1.00	69.32	JS10
ATOM	11563	CE1	HIS	54	211.994	121.599	6.735	1.00	68.98	JS10	ATOM	11616	CE1	HIS	60	221.606	137.325	7.736	1.00	69.32	JS10
ATOM	11564	NE2	HIS	54	211.610	121.717	7.992	1.00	68.98	JS10	ATOM	11617	NE2	HIS	60	221.771	136.413	8.678	1.00	69.32	JS10
ATOM	11565	C	HIS	54	217.087	124.174	7.423	1.00	53.70	JS10	ATOM	11618	C	HIS	60	218.037	138.722	12.332	1.00	57.06	JS10
ATOM	11566	O	HIS	54	216.818	125.377	7.486	1.00	53.70	JS10	ATOM	11619	O	HIS	60	217.023	139.411	12.193	1.00	57.06	JS10
ATOM	11567	N	LYS	55	218.332	123.707	7.349	1.00	47.52	JS10	ATOM	11620	N	PHE	61	218.818	138.768	13.413	1.00	70.25	JS10
ATOM	11568	CA	LYS	55	219.533	124.555	7.360	1.00	47.52	JS10	ATOM	11621	CA	PHE	61	218.551	139.619	14.575	1.00	70.25	JS10
ATOM	11569	CB	LYS	55	220.738	123.793	6.746	1.00	96.45	JS10	ATOM	11622	CB	PHE	61	218.203	138.763	15.789	1.00	57.50	JS10
ATOM	11570	CG	LYS	55	220.564	123.376	5.240	1.00	96.45	JS10	ATOM	11623	CG	PHE	61	216.890	138.068	15.684	1.00	57.50	JS10
ATOM	11571	CD	LYS	55	221.893	123.025	4.455	1.00	96.45	JS10	ATOM	11624	CD1	PHE	61	216.787	136.712	15.994	1.00	57.50	JS10
ATOM	11572	CE	LYS	55	222.593	124.261	3.806	1.00	96.45	JS10	ATOM	11625	CD2	PHE	61	215.747	138.768	15.306	1.00	57.50	JS10

ATOM	11626	CE1	PHE	61	215.557	136.053	15.930	1.00	57.50	JS10	ATOM	11679	CG	ASN	67	228.307	154.155	21.725	1.00	96.86	JS10
ATOM	11627	CE2	PHE	61	214.518	138.132	15.238	1.00	57.50	JS10	ATOM	11680	OD1	ASN	67	227.928	153.481	22.682	1.00	96.86	JS10
ATOM	11628	CZ	PHE	61	214.418	136.766	15.551	1.00	57.50	JS10	ATOM	11681	ND2	ASN	67	228.835	153.613	20.634	1.00	96.86	JS10
ATOM	11629	C	PHE	61	219.772	140.454	14.945	1.00	70.25	JS10	ATOM	11682	C	ASN	67	226.684	157.657	21.564	1.00	97.81	JS10
ATOM	11630	O	PHE	61	220.876	139.918	15.069	1.00	70.25	JS10	ATOM	11683	O	ASN	67	226.453	158.084	20.431	1.00	97.81	JS10
ATOM	11631	N	GLU	62	219.574	141.756	15.143	1.00	72.21	JS10	ATOM	11684	N	ARG	68	226.917	158.450	22.614	1.00	100.25	JS10
ATOM	11632	CA	GLU	62	220.671	142.644	15.533	1.00	72.21	JS10	ATOM	11685	CA	ARG	68	226.932	159.921	22.553	1.00	100.25	JS10
ATOM	11633	CB	GLU	62	221.028	143.582	14.381	1.00	82.82	JS10	ATOM	11686	CB	ARG	68	225.528	160.481	22.798	1.00	127.57	JS10
ATOM	11634	CG	GLU	62	219.842	144.288	13.759	1.00	82.82	JS10	ATOM	11687	CG	ARG	68	224.443	159.905	21.900	1.00	127.57	JS10
ATOM	11635	CD	GLU	62	219.843	145.794	13.994	1.00	82.82	JS10	ATOM	11688	CD	ARG	68	224.648	160.296	20.451	1.00	127.57	JS10
ATOM	11636	OE1	GLU	62	219.689	146.223	15.160	1.00	82.82	JS10	ATOM	11689	NE	ARG	68	223.603	159.750	19.590	1.00	127.57	JS10
ATOM	11637	OE2	GLU	62	219.998	146.552	13.009	1.00	82.82	JS10	ATOM	11690	CZ	ARG	68	223.503	160.001	18.288	1.00	127.57	JS10
ATOM	11638	C	GLU	62	220.359	143.466	16.791	1.00	72.21	JS10	ATOM	11691	NH1	ARG	68	224.387	160.793	17.688	1.00	127.57	JS10
ATOM	11639	O	GLU	62	219.265	144.021	16.922	1.00	72.21	JS10	ATOM	11692	NH2	ARG	68	222.515	159.468	17.582	1.00	127.57	JS10
ATOM	11640	N	LEU	63	221.320	143.525	17.716	1.00	74.47	JS10	ATOM	11693	C	ARG	68	227.875	160.417	23.660	1.00	100.25	JS10
ATOM	11641	CA	LEU	63	221.182	144.296	18.961	1.00	74.47	JS10	ATOM	11694	O	ARG	68	227.932	159.809	24.730	1.00	100.25	JS10
ATOM	11642	CB	LEU	63	221.511	143.413	20.173	1.00	70.78	JS10	ATOM	11695	N	LEU	69	228.602	161.512	23.418	1.00	147.46	JS10
ATOM	11643	CG	LEU	63	221.535	144.033	21.580	1.00	70.78	JS10	ATOM	11696	CA	LEU	69	229.537	162.025	24.428	1.00	147.46	JS10
ATOM	11644	CD1	LEU	63	221.186	142.973	22.614	1.00	70.78	JS10	ATOM	11697	CB	LEU	69	230.978	161.949	23.919	1.00	124.09	JS10
ATOM	11645	CD2	LEU	63	222.900	144.616	21.879	1.00	70.78	JS10	ATOM	11698	CG	LEU	69	231.601	160.580	23.642	1.00	124.09	JS10
ATOM	11646	C	LEU	63	222.140	145.489	18.918	1.00	74.47	JS10	ATOM	11699	CD1	LEU	69	232.993	160.569	24.252	1.00	124.09	JS10
ATOM	11647	O	LEU	63	223.219	145.437	19.496	1.00	74.47	JS10	ATOM	11700	CD2	LEU	69	230.760	159.452	24.227	1.00	124.09	JS10
ATOM	11648	N	ARG	64	221.740	146.561	18.237	1.00	83.69	JS10	ATOM	11701	C	LEU	69	229.299	163.432	24.976	1.00	147.46	JS10
ATOM	11649	CA	ARG	64	222.587	147.744	18.086	1.00	83.69	JS10	ATOM	11702	O	LEU	69	229.256	163.629	26.195	1.00	147.46	JS10
ATOM	11650	CB	ARG	64	222.118	148.547	16.874	1.00	128.28	JS10	ATOM	11703	N	VAL	70	229.180	164.417	24.092	1.00	156.69	JS10
ATOM	11651	CG	ARG	64	220.610	148.668	16.763	1.00	128.28	JS10	ATOM	11704	CA	VAL	70	228.945	165.788	24.535	1.00	156.69	JS10
ATOM	11652	CD	ARG	64	220.233	149.546	15.590	1.00	128.28	JS10	ATOM	11705	CB	VAL	70	227.886	165.808	25.659	1.00	101.91	JS10
ATOM	11653	NE	ARG	64	220.912	149.128	14.366	1.00	128.28	JS10	ATOM	11706	CG1	VAL	70	227.598	167.219	26.083	1.00	101.91	JS10
ATOM	11654	CZ	ARG	64	220.871	149.806	13.223	1.00	128.28	JS10	ATOM	11707	CG2	VAL	70	226.617	165.119	25.179	1.00	101.91	JS10
ATOM	11655	NH1	ARG	64	220.183	150.939	13.146	1.00	128.28	JS10	ATOM	11708	C	VAL	70	230.227	166.487	25.017	1.00	156.69	JS10
ATOM	11656	NH2	ARG	64	221.514	149.354	12.154	1.00	128.28	JS10	ATOM	11709	O	VAL	70	230.968	167.038	24.204	1.00	156.69	JS10
ATOM	11657	C	ARG	64	222.702	148.665	19.299	1.00	83.69	JS10	ATOM	11710	N	ASP	71	230.475	166.460	26.330	1.00	92.33	JS10
ATOM	11658	O	ARG	64	221.697	149.163	19.812	1.00	83.69	JS10	ATOM	11711	CA	ASP	71	231.662	167.079	26.957	1.00	92.33	JS10
ATOM	11659	N	THR	65	223.945	148.895	19.731	1.00	126.70	JS10	ATOM	11712	CB	ASP	71	232.884	166.989	26.033	1.00	79.89	JS10
ATOM	11660	CA	THR	65	224.278	149.756	20.878	1.00	126.70	JS10	ATOM	11713	CG	ASP	71	233.958	166.060	26.581	1.00	79.89	JS10
ATOM	11661	CB	THR	65	225.458	149.168	21.683	1.00	61.91	JS10	ATOM	11714	OD1	ASP	71	233.602	165.031	27.210	1.00	79.89	JS10
ATOM	11662	OG1	THR	65	225.058	147.940	22.305	1.00	61.91	JS10	ATOM	11715	OD2	ASP	71	235.159	166.349	26.375	1.00	79.89	JS10
ATOM	11663	CG2	THR	65	225.936	150.159	22.735	1.00	61.91	JS10	ATOM	11716	C	ASP	71	231.510	168.531	27.445	1.00	92.33	JS10
ATOM	11664	C	THR	65	224.702	151.151	20.406	1.00	126.70	JS10	ATOM	11717	O	ASP	71	231.326	169.467	26.656	1.00	92.33	JS10
ATOM	11665	O	THR	65	225.690	151.283	19.685	1.00	126.70	JS10	ATOM	11718	N	ILE	72	231.599	168.696	28.765	1.00	124.18	JS10
ATOM	11666	N	HIS	66	223.983	152.188	20.828	1.00	95.18	JS10	ATOM	11719	CA	ILE	72	231.485	170.002	29.414	1.00	124.18	JS10
ATOM	11667	CA	HIS	66	224.314	153.551	20.406	1.00	95.18	JS10	ATOM	11720	CB	ILE	72	230.444	169.999	30.558	1.00	102.33	JS10
ATOM	11668	CB	HIS	66	223.033	154.297	20.045	1.00	71.55	JS10	ATOM	11721	CG2	ILE	72	230.272	171.410	31.085	1.00	102.33	JS10
ATOM	11669	CG	HIS	66	222.183	153.578	19.046	1.00	71.55	JS10	ATOM	11722	CG1	ILE	72	229.101	169.458	30.073	1.00	102.33	JS10
ATOM	11670	CD2	HIS	66	221.632	152.340	19.072	1.00	71.55	JS10	ATOM	11723	CD1	ILE	72	228.121	169.187	31.202	1.00	102.33	JS10
ATOM	11671	ND1	HIS	66	221.796	154.146	17.850	1.00	71.55	JS10	ATOM	11724	C	ILE	72	232.820	170.369	30.050	1.00	124.18	JS10
ATOM	11672	CE1	HIS	66	221.041	153.290	17.184	1.00	71.55	JS10	ATOM	11725	O	ILE	72	233.040	170.098	31.229	1.00	124.18	JS10
ATOM	11673	NE2	HIS	66	220.926	152.187	17.903	1.00	71.55	JS10	ATOM	11726	N	ILE	73	233.717	170.966	29.275	1.00	144.47	JS10
ATOM	11674	C	HIS	66	225.122	154.350	21.439	1.00	95.18	JS10	ATOM	11727	CA	ILE	73	235.002	171.365	29.826	1.00	144.47	JS10
ATOM	11675	O	HIS	66	225.047	154.082	22.640	1.00	95.18	JS10	ATOM	11728	CB	ILE	73	236.124	171.370	28.731	1.00	149.17	JS10
ATOM	11676	N	ASN	67	225.886	155.336	20.964	1.00	97.81	JS10	ATOM	11729	CG2	ILE	73	237.267	172.309	29.128	1.00	149.17	JS10
ATOM	11677	CA	ASN	67	226.731	156.147	21.842	1.00	97.81	JS10	ATOM	11730	CG1	ILE	73	236.654	169.940	28.526	1.00	149.17	JS10
ATOM	11678	CB	ASN	67	228.185	155.670	21.733	1.00	96.86	JS10	ATOM	11731	CD1	ILE	73	237.886	169.833	27.628	1.00	149.17	JS10

ATOM	11732	C	ILE	73	234.837	172.744	30.463	1.00144.47	JS10	ATOM	11785	CA	ILE	80	227.483	169.703	38.710	1.00 91.04	JS10
ATOM	11733	O	ILE	73	234.111	173.598	29.941	1.00144.47	JS10	ATOM	11786	CB	ILE	80	228.659	169.501	39.696	1.00112.37	JS10
ATOM	11734	N	ASN	74	235.495	172.941	31.606	1.00125.89	JS10	ATOM	11787	CG2	ILE	80	228.442	168.239	40.530	1.00112.37	JS10
ATOM	11735	CA	ASN	74	235.426	174.196	32.352	1.00125.89	JS10	ATOM	11788	CG1	ILE	80	229.973	169.414	38.911	1.00112.37	JS10
ATOM	11736	CB	ASN	74	235.957	175.359	31.499	1.00167.43	JS10	ATOM	11789	CD1	ILE	80	231.211	169.250	39.781	1.00112.37	JS10
ATOM	11737	CG	ASN	74	237.427	175.185	31.123	1.00167.43	JS10	ATOM	11790	C	ILE	80	226.167	169.769	39.490	1.00 91.04	JS10
ATOM	11738	OD1	ASN	74	238.265	174.877	31.974	1.00167.43	JS10	ATOM	11791	O	ILE	80	225.799	168.842	40.222	1.00 91.04	JS10
ATOM	11739	ND2	ASN	74	237.744	175.392	29.848	1.00167.43	JS10	ATOM	11792	N	GLU	81	225.469	170.888	39.305	1.00118.06	JS10
ATOM	11740	C	ASN	74	233.992	174.470	32.826	1.00125.89	JS10	ATOM	11793	CA	GLU	81	224.185	171.170	39.936	1.00118.06	JS10
ATOM	11741	O	ASN	74	233.273	175.309	32.272	1.00125.89	JS10	ATOM	11794	CB	GLU	81	224.115	172.658	40.301	1.00157.57	JS10
ATOM	11742	N	PRO	75	233.554	173.727	33.854	1.00127.05	JS10	ATOM	11795	CG	GLU	81	222.767	173.147	40.791	1.00157.57	JS10
ATOM	11743	CD	PRO	75	234.158	172.425	34.198	1.00108.69	JS10	ATOM	11796	CD	GLU	81	222.708	173.267	42.296	1.00157.57	JS10
ATOM	11744	CA	PRO	75	232.227	173.830	34.457	1.00127.05	JS10	ATOM	11797	OE1	GLU	81	223.041	172.277	42.982	1.00157.57	JS10
ATOM	11745	CB	PRO	75	231.730	172.408	34.359	1.00108.69	JS10	ATOM	11798	OE2	GLU	81	222.328	174.351	42.790	1.00157.57	JS10
ATOM	11746	CG	PRO	75	232.972	171.651	34.821	1.00108.69	JS10	ATOM	11799	C	GLU	81	223.066	170.821	38.955	1.00118.06	JS10
ATOM	11747	C	PRO	75	232.357	174.265	35.917	1.00127.05	JS10	ATOM	11800	O	GLU	81	222.202	169.984	39.251	1.00118.06	JS10
ATOM	11748	O	PRO	75	233.388	174.028	36.553	1.00127.05	JS10	ATOM	11801	N	GLN	82	223.094	171.467	37.789	1.00146.77	JS10
ATOM	11749	N	ASN	76	231.311	174.877	36.455	1.00 96.37	JS10	ATOM	11802	CA	GLN	82	222.096	171.232	36.751	1.00146.77	JS10
ATOM	11750	CA	ASN	76	231.348	175.318	37.839	1.00 96.37	JS10	ATOM	11803	CB	GLN	82	222.269	172.236	35.603	1.00124.93	JS10
ATOM	11751	CB	ASN	76	231.530	176.840	37.913	1.00169.94	JS10	ATOM	11804	CG	GLN	82	221.854	173.660	35.961	1.00124.93	JS10
ATOM	11752	CG	ASN	76	232.980	177.271	37.742	1.00169.94	JS10	ATOM	11805	CD	GLN	82	221.749	174.589	34.748	1.00124.93	JS10
ATOM	11753	OD1	ASN	76	233.850	176.895	38.530	1.00169.94	JS10	ATOM	11806	OE1	GLN	82	221.062	174.282	33.771	1.00124.93	JS10
ATOM	11754	ND2	ASN	76	233.242	178.070	36.714	1.00169.94	JS10	ATOM	11807	NE2	GLN	82	222.420	175.737	34.818	1.00124.93	JS10
ATOM	11755	C	ASN	76	230.100	174.926	38.616	1.00 96.37	JS10	ATOM	11808	C	GLN	82	222.165	169.804	36.209	1.00146.77	JS10
ATOM	11756	O	ASN	76	228.988	175.095	38.122	1.00 96.37	JS10	ATOM	11809	O	GLN	82	221.327	169.397	35.402	1.00146.77	JS10
ATOM	11757	N	ARG	77	230.321	174.413	39.829	1.00126.38	JS10	ATOM	11810	N	LEU	83	223.163	169.047	36.660	1.00141.04	JS10
ATOM	11758	CA	ARG	77	229.282	173.995	40.779	1.00126.38	JS10	ATOM	11811	CA	LEU	83	223.336	167.661	36.227	1.00141.04	JS10
ATOM	11759	CB	ARG	77	229.359	174.875	42.033	1.00168.02	JS10	ATOM	11812	CB	LEU	83	224.749	167.437	35.655	1.00109.34	JS10
ATOM	11760	CG	ARG	77	230.387	174.421	43.055	1.00168.02	JS10	ATOM	11813	CG	LEU	83	225.305	168.329	34.536	1.00109.34	JS10
ATOM	11761	CD	ARG	77	229.771	173.420	44.017	1.00168.02	JS10	ATOM	11814	CD1	LEU	83	226.680	167.802	34.128	1.00109.34	JS10
ATOM	11762	NE	ARG	77	230.774	172.662	44.758	1.00168.02	JS10	ATOM	11815	CD2	LEU	83	224.361	168.350	33.340	1.00109.34	JS10
ATOM	11763	CZ	ARG	77	231.612	171.796	44.199	1.00168.02	JS10	ATOM	11816	C	LEU	83	223.113	166.684	37.384	1.00141.04	JS10
ATOM	11764	NH1	ARG	77	231.572	171.578	42.889	1.00168.02	JS10	ATOM	11817	O	LEU	83	222.011	166.170	37.573	1.00141.04	JS10
ATOM	11765	NH2	ARG	77	232.483	171.137	44.950	1.00168.02	JS10	ATOM	11818	N	MET	84	224.175	166.455	38.154	1.00145.18	JS10
ATOM	11766	C	ARG	77	227.841	173.964	40.281	1.00126.38	JS10	ATOM	11819	CA	MET	84	224.185	165.532	39.291	1.00145.18	JS10
ATOM	11767	O	ARG	77	227.143	172.971	40.483	1.00126.38	JS10	ATOM	11820	CB	MET	84	225.227	165.985	40.319	1.00128.26	JS10
ATOM	11768	N	LYS	78	227.386	175.061	39.675	1.00140.38	JS10	ATOM	11821	CG	MET	84	225.795	164.837	41.129	1.00128.26	JS10
ATOM	11769	CA	LYS	78	226.032	175.141	39.129	1.00140.38	JS10	ATOM	11822	SD	MET	84	226.462	163.525	40.055	1.00128.26	JS10
ATOM	11770	CB	LYS	78	225.782	176.532	38.528	1.00108.32	JS10	ATOM	11823	CE	MET	84	225.059	162.367	39.968	1.00128.26	JS10
ATOM	11771	CG	LYS	78	224.367	176.745	37.984	1.00108.32	JS10	ATOM	11824	C	MET	84	222.855	165.290	39.996	1.00145.18	JS10
ATOM	11772	CD	LYS	78	223.309	176.403	39.027	1.00108.32	JS10	ATOM	11825	O	MET	84	222.492	164.147	40.269	1.00145.18	JS10
ATOM	11773	CE	LYS	78	223.496	177.218	40.297	1.00108.32	JS10	ATOM	11826	N	ALA	85	222.132	166.360	40.297	1.00149.14	JS10
ATOM	11774	NZ	LYS	78	222.590	176.752	41.378	1.00108.32	JS10	ATOM	11827	CA	ALA	85	220.851	166.226	40.974	1.00149.14	JS10
ATOM	11775	C	LYS	78	225.880	174.068	38.045	1.00140.38	JS10	ATOM	11828	CB	ALA	85	220.493	167.540	41.665	1.00109.21	JS10
ATOM	11776	O	LYS	78	224.776	173.578	37.772	1.00140.38	JS10	ATOM	11829	C	ALA	85	219.747	165.820	39.994	1.00149.14	JS10
ATOM	11777	N	THR	79	227.006	173.721	37.423	1.00174.22	JS10	ATOM	11830	O	ALA	85	218.944	164.925	40.274	1.00149.14	JS10
ATOM	11778	CA	THR	79	227.037	172.699	36.386	1.00174.22	JS10	ATOM	11831	N	ALA	86	219.725	166.478	38.840	1.00142.94	JS10
ATOM	11779	CB	THR	79	228.418	172.652	35.692	1.00148.95	JS10	ATOM	11832	CA	ALA	86	218.727	166.214	37.807	1.00142.94	JS10
ATOM	11780	OG1	THR	79	228.733	173.949	35.161	1.00148.95	JS10	ATOM	11833	CB	ALA	86	218.596	167.454	36.913	1.00 95.88	JS10
ATOM	11781	CG2	THR	79	228.409	171.624	34.558	1.00148.95	JS10	ATOM	11834	C	ALA	86	219.066	164.965	36.967	1.00142.94	JS10
ATOM	11782	C	THR	79	226.747	171.362	37.061	1.00174.22	JS10	ATOM	11835	O	ALA	86	220.230	164.579	36.867	1.00142.94	JS10
ATOM	11783	O	THR	79	225.722	170.734	36.784	1.00174.22	JS10	ATOM	11836	N	ALA	87	218.049	164.336	36.371	1.00158.54	JS10
ATOM	11784	N	ILE	80	227.642	170.949	37.958	1.00 91.04	JS10	ATOM	11837	CA	ALA	87	218.253	163.129	35.554	1.00158.54	JS10

ATOM	11838	CB	ALA	87	218.687	161.958	36.458	1.00100.78	JS10	ATOM	11891	OE1	GLU	95	230.398	155.841	34.112	1.00135.30	JS10
ATOM	11839	C	ALA	87	217.009	162.731	34.731	1.00158.54	JS10	ATOM	11892	OE2	GLU	95	228.454	154.793	34.113	1.00135.30	JS10
ATOM	11840	O	ALA	87	215.936	163.324	34.898	1.00158.54	JS10	ATOM	11893	C	GLU	95	229.736	158.855	32.056	1.00117.98	JS10
ATOM	11841	N	ALA	88	217.150	161.728	33.855	1.00158.44	JS10	ATOM	11894	O	GLU	95	229.585	159.619	31.102	1.00117.98	JS10
ATOM	11842	CA	ALA	88	216.029	161.285	33.015	1.00158.44	JS10	ATOM	11895	N	ILE	96	230.529	159.120	33.088	1.00133.14	JS10
ATOM	11843	CB	ALA	88	215.640	162.411	32.062	1.00 80.54	JS10	ATOM	11896	CA	ILE	96	231.305	160.346	33.143	1.00133.14	JS10
ATOM	11844	C	ALA	88	216.233	159.986	32.210	1.00158.44	JS10	ATOM	11897	CB	ILE	96	230.531	161.476	33.855	1.00 94.09	JS10
ATOM	11845	O	ALA	88	217.330	159.423	32.174	1.00158.44	JS10	ATOM	11898	CG2	ILE	96	231.162	162.814	33.511	1.00 94.09	JS10
ATOM	11846	N	ALA	89	215.147	159.534	31.572	1.00 89.16	JS10	ATOM	11899	CG1	ILE	96	229.063	161.477	33.420	1.00 94.09	JS10
ATOM	11847	CA	ALA	89	215.103	158.331	30.726	1.00 89.16	JS10	ATOM	11900	CD1	ILE	96	228.192	162.448	34.182	1.00 94.09	JS10
ATOM	11848	CB	ALA	89	215.879	158.593	29.424	1.00 39.09	JS10	ATOM	11901	C	ILE	96	232.591	160.102	33.913	1.00133.14	JS10
ATOM	11849	C	ALA	89	215.574	157.018	31.374	1.00 89.16	JS10	ATOM	11902	O	ILE	96	232.630	159.270	34.821	1.00133.14	JS10
ATOM	11850	O	ALA	89	216.323	157.029	32.354	1.00 89.16	JS10	ATOM	11903	N	LYS	97	233.638	160.831	33.537	1.00155.82	JS10
ATOM	11851	N	THR	90	215.127	155.889	30.816	1.00 97.44	JS10	ATOM	11904	CA	LYS	97	234.943	160.738	34.186	1.00155.82	JS10
ATOM	11852	CA	THR	90	215.488	154.561	31.330	1.00 97.44	JS10	ATOM	11905	CB	LYS	97	235.755	159.566	33.620	1.00145.37	JS10
ATOM	11853	CB	THR	90	214.266	153.701	31.635	1.00 71.59	JS10	ATOM	11906	CG	LYS	97	235.334	158.183	34.113	1.00145.37	JS10
ATOM	11854	OG1	THR	90	213.426	154.373	32.578	1.00 71.59	JS10	ATOM	11907	CD	LYS	97	236.273	157.108	33.575	1.00145.37	JS10
ATOM	11855	CG2	THR	90	214.706	152.362	32.212	1.00 71.59	JS10	ATOM	11908	CE	LYS	97	235.898	155.724	34.076	1.00145.37	JS10
ATOM	11856	C	THR	90	216.339	153.721	30.390	1.00 97.44	JS10	ATOM	11909	NZ	LYS	97	236.839	154.689	33.563	1.00145.37	JS10
ATOM	11857	O	THR	90	217.217	152.983	30.837	1.00 97.44	JS10	ATOM	11910	C	LYS	97	235.706	162.045	33.967	1.00155.82	JS10
ATOM	11858	N	GLY	91	216.055	153.799	29.095	1.00126.99	JS10	ATOM	11911	O	LYS	97	236.804	162.047	33.409	1.00155.82	JS10
ATOM	11859	CA	GLY	91	216.820	153.027	28.130	1.00126.99	JS10	ATOM	11912	N	ALA	98	235.115	163.151	34.414	1.00149.46	JS10
ATOM	11860	C	GLY	91	218.198	153.625	27.928	1.00126.99	JS10	ATOM	11913	CA	ALA	98	235.708	164.481	34.268	1.00149.46	JS10
ATOM	11861	O	GLY	91	218.802	153.478	26.861	1.00126.99	JS10	ATOM	11914	CB	ALA	98	234.985	165.467	35.183	1.00 97.56	JS10
ATOM	11862	N	VAL	92	218.692	154.296	28.966	1.00 74.15	JS10	ATOM	11915	C	ALA	98	237.212	164.515	34.548	1.00149.46	JS10
ATOM	11863	CA	VAL	92	219.994	154.943	28.924	1.00 74.15	JS10	ATOM	11916	O	ALA	98	237.731	163.544	35.139	1.00149.46	JS10
ATOM	11864	CB	VAL	92	219.852	156.476	28.852	1.00 48.18	JS10	ATOM	11917	OXT	ALA	98	237.854	165.522	34.176	1.00 97.56	JS10
ATOM	11865	CG1	VAL	92	221.217	157.089	28.588	1.00 48.18	JS10	ATOM	11918	CB	MET	1	156.554	113.657	-84.469	1.00132.72	FS6
ATOM	11866	CG2	VAL	92	218.844	156.885	27.771	1.00 48.18	JS10	ATOM	11919	CG	MET	1	156.091	112.724	-85.554	1.00132.72	FS6
ATOM	11867	C	VAL	92	220.859	154.613	30.142	1.00 74.15	JS10	ATOM	11920	SD	MET	1	156.417	113.461	-87.153	1.00132.72	FS6
ATOM	11868	O	VAL	92	220.347	154.354	31.235	1.00 74.15	JS10	ATOM	11921	CE	MET	1	155.084	114.664	-87.238	1.00132.72	FS6
ATOM	11869	N	GLU	93	222.175	154.619	29.935	1.00 90.27	JS10	ATOM	11922	C	MET	1	156.964	114.124	-82.082	1.00111.13	FS6
ATOM	11870	CA	GLU	93	223.139	154.345	30.993	1.00 90.27	JS10	ATOM	11923	O	MET	1	156.292	114.584	-81.161	1.00111.13	FS6
ATOM	11871	CB	GLU	93	223.643	152.911	30.926	1.00128.85	JS10	ATOM	11924	N	MET	1	154.932	112.869	-82.780	1.00111.13	FS6
ATOM	11872	CG	GLU	93	224.607	152.570	32.040	1.00128.85	JS10	ATOM	11925	CA	MET	1	156.372	113.120	-83.056	1.00111.13	FS6
ATOM	11873	CD	GLU	93	225.346	151.276	31.785	1.00128.85	JS10	ATOM	11926	N	ARG	2	158.231	114.459	-82.302	1.00 75.51	FS6
ATOM	11874	OE1	GLU	93	226.188	151.246	30.863	1.00128.85	JS10	ATOM	11927	CA	ARG	2	158.945	115.416	-81.467	1.00 75.51	FS6
ATOM	11875	OE2	GLU	93	225.082	150.285	32.500	1.00128.85	JS10	ATOM	11928	CB	ARG	2	159.655	114.697	-80.305	1.00 60.31	FS6
ATOM	11876	C	GLU	93	224.313	155.286	30.798	1.00 90.27	JS10	ATOM	11929	CG	ARG	2	158.718	114.097	-79.257	1.00 60.31	FS6
ATOM	11877	O	GLU	93	225.246	154.988	30.045	1.00 90.27	JS10	ATOM	11930	CD	ARG	2	159.475	113.400	-78.135	1.00 60.31	FS6
ATOM	11878	N	ILE	94	224.254	156.421	31.488	1.00154.55	JS10	ATOM	11931	NE	ARG	2	158.558	112.654	-77.271	1.00 60.31	FS6
ATOM	11879	CA	ILE	94	225.285	157.447	31.403	1.00154.55	JS10	ATOM	11932	CZ	ARG	2	158.885	111.578	-76.549	1.00 60.31	FS6
ATOM	11880	CB	ILE	94	224.885	158.735	32.141	1.00 86.07	JS10	ATOM	11933	NH1	ARG	2	160.123	111.095	-76.567	1.00 60.31	FS6
ATOM	11881	CG2	ILE	94	225.759	159.891	31.664	1.00 86.07	JS10	ATOM	11934	NH2	ARG	2	157.959	110.964	-75.822	1.00 60.31	FS6
ATOM	11882	CG1	ILE	94	223.407	159.036	31.912	1.00 86.07	JS10	ATOM	11935	C	ARG	2	159.965	116.155	-82.325	1.00 75.51	FS6
ATOM	11883	CD1	ILE	94	222.912	160.277	32.626	1.00 86.07	JS10	ATOM	11936	O	ARG	2	160.580	115.566	-83.216	1.00 75.51	FS6
ATOM	11884	C	ILE	94	226.602	157.031	32.014	1.00154.55	JS10	ATOM	11937	N	ARG	3	160.128	117.447	-82.056	1.00 70.92	FS6
ATOM	11885	O	ILE	94	226.678	156.097	32.815	1.00154.55	JS10	ATOM	11938	CA	ARG	3	161.069	118.292	-82.792	1.00 70.92	FS6
ATOM	11886	N	GLU	95	227.638	157.762	31.624	1.00117.98	JS10	ATOM	11939	CB	ARG	3	160.628	119.752	-82.676	1.00165.05	FS6
ATOM	11887	CA	GLU	95	228.977	157.553	32.130	1.00117.98	JS10	ATOM	11940	CG	ARG	3	160.951	120.619	-83.873	1.00165.05	FS6
ATOM	11888	CB	GLU	95	229.704	156.463	31.349	1.00135.30	JS10	ATOM	11941	CD	ARG	3	160.574	122.063	-83.589	1.00165.05	FS6
ATOM	11889	CG	GLU	95	229.537	155.119	32.009	1.00135.30	JS10	ATOM	11942	NE	ARG	3	160.570	122.887	-84.795	1.00165.05	FS6
ATOM	11890	CD	GLU	95	229.458	155.256	33.521	1.00135.30	JS10	ATOM	11943	CZ	ARG	3	160.433	124.210	-84.796	1.00165.05	FS6

ATOM	11944	NH1	ARG	3	160.292	124.865	-83.651	1.00	165.05	FS6	ATOM	11997	C	VAL	9	181.525	115.909	-88.162	1.00	72.74	FS6
ATOM	11945	NH2	ARG	3	160.430	124.880	-85.941	1.00	165.05	FS6	ATOM	11998	O	VAL	9	181.838	114.851	-87.604	1.00	72.74	FS6
ATOM	11946	C	ARG	3	162.484	118.127	-82.211	1.00	70.92	FS6	ATOM	11999	N	LEU	10	181.827	116.180	-89.428	1.00	75.81	FS6
ATOM	11947	O	ARG	3	162.709	118.346	-81.015	1.00	70.92	FS6	ATOM	12000	CA	LEU	10	182.562	115.231	-90.247	1.00	75.81	FS6
ATOM	11948	N	TYR	4	163.438	117.745	-83.054	1.00	67.90	FS6	ATOM	12001	CB	LEU	10	181.696	114.787	-91.432	1.00	69.18	FS6
ATOM	11949	CA	TYR	4	164.816	117.547	-82.601	1.00	67.90	FS6	ATOM	12002	CG	LEU	10	180.756	115.851	-91.995	1.00	69.18	FS6
ATOM	11950	CB	TYR	4	165.243	116.095	-82.831	1.00	89.40	FS6	ATOM	12003	CD1	LEU	10	181.566	116.960	-92.610	1.00	69.18	FS6
ATOM	11951	CG	TYR	4	164.414	115.082	-82.080	1.00	89.40	FS6	ATOM	12004	CD2	LEU	10	179.835	115.234	-93.028	1.00	69.18	FS6
ATOM	11952	CD1	TYR	4	164.540	114.932	-80.700	1.00	89.40	FS6	ATOM	12005	C	LEU	10	183.891	115.795	-90.727	1.00	75.81	FS6
ATOM	11953	CE1	TYR	4	163.780	113.990	-80.007	1.00	89.40	FS6	ATOM	12006	O	LEU	10	184.111	117.009	-90.698	1.00	75.81	FS6
ATOM	11954	CD2	TYR	4	163.503	114.267	-82.752	1.00	89.40	FS6	ATOM	12007	N	ASN	11	184.767	114.890	-91.155	1.00	101.98	FS6
ATOM	11955	CE2	TYR	4	162.738	113.325	-82.069	1.00	89.40	FS6	ATOM	12008	CA	ASN	11	186.104	115.221	-91.638	1.00	101.98	FS6
ATOM	11956	CZ	TYR	4	162.883	113.189	-80.699	1.00	89.40	FS6	ATOM	12009	CB	ASN	11	186.642	114.070	-92.485	1.00	97.72	FS6
ATOM	11957	OH	TYR	4	162.141	112.243	-80.032	1.00	89.40	FS6	ATOM	12010	CG	ASN	11	188.137	114.138	-92.664	1.00	97.72	FS6
ATOM	11958	C	TYR	4	165.824	118.466	-83.284	1.00	67.90	FS6	ATOM	12011	OD1	ASN	11	188.689	115.189	-92.995	1.00	97.72	FS6
ATOM	11959	O	TYR	4	165.464	119.366	-84.034	1.00	67.90	FS6	ATOM	12012	ND2	ASN	11	188.807	113.012	-92.450	1.00	97.72	FS6
ATOM	11960	N	GLU	5	167.096	118.226	-82.995	1.00	76.64	FS6	ATOM	12013	C	ASN	11	186.182	116.518	-92.447	1.00	101.98	FS6
ATOM	11961	CA	GLU	5	168.194	118.984	-83.569	1.00	76.64	FS6	ATOM	12014	O	ASN	11	185.412	116.729	-93.384	1.00	101.98	FS6
ATOM	11962	CB	GLU	5	168.602	120.140	-82.663	1.00	68.31	FS6	ATOM	12015	N	PRO	12	187.133	117.398	-92.099	1.00	83.25	FS6
ATOM	11963	CG	GLU	5	167.851	121.411	-82.963	1.00	68.31	FS6	ATOM	12016	CD	PRO	12	188.015	117.271	-90.923	1.00	62.12	FS6
ATOM	11964	CD	GLU	5	168.201	122.531	-82.011	1.00	68.31	FS6	ATOM	12017	CA	PRO	12	187.339	118.688	-92.771	1.00	83.25	FS6
ATOM	11965	OE1	GLU	5	169.401	122.675	-81.692	1.00	68.31	FS6	ATOM	12018	CB	PRO	12	187.981	119.532	-91.682	1.00	62.12	FS6
ATOM	11966	OE2	GLU	5	167.284	123.275	-81.591	1.00	68.31	FS6	ATOM	12019	CG	PRO	12	188.883	118.528	-91.018	1.00	62.12	FS6
ATOM	11967	C	GLU	5	169.356	118.036	-83.749	1.00	76.64	FS6	ATOM	12020	C	PRO	12	188.227	118.601	-94.015	1.00	83.25	FS6
ATOM	11968	O	GLU	5	169.856	117.455	-82.785	1.00	76.64	FS6	ATOM	12021	O	PRO	12	188.731	119.616	-94.501	1.00	83.25	FS6
ATOM	11969	N	VAL	6	169.761	117.860	-85.000	1.00	71.96	FS6	ATOM	12022	N	ASN	13	188.416	117.391	-94.529	1.00	113.16	FS6
ATOM	11970	CA	VAL	6	170.864	116.978	-85.313	1.00	71.96	FS6	ATOM	12023	CA	ASN	13	189.261	117.204	-95.697	1.00	113.16	FS6
ATOM	11971	CB	VAL	6	170.590	116.141	-86.567	1.00	44.17	FS6	ATOM	12024	CB	ASN	13	190.419	116.273	-95.352	1.00	80.37	FS6
ATOM	11972	CG1	VAL	6	171.735	115.169	-86.784	1.00	44.17	FS6	ATOM	12025	CG	ASN	13	191.228	116.774	-94.182	1.00	80.37	FS6
ATOM	11973	CG2	VAL	6	169.283	115.400	-86.428	1.00	44.17	FS6	ATOM	12026	OD1	ASN	13	191.580	117.953	-94.118	1.00	80.37	FS6
ATOM	11974	C	VAL	6	172.115	117.789	-85.570	1.00	71.96	FS6	ATOM	12027	ND2	ASN	13	191.536	115.882	-93.248	1.00	80.37	FS6
ATOM	11975	O	VAL	6	172.085	118.764	-86.314	1.00	71.96	FS6	ATOM	12028	C	ASN	13	188.520	116.669	-96.911	1.00	113.16	FS6
ATOM	11976	N	ASN	7	173.204	117.382	-84.930	1.00	63.91	FS6	ATOM	12029	O	ASN	13	189.074	116.609	-98.009	1.00	113.16	FS6
ATOM	11977	CA	ASN	7	174.495	118.023	-85.097	1.00	63.91	FS6	ATOM	12030	N	LEU	14	187.268	116.283	-96.722	1.00	102.11	FS6
ATOM	11978	CB	ASN	7	175.052	118.481	-83.759	1.00	65.39	FS6	ATOM	12031	CA	LEU	14	186.497	115.756	-97.832	1.00	102.11	FS6
ATOM	11979	CG	ASN	7	174.278	119.630	-83.184	1.00	65.39	FS6	ATOM	12032	CB	LEU	14	185.076	115.430	-97.371	1.00	83.33	FS6
ATOM	11980	OD1	ASN	7	174.537	120.791	-83.498	1.00	65.39	FS6	ATOM	12033	CG	LEU	14	185.004	114.419	-96.220	1.00	83.33	FS6
ATOM	11981	ND2	ASN	7	173.300	119.317	-82.350	1.00	65.39	FS6	ATOM	12034	CD1	LEU	14	183.574	113.928	-96.063	1.00	83.33	FS6
ATOM	11982	C	ASN	7	175.375	116.938	-85.663	1.00	63.91	FS6	ATOM	12035	CD2	LEU	14	185.926	113.243	-96.498	1.00	83.33	FS6
ATOM	11983	O	ASN	7	175.338	115.795	-85.204	1.00	63.91	FS6	ATOM	12036	C	LEU	14	186.472	116.757	-98.981	1.00	102.11	FS6
ATOM	11984	N	ILE	8	176.150	117.279	-86.679	1.00	64.31	FS6	ATOM	12037	O	LEU	14	186.252	117.949	-98.765	1.00	102.11	FS6
ATOM	11985	CA	ILE	8	177.029	116.304	-87.282	1.00	64.31	FS6	ATOM	12038	N	ASP	15	186.726	116.274	-100.196	1.00	104.46	FS6
ATOM	11986	CB	ILE	8	176.392	115.680	-88.518	1.00	44.69	FS6	ATOM	12039	CA	ASP	15	186.715	117.140	-101.369	1.00	104.46	FS6
ATOM	11987	CG2	ILE	8	177.347	114.698	-89.132	1.00	44.69	FS6	ATOM	12040	CB	ASP	15	187.442	116.481	-102.553	1.00	131.30	FS6
ATOM	11988	CG1	ILE	8	175.103	114.959	-88.126	1.00	44.69	FS6	ATOM	12041	CG	ASP	15	186.808	115.167	-102.987	1.00	131.30	FS6
ATOM	11989	CD1	ILE	8	174.393	114.283	-89.280	1.00	44.69	FS6	ATOM	12042	OD1	ASP	15	185.617	115.164	-103.360	1.00	131.30	FS6
ATOM	11990	C	ILE	8	178.334	116.958	-87.667	1.00	64.31	FS6	ATOM	12043	OD2	ASP	15	187.510	114.134	-102.965	1.00	131.30	FS6
ATOM	11991	O	ILE	8	178.352	117.917	-88.431	1.00	64.31	FS6	ATOM	12044	C	ASP	15	185.270	117.444	-101.735	1.00	104.46	FS6
ATOM	11992	N	VAL	9	179.426	116.446	-87.117	1.00	72.74	FS6	ATOM	12045	O	ASP	15	184.354	116.740	-101.301	1.00	104.46	FS6
ATOM	11993	CA	VAL	9	180.741	116.983	-87.419	1.00	72.74	FS6	ATOM	12046	N	GLN	16	185.071	118.494	-102.525	1.00	89.76	FS6
ATOM	11994	CB	VAL	9	181.500	117.360	-86.144	1.00	56.61	FS6	ATOM	12047	CA	GLN	16	183.732	118.906	-102.932	1.00	89.76	FS6
ATOM	11995	CG1	VAL	9	182.502	118.448	-86.450	1.00	56.61	FS6	ATOM	12048	CB	GLN	16	183.818	119.772	-104.191	1.00	141.78	FS6
ATOM	11996	CG2	VAL	9	180.530	117.808	-85.077	1.00	56.61	FS6	ATOM	12049	CG	GLN	16	182.490	120.384	-104.589	1.00	141.78	FS6

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ATOM  12050  CD  GLN  16     181.760 120.999-103.406  1.00141.78      FS6
ATOM  12051  OE1 GLN  16     182.288 121.878-102.720  1.00141.78      FS6
ATOM  12052  NE2 GLN  16     180.538 120.534-103.158  1.00141.78      FS6
ATOM  12053  C   GLN  16     182.751 117.744-103.163  1.00 89.76      FS6
ATOM  12054  O   GLN  16     181.577 117.814-102.777  1.00 89.76      FS6
ATOM  12055  N   SER  17     183.239 116.677-103.786  1.00102.84      FS6
ATOM  12056  CA  SER  17     182.412 115.511-104.071  1.00102.84      FS6
ATOM  12057  CB  SER  17     183.059 114.680-105.178  1.00 98.81      FS6
ATOM  12058  OG  SER  17     183.343 115.485-106.308  1.00 98.81      FS6
ATOM  12059  C   SER  17     182.213 114.648-102.829  1.00102.84      FS6
ATOM  12060  O   SER  17     181.083 114.435-102.390  1.00102.84      FS6
ATOM  12061  N   GLN  18     183.318 114.151-102.277  1.00103.75      FS6
ATOM  12062  CA  GLN  18     183.293 113.311-101.083  1.00103.75      FS6
ATOM  12063  CB  GLN  18     184.689 113.220-100.466  1.00 94.76      FS6
ATOM  12064  CG  GLN  18     185.632 112.220-101.117  1.00 94.76      FS6
ATOM  12065  CD  GLN  18     187.035 112.267-100.513  1.00 94.76      FS6
ATOM  12066  OE1 GLN  18     187.827 111.342-100.685  1.00 94.76      FS6
ATOM  12067  NE2 GLN  18     187.346 113.352 -99.811  1.00 94.76      FS6
ATOM  12068  C   GLN  18     182.335 113.861-100.040  1.00103.75      FS6
ATOM  12069  O   GLN  18     181.541 113.117 -99.461  1.00103.75      FS6
ATOM  12070  N   LEU  19     182.423 115.167 -99.800  1.00 93.91      FS6
ATOM  12071  CA  LEU  19     181.570 115.828 -98.818  1.00 93.91      FS6
ATOM  12072  CB  LEU  19     181.965 117.307 -98.682  1.00 66.67      FS6
ATOM  12073  CG  LEU  19     181.175 118.206 -97.714  1.00 66.67      FS6
ATOM  12074  CD1 LEU  19     181.988 119.457 -97.434  1.00 66.67      FS6
ATOM  12075  CD2 LEU  19     179.796 118.566 -98.291  1.00 66.67      FS6
ATOM  12076  C   LEU  19     180.101 115.718 -99.205  1.00 93.91      FS6
ATOM  12077  O   LEU  19     179.279 115.213 -98.436  1.00 93.91      FS6
ATOM  12078  N   ALA  20     179.779 116.195-100.401  1.00103.08      FS6
ATOM  12079  CA  ALA  20     178.413 116.157-100.896  1.00103.08      FS6
ATOM  12080  CB  ALA  20     178.356 116.793-102.277  1.00113.24      FS6
ATOM  12081  C   ALA  20     177.846 114.728-100.933  1.00103.08      FS6
ATOM  12082  O   ALA  20     176.631 114.538-101.020  1.00103.08      FS6
ATOM  12083  N   LEU  21     178.724 113.730-100.868  1.00 73.57      FS6
ATOM  12084  CA  LEU  21     178.295 112.333-100.872  1.00 73.57      FS6
ATOM  12085  CB  LEU  21     179.429 111.412-101.325  1.00 77.83      FS6
ATOM  12086  CG  LEU  21     179.281 109.943-100.894  1.00 77.83      FS6
ATOM  12087  CD1 LEU  21     178.013 109.345-101.483  1.00 77.83      FS6
ATOM  12088  CD2 LEU  21     180.506 109.152-101.326  1.00 77.83      FS6
ATOM  12089  C   LEU  21     177.855 111.908 -99.477  1.00 73.57      FS6
ATOM  12090  O   LEU  21     176.875 111.174 -99.320  1.00 73.57      FS6
ATOM  12091  N   GLU  22     178.598 112.352 -98.465  1.00 95.19      FS6
ATOM  12092  CA  GLU  22     178.274 112.013 -97.086  1.00 95.19      FS6
ATOM  12093  CB  GLU  22     179.391 112.483 -96.147  1.00 98.87      FS6
ATOM  12094  CG  GLU  22     180.722 111.747 -96.355  1.00 98.87      FS6
ATOM  12095  CD  GLU  22     180.652 110.258 -96.010  1.00 98.87      FS6
ATOM  12096  OE1 GLU  22     179.743 109.563 -96.509  1.00 98.87      FS6
ATOM  12097  OE2 GLU  22     181.513 109.773 -95.246  1.00 98.87      FS6
ATOM  12098  C   GLU  22     176.945 112.656 -96.716  1.00 95.19      FS6
ATOM  12099  O   GLU  22     176.157 112.082 -95.961  1.00 95.19      FS6
ATOM  12100  N   LYS  23     176.701 113.845 -97.264  1.00 80.97      FS6
ATOM  12101  CA  LYS  23     175.456 114.565 -97.021  1.00 80.97      FS6
ATOM  12102  CB  LYS  23     175.501 115.958 -97.650  1.00 70.93      FS6
ATOM  12103  CG  LYS  23     176.550 116.877 -97.066  1.00 70.93      FS6
ATOM  12104  CD  LYS  23     176.409 118.293 -97.612  1.00 70.93      FS6
ATOM  12105  CE  LYS  23     175.033 118.884 -97.297  1.00 70.93      FS6
ATOM  12106  NZ  LYS  23     174.876 120.303 -97.761  1.00 70.93      FS6
ATOM  12107  C   LYS  23     174.327 113.764 -97.651  1.00 80.97      FS6
ATOM  12108  O   LYS  23     173.193 113.773 -97.173  1.00 80.97      FS6
ATOM  12109  N   GLU  24     174.652 113.082 -98.741  1.00 90.32      FS6
ATOM  12110  CA  GLU  24     173.684 112.256 -99.436  1.00 90.32      FS6
ATOM  12111  CB  GLU  24     174.352 111.550-100.618  1.00143.04      FS6
ATOM  12112  CG  GLU  24     173.570 110.374-101.181  1.00143.04      FS6
ATOM  12113  CD  GLU  24     172.181 110.762-101.639  1.00143.04      FS6
ATOM  12114  OE1 GLU  24     172.069 111.643-102.515  1.00143.04      FS6
ATOM  12115  OE2 GLU  24     171.202 110.185-101.122  1.00143.04      FS6
ATOM  12116  C   GLU  24     173.163 111.232 -98.441  1.00 90.32      FS6
ATOM  12117  O   GLU  24     171.992 111.260 -98.061  1.00 90.32      FS6
ATOM  12118  N   ILE  25     174.051 110.344 -98.008  1.00 97.14      FS6
ATOM  12119  CA  ILE  25     173.708 109.290 -97.057  1.00 97.14      FS6
ATOM  12120  CB  ILE  25     174.983 108.581 -96.574  1.00 83.45      FS6
ATOM  12121  CG2 ILE  25     174.621 107.384 -95.692  1.00 83.45      FS6
ATOM  12122  CG1 ILE  25     175.798 108.139 -97.789  1.00 83.45      FS6
ATOM  12123  CD1 ILE  25     177.120 107.496 -97.454  1.00 83.45      FS6
ATOM  12124  C   ILE  25     172.921 109.806 -95.846  1.00 97.14      FS6
ATOM  12125  O   ILE  25     172.005 109.141 -95.360  1.00 97.14      FS6
ATOM  12126  N   ILE  26     173.289 110.989 -95.362  1.00 74.14      FS6
ATOM  12127  CA  ILE  26     172.615 111.609 -94.226  1.00 74.14      FS6
ATOM  12128  CB  ILE  26     173.296 112.950 -93.861  1.00 56.75      FS6
ATOM  12129  CG2 ILE  26     172.355 113.804 -93.013  1.00 56.75      FS6
ATOM  12130  CG1 ILE  26     174.625 112.684 -93.142  1.00 56.75      FS6
ATOM  12131  CD1 ILE  26     175.396 113.940 -92.796  1.00 56.75      FS6
ATOM  12132  C   ILE  26     171.147 111.871 -94.578  1.00 74.14      FS6
ATOM  12133  O   ILE  26     170.228 111.324 -93.952  1.00 74.14      FS6
ATOM  12134  N   GLN  27     170.945 112.722 -95.582  1.00 80.57      FS6
ATOM  12135  CA  GLN  27     169.615 113.075 -96.065  1.00 80.57      FS6
ATOM  12136  CB  GLN  27     169.738 113.893 -97.347  1.00110.20      FS6
ATOM  12137  CG  GLN  27     170.501 115.190 -97.180  1.00110.20      FS6
ATOM  12138  CD  GLN  27     169.680 116.250 -96.484  1.00110.20      FS6
ATOM  12139  OE1 GLN  27     170.162 117.354 -96.226  1.00110.20      FS6
ATOM  12140  NE2 GLN  27     168.424 115.925 -96.181  1.00110.20      FS6
ATOM  12141  C   GLN  27     168.829 111.803 -96.356  1.00 80.57      FS6
ATOM  12142  O   GLN  27     167.642 111.700 -96.041  1.00 80.57      FS6
ATOM  12143  N   ARG  28     169.512 110.842 -96.967  1.00 87.00      FS6
ATOM  12144  CA  ARG  28     168.913 109.565 -97.315  1.00 87.00      FS6
ATOM  12145  CB  ARG  28     169.925 108.705 -98.075  1.00122.71      FS6
ATOM  12146  CG  ARG  28     169.315 107.608 -98.923  1.00122.71      FS6
ATOM  12147  CD  ARG  28     170.395 106.717 -99.517  1.00122.71      FS6
ATOM  12148  NE  ARG  28     169.964 106.109-100.774  1.00122.71      FS6
ATOM  12149  CZ  ARG  28     169.839 106.774-101.920  1.00122.71      FS6
ATOM  12150  NH1 ARG  28     170.118 108.069-101.970  1.00122.71      FS6
ATOM  12151  NH2 ARG  28     169.429 106.150-103.016  1.00122.71      FS6
ATOM  12152  C   ARG  28     168.505 108.856 -96.032  1.00 87.00      FS6
ATOM  12153  O   ARG  28     167.404 108.321 -95.931  1.00 87.00      FS6
ATOM  12154  N   ALA  29     169.401 108.863 -95.050  1.00 86.60      FS6
ATOM  12155  CA  ALA  29     169.152 108.220 -93.765  1.00 86.60      FS6
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ATOM	12156	CB	ALA	29	170.378	108.302	-92.909	1.00	26.27	FS6	ATOM	12209	CD	ARG	36	157.577	117.193	-91.330	1.00	91.51	FS6
ATOM	12157	C	ALA	29	167.989	108.858	-93.035	1.00	86.60	FS6	ATOM	12210	NE	ARG	36	157.017	118.502	-91.654	1.00	91.51	FS6
ATOM	12158	O	ALA	29	167.129	108.162	-92.495	1.00	86.60	FS6	ATOM	12211	CZ	ARG	36	157.585	119.664	-91.335	1.00	91.51	FS6
ATOM	12159	N	LEU	30	167.974	110.186	-93.003	1.00	75.31	FS6	ATOM	12212	NH1	ARG	36	158.738	119.688	-90.681	1.00	91.51	FS6
ATOM	12160	CA	LEU	30	166.901	110.901	-92.333	1.00	75.31	FS6	ATOM	12213	NH2	ARG	36	157.001	120.808	-91.666	1.00	91.51	FS6
ATOM	12161	CB	LEU	30	167.052	112.398	-92.572	1.00	63.91	FS6	ATOM	12214	C	ARG	36	161.917	116.853	-91.558	1.00	54.47	FS6
ATOM	12162	CG	LEU	30	168.328	112.927	-91.922	1.00	63.91	FS6	ATOM	12215	O	ARG	36	161.641	117.667	-90.672	1.00	54.47	FS6
ATOM	12163	CD1	LEU	30	168.450	114.430	-92.096	1.00	63.91	FS6	ATOM	12216	N	VAL	37	162.928	117.023	-92.404	1.00	86.25	FS6
ATOM	12164	CD2	LEU	30	168.292	112.568	-90.451	1.00	63.91	FS6	ATOM	12217	CA	VAL	37	163.827	118.178	-92.352	1.00	86.25	FS6
ATOM	12165	C	LEU	30	165.549	110.406	-92.827	1.00	75.31	FS6	ATOM	12218	CB	VAL	37	164.756	118.193	-93.581	1.00	69.82	FS6
ATOM	12166	O	LEU	30	164.641	110.147	-92.035	1.00	75.31	FS6	ATOM	12219	CG1	VAL	37	166.098	118.792	-93.198	1.00	69.82	FS6
ATOM	12167	N	GLU	31	165.422	110.267	-94.141	1.00	94.23	FS6	ATOM	12220	CG2	VAL	37	164.901	116.778	-94.152	1.00	69.82	FS6
ATOM	12168	CA	GLU	31	164.192	109.769	-94.744	1.00	94.23	FS6	ATOM	12221	C	VAL	37	163.150	119.552	-92.265	1.00	86.25	FS6
ATOM	12169	CB	GLU	31	164.372	109.635	-96.259	1.00	133.98	FS6	ATOM	12222	O	VAL	37	162.807	120.140	-93.285	1.00	86.25	FS6
ATOM	12170	CG	GLU	31	164.489	110.953	-97.001	1.00	133.98	FS6	ATOM	12223	N	GLU	38	162.978	120.070	-91.051	1.00	83.30	FS6
ATOM	12171	CD	GLU	31	163.137	111.517	-97.378	1.00	133.98	FS6	ATOM	12224	CA	GLU	38	162.351	121.380	-90.871	1.00	83.30	FS6
ATOM	12172	OE1	GLU	31	162.453	110.900	-98.221	1.00	133.98	FS6	ATOM	12225	CB	GLU	38	162.050	121.659	-89.399	1.00	105.75	FS6
ATOM	12173	OE2	GLU	31	162.756	112.570	-96.829	1.00	133.98	FS6	ATOM	12226	CG	GLU	38	160.878	120.884	-88.835	1.00	105.75	FS6
ATOM	12174	C	GLU	31	163.891	108.396	-94.148	1.00	94.23	FS6	ATOM	12227	CD	GLU	38	160.266	121.582	-87.640	1.00	105.75	FS6
ATOM	12175	O	GLU	31	162.838	108.175	-93.556	1.00	94.23	FS6	ATOM	12228	OE1	GLU	38	159.391	120.982	-86.981	1.00	105.75	FS6
ATOM	12176	N	ASN	32	164.843	107.485	-94.314	1.00	79.62	FS6	ATOM	12229	OE2	GLU	38	160.660	122.737	-87.369	1.00	105.75	FS6
ATOM	12177	CA	ASN	32	164.736	106.117	-93.821	1.00	79.62	FS6	ATOM	12230	C	GLU	38	163.232	122.495	-91.407	1.00	83.30	FS6
ATOM	12178	CB	ASN	32	166.112	105.456	-93.833	1.00	133.39	FS6	ATOM	12231	O	GLU	38	162.733	123.502	-91.910	1.00	83.30	FS6
ATOM	12179	CG	ASN	32	166.774	105.518	-95.185	1.00	133.39	FS6	ATOM	12232	N	LYS	39	164.541	122.330	-91.263	1.00	80.88	FS6
ATOM	12180	OD1	ASN	32	167.983	105.318	-95.305	1.00	133.39	FS6	ATOM	12233	CA	LYS	39	165.483	123.312	-91.778	1.00	80.88	FS6
ATOM	12181	ND2	ASN	32	165.984	105.789	-96.218	1.00	133.39	FS6	ATOM	12234	CB	LYS	39	165.245	124.699	-91.165	1.00	97.29	FS6
ATOM	12182	C	ASN	32	164.170	106.020	-92.412	1.00	79.62	FS6	ATOM	12235	CG	LYS	39	165.816	124.978	-89.801	1.00	97.29	FS6
ATOM	12183	O	ASN	32	163.671	104.966	-92.016	1.00	79.62	FS6	ATOM	12236	CD	LYS	39	165.577	126.457	-89.525	1.00	97.29	FS6
ATOM	12184	N	TYR	33	164.251	107.105	-91.649	1.00	97.70	FS6	ATOM	12237	CE	LYS	39	165.959	126.875	-88.126	1.00	97.29	FS6
ATOM	12185	CA	TYR	33	163.752	107.068	-90.283	1.00	97.70	FS6	ATOM	12238	NZ	LYS	39	165.541	128.287	-87.878	1.00	97.29	FS6
ATOM	12186	CB	TYR	33	164.900	107.355	-89.308	1.00	82.38	FS6	ATOM	12239	C	LYS	39	166.927	122.880	-91.608	1.00	80.88	FS6
ATOM	12187	CG	TYR	33	165.917	106.227	-89.261	1.00	82.38	FS6	ATOM	12240	O	LYS	39	167.194	121.763	-91.154	1.00	80.88	FS6
ATOM	12188	CD1	TYR	33	167.092	106.276	-90.014	1.00	82.38	FS6	ATOM	12241	N	VAL	40	167.859	123.752	-91.983	1.00	80.90	FS6
ATOM	12189	CE1	TYR	33	167.996	105.209	-90.012	1.00	82.38	FS6	ATOM	12242	CA	VAL	40	169.265	123.387	-91.906	1.00	80.90	FS6
ATOM	12190	CD2	TYR	33	165.673	105.083	-88.504	1.00	82.38	FS6	ATOM	12243	CB	VAL	40	169.613	122.404	-93.060	1.00	60.01	FS6
ATOM	12191	CE2	TYR	33	166.567	104.014	-88.497	1.00	82.38	FS6	ATOM	12244	CG1	VAL	40	169.390	123.093	-94.388	1.00	60.01	FS6
ATOM	12192	CZ	TYR	33	167.725	104.081	-89.250	1.00	82.38	FS6	ATOM	12245	CG2	VAL	40	171.048	121.892	-92.931	1.00	60.01	FS6
ATOM	12193	OH	TYR	33	168.607	103.022	-89.219	1.00	82.38	FS6	ATOM	12246	C	VAL	40	170.235	124.560	-91.951	1.00	80.90	FS6
ATOM	12194	C	TYR	33	162.555	107.963	-89.983	1.00	97.70	FS6	ATOM	12247	O	VAL	40	169.901	125.646	-92.411	1.00	80.90	FS6
ATOM	12195	O	TYR	33	161.953	107.861	-88.916	1.00	97.70	FS6	ATOM	12248	N	GLU	41	171.441	124.312	-91.457	1.00	88.89	FS6
ATOM	12196	N	GLY	34	162.196	108.822	-90.928	1.00	62.39	FS6	ATOM	12249	CA	GLU	41	172.515	125.289	-91.427	1.00	88.89	FS6
ATOM	12197	CA	GLY	34	161.058	109.696	-90.724	1.00	62.39	FS6	ATOM	12250	CB	GLU	41	172.619	125.911	-90.044	1.00	105.25	FS6
ATOM	12198	C	GLY	34	161.461	111.134	-90.475	1.00	62.39	FS6	ATOM	12251	CG	GLU	41	171.434	126.769	-89.695	1.00	105.25	FS6
ATOM	12199	O	GLY	34	160.611	111.992	-90.227	1.00	62.39	FS6	ATOM	12252	CD	GLU	41	171.442	127.193	-88.246	1.00	105.25	FS6
ATOM	12200	N	ALA	35	162.756	111.412	-90.547	1.00	88.53	FS6	ATOM	12253	OE1	GLU	41	172.514	127.621	-87.763	1.00	105.25	FS6
ATOM	12201	CA	ALA	35	163.239	112.765	-90.317	1.00	88.53	FS6	ATOM	12254	OE2	GLU	41	170.378	127.105	-87.596	1.00	105.25	FS6
ATOM	12202	CB	ALA	35	164.762	112.782	-90.325	1.00	78.86	FS6	ATOM	12255	C	GLU	41	173.777	124.509	-91.745	1.00	88.89	FS6
ATOM	12203	C	ALA	35	162.693	113.775	-91.329	1.00	88.53	FS6	ATOM	12256	O	GLU	41	173.809	123.289	-91.572	1.00	88.89	FS6
ATOM	12204	O	ALA	35	163.154	113.856	-92.469	1.00	88.53	FS6	ATOM	12257	N	GLU	42	174.815	125.197	-92.208	1.00	110.91	FS6
ATOM	12205	N	ARG	36	161.698	114.539	-90.903	1.00	54.47	FS6	ATOM	12258	CA	GLU	42	176.052	124.510	-92.554	1.00	110.91	FS6
ATOM	12206	CA	ARG	36	161.098	115.564	-91.746	1.00	54.47	FS6	ATOM	12259	CB	GLU	42	175.990	124.072	-94.019	1.00	117.65	FS6
ATOM	12207	CB	ARG	36	159.636	115.775	-91.333	1.00	91.51	FS6	ATOM	12260	CG	GLU	42	177.081	123.111	-94.446	1.00	117.65	FS6
ATOM	12208	CG	ARG	36	158.947	116.974	-91.963	1.00	91.51	FS6	ATOM	12261	CD	GLU	42	176.770	122.441	-95.774	1.00	117.65	FS6

ATOM	12262	OE1	GLU	42	177.603	121.641	-96.249	1.00117.65	FS6	ATOM	12315	O	LEU	48	189.872	123.381	-81.532	1.00 63.86	FS6
ATOM	12263	OE2	GLU	42	175.688	122.709	-96.343	1.00117.65	FS6	ATOM	12316	N	ALA	49	188.082	123.069	-80.209	1.00 66.49	FS6
ATOM	12264	C	GLU	42	177.298	125.351	-92.301	1.00110.91	FS6	ATOM	12317	CA	ALA	49	188.780	123.418	-78.979	1.00 66.49	FS6
ATOM	12265	O	GLU	42	178.049	125.650	-93.226	1.00110.91	FS6	ATOM	12318	CB	ALA	49	187.805	123.452	-77.816	1.00108.67	FS6
ATOM	12266	N	LEU	43	177.511	125.719	-91.040	1.00 88.90	FS6	ATOM	12319	C	ALA	49	189.889	122.417	-78.707	1.00 66.49	FS6
ATOM	12267	CA	LEU	43	178.666	126.518	-90.637	1.00 88.90	FS6	ATOM	12320	O	ALA	49	190.913	122.747	-78.103	1.00 66.49	FS6
ATOM	12268	CB	LEU	43	178.766	126.574	-89.110	1.00 96.68	FS6	ATOM	12321	N	TYR	50	189.669	121.188	-79.154	1.00 67.17	FS6
ATOM	12269	CG	LEU	43	177.626	127.224	-88.320	1.00 96.68	FS6	ATOM	12322	CA	TYR	50	190.642	120.116	-78.996	1.00 67.17	FS6
ATOM	12270	CD1	LEU	43	177.528	128.689	-88.693	1.00 96.68	FS6	ATOM	12323	CB	TYR	50	190.326	119.276	-77.756	1.00 55.90	FS6
ATOM	12271	CD2	LEU	43	176.311	126.505	-88.592	1.00 96.68	FS6	ATOM	12324	CG	TYR	50	188.948	118.651	-77.768	1.00 55.90	FS6
ATOM	12272	C	LEU	43	179.953	125.925	-91.207	1.00 88.90	FS6	ATOM	12325	CD1	TYR	50	187.818	119.400	-77.449	1.00 55.90	FS6
ATOM	12273	O	LEU	43	180.981	126.603	-91.303	1.00 88.90	FS6	ATOM	12326	CE1	TYR	50	186.547	118.837	-77.475	1.00 55.90	FS6
ATOM	12274	N	GLY	44	179.890	124.647	-91.567	1.00100.17	FS6	ATOM	12327	CD2	TYR	50	188.772	117.313	-78.118	1.00 55.90	FS6
ATOM	12275	CA	GLY	44	181.041	123.986	-92.143	1.00100.17	FS6	ATOM	12328	CE2	TYR	50	187.504	116.736	-78.151	1.00 55.90	FS6
ATOM	12276	C	GLY	44	182.272	123.873	-91.267	1.00100.17	FS6	ATOM	12329	CZ	TYR	50	186.391	117.503	-77.827	1.00 55.90	FS6
ATOM	12277	O	GLY	44	182.205	123.390	-90.138	1.00100.17	FS6	ATOM	12330	OH	TYR	50	185.128	116.934	-77.853	1.00 55.90	FS6
ATOM	12278	N	LEU	45	183.404	124.326	-91.795	1.00101.05	FS6	ATOM	12331	C	TYR	50	190.566	119.250	-80.252	1.00 67.17	FS6
ATOM	12279	CA	LEU	45	184.683	124.261	-91.097	1.00101.05	FS6	ATOM	12332	O	TYR	50	189.534	119.203	-80.920	1.00 67.17	FS6
ATOM	12280	CB	LEU	45	185.808	124.575	-92.077	1.00 79.48	FS6	ATOM	12333	N	PRO	51	191.657	118.556	-80.597	1.00 57.56	FS6
ATOM	12281	CG	LEU	45	185.959	123.526	-93.173	1.00 79.48	FS6	ATOM	12334	CD	PRO	51	192.985	118.559	-79.967	1.00 63.40	FS6
ATOM	12282	CD1	LEU	45	186.889	124.035	-94.259	1.00 79.48	FS6	ATOM	12335	CA	PRO	51	191.655	117.710	-81.791	1.00 57.56	FS6
ATOM	12283	CD2	LEU	45	186.478	122.236	-92.560	1.00 79.48	FS6	ATOM	12336	CB	PRO	51	193.123	117.322	-81.933	1.00 63.40	FS6
ATOM	12284	C	LEU	45	184.823	125.168	-89.885	1.00101.05	FS6	ATOM	12337	CG	PRO	51	193.592	117.304	-80.528	1.00 63.40	FS6
ATOM	12285	O	LEU	45	184.465	126.344	-89.945	1.00101.05	FS6	ATOM	12338	C	PRO	51	190.740	116.494	-81.746	1.00 57.56	FS6
ATOM	12286	N	ARG	46	185.361	124.612	-88.795	1.00103.56	FS6	ATOM	12339	O	PRO	51	190.720	115.751	-80.766	1.00 57.56	FS6
ATOM	12287	CA	ARG	46	185.587	125.362	-87.556	1.00103.56	FS6	ATOM	12340	N	ILE	52	189.975	116.308	-82.816	1.00 79.88	FS6
ATOM	12288	CB	ARG	46	184.320	125.383	-86.699	1.00104.19	FS6	ATOM	12341	CA	ILE	52	189.075	115.170	-82.941	1.00 79.88	FS6
ATOM	12289	CG	ARG	46	183.152	126.083	-87.357	1.00104.19	FS6	ATOM	12342	CB	ILE	52	187.632	115.602	-83.256	1.00 50.02	FS6
ATOM	12290	CD	ARG	46	182.278	126.729	-86.322	1.00104.19	FS6	ATOM	12343	CG2	ILE	52	186.768	114.362	-83.504	1.00 50.02	FS6
ATOM	12291	NE	ARG	46	183.052	127.642	-85.490	1.00104.19	FS6	ATOM	12344	CG1	ILE	52	187.069	116.440	-82.106	1.00 50.02	FS6
ATOM	12292	CZ	ARG	46	182.550	128.333	-84.472	1.00104.19	FS6	ATOM	12345	CD1	ILE	52	185.595	116.815	-82.269	1.00 50.02	FS6
ATOM	12293	NH1	ARG	46	181.265	128.215	-84.160	1.00104.19	FS6	ATOM	12346	C	ILE	52	189.580	114.317	-84.099	1.00 79.88	FS6
ATOM	12294	NH2	ARG	46	183.330	129.138	-83.760	1.00104.19	FS6	ATOM	12347	O	ILE	52	189.671	114.789	-85.234	1.00 79.88	FS6
ATOM	12295	C	ARG	46	186.756	124.808	-86.731	1.00103.56	FS6	ATOM	12348	N	ALA	53	189.907	113.062	-83.815	1.00 77.94	FS6
ATOM	12296	O	ARG	46	187.001	123.595	-86.710	1.00103.56	FS6	ATOM	12349	CA	ALA	53	190.416	112.172	-84.844	1.00 77.94	FS6
ATOM	12297	N	ARG	47	187.467	125.715	-86.056	1.00 77.47	FS6	ATOM	12350	CB	ALA	53	189.385	112.012	-85.957	1.00 71.02	FS6
ATOM	12298	CA	ARG	47	188.621	125.361	-85.231	1.00 77.47	FS6	ATOM	12351	C	ALA	53	191.708	112.774	-85.391	1.00 77.94	FS6
ATOM	12299	CB	ARG	47	189.473	126.603	-84.945	1.00131.38	FS6	ATOM	12352	O	ALA	53	191.923	112.829	-86.601	1.00 77.94	FS6
ATOM	12300	CG	ARG	47	189.669	127.530	-86.137	1.00131.38	FS6	ATOM	12353	N	LYS	54	192.559	113.223	-84.472	1.00 72.42	FS6
ATOM	12301	CD	ARG	47	190.344	126.833	-87.318	1.00131.38	FS6	ATOM	12354	CA	LYS	54	193.849	113.832	-84.789	1.00 72.42	FS6
ATOM	12302	NE	ARG	47	190.360	127.675	-88.518	1.00131.38	FS6	ATOM	12355	CB	LYS	54	194.661	112.940	-85.733	1.00110.24	FS6
ATOM	12303	CZ	ARG	47	190.767	127.274	-89.722	1.00131.38	FS6	ATOM	12356	CG	LYS	54	194.482	111.445	-85.516	1.00110.24	FS6
ATOM	12304	NH1	ARG	47	191.202	126.034	-89.903	1.00131.38	FS6	ATOM	12357	CD	LYS	54	194.744	111.027	-84.084	1.00110.24	FS6
ATOM	12305	NH2	ARG	47	190.727	128.110	-90.753	1.00131.38	FS6	ATOM	12358	CE	LYS	54	194.377	109.564	-83.887	1.00110.24	FS6
ATOM	12306	C	ARG	47	188.172	124.754	-83.906	1.00 77.47	FS6	ATOM	12359	NZ	LYS	54	194.462	109.166	-82.460	1.00110.24	FS6
ATOM	12307	O	ARG	47	187.784	125.477	-82.990	1.00 77.47	FS6	ATOM	12360	C	LYS	54	193.658	115.200	-85.429	1.00 72.42	FS6
ATOM	12308	N	LEU	48	188.233	123.428	-83.807	1.00 63.86	FS6	ATOM	12361	O	LYS	54	194.380	116.146	-85.115	1.00 72.42	FS6
ATOM	12309	CA	LEU	48	187.839	122.715	-82.591	1.00 63.86	FS6	ATOM	12362	N	ASP	55	192.675	115.296	-86.319	1.00 63.06	FS6
ATOM	12310	CB	LEU	48	187.942	121.211	-82.805	1.00 44.68	FS6	ATOM	12363	CA	ASP	55	192.367	116.534	-87.028	1.00 63.06	FS6
ATOM	12311	CG	LEU	48	187.116	120.658	-83.961	1.00 44.68	FS6	ATOM	12364	CB	ASP	55	191.287	116.253	-88.065	1.00 91.73	FS6
ATOM	12312	CD1	LEU	48	187.238	119.133	-83.961	1.00 44.68	FS6	ATOM	12365	CG	ASP	55	191.391	117.153	-89.262	1.00 91.73	FS6
ATOM	12313	CD2	LEU	48	185.655	121.088	-83.831	1.00 44.68	FS6	ATOM	12366	OD1	ASP	55	191.351	118.393	-89.092	1.00 91.73	FS6
ATOM	12314	C	LEU	48	188.690	123.091	-81.391	1.00 63.86	FS6	ATOM	12367	OD2	ASP	55	191.515	116.613	-90.378	1.00 91.73	FS6

ATOM	12368	C	ASP	55	191.880	117.619	-86.060	1.00	63.06	FS6	ATOM	12421	N	TRP	62	174.042	121.243	-89.249	1.00	74.71	FS6
ATOM	12369	O	ASP	55	190.918	117.404	-85.330	1.00	63.06	FS6	ATOM	12422	CA	TRP	62	172.987	121.378	-88.250	1.00	74.71	FS6
ATOM	12370	N	PRO	56	192.532	118.801	-86.048	1.00	65.53	FS6	ATOM	12423	CB	TRP	62	173.066	122.760	-87.597	1.00	102.71	FS6
ATOM	12371	CD	PRO	56	193.755	119.132	-86.796	1.00	75.55	FS6	ATOM	12424	CG	TRP	62	172.076	122.973	-86.487	1.00	102.71	FS6
ATOM	12372	CA	PRO	56	192.171	119.920	-85.170	1.00	65.53	FS6	ATOM	12425	CD2	TRP	62	170.780	123.573	-86.598	1.00	102.71	FS6
ATOM	12373	CB	PRO	56	193.467	120.692	-85.076	1.00	75.55	FS6	ATOM	12426	CE2	TRP	62	170.202	123.560	-85.312	1.00	102.71	FS6
ATOM	12374	CG	PRO	56	193.941	120.610	-86.474	1.00	75.55	FS6	ATOM	12427	CE3	TRP	62	170.049	124.121	-87.663	1.00	102.71	FS6
ATOM	12375	C	PRO	56	191.042	120.802	-85.699	1.00	65.53	FS6	ATOM	12428	CD1	TRP	62	172.225	122.627	-85.175	1.00	102.71	FS6
ATOM	12376	O	PRO	56	190.812	121.892	-85.176	1.00	65.53	FS6	ATOM	12429	NE1	TRP	62	171.106	122.977	-84.462	1.00	102.71	FS6
ATOM	12377	N	GLN	57	190.354	120.333	-86.739	1.00	51.08	FS6	ATOM	12430	CZ2	TRP	62	168.927	124.075	-85.058	1.00	102.71	FS6
ATOM	12378	CA	GLN	57	189.244	121.071	-87.347	1.00	51.08	FS6	ATOM	12431	CZ3	TRP	62	168.781	124.631	-87.411	1.00	102.71	FS6
ATOM	12379	CB	GLN	57	189.651	121.639	-88.703	1.00	126.32	FS6	ATOM	12432	CH2	TRP	62	168.234	124.604	-86.118	1.00	102.71	FS6
ATOM	12380	CG	GLN	57	190.795	122.620	-88.678	1.00	126.32	FS6	ATOM	12433	C	TRP	62	171.615	121.195	-88.901	1.00	74.71	FS6
ATOM	12381	CD	GLN	57	191.318	122.911	-90.071	1.00	126.32	FS6	ATOM	12434	O	TRP	62	171.176	122.037	-89.673	1.00	74.71	FS6
ATOM	12382	OE1	GLN	57	192.172	123.777	-90.258	1.00	126.32	FS6	ATOM	12435	N	TYR	63	170.941	120.093	-88.594	1.00	77.91	FS6
ATOM	12383	NE2	GLN	57	190.810	122.178	-91.060	1.00	126.32	FS6	ATOM	12436	CA	TYR	63	169.622	119.824	-89.163	1.00	77.91	FS6
ATOM	12384	C	GLN	57	188.058	120.148	-87.568	1.00	51.08	FS6	ATOM	12437	CB	TYR	63	169.581	118.448	-89.831	1.00	109.00	FS6
ATOM	12385	O	GLN	57	188.150	118.933	-87.378	1.00	51.08	FS6	ATOM	12438	CG	TYR	63	170.594	118.190	-90.920	1.00	109.00	FS6
ATOM	12386	N	GLY	58	186.945	120.733	-87.989	1.00	49.12	FS6	ATOM	12439	CD1	TYR	63	171.764	118.937	-91.016	1.00	109.00	FS6
ATOM	12387	CA	GLY	58	185.763	119.939	-88.244	1.00	49.12	FS6	ATOM	12440	CE1	TYR	63	172.736	118.630	-91.961	1.00	109.00	FS6
ATOM	12388	C	GLY	58	184.806	120.656	-89.173	1.00	49.12	FS6	ATOM	12441	CD2	TYR	63	170.418	117.131	-91.807	1.00	109.00	FS6
ATOM	12389	O	GLY	58	184.847	121.891	-89.297	1.00	49.12	FS6	ATOM	12442	CE2	TYR	63	171.381	116.817	-92.752	1.00	109.00	FS6
ATOM	12390	N	TYR	59	183.958	119.876	-89.842	1.00	59.47	FS6	ATOM	12443	CZ	TYR	63	172.538	117.567	-92.822	1.00	109.00	FS6
ATOM	12391	CA	TYR	59	182.952	120.417	-90.750	1.00	59.47	FS6	ATOM	12444	OH	TYR	63	173.511	117.236	-93.732	1.00	109.00	FS6
ATOM	12392	CB	TYR	59	183.001	119.701	-92.107	1.00	87.06	FS6	ATOM	12445	C	TYR	63	168.573	119.813	-88.057	1.00	77.91	FS6
ATOM	12393	CG	TYR	59	182.226	120.422	-93.189	1.00	87.06	FS6	ATOM	12446	O	TYR	63	168.720	119.096	-87.066	1.00	77.91	FS6
ATOM	12394	CD1	TYR	59	182.681	121.636	-93.700	1.00	87.06	FS6	ATOM	12447	N	GLN	64	167.515	120.596	-88.223	1.00	76.23	FS6
ATOM	12395	CE1	TYR	59	181.944	122.345	-94.641	1.00	87.06	FS6	ATOM	12448	CA	GLN	64	166.438	120.615	-87.241	1.00	76.23	FS6
ATOM	12396	CD2	TYR	59	181.007	119.925	-93.655	1.00	87.06	FS6	ATOM	12449	CB	GLN	64	165.957	122.050	-87.000	1.00	83.88	FS6
ATOM	12397	CE2	TYR	59	180.258	120.626	-94.597	1.00	87.06	FS6	ATOM	12450	CG	GLN	64	164.632	122.134	-86.252	1.00	83.88	FS6
ATOM	12398	CZ	TYR	59	180.733	121.839	-95.083	1.00	87.06	FS6	ATOM	12451	CD	GLN	64	164.282	123.547	-85.841	1.00	83.88	FS6
ATOM	12399	OH	TYR	59	179.993	122.560	-95.991	1.00	87.06	FS6	ATOM	12452	OE1	GLN	64	164.870	124.097	-84.910	1.00	83.88	FS6
ATOM	12400	C	TYR	59	181.600	120.178	-90.077	1.00	59.47	FS6	ATOM	12453	NE2	GLN	64	163.323	124.148	-86.542	1.00	83.88	FS6
ATOM	12401	O	TYR	59	181.302	119.057	-89.665	1.00	59.47	FS6	ATOM	12454	C	GLN	64	165.301	119.760	-87.801	1.00	76.23	FS6
ATOM	12402	N	PHE	60	180.784	121.223	-89.969	1.00	90.81	FS6	ATOM	12455	O	GLN	64	164.574	120.196	-88.685	1.00	76.23	FS6
ATOM	12403	CA	PHE	60	179.497	121.099	-89.298	1.00	90.81	FS6	ATOM	12456	N	VAL	65	165.146	118.543	-87.293	1.00	87.35	FS6
ATOM	12404	CB	PHE	60	179.373	122.162	-88.205	1.00	81.62	FS6	ATOM	12457	CA	VAL	65	164.104	117.662	-87.801	1.00	87.35	FS6
ATOM	12405	CG	PHE	60	180.342	121.974	-87.077	1.00	81.62	FS6	ATOM	12458	CB	VAL	65	164.637	116.235	-88.026	1.00	101.22	FS6
ATOM	12406	CD1	PHE	60	181.623	122.502	-87.148	1.00	81.62	FS6	ATOM	12459	CG1	VAL	65	165.876	116.281	-88.890	1.00	101.22	FS6
ATOM	12407	CD2	PHE	60	179.987	121.230	-85.958	1.00	81.62	FS6	ATOM	12460	CG2	VAL	65	164.928	115.567	-86.691	1.00	101.22	FS6
ATOM	12408	CE1	PHE	60	182.539	122.289	-86.119	1.00	81.62	FS6	ATOM	12461	C	VAL	65	162.855	117.538	-86.943	1.00	87.35	FS6
ATOM	12409	CE2	PHE	60	180.893	121.013	-84.929	1.00	81.62	FS6	ATOM	12462	O	VAL	65	162.658	118.268	-85.969	1.00	87.35	FS6
ATOM	12410	CZ	PHE	60	182.171	121.543	-85.010	1.00	81.62	FS6	ATOM	12463	N	GLU	66	162.018	116.590	-87.346	1.00	70.61	FS6
ATOM	12411	C	PHE	60	178.237	121.120	-90.141	1.00	90.81	FS6	ATOM	12464	CA	GLU	66	160.768	116.255	-86.684	1.00	70.61	FS6
ATOM	12412	O	PHE	60	178.141	121.825	-91.140	1.00	90.81	FS6	ATOM	12465	CB	GLU	66	159.626	117.089	-87.254	1.00	100.10	FS6
ATOM	12413	N	LEU	61	177.269	120.332	-89.689	1.00	79.43	FS6	ATOM	12466	CG	GLU	66	158.267	116.738	-86.694	1.00	100.10	FS6
ATOM	12414	CA	LEU	61	175.964	120.192	-90.316	1.00	79.43	FS6	ATOM	12467	CD	GLU	66	157.191	117.689	-87.170	1.00	100.10	FS6
ATOM	12415	CB	LEU	61	175.874	118.854	-91.034	1.00	100.31	FS6	ATOM	12468	OE1	GLU	66	157.278	118.890	-86.833	1.00	100.10	FS6
ATOM	12416	CG	LEU	61	176.680	118.720	-92.315	1.00	100.31	FS6	ATOM	12469	OE2	GLU	66	156.266	117.238	-87.883	1.00	100.10	FS6
ATOM	12417	CD1	LEU	61	176.610	117.284	-92.811	1.00	100.31	FS6	ATOM	12470	C	GLU	66	160.608	114.793	-87.069	1.00	70.61	FS6
ATOM	12418	CD2	LEU	61	176.122	119.686	-93.348	1.00	100.31	FS6	ATOM	12471	O	GLU	66	160.632	114.469	-88.255	1.00	70.61	FS6
ATOM	12419	C	LEU	61	174.904	120.232	-89.220	1.00	79.43	FS6	ATOM	12472	N	MET	67	160.463	113.908	-86.085	1.00	63.86	FS6
ATOM	12420	O	LEU	61	174.873	119.352	-88.360	1.00	79.43	FS6	ATOM	12473	CA	MET	67	160.358	112.481	-86.387	1.00	63.86	FS6

ATOM	12474	CB	MET	67	161.733	111.952	-86.807	1.00	80.84	FS6	ATOM	12527	ND2	ASN	73	167.420	106.167	-77.948	1.00	93.57	FS6
ATOM	12475	CG	MET	67	162.793	112.137	-85.726	1.00	80.84	FS6	ATOM	12528	C	ASN	73	168.903	105.684	-82.527	1.00	80.39	FS6
ATOM	12476	SD	MET	67	164.446	111.541	-86.142	1.00	80.84	FS6	ATOM	12529	O	ASN	73	170.095	105.856	-82.797	1.00	80.39	FS6
ATOM	12477	CE	MET	67	164.378	109.872	-85.499	1.00	80.84	FS6	ATOM	12530	N	ASP	74	168.097	104.925	-83.272	1.00	82.22	FS6
ATOM	12478	C	MET	67	159.855	111.644	-85.219	1.00	63.86	FS6	ATOM	12531	CA	ASP	74	168.601	104.231	-84.457	1.00	82.22	FS6
ATOM	12479	O	MET	67	159.660	112.145	-84.113	1.00	63.86	FS6	ATOM	12532	CB	ASP	74	167.493	103.426	-85.135	1.00	85.60	FS6
ATOM	12480	N	PRO	68	159.627	110.345	-85.463	1.00	108.66	FS6	ATOM	12533	CG	ASP	74	166.804	102.478	-84.187	1.00	85.60	FS6
ATOM	12481	CD	PRO	68	159.487	109.746	-86.801	1.00	88.88	FS6	ATOM	12534	OD1	ASP	74	167.475	101.988	-83.257	1.00	85.60	FS6
ATOM	12482	CA	PRO	68	159.150	109.415	-84.437	1.00	108.66	FS6	ATOM	12535	OD2	ASP	74	165.597	102.212	-84.375	1.00	85.60	FS6
ATOM	12483	CB	PRO	68	158.768	108.179	-85.248	1.00	88.88	FS6	ATOM	12536	C	ASP	74	169.155	105.242	-85.444	1.00	82.22	FS6
ATOM	12484	CG	PRO	68	158.390	108.748	-86.580	1.00	88.88	FS6	ATOM	12537	O	ASP	74	170.261	105.084	-85.958	1.00	82.22	FS6
ATOM	12485	C	PRO	68	160.266	109.120	-83.437	1.00	108.66	FS6	ATOM	12538	N	LEU	75	168.371	106.282	-85.703	1.00	52.62	FS6
ATOM	12486	O	PRO	68	161.279	108.505	-83.785	1.00	108.66	FS6	ATOM	12539	CA	LEU	75	168.771	107.341	-86.616	1.00	52.62	FS6
ATOM	12487	N	GLU	69	160.076	109.560	-82.198	1.00	96.56	FS6	ATOM	12540	CB	LEU	75	167.888	108.574	-86.394	1.00	77.30	FS6
ATOM	12488	CA	GLU	69	161.066	109.356	-81.147	1.00	96.56	FS6	ATOM	12541	CG	LEU	75	168.058	109.846	-87.238	1.00	77.30	FS6
ATOM	12489	CB	GLU	69	160.516	109.802	-79.794	1.00	83.56	FS6	ATOM	12542	CD1	LEU	75	169.395	110.505	-86.933	1.00	77.30	FS6
ATOM	12490	CG	GLU	69	159.338	110.748	-79.864	1.00	83.56	FS6	ATOM	12543	CD2	LEU	75	167.933	109.508	-88.712	1.00	77.30	FS6
ATOM	12491	CD	GLU	69	158.040	110.032	-80.156	1.00	83.56	FS6	ATOM	12544	C	LEU	75	170.243	107.694	-86.407	1.00	52.62	FS6
ATOM	12492	OE1	GLU	69	157.835	109.618	-81.315	1.00	83.56	FS6	ATOM	12545	O	LEU	75	170.978	107.894	-87.370	1.00	52.62	FS6
ATOM	12493	OE2	GLU	69	157.225	109.869	-79.222	1.00	83.56	FS6	ATOM	12546	N	ALA	76	170.688	107.762	-85.158	1.00	63.03	FS6
ATOM	12494	C	GLU	69	161.502	107.902	-81.045	1.00	96.56	FS6	ATOM	12547	CA	ALA	76	172.085	108.095	-84.908	1.00	63.03	FS6
ATOM	12495	O	GLU	69	162.665	107.614	-80.766	1.00	96.56	FS6	ATOM	12548	CB	ALA	76	172.236	108.848	-83.592	1.00	17.78	FS6
ATOM	12496	N	ASP	70	160.565	106.987	-81.272	1.00	67.72	FS6	ATOM	12549	C	ALA	76	172.993	106.872	-84.929	1.00	63.03	FS6
ATOM	12497	CA	ASP	70	160.855	105.560	-81.194	1.00	67.72	FS6	ATOM	12550	O	ALA	76	174.195	107.011	-85.133	1.00	63.03	FS6
ATOM	12498	CB	ASP	70	159.593	104.752	-81.508	1.00	158.15	FS6	ATOM	12551	N	ARG	77	172.440	105.679	-84.703	1.00	74.02	FS6
ATOM	12499	CG	ASP	70	158.940	105.172	-82.807	1.00	158.15	FS6	ATOM	12552	CA	ARG	77	173.267	104.475	-84.758	1.00	74.02	FS6
ATOM	12500	OD1	ASP	70	158.521	106.344	-82.907	1.00	158.15	FS6	ATOM	12553	CB	ARG	77	172.460	103.195	-84.592	1.00	121.07	FS6
ATOM	12501	OD2	ASP	70	158.846	104.332	-83.726	1.00	158.15	FS6	ATOM	12554	CG	ARG	77	171.842	102.959	-83.258	1.00	121.07	FS6
ATOM	12502	C	ASP	70	161.999	105.103	-82.102	1.00	67.72	FS6	ATOM	12555	CD	ARG	77	171.196	101.599	-83.295	1.00	121.07	FS6
ATOM	12503	O	ASP	70	162.405	103.935	-82.049	1.00	67.72	FS6	ATOM	12556	NE	ARG	77	170.296	101.381	-82.175	1.00	121.07	FS6
ATOM	12504	N	ARG	71	162.520	106.014	-82.925	1.00	74.49	FS6	ATOM	12557	CZ	ARG	77	169.550	100.292	-82.033	1.00	121.07	FS6
ATOM	12505	CA	ARG	71	163.621	105.674	-83.825	1.00	74.49	FS6	ATOM	12558	NH1	ARG	77	169.607	99.331	-82.948	1.00	121.07	FS6
ATOM	12506	CB	ARG	71	163.116	105.609	-85.274	1.00	122.02	FS6	ATOM	12559	NH2	ARG	77	168.745	100.166	-80.985	1.00	121.07	FS6
ATOM	12507	CG	ARG	71	162.063	104.526	-85.486	1.00	122.02	FS6	ATOM	12560	C	ARG	77	173.733	104.494	-86.184	1.00	74.02	FS6
ATOM	12508	CD	ARG	71	162.196	103.807	-86.825	1.00	122.02	FS6	ATOM	12561	O	ARG	77	174.896	104.243	-86.482	1.00	74.02	FS6
ATOM	12509	NE	ARG	71	161.839	104.646	-87.966	1.00	122.02	FS6	ATOM	12562	N	GLU	78	172.780	104.805	-87.057	1.00	80.61	FS6
ATOM	12510	CZ	ARG	71	161.623	104.181	-89.195	1.00	122.02	FS6	ATOM	12563	CA	GLU	78	172.995	104.874	-88.491	1.00	80.61	FS6
ATOM	12511	NH1	ARG	71	161.727	102.882	-89.444	1.00	122.02	FS6	ATOM	12564	CB	GLU	78	171.654	105.093	-89.195	1.00	118.77	FS6
ATOM	12512	NH2	ARG	71	161.299	105.010	-90.177	1.00	122.02	FS6	ATOM	12565	CG	GLU	78	171.717	105.091	-90.714	1.00	118.77	FS6
ATOM	12513	C	ARG	71	164.832	106.612	-83.724	1.00	74.49	FS6	ATOM	12566	CD	GLU	78	172.075	103.735	-91.288	1.00	118.77	FS6
ATOM	12514	O	ARG	71	165.908	106.309	-84.245	1.00	74.49	FS6	ATOM	12567	OE1	GLU	78	171.404	102.742	-90.929	1.00	118.77	FS6
ATOM	12515	N	VAL	72	164.663	107.734	-83.034	1.00	74.59	FS6	ATOM	12568	OE2	GLU	78	173.021	103.664	-92.103	1.00	118.77	FS6
ATOM	12516	CA	VAL	72	165.744	108.700	-82.882	1.00	74.59	FS6	ATOM	12569	C	GLU	78	173.953	105.993	-88.859	1.00	80.61	FS6
ATOM	12517	CB	VAL	72	165.416	109.759	-81.822	1.00	70.24	FS6	ATOM	12570	O	GLU	78	174.951	105.766	-89.544	1.00	80.61	FS6
ATOM	12518	CG1	VAL	72	166.480	110.840	-81.831	1.00	70.24	FS6	ATOM	12571	N	LEU	79	173.656	107.202	-88.403	1.00	57.27	FS6
ATOM	12519	CG2	VAL	72	164.065	110.365	-82.100	1.00	70.24	FS6	ATOM	12572	CA	LEU	79	174.511	108.331	-88.725	1.00	57.27	FS6
ATOM	12520	C	VAL	72	167.069	108.057	-82.508	1.00	74.59	FS6	ATOM	12573	CB	LEU	79	173.947	109.620	-88.125	1.00	40.63	FS6
ATOM	12521	O	VAL	72	168.122	108.503	-82.954	1.00	74.59	FS6	ATOM	12574	CG	LEU	79	172.537	110.029	-88.562	1.00	40.63	FS6
ATOM	12522	N	ASN	73	167.037	107.018	-81.686	1.00	80.39	FS6	ATOM	12575	CD1	LEU	79	172.271	111.484	-88.170	1.00	40.63	FS6
ATOM	12523	CA	ASN	73	168.287	106.375	-81.313	1.00	80.39	FS6	ATOM	12576	CD2	LEU	79	172.402	109.854	-90.067	1.00	40.63	FS6
ATOM	12524	CB	ASN	73	168.077	105.379	-80.159	1.00	93.57	FS6	ATOM	12577	C	LEU	79	175.963	108.144	-88.280	1.00	57.27	FS6
ATOM	12525	CG	ASN	73	168.430	105.980	-78.789	1.00	93.57	FS6	ATOM	12578	O	LEU	79	176.878	108.663	-88.916	1.00	57.27	FS6
ATOM	12526	OD1	ASN	73	169.595	106.273	-78.502	1.00	93.57	FS6	ATOM	12579	N	ARG	80	176.185	107.399	-87.203	1.00	86.16	FS6

ATOM	12580	CA	ARG	80	177.545	107.193	-86.710	1.00	86.16	FS6	ATOM	12633	CA	ARG	86	183.201	111.932	-86.345	1.00 73.25	FS6
ATOM	12581	CB	ARG	80	177.523	106.781	-85.235	1.00	70.96	FS6	ATOM	12634	CB	ARG	86	184.606	112.509	-86.530	1.00 78.46	FS6
ATOM	12582	CG	ARG	80	176.823	107.734	-84.274	1.00	70.96	FS6	ATOM	12635	CG	ARG	86	184.680	113.628	-87.542	1.00 78.46	FS6
ATOM	12583	CD	ARG	80	176.932	107.169	-82.851	1.00	70.96	FS6	ATOM	12636	CD	ARG	86	186.124	113.948	-87.906	1.00 78.46	FS6
ATOM	12584	NE	ARG	80	175.883	107.629	-81.941	1.00	70.96	FS6	ATOM	12637	NE	ARG	86	186.788	112.831	-88.571	1.00 78.46	FS6
ATOM	12585	CZ	ARG	80	175.723	108.890	-81.556	1.00	70.96	FS6	ATOM	12638	CZ	ARG	86	188.019	112.889	-89.068	1.00 78.46	FS6
ATOM	12586	NH1	ARG	80	176.550	109.829	-82.004	1.00	70.96	FS6	ATOM	12639	NH1	ARG	86	188.725	114.014	-88.976	1.00 78.46	FS6
ATOM	12587	NH2	ARG	80	174.737	109.204	-80.722	1.00	70.96	FS6	ATOM	12640	NH2	ARG	86	188.539	111.823	-89.663	1.00 78.46	FS6
ATOM	12588	C	ARG	80	178.341	106.145	-87.498	1.00	86.16	FS6	ATOM	12641	C	ARG	86	182.508	112.570	-85.139	1.00 73.25	FS6
ATOM	12589	O	ARG	80	179.560	106.036	-87.329	1.00	86.16	FS6	ATOM	12642	O	ARG	86	183.156	112.859	-84.134	1.00 73.25	FS6
ATOM	12590	N	ILE	81	177.654	105.383	-88.347	1.00	84.50	FS6	ATOM	12643	N	ARG	87	181.192	112.765	-85.247	1.00 76.91	FS6
ATOM	12591	CA	ILE	81	178.284	104.329	-89.151	1.00	84.50	FS6	ATOM	12644	CA	ARG	87	180.362	113.332	-84.180	1.00 76.91	FS6
ATOM	12592	CB	ILE	81	177.241	103.584	-89.989	1.00	85.01	FS6	ATOM	12645	CB	ARG	87	180.822	114.726	-83.780	1.00 59.62	FS6
ATOM	12593	CG2	ILE	81	177.901	102.438	-90.735	1.00	85.01	FS6	ATOM	12646	CG	ARG	87	181.888	114.761	-82.704	1.00 59.62	FS6
ATOM	12594	CG1	ILE	81	176.136	103.054	-89.080	1.00	85.01	FS6	ATOM	12647	CD	ARG	87	181.442	114.205	-81.356	1.00 59.62	FS6
ATOM	12595	CD1	ILE	81	174.978	102.427	-89.820	1.00	85.01	FS6	ATOM	12648	NE	ARG	87	182.439	114.561	-80.349	1.00 59.62	FS6
ATOM	12596	C	ILE	81	179.365	104.836	-90.101	1.00	84.50	FS6	ATOM	12649	CZ	ARG	87	183.645	114.002	-80.250	1.00 59.62	FS6
ATOM	12597	O	ILE	81	180.413	104.203	-90.268	1.00	84.50	FS6	ATOM	12650	NH1	ARG	87	184.009	113.036	-81.087	1.00 59.62	FS6
ATOM	12598	N	ARG	82	179.092	105.971	-90.733	1.00	98.97	FS6	ATOM	12651	NH2	ARG	87	184.510	114.438	-79.340	1.00 59.62	FS6
ATOM	12599	CA	ARG	82	180.025	106.587	-91.666	1.00	98.97	FS6	ATOM	12652	C	ARG	87	178.918	113.430	-84.616	1.00 76.91	FS6
ATOM	12600	CB	ARG	82	179.451	107.922	-92.152	1.00	102.41	FS6	ATOM	12653	O	ARG	87	178.619	113.931	-85.695	1.00 76.91	FS6
ATOM	12601	CG	ARG	82	178.190	107.812	-93.011	1.00	102.41	FS6	ATOM	12654	N	VAL	88	178.023	112.955	-83.763	1.00 68.34	FS6
ATOM	12602	CD	ARG	82	178.542	107.606	-94.481	1.00	102.41	FS6	ATOM	12655	CA	VAL	88	176.596	112.994	-84.043	1.00 68.34	FS6
ATOM	12603	NE	ARG	82	178.997	106.250	-94.784	1.00	102.41	FS6	ATOM	12656	CB	VAL	88	176.093	111.654	-84.589	1.00 74.20	FS6
ATOM	12604	CZ	ARG	82	179.609	105.899	-95.913	1.00	102.41	FS6	ATOM	12657	CG1	VAL	88	174.636	111.783	-85.002	1.00 74.20	FS6
ATOM	12605	NH1	ARG	82	179.849	106.803	-96.851	1.00	102.41	FS6	ATOM	12658	CG2	VAL	88	176.958	111.205	-85.744	1.00 74.20	FS6
ATOM	12606	NH2	ARG	82	179.970	104.639	-96.108	1.00	102.41	FS6	ATOM	12659	C	VAL	88	175.873	113.244	-82.735	1.00 68.34	FS6
ATOM	12607	C	ARG	82	181.390	106.816	-91.010	1.00	98.97	FS6	ATOM	12660	O	VAL	88	175.958	112.424	-81.832	1.00 68.34	FS6
ATOM	12608	O	ARG	82	181.475	107.171	-89.831	1.00	98.97	FS6	ATOM	12661	N	MET	89	175.166	114.365	-82.622	1.00 72.25	FS6
ATOM	12609	N	ASP	83	182.454	106.610	-91.781	1.00	71.16	FS6	ATOM	12662	CA	MET	89	174.434	114.657	-81.394	1.00 72.25	FS6
ATOM	12610	CA	ASP	83	183.815	106.792	-91.286	1.00	71.16	FS6	ATOM	12663	CB	MET	89	175.186	115.694	-80.557	1.00 84.43	FS6
ATOM	12611	CB	ASP	83	184.804	105.996	-92.141	1.00	172.18	FS6	ATOM	12664	CG	MET	89	174.603	115.891	-79.160	1.00 84.43	FS6
ATOM	12612	CG	ASP	83	184.687	104.498	-91.922	1.00	172.18	FS6	ATOM	12665	SD	MET	89	175.613	116.952	-78.106	1.00 84.43	FS6
ATOM	12613	OD1	ASP	83	185.411	103.736	-92.598	1.00	172.18	FS6	ATOM	12666	CE	MET	89	174.988	118.565	-78.572	1.00 84.43	FS6
ATOM	12614	OD2	ASP	83	183.874	104.083	-91.069	1.00	172.18	FS6	ATOM	12667	C	MET	89	173.014	115.145	-81.660	1.00 72.25	FS6
ATOM	12615	C	ASP	83	184.207	108.261	-91.275	1.00	71.16	FS6	ATOM	12668	O	MET	89	172.816	116.246	-82.170	1.00 72.25	FS6
ATOM	12616	O	ASP	83	185.011	108.684	-90.451	1.00	71.16	FS6	ATOM	12669	N	VAL	90	172.032	114.317	-81.311	1.00 71.32	FS6
ATOM	12617	N	ASN	84	183.637	109.040	-92.186	1.00	92.91	FS6	ATOM	12670	CA	VAL	90	170.628	114.668	-81.503	1.00 71.32	FS6
ATOM	12618	CA	ASN	84	183.936	110.465	-92.241	1.00	92.91	FS6	ATOM	12671	CB	VAL	90	169.791	113.453	-81.864	1.00 51.00	FS6
ATOM	12619	CB	ASN	84	183.618	111.026	-93.625	1.00	110.56	FS6	ATOM	12672	CG1	VAL	90	168.450	113.917	-82.398	1.00 51.00	FS6
ATOM	12620	CG	ASN	84	184.555	110.503	-94.684	1.00	110.56	FS6	ATOM	12673	CG2	VAL	90	170.531	112.585	-82.867	1.00 51.00	FS6
ATOM	12621	OD1	ASN	84	185.768	110.708	-94.609	1.00	110.56	FS6	ATOM	12674	C	VAL	90	170.066	115.245	-80.211	1.00 71.32	FS6
ATOM	12622	ND2	ASN	84	184.002	109.817	-95.678	1.00	110.56	FS6	ATOM	12675	O	VAL	90	170.142	114.617	-79.161	1.00 71.32	FS6
ATOM	12623	C	ASN	84	183.144	111.218	-91.182	1.00	92.91	FS6	ATOM	12676	N	VAL	91	169.469	116.423	-80.295	1.00 70.25	FS6
ATOM	12624	O	ASN	84	183.404	112.394	-90.917	1.00	92.91	FS6	ATOM	12677	CA	VAL	91	168.953	117.077	-79.106	1.00 70.25	FS6
ATOM	12625	N	VAL	85	182.168	110.532	-90.588	1.00	89.60	FS6	ATOM	12678	CB	VAL	91	169.896	118.246	-78.738	1.00 47.70	FS6
ATOM	12626	CA	VAL	85	181.342	111.113	-89.533	1.00	89.60	FS6	ATOM	12679	CG1	VAL	91	169.155	119.342	-77.970	1.00 47.70	FS6
ATOM	12627	CB	VAL	85	179.969	110.421	-89.426	1.00	77.21	FS6	ATOM	12680	CG2	VAL	91	171.050	117.706	-77.925	1.00 47.70	FS6
ATOM	12628	CG1	VAL	85	179.343	110.725	-88.082	1.00	77.21	FS6	ATOM	12681	C	VAL	91	167.520	117.584	-79.215	1.00 70.25	FS6
ATOM	12629	CG2	VAL	85	179.056	110.903	-90.533	1.00	77.21	FS6	ATOM	12682	O	VAL	91	167.157	118.193	-80.216	1.00 70.25	FS6
ATOM	12630	C	VAL	85	182.073	110.908	-88.221	1.00	89.60	FS6	ATOM	12683	N	LYS	92	166.707	117.340	-78.186	1.00 56.82	FS6
ATOM	12631	O	VAL	85	182.264	109.768	-87.778	1.00	89.60	FS6	ATOM	12684	CA	LYS	92	165.326	117.814	-78.196	1.00 56.82	FS6
ATOM	12632	N	ARG	86	182.477	112.011	-87.602	1.00	73.25	FS6	ATOM	12685	CB	LYS	92	164.594	117.459	-76.907	1.00 61.13	FS6

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ATOM  12686  CG  LYS    92     164.224 116.006 -76.749  1.00 61.13      FS6
ATOM  12687  CD  LYS    92     163.039 115.884 -75.806  1.00 61.13      FS6
ATOM  12688  CE  LYS    92     163.226 114.763 -74.805  1.00 61.13      FS6
ATOM  12689  NZ  LYS    92     164.444 114.965 -73.950  1.00 61.13      FS6
ATOM  12690  C   LYS    92     165.353 119.321 -78.318  1.00 56.82      FS6
ATOM  12691  O   LYS    92     166.050 119.991 -77.553  1.00 56.82      FS6
ATOM  12692  N   SER    93     164.607 119.853 -79.281  1.00 73.03      FS6
ATOM  12693  CA  SER    93     164.555 121.296 -79.474  1.00 73.03      FS6
ATOM  12694  CB  SER    93     163.594 121.661 -80.605  1.00 67.28      FS6
ATOM  12695  OG  SER    93     163.923 120.981 -81.798  1.00 67.28      FS6
ATOM  12696  C   SER    93     164.033 121.870 -78.177  1.00 73.03      FS6
ATOM  12697  O   SER    93     163.262 121.215 -77.479  1.00 73.03      FS6
ATOM  12698  N   GLN    94     164.456 123.082 -77.844  1.00 60.50      FS6
ATOM  12699  CA  GLN    94     163.994 123.714 -76.620  1.00 60.50      FS6
ATOM  12700  CB  GLN    94     164.955 123.424 -75.474  1.00 74.84      FS6
ATOM  12701  CG  GLN    94     164.906 121.987 -75.006  1.00 74.84      FS6
ATOM  12702  CD  GLN    94     165.686 121.763 -73.730  1.00 74.84      FS6
ATOM  12703  OE1 GLN    94     165.656 120.670 -73.160  1.00 74.84      FS6
ATOM  12704  NE2 GLN    94     166.388 122.796 -73.269  1.00 74.84      FS6
ATOM  12705  C   GLN    94     163.814 125.210 -76.767  1.00 60.50      FS6
ATOM  12706  O   GLN    94     164.636 125.889 -77.391  1.00 60.50      FS6
ATOM  12707  N   GLU    95     162.719 125.711 -76.198  1.00 58.82      FS6
ATOM  12708  CA  GLU    95     162.407 127.131 -76.243  1.00 58.82      FS6
ATOM  12709  CB  GLU    95     161.259 127.455 -75.286  1.00139.01      FS6
ATOM  12710  CG  GLU    95     160.091 126.475 -75.338  1.00139.01      FS6
ATOM  12711  CD  GLU    95     160.474 125.068 -74.893  1.00139.01      FS6
ATOM  12712  OE1 GLU    95     161.046 124.917 -73.790  1.00139.01      FS6
ATOM  12713  OE2 GLU    95     160.199 124.111 -75.648  1.00139.01      FS6
ATOM  12714  C   GLU    95     163.680 127.801 -75.769  1.00 58.82      FS6
ATOM  12715  O   GLU    95     164.290 127.371 -74.791  1.00 58.82      FS6
ATOM  12716  N   PRO    96     164.122 128.848 -76.465  1.00 82.34      FS6
ATOM  12717  CD  PRO    96     163.515 129.593 -77.579  1.00 63.23      FS6
ATOM  12718  CA  PRO    96     165.353 129.491 -76.007  1.00 82.34      FS6
ATOM  12719  CB  PRO    96     165.637 130.505 -77.108  1.00 63.23      FS6
ATOM  12720  CG  PRO    96     164.263 130.914 -77.519  1.00 63.23      FS6
ATOM  12721  C   PRO    96     165.169 130.144 -74.644  1.00 82.34      FS6
ATOM  12722  O   PRO    96     164.285 130.975 -74.458  1.00 82.34      FS6
ATOM  12723  N   PHE    97     165.990 129.749 -73.682  1.00 41.91      FS6
ATOM  12724  CA  PHE    97     165.908 130.332 -72.359  1.00 41.91      FS6
ATOM  12725  CB  PHE    97     166.425 129.346 -71.311  1.00 52.34      FS6
ATOM  12726  CG  PHE    97     166.260 129.831 -69.898  1.00 52.34      FS6
ATOM  12727  CD1 PHE    97     165.098 129.556 -69.187  1.00 52.34      FS6
ATOM  12728  CD2 PHE    97     167.249 130.603 -69.293  1.00 52.34      FS6
ATOM  12729  CE1 PHE    97     164.926 130.042 -67.905  1.00 52.34      FS6
ATOM  12730  CE2 PHE    97     167.085 131.095 -68.010  1.00 52.34      FS6
ATOM  12731  CZ  PHE    97     165.924 130.815 -67.315  1.00 52.34      FS6
ATOM  12732  C   PHE    97     166.754 131.610 -72.324  1.00 41.91      FS6
ATOM  12733  O   PHE    97     167.975 131.554 -72.176  1.00 41.91      FS6
ATOM  12734  N   LEU    98     166.104 132.761 -72.459  1.00 62.83      FS6
ATOM  12735  CA  LEU    98     166.807 134.037 -72.437  1.00 62.83      FS6
ATOM  12736  CB  LEU    98     165.854 135.168 -72.797  1.00 76.30      FS6
ATOM  12737  CG  LEU    98     165.840 135.608 -74.255  1.00 76.30      FS6
ATOM  12738  CD1 LEU    98     164.983 136.863 -74.386  1.00 76.30      FS6
ATOM  12739  CD2 LEU    98     167.267 135.886 -74.713  1.00 76.30      FS6
ATOM  12740  C   LEU    98     167.464 134.366 -71.104  1.00 62.83      FS6
ATOM  12741  O   LEU    98     167.297 133.647 -70.126  1.00 62.83      FS6
ATOM  12742  N   ALA    99     168.202 135.471 -71.081  1.00 75.61      FS6
ATOM  12743  CA  ALA    99     168.901 135.941 -69.886  1.00 75.61      FS6
ATOM  12744  CB  ALA    99     170.018 134.999 -69.534  1.00 44.58      FS6
ATOM  12745  C   ALA    99     169.475 137.315 -70.182  1.00 75.61      FS6
ATOM  12746  O   ALA    99     169.663 137.666 -71.347  1.00 75.61      FS6
ATOM  12747  N   ASN   100     169.758 138.089 -69.138  1.00 96.53      FS6
ATOM  12748  CA  ASN   100     170.318 139.432 -69.310  1.00 96.53      FS6
ATOM  12749  CB  ASN   100     171.640 139.356 -70.079  1.00100.25      FS6
ATOM  12750  CG  ASN   100     172.781 140.044 -69.357  1.00100.25      FS6
ATOM  12751  OD1 ASN   100     172.636 141.160 -68.852  1.00100.25      FS6
ATOM  12752  ND2 ASN   100     173.935 139.381 -69.316  1.00100.25      FS6
ATOM  12753  C   ASN   100     169.381 140.397 -70.049  1.00 96.53      FS6
ATOM  12754  O   ASN   100     169.765 141.527 -70.347  1.00 96.53      FS6
ATOM  12755  N   ALA   101     168.162 139.955 -70.353  1.00144.44      FS6
ATOM  12756  CA  ALA   101     167.201 140.803 -71.060  1.00144.44      FS6
ATOM  12757  CB  ALA   101     166.761 140.131 -72.356  1.00 59.20      FS6
ATOM  12758  C   ALA   101     165.976 141.128 -70.205  1.00144.44      FS6
ATOM  12759  O   ALA   101     165.891 140.618 -69.065  1.00144.44      FS6
ATOM  12760  OXT ALA   101     165.109 141.888 -70.692  1.00102.76      FS6
ATOM  12761  CB  ALA     1     279.489 117.396  -7.709  1.00118.45      MS13
ATOM  12762  C   ALA     1     278.381 115.206  -8.134  1.00 68.79      MS13
ATOM  12763  O   ALA     1     277.162 115.128  -8.265  1.00 68.79      MS13
ATOM  12764  N   ALA     1     278.372 116.979  -9.867  1.00 68.79      MS13
ATOM  12765  CA  ALA     1     279.157 116.353  -8.765  1.00 68.79      MS13
ATOM  12766  N   ARG     2     279.090 114.313  -7.450  1.00 81.09      MS13
ATOM  12767  CA  ARG     2     278.449 113.180  -6.800  1.00 81.09      MS13
ATOM  12768  CB  ARG     2     279.043 111.870  -7.300  1.00153.50      MS13
ATOM  12769  CG  ARG     2     279.119 111.785  -8.800  1.00153.50      MS13
ATOM  12770  CD  ARG     2     278.981 110.355  -9.254  1.00153.50      MS13
ATOM  12771  NE  ARG     2     279.235 110.223 -10.682  1.00153.50      MS13
ATOM  12772  CZ  ARG     2     278.979 109.125 -11.382  1.00153.50      MS13
ATOM  12773  NH1 ARG     2     278.451 108.065 -10.785  1.00153.50      MS13
ATOM  12774  NH2 ARG     2     279.269 109.083 -12.675  1.00153.50      MS13
ATOM  12775  C   ARG     2     278.649 113.282  -5.304  1.00 81.09      MS13
ATOM  12776  O   ARG     2     279.744 113.036  -4.810  1.00 81.09      MS13
ATOM  12777  N   ILE     3     277.591 113.639  -4.581  1.00 93.93      MS13
ATOM  12778  CA  ILE     3     277.693 113.780  -3.140  1.00 93.93      MS13
ATOM  12779  CB  ILE     3     276.901 115.010  -2.659  1.00 55.16      MS13
ATOM  12780  CG2 ILE     3     276.897 115.093  -1.148  1.00 55.16      MS13
ATOM  12781  CG1 ILE     3     277.568 116.275  -3.208  1.00 55.16      MS13
ATOM  12782  CD1 ILE     3     277.058 117.580  -2.602  1.00 55.16      MS13
ATOM  12783  C   ILE     3     277.297 112.538  -2.350  1.00 93.93      MS13
ATOM  12784  O   ILE     3     278.004 111.533  -2.395  1.00 93.93      MS13
ATOM  12785  N   ALA     4     276.179 112.584  -1.634  1.00 75.80      MS13
ATOM  12786  CA  ALA     4     275.767 111.445  -0.810  1.00 75.80      MS13
ATOM  12787  CB  ALA     4     274.451 111.751  -0.110  1.00 86.33      MS13
ATOM  12788  C   ALA     4     275.651 110.141  -1.583  1.00 75.80      MS13
ATOM  12789  O   ALA     4     275.779 110.118  -2.808  1.00 75.80      MS13
ATOM  12790  N   GLY     5     275.410 109.060  -0.850  1.00128.52      MS13
ATOM  12791  CA  GLY     5     275.272 107.758  -1.469  1.00128.52      MS13
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ATOM	12792	C	GLY	5	274.853	107.840	-2.924	1.00128.52	MS13	ATOM	12845	CA	LYS	12	270.653	122.615	-12.216	1.00 82.15	MS13
ATOM	12793	O	GLY	5	273.677	108.011	-3.240	1.00128.52	MS13	ATOM	12846	CB	LYS	12	269.597	121.669	-11.647	1.00 88.50	MS13
ATOM	12794	N	VAL	6	275.837	107.738	-3.810	1.00113.72	MS13	ATOM	12847	CG	LYS	12	268.455	121.347	-12.582	1.00 88.50	MS13
ATOM	12795	CA	VAL	6	275.624	107.779	-5.252	1.00113.72	MS13	ATOM	12848	CD	LYS	12	267.350	120.620	-11.840	1.00 88.50	MS13
ATOM	12796	CB	VAL	6	275.143	106.390	-5.781	1.00120.12	MS13	ATOM	12849	CE	LYS	12	266.153	120.422	-12.730	1.00 88.50	MS13
ATOM	12797	CG1	VAL	6	276.227	105.341	-5.539	1.00120.12	MS13	ATOM	12850	NZ	LYS	12	266.576	119.704	-13.954	1.00 88.50	MS13
ATOM	12798	CG2	VAL	6	273.835	105.973	-5.102	1.00120.12	MS13	ATOM	12851	C	LYS	12	271.326	123.322	-11.064	1.00 82.15	MS13
ATOM	12799	C	VAL	6	274.680	108.868	-5.769	1.00113.72	MS13	ATOM	12852	O	LYS	12	272.442	122.972	-10.684	1.00 82.15	MS13
ATOM	12800	O	VAL	6	273.800	108.600	-6.586	1.00113.72	MS13	ATOM	12853	N	ARG	13	270.652	124.322	-10.510	1.00 47.00	MS13
ATOM	12801	N	GLU	7	274.874	110.099	-5.305	1.00 84.69	MS13	ATOM	12854	CA	ARG	13	271.189	125.035	-9.362	1.00 47.00	MS13
ATOM	12802	CA	GLU	7	274.043	111.216	-5.753	1.00 84.69	MS13	ATOM	12855	CB	ARG	13	270.124	125.966	-8.804	1.00 56.43	MS13
ATOM	12803	CB	GLU	7	273.850	112.221	-4.619	1.00201.09	MS13	ATOM	12856	CG	ARG	13	269.694	127.008	-9.776	1.00 56.43	MS13
ATOM	12804	CG	GLU	7	273.007	111.681	-3.481	1.00201.09	MS13	ATOM	12857	CD	ARG	13	268.541	127.775	-9.215	1.00 56.43	MS13
ATOM	12805	CD	GLU	7	271.629	111.246	-3.944	1.00201.09	MS13	ATOM	12858	NE	ARG	13	268.771	129.217	-9.224	1.00 56.43	MS13
ATOM	12806	OE1	GLU	7	270.872	112.102	-4.443	1.00201.09	MS13	ATOM	12859	CZ	ARG	13	269.049	129.933	-8.137	1.00 56.43	MS13
ATOM	12807	OE2	GLU	7	271.305	110.047	-3.815	1.00201.09	MS13	ATOM	12860	NH1	ARG	13	269.134	129.334	-6.952	1.00 56.43	MS13
ATOM	12808	C	GLU	7	274.691	111.900	-6.956	1.00 84.69	MS13	ATOM	12861	NH2	ARG	13	269.222	131.249	-8.233	1.00 56.43	MS13
ATOM	12809	O	GLU	7	275.883	112.189	-6.939	1.00 84.69	MS13	ATOM	12862	C	ARG	13	271.585	123.987	-8.309	1.00 47.00	MS13
ATOM	12810	N	ILE	8	273.907	112.164	-7.998	1.00127.43	MS13	ATOM	12863	O	ARG	13	270.955	122.938	-8.209	1.00 47.00	MS13
ATOM	12811	CA	ILE	8	274.461	112.781	-9.197	1.00127.43	MS13	ATOM	12864	N	VAL	14	272.625	124.264	-7.529	1.00 84.22	MS13
ATOM	12812	CB	ILE	8	274.955	111.695	-10.203	1.00101.69	MS13	ATOM	12865	CA	VAL	14	273.080	123.306	-6.525	1.00 84.22	MS13
ATOM	12813	CG2	ILE	8	276.366	112.022	-10.669	1.00101.69	MS13	ATOM	12866	CB	VAL	14	274.358	123.802	-5.821	1.00 76.28	MS13
ATOM	12814	CG1	ILE	8	274.931	110.301	-9.560	1.00101.69	MS13	ATOM	12867	CG1	VAL	14	274.882	122.736	-4.874	1.00 76.28	MS13
ATOM	12815	CD1	ILE	8	273.549	109.672	-9.455	1.00101.69	MS13	ATOM	12868	CG2	VAL	14	275.410	124.137	-6.858	1.00 76.28	MS13
ATOM	12816	C	ILE	8	273.523	113.729	-9.957	1.00127.43	MS13	ATOM	12869	C	VAL	14	272.021	122.978	-5.479	1.00 84.22	MS13
ATOM	12817	O	ILE	8	273.007	113.380	-11.019	1.00127.43	MS13	ATOM	12870	O	VAL	14	271.873	121.819	-5.087	1.00 84.22	MS13
ATOM	12818	N	PRO	9	273.287	114.940	-9.423	1.00101.51	MS13	ATOM	12871	N	ASP	15	271.292	123.988	-5.018	1.00114.34	MS13
ATOM	12819	CD	PRO	9	273.579	115.353	-8.034	1.00 64.96	MS13	ATOM	12872	CA	ASP	15	270.240	123.752	-4.036	1.00114.34	MS13
ATOM	12820	CA	PRO	9	272.407	115.912	-10.093	1.00101.51	MS13	ATOM	12873	CB	ASP	15	269.509	125.055	-3.715	1.00 86.06	MS13
ATOM	12821	CB	PRO	9	271.702	116.573	-8.931	1.00 64.96	MS13	ATOM	12874	CG	ASP	15	269.553	126.042	-4.860	1.00 86.06	MS13
ATOM	12822	CG	PRO	9	272.854	116.696	-7.917	1.00 64.96	MS13	ATOM	12875	OD1	ASP	15	269.514	125.596	-6.025	1.00 86.06	MS13
ATOM	12823	C	PRO	9	273.283	116.901	-10.854	1.00101.51	MS13	ATOM	12876	OD2	ASP	15	269.617	127.261	-4.597	1.00 86.06	MS13
ATOM	12824	O	PRO	9	274.317	117.321	-10.338	1.00101.51	MS13	ATOM	12877	C	ASP	15	269.271	122.737	-4.636	1.00114.34	MS13
ATOM	12825	N	ARG	10	272.893	117.286	-12.062	1.00 74.57	MS13	ATOM	12878	O	ASP	15	269.153	121.614	-4.143	1.00114.34	MS13
ATOM	12826	CA	ARG	10	273.729	118.217	-12.820	1.00 74.57	MS13	ATOM	12879	N	VAL	16	268.589	123.144	-5.703	1.00 76.03	MS13
ATOM	12827	CB	ARG	10	274.669	117.432	-13.742	1.00161.70	MS13	ATOM	12880	CA	VAL	16	267.643	122.288	-6.423	1.00 76.03	MS13
ATOM	12828	CG	ARG	10	275.734	118.269	-14.437	1.00161.70	MS13	ATOM	12881	CB	VAL	16	267.470	122.776	-7.884	1.00 34.79	MS13
ATOM	12829	CD	ARG	10	275.384	118.574	-15.890	1.00161.70	MS13	ATOM	12882	CG1	VAL	16	266.710	121.750	-8.684	1.00 34.79	MS13
ATOM	12830	NE	ARG	10	275.274	117.361	-16.701	1.00161.70	MS13	ATOM	12883	CG2	VAL	16	266.761	124.127	-7.915	1.00 34.79	MS13
ATOM	12831	CZ	ARG	10	275.184	117.346	-18.030	1.00161.70	MS13	ATOM	12884	C	VAL	16	268.189	120.868	-6.488	1.00 76.03	MS13
ATOM	12832	NH1	ARG	10	275.193	118.484	-18.711	1.00161.70	MS13	ATOM	12885	O	VAL	16	267.557	119.906	-6.042	1.00 76.03	MS13
ATOM	12833	NH2	ARG	10	275.079	116.193	-18.680	1.00161.70	MS13	ATOM	12886	N	ALA	17	269.383	120.779	-7.062	1.00 61.77	MS13
ATOM	12834	C	ARG	10	272.901	119.197	-13.634	1.00 74.57	MS13	ATOM	12887	CA	ALA	17	270.107	119.538	-7.264	1.00 61.77	MS13
ATOM	12835	O	ARG	10	271.694	119.030	-13.757	1.00 74.57	MS13	ATOM	12888	CB	ALA	17	271.434	119.851	-7.915	1.00 46.70	MS13
ATOM	12836	N	ASN	11	273.544	120.227	-14.175	1.00 70.51	MS13	ATOM	12889	C	ALA	17	270.326	118.699	-6.006	1.00 61.77	MS13
ATOM	12837	CA	ASN	11	272.846	121.221	-14.994	1.00 70.51	MS13	ATOM	12890	O	ALA	17	270.199	117.471	-6.030	1.00 61.77	MS13
ATOM	12838	CB	ASN	11	272.217	120.561	-16.221	1.00 87.55	MS13	ATOM	12891	N	LEU	18	270.676	119.350	-4.908	1.00 55.04	MS13
ATOM	12839	CG	ASN	11	272.906	120.955	-17.505	1.00 87.55	MS13	ATOM	12892	CA	LEU	18	270.904	118.617	-3.672	1.00 55.04	MS13
ATOM	12840	OD1	ASN	11	273.359	122.092	-17.658	1.00 87.55	MS13	ATOM	12893	CB	LEU	18	271.436	119.573	-2.606	1.00 69.94	MS13
ATOM	12841	ND2	ASN	11	272.973	120.023	-18.449	1.00 87.55	MS13	ATOM	12894	CG	LEU	18	272.871	120.044	-2.856	1.00 69.94	MS13
ATOM	12842	C	ASN	11	271.763	122.036	-14.289	1.00 70.51	MS13	ATOM	12895	CD1	LEU	18	273.119	121.394	-2.201	1.00 69.94	MS13
ATOM	12843	O	ASN	11	271.035	122.795	-14.934	1.00 70.51	MS13	ATOM	12896	CD2	LEU	18	273.824	118.983	-2.331	1.00 69.94	MS13
ATOM	12844	N	LYS	12	271.648	121.877	-12.978	1.00 82.15	MS13	ATOM	12897	C	LEU	18	269.604	117.964	-3.214	1.00 55.04	MS13

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ATOM  12898  O   LEU  18     269.618 116.932  -2.535  1.00 55.04      MS13
ATOM  12899  N   THR  19     268.487 118.573  -3.613  1.00 64.86      MS13
ATOM  12900  CA  THR  19     267.158 118.090  -3.265  1.00 64.86      MS13
ATOM  12901  CB  THR  19     266.068 118.963  -3.885  1.00104.36      MS13
ATOM  12902  OG1 THR  19     266.235 120.312  -3.442  1.00104.36      MS13
ATOM  12903  CG2 THR  19     264.694 118.470  -3.471  1.00104.36      MS13
ATOM  12904  C   THR  19     266.959 116.676  -3.762  1.00 64.86      MS13
ATOM  12905  O   THR  19     266.218 115.892  -3.145  1.00 64.86      MS13
ATOM  12906  N   TYR  20     267.624 116.362  -4.877  1.00 45.22      MS13
ATOM  12907  CA  TYR  20     267.544 115.037  -5.491  1.00 45.22      MS13
ATOM  12908  CB  TYR  20     268.240 115.034  -6.853  1.00 97.56      MS13
ATOM  12909  CG  TYR  20     267.461 115.775  -7.909  1.00 97.56      MS13
ATOM  12910  CD1 TYR  20     267.372 117.163  -7.892  1.00 97.56      MS13
ATOM  12911  CE1 TYR  20     266.628 117.850  -8.851  1.00 97.56      MS13
ATOM  12912  CD2 TYR  20     266.785 115.084  -8.912  1.00 97.56      MS13
ATOM  12913  CE2 TYR  20     266.034 115.758  -9.876  1.00 97.56      MS13
ATOM  12914  CZ  TYR  20     265.959 117.142  -9.843  1.00 97.56      MS13
ATOM  12915  OH  TYR  20     265.220 117.817 -10.797  1.00 97.56      MS13
ATOM  12916  C   TYR  20     268.100 113.920  -4.615  1.00 45.22      MS13
ATOM  12917  O   TYR  20     268.099 112.751  -5.008  1.00 45.22      MS13
ATOM  12918  N   ILE  21     268.560 114.290  -3.422  1.00 63.76      MS13
ATOM  12919  CA  ILE  21     269.095 113.335  -2.463  1.00 63.76      MS13
ATOM  12920  CB  ILE  21     270.244 113.963  -1.670  1.00 68.36      MS13
ATOM  12921  CG2 ILE  21     270.811 112.957  -0.665  1.00 68.36      MS13
ATOM  12922  CG1 ILE  21     271.309 114.445  -2.657  1.00 68.36      MS13
ATOM  12923  CD1 ILE  21     272.512 115.084  -2.017  1.00 68.36      MS13
ATOM  12924  C   ILE  21     267.965 112.905  -1.524  1.00 63.76      MS13
ATOM  12925  O   ILE  21     267.058 113.691  -1.214  1.00 63.76      MS13
ATOM  12926  N   TYR  22     268.016 111.657  -1.075  1.00110.35      MS13
ATOM  12927  CA  TYR  22     266.963 111.139  -0.224  1.00110.35      MS13
ATOM  12928  CB  TYR  22     267.242 109.696   0.187  1.00 82.97      MS13
ATOM  12929  CG  TYR  22     266.064 109.098   0.910  1.00 82.97      MS13
ATOM  12930  CD1 TYR  22     264.782 109.176   0.364  1.00 82.97      MS13
ATOM  12931  CE1 TYR  22     263.669 108.690   1.048  1.00 82.97      MS13
ATOM  12932  CD2 TYR  22     266.210 108.509   2.163  1.00 82.97      MS13
ATOM  12933  CE2 TYR  22     265.098 108.015   2.861  1.00 82.97      MS13
ATOM  12934  CZ  TYR  22     263.832 108.112   2.295  1.00 82.97      MS13
ATOM  12935  OH  TYR  22     262.736 107.641   2.976  1.00 82.97      MS13
ATOM  12936  C   TYR  22     266.648 111.949   1.017  1.00110.35      MS13
ATOM  12937  O   TYR  22     265.480 112.155   1.332  1.00110.35      MS13
ATOM  12938  N   GLY  23     267.666 112.412   1.729  1.00 73.05      MS13
ATOM  12939  CA  GLY  23     267.397 113.176   2.936  1.00 73.05      MS13
ATOM  12940  C   GLY  23     267.565 114.681   2.834  1.00 73.05      MS13
ATOM  12941  O   GLY  23     267.756 115.345   3.849  1.00 73.05      MS13
ATOM  12942  N   ILE  24     267.498 115.239   1.632  1.00 75.18      MS13
ATOM  12943  CA  ILE  24     267.661 116.680   1.500  1.00 75.18      MS13
ATOM  12944  CB  ILE  24     268.905 117.039   0.666  1.00 60.15      MS13
ATOM  12945  CG2 ILE  24     269.118 118.559   0.661  1.00 60.15      MS13
ATOM  12946  CG1 ILE  24     270.131 116.349   1.257  1.00 60.15      MS13
ATOM  12947  CD1 ILE  24     271.408 116.732   0.578  1.00 60.15      MS13
ATOM  12948  C   ILE  24     266.459 117.374   0.885  1.00 75.18      MS13
ATOM  12949  O   ILE  24     265.987 117.003  -0.199  1.00 75.18      MS13
ATOM  12950  N   GLY  25     265.970 118.385   1.595  1.00 49.91      MS13
ATOM  12951  CA  GLY  25     264.834 119.150   1.125  1.00 49.91      MS13
ATOM  12952  C   GLY  25     265.282 120.559   0.809  1.00 49.91      MS13
ATOM  12953  O   GLY  25     266.451 120.872   0.991  1.00 49.91      MS13
ATOM  12954  N   LYS  26     264.366 121.401   0.335  1.00 71.22      MS13
ATOM  12955  CA  LYS  26     264.682 122.788  -0.003  1.00 71.22      MS13
ATOM  12956  CB  LYS  26     263.423 123.522  -0.483  1.00127.75      MS13
ATOM  12957  CG  LYS  26     263.355 123.768  -1.990  1.00127.75      MS13
ATOM  12958  CD  LYS  26     264.430 124.757  -2.457  1.00127.75      MS13
ATOM  12959  CE  LYS  26     264.296 125.075  -3.946  1.00127.75      MS13
ATOM  12960  NZ  LYS  26     265.285 126.091  -4.404  1.00127.75      MS13
ATOM  12961  C   LYS  26     265.269 123.513   1.203  1.00 71.22      MS13
ATOM  12962  O   LYS  26     265.875 124.574   1.070  1.00 71.22      MS13
ATOM  12963  N   ALA  27     265.082 122.934   2.382  1.00 79.71      MS13
ATOM  12964  CA  ALA  27     265.596 123.531   3.601  1.00 79.71      MS13
ATOM  12965  CB  ALA  27     264.831 123.003   4.791  1.00 41.54      MS13
ATOM  12966  C   ALA  27     267.081 123.221   3.746  1.00 79.71      MS13
ATOM  12967  O   ALA  27     267.911 124.127   3.786  1.00 79.71      MS13
ATOM  12968  N   ARG  28     267.422 121.941   3.821  1.00 53.76      MS13
ATOM  12969  CA  ARG  28     268.817 121.554   3.956  1.00 53.76      MS13
ATOM  12970  CB  ARG  28     268.928 120.037   4.098  1.00 43.03      MS13
ATOM  12971  CG  ARG  28     268.292 119.549   5.379  1.00 43.03      MS13
ATOM  12972  CD  ARG  28     268.440 118.070   5.599  1.00 43.03      MS13
ATOM  12973  NE  ARG  28     268.521 117.838   7.032  1.00 43.03      MS13
ATOM  12974  CZ  ARG  28     268.536 116.644   7.612  1.00 43.03      MS13
ATOM  12975  NH1 ARG  28     268.461 115.539   6.883  1.00 43.03      MS13
ATOM  12976  NH2 ARG  28     268.670 116.560   8.931  1.00 43.03      MS13
ATOM  12977  C   ARG  28     269.660 122.041   2.785  1.00 53.76      MS13
ATOM  12978  O   ARG  28     270.881 122.109   2.883  1.00 53.76      MS13
ATOM  12979  N   ALA  29     269.006 122.389   1.682  1.00 78.39      MS13
ATOM  12980  CA  ALA  29     269.710 122.884   0.505  1.00 78.39      MS13
ATOM  12981  CB  ALA  29     268.738 123.053  -0.657  1.00115.58      MS13
ATOM  12982  C   ALA  29     270.389 124.214   0.817  1.00 78.39      MS13
ATOM  12983  O   ALA  29     271.616 124.300   0.790  1.00 78.39      MS13
ATOM  12984  N   LYS  30     269.586 125.241   1.112  1.00 76.62      MS13
ATOM  12985  CA  LYS  30     270.089 126.581   1.435  1.00 76.62      MS13
ATOM  12986  CB  LYS  30     268.943 127.536   1.767  1.00115.94      MS13
ATOM  12987  CG  LYS  30     268.167 128.040   0.574  1.00115.94      MS13
ATOM  12988  CD  LYS  30     267.082 129.013   1.021  1.00115.94      MS13
ATOM  12989  CE  LYS  30     266.181 129.426  -0.140  1.00115.94      MS13
ATOM  12990  NZ  LYS  30     265.106 130.376   0.275  1.00115.94      MS13
ATOM  12991  C   LYS  30     271.052 126.578   2.608  1.00 76.62      MS13
ATOM  12992  O   LYS  30     271.936 127.430   2.689  1.00 76.62      MS13
ATOM  12993  N   GLU  31     270.874 125.629   3.523  1.00 60.76      MS13
ATOM  12994  CA  GLU  31     271.744 125.544   4.684  1.00 60.76      MS13
ATOM  12995  CB  GLU  31     271.119 124.664   5.755  1.00 97.74      MS13
ATOM  12996  CG  GLU  31     271.742 124.861   7.114  1.00 97.74      MS13
ATOM  12997  CD  GLU  31     271.935 123.554   7.840  1.00 97.74      MS13
ATOM  12998  OE1 GLU  31     272.594 122.666   7.262  1.00 97.74      MS13
ATOM  12999  OE2 GLU  31     271.437 123.411   8.977  1.00 97.74      MS13
ATOM  13000  C   GLU  31     273.125 125.005   4.313  1.00 60.76      MS13
ATOM  13001  O   GLU  31     274.125 125.680   4.527  1.00 60.76      MS13
ATOM  13002  N   ALA  32     273.191 123.799   3.756  1.00 86.49      MS13
ATOM  13003  CA  ALA  32     274.484 123.225   3.368  1.00 86.49      MS13
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ATOM	13004	CB	ALA	32	274.294	121.870	2.697	1.00	65.33	MS13	ATOM	13057	ND2	ASN	39	274.578	131.647	-5.533	1.00	81.63	MS13
ATOM	13005	C	ALA	32	275.239	124.166	2.435	1.00	86.49	MS13	ATOM	13058	C	ASN	39	275.435	129.188	-4.529	1.00	114.52	MS13
ATOM	13006	O	ALA	32	276.466	124.173	2.406	1.00	86.49	MS13	ATOM	13059	O	ASN	39	275.688	128.168	-5.171	1.00	114.52	MS13
ATOM	13007	N	LEU	33	274.501	124.952	1.663	1.00	69.21	MS13	ATOM	13060	N	PRO	40	274.221	129.419	-4.018	1.00	103.17	MS13
ATOM	13008	CA	LEU	33	275.127	125.907	0.762	1.00	69.21	MS13	ATOM	13061	CD	PRO	40	273.768	130.536	-3.176	1.00	74.08	MS13
ATOM	13009	CB	LEU	33	274.184	126.276	-0.383	1.00	73.49	MS13	ATOM	13062	CA	PRO	40	273.143	128.448	-4.219	1.00	103.17	MS13
ATOM	13010	CG	LEU	33	273.915	125.182	-1.420	1.00	73.49	MS13	ATOM	13063	CB	PRO	40	271.997	129.033	-3.404	1.00	74.08	MS13
ATOM	13011	CD1	LEU	33	272.876	125.680	-2.402	1.00	73.49	MS13	ATOM	13064	CG	PRO	40	272.688	129.882	-2.376	1.00	74.08	MS13
ATOM	13012	CD2	LEU	33	275.196	124.810	-2.150	1.00	73.49	MS13	ATOM	13065	C	PRO	40	272.767	128.305	-5.680	1.00	103.17	MS13
ATOM	13013	C	LEU	33	275.460	127.144	1.577	1.00	69.21	MS13	ATOM	13066	O	PRO	40	272.296	127.256	-6.112	1.00	103.17	MS13
ATOM	13014	O	LEU	33	276.345	127.920	1.221	1.00	69.21	MS13	ATOM	13067	N	ALA	41	272.996	129.373	-6.431	1.00	78.11	MS13
ATOM	13015	N	GLU	34	274.733	127.318	2.675	1.00	71.23	MS13	ATOM	13068	CA	ALA	41	272.652	129.426	-7.840	1.00	78.11	MS13
ATOM	13016	CA	GLU	34	274.943	128.444	3.575	1.00	71.23	MS13	ATOM	13069	CB	ALA	41	272.457	130.852	-8.228	1.00	11.51	MS13
ATOM	13017	CB	GLU	34	273.835	128.485	4.631	1.00	143.36	MS13	ATOM	13070	C	ALA	41	273.590	128.755	-8.840	1.00	78.11	MS13
ATOM	13018	CG	GLU	34	273.740	129.785	5.408	1.00	143.36	MS13	ATOM	13071	O	ALA	41	273.157	128.375	-9.925	1.00	78.11	MS13
ATOM	13019	CD	GLU	34	273.038	130.879	4.627	1.00	143.36	MS13	ATOM	13072	N	THR	42	274.867	128.618	-8.504	1.00	82.79	MS13
ATOM	13020	OE1	GLU	34	271.854	130.688	4.273	1.00	143.36	MS13	ATOM	13073	CA	THR	42	275.801	127.989	-9.433	1.00	82.79	MS13
ATOM	13021	OE2	GLU	34	273.668	131.928	4.369	1.00	143.36	MS13	ATOM	13074	CB	THR	42	277.169	127.719	-8.767	1.00	97.88	MS13
ATOM	13022	C	GLU	34	276.287	128.204	4.249	1.00	71.23	MS13	ATOM	13075	OG1	THR	42	276.969	127.072	-7.505	1.00	97.88	MS13
ATOM	13023	O	GLU	34	277.259	128.911	3.987	1.00	71.23	MS13	ATOM	13076	CG2	THR	42	277.934	129.019	-8.562	1.00	97.88	MS13
ATOM	13024	N	LYS	35	276.327	127.183	5.102	1.00	76.32	MS13	ATOM	13077	C	THR	42	275.251	126.668	-9.969	1.00	82.79	MS13
ATOM	13025	CA	LYS	35	277.530	126.807	5.838	1.00	76.32	MS13	ATOM	13078	O	THR	42	274.744	125.843	-9.203	1.00	82.79	MS13
ATOM	13026	CB	LYS	35	277.308	125.483	6.568	1.00	86.81	MS13	ATOM	13079	N	ARG	43	275.337	126.480	-11.287	1.00	60.52	MS13
ATOM	13027	CG	LYS	35	276.238	125.515	7.632	1.00	86.81	MS13	ATOM	13080	CA	ARG	43	274.868	125.245	-11.922	1.00	60.52	MS13
ATOM	13028	CD	LYS	35	276.147	124.155	8.299	1.00	86.81	MS13	ATOM	13081	CB	ARG	43	274.940	125.380	-13.447	1.00	93.73	MS13
ATOM	13029	CE	LYS	35	275.089	124.116	9.398	1.00	86.81	MS13	ATOM	13082	CG	ARG	43	273.595	125.278	-14.160	1.00	93.73	MS13
ATOM	13030	NZ	LYS	35	275.000	122.770	10.050	1.00	86.81	MS13	ATOM	13083	CD	ARG	43	272.596	126.277	-13.604	1.00	93.73	MS13
ATOM	13031	C	LYS	35	278.758	126.665	4.943	1.00	76.32	MS13	ATOM	13084	NE	ARG	43	271.248	126.059	-14.119	1.00	93.73	MS13
ATOM	13032	O	LYS	35	279.751	127.378	5.106	1.00	76.32	MS13	ATOM	13085	CZ	ARG	43	270.166	126.664	-13.642	1.00	93.73	MS13
ATOM	13033	N	THR	36	278.692	125.730	4.004	1.00	72.45	MS13	ATOM	13086	NH1	ARG	43	270.274	127.521	-12.638	1.00	93.73	MS13
ATOM	13034	CA	THR	36	279.801	125.485	3.092	1.00	72.45	MS13	ATOM	13087	NH2	ARG	43	268.976	126.420	-14.168	1.00	93.73	MS13
ATOM	13035	CB	THR	36	279.496	124.237	2.226	1.00	68.25	MS13	ATOM	13088	C	ARG	43	275.785	124.125	-11.445	1.00	60.52	MS13
ATOM	13036	OG1	THR	36	279.450	123.079	3.075	1.00	68.25	MS13	ATOM	13089	O	ARG	43	276.994	124.300	-11.425	1.00	60.52	MS13
ATOM	13037	CG2	THR	36	280.559	124.029	1.164	1.00	68.25	MS13	ATOM	13090	N	VAL	44	275.232	122.986	-11.051	1.00	79.30	MS13
ATOM	13038	C	THR	36	280.114	126.716	2.227	1.00	72.45	MS13	ATOM	13091	CA	VAL	44	276.076	121.900	-10.563	1.00	79.30	MS13
ATOM	13039	O	THR	36	281.074	126.733	1.455	1.00	72.45	MS13	ATOM	13092	CB	VAL	44	275.290	120.579	-10.438	1.00	72.67	MS13
ATOM	13040	N	GLY	37	279.307	127.757	2.389	1.00	69.27	MS13	ATOM	13093	CG1	VAL	44	276.216	119.450	-9.980	1.00	72.67	MS13
ATOM	13041	CA	GLY	37	279.518	128.983	1.645	1.00	69.27	MS13	ATOM	13094	CG2	VAL	44	274.156	120.760	-9.443	1.00	72.67	MS13
ATOM	13042	C	GLY	37	279.719	128.801	0.155	1.00	69.27	MS13	ATOM	13095	C	VAL	44	277.309	121.668	-11.434	1.00	79.30	MS13
ATOM	13043	O	GLY	37	280.810	129.035	-0.364	1.00	69.27	MS13	ATOM	13096	O	VAL	44	278.359	121.260	-10.930	1.00	79.30	MS13
ATOM	13044	N	ILE	38	278.665	128.367	-0.530	1.00	98.47	MS13	ATOM	13097	N	LYS	45	277.189	121.934	-12.733	1.00	86.69	MS13
ATOM	13045	CA	ILE	38	278.691	128.167	-1.977	1.00	98.47	MS13	ATOM	13098	CA	LYS	45	278.313	121.757	-13.653	1.00	86.69	MS13
ATOM	13046	CB	ILE	38	278.369	126.706	-2.389	1.00	65.26	MS13	ATOM	13099	CB	LYS	45	277.831	121.848	-15.100	1.00	81.78	MS13
ATOM	13047	CG2	ILE	38	278.697	126.510	-3.867	1.00	65.26	MS13	ATOM	13100	CG	LYS	45	276.975	123.061	-15.369	1.00	81.78	MS13
ATOM	13048	CG1	ILE	38	279.145	125.705	-1.532	1.00	65.26	MS13	ATOM	13101	CD	LYS	45	276.546	123.145	-16.818	1.00	81.78	MS13
ATOM	13049	CD1	ILE	38	280.585	125.572	-1.905	1.00	65.26	MS13	ATOM	13102	CE	LYS	45	277.721	123.478	-17.721	1.00	81.78	MS13
ATOM	13050	C	ILE	38	277.541	129.013	-2.494	1.00	98.47	MS13	ATOM	13103	NZ	LYS	45	277.301	123.661	-19.148	1.00	81.78	MS13
ATOM	13051	O	ILE	38	276.590	129.270	-1.759	1.00	98.47	MS13	ATOM	13104	C	LYS	45	279.409	122.797	-13.415	1.00	86.69	MS13
ATOM	13052	N	ASN	39	277.616	129.462	-3.739	1.00	114.52	MS13	ATOM	13105	O	LYS	45	280.593	122.462	-13.375	1.00	86.69	MS13
ATOM	13053	CA	ASN	39	276.509	130.232	-4.275	1.00	114.52	MS13	ATOM	13106	N	ASP	46	279.003	124.053	-13.249	1.00	85.02	MS13
ATOM	13054	CB	ASN	39	276.890	130.920	-5.581	1.00	81.63	MS13	ATOM	13107	CA	ASP	46	279.936	125.153	-13.029	1.00	85.02	MS13
ATOM	13055	CG	ASN	39	275.747	131.730	-6.162	1.00	81.63	MS13	ATOM	13108	CB	ASP	46	279.260	126.499	-13.327	1.00	95.39	MS13
ATOM	13056	OD1	ASN	39	275.913	132.423	-7.168	1.00	81.63	MS13	ATOM	13109	CG	ASP	46	278.758	126.608	-14.760	1.00	95.39	MS13

ATOM	13110	OD1	ASP	46	279.512	126.246	-15.686	1.00	95.39	MS13	ATOM	13163	CG2	VAL	53	286.561	118.223	-2.897	1.00	60.54	MS13
ATOM	13111	OD2	ASP	46	277.614	127.073	-14.960	1.00	95.39	MS13	ATOM	13164	C	VAL	53	283.999	119.114	-0.162	1.00	81.93	MS13
ATOM	13112	C	ASP	46	280.528	125.201	-11.619	1.00	85.02	MS13	ATOM	13165	O	VAL	53	283.831	118.315	0.759	1.00	81.93	MS13
ATOM	13113	O	ASP	46	281.141	126.194	-11.240	1.00	85.02	MS13	ATOM	13166	N	ARG	54	283.760	120.415	-0.037	1.00	89.10	MS13
ATOM	13114	N	LEU	47	280.351	124.147	-10.835	1.00	80.07	MS13	ATOM	13167	CA	ARG	54	283.257	120.970	1.212	1.00	89.10	MS13
ATOM	13115	CA	LEU	47	280.911	124.143	-9.488	1.00	80.07	MS13	ATOM	13168	CB	ARG	54	283.383	122.491	1.203	1.00	70.43	MS13
ATOM	13116	CB	LEU	47	280.289	123.027	-8.649	1.00	76.30	MS13	ATOM	13169	CG	ARG	54	284.757	122.993	0.812	1.00	70.43	MS13
ATOM	13117	CG	LEU	47	279.024	123.341	-7.854	1.00	76.30	MS13	ATOM	13170	CD	ARG	54	284.837	124.507	0.917	1.00	70.43	MS13
ATOM	13118	CD1	LEU	47	278.580	122.085	-7.119	1.00	76.30	MS13	ATOM	13171	NE	ARG	54	284.099	125.206	-0.134	1.00	70.43	MS13
ATOM	13119	CD2	LEU	47	279.291	124.472	-6.864	1.00	76.30	MS13	ATOM	13172	CZ	ARG	54	283.944	126.526	-0.168	1.00	70.43	MS13
ATOM	13120	C	LEU	47	282.426	123.957	-9.515	1.00	80.07	MS13	ATOM	13173	NH1	ARG	54	284.473	127.272	0.793	1.00	70.43	MS13
ATOM	13121	O	LEU	47	283.000	123.654	-10.559	1.00	80.07	MS13	ATOM	13174	NH2	ARG	54	283.279	127.104	-1.160	1.00	70.43	MS13
ATOM	13122	N	THR	48	283.063	124.140	-8.359	1.00	70.40	MS13	ATOM	13175	C	ARG	54	281.788	120.567	1.337	1.00	89.10	MS13
ATOM	13123	CA	THR	48	284.513	123.979	-8.216	1.00	70.40	MS13	ATOM	13176	O	ARG	54	281.305	120.271	2.433	1.00	89.10	MS13
ATOM	13124	CB	THR	48	285.127	125.102	-7.354	1.00	74.74	MS13	ATOM	13177	N	LEU	55	281.090	120.565	0.199	1.00	87.28	MS13
ATOM	13125	OG1	THR	48	285.051	126.343	-8.058	1.00	74.74	MS13	ATOM	13178	CA	LEU	55	279.682	120.178	0.123	1.00	87.28	MS13
ATOM	13126	CG2	THR	48	286.580	124.801	-7.034	1.00	74.74	MS13	ATOM	13179	CB	LEU	55	279.119	120.451	-1.270	1.00	67.59	MS13
ATOM	13127	C	THR	48	284.807	122.648	-7.535	1.00	70.40	MS13	ATOM	13180	CG	LEU	55	278.327	121.736	-1.487	1.00	67.59	MS13
ATOM	13128	O	THR	48	284.035	122.192	-6.695	1.00	70.40	MS13	ATOM	13181	CD1	LEU	55	277.999	121.882	-2.966	1.00	67.59	MS13
ATOM	13129	N	GLU	49	285.927	122.029	-7.895	1.00	79.39	MS13	ATOM	13182	CD2	LEU	55	277.055	121.703	-0.647	1.00	67.59	MS13
ATOM	13130	CA	GLU	49	286.300	120.751	-7.307	1.00	79.39	MS13	ATOM	13183	C	LEU	55	279.574	118.691	0.389	1.00	87.28	MS13
ATOM	13131	CB	GLU	49	287.581	120.224	-7.948	1.00	141.27	MS13	ATOM	13184	O	LEU	55	278.781	118.250	1.216	1.00	87.28	MS13
ATOM	13132	CG	GLU	49	287.523	118.745	-8.246	1.00	141.27	MS13	ATOM	13185	N	ARG	56	280.380	117.926	-0.336	1.00	64.44	MS13
ATOM	13133	CD	GLU	49	286.350	118.397	-9.142	1.00	141.27	MS13	ATOM	13186	CA	ARG	56	280.397	116.481	-0.203	1.00	64.44	MS13
ATOM	13134	OE1	GLU	49	286.329	118.858	-10.304	1.00	141.27	MS13	ATOM	13187	CB	ARG	56	281.454	115.877	-1.132	1.00	104.99	MS13
ATOM	13135	OE2	GLU	49	285.446	117.670	-8.682	1.00	141.27	MS13	ATOM	13188	CG	ARG	56	281.405	114.367	-1.230	1.00	104.99	MS13
ATOM	13136	C	GLU	49	286.509	120.946	-5.818	1.00	79.39	MS13	ATOM	13189	CD	ARG	56	282.376	113.846	-2.276	1.00	104.99	MS13
ATOM	13137	O	GLU	49	286.496	119.997	-5.043	1.00	79.39	MS13	ATOM	13190	NE	ARG	56	282.161	114.468	-3.581	1.00	104.99	MS13
ATOM	13138	N	ALA	50	286.700	122.199	-5.433	1.00	99.19	MS13	ATOM	13191	CZ	ARG	56	282.778	114.098	-4.702	1.00	104.99	MS13
ATOM	13139	CA	ALA	50	286.912	122.559	-4.043	1.00	99.19	MS13	ATOM	13192	NH1	ARG	56	283.655	113.100	-4.683	1.00	104.99	MS13
ATOM	13140	CB	ALA	50	287.625	123.900	-3.973	1.00	62.99	MS13	ATOM	13193	NH2	ARG	56	282.520	114.729	-5.844	1.00	104.99	MS13
ATOM	13141	C	ALA	50	285.567	122.635	-3.326	1.00	99.19	MS13	ATOM	13194	C	ARG	56	280.674	116.065	1.229	1.00	64.44	MS13
ATOM	13142	O	ALA	50	285.408	122.114	-2.220	1.00	99.19	MS13	ATOM	13195	O	ARG	56	279.889	115.331	1.821	1.00	64.44	MS13
ATOM	13143	N	GLU	51	284.605	123.292	-3.969	1.00	83.21	MS13	ATOM	13196	N	GLU	57	281.780	116.543	1.793	1.00	96.41	MS13
ATOM	13144	CA	GLU	51	283.261	123.449	-3.427	1.00	83.21	MS13	ATOM	13197	CA	GLU	57	282.146	116.183	3.160	1.00	96.41	MS13
ATOM	13145	CB	GLU	51	282.441	124.335	-4.356	1.00	78.23	MS13	ATOM	13198	CB	GLU	57	283.573	116.644	3.476	1.00	146.60	MS13
ATOM	13146	CG	GLU	51	283.114	125.654	-4.635	1.00	78.23	MS13	ATOM	13199	CG	GLU	57	284.657	115.975	2.625	1.00	146.60	MS13
ATOM	13147	CD	GLU	51	282.342	126.523	-5.598	1.00	78.23	MS13	ATOM	13200	CD	GLU	57	284.668	114.447	2.722	1.00	146.60	MS13
ATOM	13148	OE1	GLU	51	282.205	126.139	-6.779	1.00	78.23	MS13	ATOM	13201	OE1	GLU	57	285.594	113.829	2.154	1.00	146.60	MS13
ATOM	13149	OE2	GLU	51	281.871	127.599	-5.171	1.00	78.23	MS13	ATOM	13202	OE2	GLU	57	283.760	113.861	3.354	1.00	146.60	MS13
ATOM	13150	C	GLU	51	282.605	122.085	-3.309	1.00	83.21	MS13	ATOM	13203	C	GLU	57	281.183	116.715	4.211	1.00	96.41	MS13
ATOM	13151	O	GLU	51	281.911	121.799	-2.341	1.00	83.21	MS13	ATOM	13204	O	GLU	57	280.767	115.974	5.105	1.00	96.41	MS13
ATOM	13152	N	VAL	52	282.840	121.244	-4.310	1.00	55.00	MS13	ATOM	13205	N	TYR	58	280.826	117.990	4.114	1.00	76.22	MS13
ATOM	13153	CA	VAL	52	282.282	119.901	-4.343	1.00	55.00	MS13	ATOM	13206	CA	TYR	58	279.893	118.552	5.082	1.00	76.22	MS13
ATOM	13154	CB	VAL	52	282.563	119.225	-5.708	1.00	55.70	MS13	ATOM	13207	CB	TYR	58	279.516	119.990	4.723	1.00	97.13	MS13
ATOM	13155	CG1	VAL	52	282.034	117.795	-5.712	1.00	55.70	MS13	ATOM	13208	CG	TYR	58	278.341	120.470	5.536	1.00	97.13	MS13
ATOM	13156	CG2	VAL	52	281.908	120.024	-6.817	1.00	55.70	MS13	ATOM	13209	CD1	TYR	58	278.375	120.418	6.927	1.00	97.13	MS13
ATOM	13157	C	VAL	52	282.822	119.021	-3.218	1.00	55.00	MS13	ATOM	13210	CE1	TYR	58	277.274	120.770	7.687	1.00	97.13	MS13
ATOM	13158	O	VAL	52	282.236	117.986	-2.902	1.00	55.00	MS13	ATOM	13211	CD2	TYR	58	277.168	120.900	4.921	1.00	97.13	MS13
ATOM	13159	N	VAL	53	283.929	119.426	-2.608	1.00	81.93	MS13	ATOM	13212	CE2	TYR	58	276.052	121.257	5.676	1.00	97.13	MS13
ATOM	13160	CA	VAL	53	284.501	118.636	-1.523	1.00	81.93	MS13	ATOM	13213	CZ	TYR	58	276.115	121.185	7.060	1.00	97.13	MS13
ATOM	13161	CB	VAL	53	286.049	118.679	-1.540	1.00	60.54	MS13	ATOM	13214	OH	TYR	58	275.018	121.503	7.824	1.00	97.13	MS13
ATOM	13162	CG1	VAL	53	286.610	117.790	-0.431	1.00	60.54	MS13	ATOM	13215	C	TYR	58	278.619	117.712	5.139	1.00	76.22	MS13

ATOM	13216	O	TYR	58	278.358	117.013	6.119	1.00	76.22	MS13	ATOM	13269	C	LYS	64	270.985	110.736	6.693	1.00	95.86	MS13
ATOM	13217	N	VAL	59	277.837	117.798	4.070	1.00	65.38	MS13	ATOM	13270	O	LYS	64	269.775	110.931	6.757	1.00	95.86	MS13
ATOM	13218	CA	VAL	59	276.587	117.070	3.930	1.00	65.38	MS13	ATOM	13271	N	LEU	65	271.618	110.501	5.548	1.00	82.56	MS13
ATOM	13219	CB	VAL	59	276.098	117.109	2.477	1.00	57.02	MS13	ATOM	13272	CA	LEU	65	270.916	110.502	4.266	1.00	82.56	MS13
ATOM	13220	CG1	VAL	59	274.973	116.116	2.280	1.00	57.02	MS13	ATOM	13273	CB	LEU	65	271.652	111.420	3.293	1.00	43.30	MS13
ATOM	13221	CG2	VAL	59	275.641	118.512	2.129	1.00	57.02	MS13	ATOM	13274	CG	LEU	65	271.985	112.821	3.809	1.00	43.30	MS13
ATOM	13222	C	VAL	59	276.654	115.611	4.348	1.00	65.38	MS13	ATOM	13275	CD1	LEU	65	273.176	113.372	3.050	1.00	43.30	MS13
ATOM	13223	O	VAL	59	275.933	115.189	5.249	1.00	65.38	MS13	ATOM	13276	CD2	LEU	65	270.780	113.734	3.663	1.00	43.30	MS13
ATOM	13224	N	GLU	60	277.510	114.841	3.683	1.00	84.80	MS13	ATOM	13277	C	LEU	65	270.738	109.143	3.599	1.00	82.56	MS13
ATOM	13225	CA	GLU	60	277.630	113.417	3.973	1.00	84.80	MS13	ATOM	13278	O	LEU	65	270.990	108.097	4.196	1.00	82.56	MS13
ATOM	13226	CB	GLU	60	278.765	112.798	3.156	1.00	103.91	MS13	ATOM	13279	N	GLU	66	270.297	109.198	2.345	1.00	75.75	MS13
ATOM	13227	CG	GLU	60	278.416	112.655	1.680	1.00	103.91	MS13	ATOM	13280	CA	GLU	66	270.067	108.030	1.495	1.00	75.75	MS13
ATOM	13228	CD	GLU	60	279.377	111.761	0.923	1.00	103.91	MS13	ATOM	13281	CB	GLU	66	271.217	107.897	0.494	1.00	86.92	MS13
ATOM	13229	OE1	GLU	60	279.490	110.567	1.277	1.00	103.91	MS13	ATOM	13282	CG	GLU	66	271.181	108.911	-0.642	1.00	86.92	MS13
ATOM	13230	OE2	GLU	60	280.015	112.253	-0.031	1.00	103.91	MS13	ATOM	13283	CD	GLU	66	269.920	108.798	-1.487	1.00	86.92	MS13
ATOM	13231	C	GLU	60	277.786	113.048	5.439	1.00	84.80	MS13	ATOM	13284	OE1	GLU	66	269.403	107.668	-1.634	1.00	86.92	MS13
ATOM	13232	O	GLU	60	277.187	112.070	5.896	1.00	84.80	MS13	ATOM	13285	OE2	GLU	66	269.453	109.831	-2.016	1.00	86.92	MS13
ATOM	13233	N	ASN	61	278.578	113.820	6.179	1.00	106.26	MS13	ATOM	13286	C	GLU	66	269.831	106.679	2.172	1.00	75.75	MS13
ATOM	13234	CA	ASN	61	278.777	113.531	7.595	1.00	106.26	MS13	ATOM	13287	O	GLU	66	269.294	106.604	3.273	1.00	75.75	MS13
ATOM	13235	CB	ASN	61	280.264	113.309	7.890	1.00	132.57	MS13	ATOM	13288	N	GLY	67	270.226	105.617	1.478	1.00	73.72	MS13
ATOM	13236	CG	ASN	61	280.665	111.840	7.792	1.00	132.57	MS13	ATOM	13289	CA	GLY	67	270.063	104.263	1.977	1.00	73.72	MS13
ATOM	13237	OD1	ASN	61	281.842	111.498	7.899	1.00	132.57	MS13	ATOM	13290	C	GLY	67	270.009	104.075	3.481	1.00	73.72	MS13
ATOM	13238	ND2	ASN	61	279.679	110.966	7.597	1.00	132.57	MS13	ATOM	13291	O	GLY	67	269.072	103.460	3.988	1.00	73.72	MS13
ATOM	13239	C	ASN	61	278.197	114.573	8.545	1.00	106.26	MS13	ATOM	13292	N	GLU	68	271.011	104.586	4.194	1.00	86.54	MS13
ATOM	13240	O	ASN	61	278.748	114.836	9.610	1.00	106.26	MS13	ATOM	13293	CA	GLU	68	271.073	104.459	5.651	1.00	86.54	MS13
ATOM	13241	N	THR	62	277.069	115.153	8.149	1.00	88.95	MS13	ATOM	13294	CB	GLU	68	272.287	105.207	6.193	1.00	125.78	MS13
ATOM	13242	CA	THR	62	276.371	116.143	8.959	1.00	88.95	MS13	ATOM	13295	CG	GLU	68	272.404	105.171	7.705	1.00	125.78	MS13
ATOM	13243	CB	THR	62	276.461	117.558	8.309	1.00	93.17	MS13	ATOM	13296	CD	GLU	68	273.543	106.031	8.212	1.00	125.78	MS13
ATOM	13244	OG1	THR	62	275.870	118.534	9.177	1.00	93.17	MS13	ATOM	13297	OE1	GLU	68	274.661	105.903	7.677	1.00	125.78	MS13
ATOM	13245	CG2	THR	62	275.743	117.586	6.981	1.00	93.17	MS13	ATOM	13298	OE2	GLU	68	273.329	106.831	9.146	1.00	125.78	MS13
ATOM	13246	C	THR	62	274.904	115.693	9.095	1.00	88.95	MS13	ATOM	13299	C	GLU	68	269.817	105.000	6.324	1.00	86.54	MS13
ATOM	13247	O	THR	62	274.212	116.051	10.049	1.00	88.95	MS13	ATOM	13300	O	GLU	68	269.398	104.500	7.367	1.00	86.54	MS13
ATOM	13248	N	TRP	63	274.449	114.885	8.139	1.00	72.57	MS13	ATOM	13301	N	LEU	69	269.233	106.032	5.721	1.00	84.21	MS13
ATOM	13249	CA	TRP	63	273.085	114.361	8.129	1.00	72.57	MS13	ATOM	13302	CA	LEU	69	268.021	106.661	6.232	1.00	84.21	MS13
ATOM	13250	CB	TRP	63	272.218	115.103	7.114	1.00	40.04	MS13	ATOM	13303	CB	LEU	69	267.770	107.979	5.499	1.00	50.46	MS13
ATOM	13251	CG	TRP	63	272.072	116.548	7.331	1.00	40.04	MS13	ATOM	13304	CG	LEU	69	267.050	109.085	6.277	1.00	50.46	MS13
ATOM	13252	CD2	TRP	63	272.179	117.580	6.340	1.00	40.04	MS13	ATOM	13305	CD1	LEU	69	266.477	110.111	5.296	1.00	50.46	MS13
ATOM	13253	CE2	TRP	63	271.888	118.805	6.979	1.00	40.04	MS13	ATOM	13306	CD2	LEU	69	265.944	108.485	7.127	1.00	50.46	MS13
ATOM	13254	CE3	TRP	63	272.490	117.590	4.969	1.00	40.04	MS13	ATOM	13307	C	LEU	69	266.821	105.731	6.033	1.00	84.21	MS13
ATOM	13255	CD1	TRP	63	271.736	117.161	8.490	1.00	40.04	MS13	ATOM	13308	O	LEU	69	266.096	105.436	6.981	1.00	84.21	MS13
ATOM	13256	NE1	TRP	63	271.621	118.519	8.292	1.00	40.04	MS13	ATOM	13309	N	ARG	70	266.607	105.285	4.796	1.00	79.17	MS13
ATOM	13257	CZ2	TRP	63	271.896	120.041	6.299	1.00	40.04	MS13	ATOM	13310	CA	ARG	70	265.502	104.374	4.494	1.00	79.17	MS13
ATOM	13258	CZ3	TRP	63	272.499	118.832	4.284	1.00	40.04	MS13	ATOM	13311	CB	ARG	70	265.572	103.876	3.052	1.00	71.93	MS13
ATOM	13259	CH2	TRP	63	272.202	120.035	4.961	1.00	40.04	MS13	ATOM	13312	CG	ARG	70	265.659	104.945	2.008	1.00	71.93	MS13
ATOM	13260	C	TRP	63	273.064	112.877	7.754	1.00	72.57	MS13	ATOM	13313	CD	ARG	70	266.076	104.328	0.697	1.00	71.93	MS13
ATOM	13261	O	TRP	63	273.945	112.380	7.045	1.00	72.57	MS13	ATOM	13314	NE	ARG	70	266.296	105.331	-0.337	1.00	71.93	MS13
ATOM	13262	N	LYS	64	272.035	112.184	8.228	1.00	95.86	MS13	ATOM	13315	CZ	ARG	70	265.325	105.983	-0.967	1.00	71.93	MS13
ATOM	13263	CA	LYS	64	271.843	110.766	7.952	1.00	95.86	MS13	ATOM	13316	NH1	ARG	70	264.052	105.739	-0.673	1.00	71.93	MS13
ATOM	13264	CB	LYS	64	271.110	110.118	9.130	1.00	97.12	MS13	ATOM	13317	NH2	ARG	70	265.633	106.883	-1.891	1.00	71.93	MS13
ATOM	13265	CG	LYS	64	271.100	108.603	9.134	1.00	97.12	MS13	ATOM	13318	C	ARG	70	265.643	103.171	5.406	1.00	79.17	MS13
ATOM	13266	CD	LYS	64	270.763	108.066	10.527	1.00	97.12	MS13	ATOM	13319	O	ARG	70	264.662	102.526	5.767	1.00	79.17	MS13
ATOM	13267	CE	LYS	64	270.900	106.549	10.591	1.00	97.12	MS13	ATOM	13320	N	ALA	71	266.885	102.861	5.748	1.00	60.21	MS13
ATOM	13268	NZ	LYS	64	270.818	106.028	11.983	1.00	97.12	MS13	ATOM	13321	CA	ALA	71	267.177	101.742	6.620	1.00	60.21	MS13

ATOM	13322	CB	ALA	71	268.683	101.575	6.753	1.00	111.81	MS13	ATOM	13375	O	LYS	78	258.292	96.351	13.886	1.00	59.87	MS13
ATOM	13323	C	ALA	71	266.550	102.017	7.987	1.00	60.21	MS13	ATOM	13376	N	ARG	79	259.439	98.263	14.180	1.00	70.76	MS13
ATOM	13324	O	ALA	71	265.877	101.155	8.569	1.00	60.21	MS13	ATOM	13377	CA	ARG	79	259.306	98.290	15.635	1.00	70.76	MS13
ATOM	13325	N	GLU	72	266.777	103.228	8.489	1.00	83.47	MS13	ATOM	13378	CB	ARG	79	260.194	99.405	16.191	1.00	119.48	MS13
ATOM	13326	CA	GLU	72	266.246	103.646	9.780	1.00	83.47	MS13	ATOM	13379	CG	ARG	79	260.004	99.699	17.654	1.00	119.48	MS13
ATOM	13327	CB	GLU	72	266.729	105.061	10.103	1.00	94.46	MS13	ATOM	13380	CD	ARG	79	260.748	100.956	18.015	1.00	119.48	MS13
ATOM	13328	CG	GLU	72	266.461	105.509	11.523	1.00	94.46	MS13	ATOM	13381	NE	ARG	79	260.200	101.570	19.216	1.00	119.48	MS13
ATOM	13329	CD	GLU	72	267.126	106.836	11.847	1.00	94.46	MS13	ATOM	13382	CZ	ARG	79	260.587	102.750	19.684	1.00	119.48	MS13
ATOM	13330	OE1	GLU	72	266.713	107.870	11.277	1.00	94.46	MS13	ATOM	13383	NH1	ARG	79	261.526	103.436	19.046	1.00	119.48	MS13
ATOM	13331	OE2	GLU	72	268.068	106.843	12.669	1.00	94.46	MS13	ATOM	13384	NH2	ARG	79	260.034	103.248	20.784	1.00	119.48	MS13
ATOM	13332	C	GLU	72	264.720	103.608	9.732	1.00	83.47	MS13	ATOM	13385	C	ARG	79	257.875	98.447	16.170	1.00	70.76	MS13
ATOM	13333	O	GLU	72	264.092	102.763	10.370	1.00	83.47	MS13	ATOM	13386	O	ARG	79	257.329	97.528	16.806	1.00	70.76	MS13
ATOM	13334	N	VAL	73	264.135	104.523	8.961	1.00	66.91	MS13	ATOM	13387	N	LEU	80	257.274	99.611	15.931	1.00	87.02	MS13
ATOM	13335	CA	VAL	73	262.683	104.600	8.818	1.00	66.91	MS13	ATOM	13388	CA	LEU	80	255.915	99.863	16.397	1.00	87.02	MS13
ATOM	13336	CB	VAL	73	262.288	105.410	7.554	1.00	47.06	MS13	ATOM	13389	CB	LEU	80	255.477	101.306	16.069	1.00	48.76	MS13
ATOM	13337	CG1	VAL	73	260.794	105.308	7.314	1.00	47.06	MS13	ATOM	13390	CG	LEU	80	255.684	101.949	14.694	1.00	48.76	MS13
ATOM	13338	CG2	VAL	73	262.674	106.868	7.725	1.00	47.06	MS13	ATOM	13391	CD1	LEU	80	255.419	103.452	14.776	1.00	48.76	MS13
ATOM	13339	C	VAL	73	262.051	103.208	8.741	1.00	66.91	MS13	ATOM	13392	CD2	LEU	80	257.095	101.741	14.249	1.00	48.76	MS13
ATOM	13340	O	VAL	73	261.195	102.851	9.553	1.00	66.91	MS13	ATOM	13393	C	LEU	80	254.976	98.846	15.774	1.00	87.02	MS13
ATOM	13341	N	ALA	74	262.472	102.421	7.761	1.00	63.16	MS13	ATOM	13394	O	LEU	80	253.786	98.804	16.074	1.00	87.02	MS13
ATOM	13342	CA	ALA	74	261.935	101.082	7.609	1.00	63.16	MS13	ATOM	13395	N	MET	81	255.544	98.003	14.924	1.00	59.25	MS13
ATOM	13343	CB	ALA	74	262.695	100.339	6.515	1.00	100.44	MS13	ATOM	13396	CA	MET	81	254.798	96.964	14.243	1.00	59.25	MS13
ATOM	13344	C	ALA	74	262.073	100.357	8.946	1.00	63.16	MS13	ATOM	13397	CB	MET	81	255.251	96.883	12.791	1.00	95.75	MS13
ATOM	13345	O	ALA	74	261.169	99.637	9.380	1.00	63.16	MS13	ATOM	13398	CG	MET	81	254.357	96.056	11.907	1.00	95.75	MS13
ATOM	13346	N	ALA	75	263.214	100.559	9.595	1.00	96.14	MS13	ATOM	13399	SD	MET	81	255.069	95.914	10.268	1.00	95.75	MS13
ATOM	13347	CA	ALA	75	263.476	99.929	10.876	1.00	96.14	MS13	ATOM	13400	CE	MET	81	254.557	97.428	9.538	1.00	95.75	MS13
ATOM	13348	CB	ALA	75	264.896	100.225	11.321	1.00	83.89	MS13	ATOM	13401	C	MET	81	255.032	95.629	14.940	1.00	59.25	MS13
ATOM	13349	C	ALA	75	262.472	100.422	11.913	1.00	96.14	MS13	ATOM	13402	O	MET	81	254.137	94.786	14.989	1.00	59.25	MS13
ATOM	13350	O	ALA	75	261.929	99.618	12.670	1.00	96.14	MS13	ATOM	13403	N	ASP	82	256.238	95.437	15.475	1.00	92.63	MS13
ATOM	13351	N	ASN	76	262.227	101.733	11.951	1.00	85.16	MS13	ATOM	13404	CA	ASP	82	256.564	94.199	16.179	1.00	92.63	MS13
ATOM	13352	CA	ASN	76	261.259	102.301	12.892	1.00	85.16	MS13	ATOM	13405	CB	ASP	82	258.066	94.057	16.370	1.00	93.83	MS13
ATOM	13353	CB	ASN	76	260.965	103.761	12.566	1.00	95.29	MS13	ATOM	13406	CG	ASP	82	258.769	93.679	15.094	1.00	93.83	MS13
ATOM	13354	CG	ASN	76	261.986	104.697	13.146	1.00	95.29	MS13	ATOM	13407	OD1	ASP	82	258.348	92.690	14.455	1.00	93.83	MS13
ATOM	13355	OD1	ASN	76	262.186	104.739	14.361	1.00	95.29	MS13	ATOM	13408	OD2	ASP	82	259.742	94.366	14.729	1.00	93.83	MS13
ATOM	13356	ND2	ASN	76	262.640	105.463	12.285	1.00	95.29	MS13	ATOM	13409	C	ASP	82	255.870	94.171	17.521	1.00	92.63	MS13
ATOM	13357	C	ASN	76	259.962	101.522	12.792	1.00	85.16	MS13	ATOM	13410	O	ASP	82	255.422	93.119	17.977	1.00	92.63	MS13
ATOM	13358	O	ASN	76	259.582	100.807	13.718	1.00	85.16	MS13	ATOM	13411	N	ILE	83	255.798	95.329	18.164	1.00	98.15	MS13
ATOM	13359	N	ILE	77	259.291	101.674	11.652	1.00	78.41	MS13	ATOM	13412	CA	ILE	83	255.096	95.424	19.430	1.00	98.15	MS13
ATOM	13360	CA	ILE	77	258.033	100.989	11.369	1.00	78.41	MS13	ATOM	13413	CB	ILE	83	255.634	96.589	20.264	1.00	73.44	MS13
ATOM	13361	CB	ILE	77	257.766	100.993	9.854	1.00	70.31	MS13	ATOM	13414	CG2	ILE	83	257.069	96.312	20.630	1.00	73.44	MS13
ATOM	13362	CG2	ILE	77	256.689	99.988	9.503	1.00	70.31	MS13	ATOM	13415	CG1	ILE	83	255.565	97.892	19.466	1.00	73.44	MS13
ATOM	13363	CG1	ILE	77	257.391	102.410	9.419	1.00	70.31	MS13	ATOM	13416	CD1	ILE	83	256.105	99.106	20.208	1.00	73.44	MS13
ATOM	13364	CD1	ILE	77	256.976	102.531	7.980	1.00	70.31	MS13	ATOM	13417	C	ILE	83	253.640	95.659	19.028	1.00	98.15	MS13
ATOM	13365	C	ILE	77	258.029	99.553	11.895	1.00	78.41	MS13	ATOM	13418	O	ILE	83	253.371	96.384	18.065	1.00	98.15	MS13
ATOM	13366	O	ILE	77	257.134	99.149	12.638	1.00	78.41	MS13	ATOM	13419	N	GLY	84	252.710	95.025	19.739	1.00	105.06	MS13
ATOM	13367	N	LYS	78	259.043	98.793	11.503	1.00	59.87	MS13	ATOM	13420	CA	GLY	84	251.291	95.146	19.421	1.00	105.06	MS13
ATOM	13368	CA	LYS	78	259.197	97.411	11.926	1.00	59.87	MS13	ATOM	13421	C	GLY	84	250.738	96.549	19.250	1.00	105.06	MS13
ATOM	13369	CB	LYS	78	260.623	96.948	11.607	1.00	69.41	MS13	ATOM	13422	O	GLY	84	249.527	96.755	19.302	1.00	105.06	MS13
ATOM	13370	CG	LYS	78	260.739	95.557	10.997	1.00	69.41	MS13	ATOM	13423	N	CYS	85	251.628	97.510	19.041	1.00	67.99	MS13
ATOM	13371	CD	LYS	78	260.557	94.454	12.012	1.00	69.41	MS13	ATOM	13424	CA	CYS	85	251.262	98.905	18.861	1.00	67.99	MS13
ATOM	13372	CE	LYS	78	260.723	93.093	11.359	1.00	69.41	MS13	ATOM	13425	CB	CYS	85	252.502	99.700	18.462	1.00	73.94	MS13
ATOM	13373	NZ	LYS	78	260.521	91.975	12.329	1.00	69.41	MS13	ATOM	13426	SG	CYS	85	252.173	101.409	18.020	1.00	73.94	MS13
ATOM	13374	C	LYS	78	258.939	97.291	13.428	1.00	59.87	MS13	ATOM	13427	C	CYS	85	250.166	99.125	17.822	1.00	67.99	MS13

ATOM	13428	O	CYS	85	250.309	98.723	16.663	1.00	67.99	MS13	ATOM	13481	CE1	HIS	91	253.471	102.898	8.976	1.00	59.33	MS13
ATOM	13429	N	TYR	86	249.072	99.760	18.245	1.00	86.53	MS13	ATOM	13482	NE2	HIS	91	253.368	102.993	10.291	1.00	59.33	MS13
ATOM	13430	CA	TYR	86	247.950	100.065	17.351	1.00	86.53	MS13	ATOM	13483	C	HIS	91	250.515	98.098	8.534	1.00	61.54	MS13
ATOM	13431	CB	TYR	86	247.006	101.076	18.016	1.00	73.30	MS13	ATOM	13484	O	HIS	91	250.320	97.944	7.331	1.00	61.54	MS13
ATOM	13432	CG	TYR	86	245.977	101.697	17.084	1.00	73.30	MS13	ATOM	13485	N	ARG	92	250.457	97.103	9.417	1.00	72.42	MS13
ATOM	13433	CD1	TYR	86	244.884	100.959	16.614	1.00	73.30	MS13	ATOM	13486	CA	ARG	92	250.172	95.734	9.016	1.00	72.42	MS13
ATOM	13434	CE1	TYR	86	243.938	101.536	15.766	1.00	73.30	MS13	ATOM	13487	CB	ARG	92	249.890	94.857	10.232	1.00	129.51	MS13
ATOM	13435	CD2	TYR	86	246.096	103.029	16.675	1.00	73.30	MS13	ATOM	13488	CG	ARG	92	251.024	94.706	11.208	1.00	129.51	MS13
ATOM	13436	CE2	TYR	86	245.157	103.613	15.825	1.00	73.30	MS13	ATOM	13489	CD	ARG	92	250.585	93.776	12.316	1.00	129.51	MS13
ATOM	13437	CZ	TYR	86	244.083	102.865	15.378	1.00	73.30	MS13	ATOM	13490	NE	ARG	92	251.617	93.579	13.326	1.00	129.51	MS13
ATOM	13438	OH	TYR	86	243.150	103.453	14.550	1.00	73.30	MS13	ATOM	13491	CZ	ARG	92	251.479	92.784	14.383	1.00	129.51	MS13
ATOM	13439	C	TYR	86	248.537	100.676	16.089	1.00	86.53	MS13	ATOM	13492	NH1	ARG	92	250.348	92.110	14.564	1.00	129.51	MS13
ATOM	13440	O	TYR	86	248.356	100.173	14.981	1.00	86.53	MS13	ATOM	13493	NH2	ARG	92	252.469	92.661	15.260	1.00	129.51	MS13
ATOM	13441	N	ARG	87	249.249	101.774	16.288	1.00	63.36	MS13	ATOM	13494	C	ARG	92	248.944	95.710	8.125	1.00	72.42	MS13
ATOM	13442	CA	ARG	87	249.910	102.491	15.213	1.00	63.36	MS13	ATOM	13495	O	ARG	92	249.019	95.278	6.980	1.00	72.42	MS13
ATOM	13443	CB	ARG	87	250.873	103.508	15.821	1.00	89.89	MS13	ATOM	13496	N	ARG	93	247.814	96.171	8.661	1.00	77.48	MS13
ATOM	13444	CG	ARG	87	251.541	104.439	14.848	1.00	89.89	MS13	ATOM	13497	CA	ARG	93	246.554	96.188	7.920	1.00	77.48	MS13
ATOM	13445	CD	ARG	87	252.545	105.280	15.590	1.00	89.89	MS13	ATOM	13498	CB	ARG	93	245.389	96.615	8.823	1.00	105.17	MS13
ATOM	13446	NE	ARG	87	253.157	106.278	14.728	1.00	89.89	MS13	ATOM	13499	CG	ARG	93	244.758	95.486	9.640	1.00	105.17	MS13
ATOM	13447	CZ	ARG	87	254.191	107.028	15.086	1.00	89.89	MS13	ATOM	13500	CD	ARG	93	244.237	94.365	8.740	1.00	105.17	MS13
ATOM	13448	NH1	ARG	87	254.730	106.888	16.293	1.00	89.89	MS13	ATOM	13501	NE	ARG	93	243.446	93.372	9.471	1.00	105.17	MS13
ATOM	13449	NH2	ARG	87	254.678	107.927	14.241	1.00	89.89	MS13	ATOM	13502	CZ	ARG	93	243.023	92.217	8.957	1.00	105.17	MS13
ATOM	13450	C	ARG	87	250.674	101.505	14.333	1.00	63.36	MS13	ATOM	13503	NH1	ARG	93	243.314	91.892	7.702	1.00	105.17	MS13
ATOM	13451	O	ARG	87	250.821	101.711	13.133	1.00	63.36	MS13	ATOM	13504	NH2	ARG	93	242.307	91.382	9.697	1.00	105.17	MS13
ATOM	13452	N	GLY	88	251.163	100.431	14.937	1.00	82.70	MS13	ATOM	13505	C	ARG	93	246.606	97.095	6.705	1.00	77.48	MS13
ATOM	13453	CA	GLY	88	251.895	99.442	14.171	1.00	82.70	MS13	ATOM	13506	O	ARG	93	245.789	96.965	5.802	1.00	77.48	MS13
ATOM	13454	C	GLY	88	250.964	98.554	13.371	1.00	82.70	MS13	ATOM	13507	N	GLY	94	247.556	98.020	6.687	1.00	50.48	MS13
ATOM	13455	O	GLY	88	251.287	98.132	12.254	1.00	82.70	MS13	ATOM	13508	CA	GLY	94	247.688	98.916	5.554	1.00	50.48	MS13
ATOM	13456	N	LEU	89	249.804	98.265	13.952	1.00	45.32	MS13	ATOM	13509	C	GLY	94	246.738	100.098	5.474	1.00	50.48	MS13
ATOM	13457	CA	LEU	89	248.808	97.432	13.296	1.00	45.32	MS13	ATOM	13510	O	GLY	94	246.532	100.636	4.395	1.00	50.48	MS13
ATOM	13458	CB	LEU	89	247.684	97.098	14.281	1.00	82.51	MS13	ATOM	13511	N	LEU	95	246.164	100.514	6.598	1.00	48.04	MS13
ATOM	13459	CG	LEU	89	248.202	96.429	15.562	1.00	82.51	MS13	ATOM	13512	CA	LEU	95	245.247	101.657	6.619	1.00	48.04	MS13
ATOM	13460	CD1	LEU	89	247.062	96.217	16.536	1.00	82.51	MS13	ATOM	13513	CB	LEU	95	244.029	101.318	7.461	1.00	67.67	MS13
ATOM	13461	CD2	LEU	89	248.870	95.105	15.220	1.00	82.51	MS13	ATOM	13514	CG	LEU	95	243.370	100.033	6.982	1.00	67.67	MS13
ATOM	13462	C	LEU	89	248.268	98.171	12.078	1.00	45.32	MS13	ATOM	13515	CD1	LEU	95	242.359	99.553	8.008	1.00	67.67	MS13
ATOM	13463	O	LEU	89	247.963	97.561	11.059	1.00	45.32	MS13	ATOM	13516	CD2	LEU	95	242.731	100.292	5.620	1.00	67.67	MS13
ATOM	13464	N	ARG	90	248.174	99.493	12.178	1.00	61.24	MS13	ATOM	13517	C	LEU	95	245.947	102.878	7.200	1.00	48.04	MS13
ATOM	13465	CA	ARG	90	247.681	100.293	11.063	1.00	61.24	MS13	ATOM	13518	O	LEU	95	246.993	102.750	7.829	1.00	48.04	MS13
ATOM	13466	CB	ARG	90	247.534	101.762	11.473	1.00	66.34	MS13	ATOM	13519	N	PRO	96	245.381	104.081	7.010	1.00	50.63	MS13
ATOM	13467	CG	ARG	90	246.469	101.975	12.529	1.00	66.34	MS13	ATOM	13520	CD	PRO	96	244.091	104.428	6.396	1.00	39.86	MS13
ATOM	13468	CD	ARG	90	245.113	101.428	12.076	1.00	66.34	MS13	ATOM	13521	CA	PRO	96	246.048	105.271	7.559	1.00	50.63	MS13
ATOM	13469	NE	ARG	90	244.368	102.376	11.246	1.00	66.34	MS13	ATOM	13522	CB	PRO	96	245.097	106.416	7.191	1.00	39.86	MS13
ATOM	13470	CZ	ARG	90	243.120	102.180	10.822	1.00	66.34	MS13	ATOM	13523	CG	PRO	96	243.771	105.744	7.060	1.00	39.86	MS13
ATOM	13471	NH1	ARG	90	242.478	101.065	11.147	1.00	66.34	MS13	ATOM	13524	C	PRO	96	246.367	105.168	9.055	1.00	50.63	MS13
ATOM	13472	NH2	ARG	90	242.509	103.106	10.089	1.00	66.34	MS13	ATOM	13525	O	PRO	96	245.580	104.658	9.860	1.00	50.63	MS13
ATOM	13473	C	ARG	90	248.628	100.156	9.881	1.00	61.24	MS13	ATOM	13526	N	VAL	97	247.547	105.658	9.409	1.00	72.58	MS13
ATOM	13474	O	ARG	90	248.282	100.464	8.740	1.00	61.24	MS13	ATOM	13527	CA	VAL	97	248.040	105.575	10.770	1.00	72.58	MS13
ATOM	13475	N	HIS	91	249.838	99.695	10.161	1.00	61.54	MS13	ATOM	13528	CB	VAL	97	249.502	105.095	10.756	1.00	103.00	MS13
ATOM	13476	CA	HIS	91	250.802	99.480	9.101	1.00	61.54	MS13	ATOM	13529	CG1	VAL	97	249.852	104.451	12.074	1.00	103.00	MS13
ATOM	13477	CB	HIS	91	252.213	99.570	9.659	1.00	59.33	MS13	ATOM	13530	CG2	VAL	97	249.721	104.128	9.602	1.00	103.00	MS13
ATOM	13478	CG	HIS	91	252.729	100.968	9.735	1.00	59.33	MS13	ATOM	13531	C	VAL	97	247.975	106.869	11.568	1.00	72.58	MS13
ATOM	13479	CD2	HIS	91	252.907	101.798	10.790	1.00	59.33	MS13	ATOM	13532	O	VAL	97	248.464	106.929	12.692	1.00	72.58	MS13
ATOM	13480	ND1	HIS	91	253.091	101.685	8.614	1.00	59.33	MS13	ATOM	13533	N	ARG	98	247.379	107.908	11.003	1.00	58.61	MS13

ATOM	13534	CA	ARG	98	247.310	109.174	11.723	1.00	58.61	MS13	ATOM	13587	CA	THR	104	235.913	107.328	2.433	1.00	71.67	MS13
ATOM	13535	CB	ARG	98	248.083	110.256	10.960	1.00	67.23	MS13	ATOM	13588	CB	THR	104	234.849	108.413	2.121	1.00	37.79	MS13
ATOM	13536	CG	ARG	98	249.548	109.881	10.794	1.00	67.23	MS13	ATOM	13589	OG1	THR	104	234.943	109.478	3.067	1.00	37.79	MS13
ATOM	13537	CD	ARG	98	250.422	111.032	10.336	1.00	67.23	MS13	ATOM	13590	CG2	THR	104	233.460	107.825	2.161	1.00	37.79	MS13
ATOM	13538	NE	ARG	98	251.826	110.625	10.317	1.00	67.23	MS13	ATOM	13591	C	THR	104	237.302	107.941	2.444	1.00	71.67	MS13
ATOM	13539	CZ	ARG	98	252.832	111.399	9.926	1.00	67.23	MS13	ATOM	13592	O	THR	104	237.981	107.855	3.458	1.00	71.67	MS13
ATOM	13540	NH1	ARG	98	252.603	112.641	9.512	1.00	67.23	MS13	ATOM	13593	N	ASN	105	237.727	108.538	1.333	1.00	64.72	MS13
ATOM	13541	NH2	ARG	98	254.071	110.925	9.948	1.00	67.23	MS13	ATOM	13594	CA	ASN	105	239.046	109.172	1.235	1.00	64.72	MS13
ATOM	13542	C	ARG	98	245.892	109.626	12.036	1.00	58.61	MS13	ATOM	13595	CB	ASN	105	238.979	110.624	1.707	1.00	68.98	MS13
ATOM	13543	O	ARG	98	245.529	110.794	11.853	1.00	58.61	MS13	ATOM	13596	CG	ASN	105	237.867	111.390	1.066	1.00	68.98	MS13
ATOM	13544	N	GLY	99	245.103	108.675	12.525	1.00	76.98	MS13	ATOM	13597	OD1	ASN	105	237.783	111.487	-0.154	1.00	68.98	MS13
ATOM	13545	CA	GLY	99	243.729	108.945	12.897	1.00	76.98	MS13	ATOM	13598	ND2	ASN	105	236.996	111.948	1.888	1.00	68.98	MS13
ATOM	13546	C	GLY	99	242.904	109.682	11.870	1.00	76.98	MS13	ATOM	13599	C	ASN	105	240.170	108.486	2.014	1.00	64.72	MS13
ATOM	13547	O	GLY	99	242.367	110.751	12.152	1.00	76.98	MS13	ATOM	13600	O	ASN	105	240.501	108.893	3.134	1.00	64.72	MS13
ATOM	13548	N	GLN	100	242.808	109.125	10.672	1.00	75.39	MS13	ATOM	13601	N	ALA	106	240.775	107.466	1.422	1.00	67.93	MS13
ATOM	13549	CA	GLN	100	242.004	109.748	9.641	1.00	75.39	MS13	ATOM	13602	CA	ALA	106	241.870	106.764	2.078	1.00	67.93	MS13
ATOM	13550	CB	GLN	100	242.778	109.840	8.329	1.00	57.71	MS13	ATOM	13603	CB	ALA	106	241.326	105.786	3.103	1.00	69.83	MS13
ATOM	13551	CG	GLN	100	244.028	110.721	8.409	1.00	57.71	MS13	ATOM	13604	C	ALA	106	242.617	106.015	1.001	1.00	67.93	MS13
ATOM	13552	CD	GLN	100	245.326	109.929	8.318	1.00	57.71	MS13	ATOM	13605	O	ALA	106	243.392	105.098	1.284	1.00	67.93	MS13
ATOM	13553	OE1	GLN	100	245.472	108.881	8.950	1.00	57.71	MS13	ATOM	13606	N	ARG	107	242.372	106.430	-0.238	1.00	78.35	MS13
ATOM	13554	NE2	GLN	100	246.278	110.434	7.537	1.00	57.71	MS13	ATOM	13607	CA	ARG	107	242.948	105.794	-1.412	1.00	78.35	MS13
ATOM	13555	C	GLN	100	240.769	108.880	9.486	1.00	75.39	MS13	ATOM	13608	CB	ARG	107	242.332	106.399	-2.678	1.00	54.18	MS13
ATOM	13556	O	GLN	100	240.633	107.856	10.168	1.00	75.39	MS13	ATOM	13609	CG	ARG	107	240.794	106.403	-2.703	1.00	54.18	MS13
ATOM	13557	N	ARG	101	239.857	109.296	8.614	1.00	64.02	MS13	ATOM	13610	CD	ARG	107	240.163	105.176	-2.027	1.00	54.18	MS13
ATOM	13558	CA	ARG	101	238.628	108.542	8.391	1.00	64.02	MS13	ATOM	13611	NE	ARG	107	240.772	103.914	-2.433	1.00	54.18	MS13
ATOM	13559	CB	ARG	101	237.510	109.469	7.906	1.00	77.75	MS13	ATOM	13612	CZ	ARG	107	240.282	102.713	-2.140	1.00	54.18	MS13
ATOM	13560	CG	ARG	101	237.939	110.447	6.833	1.00	77.75	MS13	ATOM	13613	NH1	ARG	107	239.165	102.593	-1.437	1.00	54.18	MS13
ATOM	13561	CD	ARG	101	236.814	110.722	5.852	1.00	77.75	MS13	ATOM	13614	NH2	ARG	107	240.910	101.623	-2.552	1.00	54.18	MS13
ATOM	13562	NE	ARG	101	235.621	111.305	6.466	1.00	77.75	MS13	ATOM	13615	C	ARG	107	244.460	105.831	-1.509	1.00	78.35	MS13
ATOM	13563	CZ	ARG	101	234.452	110.682	6.576	1.00	77.75	MS13	ATOM	13616	O	ARG	107	245.084	104.890	-1.999	1.00	78.35	MS13
ATOM	13564	NH1	ARG	101	234.305	109.444	6.122	1.00	77.75	MS13	ATOM	13617	N	THR	108	245.051	106.916	-1.041	1.00	48.35	MS13
ATOM	13565	NH2	ARG	101	233.421	111.308	7.122	1.00	77.75	MS13	ATOM	13618	CA	THR	108	246.503	107.066	-1.089	1.00	48.35	MS13
ATOM	13566	C	ARG	101	238.880	107.472	7.354	1.00	64.02	MS13	ATOM	13619	CB	THR	108	246.896	108.468	-0.564	1.00	36.99	MS13
ATOM	13567	O	ARG	101	239.579	107.721	6.381	1.00	64.02	MS13	ATOM	13620	OG1	THR	108	248.261	108.748	-0.875	1.00	36.99	MS13
ATOM	13568	N	THR	102	238.322	106.285	7.555	1.00	52.52	MS13	ATOM	13621	CG2	THR	108	246.698	108.533	0.927	1.00	36.99	MS13
ATOM	13569	CA	THR	102	238.525	105.226	6.584	1.00	52.52	MS13	ATOM	13622	C	THR	108	247.202	105.969	-0.267	1.00	48.35	MS13
ATOM	13570	CB	THR	102	239.261	104.032	7.200	1.00	59.37	MS13	ATOM	13623	O	THR	108	248.358	105.639	-0.500	1.00	48.35	MS13
ATOM	13571	OG1	THR	102	238.487	103.497	8.272	1.00	59.37	MS13	ATOM	13624	N	ARG	109	246.475	105.393	0.680	1.00	46.03	MS13
ATOM	13572	CG2	THR	102	240.615	104.454	7.723	1.00	59.37	MS13	ATOM	13625	CA	ARG	109	247.016	104.358	1.544	1.00	46.03	MS13
ATOM	13573	C	THR	102	237.228	104.729	5.946	1.00	52.52	MS13	ATOM	13626	CB	ARG	109	246.651	104.651	3.004	1.00	64.40	MS13
ATOM	13574	O	THR	102	237.171	103.606	5.422	1.00	52.52	MS13	ATOM	13627	CG	ARG	109	247.557	103.990	4.018	1.00	64.40	MS13
ATOM	13575	N	ARG	103	236.191	105.566	5.995	1.00	44.81	MS13	ATOM	13628	CD	ARG	109	248.617	104.968	4.520	1.00	64.40	MS13
ATOM	13576	CA	ARG	103	234.900	105.236	5.408	1.00	44.81	MS13	ATOM	13629	NE	ARG	109	249.907	104.325	4.767	1.00	64.40	MS13
ATOM	13577	CB	ARG	103	233.772	105.952	6.150	1.00	76.29	MS13	ATOM	13630	CZ	ARG	109	250.085	103.245	5.526	1.00	64.40	MS13
ATOM	13578	CG	ARG	103	232.368	105.631	5.632	1.00	76.29	MS13	ATOM	13631	NH1	ARG	109	249.057	102.663	6.130	1.00	64.40	MS13
ATOM	13579	CD	ARG	103	231.296	106.279	6.496	1.00	76.29	MS13	ATOM	13632	NH2	ARG	109	251.302	102.739	5.683	1.00	64.40	MS13
ATOM	13580	NE	ARG	103	229.944	105.894	6.109	1.00	76.29	MS13	ATOM	13633	C	ARG	109	246.466	102.996	1.162	1.00	46.03	MS13
ATOM	13581	CZ	ARG	103	228.844	106.297	6.740	1.00	76.29	MS13	ATOM	13634	O	ARG	109	247.136	101.991	1.338	1.00	46.03	MS13
ATOM	13582	NH1	ARG	103	228.933	107.100	7.791	1.00	76.29	MS13	ATOM	13635	N	LYS	110	245.240	102.968	0.649	1.00	73.95	MS13
ATOM	13583	NH2	ARG	103	227.651	105.894	6.329	1.00	76.29	MS13	ATOM	13636	CA	LYS	110	244.588	101.717	0.256	1.00	73.95	MS13
ATOM	13584	C	ARG	103	234.959	105.721	3.976	1.00	44.81	MS13	ATOM	13637	CB	LYS	110	243.070	101.868	0.284	1.00	63.38	MS13
ATOM	13585	O	ARG	103	234.314	105.174	3.092	1.00	44.81	MS13	ATOM	13638	CG	LYS	110	242.390	101.934	1.629	1.00	63.38	MS13
ATOM	13586	N	THR	104	235.738	106.769	3.759	1.00	71.67	MS13	ATOM	13639	CD	LYS	110	240.928	101.586	1.391	1.00	63.38	MS13

ATOM	13640	CE	LYS	110	240.041	101.953	2.540	1.00	63.38	MS13
ATOM	13641	NZ	LYS	110	238.635	101.659	2.181	1.00	63.38	MS13
ATOM	13642	C	LYS	110	244.949	101.212	-1.141	1.00	73.95	MS13
ATOM	13643	O	LYS	110	244.997	100.003	-1.384	1.00	73.95	MS13
ATOM	13644	N	GLY	111	245.172	102.141	-2.063	1.00	46.12	MS13
ATOM	13645	CA	GLY	111	245.481	101.767	-3.426	1.00	46.12	MS13
ATOM	13646	C	GLY	111	244.285	102.153	-4.270	1.00	46.12	MS13
ATOM	13647	O	GLY	111	243.552	103.072	-3.909	1.00	46.12	MS13
ATOM	13648	N	PRO	112	244.057	101.483	-5.404	1.00	77.97	MS13
ATOM	13649	CD	PRO	112	245.034	100.668	-6.137	1.00	73.84	MS13
ATOM	13650	CA	PRO	112	242.913	101.810	-6.264	1.00	77.97	MS13
ATOM	13651	CB	PRO	112	243.278	101.141	-7.583	1.00	73.84	MS13
ATOM	13652	CG	PRO	112	244.784	101.111	-7.542	1.00	73.84	MS13
ATOM	13653	C	PRO	112	241.611	101.266	-5.691	1.00	77.97	MS13
ATOM	13654	O	PRO	112	241.627	100.306	-4.915	1.00	77.97	MS13
ATOM	13655	N	ARG	113	240.485	101.868	-6.067	1.00	85.78	MS13
ATOM	13656	CA	ARG	113	239.206	101.391	-5.554	1.00	85.78	MS13
ATOM	13657	CB	ARG	113	238.038	102.241	-6.053	1.00	61.21	MS13
ATOM	13658	CG	ARG	113	237.888	103.550	-5.321	1.00	61.21	MS13
ATOM	13659	CD	ARG	113	236.540	104.195	-5.575	1.00	61.21	MS13
ATOM	13660	NE	ARG	113	236.636	105.641	-5.433	1.00	61.21	MS13
ATOM	13661	CZ	ARG	113	236.924	106.271	-4.298	1.00	61.21	MS13
ATOM	13662	NH1	ARG	113	237.134	105.585	-3.180	1.00	61.21	MS13
ATOM	13663	NH2	ARG	113	237.041	107.593	-4.292	1.00	61.21	MS13
ATOM	13664	C	ARG	113	238.987	99.944	-5.941	1.00	85.78	MS13
ATOM	13665	O	ARG	113	239.260	99.533	-7.069	1.00	85.78	MS13
ATOM	13666	N	LYS	114	238.476	99.178	-4.989	1.00	62.54	MS13
ATOM	13667	CA	LYS	114	238.239	97.763	-5.189	1.00	62.54	MS13
ATOM	13668	CB	LYS	114	238.985	96.997	-4.102	1.00	52.34	MS13
ATOM	13669	CG	LYS	114	240.272	97.711	-3.668	1.00	52.34	MS13
ATOM	13670	CD	LYS	114	240.847	97.125	-2.401	1.00	52.34	MS13
ATOM	13671	CE	LYS	114	240.995	95.638	-2.570	1.00	52.34	MS13
ATOM	13672	NZ	LYS	114	241.476	95.325	-3.950	1.00	52.34	MS13
ATOM	13673	C	LYS	114	236.746	97.488	-5.110	1.00	62.54	MS13
ATOM	13674	O	LYS	114	236.286	96.769	-4.224	1.00	62.54	MS13
ATOM	13675	N	THR	115	236.000	98.060	-6.052	1.00	47.04	MS13
ATOM	13676	CA	THR	115	234.546	97.915	-6.110	1.00	47.04	MS13
ATOM	13677	CB	THR	115	234.016	98.418	-7.464	1.00	50.46	MS13
ATOM	13678	OG1	THR	115	234.268	99.827	-7.576	1.00	50.46	MS13
ATOM	13679	CG2	THR	115	232.531	98.169	-7.583	1.00	50.46	MS13
ATOM	13680	C	THR	115	234.005	96.509	-5.832	1.00	47.04	MS13
ATOM	13681	O	THR	115	234.656	95.508	-6.112	1.00	47.04	MS13
ATOM	13682	N	VAL	116	232.808	96.460	-5.255	1.00	65.80	MS13
ATOM	13683	CA	VAL	116	232.139	95.209	-4.897	1.00	65.80	MS13
ATOM	13684	CB	VAL	116	232.273	94.925	-3.359	1.00	52.25	MS13
ATOM	13685	CG1	VAL	116	231.567	93.617	-2.982	1.00	52.25	MS13
ATOM	13686	CG2	VAL	116	233.737	94.873	-2.963	1.00	52.25	MS13
ATOM	13687	C	VAL	116	230.659	95.373	-5.229	1.00	65.80	MS13
ATOM	13688	O	VAL	116	230.200	96.488	-5.470	1.00	65.80	MS13
ATOM	13689	N	ALA	117	229.915	94.272	-5.257	1.00	98.17	MS13
ATOM	13690	CA	ALA	117	228.482	94.353	-5.517	1.00	98.17	MS13
ATOM	13691	CB	ALA	117	227.921	92.970	-5.852	1.00	72.41	MS13
ATOM	13692	C	ALA	117	227.871	94.880	-4.216	1.00	98.17	MS13
ATOM	13693	O	ALA	117	228.437	94.663	-3.142	1.00	98.17	MS13
ATOM	13694	N	GLY	118	226.736	95.573	-4.301	1.00	91.96	MS13
ATOM	13695	CA	GLY	118	226.126	96.105	-3.093	1.00	91.96	MS13
ATOM	13696	C	GLY	118	224.672	96.522	-3.209	1.00	91.96	MS13
ATOM	13697	O	GLY	118	224.088	96.464	-4.291	1.00	91.96	MS13
ATOM	13698	N	LYS	119	224.094	96.944	-2.084	1.00	171.35	MS13
ATOM	13699	CA	LYS	119	222.700	97.382	-2.021	1.00	171.35	MS13
ATOM	13700	CB	LYS	119	222.275	97.557	-0.563	1.00	104.38	MS13
ATOM	13701	CG	LYS	119	220.900	98.184	-0.378	1.00	104.38	MS13
ATOM	13702	CD	LYS	119	220.501	98.177	1.089	1.00	104.38	MS13
ATOM	13703	CE	LYS	119	219.252	99.001	1.349	1.00	104.38	MS13
ATOM	13704	NZ	LYS	119	218.934	99.043	2.803	1.00	104.38	MS13
ATOM	13705	C	LYS	119	222.490	98.687	-2.782	1.00	171.35	MS13
ATOM	13706	O	LYS	119	223.371	99.548	-2.802	1.00	171.35	MS13
ATOM	13707	N	LYS	120	221.312	98.838	-3.385	1.00	123.84	MS13
ATOM	13708	CA	LYS	120	221.000	100.022	-4.184	1.00	123.84	MS13
ATOM	13709	CB	LYS	120	220.701	99.577	-5.622	1.00	158.90	MS13
ATOM	13710	CG	LYS	120	221.846	98.766	-6.228	1.00	158.90	MS13
ATOM	13711	CD	LYS	120	221.455	97.997	-7.479	1.00	158.90	MS13
ATOM	13712	CE	LYS	120	222.587	97.065	-7.890	1.00	158.90	MS13
ATOM	13713	NZ	LYS	120	222.228	96.202	-9.043	1.00	158.90	MS13
ATOM	13714	C	LYS	120	219.870	100.905	-3.649	1.00	123.84	MS13
ATOM	13715	O	LYS	120	219.935	101.367	-2.512	1.00	123.84	MS13
ATOM	13716	N	LYS	121	218.853	101.133	-4.485	1.00	189.13	MS13
ATOM	13717	CA	LYS	121	217.683	101.969	-4.171	1.00	189.13	MS13
ATOM	13718	CB	LYS	121	216.448	101.099	-3.889	1.00	79.20	MS13
ATOM	13719	CG	LYS	121	215.091	101.799	-4.127	1.00	79.20	MS13
ATOM	13720	CD	LYS	121	214.859	103.028	-3.232	1.00	79.20	MS13
ATOM	13721	CE	LYS	121	213.507	103.675	-3.515	1.00	79.20	MS13
ATOM	13722	NZ	LYS	121	213.307	104.913	-2.724	1.00	79.20	MS13
ATOM	13723	C	LYS	121	217.896	102.929	-3.007	1.00	189.13	MS13
ATOM	13724	O	LYS	121	218.058	104.131	-3.219	1.00	189.13	MS13
ATOM	13725	N	ALA	122	217.872	102.392	-1.786	1.00	201.09	MS13
ATOM	13726	CA	ALA	122	218.067	103.178	-0.567	1.00	201.09	MS13
ATOM	13727	CB	ALA	122	218.608	102.277	0.566	1.00	90.79	MS13
ATOM	13728	C	ALA	122	219.037	104.327	-0.832	1.00	201.09	MS13
ATOM	13729	O	ALA	122	220.253	104.149	-0.756	1.00	201.09	MS13
ATOM	13730	N	PRO	123	218.504	105.525	-1.143	1.00	201.09	MS13
ATOM	13731	CD	PRO	123	217.068	105.867	-1.067	1.00	152.95	MS13
ATOM	13732	CA	PRO	123	219.301	106.722	-1.430	1.00	201.09	MS13
ATOM	13733	CB	PRO	123	218.359	107.850	-1.029	1.00	152.95	MS13
ATOM	13734	CG	PRO	123	217.042	107.326	-1.516	1.00	152.95	MS13
ATOM	13735	C	PRO	123	220.663	106.798	-0.733	1.00	201.09	MS13
ATOM	13736	O	PRO	123	220.804	107.409	0.330	1.00	201.09	MS13
ATOM	13737	N	ARG	124	221.661	106.166	-1.348	1.00	200.89	MS13
ATOM	13738	CA	ARG	124	223.025	106.159	-0.823	1.00	200.89	MS13
ATOM	13739	CB	ARG	124	223.765	104.870	-1.235	1.00	131.34	MS13
ATOM	13740	CG	ARG	124	223.852	104.592	-2.741	1.00	131.34	MS13
ATOM	13741	CD	ARG	124	224.847	105.499	-3.456	1.00	131.34	MS13
ATOM	13742	NE	ARG	124	224.881	105.253	-4.896	1.00	131.34	MS13
ATOM	13743	CZ	ARG	124	223.868	105.481	-5.727	1.00	131.34	MS13
ATOM	13744	NH1	ARG	124	222.723	105.970	-5.270	1.00	131.34	MS13
ATOM	13745	NH2	ARG	124	224.003	105.210	-7.018	1.00	131.34	MS13

ATOM	13746	C	ARG	124	223.764	107.374	-1.363	1.00200.89	MS13
ATOM	13747	O	ARG	124	224.986	107.484	-1.231	1.00200.89	MS13
ATOM	13748	N	LYS	125	223.011	108.282	-1.978	1.00201.09	MS13
ATOM	13749	CA	LYS	125	223.589	109.490	-2.546	1.00201.09	MS13
ATOM	13750	CB	LYS	125	222.501	110.341	-3.213	1.00105.60	MS13
ATOM	13751	CG	LYS	125	221.800	109.677	-4.387	1.00105.60	MS13
ATOM	13752	CD	LYS	125	220.803	110.631	-5.022	1.00105.60	MS13
ATOM	13753	CE	LYS	125	220.022	109.962	-6.142	1.00105.60	MS13
ATOM	13754	NZ	LYS	125	218.925	110.837	-6.660	1.00105.60	MS13
ATOM	13755	C	LYS	125	224.284	110.306	-1.466	1.00201.09	MS13
ATOM	13756	O	LYS	125	224.514	111.505	-1.706	1.00201.09	MS13
ATOM	13757	OXT	LYS	125	224.608	109.741	-0.400	1.00134.57	MS13
ATOM	13758	CB	VAL	7	151.630	167.475	-25.959	1.00 70.67	BS2
ATOM	13759	CG1	VAL	7	152.512	167.066	-27.140	1.00 70.67	BS2
ATOM	13760	CG2	VAL	7	152.491	167.682	-24.723	1.00 70.67	BS2
ATOM	13761	C	VAL	7	150.216	168.613	-27.679	1.00 67.88	BS2
ATOM	13762	O	VAL	7	149.215	167.903	-27.850	1.00 67.88	BS2
ATOM	13763	N	VAL	7	149.888	169.167	-25.217	1.00 67.88	BS2
ATOM	13764	CA	VAL	7	150.856	168.786	-26.299	1.00 67.88	BS2
ATOM	13765	N	LYS	8	150.848	169.264	-28.654	1.00 99.84	BS2
ATOM	13766	CA	LYS	8	150.436	169.277	-30.054	1.00 99.84	BS2
ATOM	13767	CB	LYS	8	151.650	169.097	-30.966	1.00 88.06	BS2
ATOM	13768	CG	LYS	8	152.219	170.414	-31.479	1.00 88.06	BS2
ATOM	13769	CD	LYS	8	151.959	171.590	-30.514	1.00 88.06	BS2
ATOM	13770	CE	LYS	8	152.617	171.412	-29.140	1.00 88.06	BS2
ATOM	13771	NZ	LYS	8	154.102	171.437	-29.184	1.00 88.06	BS2
ATOM	13772	C	LYS	8	149.345	168.330	-30.472	1.00 99.84	BS2
ATOM	13773	O	LYS	8	149.599	167.227	-30.953	1.00 99.84	BS2
ATOM	13774	N	GLU	9	148.125	168.818	-30.275	1.00166.44	BS2
ATOM	13775	CA	GLU	9	146.883	168.149	-30.620	1.00166.44	BS2
ATOM	13776	CB	GLU	9	145.792	169.213	-30.782	1.00181.37	BS2
ATOM	13777	CG	GLU	9	146.067	170.290	-31.873	1.00181.37	BS2
ATOM	13778	CD	GLU	9	147.366	171.095	-31.680	1.00181.37	BS2
ATOM	13779	OE1	GLU	9	148.469	170.553	-31.918	1.00181.37	BS2
ATOM	13780	OE2	GLU	9	147.282	172.281	-31.289	1.00181.37	BS2
ATOM	13781	C	GLU	9	147.032	167.357	-31.915	1.00166.44	BS2
ATOM	13782	O	GLU	9	146.486	167.740	-32.954	1.00166.44	BS2
ATOM	13783	N	LEU	10	147.766	166.249	-31.845	1.00 83.01	BS2
ATOM	13784	CA	LEU	10	148.008	165.412	-33.013	1.00 83.01	BS2
ATOM	13785	CB	LEU	10	146.694	165.144	-33.759	1.00161.32	BS2
ATOM	13786	CG	LEU	10	145.464	164.772	-32.919	1.00161.32	BS2
ATOM	13787	CD1	LEU	10	144.240	164.717	-33.821	1.00161.32	BS2
ATOM	13788	CD2	LEU	10	145.681	163.440	-32.216	1.00161.32	BS2
ATOM	13789	C	LEU	10	148.993	166.137	-33.933	1.00 83.01	BS2
ATOM	13790	O	LEU	10	149.812	165.500	-34.590	1.00 83.01	BS2
ATOM	13791	N	LEU	11	148.916	167.469	-33.966	1.00 88.25	BS2
ATOM	13792	CA	LEU	11	149.797	168.279	-34.806	1.00 88.25	BS2
ATOM	13793	CB	LEU	11	149.403	169.760	-34.736	1.00124.79	BS2
ATOM	13794	CG	LEU	11	149.668	170.666	-35.951	1.00124.79	BS2
ATOM	13795	CD1	LEU	11	149.214	172.074	-35.605	1.00124.79	BS2
ATOM	13796	CD2	LEU	11	151.138	170.679	-36.347	1.00124.79	BS2
ATOM	13797	C	LEU	11	151.247	168.108	-34.363	1.00 88.25	BS2
ATOM	13798	O	LEU	11	152.106	168.953	-34.634	1.00 88.25	BS2
ATOM	13799	N	GLU	12	151.522	167.020	-33.654	1.00110.32	BS2
ATOM	13800	CA	GLU	12	152.890	166.783	-33.259	1.00110.32	BS2
ATOM	13801	CB	GLU	12	153.000	166.182	-31.867	1.00104.13	BS2
ATOM	13802	CG	GLU	12	154.158	166.849	-31.160	1.00104.13	BS2
ATOM	13803	CD	GLU	12	154.941	167.772	-32.118	1.00104.13	BS2
ATOM	13804	OE1	GLU	12	155.741	167.256	-32.934	1.00104.13	BS2
ATOM	13805	OE2	GLU	12	154.735	169.006	-32.075	1.00104.13	BS2
ATOM	13806	C	GLU	12	153.581	165.886	-34.270	1.00110.32	BS2
ATOM	13807	O	GLU	12	154.618	165.273	-33.990	1.00110.32	BS2
ATOM	13808	N	ALA	13	152.983	165.820	-35.457	1.00 99.79	BS2
ATOM	13809	CA	ALA	13	153.537	165.042	-36.548	1.00 99.79	BS2
ATOM	13810	CB	ALA	13	152.573	165.033	-37.751	1.00 20.47	BS2
ATOM	13811	C	ALA	13	154.787	165.837	-36.865	1.00 99.79	BS2
ATOM	13812	O	ALA	13	155.616	165.435	-37.681	1.00 99.79	BS2
ATOM	13813	N	GLY	14	154.897	166.982	-36.193	1.00 82.06	BS2
ATOM	13814	CA	GLY	14	156.033	167.858	-36.370	1.00 82.06	BS2
ATOM	13815	C	GLY	14	157.335	167.220	-35.931	1.00 82.06	BS2
ATOM	13816	O	GLY	14	158.403	167.777	-36.193	1.00 82.06	BS2
ATOM	13817	N	VAL	15	157.267	166.059	-35.272	1.00102.24	BS2
ATOM	13818	CA	VAL	15	158.490	165.386	-34.821	1.00102.24	BS2
ATOM	13819	CB	VAL	15	158.999	165.977	-33.487	1.00 64.54	BS2
ATOM	13820	CG1	VAL	15	160.274	165.253	-33.074	1.00 64.54	BS2
ATOM	13821	CG2	VAL	15	159.237	167.473	-33.616	1.00 64.54	BS2
ATOM	13822	C	VAL	15	158.451	163.856	-34.623	1.00102.24	BS2
ATOM	13823	O	VAL	15	159.185	163.111	-35.276	1.00102.24	BS2
ATOM	13824	N	HIS	16	157.612	163.399	-33.700	1.00132.54	BS2
ATOM	13825	CA	HIS	16	157.523	161.981	-33.370	1.00132.54	BS2
ATOM	13826	CB	HIS	16	156.629	161.790	-32.147	1.00183.42	BS2
ATOM	13827	CG	HIS	16	157.239	162.299	-30.884	1.00183.42	BS2
ATOM	13828	CD2	HIS	16	157.572	161.666	-29.736	1.00183.42	BS2
ATOM	13829	ND1	HIS	16	157.631	163.611	-30.727	1.00183.42	BS2
ATOM	13830	CE1	HIS	16	158.184	163.763	-29.538	1.00183.42	BS2
ATOM	13831	NE2	HIS	16	158.162	162.598	-28.917	1.00183.42	BS2
ATOM	13832	C	HIS	16	157.102	160.988	-34.423	1.00132.54	BS2
ATOM	13833	O	HIS	16	157.920	160.525	-35.213	1.00132.54	BS2
ATOM	13834	N	PHE	17	155.811	160.677	-34.416	1.00104.80	BS2
ATOM	13835	CA	PHE	17	155.217	159.684	-35.292	1.00104.80	BS2
ATOM	13836	CB	PHE	17	154.592	160.305	-36.579	1.00 87.91	BS2
ATOM	13837	CG	PHE	17	155.574	160.738	-37.658	1.00 87.91	BS2
ATOM	13838	CD1	PHE	17	156.832	160.138	-37.820	1.00 87.91	BS2
ATOM	13839	CD2	PHE	17	155.182	161.699	-38.585	1.00 87.91	BS2
ATOM	13840	CE1	PHE	17	157.682	160.483	-38.892	1.00 87.91	BS2
ATOM	13841	CE2	PHE	17	156.015	162.051	-39.652	1.00 87.91	BS2
ATOM	13842	CZ	PHE	17	157.270	161.439	-39.805	1.00 87.91	BS2
ATOM	13843	C	PHE	17	156.169	158.527	-35.595	1.00104.80	BS2
ATOM	13844	O	PHE	17	157.114	158.286	-34.835	1.00104.80	BS2
ATOM	13845	N	GLY	18	155.903	157.804	-36.682	1.00 67.65	BS2
ATOM	13846	CA	GLY	18	156.716	156.658	-37.066	1.00 67.65	BS2
ATOM	13847	C	GLY	18	158.214	156.636	-36.777	1.00 67.65	BS2
ATOM	13848	O	GLY	18	158.875	157.675	-36.658	1.00 67.65	BS2
ATOM	13849	N	HIS	19	158.738	155.416	-36.665	1.00 73.00	BS2
ATOM	13850	CA	HIS	19	160.157	155.182	-36.427	1.00 73.00	BS2
ATOM	13851	CB	HIS	19	160.549	155.647	-35.027	1.00137.98	BS2

ATOM	13852	CG	HIS	19	162.025	155.792	-34.843	1.00137.98	BS2	ATOM	13905	CE3	TRP	24	155.259	144.826	-35.689	1.00	49.26	BS2
ATOM	13853	CD2	HIS	19	162.895	155.131	-34.044	1.00137.98	BS2	ATOM	13906	CD1	TRP	24	158.433	143.145	-36.206	1.00	49.26	BS2
ATOM	13854	ND1	HIS	19	162.777	156.701	-35.557	1.00137.98	BS2	ATOM	13907	NE1	TRP	24	157.505	142.186	-36.532	1.00	49.26	BS2
ATOM	13855	CE1	HIS	19	164.046	156.594	-35.206	1.00137.98	BS2	ATOM	13908	CZ2	TRP	24	154.991	142.131	-36.592	1.00	49.26	BS2
ATOM	13856	NE2	HIS	19	164.145	155.648	-34.288	1.00137.98	BS2	ATOM	13909	CZ3	TRP	24	154.005	144.239	-35.901	1.00	49.26	BS2
ATOM	13857	C	HIS	19	160.454	153.686	-36.594	1.00 73.00	BS2	ATOM	13910	CH2	TRP	24	153.887	142.902	-36.350	1.00	49.26	BS2
ATOM	13858	O	HIS	19	159.523	152.888	-36.644	1.00 73.00	BS2	ATOM	13911	C	TRP	24	159.850	144.339	-33.752	1.00	80.49	BS2
ATOM	13859	N	GLU	20	161.738	153.323	-36.695	1.00 69.30	BS2	ATOM	13912	O	TRP	24	160.788	143.606	-33.441	1.00	80.49	BS2
ATOM	13860	CA	GLU	20	162.205	151.925	-36.858	1.00 69.30	BS2	ATOM	13913	N	ASN	25	158.684	144.381	-33.110	1.00	44.53	BS2
ATOM	13861	CB	GLU	20	161.867	151.096	-35.608	1.00 56.61	BS2	ATOM	13914	CA	ASN	25	158.293	143.517	-32.005	1.00	44.53	BS2
ATOM	13862	CG	GLU	20	162.170	151.755	-34.252	1.00 56.61	BS2	ATOM	13915	CB	ASN	25	158.639	144.129	-30.655	1.00	38.84	BS2
ATOM	13863	CD	GLU	20	163.653	151.970	-33.989	1.00 56.61	BS2	ATOM	13916	CG	ASN	25	158.168	143.270	-29.504	1.00	38.84	BS2
ATOM	13864	OE1	GLU	20	164.465	151.475	-34.800	1.00 56.61	BS2	ATOM	13917	OD1	ASN	25	158.770	143.274	-28.431	1.00	38.84	BS2
ATOM	13865	OE2	GLU	20	164.004	152.627	-32.970	1.00 56.61	BS2	ATOM	13918	ND2	ASN	25	157.081	142.523	-29.720	1.00	38.84	BS2
ATOM	13866	C	GLU	20	161.657	151.198	-38.106	1.00 69.30	BS2	ATOM	13919	C	ASN	25	156.775	143.419	-32.160	1.00	44.53	BS2
ATOM	13867	O	GLU	20	160.452	151.002	-38.249	1.00 69.30	BS2	ATOM	13920	O	ASN	25	156.036	144.303	-31.745	1.00	44.53	BS2
ATOM	13868	N	ARG	21	162.545	150.792	-39.008	1.00 88.35	BS2	ATOM	13921	N	PRO	26	156.298	142.333	-32.768	1.00	46.76	BS2
ATOM	13869	CA	ARG	21	162.120	150.096	-40.224	1.00 88.35	BS2	ATOM	13922	CD	PRO	26	157.075	141.114	-33.047	1.00	55.16	BS2
ATOM	13870	CB	ARG	21	163.212	150.184	-41.292	1.00135.53	BS2	ATOM	13923	CA	PRO	26	154.874	142.105	-33.002	1.00	46.76	BS2
ATOM	13871	CG	ARG	21	164.590	149.760	-40.800	1.00135.53	BS2	ATOM	13924	CB	PRO	26	154.798	140.593	-33.157	1.00	55.16	BS2
ATOM	13872	CD	ARG	21	165.587	149.634	-41.947	1.00135.53	BS2	ATOM	13925	CG	PRO	26	156.093	140.284	-33.839	1.00	55.16	BS2
ATOM	13873	NE	ARG	21	166.930	149.302	-41.475	1.00135.53	BS2	ATOM	13926	C	PRO	26	153.922	142.632	-31.939	1.00	46.76	BS2
ATOM	13874	CZ	ARG	21	167.236	148.206	-40.786	1.00135.53	BS2	ATOM	13927	O	PRO	26	152.822	143.069	-32.272	1.00	46.76	BS2
ATOM	13875	NH1	ARG	21	166.297	147.321	-40.481	1.00135.53	BS2	ATOM	13928	N	LYS	27	154.331	142.586	-30.669	1.00	48.37	BS2
ATOM	13876	NH2	ARG	21	168.484	147.998	-40.390	1.00135.53	BS2	ATOM	13929	CA	LYS	27	153.479	143.061	-29.573	1.00	48.37	BS2
ATOM	13877	C	ARG	21	161.835	148.632	-39.910	1.00 88.35	BS2	ATOM	13930	CB	LYS	27	154.173	142.837	-28.223	1.00	55.76	BS2
ATOM	13878	O	ARG	21	162.760	147.867	-39.636	1.00 88.35	BS2	ATOM	13931	CG	LYS	27	154.158	141.380	-27.750	1.00	55.76	BS2
ATOM	13879	N	LYS	22	160.563	148.239	-39.963	1.00165.91	BS2	ATOM	13932	CD	LYS	27	154.809	141.213	-26.373	1.00	55.76	BS2
ATOM	13880	CA	LYS	22	160.166	146.865	-39.646	1.00165.91	BS2	ATOM	13933	CE	LYS	27	154.651	139.788	-25.858	1.00	55.76	BS2
ATOM	13881	CB	LYS	22	160.092	146.021	-40.915	1.00 87.19	BS2	ATOM	13934	NZ	LYS	27	155.241	139.562	-24.509	1.00	55.76	BS2
ATOM	13882	CG	LYS	22	158.932	146.462	-41.823	1.00 87.19	BS2	ATOM	13935	C	LYS	27	153.074	144.533	-29.706	1.00	48.37	BS2
ATOM	13883	CD	LYS	22	158.641	145.458	-42.937	1.00 87.19	BS2	ATOM	13936	O	LYS	27	151.943	144.917	-29.396	1.00	48.37	BS2
ATOM	13884	CE	LYS	22	157.440	145.878	-43.781	1.00 87.19	BS2	ATOM	13937	N	PHE	28	154.010	145.344	-30.179	1.00	46.54	BS2
ATOM	13885	NZ	LYS	22	157.213	144.924	-44.906	1.00 87.19	BS2	ATOM	13938	CA	PHE	28	153.797	146.769	-30.370	1.00	46.54	BS2
ATOM	13886	C	LYS	22	161.139	146.288	-38.625	1.00165.91	BS2	ATOM	13939	CB	PHE	28	155.132	147.436	-30.692	1.00	58.18	BS2
ATOM	13887	O	LYS	22	161.538	147.023	-37.720	1.00165.91	BS2	ATOM	13940	CG	PHE	28	155.124	148.916	-30.526	1.00	58.18	BS2
ATOM	13888	N	ARG	23	161.545	145.022	-38.731	1.00 76.03	BS2	ATOM	13941	CD1	PHE	28	155.470	149.488	-29.309	1.00	58.18	BS2
ATOM	13889	CA	ARG	23	162.467	144.508	-37.706	1.00 76.03	BS2	ATOM	13942	CD2	PHE	28	154.752	149.743	-31.581	1.00	58.18	BS2
ATOM	13890	CB	ARG	23	163.888	144.979	-38.056	1.00125.49	BS2	ATOM	13943	CE1	PHE	28	155.446	150.864	-29.138	1.00	58.18	BS2
ATOM	13891	CG	ARG	23	164.893	144.934	-36.931	1.00125.49	BS2	ATOM	13944	CE2	PHE	28	154.723	151.122	-31.426	1.00	58.18	BS2
ATOM	13892	CD	ARG	23	165.090	146.321	-36.321	1.00125.49	BS2	ATOM	13945	CZ	PHE	28	155.071	151.687	-30.198	1.00	58.18	BS2
ATOM	13893	NE	ARG	23	165.797	146.256	-35.045	1.00125.49	BS2	ATOM	13946	C	PHE	28	152.816	147.003	-31.520	1.00	46.54	BS2
ATOM	13894	CZ	ARG	23	165.308	145.699	-33.936	1.00125.49	BS2	ATOM	13947	O	PHE	28	152.489	148.145	-31.857	1.00	46.54	BS2
ATOM	13895	NH1	ARG	23	164.097	145.156	-33.931	1.00125.49	BS2	ATOM	13948	N	ALA	29	152.353	145.912	-32.119	1.00	61.67	BS2
ATOM	13896	NH2	ARG	23	166.039	145.667	-32.828	1.00125.49	BS2	ATOM	13949	CA	ALA	29	151.418	145.972	-33.238	1.00	61.67	BS2
ATOM	13897	C	ARG	23	161.951	145.099	-36.348	1.00 76.03	BS2	ATOM	13950	CB	ALA	29	150.771	144.591	-33.454	1.00	35.67	BS2
ATOM	13898	O	ARG	23	162.655	145.781	-35.596	1.00 76.03	BS2	ATOM	13951	C	ALA	29	150.326	147.024	-33.071	1.00	61.67	BS2
ATOM	13899	N	TRP	24	160.677	144.826	-36.085	1.00 80.49	BS2	ATOM	13952	O	ALA	29	150.108	147.846	-33.960	1.00	61.67	BS2
ATOM	13900	CA	TRP	24	159.928	145.318	-34.927	1.00 80.49	BS2	ATOM	13953	N	ARG	30	149.647	146.994	-31.926	1.00	72.32	BS2
ATOM	13901	CB	TRP	24	158.496	145.596	-35.400	1.00 49.26	BS2	ATOM	13954	CA	ARG	30	148.544	147.910	-31.649	1.00	72.32	BS2
ATOM	13902	CG	TRP	24	157.814	144.311	-35.831	1.00 49.26	BS2	ATOM	13955	CB	ARG	30	148.057	147.714	-30.208	1.00	92.21	BS2
ATOM	13903	CD2	TRP	24	156.406	144.058	-35.932	1.00 49.26	BS2	ATOM	13956	CG	ARG	30	148.958	148.309	-29.147	1.00	92.21	BS2
ATOM	13904	CE2	TRP	24	156.251	142.716	-36.377	1.00 49.26	BS2	ATOM	13957	CD	ARG	30	148.624	147.796	-27.741	1.00	92.21	BS2

ATOM	13958	NE	ARG	30	149.154	146.452	-27.514	1.00	92.21	BS2	ATOM	14011	CA	ARG	36	156.556	151.957	-44.929	1.00144.53	BS2
ATOM	13959	CZ	ARG	30	149.756	146.056	-26.393	1.00	92.21	BS2	ATOM	14012	CB	ARG	36	156.150	153.433	-44.849	1.00 83.91	BS2
ATOM	13960	NH1	ARG	30	149.902	146.906	-25.378	1.00	92.21	BS2	ATOM	14013	CG	ARG	36	157.212	154.342	-45.394	1.00 83.91	BS2
ATOM	13961	NH2	ARG	30	150.234	144.815	-26.294	1.00	92.21	BS2	ATOM	14014	CD	ARG	36	157.581	153.931	-46.820	1.00 83.91	BS2
ATOM	13962	C	ARG	30	148.838	149.388	-31.903	1.00	72.32	BS2	ATOM	14015	NE	ARG	36	159.018	154.059	-47.074	1.00 83.91	BS2
ATOM	13963	O	ARG	30	147.992	150.099	-32.447	1.00	72.32	BS2	ATOM	14016	CZ	ARG	36	159.916	153.110	-46.813	1.00 83.91	BS2
ATOM	13964	N	TYR	31	150.031	149.848	-31.532	1.00	66.79	BS2	ATOM	14017	NH1	ARG	36	159.535	151.946	-46.294	1.00 83.91	BS2
ATOM	13965	CA	TYR	31	150.382	151.252	-31.719	1.00	66.79	BS2	ATOM	14018	NH2	ARG	36	161.201	153.332	-47.064	1.00 83.91	BS2
ATOM	13966	CB	TYR	31	151.405	151.692	-30.682	1.00	66.49	BS2	ATOM	14019	C	ARG	36	157.656	151.624	-43.913	1.00144.53	BS2
ATOM	13967	CG	TYR	31	150.987	151.411	-29.271	1.00	66.49	BS2	ATOM	14020	O	ARG	36	158.677	151.021	-44.258	1.00144.53	BS2
ATOM	13968	CD1	TYR	31	151.777	150.624	-28.442	1.00	66.49	BS2	ATOM	14021	N	ASN	37	157.428	152.001	-42.658	1.00111.38	BS2
ATOM	13969	CE1	TYR	31	151.385	150.329	-27.145	1.00	66.49	BS2	ATOM	14022	CA	ASN	37	158.366	151.726	-41.578	1.00111.38	BS2
ATOM	13970	CD2	TYR	31	149.791	151.907	-28.767	1.00	66.49	BS2	ATOM	14023	CB	ASN	37	159.513	152.722	-41.600	1.00105.06	BS2
ATOM	13971	CE2	TYR	31	149.382	151.618	-27.467	1.00	66.49	BS2	ATOM	14024	CG	ASN	37	160.434	152.486	-42.751	1.00105.06	BS2
ATOM	13972	CZ	TYR	31	150.184	150.822	-26.662	1.00	66.49	BS2	ATOM	14025	OD1	ASN	37	161.034	151.413	-42.865	1.00105.06	BS2
ATOM	13973	OH	TYR	31	149.766	150.465	-25.397	1.00	66.49	BS2	ATOM	14026	ND2	ASN	37	160.547	153.473	-43.632	1.00105.06	BS2
ATOM	13974	C	TYR	31	150.916	151.623	-33.092	1.00	66.79	BS2	ATOM	14027	C	ASN	37	157.654	151.804	-40.248	1.00111.38	BS2
ATOM	13975	O	TYR	31	151.135	152.794	-33.360	1.00	66.79	BS2	ATOM	14028	O	ASN	37	158.232	152.234	-39.252	1.00111.38	BS2
ATOM	13976	N	ILE	32	151.154	150.645	-33.955	1.00	70.67	BS2	ATOM	14029	N	GLY	38	156.402	151.365	-40.231	1.00 83.97	BS2
ATOM	13977	CA	ILE	32	151.659	150.956	-35.290	1.00	70.67	BS2	ATOM	14030	CA	GLY	38	155.645	151.428	-39.006	1.00 83.97	BS2
ATOM	13978	CB	ILE	32	152.378	149.750	-35.925	1.00	49.64	BS2	ATOM	14031	C	GLY	38	155.572	152.907	-38.705	1.00 83.97	BS2
ATOM	13979	CG2	ILE	32	152.638	150.023	-37.397	1.00	49.64	BS2	ATOM	14032	O	GLY	38	156.410	153.457	-37.980	1.00 83.97	BS2
ATOM	13980	CG1	ILE	32	153.696	149.487	-35.183	1.00	49.64	BS2	ATOM	14033	N	ILE	39	154.579	153.567	-39.284	1.00 85.40	BS2
ATOM	13981	CD1	ILE	32	154.043	148.018	-35.032	1.00	49.64	BS2	ATOM	14034	CA	ILE	39	154.424	154.995	-39.075	1.00 85.40	BS2
ATOM	13982	C	ILE	32	150.489	151.364	-36.167	1.00	70.67	BS2	ATOM	14035	CB	ILE	39	153.875	155.669	-40.344	1.00 87.91	BS2
ATOM	13983	O	ILE	32	149.421	150.754	-36.106	1.00	70.67	BS2	ATOM	14036	CG2	ILE	39	152.341	155.609	-40.339	1.00 87.91	BS2
ATOM	13984	N	TYR	33	150.697	152.406	-36.969	1.00	71.53	BS2	ATOM	14037	CG1	ILE	39	154.386	157.115	-40.419	1.00 87.91	BS2
ATOM	13985	CA	TYR	33	149.655	152.912	-37.852	1.00	71.53	BS2	ATOM	14038	CD1	ILE	39	153.999	157.863	-41.697	1.00 87.91	BS2
ATOM	13986	CB	TYR	33	149.891	154.377	-38.219	1.00	85.03	BS2	ATOM	14039	C	ILE	39	153.495	155.299	-37.891	1.00 85.40	BS2
ATOM	13987	CG	TYR	33	148.788	154.985	-39.070	1.00	85.03	BS2	ATOM	14040	O	ILE	39	152.948	154.388	-37.264	1.00 85.40	BS2
ATOM	13988	CD1	TYR	33	147.889	154.179	-39.770	1.00	85.03	BS2	ATOM	14041	N	HIS	40	153.323	156.591	-37.609	1.00169.36	BS2
ATOM	13989	CE1	TYR	33	146.883	154.726	-40.547	1.00	85.03	BS2	ATOM	14042	CA	HIS	40	152.478	157.045	-36.510	1.00169.36	BS2
ATOM	13990	CD2	TYR	33	148.646	156.365	-39.178	1.00	85.03	BS2	ATOM	14043	CB	HIS	40	153.337	157.388	-35.291	1.00 72.37	BS2
ATOM	13991	CE2	TYR	33	147.640	156.927	-39.954	1.00	85.03	BS2	ATOM	14044	CG	HIS	40	153.977	156.205	-34.628	1.00 72.37	BS2
ATOM	13992	CZ	TYR	33	146.762	156.098	-40.633	1.00	85.03	BS2	ATOM	14045	CD2	HIS	40	154.156	155.912	-33.317	1.00 72.37	BS2
ATOM	13993	OH	TYR	33	145.748	156.629	-41.392	1.00	85.03	BS2	ATOM	14046	ND1	HIS	40	154.571	155.184	-35.335	1.00 72.37	BS2
ATOM	13994	C	TYR	33	149.679	152.122	-39.125	1.00	71.53	BS2	ATOM	14047	CE1	HIS	40	155.091	154.315	-34.487	1.00 72.37	BS2
ATOM	13995	O	TYR	33	148.708	151.449	-39.477	1.00	71.53	BS2	ATOM	14048	NE2	HIS	40	154.853	154.734	-33.257	1.00 72.37	BS2
ATOM	13996	N	ALA	34	150.790	152.236	-39.841	1.00	64.52	BS2	ATOM	14049	C	HIS	40	151.543	158.233	-36.795	1.00169.36	BS2
ATOM	13997	CA	ALA	34	150.902	151.526	-41.093	1.00	64.52	BS2	ATOM	14050	O	HIS	40	151.942	159.244	-37.379	1.00169.36	BS2
ATOM	13998	CB	ALA	34	150.018	152.198	-42.147	1.00	19.72	BS2	ATOM	14051	N	ILE	41	150.300	158.074	-36.343	1.00135.29	BS2
ATOM	13999	C	ALA	34	152.329	151.342	-41.612	1.00	64.52	BS2	ATOM	14052	CA	ILE	41	149.201	159.040	-36.453	1.00135.29	BS2
ATOM	14000	O	ALA	34	153.300	151.880	-41.058	1.00	64.52	BS2	ATOM	14053	CB	ILE	41	148.770	159.308	-37.931	1.00 69.47	BS2
ATOM	14001	N	GLU	35	152.403	150.550	-42.684	1.00	89.32	BS2	ATOM	14054	CG2	ILE	41	147.298	159.733	-38.008	1.00 69.47	BS2
ATOM	14002	CA	GLU	35	153.617	150.144	-43.388	1.00	89.32	BS2	ATOM	14055	CG1	ILE	41	149.659	160.399	-38.534	1.00 69.47	BS2
ATOM	14003	CB	GLU	35	153.264	149.660	-44.802	1.00146.18		BS2	ATOM	14056	CD1	ILE	41	149.352	160.717	-39.992	1.00 69.47	BS2
ATOM	14004	CG	GLU	35	151.890	149.012	-44.946	1.00146.18		BS2	ATOM	14057	C	ILE	41	148.081	158.346	-35.685	1.00135.29	BS2
ATOM	14005	CD	GLU	35	150.754	150.017	-44.819	1.00146.18		BS2	ATOM	14058	O	ILE	41	147.622	158.855	-34.664	1.00135.29	BS2
ATOM	14006	OE1	GLU	35	150.818	151.073	-45.486	1.00146.18		BS2	ATOM	14059	N	ILE	42	147.660	157.172	-36.166	1.00121.22	BS2
ATOM	14007	OE2	GLU	35	149.795	149.754	-44.060	1.00146.18		BS2	ATOM	14060	CA	ILE	42	146.634	156.387	-35.473	1.00121.22	BS2
ATOM	14008	C	GLU	35	154.739	151.156	-43.498	1.00	89.32	BS2	ATOM	14061	CB	ILE	42	146.312	155.049	-36.187	1.00138.86	BS2
ATOM	14009	O	GLU	35	154.985	151.952	-42.589	1.00	89.32	BS2	ATOM	14062	CG2	ILE	42	145.411	154.197	-35.300	1.00138.86	BS2
ATOM	14010	N	ARG	36	155.420	151.099	-44.640	1.00144.53		BS2	ATOM	14063	CG1	ILE	42	145.635	155.307	-37.540	1.00138.86	BS2

ATOM	14064	CD1	ILE	42	144.188	155.768	-37.459	1.00138.86	BS2	ATOM	14117	CA	GLU	49	145.303	158.703	-25.638	1.00 64.97	BS2
ATOM	14065	C	ILE	42	147.350	156.068	-34.186	1.00121.22	BS2	ATOM	14118	CB	GLU	49	144.591	157.557	-26.364	1.00126.08	BS2
ATOM	14066	O	ILE	42	146.765	155.635	-33.201	1.00121.22	BS2	ATOM	14119	CG	GLU	49	143.521	158.080	-27.330	1.00126.08	BS2
ATOM	14067	N	ASP	43	148.653	156.296	-34.239	1.00100.47	BS2	ATOM	14120	CD	GLU	49	142.699	156.991	-28.006	1.00126.08	BS2
ATOM	14068	CA	ASP	43	149.543	156.088	-33.123	1.00100.47	BS2	ATOM	14121	OE1	GLU	49	142.104	156.152	-27.296	1.00126.08	BS2
ATOM	14069	CB	ASP	43	150.969	156.013	-33.617	1.00 94.84	BS2	ATOM	14122	OE2	GLU	49	142.637	156.985	-29.255	1.00126.08	BS2
ATOM	14070	CG	ASP	43	151.073	155.285	-34.918	1.00 94.84	BS2	ATOM	14123	C	GLU	49	146.217	158.185	-24.544	1.00 64.97	BS2
ATOM	14071	OD1	ASP	43	150.214	155.538	-35.781	1.00 94.84	BS2	ATOM	14124	O	GLU	49	145.831	158.125	-23.376	1.00 64.97	BS2
ATOM	14072	OD2	ASP	43	152.010	154.478	-35.093	1.00 94.84	BS2	ATOM	14125	N	GLU	50	147.445	157.848	-24.916	1.00 61.67	BS2
ATOM	14073	C	ASP	43	149.387	157.329	-32.298	1.00100.47	BS2	ATOM	14126	CA	GLU	50	148.405	157.346	-23.948	1.00 61.67	BS2
ATOM	14074	O	ASP	43	148.983	157.266	-31.147	1.00100.47	BS2	ATOM	14127	CB	GLU	50	149.519	156.581	-24.653	1.00 90.89	BS2
ATOM	14075	N	LEU	44	149.720	158.461	-32.909	1.00 71.29	BS2	ATOM	14128	CG	GLU	50	149.116	155.178	-25.066	1.00 90.89	BS2
ATOM	14076	CA	LEU	44	149.607	159.742	-32.236	1.00 71.29	BS2	ATOM	14129	CD	GLU	50	148.511	154.396	-23.915	1.00 90.89	BS2
ATOM	14077	CB	LEU	44	149.894	160.860	-33.233	1.00 51.42	BS2	ATOM	14130	OE1	GLU	50	149.029	154.511	-22.778	1.00 90.89	BS2
ATOM	14078	CG	LEU	44	151.086	160.595	-34.156	1.00 51.42	BS2	ATOM	14131	OE2	GLU	50	147.522	153.665	-24.155	1.00 90.89	BS2
ATOM	14079	CD1	LEU	44	151.109	161.681	-35.218	1.00 51.42	BS2	ATOM	14132	C	GLU	50	148.997	158.450	-23.086	1.00 61.67	BS2
ATOM	14080	CD2	LEU	44	152.389	160.549	-33.379	1.00 51.42	BS2	ATOM	14133	O	GLU	50	149.146	158.276	-21.874	1.00 61.67	BS2
ATOM	14081	C	LEU	44	148.185	159.838	-31.673	1.00 71.29	BS2	ATOM	14134	N	LEU	51	149.342	159.576	-23.705	1.00 52.29	BS2
ATOM	14082	O	LEU	44	147.971	160.382	-30.591	1.00 71.29	BS2	ATOM	14135	CA	LEU	51	149.898	160.704	-22.960	1.00 52.29	BS2
ATOM	14083	N	GLN	45	147.222	159.297	-32.418	1.00 76.15	BS2	ATOM	14136	CB	LEU	51	150.146	161.883	-23.899	1.00 39.06	BS2
ATOM	14084	CA	GLN	45	145.833	159.264	-31.978	1.00 76.15	BS2	ATOM	14137	CG	LEU	51	151.312	161.787	-24.876	1.00 39.06	BS2
ATOM	14085	CB	GLN	45	144.975	158.468	-32.959	1.00126.16	BS2	ATOM	14138	CD1	LEU	51	151.019	162.675	-26.083	1.00 39.06	BS2
ATOM	14086	CG	GLN	45	144.623	159.187	-34.250	1.00126.16	BS2	ATOM	14139	CD2	LEU	51	152.620	162.173	-24.180	1.00 39.06	BS2
ATOM	14087	CD	GLN	45	144.164	158.223	-35.348	1.00126.16	BS2	ATOM	14140	C	LEU	51	148.890	161.124	-21.891	1.00 52.29	BS2
ATOM	14088	OE1	GLN	45	143.496	157.216	-35.075	1.00126.16	BS2	ATOM	14141	O	LEU	51	149.223	161.289	-20.712	1.00 52.29	BS2
ATOM	14089	NE2	GLN	45	144.520	158.533	-36.597	1.00126.16	BS2	ATOM	14142	N	GLU	52	147.650	161.305	-22.339	1.00 87.78	BS2
ATOM	14090	C	GLN	45	145.885	158.516	-30.651	1.00 76.15	BS2	ATOM	14143	CA	GLU	52	146.542	161.706	-21.482	1.00 87.78	BS2
ATOM	14091	O	GLN	45	145.221	158.873	-29.675	1.00 76.15	BS2	ATOM	14144	CB	GLU	52	145.229	161.449	-22.221	1.00127.67	BS2
ATOM	14092	N	LYS	46	146.696	157.469	-30.632	1.00 78.27	BS2	ATOM	14145	CG	GLU	52	143.971	161.766	-21.445	1.00127.67	BS2
ATOM	14093	CA	LYS	46	146.873	156.668	-29.442	1.00 78.27	BS2	ATOM	14146	CD	GLU	52	142.714	161.438	-22.238	1.00127.67	BS2
ATOM	14094	CB	LYS	46	147.318	155.260	-29.832	1.00100.12	BS2	ATOM	14147	OE1	GLU	52	141.598	161.665	-21.718	1.00127.67	BS2
ATOM	14095	CG	LYS	46	146.180	154.445	-30.417	1.00100.12	BS2	ATOM	14148	OE2	GLU	52	142.843	160.951	-23.385	1.00127.67	BS2
ATOM	14096	CD	LYS	46	146.665	153.374	-31.367	1.00100.12	BS2	ATOM	14149	C	GLU	52	146.610	160.879	-20.210	1.00 87.78	BS2
ATOM	14097	CE	LYS	46	145.502	152.863	-32.219	1.00100.12	BS2	ATOM	14150	O	GLU	52	146.802	161.403	-19.106	1.00 87.78	BS2
ATOM	14098	NZ	LYS	46	145.927	151.960	-33.343	1.00100.12	BS2	ATOM	14151	N	ARG	53	146.473	159.573	-20.397	1.00 73.54	BS2
ATOM	14099	C	LYS	46	147.895	157.343	-28.543	1.00 78.27	BS2	ATOM	14152	CA	ARG	53	146.514	158.609	-19.314	1.00 73.54	BS2
ATOM	14100	O	LYS	46	147.689	157.426	-27.332	1.00 78.27	BS2	ATOM	14153	CB	ARG	53	146.294	157.217	-19.897	1.00 77.68	BS2
ATOM	14101	N	THR	47	148.982	157.834	-29.136	1.00 62.72	BS2	ATOM	14154	CG	ARG	53	146.388	156.111	-18.895	1.00 77.68	BS2
ATOM	14102	CA	THR	47	150.034	158.529	-28.390	1.00 62.72	BS2	ATOM	14155	CD	ARG	53	146.025	154.775	-19.511	1.00 77.68	BS2
ATOM	14103	CB	THR	47	150.981	159.326	-29.319	1.00 73.02	BS2	ATOM	14156	NE	ARG	53	146.346	153.701	-18.583	1.00 77.68	BS2
ATOM	14104	OG1	THR	47	151.610	158.445	-30.261	1.00 73.02	BS2	ATOM	14157	CZ	ARG	53	147.583	153.422	-18.184	1.00 77.68	BS2
ATOM	14105	CG2	THR	47	152.051	160.031	-28.490	1.00 73.02	BS2	ATOM	14158	NH1	ARG	53	148.600	154.139	-18.651	1.00 77.68	BS2
ATOM	14106	C	THR	47	149.352	159.533	-27.471	1.00 62.72	BS2	ATOM	14159	NH2	ARG	53	147.804	152.451	-17.304	1.00 77.68	BS2
ATOM	14107	O	THR	47	149.696	159.674	-26.286	1.00 62.72	BS2	ATOM	14160	C	ARG	53	147.845	158.667	-18.557	1.00 73.54	BS2
ATOM	14108	N	MET	48	148.384	160.239	-28.048	1.00 89.51	BS2	ATOM	14161	O	ARG	53	147.878	158.667	-17.324	1.00 73.54	BS2
ATOM	14109	CA	MET	48	147.607	161.215	-27.311	1.00 89.51	BS2	ATOM	14162	N	THR	54	148.941	158.728	-19.304	1.00 59.37	BS2
ATOM	14110	CB	MET	48	146.570	161.868	-28.234	1.00 97.30	BS2	ATOM	14163	CA	THR	54	150.272	158.770	-18.710	1.00 59.37	BS2
ATOM	14111	CG	MET	48	147.149	162.834	-29.260	1.00 97.30	BS2	ATOM	14164	CB	THR	54	151.370	158.684	-19.806	1.00 59.12	BS2
ATOM	14112	SD	MET	48	147.855	164.326	-28.510	1.00 97.30	BS2	ATOM	14165	OG1	THR	54	151.208	157.465	-20.545	1.00 59.12	BS2
ATOM	14113	CE	MET	48	146.432	165.437	-28.536	1.00 97.30	BS2	ATOM	14166	CG2	THR	54	152.761	158.706	-19.178	1.00 59.12	BS2
ATOM	14114	C	MET	48	146.900	160.454	-26.195	1.00 89.51	BS2	ATOM	14167	C	THR	54	150.499	160.026	-17.873	1.00 59.37	BS2
ATOM	14115	O	MET	48	147.129	160.710	-25.007	1.00 89.51	BS2	ATOM	14168	O	THR	54	150.744	159.941	-16.666	1.00 59.37	BS2
ATOM	14116	N	GLU	49	146.057	159.502	-26.592	1.00 64.97	BS2	ATOM	14169	N	PHE	55	150.424	161.184	-18.532	1.00 62.27	BS2

ATOM	14170	CA	PHE	55	150.622	162.477	-17.882	1.00	62.27	BS2	ATOM	14223	OD1	ASP	60	150.303	159.509	-8.158	1.00	137.76	BS2
ATOM	14171	CB	PHE	55	150.309	163.608	-18.868	1.00	74.46	BS2	ATOM	14224	OD2	ASP	60	148.473	158.665	-9.025	1.00	137.76	BS2
ATOM	14172	CG	PHE	55	151.467	163.955	-19.756	1.00	74.46	BS2	ATOM	14225	C	ASP	60	150.663	162.192	-8.582	1.00	54.62	BS2
ATOM	14173	CD1	PHE	55	152.032	162.998	-20.589	1.00	74.46	BS2	ATOM	14226	O	ASP	60	150.606	162.915	-7.585	1.00	54.62	BS2
ATOM	14174	CD2	PHE	55	152.063	165.209	-19.685	1.00	74.46	BS2	ATOM	14227	N	LEU	61	151.755	161.506	-8.917	1.00	61.15	BS2
ATOM	14175	CE1	PHE	55	153.181	163.283	-21.327	1.00	74.46	BS2	ATOM	14228	CA	LEU	61	152.968	161.547	-8.109	1.00	61.15	BS2
ATOM	14176	CE2	PHE	55	153.215	165.501	-20.423	1.00	74.46	BS2	ATOM	14229	CB	LEU	61	154.120	160.800	-8.781	1.00	101.60	BS2
ATOM	14177	CZ	PHE	55	153.773	164.537	-21.240	1.00	74.46	BS2	ATOM	14230	CG	LEU	61	154.114	159.308	-9.092	1.00	101.60	BS2
ATOM	14178	C	PHE	55	149.756	162.578	-16.642	1.00	62.27	BS2	ATOM	14231	CD1	LEU	61	155.464	158.970	-9.710	1.00	101.60	BS2
ATOM	14179	O	PHE	55	150.190	163.075	-15.600	1.00	62.27	BS2	ATOM	14232	CD2	LEU	61	153.878	158.481	-7.826	1.00	101.60	BS2
ATOM	14180	N	ARG	56	148.530	162.089	-16.775	1.00	61.66	BS2	ATOM	14233	C	LEU	61	153.401	162.977	-7.966	1.00	61.15	BS2
ATOM	14181	CA	ARG	56	147.579	162.064	-15.682	1.00	61.66	BS2	ATOM	14234	O	LEU	61	153.849	163.395	-6.904	1.00	61.15	BS2
ATOM	14182	CB	ARG	56	146.345	161.281	-16.120	1.00	115.60	BS2	ATOM	14235	N	ALA	62	153.283	163.715	-9.062	1.00	56.97	BS2
ATOM	14183	CG	ARG	56	145.224	161.222	-15.111	1.00	115.60	BS2	ATOM	14236	CA	ALA	62	153.684	165.115	-9.112	1.00	56.97	BS2
ATOM	14184	CD	ARG	56	144.257	160.116	-15.491	1.00	115.60	BS2	ATOM	14237	CB	ALA	62	153.037	165.788	-10.313	1.00	77.81	BS2
ATOM	14185	NE	ARG	56	143.805	160.234	-16.875	1.00	115.60	BS2	ATOM	14238	C	ALA	62	153.380	165.899	-7.826	1.00	56.97	BS2
ATOM	14186	CZ	ARG	56	143.275	159.235	-17.577	1.00	115.60	BS2	ATOM	14239	O	ALA	62	154.289	166.162	-7.026	1.00	56.97	BS2
ATOM	14187	NH1	ARG	56	143.127	158.033	-17.027	1.00	115.60	BS2	ATOM	14240	N	MET	63	152.117	166.270	-7.624	1.00	77.93	BS2
ATOM	14188	NH2	ARG	56	142.891	159.436	-18.832	1.00	115.60	BS2	ATOM	14241	CA	MET	63	151.753	167.015	-6.426	1.00	77.93	BS2
ATOM	14189	C	ARG	56	148.258	161.365	-14.496	1.00	61.66	BS2	ATOM	14242	CB	MET	63	150.284	167.436	-6.474	1.00	99.98	BS2
ATOM	14190	O	ARG	56	148.249	161.875	-13.374	1.00	61.66	BS2	ATOM	14243	CG	MET	63	149.381	166.471	-7.196	1.00	99.98	BS2
ATOM	14191	N	PHE	57	148.851	160.197	-14.751	1.00	47.33	BS2	ATOM	14244	SD	MET	63	147.737	167.184	-7.434	1.00	99.98	BS2
ATOM	14192	CA	PHE	57	149.544	159.433	-13.707	1.00	47.33	BS2	ATOM	14245	CE	MET	63	146.699	165.873	-6.689	1.00	99.98	BS2
ATOM	14193	CB	PHE	57	150.108	158.106	-14.275	1.00	40.10	BS2	ATOM	14246	C	MET	63	152.029	166.204	-5.172	1.00	77.93	BS2
ATOM	14194	CG	PHE	57	151.109	157.427	-13.361	1.00	40.10	BS2	ATOM	14247	O	MET	63	152.581	166.723	-4.200	1.00	77.93	BS2
ATOM	14195	CD1	PHE	57	150.691	156.721	-12.244	1.00	40.10	BS2	ATOM	14248	N	ARG	64	151.662	164.928	-5.198	1.00	41.70	BS2
ATOM	14196	CD2	PHE	57	152.472	157.589	-13.560	1.00	40.10	BS2	ATOM	14249	CA	ARG	64	151.888	164.047	-4.061	1.00	41.70	BS2
ATOM	14197	CE1	PHE	57	151.615	156.194	-11.329	1.00	40.10	BS2	ATOM	14250	CB	ARG	64	151.608	162.610	-4.479	1.00	81.64	BS2
ATOM	14198	CE2	PHE	57	153.398	157.067	-12.648	1.00	40.10	BS2	ATOM	14251	CG	ARG	64	150.413	162.004	-3.796	1.00	81.64	BS2
ATOM	14199	CZ	PHE	57	152.964	156.372	-11.531	1.00	40.10	BS2	ATOM	14252	CD	ARG	64	149.723	161.005	-4.704	1.00	81.64	BS2
ATOM	14200	C	PHE	57	150.688	160.259	-13.130	1.00	47.33	BS2	ATOM	14253	NE	ARG	64	149.030	161.680	-5.799	1.00	81.64	BS2
ATOM	14201	O	PHE	57	151.110	160.047	-11.996	1.00	47.33	BS2	ATOM	14254	CZ	ARG	64	148.112	161.104	-6.572	1.00	81.64	BS2
ATOM	14202	N	ILE	58	151.191	161.198	-13.921	1.00	52.06	BS2	ATOM	14255	NH1	ARG	64	147.780	159.832	-6.370	1.00	81.64	BS2
ATOM	14203	CA	ILE	58	152.301	162.021	-13.475	1.00	52.06	BS2	ATOM	14256	NH2	ARG	64	147.508	161.807	-7.526	1.00	81.64	BS2
ATOM	14204	CB	ILE	58	153.066	162.599	-14.694	1.00	60.61	BS2	ATOM	14257	C	ARG	64	153.324	164.181	-3.538	1.00	41.70	BS2
ATOM	14205	CG2	ILE	58	154.329	163.332	-14.231	1.00	60.61	BS2	ATOM	14258	O	ARG	64	153.621	163.841	-2.383	1.00	41.70	BS2
ATOM	14206	CG1	ILE	58	153.469	161.446	-15.625	1.00	60.61	BS2	ATOM	14259	N	GLY	65	154.210	164.690	-4.396	1.00	64.42	BS2
ATOM	14207	CD1	ILE	58	154.396	161.842	-16.749	1.00	60.61	BS2	ATOM	14260	CA	GLY	65	155.603	164.863	-4.026	1.00	64.42	BS2
ATOM	14208	C	ILE	58	151.895	163.129	-12.482	1.00	52.06	BS2	ATOM	14261	C	GLY	65	156.397	163.601	-4.293	1.00	64.42	BS2
ATOM	14209	O	ILE	58	152.574	163.311	-11.463	1.00	52.06	BS2	ATOM	14262	O	GLY	65	157.367	163.295	-3.601	1.00	64.42	BS2
ATOM	14210	N	GLU	59	150.810	163.863	-12.759	1.00	57.44	BS2	ATOM	14263	N	GLY	66	155.981	162.861	-5.310	1.00	80.15	BS2
ATOM	14211	CA	GLU	59	150.342	164.901	-11.831	1.00	57.44	BS2	ATOM	14264	CA	GLY	66	156.667	161.633	-5.636	1.00	80.15	BS2
ATOM	14212	CB	GLU	59	148.979	165.442	-12.239	1.00	94.20	BS2	ATOM	14265	C	GLY	66	157.872	161.865	-6.514	1.00	80.15	BS2
ATOM	14213	CG	GLU	59	148.939	166.038	-13.612	1.00	94.20	BS2	ATOM	14266	O	GLY	66	157.870	162.746	-7.369	1.00	80.15	BS2
ATOM	14214	CD	GLU	59	147.862	167.090	-13.741	1.00	94.20	BS2	ATOM	14267	N	THR	67	158.908	161.069	-6.284	1.00	62.14	BS2
ATOM	14215	OE1	GLU	59	147.973	168.135	-13.054	1.00	94.20	BS2	ATOM	14268	CA	THR	67	160.140	161.134	-7.056	1.00	62.14	BS2
ATOM	14216	OE2	GLU	59	146.907	166.872	-14.524	1.00	94.20	BS2	ATOM	14269	CB	THR	67	161.304	160.530	-6.266	1.00	50.24	BS2
ATOM	14217	C	GLU	59	150.190	164.169	-10.517	1.00	57.44	BS2	ATOM	14270	OG1	THR	67	161.514	161.281	-5.066	1.00	50.24	BS2
ATOM	14218	O	GLU	59	150.534	164.680	-9.447	1.00	57.44	BS2	ATOM	14271	CG2	THR	67	162.563	160.538	-7.095	1.00	50.24	BS2
ATOM	14219	N	ASP	60	149.644	162.963	-10.635	1.00	54.62	BS2	ATOM	14272	C	THR	67	159.985	160.316	-8.343	1.00	62.14	BS2
ATOM	14220	CA	ASP	60	149.454	162.053	-9.520	1.00	54.62	BS2	ATOM	14273	O	THR	67	159.278	159.310	-8.371	1.00	62.14	BS2
ATOM	14221	CB	ASP	60	149.351	160.619	-10.081	1.00	137.76	BS2	ATOM	14274	N	ILE	68	160.639	160.757	-9.410	1.00	53.24	BS2
ATOM	14222	CG	ASP	60	149.378	159.529	-9.004	1.00	137.76	BS2	ATOM	14275	CA	ILE	68	160.606	160.043	-10.682	1.00	53.24	BS2

ATOM	14276	CB	ILE	68	159.762	160.767	-11.730	1.00	34.50	BS2	ATOM	14329	CA	LYS	75	173.401	158.588	-26.550	1.00	90.10	BS2
ATOM	14277	CG2	ILE	68	160.002	160.159	-13.100	1.00	34.50	BS2	ATOM	14330	CB	LYS	75	174.631	158.295	-27.419	1.00	129.79	BS2
ATOM	14278	CG1	ILE	68	158.285	160.661	-11.371	1.00	34.50	BS2	ATOM	14331	CG	LYS	75	175.907	158.972	-26.929	1.00	129.79	BS2
ATOM	14279	CD1	ILE	68	157.361	161.261	-12.443	1.00	34.50	BS2	ATOM	14332	CD	LYS	75	175.743	160.487	-26.851	1.00	129.79	BS2
ATOM	14280	C	ILE	68	162.032	159.944	-11.198	1.00	53.24	BS2	ATOM	14333	CE	LYS	75	176.909	161.155	-26.120	1.00	129.79	BS2
ATOM	14281	O	ILE	68	162.643	160.948	-11.562	1.00	53.24	BS2	ATOM	14334	NZ	LYS	75	178.236	160.907	-26.761	1.00	129.79	BS2
ATOM	14282	N	LEU	69	162.573	158.733	-11.209	1.00	65.82	BS2	ATOM	14335	C	LYS	75	172.556	159.679	-27.208	1.00	90.10	BS2
ATOM	14283	CA	LEU	69	163.926	158.545	-11.690	1.00	65.82	BS2	ATOM	14336	O	LYS	75	172.753	160.867	-26.958	1.00	90.10	BS2
ATOM	14284	CB	LEU	69	164.536	157.276	-11.091	1.00	56.13	BS2	ATOM	14337	N	GLN	76	171.617	159.265	-28.048	1.00	81.53	BS2
ATOM	14285	CG	LEU	69	166.066	157.209	-11.132	1.00	56.13	BS2	ATOM	14338	CA	GLN	76	170.735	160.191	-28.742	1.00	81.53	BS2
ATOM	14286	CD1	LEU	69	166.589	156.008	-10.339	1.00	56.13	BS2	ATOM	14339	CB	GLN	76	169.744	159.397	-29.593	1.00	119.59	BS2
ATOM	14287	CD2	LEU	69	166.503	157.136	-12.579	1.00	56.13	BS2	ATOM	14340	CG	GLN	76	170.046	159.408	-31.067	1.00	119.59	BS2
ATOM	14288	C	LEU	69	163.872	158.447	-13.206	1.00	65.82	BS2	ATOM	14341	CD	GLN	76	169.848	160.781	-31.682	1.00	119.59	BS2
ATOM	14289	O	LEU	69	163.215	157.560	-13.757	1.00	65.82	BS2	ATOM	14342	OE1	GLN	76	170.663	161.689	-31.492	1.00	119.59	BS2
ATOM	14290	N	PHE	70	164.537	159.393	-13.868	1.00	66.10	BS2	ATOM	14343	NE2	GLN	76	168.749	160.947	-32.414	1.00	119.59	BS2
ATOM	14291	CA	PHE	70	164.601	159.430	-15.325	1.00	66.10	BS2	ATOM	14344	C	GLN	76	169.962	161.121	-27.800	1.00	81.53	BS2
ATOM	14292	CB	PHE	70	164.761	160.858	-15.836	1.00	57.66	BS2	ATOM	14345	O	GLN	76	169.491	162.181	-28.213	1.00	81.53	BS2
ATOM	14293	CG	PHE	70	163.506	161.673	-15.789	1.00	57.66	BS2	ATOM	14346	N	ALA	77	169.833	160.725	-26.537	1.00	77.21	BS2
ATOM	14294	CD1	PHE	70	162.991	162.119	-14.576	1.00	57.66	BS2	ATOM	14347	CA	ALA	77	169.090	161.518	-25.563	1.00	77.21	BS2
ATOM	14295	CD2	PHE	70	162.853	162.028	-16.974	1.00	57.66	BS2	ATOM	14348	CB	ALA	77	167.767	160.853	-25.278	1.00	57.67	BS2
ATOM	14296	CE1	PHE	70	161.840	162.912	-14.542	1.00	57.66	BS2	ATOM	14349	C	ALA	77	169.836	161.735	-24.258	1.00	77.21	BS2
ATOM	14297	CE2	PHE	70	161.708	162.815	-16.953	1.00	57.66	BS2	ATOM	14350	O	ALA	77	169.294	162.311	-23.317	1.00	77.21	BS2
ATOM	14298	CZ	PHE	70	161.200	163.259	-15.732	1.00	57.66	BS2	ATOM	14351	N	GLN	78	171.075	161.266	-24.202	1.00	57.02	BS2
ATOM	14299	C	PHE	70	165.808	158.627	-15.788	1.00	66.10	BS2	ATOM	14352	CA	GLN	78	171.892	161.408	-23.008	1.00	57.02	BS2
ATOM	14300	O	PHE	70	166.938	158.849	-15.321	1.00	66.10	BS2	ATOM	14353	CB	GLN	78	173.341	161.097	-23.353	1.00	93.78	BS2
ATOM	14301	N	VAL	71	165.566	157.701	-16.713	1.00	68.49	BS2	ATOM	14354	CG	GLN	78	174.013	160.203	-22.349	1.00	93.78	BS2
ATOM	14302	CA	VAL	71	166.629	156.869	-17.245	1.00	68.49	BS2	ATOM	14355	CD	GLN	78	175.412	159.810	-22.779	1.00	93.78	BS2
ATOM	14303	CB	VAL	71	166.420	155.391	-16.868	1.00	56.97	BS2	ATOM	14356	OE1	GLN	78	176.292	160.666	-22.925	1.00	93.78	BS2
ATOM	14304	CG1	VAL	71	167.643	154.591	-17.239	1.00	56.97	BS2	ATOM	14357	NE2	GLN	78	175.628	158.507	-22.988	1.00	93.78	BS2
ATOM	14305	CG2	VAL	71	166.167	155.262	-15.379	1.00	56.97	BS2	ATOM	14358	C	GLN	78	171.782	162.818	-22.416	1.00	57.02	BS2
ATOM	14306	C	VAL	71	166.720	156.999	-18.763	1.00	68.49	BS2	ATOM	14359	O	GLN	78	171.320	163.000	-21.292	1.00	57.02	BS2
ATOM	14307	O	VAL	71	165.763	156.707	-19.493	1.00	68.49	BS2	ATOM	14360	N	ASP	79	172.189	163.817	-23.191	1.00	96.66	BS2
ATOM	14308	N	GLY	72	167.887	157.466	-19.208	1.00	61.00	BS2	ATOM	14361	CA	ASP	79	172.154	165.211	-22.757	1.00	96.66	BS2
ATOM	14309	CA	GLY	72	168.185	157.646	-20.622	1.00	61.00	BS2	ATOM	14362	CB	ASP	79	172.529	166.109	-23.930	1.00	82.09	BS2
ATOM	14310	C	GLY	72	169.694	157.533	-20.836	1.00	61.00	BS2	ATOM	14363	CG	ASP	79	173.875	165.749	-24.519	1.00	82.09	BS2
ATOM	14311	O	GLY	72	170.442	158.479	-20.570	1.00	61.00	BS2	ATOM	14364	OD1	ASP	79	174.911	166.029	-23.868	1.00	82.09	BS2
ATOM	14312	N	THR	73	170.158	156.370	-21.283	1.00	59.35	BS2	ATOM	14365	OD2	ASP	79	173.891	165.167	-25.627	1.00	82.09	BS2
ATOM	14313	CA	THR	73	171.582	156.167	-21.532	1.00	59.35	BS2	ATOM	14366	C	ASP	79	170.801	165.639	-22.203	1.00	96.66	BS2
ATOM	14314	CB	THR	73	172.022	154.775	-21.085	1.00	74.34	BS2	ATOM	14367	O	ASP	79	170.707	166.148	-21.080	1.00	96.66	BS2
ATOM	14315	OG1	THR	73	172.146	154.765	-19.658	1.00	74.34	BS2	ATOM	14368	N	ILE	80	169.755	165.435	-22.996	1.00	65.02	BS2
ATOM	14316	CG2	THR	73	173.349	154.391	-21.731	1.00	74.34	BS2	ATOM	14369	CA	ILE	80	168.418	165.815	-22.575	1.00	65.02	BS2
ATOM	14317	C	THR	73	171.835	156.348	-23.021	1.00	59.35	BS2	ATOM	14370	CB	ILE	80	167.384	165.385	-23.613	1.00	62.18	BS2
ATOM	14318	O	THR	73	172.854	156.904	-23.427	1.00	59.35	BS2	ATOM	14371	CG2	ILE	80	165.984	165.705	-23.127	1.00	62.18	BS2
ATOM	14319	N	LYS	74	170.891	155.855	-23.815	1.00	61.23	BS2	ATOM	14372	CG1	ILE	80	167.649	166.123	-24.919	1.00	62.18	BS2
ATOM	14320	CA	LYS	74	170.883	155.986	-25.269	1.00	61.23	BS2	ATOM	14373	CD1	ILE	80	166.697	165.743	-26.037	1.00	62.18	BS2
ATOM	14321	CB	LYS	74	169.406	155.995	-25.688	1.00	65.99	BS2	ATOM	14374	C	ILE	80	168.020	165.260	-21.204	1.00	65.02	BS2
ATOM	14322	CG	LYS	74	169.024	155.922	-27.151	1.00	65.99	BS2	ATOM	14375	O	ILE	80	167.614	166.011	-20.321	1.00	65.02	BS2
ATOM	14323	CD	LYS	74	167.531	155.564	-27.191	1.00	65.99	BS2	ATOM	14376	N	VAL	81	168.136	163.954	-21.014	1.00	73.06	BS2
ATOM	14324	CE	LYS	74	166.972	155.389	-28.590	1.00	65.99	BS2	ATOM	14377	CA	VAL	81	167.766	163.377	-19.732	1.00	73.06	BS2
ATOM	14325	NZ	LYS	74	166.864	156.686	-29.310	1.00	65.99	BS2	ATOM	14378	CB	VAL	81	168.199	161.900	-19.621	1.00	63.46	BS2
ATOM	14326	C	LYS	74	171.550	157.342	-25.546	1.00	61.23	BS2	ATOM	14379	CG1	VAL	81	167.965	161.389	-18.197	1.00	63.46	BS2
ATOM	14327	O	LYS	74	171.058	158.373	-25.092	1.00	61.23	BS2	ATOM	14380	CG2	VAL	81	167.407	161.056	-20.618	1.00	63.46	BS2
ATOM	14328	N	LYS	75	172.669	157.345	-26.269	1.00	90.10	BS2	ATOM	14381	C	VAL	81	168.343	164.163	-18.559	1.00	73.06	BS2

ATOM	14382	O	VAL	81	167.747	164.186	-17.491	1.00	73.06	BS2	ATOM	14435	O	ARG	87	162.853	171.688	-13.671	1.00	58.81	BS2
ATOM	14383	N	ARG	82	169.493	164.809	-18.738	1.00	61.23	BS2	ATOM	14436	N	ALA	88	163.836	169.745	-13.092	1.00	63.09	BS2
ATOM	14384	CA	ARG	82	170.058	165.589	-17.634	1.00	61.23	BS2	ATOM	14437	CA	ALA	88	162.822	169.307	-12.133	1.00	63.09	BS2
ATOM	14385	CB	ARG	82	171.527	165.932	-17.876	1.00	91.43	BS2	ATOM	14438	CB	ALA	88	161.940	168.243	-12.741	1.00	40.99	BS2
ATOM	14386	CG	ARG	82	171.943	167.183	-17.118	1.00	91.43	BS2	ATOM	14439	C	ALA	88	163.651	168.731	-10.981	1.00	63.09	BS2
ATOM	14387	CD	ARG	82	173.433	167.399	-17.080	1.00	91.43	BS2	ATOM	14440	O	ALA	88	164.805	168.347	-11.173	1.00	63.09	BS2
ATOM	14388	NE	ARG	82	174.108	166.264	-16.467	1.00	91.43	BS2	ATOM	14441	N	GLY	89	163.096	168.661	-9.784	1.00	69.30	BS2
ATOM	14389	CZ	ARG	82	175.170	166.362	-15.674	1.00	91.43	BS2	ATOM	14442	CA	GLY	89	163.898	168.158	-8.681	1.00	69.30	BS2
ATOM	14390	NH1	ARG	82	175.676	167.554	-15.385	1.00	91.43	BS2	ATOM	14443	C	GLY	89	164.282	166.697	-8.795	1.00	69.30	BS2
ATOM	14391	NH2	ARG	82	175.737	165.265	-15.185	1.00	91.43	BS2	ATOM	14444	O	GLY	89	164.843	166.110	-7.859	1.00	69.30	BS2
ATOM	14392	C	ARG	82	169.266	166.888	-17.471	1.00	61.23	BS2	ATOM	14445	N	MET	90	164.013	166.119	-9.960	1.00	59.35	BS2
ATOM	14393	O	ARG	82	168.686	167.148	-16.411	1.00	61.23	BS2	ATOM	14446	CA	MET	90	164.261	164.704	-10.200	1.00	59.35	BS2
ATOM	14394	N	MET	83	169.260	167.699	-18.529	1.00	86.86	BS2	ATOM	14447	CB	MET	90	163.340	164.240	-11.324	1.00	70.81	BS2
ATOM	14395	CA	MET	83	168.530	168.964	-18.539	1.00	86.86	BS2	ATOM	14448	CG	MET	90	161.909	164.712	-11.122	1.00	70.81	BS2
ATOM	14396	CB	MET	83	168.290	169.421	-19.978	1.00	107.09	BS2	ATOM	14449	SD	MET	90	161.225	164.223	-9.505	1.00	70.81	BS2
ATOM	14397	CG	MET	83	169.545	169.703	-20.776	1.00	107.09	BS2	ATOM	14450	CE	MET	90	159.569	163.701	-10.028	1.00	70.81	BS2
ATOM	14398	SD	MET	83	170.332	171.253	-20.298	1.00	107.09	BS2	ATOM	14451	C	MET	90	165.684	164.225	-10.481	1.00	59.35	BS2
ATOM	14399	CE	MET	83	169.235	172.443	-21.101	1.00	107.09	BS2	ATOM	14452	O	MET	90	166.527	164.967	-11.000	1.00	59.35	BS2
ATOM	14400	C	MET	83	167.177	168.779	-17.857	1.00	86.86	BS2	ATOM	14453	N	PRO	91	165.965	162.960	-10.115	1.00	77.26	BS2
ATOM	14401	O	MET	83	167.017	169.063	-16.669	1.00	86.86	BS2	ATOM	14454	CD	PRO	91	165.114	162.199	-9.188	1.00	73.14	BS2
ATOM	14402	N	GLU	84	166.213	168.287	-18.629	1.00	56.77	BS2	ATOM	14455	CA	PRO	91	167.248	162.270	-10.286	1.00	77.26	BS2
ATOM	14403	CA	GLU	84	164.864	168.051	-18.153	1.00	56.77	BS2	ATOM	14456	CB	PRO	91	167.235	161.210	-9.178	1.00	73.14	BS2
ATOM	14404	CB	GLU	84	164.115	167.213	-19.174	1.00	78.73	BS2	ATOM	14457	CG	PRO	91	166.138	161.638	-8.251	1.00	73.14	BS2
ATOM	14405	CG	GLU	84	164.102	167.840	-20.534	1.00	78.73	BS2	ATOM	14458	C	PRO	91	167.262	161.614	-11.662	1.00	77.26	BS2
ATOM	14406	CD	GLU	84	163.729	169.302	-20.467	1.00	78.73	BS2	ATOM	14459	O	PRO	91	166.205	161.450	-12.288	1.00	77.26	BS2
ATOM	14407	OE1	GLU	84	162.639	169.614	-19.930	1.00	78.73	BS2	ATOM	14460	N	TYR	92	168.447	161.230	-12.130	1.00	44.97	BS2
ATOM	14408	OE2	GLU	84	164.528	170.137	-20.946	1.00	78.73	BS2	ATOM	14461	CA	TYR	92	168.548	160.576	-13.431	1.00	44.97	BS2
ATOM	14409	C	GLU	84	164.775	167.384	-16.786	1.00	56.77	BS2	ATOM	14462	CB	TYR	92	168.583	161.631	-14.555	1.00	85.83	BS2
ATOM	14410	O	GLU	84	163.768	167.529	-16.089	1.00	56.77	BS2	ATOM	14463	CG	TYR	92	169.740	162.601	-14.434	1.00	85.83	BS2
ATOM	14411	N	ALA	85	165.810	166.651	-16.391	1.00	64.83	BS2	ATOM	14464	CD1	TYR	92	171.058	162.164	-14.575	1.00	85.83	BS2
ATOM	14412	CA	ALA	85	165.767	165.996	-15.089	1.00	64.83	BS2	ATOM	14465	CE1	TYR	92	172.138	163.014	-14.347	1.00	85.83	BS2
ATOM	14413	CB	ALA	85	166.645	164.758	-15.091	1.00	88.81	BS2	ATOM	14466	CD2	TYR	92	169.528	163.930	-14.076	1.00	85.83	BS2
ATOM	14414	C	ALA	85	166.169	166.924	-13.939	1.00	64.83	BS2	ATOM	14467	CE2	TYR	92	170.604	164.794	-13.844	1.00	85.83	BS2
ATOM	14415	O	ALA	85	165.659	166.790	-12.824	1.00	64.83	BS2	ATOM	14468	CZ	TYR	92	171.909	164.324	-13.972	1.00	85.83	BS2
ATOM	14416	N	GLU	86	167.090	167.848	-14.202	1.00	79.50	BS2	ATOM	14469	OH	TYR	92	172.981	165.133	-13.652	1.00	85.83	BS2
ATOM	14417	CA	GLU	86	167.537	168.794	-13.182	1.00	79.50	BS2	ATOM	14470	C	TYR	92	169.780	159.691	-13.545	1.00	44.97	BS2
ATOM	14418	CB	GLU	86	168.958	169.262	-13.475	1.00	84.83	BS2	ATOM	14471	O	TYR	92	170.739	159.827	-12.777	1.00	44.97	BS2
ATOM	14419	CG	GLU	86	169.904	168.140	-13.825	1.00	84.83	BS2	ATOM	14472	N	VAL	93	169.724	158.752	-14.485	1.00	53.90	BS2
ATOM	14420	CD	GLU	86	171.220	168.643	-14.385	1.00	84.83	BS2	ATOM	14473	CA	VAL	93	170.871	157.902	-14.791	1.00	53.90	BS2
ATOM	14421	OE1	GLU	86	171.185	169.520	-15.280	1.00	84.83	BS2	ATOM	14474	CB	VAL	93	170.613	156.400	-14.564	1.00	50.59	BS2
ATOM	14422	OE2	GLU	86	172.284	168.157	-13.938	1.00	84.83	BS2	ATOM	14475	CG1	VAL	93	171.755	155.593	-15.185	1.00	50.59	BS2
ATOM	14423	C	GLU	86	166.589	169.978	-13.262	1.00	79.50	BS2	ATOM	14476	CG2	VAL	93	170.560	156.102	-13.065	1.00	50.59	BS2
ATOM	14424	O	GLU	86	166.436	170.745	-12.315	1.00	79.50	BS2	ATOM	14477	C	VAL	93	171.063	158.203	-16.273	1.00	53.90	BS2
ATOM	14425	N	ARG	87	165.951	170.106	-14.417	1.00	58.81	BS2	ATOM	14478	O	VAL	93	170.215	157.867	-17.109	1.00	53.90	BS2
ATOM	14426	CA	ARG	87	164.998	171.173	-14.666	1.00	58.81	BS2	ATOM	14479	N	ASN	94	172.180	158.863	-16.571	1.00	48.79	BS2
ATOM	14427	CB	ARG	87	164.631	171.162	-16.158	1.00	63.11	BS2	ATOM	14480	CA	ASN	94	172.486	159.320	-17.921	1.00	48.79	BS2
ATOM	14428	CG	ARG	87	164.013	172.434	-16.714	1.00	63.11	BS2	ATOM	14481	CB	ASN	94	172.717	160.829	-17.862	1.00	70.20	BS2
ATOM	14429	CD	ARG	87	162.507	172.319	-16.762	1.00	63.11	BS2	ATOM	14482	CG	ASN	94	172.428	161.496	-19.167	1.00	70.20	BS2
ATOM	14430	NE	ARG	87	161.965	172.815	-18.020	1.00	63.11	BS2	ATOM	14483	OD1	ASN	94	171.691	160.950	-19.992	1.00	70.20	BS2
ATOM	14431	CZ	ARG	87	160.709	172.624	-18.412	1.00	63.11	BS2	ATOM	14484	ND2	ASN	94	172.987	162.687	-19.370	1.00	70.20	BS2
ATOM	14432	NH1	ARG	87	159.869	171.946	-17.640	1.00	63.11	BS2	ATOM	14485	C	ASN	94	173.657	158.642	-18.646	1.00	48.79	BS2
ATOM	14433	NH2	ARG	87	160.289	173.103	-19.576	1.00	63.11	BS2	ATOM	14486	O	ASN	94	173.618	158.449	-19.862	1.00	48.79	BS2
ATOM	14434	C	ARG	87	163.789	170.895	-13.759	1.00	58.81	BS2	ATOM	14487	N	GLN	95	174.707	158.306	-17.908	1.00	69.53	BS2

ATOM	14488	CA	GLN	95	175.832	157.645	-18.526	1.00 69.53	BS2	ATOM	14541	SD	MET	101	172.201	153.265	-11.661	1.00 41.83	BS2
ATOM	14489	CB	GLN	95	177.098	157.797	-17.688	1.00121.64	BS2	ATOM	14542	CE	MET	101	173.492	154.277	-10.943	1.00 41.83	BS2
ATOM	14490	CG	GLN	95	178.085	158.791	-18.283	1.00121.64	BS2	ATOM	14543	C	MET	101	169.392	150.686	-8.006	1.00 51.08	BS2
ATOM	14491	CD	GLN	95	178.170	158.690	-19.800	1.00121.64	BS2	ATOM	14544	O	MET	101	169.237	151.454	-7.067	1.00 51.08	BS2
ATOM	14492	OE1	GLN	95	177.231	159.053	-20.510	1.00121.64	BS2	ATOM	14545	N	LEU	102	168.434	149.867	-8.423	1.00 39.17	BS2
ATOM	14493	NE2	GLN	95	179.292	158.188	-20.302	1.00121.64	BS2	ATOM	14546	CA	LEU	102	167.147	149.810	-7.746	1.00 39.17	BS2
ATOM	14494	C	GLN	95	175.512	156.178	-18.717	1.00 69.53	BS2	ATOM	14547	CB	LEU	102	166.017	149.749	-8.764	1.00 32.97	BS2
ATOM	14495	O	GLN	95	175.200	155.761	-19.831	1.00 69.53	BS2	ATOM	14548	CG	LEU	102	165.488	151.077	-9.294	1.00 32.97	BS2
ATOM	14496	N	ARG	96	175.582	155.394	-17.642	1.00 72.42	BS2	ATOM	14549	CD1	LEU	102	166.658	151.961	-9.649	1.00 32.97	BS2
ATOM	14497	CA	ARG	96	175.288	153.968	-17.741	1.00 72.42	BS2	ATOM	14550	CD2	LEU	102	164.580	150.848	-10.505	1.00 32.97	BS2
ATOM	14498	CB	ARG	96	176.548	153.179	-18.112	1.00174.40	BS2	ATOM	14551	C	LEU	102	167.112	148.555	-6.881	1.00 39.17	BS2
ATOM	14499	CG	ARG	96	176.490	152.546	-19.508	1.00174.40	BS2	ATOM	14552	O	LEU	102	166.866	148.594	-5.680	1.00 39.17	BS2
ATOM	14500	CD	ARG	96	176.551	153.595	-20.621	1.00174.40	BS2	ATOM	14553	N	THR	103	167.381	147.430	-7.510	1.00 43.12	BS2
ATOM	14501	NE	ARG	96	176.189	153.059	-21.934	1.00174.40	BS2	ATOM	14554	CA	THR	103	167.350	146.169	-6.821	1.00 43.12	BS2
ATOM	14502	CZ	ARG	96	176.123	153.785	-23.048	1.00174.40	BS2	ATOM	14555	CB	THR	103	167.468	145.033	-7.831	1.00 47.35	BS2
ATOM	14503	NH1	ARG	96	176.400	155.082	-23.010	1.00174.40	BS2	ATOM	14556	OG1	THR	103	166.308	145.042	-8.675	1.00 47.35	BS2
ATOM	14504	NH2	ARG	96	175.763	153.222	-24.198	1.00174.40	BS2	ATOM	14557	CG2	THR	103	167.536	143.722	-7.142	1.00 47.35	BS2
ATOM	14505	C	ARG	96	174.678	153.384	-16.482	1.00 72.42	BS2	ATOM	14558	C	THR	103	168.408	146.048	-5.740	1.00 43.12	BS2
ATOM	14506	O	ARG	96	175.271	153.414	-15.413	1.00 72.42	BS2	ATOM	14559	O	THR	103	168.195	145.355	-4.748	1.00 43.12	BS2
ATOM	14507	N	TRP	97	173.491	152.821	-16.634	1.00 38.59	BS2	ATOM	14560	N	ASN	104	169.547	146.712	-5.913	1.00 51.99	BS2
ATOM	14508	CA	TRP	97	172.766	152.237	-15.522	1.00 38.59	BS2	ATOM	14561	CA	ASN	104	170.587	146.642	-4.887	1.00 51.99	BS2
ATOM	14509	CB	TRP	97	171.391	151.793	-16.009	1.00 70.01	BS2	ATOM	14562	CB	ASN	104	171.863	145.987	-5.428	1.00 53.85	BS2
ATOM	14510	CG	TRP	97	170.331	151.862	-14.968	1.00 70.01	BS2	ATOM	14563	CG	ASN	104	172.843	145.609	-4.318	1.00 53.85	BS2
ATOM	14511	CD2	TRP	97	169.719	150.764	-14.324	1.00 70.01	BS2	ATOM	14564	OD1	ASN	104	172.543	145.751	-3.129	1.00 53.85	BS2
ATOM	14512	CE2	TRP	97	168.740	151.286	-13.442	1.00 70.01	BS2	ATOM	14565	ND2	ASN	104	174.016	145.119	-4.706	1.00 53.85	BS2
ATOM	14513	CE3	TRP	97	169.895	149.383	-14.406	1.00 70.01	BS2	ATOM	14566	C	ASN	104	170.885	148.047	-4.400	1.00 51.99	BS2
ATOM	14514	CD1	TRP	97	169.727	152.989	-14.464	1.00 70.01	BS2	ATOM	14567	O	ASN	104	172.039	148.414	-4.168	1.00 51.99	BS2
ATOM	14515	NE1	TRP	97	168.766	152.649	-13.547	1.00 70.01	BS2	ATOM	14568	N	PHE	105	169.809	148.811	-4.226	1.00 59.74	BS2
ATOM	14516	CZ2	TRP	97	167.945	150.475	-12.657	1.00 70.01	BS2	ATOM	14569	CA	PHE	105	169.855	150.204	-3.787	1.00 59.74	BS2
ATOM	14517	CZ3	TRP	97	169.107	148.576	-13.630	1.00 70.01	BS2	ATOM	14570	CB	PHE	105	168.437	150.745	-3.647	1.00 59.03	BS2
ATOM	14518	CH2	TRP	97	168.139	149.123	-12.764	1.00 70.01	BS2	ATOM	14571	CG	PHE	105	168.386	152.221	-3.394	1.00 59.03	BS2
ATOM	14519	C	TRP	97	173.441	151.056	-14.830	1.00 38.59	BS2	ATOM	14572	CD1	PHE	105	168.701	153.122	-4.406	1.00 59.03	BS2
ATOM	14520	O	TRP	97	173.338	149.936	-15.304	1.00 38.59	BS2	ATOM	14573	CD2	PHE	105	168.021	152.716	-2.149	1.00 59.03	BS2
ATOM	14521	N	LEU	98	174.106	151.293	-13.702	1.00 38.12	BS2	ATOM	14574	CE1	PHE	105	168.649	154.496	-4.188	1.00 59.03	BS2
ATOM	14522	CA	LEU	98	174.752	150.207	-12.954	1.00 38.12	BS2	ATOM	14575	CE2	PHE	105	167.968	154.089	-1.924	1.00 59.03	BS2
ATOM	14523	CB	LEU	98	175.496	150.758	-11.739	1.00 35.89	BS2	ATOM	14576	CZ	PHE	105	168.283	154.980	-2.953	1.00 59.03	BS2
ATOM	14524	CG	LEU	98	176.233	152.090	-11.936	1.00 35.89	BS2	ATOM	14577	C	PHE	105	170.629	150.594	-2.521	1.00 59.74	BS2
ATOM	14525	CD1	LEU	98	177.260	152.256	-10.825	1.00 35.89	BS2	ATOM	14578	O	PHE	105	171.347	151.589	-2.527	1.00 59.74	BS2
ATOM	14526	CD2	LEU	98	176.913	152.134	-13.287	1.00 35.89	BS2	ATOM	14579	N	LYS	106	170.487	149.851	-1.432	1.00 63.67	BS2
ATOM	14527	C	LEU	98	173.728	149.157	-12.491	1.00 38.12	BS2	ATOM	14580	CA	LYS	106	171.200	150.259	-0.232	1.00 63.67	BS2
ATOM	14528	O	LEU	98	172.666	149.485	-11.964	1.00 38.12	BS2	ATOM	14581	CB	LYS	106	170.742	149.473	1.006	1.00 85.81	BS2
ATOM	14529	N	GLY	99	174.057	147.888	-12.692	1.00 45.73	BS2	ATOM	14582	CG	LYS	106	171.019	150.229	2.314	1.00 85.81	BS2
ATOM	14530	CA	GLY	99	173.142	146.824	-12.326	1.00 45.73	BS2	ATOM	14583	CD	LYS	106	171.266	149.304	3.505	1.00 85.81	BS2
ATOM	14531	C	GLY	99	172.885	146.752	-10.846	1.00 45.73	BS2	ATOM	14584	CE	LYS	106	169.995	148.595	3.991	1.00 85.81	BS2
ATOM	14532	O	GLY	99	173.815	146.535	-10.064	1.00 45.73	BS2	ATOM	14585	NZ	LYS	106	170.247	147.656	5.146	1.00 85.81	BS2
ATOM	14533	N	GLY	100	171.623	146.934	-10.465	1.00 50.80	BS2	ATOM	14586	C	LYS	106	172.709	150.128	-0.390	1.00 63.67	BS2
ATOM	14534	CA	GLY	100	171.239	146.884	-9.062	1.00 50.80	BS2	ATOM	14587	O	LYS	106	173.472	150.650	0.430	1.00 63.67	BS2
ATOM	14535	C	GLY	100	170.968	148.244	-8.434	1.00 50.80	BS2	ATOM	14588	N	THR	107	173.151	149.431	-1.431	1.00 62.29	BS2
ATOM	14536	O	GLY	100	170.759	148.345	-7.216	1.00 50.80	BS2	ATOM	14589	CA	THR	107	174.584	149.280	-1.656	1.00 62.29	BS2
ATOM	14537	N	MET	101	170.968	149.295	-9.255	1.00 51.08	BS2	ATOM	14590	CB	THR	107	174.910	147.936	-2.320	1.00 46.06	BS2
ATOM	14538	CA	MET	101	170.718	150.638	-8.747	1.00 51.08	BS2	ATOM	14591	OG1	THR	107	174.801	146.892	-1.349	1.00 46.06	BS2
ATOM	14539	CB	MET	101	170.738	151.665	-9.879	1.00 41.83	BS2	ATOM	14592	CG2	THR	107	176.311	147.942	-2.877	1.00 46.06	BS2
ATOM	14540	CG	MET	101	172.133	151.916	-10.447	1.00 41.83	BS2	ATOM	14593	C	THR	107	175.059	150.414	-2.553	1.00 62.29	BS2

ATOM	14594	O	THR	107	175.970	151.172	-2.199	1.00	62.29	BS2	ATOM	14647	CA	ARG	114	181.350	157.882	-0.825	1.00	88.68	BS2
ATOM	14595	N	ILE	108	174.432	150.528	-3.719	1.00	49.02	BS2	ATOM	14648	CB	ARG	114	181.794	156.742	-1.740	1.00	83.88	BS2
ATOM	14596	CA	ILE	108	174.777	151.577	-4.655	1.00	49.02	BS2	ATOM	14649	CG	ARG	114	182.909	155.888	-1.169	1.00	83.88	BS2
ATOM	14597	CB	ILE	108	173.931	151.459	-5.935	1.00	75.04	BS2	ATOM	14650	CD	ARG	114	184.148	156.706	-0.843	1.00	83.88	BS2
ATOM	14598	CG2	ILE	108	174.142	152.673	-6.854	1.00	75.04	BS2	ATOM	14651	NE	ARG	114	185.301	155.846	-0.594	1.00	83.88	BS2
ATOM	14599	CG1	ILE	108	174.306	150.158	-6.642	1.00	75.04	BS2	ATOM	14652	CZ	ARG	114	186.480	156.284	-0.166	1.00	83.88	BS2
ATOM	14600	CD1	ILE	108	173.661	149.986	-7.984	1.00	75.04	BS2	ATOM	14653	NH1	ARG	114	186.658	157.579	0.068	1.00	83.88	BS2
ATOM	14601	C	ILE	108	174.558	152.926	-3.988	1.00	49.02	BS2	ATOM	14654	NH2	ARG	114	187.481	155.430	0.020	1.00	83.88	BS2
ATOM	14602	O	ILE	108	174.978	153.958	-4.503	1.00	49.02	BS2	ATOM	14655	C	ARG	114	181.553	159.222	-1.535	1.00	88.68	BS2
ATOM	14603	N	SER	109	173.896	152.917	-2.835	1.00	100.04	BS2	ATOM	14656	O	ARG	114	182.413	160.009	-1.146	1.00	88.68	BS2
ATOM	14604	CA	SER	109	173.661	154.151	-2.098	1.00	100.04	BS2	ATOM	14657	N	LEU	115	180.754	159.476	-2.571	1.00	71.96	BS2
ATOM	14605	CB	SER	109	172.604	153.951	-1.013	1.00	103.78	BS2	ATOM	14658	CA	LEU	115	180.862	160.713	-3.332	1.00	71.96	BS2
ATOM	14606	OG	SER	109	173.165	153.299	0.118	1.00	103.78	BS2	ATOM	14659	CB	LEU	115	179.717	160.837	-4.333	1.00	60.34	BS2
ATOM	14607	C	SER	109	174.993	154.477	-1.439	1.00	100.04	BS2	ATOM	14660	CG	LEU	115	179.760	162.139	-5.142	1.00	60.34	BS2
ATOM	14608	O	SER	109	175.444	155.626	-1.453	1.00	100.04	BS2	ATOM	14661	CD1	LEU	115	181.061	162.196	-5.924	1.00	60.34	BS2
ATOM	14609	N	GLN	110	175.613	153.449	-0.862	1.00	64.42	BS2	ATOM	14662	CD2	LEU	115	178.578	162.226	-6.095	1.00	60.34	BS2
ATOM	14610	CA	GLN	110	176.900	153.602	-0.201	1.00	64.42	BS2	ATOM	14663	C	LEU	115	180.856	161.917	-2.407	1.00	71.96	BS2
ATOM	14611	CB	GLN	110	177.481	152.248	0.158	1.00	83.24	BS2	ATOM	14664	O	LEU	115	181.671	162.830	-2.560	1.00	71.96	BS2
ATOM	14612	CG	GLN	110	176.755	151.534	1.254	1.00	83.24	BS2	ATOM	14665	N	GLU	116	179.935	161.916	-1.446	1.00	68.86	BS2
ATOM	14613	CD	GLN	110	177.191	150.094	1.342	1.00	83.24	BS2	ATOM	14666	CA	GLU	116	179.835	163.007	-0.486	1.00	68.86	BS2
ATOM	14614	OE1	GLN	110	177.096	149.354	0.362	1.00	83.24	BS2	ATOM	14667	CB	GLU	116	178.671	162.762	0.477	1.00	77.95	BS2
ATOM	14615	NE2	GLN	110	177.676	149.682	2.511	1.00	83.24	BS2	ATOM	14668	CG	GLU	116	177.357	162.605	-0.263	1.00	77.95	BS2
ATOM	14616	C	GLN	110	177.852	154.301	-1.142	1.00	64.42	BS2	ATOM	14669	CD	GLU	116	176.134	162.529	0.629	1.00	77.95	BS2
ATOM	14617	O	GLN	110	178.668	155.132	-0.730	1.00	64.42	BS2	ATOM	14670	OE1	GLU	116	176.015	161.556	1.412	1.00	77.95	BS2
ATOM	14618	N	ARG	111	177.759	153.953	-2.416	1.00	72.05	BS2	ATOM	14671	OE2	GLU	116	175.284	163.445	0.532	1.00	77.95	BS2
ATOM	14619	CA	ARG	111	178.613	154.580	-3.399	1.00	72.05	BS2	ATOM	14672	C	GLU	116	181.148	163.066	0.267	1.00	68.86	BS2
ATOM	14620	CB	ARG	111	178.428	153.907	-4.757	1.00	67.72	BS2	ATOM	14673	O	GLU	116	181.912	164.015	0.123	1.00	68.86	BS2
ATOM	14621	CG	ARG	111	179.246	152.641	-4.906	1.00	67.72	BS2	ATOM	14674	N	GLU	117	181.421	162.024	1.039	1.00	70.39	BS2
ATOM	14622	CD	ARG	111	180.725	152.979	-4.952	1.00	67.72	BS2	ATOM	14675	CA	GLU	117	182.642	161.947	1.817	1.00	70.39	BS2
ATOM	14623	NE	ARG	111	181.447	152.619	-3.731	1.00	67.72	BS2	ATOM	14676	CB	GLU	117	182.916	160.513	2.229	1.00	97.68	BS2
ATOM	14624	CZ	ARG	111	182.718	152.955	-3.499	1.00	67.72	BS2	ATOM	14677	CG	GLU	117	184.101	160.406	3.140	1.00	97.68	BS2
ATOM	14625	NH1	ARG	111	183.397	153.665	-4.404	1.00	67.72	BS2	ATOM	14678	CD	GLU	117	184.274	159.015	3.681	1.00	97.68	BS2
ATOM	14626	NH2	ARG	111	183.322	152.570	-2.376	1.00	67.72	BS2	ATOM	14679	OE1	GLU	117	184.642	158.120	2.889	1.00	97.68	BS2
ATOM	14627	C	ARG	111	178.344	156.086	-3.478	1.00	72.05	BS2	ATOM	14680	OE2	GLU	117	184.032	158.816	4.894	1.00	97.68	BS2
ATOM	14628	O	ARG	111	179.218	156.849	-3.888	1.00	72.05	BS2	ATOM	14681	C	GLU	117	183.863	162.490	1.095	1.00	70.39	BS2
ATOM	14629	N	VAL	112	177.149	156.525	-3.082	1.00	61.51	BS2	ATOM	14682	O	GLU	117	184.585	163.318	1.643	1.00	70.39	BS2
ATOM	14630	CA	VAL	112	176.861	157.958	-3.107	1.00	61.51	BS2	ATOM	14683	N	LEU	118	184.107	162.026	-0.128	1.00	95.22	BS2
ATOM	14631	CB	VAL	112	175.356	158.276	-3.237	1.00	47.11	BS2	ATOM	14684	CA	LEU	118	185.262	162.506	-0.880	1.00	95.22	BS2
ATOM	14632	CG1	VAL	112	175.172	159.760	-3.566	1.00	47.11	BS2	ATOM	14685	CB	LEU	118	185.433	161.737	-2.194	1.00	70.92	BS2
ATOM	14633	CG2	VAL	112	174.732	157.419	-4.332	1.00	47.11	BS2	ATOM	14686	CG	LEU	118	185.962	160.299	-2.128	1.00	70.92	BS2
ATOM	14634	C	VAL	112	177.389	158.578	-1.818	1.00	61.51	BS2	ATOM	14687	CD1	LEU	118	186.557	159.911	-3.490	1.00	70.92	BS2
ATOM	14635	O	VAL	112	177.845	159.716	-1.822	1.00	61.51	BS2	ATOM	14688	CD2	LEU	118	187.023	160.190	-1.045	1.00	70.92	BS2
ATOM	14636	N	HIS	113	177.337	157.831	-0.717	1.00	61.39	BS2	ATOM	14689	C	LEU	118	185.155	163.991	-1.178	1.00	95.22	BS2
ATOM	14637	CA	HIS	113	177.869	158.343	0.544	1.00	61.39	BS2	ATOM	14690	O	LEU	118	185.960	164.777	-0.680	1.00	95.22	BS2
ATOM	14638	CB	HIS	113	177.694	157.328	1.674	1.00	113.36	BS2	ATOM	14691	N	GLU	119	184.165	164.372	-1.983	1.00	58.14	BS2
ATOM	14639	CG	HIS	113	176.272	157.151	2.098	1.00	113.36	BS2	ATOM	14692	CA	GLU	119	183.959	165.776	-2.344	1.00	58.14	BS2
ATOM	14640	CD2	HIS	113	175.509	156.041	2.227	1.00	113.36	BS2	ATOM	14693	CB	GLU	119	182.503	166.007	-2.741	1.00	111.61	BS2
ATOM	14641	ND1	HIS	113	175.458	158.216	2.417	1.00	113.36	BS2	ATOM	14694	CG	GLU	119	182.133	165.387	-4.064	1.00	111.61	BS2
ATOM	14642	CE1	HIS	113	174.252	157.769	2.721	1.00	113.36	BS2	ATOM	14695	CD	GLU	119	180.650	165.449	-4.333	1.00	111.61	BS2
ATOM	14643	NE2	HIS	113	174.256	156.453	2.613	1.00	113.36	BS2	ATOM	14696	OE1	GLU	119	179.889	164.809	-3.575	1.00	111.61	BS2
ATOM	14644	C	HIS	113	179.342	158.600	0.304	1.00	61.39	BS2	ATOM	14697	OE2	GLU	119	180.247	166.137	-5.298	1.00	111.61	BS2
ATOM	14645	O	HIS	113	179.915	159.559	0.809	1.00	61.39	BS2	ATOM	14698	C	GLU	119	184.330	166.727	-1.210	1.00	58.14	BS2
ATOM	14646	N	ARG	114	179.949	157.732	-0.491	1.00	88.68	BS2	ATOM	14699	O	GLU	119	184.921	167.787	-1.436	1.00	58.14	BS2

ATOM	14700	N	ALA	120	183.972	166.334	0.008	1.00112.23	BS2	ATOM	14753	CB	ILE	127	193.936	169.444	0.761	1.00108.27	BS2
ATOM	14701	CA	ALA	120	184.257	167.126	1.192	1.00112.23	BS2	ATOM	14754	CG2	ILE	127	194.667	169.285	-0.565	1.00108.27	BS2
ATOM	14702	CB	ALA	120	183.423	166.625	2.363	1.00 54.45	BS2	ATOM	14755	CG1	ILE	127	192.507	169.941	0.541	1.00108.27	BS2
ATOM	14703	C	ALA	120	185.747	167.044	1.519	1.00112.23	BS2	ATOM	14756	CD1	ILE	127	192.421	171.234	-0.248	1.00108.27	BS2
ATOM	14704	O	ALA	120	186.517	167.924	1.131	1.00112.23	BS2	ATOM	14757	C	ILE	127	195.310	167.505	1.485	1.00174.48	BS2
ATOM	14705	N	LEU	121	186.153	165.990	2.224	1.00101.39	BS2	ATOM	14758	O	ILE	127	195.520	166.419	0.934	1.00174.48	BS2
ATOM	14706	CA	LEU	121	187.559	165.809	2.582	1.00101.39	BS2	ATOM	14759	N	GLU	128	196.264	168.219	2.073	1.00151.74	BS2
ATOM	14707	CB	LEU	121	187.872	164.333	2.811	1.00 85.55	BS2	ATOM	14760	CA	GLU	128	197.640	167.757	2.078	1.00151.74	BS2
ATOM	14708	CG	LEU	121	189.369	164.075	3.022	1.00 85.55	BS2	ATOM	14761	CB	GLU	128	198.592	168.909	1.752	1.00144.27	BS2
ATOM	14709	CD1	LEU	121	189.777	164.612	4.397	1.00 85.55	BS2	ATOM	14762	CG	GLU	128	198.511	169.354	0.303	1.00144.27	BS2
ATOM	14710	CD2	LEU	121	189.676	162.585	2.897	1.00 85.55	BS2	ATOM	14763	CD	GLU	128	198.133	168.212	-0.634	1.00144.27	BS2
ATOM	14711	C	LEU	121	188.489	166.322	1.492	1.00101.39	BS2	ATOM	14764	OE1	GLU	128	198.682	167.094	-0.483	1.00144.27	BS2
ATOM	14712	O	LEU	121	189.492	166.977	1.778	1.00101.39	BS2	ATOM	14765	OE2	GLU	128	197.287	168.439	-1.526	1.00144.27	BS2
ATOM	14713	N	PHE	122	188.156	165.997	0.247	1.00124.37	BS2	ATOM	14766	C	GLU	128	198.108	167.036	3.330	1.00151.74	BS2
ATOM	14714	CA	PHE	122	188.944	166.415	-0.906	1.00124.37	BS2	ATOM	14767	O	GLU	128	198.044	167.547	4.448	1.00151.74	BS2
ATOM	14715	CB	PHE	122	188.189	166.108	-2.194	1.00130.07	BS2	ATOM	14768	N	GLU	129	198.581	165.823	3.087	1.00120.52	BS2
ATOM	14716	CG	PHE	122	189.077	165.712	-3.331	1.00130.07	BS2	ATOM	14769	CA	GLU	129	199.114	164.904	4.077	1.00120.52	BS2
ATOM	14717	CD1	PHE	122	189.849	164.555	-3.250	1.00130.07	BS2	ATOM	14770	CB	GLU	129	198.302	164.891	5.375	1.00164.11	BS2
ATOM	14718	CD2	PHE	122	189.134	166.480	-4.488	1.00130.07	BS2	ATOM	14771	CG	GLU	129	199.106	164.346	6.559	1.00164.11	BS2
ATOM	14719	CE1	PHE	122	190.664	164.164	-4.307	1.00130.07	BS2	ATOM	14772	CD	GLU	129	198.251	163.633	7.590	1.00164.11	BS2
ATOM	14720	CE2	PHE	122	189.948	166.095	-5.551	1.00130.07	BS2	ATOM	14773	OE1	GLU	129	197.697	162.559	7.264	1.00164.11	BS2
ATOM	14721	CZ	PHE	122	190.712	164.934	-5.456	1.00130.07	BS2	ATOM	14774	OE2	GLU	129	198.137	164.145	8.725	1.00164.11	BS2
ATOM	14722	C	PHE	122	189.217	167.910	-0.816	1.00124.37	BS2	ATOM	14775	C	GLU	129	198.939	163.587	3.349	1.00120.52	BS2
ATOM	14723	O	PHE	122	190.335	168.326	-0.514	1.00124.37	BS2	ATOM	14776	O	GLU	129	197.901	163.357	2.720	1.00120.52	BS2
ATOM	14724	N	ALA	123	188.194	168.716	-1.088	1.00155.44	BS2	ATOM	14777	N	ARG	130	199.950	162.731	3.427	1.00143.66	BS2
ATOM	14725	CA	ALA	123	188.329	170.165	-0.995	1.00155.44	BS2	ATOM	14778	CA	ARG	130	199.918	161.457	2.729	1.00143.66	BS2
ATOM	14726	CB	ALA	123	187.051	170.843	-1.476	1.00 57.03	BS2	ATOM	14779	CB	ARG	130	198.750	160.591	3.220	1.00139.75	BS2
ATOM	14727	C	ALA	123	188.558	170.466	0.486	1.00155.44	BS2	ATOM	14780	CG	ARG	130	199.020	159.945	4.583	1.00139.75	BS2
ATOM	14728	O	ALA	123	188.974	169.585	1.240	1.00155.44	BS2	ATOM	14781	CD	ARG	130	200.346	159.171	4.558	1.00139.75	BS2
ATOM	14729	N	SER	124	188.299	171.701	0.908	1.00144.07	BS2	ATOM	14782	NE	ARG	130	200.853	158.820	5.887	1.00139.75	BS2
ATOM	14730	CA	SER	124	188.457	172.061	2.315	1.00144.07	BS2	ATOM	14783	CZ	ARG	130	200.326	157.888	6.680	1.00139.75	BS2
ATOM	14731	CB	SER	124	187.369	171.343	3.124	1.00107.69	BS2	ATOM	14784	NH1	ARG	130	199.263	157.200	6.285	1.00139.75	BS2
ATOM	14732	OG	SER	124	187.630	169.948	3.209	1.00107.69	BS2	ATOM	14785	NH2	ARG	130	200.867	157.638	7.868	1.00139.75	BS2
ATOM	14733	C	SER	124	189.864	171.710	2.853	1.00144.07	BS2	ATOM	14786	C	ARG	130	199.838	161.729	1.221	1.00143.66	BS2
ATOM	14734	O	SER	124	190.833	171.695	2.092	1.00144.07	BS2	ATOM	14787	O	ARG	130	199.013	162.519	0.758	1.00143.66	BS2
ATOM	14735	N	PRO	125	190.000	171.444	4.172	1.00147.39	BS2	ATOM	14788	N	PRO	131	200.703	161.055	0.445	1.00130.71	BS2
ATOM	14736	CD	PRO	125	189.105	171.714	5.318	1.00166.84	BS2	ATOM	14789	CD	PRO	131	201.151	159.757	0.997	1.00115.50	BS2
ATOM	14737	CA	PRO	125	191.342	171.112	4.661	1.00147.39	BS2	ATOM	14790	CA	PRO	131	200.921	161.069	-1.005	1.00130.71	BS2
ATOM	14738	CB	PRO	125	191.296	171.570	6.112	1.00166.84	BS2	ATOM	14791	CB	PRO	131	200.808	159.598	-1.366	1.00115.50	BS2
ATOM	14739	CG	PRO	125	189.905	171.192	6.502	1.00166.84	BS2	ATOM	14792	CG	PRO	131	201.579	158.973	-0.247	1.00115.50	BS2
ATOM	14740	C	PRO	125	191.670	169.632	4.558	1.00147.39	BS2	ATOM	14793	C	PRO	131	200.068	161.943	-1.919	1.00130.71	BS2
ATOM	14741	O	PRO	125	190.975	168.868	3.883	1.00147.39	BS2	ATOM	14794	O	PRO	131	199.046	162.504	-1.523	1.00130.71	BS2
ATOM	14742	N	GLU	126	192.731	169.243	5.260	1.00137.56	BS2	ATOM	14795	N	LYS	132	200.539	162.063	-3.155	1.00143.66	BS2
ATOM	14743	CA	GLU	126	193.202	167.867	5.276	1.00137.56	BS2	ATOM	14796	CA	LYS	132	199.835	162.796	-4.192	1.00143.66	BS2
ATOM	14744	CB	GLU	126	192.055	166.911	5.625	1.00147.63	BS2	ATOM	14797	CB	LYS	132	200.779	163.692	-4.995	1.00109.64	BS2
ATOM	14745	CG	GLU	126	192.495	165.466	5.744	1.00147.63	BS2	ATOM	14798	CG	LYS	132	201.190	164.962	-4.283	1.00109.64	BS2
ATOM	14746	CD	GLU	126	193.741	165.320	6.590	1.00147.63	BS2	ATOM	14799	CD	LYS	132	201.871	165.918	-5.249	1.00109.64	BS2
ATOM	14747	OE1	GLU	126	193.707	165.725	7.773	1.00147.63	BS2	ATOM	14800	CE	LYS	132	202.243	167.235	-4.574	1.00109.64	BS2
ATOM	14748	OE2	GLU	126	194.757	164.808	6.072	1.00147.63	BS2	ATOM	14801	NZ	LYS	132	202.920	168.193	-5.504	1.00109.64	BS2
ATOM	14749	C	GLU	126	193.797	167.502	3.918	1.00137.56	BS2	ATOM	14802	C	LYS	132	199.279	161.699	-5.084	1.00143.66	BS2
ATOM	14750	O	GLU	126	194.560	166.537	3.803	1.00137.56	BS2	ATOM	14803	O	LYS	132	198.528	161.958	-6.023	1.00143.66	BS2
ATOM	14751	N	ILE	127	193.440	168.290	2.903	1.00174.48	BS2	ATOM	14804	N	LYS	133	199.673	160.464	-4.774	1.00166.29	BS2
ATOM	14752	CA	ILE	127	193.911	168.100	1.531	1.00174.48	BS2	ATOM	14805	CA	LYS	133	199.217	159.288	-5.507	1.00166.29	BS2

ATOM	14806	CB	LYS	133	200.205	158.134	-5.329	1.00171.56	BS2
ATOM	14807	CG	LYS	133	201.519	158.356	-6.069	1.00171.56	BS2
ATOM	14808	CD	LYS	133	202.419	157.132	-6.011	1.00171.56	BS2
ATOM	14809	CE	LYS	133	203.655	157.321	-6.882	1.00171.56	BS2
ATOM	14810	NZ	LYS	133	204.591	156.158	-6.832	1.00171.56	BS2
ATOM	14811	C	LYS	133	197.837	158.910	-4.979	1.00166.29	BS2
ATOM	14812	O	LYS	133	196.985	158.431	-5.727	1.00166.29	BS2
ATOM	14813	N	GLU	134	197.626	159.115	-3.681	1.00140.83	BS2
ATOM	14814	CA	GLU	134	196.322	158.861	-3.088	1.00140.83	BS2
ATOM	14815	CB	GLU	134	196.391	158.915	-1.566	1.00153.43	BS2
ATOM	14816	CG	GLU	134	197.069	157.738	-0.914	1.00153.43	BS2
ATOM	14817	CD	GLU	134	197.144	157.901	0.588	1.00153.43	BS2
ATOM	14818	OE1	GLU	134	197.865	158.812	1.047	1.00153.43	BS2
ATOM	14819	OE2	GLU	134	196.473	157.130	1.307	1.00153.43	BS2
ATOM	14820	C	GLU	134	195.516	160.045	-3.596	1.00140.83	BS2
ATOM	14821	O	GLU	134	194.344	159.925	-3.951	1.00140.83	BS2
ATOM	14822	N	GLN	135	196.187	161.194	-3.627	1.00120.50	BS2
ATOM	14823	CA	GLN	135	195.624	162.450	-4.104	1.00120.50	BS2
ATOM	14824	CB	GLN	135	196.573	163.599	-3.742	1.00138.59	BS2
ATOM	14825	CG	GLN	135	196.254	164.943	-4.370	1.00138.59	BS2
ATOM	14826	CD	GLN	135	197.234	166.019	-3.942	1.00138.59	BS2
ATOM	14827	OE1	GLN	135	198.420	165.749	-3.748	1.00138.59	BS2
ATOM	14828	NE2	GLN	135	196.747	167.248	-3.805	1.00138.59	BS2
ATOM	14829	C	GLN	135	195.456	162.335	-5.621	1.00120.50	BS2
ATOM	14830	O	GLN	135	195.293	163.331	-6.331	1.00120.50	BS2
ATOM	14831	N	VAL	136	195.516	161.095	-6.099	1.00 92.58	BS2
ATOM	14832	CA	VAL	136	195.355	160.771	-7.509	1.00 92.58	BS2
ATOM	14833	CB	VAL	136	196.662	160.218	-8.130	1.00116.95	BS2
ATOM	14834	CG1	VAL	136	196.344	159.344	-9.339	1.00116.95	BS2
ATOM	14835	CG2	VAL	136	197.555	161.370	-8.559	1.00116.95	BS2
ATOM	14836	C	VAL	136	194.273	159.710	-7.605	1.00 92.58	BS2
ATOM	14837	O	VAL	136	193.299	159.886	-8.329	1.00 92.58	BS2
ATOM	14838	N	ARG	137	194.452	158.613	-6.868	1.00130.02	BS2
ATOM	14839	CA	ARG	137	193.474	157.528	-6.859	1.00130.02	BS2
ATOM	14840	CB	ARG	137	193.875	156.435	-5.868	1.00119.82	BS2
ATOM	14841	CG	ARG	137	195.250	155.834	-6.099	1.00119.82	BS2
ATOM	14842	CD	ARG	137	195.447	154.540	-5.299	1.00119.82	BS2
ATOM	14843	NE	ARG	137	195.102	154.668	-3.880	1.00119.82	BS2
ATOM	14844	CZ	ARG	137	193.877	154.512	-3.381	1.00119.82	BS2
ATOM	14845	NH1	ARG	137	192.855	154.216	-4.179	1.00119.82	BS2
ATOM	14846	NH2	ARG	137	193.669	154.654	-2.079	1.00119.82	BS2
ATOM	14847	C	ARG	137	192.141	158.125	-6.432	1.00130.02	BS2
ATOM	14848	O	ARG	137	191.093	157.820	-7.003	1.00130.02	BS2
ATOM	14849	N	LEU	138	192.188	158.977	-5.415	1.00 91.46	BS2
ATOM	14850	CA	LEU	138	190.987	159.632	-4.942	1.00 91.46	BS2
ATOM	14851	CB	LEU	138	191.279	160.438	-3.673	1.00 82.51	BS2
ATOM	14852	CG	LEU	138	191.889	159.676	-2.481	1.00 82.51	BS2
ATOM	14853	CD1	LEU	138	191.221	160.175	-1.207	1.00 82.51	BS2
ATOM	14854	CD2	LEU	138	191.701	158.163	-2.608	1.00 82.51	BS2
ATOM	14855	C	LEU	138	190.527	160.538	-6.076	1.00 91.46	BS2
ATOM	14856	O	LEU	138	189.404	160.403	-6.551	1.00 91.46	BS2
ATOM	14857	N	LYS	139	191.399	161.442	-6.520	1.00103.99	BS2
ATOM	14858	CA	LYS	139	191.077	162.343	-7.631	1.00103.99	BS2
ATOM	14859	CB	LYS	139	192.356	162.837	-8.310	1.00152.36	BS2
ATOM	14860	CG	LYS	139	192.945	164.115	-7.743	1.00152.36	BS2
ATOM	14861	CD	LYS	139	192.135	165.338	-8.143	1.00152.36	BS2
ATOM	14862	CE	LYS	139	192.853	166.618	-7.730	1.00152.36	BS2
ATOM	14863	NZ	LYS	139	193.215	166.636	-6.282	1.00152.36	BS2
ATOM	14864	C	LYS	139	190.230	161.622	-8.677	1.00103.99	BS2
ATOM	14865	O	LYS	139	189.293	162.196	-9.231	1.00103.99	BS2
ATOM	14866	N	HIS	140	190.581	160.365	-8.946	1.00158.93	BS2
ATOM	14867	CA	HIS	140	189.866	159.545	-9.920	1.00158.93	BS2
ATOM	14868	CB	HIS	140	190.694	158.315	-10.313	1.00141.76	BS2
ATOM	14869	CG	HIS	140	192.076	158.639	-10.798	1.00141.76	BS2
ATOM	14870	CD2	HIS	140	193.268	158.039	-10.561	1.00141.76	BS2
ATOM	14871	ND1	HIS	140	192.339	159.686	-11.656	1.00141.76	BS2
ATOM	14872	CE1	HIS	140	193.633	159.717	-11.925	1.00141.76	BS2
ATOM	14873	NE2	HIS	140	194.219	158.729	-11.273	1.00141.76	BS2
ATOM	14874	C	HIS	140	188.521	159.091	-9.357	1.00158.93	BS2
ATOM	14875	O	HIS	140	187.490	159.280	-10.005	1.00158.93	BS2
ATOM	14876	N	GLU	141	188.530	158.487	-8.166	1.00 86.69	BS2
ATOM	14877	CA	GLU	141	187.283	158.036	-7.539	1.00 86.69	BS2
ATOM	14878	CB	GLU	141	187.443	157.872	-6.031	1.00 85.95	BS2
ATOM	14879	CG	GLU	141	188.146	156.611	-5.602	1.00 85.95	BS2
ATOM	14880	CD	GLU	141	187.533	156.026	-4.341	1.00 85.95	BS2
ATOM	14881	OE1	GLU	141	187.397	156.757	-3.337	1.00 85.95	BS2
ATOM	14882	OE2	GLU	141	187.176	154.831	-4.355	1.00 85.95	BS2
ATOM	14883	C	GLU	141	186.201	159.070	-7.794	1.00 86.69	BS2
ATOM	14884	O	GLU	141	185.188	158.783	-8.427	1.00 86.69	BS2
ATOM	14885	N	LEU	142	186.425	160.281	-7.299	1.00 78.36	BS2
ATOM	14886	CA	LEU	142	185.462	161.340	-7.505	1.00 78.36	BS2
ATOM	14887	CB	LEU	142	186.036	162.693	-7.079	1.00 85.57	BS2
ATOM	14888	CG	LEU	142	185.986	163.002	-5.580	1.00 85.57	BS2
ATOM	14889	CD1	LEU	142	186.446	164.427	-5.348	1.00 85.57	BS2
ATOM	14890	CD2	LEU	142	184.567	162.833	-5.053	1.00 85.57	BS2
ATOM	14891	C	LEU	142	185.096	161.372	-8.972	1.00 78.36	BS2
ATOM	14892	O	LEU	142	183.929	161.226	-9.324	1.00 78.36	BS2
ATOM	14893	N	GLU	143	186.104	161.536	-9.825	1.00 86.05	BS2
ATOM	14894	CA	GLU	143	185.895	161.602	-11.268	1.00 86.05	BS2
ATOM	14895	CB	GLU	143	187.207	161.327	-12.013	1.00141.95	BS2
ATOM	14896	CG	GLU	143	188.247	162.430	-11.859	1.00141.95	BS2
ATOM	14897	CD	GLU	143	187.796	163.758	-12.458	1.00141.95	BS2
ATOM	14898	OE1	GLU	143	187.730	163.865	-13.703	1.00141.95	BS2
ATOM	14899	OE2	GLU	143	187.503	164.695	-11.685	1.00141.95	BS2
ATOM	14900	C	GLU	143	184.822	160.639	-11.746	1.00 86.05	BS2
ATOM	14901	O	GLU	143	183.834	161.065	-12.351	1.00 86.05	BS2
ATOM	14902	N	ARG	144	185.007	159.349	-11.460	1.00 75.64	BS2
ATOM	14903	CA	ARG	144	184.043	158.335	-11.879	1.00 75.64	BS2
ATOM	14904	CB	ARG	144	184.586	156.919	-11.647	1.00 98.86	BS2
ATOM	14905	CG	ARG	144	184.747	156.535	-10.185	1.00 98.86	BS2
ATOM	14906	CD	ARG	144	184.308	155.099	-9.923	1.00 98.86	BS2
ATOM	14907	NE	ARG	144	184.711	154.188	-10.990	1.00 98.86	BS2
ATOM	14908	CZ	ARG	144	184.836	152.870	-10.849	1.00 98.86	BS2
ATOM	14909	NH1	ARG	144	184.599	152.291	-9.675	1.00 98.86	BS2
ATOM	14910	NH2	ARG	144	185.184	152.128	-11.890	1.00 98.86	BS2
ATOM	14911	C	ARG	144	182.692	158.471	-11.180	1.00 75.64	BS2

ATOM	14912	O	ARG	144	181.653	158.496	-11.851	1.00	75.64	BS2
ATOM	14913	N	LEU	145	182.702	158.546	-9.844	1.00	55.52	BS2
ATOM	14914	CA	LEU	145	181.467	158.682	-9.082	1.00	55.52	BS2
ATOM	14915	CB	LEU	145	181.756	158.981	-7.622	1.00	37.13	BS2
ATOM	14916	CG	LEU	145	182.460	157.811	-6.930	1.00	37.13	BS2
ATOM	14917	CD1	LEU	145	182.701	158.099	-5.442	1.00	37.13	BS2
ATOM	14918	CD2	LEU	145	181.604	156.570	-7.104	1.00	37.13	BS2
ATOM	14919	C	LEU	145	180.677	159.808	-9.697	1.00	55.52	BS2
ATOM	14920	O	LEU	145	179.492	159.660	-9.982	1.00	55.52	BS2
ATOM	14921	N	GLN	146	181.341	160.933	-9.925	1.00	47.47	BS2
ATOM	14922	CA	GLN	146	180.683	162.072	-10.544	1.00	47.47	BS2
ATOM	14923	CB	GLN	146	181.662	163.242	-10.693	1.00	100.56	BS2
ATOM	14924	CG	GLN	146	181.841	164.087	-9.433	1.00	100.56	BS2
ATOM	14925	CD	GLN	146	183.283	164.143	-8.960	1.00	100.56	BS2
ATOM	14926	OE1	GLN	146	184.209	164.301	-9.761	1.00	100.56	BS2
ATOM	14927	NE2	GLN	146	183.481	164.026	-7.652	1.00	100.56	BS2
ATOM	14928	C	GLN	146	180.137	161.686	-11.914	1.00	47.47	BS2
ATOM	14929	O	GLN	146	179.081	162.167	-12.325	1.00	47.47	BS2
ATOM	14930	N	LYS	147	180.856	160.814	-12.617	1.00	63.99	BS2
ATOM	14931	CA	LYS	147	180.447	160.381	-13.953	1.00	63.99	BS2
ATOM	14932	CB	LYS	147	181.567	159.584	-14.633	1.00	109.30	BS2
ATOM	14933	CG	LYS	147	182.771	160.408	-15.037	1.00	109.30	BS2
ATOM	14934	CD	LYS	147	183.887	159.513	-15.566	1.00	109.30	BS2
ATOM	14935	CE	LYS	147	185.190	160.287	-15.767	1.00	109.30	BS2
ATOM	14936	NZ	LYS	147	186.330	159.378	-16.066	1.00	109.30	BS2
ATOM	14937	C	LYS	147	179.185	159.539	-13.966	1.00	63.99	BS2
ATOM	14938	O	LYS	147	178.384	159.628	-14.900	1.00	63.99	BS2
ATOM	14939	N	TYR	148	179.012	158.725	-12.931	1.00	84.36	BS2
ATOM	14940	CA	TYR	148	177.863	157.833	-12.842	1.00	84.36	BS2
ATOM	14941	CB	TYR	148	178.365	156.421	-12.540	1.00	95.84	BS2
ATOM	14942	CG	TYR	148	179.242	155.891	-13.652	1.00	95.84	BS2
ATOM	14943	CD1	TYR	148	180.347	155.079	-13.385	1.00	95.84	BS2
ATOM	14944	CE1	TYR	148	181.179	154.638	-14.420	1.00	95.84	BS2
ATOM	14945	CD2	TYR	148	178.986	156.242	-14.981	1.00	95.84	BS2
ATOM	14946	CE2	TYR	148	179.805	155.811	-16.015	1.00	95.84	BS2
ATOM	14947	CZ	TYR	148	180.898	155.015	-15.732	1.00	95.84	BS2
ATOM	14948	OH	TYR	148	181.707	154.625	-16.769	1.00	95.84	BS2
ATOM	14949	C	TYR	148	176.802	158.248	-11.834	1.00	84.36	BS2
ATOM	14950	O	TYR	148	175.627	158.403	-12.171	1.00	84.36	BS2
ATOM	14951	N	LEU	149	177.223	158.439	-10.595	1.00	76.59	BS2
ATOM	14952	CA	LEU	149	176.304	158.823	-9.548	1.00	76.59	BS2
ATOM	14953	CB	LEU	149	176.881	158.366	-8.210	1.00	58.90	BS2
ATOM	14954	CG	LEU	149	177.285	156.886	-8.190	1.00	58.90	BS2
ATOM	14955	CD1	LEU	149	177.836	156.517	-6.822	1.00	58.90	BS2
ATOM	14956	CD2	LEU	149	176.078	156.020	-8.524	1.00	58.90	BS2
ATOM	14957	C	LEU	149	175.991	160.325	-9.519	1.00	76.59	BS2
ATOM	14958	O	LEU	149	175.720	160.882	-8.458	1.00	76.59	BS2
ATOM	14959	N	SER	150	176.010	160.981	-10.678	1.00	65.11	BS2
ATOM	14960	CA	SER	150	175.726	162.417	-10.735	1.00	65.11	BS2
ATOM	14961	CB	SER	150	176.207	163.019	-12.055	1.00	61.24	BS2
ATOM	14962	OG	SER	150	175.120	163.210	-12.953	1.00	61.24	BS2
ATOM	14963	C	SER	150	174.231	162.698	-10.586	1.00	65.11	BS2
ATOM	14964	O	SER	150	173.834	163.500	-9.745	1.00	65.11	BS2
ATOM	14965	N	GLY	151	173.410	162.049	-11.414	1.00	64.56	BS2
ATOM	14966	CA	GLY	151	171.968	162.242	-11.344	1.00	64.56	BS2
ATOM	14967	C	GLY	151	171.318	161.326	-10.323	1.00	64.56	BS2
ATOM	14968	O	GLY	151	170.229	161.593	-9.813	1.00	64.56	BS2
ATOM	14969	N	PHE	152	172.003	160.231	-10.029	1.00	67.55	BS2
ATOM	14970	CA	PHE	152	171.526	159.267	-9.057	1.00	67.55	BS2
ATOM	14971	CB	PHE	152	172.230	157.939	-9.281	1.00	63.55	BS2
ATOM	14972	CG	PHE	152	171.620	156.801	-8.535	1.00	63.55	BS2
ATOM	14973	CD1	PHE	152	170.460	156.193	-9.003	1.00	63.55	BS2
ATOM	14974	CD2	PHE	152	172.211	156.324	-7.371	1.00	63.55	BS2
ATOM	14975	CE1	PHE	152	169.897	155.125	-8.327	1.00	63.55	BS2
ATOM	14976	CE2	PHE	152	171.652	155.250	-6.685	1.00	63.55	BS2
ATOM	14977	CZ	PHE	152	170.493	154.650	-7.167	1.00	63.55	BS2
ATOM	14978	C	PHE	152	171.890	159.815	-7.682	1.00	67.55	BS2
ATOM	14979	O	PHE	152	171.469	159.298	-6.645	1.00	67.55	BS2
ATOM	14980	N	ARG	153	172.701	160.867	-7.708	1.00	78.00	BS2
ATOM	14981	CA	ARG	153	173.185	161.565	-6.518	1.00	78.00	BS2
ATOM	14982	CB	ARG	153	173.773	162.917	-6.953	1.00	105.09	BS2
ATOM	14983	CG	ARG	153	175.095	163.298	-6.320	1.00	105.09	BS2
ATOM	14984	CD	ARG	153	174.949	163.458	-4.827	1.00	105.09	BS2
ATOM	14985	NE	ARG	153	176.202	163.853	-4.195	1.00	105.09	BS2
ATOM	14986	CZ	ARG	153	176.364	163.975	-2.880	1.00	105.09	BS2
ATOM	14987	NH1	ARG	153	175.350	163.732	-2.055	1.00	105.09	BS2
ATOM	14988	NH2	ARG	153	177.542	164.341	-2.389	1.00	105.09	BS2
ATOM	14989	C	ARG	153	172.046	161.791	-5.513	1.00	78.00	BS2
ATOM	14990	O	ARG	153	172.044	161.242	-4.404	1.00	78.00	BS2
ATOM	14991	N	LEU	154	171.090	162.622	-5.921	1.00	87.55	BS2
ATOM	14992	CA	LEU	154	169.927	162.946	-5.107	1.00	87.55	BS2
ATOM	14993	CB	LEU	154	169.295	164.272	-5.566	1.00	68.93	BS2
ATOM	14994	CG	LEU	154	168.919	164.422	-7.052	1.00	68.93	BS2
ATOM	14995	CD1	LEU	154	167.741	165.377	-7.235	1.00	68.93	BS2
ATOM	14996	CD2	LEU	154	170.140	164.905	-7.822	1.00	68.93	BS2
ATOM	14997	C	LEU	154	168.917	161.825	-5.267	1.00	87.55	BS2
ATOM	14998	O	LEU	154	168.404	161.585	-6.357	1.00	87.55	BS2
ATOM	14999	N	LEU	155	168.647	161.123	-4.181	1.00	62.99	BS2
ATOM	15000	CA	LEU	155	167.691	160.034	-4.215	1.00	62.99	BS2
ATOM	15001	CB	LEU	155	168.223	158.820	-5.000	1.00	34.47	BS2
ATOM	15002	CG	LEU	155	167.480	158.301	-6.258	1.00	34.47	BS2
ATOM	15003	CD1	LEU	155	167.428	156.791	-6.202	1.00	34.47	BS2
ATOM	15004	CD2	LEU	155	166.051	158.831	-6.357	1.00	34.47	BS2
ATOM	15005	C	LEU	155	167.423	159.621	-2.789	1.00	62.99	BS2
ATOM	15006	O	LEU	155	166.758	160.343	-2.045	1.00	62.99	BS2
ATOM	15007	N	LYS	156	167.984	158.482	-2.397	1.00	92.48	BS2
ATOM	15008	CA	LYS	156	167.760	157.930	-1.064	1.00	92.48	BS2
ATOM	15009	CB	LYS	156	167.880	159.007	0.022	1.00	96.02	BS2
ATOM	15010	CG	LYS	156	168.206	158.459	1.406	1.00	96.02	BS2
ATOM	15011	CD	LYS	156	167.564	157.090	1.659	1.00	96.02	BS2
ATOM	15012	CE	LYS	156	167.878	156.578	3.060	1.00	96.02	BS2
ATOM	15013	NZ	LYS	156	169.337	156.645	3.368	1.00	96.02	BS2
ATOM	15014	C	LYS	156	166.312	157.474	-1.184	1.00	92.48	BS2
ATOM	15015	O	LYS	156	165.479	158.230	-1.685	1.00	92.48	BS2
ATOM	15016	N	ARG	157	166.002	156.250	-0.763	1.00	48.90	BS2
ATOM	15017	CA	ARG	157	164.626	155.777	-0.894	1.00	48.90	BS2

ATOM	15018	CB	ARG	157	163.686	156.915	-0.482	1.00	66.83	BS2
ATOM	15019	CG	ARG	157	162.343	156.568	0.068	1.00	66.83	BS2
ATOM	15020	CD	ARG	157	162.061	157.603	1.140	1.00	66.83	BS2
ATOM	15021	NE	ARG	157	160.764	157.463	1.783	1.00	66.83	BS2
ATOM	15022	CZ	ARG	157	159.615	157.643	1.151	1.00	66.83	BS2
ATOM	15023	NH1	ARG	157	159.623	157.958	-0.137	1.00	66.83	BS2
ATOM	15024	NH2	ARG	157	158.468	157.539	1.807	1.00	66.83	BS2
ATOM	15025	C	ARG	157	164.401	155.439	-2.379	1.00	48.90	BS2
ATOM	15026	O	ARG	157	164.625	156.279	-3.252	1.00	48.90	BS2
ATOM	15027	N	LEU	158	163.981	154.217	-2.675	1.00	31.71	BS2
ATOM	15028	CA	LEU	158	163.714	153.865	-4.064	1.00	31.71	BS2
ATOM	15029	CB	LEU	158	163.126	152.464	-4.159	1.00	51.81	BS2
ATOM	15030	CG	LEU	158	164.072	151.335	-3.771	1.00	51.81	BS2
ATOM	15031	CD1	LEU	158	163.295	150.048	-3.667	1.00	51.81	BS2
ATOM	15032	CD2	LEU	158	165.182	151.222	-4.809	1.00	51.81	BS2
ATOM	15033	C	LEU	158	162.703	154.861	-4.597	1.00	31.71	BS2
ATOM	15034	O	LEU	158	161.865	155.337	-3.849	1.00	31.71	BS2
ATOM	15035	N	PRO	159	162.757	155.182	-5.895	1.00	32.86	BS2
ATOM	15036	CD	PRO	159	163.600	154.556	-6.927	1.00	83.19	BS2
ATOM	15037	CA	PRO	159	161.825	156.136	-6.509	1.00	32.86	BS2
ATOM	15038	CB	PRO	159	162.389	156.304	-7.909	1.00	83.19	BS2
ATOM	15039	CG	PRO	159	162.860	154.919	-8.207	1.00	83.19	BS2
ATOM	15040	C	PRO	159	160.387	155.621	-6.548	1.00	32.86	BS2
ATOM	15041	O	PRO	159	160.104	154.472	-6.201	1.00	32.86	BS2
ATOM	15042	N	ASP	160	159.475	156.465	-7.003	1.00	39.03	BS2
ATOM	15043	CA	ASP	160	158.077	156.074	-7.058	1.00	39.03	BS2
ATOM	15044	CB	ASP	160	157.220	157.210	-6.503	1.00	70.58	BS2
ATOM	15045	CG	ASP	160	157.618	157.576	-5.080	1.00	70.58	BS2
ATOM	15046	OD1	ASP	160	157.306	156.796	-4.152	1.00	70.58	BS2
ATOM	15047	OD2	ASP	160	158.269	158.626	-4.887	1.00	70.58	BS2
ATOM	15048	C	ASP	160	157.671	155.706	-8.466	1.00	39.03	BS2
ATOM	15049	O	ASP	160	156.549	155.286	-8.722	1.00	39.03	BS2
ATOM	15050	N	ALA	161	158.608	155.851	-9.380	1.00	50.95	BS2
ATOM	15051	CA	ALA	161	158.347	155.530	-10.763	1.00	50.95	BS2
ATOM	15052	CB	ALA	161	157.248	156.430	-11.331	1.00	26.77	BS2
ATOM	15053	C	ALA	161	159.630	155.725	-11.535	1.00	50.95	BS2
ATOM	15054	O	ALA	161	160.651	156.133	-10.982	1.00	50.95	BS2
ATOM	15055	N	ILE	162	159.564	155.429	-12.822	1.00	64.03	BS2
ATOM	15056	CA	ILE	162	160.712	155.547	-13.685	1.00	64.03	BS2
ATOM	15057	CB	ILE	162	161.396	154.173	-13.864	1.00	48.61	BS2
ATOM	15058	CG2	ILE	162	162.343	154.190	-15.035	1.00	48.61	BS2
ATOM	15059	CG1	ILE	162	162.185	153.812	-12.624	1.00	48.61	BS2
ATOM	15060	CD1	ILE	162	162.894	152.500	-12.787	1.00	48.61	BS2
ATOM	15061	C	ILE	162	160.255	156.044	-15.038	1.00	64.03	BS2
ATOM	15062	O	ILE	162	159.277	155.535	-15.605	1.00	64.03	BS2
ATOM	15063	N	PHE	163	160.941	157.067	-15.534	1.00	92.45	BS2
ATOM	15064	CA	PHE	163	160.637	157.580	-16.852	1.00	92.45	BS2
ATOM	15065	CB	PHE	163	160.578	159.106	-16.895	1.00	61.85	BS2
ATOM	15066	CG	PHE	163	159.789	159.619	-18.055	1.00	61.85	BS2
ATOM	15067	CD1	PHE	163	158.527	160.164	-17.866	1.00	61.85	BS2
ATOM	15068	CD2	PHE	163	160.245	159.429	-19.351	1.00	61.85	BS2
ATOM	15069	CE1	PHE	163	157.723	160.506	-18.951	1.00	61.85	BS2
ATOM	15070	CE2	PHE	163	159.451	159.765	-20.446	1.00	61.85	BS2
ATOM	15071	CZ	PHE	163	158.187	160.303	-20.246	1.00	61.85	BS2
ATOM	15072	C	PHE	163	161.804	157.092	-17.681	1.00	92.45	BS2
ATOM	15073	O	PHE	163	162.912	157.621	-17.591	1.00	92.45	BS2
ATOM	15074	N	VAL	164	161.552	156.063	-18.477	1.00	54.78	BS2
ATOM	15075	CA	VAL	164	162.591	155.475	-19.299	1.00	54.78	BS2
ATOM	15076	CB	VAL	164	162.581	153.936	-19.109	1.00	32.86	BS2
ATOM	15077	CG1	VAL	164	162.372	153.222	-20.450	1.00	32.86	BS2
ATOM	15078	CG2	VAL	164	163.864	153.499	-18.441	1.00	32.86	BS2
ATOM	15079	C	VAL	164	162.477	155.838	-20.784	1.00	54.78	BS2
ATOM	15080	O	VAL	164	161.377	155.928	-21.347	1.00	54.78	BS2
ATOM	15081	N	VAL	165	163.628	156.051	-21.411	1.00	77.41	BS2
ATOM	15082	CA	VAL	165	163.673	156.385	-22.827	1.00	77.41	BS2
ATOM	15083	CB	VAL	165	164.570	157.591	-23.063	1.00	54.86	BS2
ATOM	15084	CG1	VAL	165	164.169	158.278	-24.348	1.00	54.86	BS2
ATOM	15085	CG2	VAL	165	164.473	158.538	-21.885	1.00	54.86	BS2
ATOM	15086	C	VAL	165	164.223	155.182	-23.590	1.00	77.41	BS2
ATOM	15087	O	VAL	165	165.427	154.924	-23.585	1.00	77.41	BS2
ATOM	15088	N	ASP	166	163.320	154.456	-24.242	1.00	67.75	BS2
ATOM	15089	CA	ASP	166	163.641	153.239	-24.990	1.00	67.75	BS2
ATOM	15090	CB	ASP	166	164.889	153.433	-25.879	1.00	104.46	BS2
ATOM	15091	CG	ASP	166	164.924	152.473	-27.082	1.00	104.46	BS2
ATOM	15092	OD1	ASP	166	163.899	152.345	-27.790	1.00	104.46	BS2
ATOM	15093	OD2	ASP	166	165.981	151.855	-27.332	1.00	104.46	BS2
ATOM	15094	C	ASP	166	163.856	152.124	-23.953	1.00	67.75	BS2
ATOM	15095	O	ASP	166	164.981	151.877	-23.494	1.00	67.75	BS2
ATOM	15096	N	PRO	167	162.757	151.450	-23.556	1.00	60.42	BS2
ATOM	15097	CD	PRO	167	161.450	151.498	-24.235	1.00	49.26	BS2
ATOM	15098	CA	PRO	167	162.774	150.363	-22.578	1.00	60.42	BS2
ATOM	15099	CB	PRO	167	161.316	149.948	-22.512	1.00	49.26	BS2
ATOM	15100	CG	PRO	167	160.876	150.132	-23.916	1.00	49.26	BS2
ATOM	15101	C	PRO	167	163.659	149.233	-23.076	1.00	60.42	BS2
ATOM	15102	O	PRO	167	164.447	148.664	-22.322	1.00	60.42	BS2
ATOM	15103	N	THR	168	163.517	148.915	-24.359	1.00	75.59	BS2
ATOM	15104	CA	THR	168	164.309	147.863	-24.975	1.00	75.59	BS2
ATOM	15105	CB	THR	168	164.154	147.860	-26.482	1.00	52.24	BS2
ATOM	15106	OG1	THR	168	162.764	147.787	-26.822	1.00	52.24	BS2
ATOM	15107	CG2	THR	168	164.899	146.680	-27.067	1.00	52.24	BS2
ATOM	15108	C	THR	168	165.758	148.154	-24.679	1.00	75.59	BS2
ATOM	15109	O	THR	168	166.534	147.259	-24.363	1.00	75.59	BS2
ATOM	15110	N	LYS	169	166.108	149.428	-24.787	1.00	49.46	BS2
ATOM	15111	CA	LYS	169	167.467	149.881	-24.536	1.00	49.46	BS2
ATOM	15112	CB	LYS	169	167.581	151.369	-24.865	1.00	75.60	BS2
ATOM	15113	CG	LYS	169	168.945	151.799	-25.341	1.00	75.60	BS2
ATOM	15114	CD	LYS	169	170.034	151.425	-24.359	1.00	75.60	BS2
ATOM	15115	CE	LYS	169	171.372	151.922	-24.864	1.00	75.60	BS2
ATOM	15116	NZ	LYS	169	171.529	151.519	-26.297	1.00	75.60	BS2
ATOM	15117	C	LYS	169	167.800	149.651	-23.071	1.00	49.46	BS2
ATOM	15118	O	LYS	169	168.663	148.835	-22.743	1.00	49.46	BS2
ATOM	15119	N	GLU	170	167.093	150.371	-22.199	1.00	61.27	BS2
ATOM	15120	CA	GLU	170	167.302	150.269	-20.758	1.00	61.27	BS2
ATOM	15121	CB	GLU	170	167.016	151.616	-20.087	1.00	71.14	BS2
ATOM	15122	CG	GLU	170	168.180	152.615	-20.084	1.00	71.14	BS2
ATOM	15123	CD	GLU	170	168.324	153.409	-21.383	1.00	71.14	BS2

ATOM	15124	OE1	GLU	170	167.300	153.726	-22.029	1.00	71.14	BS2	ATOM	15177	O	ALA	177	159.879	147.166	-10.071	1.00	40.74	BS2
ATOM	15125	OE2	GLU	170	169.470	153.742	-21.750	1.00	71.14	BS2	ATOM	15178	N	ARG	178	160.004	146.468	-12.203	1.00	38.75	BS2
ATOM	15126	C	GLU	170	166.436	149.186	-20.123	1.00	61.27	BS2	ATOM	15179	CA	ARG	178	159.024	145.403	-12.061	1.00	38.75	BS2
ATOM	15127	O	GLU	170	165.812	149.409	-19.082	1.00	61.27	BS2	ATOM	15180	CB	ARG	178	159.193	144.438	-13.221	1.00	43.29	BS2
ATOM	15128	N	ALA	171	166.424	148.007	-20.745	1.00	59.07	BS2	ATOM	15181	CG	ARG	178	158.149	144.523	-14.265	1.00	43.29	BS2
ATOM	15129	CA	ALA	171	165.627	146.877	-20.265	1.00	59.07	BS2	ATOM	15182	CD	ARG	178	158.178	145.820	-14.961	1.00	43.29	BS2
ATOM	15130	CB	ALA	171	165.733	145.724	-21.244	1.00	53.19	BS2	ATOM	15183	NE	ARG	178	157.040	145.934	-15.863	1.00	43.29	BS2
ATOM	15131	C	ALA	171	165.984	146.406	-18.850	1.00	59.07	BS2	ATOM	15184	CZ	ARG	178	155.807	145.497	-15.595	1.00	43.29	BS2
ATOM	15132	O	ALA	171	165.112	145.959	-18.103	1.00	59.07	BS2	ATOM	15185	NH1	ARG	178	155.516	144.884	-14.447	1.00	43.29	BS2
ATOM	15133	N	ILE	172	167.258	146.497	-18.484	1.00	46.70	BS2	ATOM	15186	NH2	ARG	178	154.837	145.723	-16.470	1.00	43.29	BS2
ATOM	15134	CA	ILE	172	167.684	146.097	-17.153	1.00	46.70	BS2	ATOM	15187	C	ARG	178	159.152	144.602	-10.742	1.00	38.75	BS2
ATOM	15135	CB	ILE	172	169.193	146.210	-16.997	1.00	32.09	BS2	ATOM	15188	O	ARG	178	158.208	144.506	-9.955	1.00	38.75	BS2
ATOM	15136	CG2	ILE	172	169.625	145.626	-15.673	1.00	32.09	BS2	ATOM	15189	N	LYS	179	160.322	144.011	-10.523	1.00	41.02	BS2
ATOM	15137	CG1	ILE	172	169.880	145.470	-18.133	1.00	32.09	BS2	ATOM	15190	CA	LYS	179	160.558	143.206	-9.343	1.00	41.02	BS2
ATOM	15138	CD1	ILE	172	171.391	145.424	-18.005	1.00	32.09	BS2	ATOM	15191	CB	LYS	179	161.973	142.627	-9.388	1.00	58.58	BS2
ATOM	15139	C	ILE	172	167.045	147.016	-16.115	1.00	46.70	BS2	ATOM	15192	CG	LYS	179	162.226	141.558	-8.330	1.00	58.58	BS2
ATOM	15140	O	ILE	172	166.728	146.587	-15.004	1.00	46.70	BS2	ATOM	15193	CD	LYS	179	163.643	141.012	-8.383	1.00	58.58	BS2
ATOM	15141	N	ALA	173	166.876	148.289	-16.467	1.00	55.55	BS2	ATOM	15194	CE	LYS	179	163.895	140.320	-9.698	1.00	58.58	BS2
ATOM	15142	CA	ALA	173	166.266	149.244	-15.550	1.00	55.55	BS2	ATOM	15195	NZ	LYS	179	165.307	139.896	-9.794	1.00	58.58	BS2
ATOM	15143	CB	ALA	173	166.427	150.662	-16.085	1.00	50.25	BS2	ATOM	15196	C	LYS	179	160.354	144.019	-8.068	1.00	41.02	BS2
ATOM	15144	C	ALA	173	164.787	148.890	-15.409	1.00	55.55	BS2	ATOM	15197	O	LYS	179	160.045	143.476	-7.004	1.00	41.02	BS2
ATOM	15145	O	ALA	173	164.261	148.758	-14.297	1.00	55.55	BS2	ATOM	15198	N	LEU	180	160.529	145.325	-8.159	1.00	36.80	BS2
ATOM	15146	N	VAL	174	164.122	148.729	-16.547	1.00	41.49	BS2	ATOM	15199	CA	LEU	180	160.335	146.143	-6.979	1.00	36.80	BS2
ATOM	15147	CA	VAL	174	162.713	148.370	-16.557	1.00	41.49	BS2	ATOM	15200	CB	LEU	180	161.408	147.223	-6.909	1.00	31.44	BS2
ATOM	15148	CB	VAL	174	162.215	148.155	-17.992	1.00	34.13	BS2	ATOM	15201	CG	LEU	180	162.769	146.704	-6.444	1.00	31.44	BS2
ATOM	15149	CG1	VAL	174	160.776	147.653	-17.989	1.00	34.13	BS2	ATOM	15202	CD1	LEU	180	163.779	147.834	-6.526	1.00	31.44	BS2
ATOM	15150	CG2	VAL	174	162.333	149.447	-18.761	1.00	34.13	BS2	ATOM	15203	CD2	LEU	180	162.677	146.166	-5.021	1.00	31.44	BS2
ATOM	15151	C	VAL	174	162.464	147.090	-15.761	1.00	41.49	BS2	ATOM	15204	C	LEU	180	158.942	146.764	-6.962	1.00	36.80	BS2
ATOM	15152	O	VAL	174	161.411	146.940	-15.139	1.00	41.49	BS2	ATOM	15205	O	LEU	180	158.563	147.429	-5.999	1.00	36.80	BS2
ATOM	15153	N	ARG	175	163.421	146.161	-15.779	1.00	42.29	BS2	ATOM	15206	N	PHE	181	158.187	146.513	-8.032	1.00	67.21	BS2
ATOM	15154	CA	ARG	175	163.241	144.921	-15.043	1.00	42.29	BS2	ATOM	15207	CA	PHE	181	156.826	147.018	-8.200	1.00	67.21	BS2
ATOM	15155	CB	ARG	175	164.249	143.862	-15.460	1.00	84.52	BS2	ATOM	15208	CB	PHE	181	155.951	146.642	-7.017	1.00	59.92	BS2
ATOM	15156	CG	ARG	175	163.949	142.512	-14.820	1.00	84.52	BS2	ATOM	15209	CG	PHE	181	155.777	145.179	-6.848	1.00	59.92	BS2
ATOM	15157	CD	ARG	175	165.030	141.507	-15.110	1.00	84.52	BS2	ATOM	15210	CD1	PHE	181	156.798	144.406	-6.308	1.00	59.92	BS2
ATOM	15158	NE	ARG	175	165.326	141.461	-16.535	1.00	84.52	BS2	ATOM	15211	CD2	PHE	181	154.603	144.560	-7.257	1.00	59.92	BS2
ATOM	15159	CZ	ARG	175	166.451	140.966	-17.038	1.00	84.52	BS2	ATOM	15212	CE1	PHE	181	156.652	143.033	-6.183	1.00	59.92	BS2
ATOM	15160	NH1	ARG	175	167.378	140.470	-16.216	1.00	84.52	BS2	ATOM	15213	CE2	PHE	181	154.447	143.192	-7.136	1.00	59.92	BS2
ATOM	15161	NH2	ARG	175	166.662	140.989	-18.354	1.00	84.52	BS2	ATOM	15214	CZ	PHE	181	155.474	142.424	-6.598	1.00	59.92	BS2
ATOM	15162	C	ARG	175	163.346	145.119	-13.548	1.00	42.29	BS2	ATOM	15215	C	PHE	181	156.813	148.514	-8.351	1.00	67.21	BS2
ATOM	15163	O	ARG	175	162.513	144.621	-12.810	1.00	42.29	BS2	ATOM	15216	O	PHE	181	155.892	149.187	-7.907	1.00	67.21	BS2
ATOM	15164	N	GLU	176	164.366	145.830	-13.089	1.00	48.33	BS2	ATOM	15217	N	ILE	182	157.852	149.033	-8.977	1.00	41.98	BS2
ATOM	15165	CA	GLU	176	164.509	146.044	-11.655	1.00	48.33	BS2	ATOM	15218	CA	ILE	182	157.964	150.455	-9.201	1.00	41.98	BS2
ATOM	15166	CB	GLU	176	165.733	146.905	-11.351	1.00	48.85	BS2	ATOM	15219	CB	ILE	182	159.435	150.852	-9.141	1.00	21.70	BS2
ATOM	15167	CG	GLU	176	167.043	146.200	-11.615	1.00	48.85	BS2	ATOM	15220	CG2	ILE	182	159.592	152.353	-9.381	1.00	21.70	BS2
ATOM	15168	CD	GLU	176	168.219	146.893	-10.957	1.00	48.85	BS2	ATOM	15221	CG1	ILE	182	160.001	150.396	-7.799	1.00	21.70	BS2
ATOM	15169	OE1	GLU	176	168.058	147.375	-9.815	1.00	48.85	BS2	ATOM	15222	CD1	ILE	182	161.371	150.904	-7.519	1.00	21.70	BS2
ATOM	15170	OE2	GLU	176	169.308	146.948	-11.575	1.00	48.85	BS2	ATOM	15223	C	ILE	182	157.371	150.767	-10.572	1.00	41.98	BS2
ATOM	15171	C	GLU	176	163.265	146.709	-11.096	1.00	48.33	BS2	ATOM	15224	O	ILE	182	157.836	150.261	-11.584	1.00	41.98	BS2
ATOM	15172	O	GLU	176	162.875	146.455	-9.951	1.00	48.33	BS2	ATOM	15225	N	PRO	183	156.320	151.594	-10.625	1.00	51.32	BS2
ATOM	15173	N	ALA	177	162.648	147.560	-11.915	1.00	40.74	BS2	ATOM	15226	CD	PRO	183	155.595	152.275	-9.541	1.00	45.30	BS2
ATOM	15174	CA	ALA	177	161.438	148.277	-11.521	1.00	40.74	BS2	ATOM	15227	CA	PRO	183	155.725	151.909	-11.929	1.00	51.32	BS2
ATOM	15175	CB	ALA	177	160.986	149.177	-12.653	1.00	52.66	BS2	ATOM	15228	CB	PRO	183	154.796	153.071	-11.607	1.00	45.30	BS2
ATOM	15176	C	ALA	177	160.364	147.249	-11.197	1.00	40.74	BS2	ATOM	15229	CG	PRO	183	154.321	152.707	-10.233	1.00	45.30	BS2

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ATOM  15230  C   PRO  183     156.753 152.246 -13.008  1.00 51.32      BS2
ATOM  15231  O   PRO  183     157.842 152.748 -12.724  1.00 51.32      BS2
ATOM  15232  N   VAL  184     156.392 151.957 -14.250  1.00 42.35      BS2
ATOM  15233  CA  VAL  184     157.283 152.197 -15.365  1.00 42.35      BS2
ATOM  15234  CB  VAL  184     157.810 150.852 -15.957  1.00 41.83      BS2
ATOM  15235  CG1 VAL  184     158.476 151.093 -17.300  1.00 41.83      BS2
ATOM  15236  CG2 VAL  184     158.814 150.216 -15.005  1.00 41.83      BS2
ATOM  15237  C   VAL  184     156.629 153.012 -16.473  1.00 42.35      BS2
ATOM  15238  O   VAL  184     155.656 152.580 -17.093  1.00 42.35      BS2
ATOM  15239  N   ILE  185     157.191 154.197 -16.699  1.00 55.60      BS2
ATOM  15240  CA  ILE  185     156.746 155.124 -17.737  1.00 55.60      BS2
ATOM  15241  CB  ILE  185     156.784 156.577 -17.240  1.00 48.16      BS2
ATOM  15242  CG2 ILE  185     156.044 157.492 -18.220  1.00 48.16      BS2
ATOM  15243  CG1 ILE  185     156.200 156.642 -15.830  1.00 48.16      BS2
ATOM  15244  CD1 ILE  185     156.327 157.992 -15.159  1.00 48.16      BS2
ATOM  15245  C   ILE  185     157.796 155.001 -18.829  1.00 55.60      BS2
ATOM  15246  O   ILE  185     158.971 154.751 -18.532  1.00 55.60      BS2
ATOM  15247  N   ALA  186     157.399 155.196 -20.083  1.00 47.65      BS2
ATOM  15248  CA  ALA  186     158.370 155.082 -21.158  1.00 47.65      BS2
ATOM  15249  CB  ALA  186     158.823 153.634 -21.261  1.00 16.68      BS2
ATOM  15250  C   ALA  186     157.966 155.577 -22.540  1.00 47.65      BS2
ATOM  15251  O   ALA  186     156.820 155.429 -22.970  1.00 47.65      BS2
ATOM  15252  N   LEU  187     158.935 156.181 -23.221  1.00 47.33      BS2
ATOM  15253  CA  LEU  187     158.752 156.634 -24.591  1.00 47.33      BS2
ATOM  15254  CB  LEU  187     159.865 157.618 -24.961  1.00 55.44      BS2
ATOM  15255  CG  LEU  187     159.685 158.480 -26.215  1.00 55.44      BS2
ATOM  15256  CD1 LEU  187     159.521 157.596 -27.430  1.00 55.44      BS2
ATOM  15257  CD2 LEU  187     158.471 159.366 -26.059  1.00 55.44      BS2
ATOM  15258  C   LEU  187     158.980 155.263 -25.234  1.00 47.33      BS2
ATOM  15259  O   LEU  187     160.052 154.674 -25.068  1.00 47.33      BS2
ATOM  15260  N   ALA  188     157.987 154.737 -25.944  1.00 58.89      BS2
ATOM  15261  CA  ALA  188     158.109 153.385 -26.498  1.00 58.89      BS2
ATOM  15262  CB  ALA  188     156.762 152.695 -26.439  1.00 90.36      BS2
ATOM  15263  C   ALA  188     158.681 153.224 -27.885  1.00 58.89      BS2
ATOM  15264  O   ALA  188     159.897 153.323 -28.089  1.00 58.89      BS2
ATOM  15265  N   ASP  189     157.788 152.892 -28.817  1.00 62.01      BS2
ATOM  15266  CA  ASP  189     158.126 152.712 -30.229  1.00 62.01      BS2
ATOM  15267  CB  ASP  189     159.211 153.735 -30.611  1.00 82.67      BS2
ATOM  15268  CG  ASP  189     160.258 153.174 -31.522  1.00 82.67      BS2
ATOM  15269  OD1 ASP  189     160.998 152.262 -31.083  1.00 82.67      BS2
ATOM  15270  OD2 ASP  189     160.340 153.664 -32.668  1.00 82.67      BS2
ATOM  15271  C   ASP  189     158.478 151.304 -30.742  1.00 62.01      BS2
ATOM  15272  O   ASP  189     159.074 150.483 -30.048  1.00 62.01      BS2
ATOM  15273  N   THR  190     158.056 151.079 -31.984  1.00 41.68      BS2
ATOM  15274  CA  THR  190     158.214 149.863 -32.791  1.00 41.68      BS2
ATOM  15275  CB  THR  190     158.840 150.233 -34.128  1.00 55.63      BS2
ATOM  15276  OG1 THR  190     158.272 151.470 -34.572  1.00 55.63      BS2
ATOM  15277  CG2 THR  190     158.587 149.134 -35.172  1.00 55.63      BS2
ATOM  15278  C   THR  190     158.965 148.634 -32.293  1.00 41.68      BS2
ATOM  15279  O   THR  190     158.433 147.519 -32.336  1.00 41.68      BS2
ATOM  15280  N   ASP  191     160.206 148.839 -31.861  1.00 55.95      BS2
ATOM  15281  CA  ASP  191     161.069 147.757 -31.399  1.00 55.95      BS2
ATOM  15282  CB  ASP  191     162.527 148.060 -31.783  1.00 83.13      BS2
ATOM  15283  CG  ASP  191     163.154 149.180 -30.925  1.00 83.13      BS2
ATOM  15284  OD1 ASP  191     162.690 150.341 -30.988  1.00 83.13      BS2
ATOM  15285  OD2 ASP  191     164.119 148.894 -30.182  1.00 83.13      BS2
ATOM  15286  C   ASP  191     161.028 147.476 -29.905  1.00 55.95      BS2
ATOM  15287  O   ASP  191     162.073 147.253 -29.307  1.00 55.95      BS2
ATOM  15288  N   SER  192     159.857 147.458 -29.286  1.00 59.06      BS2
ATOM  15289  CA  SER  192     159.835 147.217 -27.844  1.00 59.06      BS2
ATOM  15290  CB  SER  192     159.982 148.542 -27.099  1.00 83.92      BS2
ATOM  15291  OG  SER  192     159.029 149.478 -27.571  1.00 83.92      BS2
ATOM  15292  C   SER  192     158.598 146.493 -27.344  1.00 59.06      BS2
ATOM  15293  O   SER  192     157.590 146.403 -28.051  1.00 59.06      BS2
ATOM  15294  N   ASP  193     158.685 145.986 -26.115  1.00 53.04      BS2
ATOM  15295  CA  ASP  193     157.577 145.255 -25.507  1.00 53.04      BS2
ATOM  15296  CB  ASP  193     158.101 144.205 -24.524  1.00 67.60      BS2
ATOM  15297  CG  ASP  193     157.045 143.167 -24.150  1.00 67.60      BS2
ATOM  15298  OD1 ASP  193     155.857 143.363 -24.498  1.00 67.60      BS2
ATOM  15299  OD2 ASP  193     157.414 142.157 -23.506  1.00 67.60      BS2
ATOM  15300  C   ASP  193     156.635 146.190 -24.768  1.00 53.04      BS2
ATOM  15301  O   ASP  193     156.906 146.600 -23.641  1.00 53.04      BS2
ATOM  15302  N   PRO  194     155.502 146.526 -25.389  1.00 52.66      BS2
ATOM  15303  CD  PRO  194     154.996 145.981 -26.665  1.00 39.98      BS2
ATOM  15304  CA  PRO  194     154.524 147.420 -24.766  1.00 52.66      BS2
ATOM  15305  CB  PRO  194     153.440 147.536 -25.836  1.00 39.98      BS2
ATOM  15306  CG  PRO  194     153.510 146.196 -26.546  1.00 39.98      BS2
ATOM  15307  C   PRO  194     153.973 146.885 -23.439  1.00 52.66      BS2
ATOM  15308  O   PRO  194     153.555 147.660 -22.573  1.00 52.66      BS2
ATOM  15309  N   ASP  195     153.991 145.560 -23.283  1.00 45.75      BS2
ATOM  15310  CA  ASP  195     153.468 144.912 -22.088  1.00 45.75      BS2
ATOM  15311  CB  ASP  195     153.384 143.404 -22.290  1.00104.50      BS2
ATOM  15312  CG  ASP  195     152.820 143.029 -23.636  1.00104.50      BS2
ATOM  15313  OD1 ASP  195     151.930 143.752 -24.138  1.00104.50      BS2
ATOM  15314  OD2 ASP  195     153.260 141.998 -24.186  1.00104.50      BS2
ATOM  15315  C   ASP  195     154.246 145.170 -20.815  1.00 45.75      BS2
ATOM  15316  O   ASP  195     153.707 145.012 -19.731  1.00 45.75      BS2
ATOM  15317  N   LEU  196     155.505 145.560 -20.926  1.00 37.13      BS2
ATOM  15318  CA  LEU  196     156.293 145.788 -19.725  1.00 37.13      BS2
ATOM  15319  CB  LEU  196     157.748 145.407 -19.972  1.00 53.50      BS2
ATOM  15320  CG  LEU  196     157.942 144.048 -20.635  1.00 53.50      BS2
ATOM  15321  CD1 LEU  196     159.410 143.684 -20.640  1.00 53.50      BS2
ATOM  15322  CD2 LEU  196     157.145 143.011 -19.870  1.00 53.50      BS2
ATOM  15323  C   LEU  196     156.233 147.220 -19.259  1.00 37.13      BS2
ATOM  15324  O   LEU  196     156.677 147.542 -18.162  1.00 37.13      BS2
ATOM  15325  N   VAL  197     155.693 148.091 -20.097  1.00 52.46      BS2
ATOM  15326  CA  VAL  197     155.611 149.487 -19.727  1.00 52.46      BS2
ATOM  15327  CB  VAL  197     155.842 150.384 -20.928  1.00 60.20      BS2
ATOM  15328  CG1 VAL  197     156.082 151.813 -20.462  1.00 60.20      BS2
ATOM  15329  CG2 VAL  197     157.017 149.876 -21.714  1.00 60.20      BS2
ATOM  15330  C   VAL  197     154.245 149.775 -19.134  1.00 52.46      BS2
ATOM  15331  O   VAL  197     153.202 149.504 -19.751  1.00 52.46      BS2
ATOM  15332  N   ASP  198     154.268 150.327 -17.926  1.00 49.43      BS2
ATOM  15333  CA  ASP  198     153.050 150.643 -17.198  1.00 49.43      BS2
ATOM  15334  CB  ASP  198     153.402 150.857 -15.731  1.00 61.06      BS2
ATOM  15335  CG  ASP  198     154.277 149.747 -15.188  1.00 61.06      BS2
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ATOM	15336	OD1	ASP	198	153.969	148.568	-15.467	1.00	61.06	BS2	ATOM	15389	CB	ASP	205	162.576	154.631	-29.117	1.00	55.19	BS2
ATOM	15337	OD2	ASP	198	155.261	150.048	-14.485	1.00	61.06	BS2	ATOM	15390	CG	ASP	205	163.292	154.030	-30.371	1.00	55.19	BS2
ATOM	15338	C	ASP	198	152.302	151.848	-17.762	1.00	49.43	BS2	ATOM	15391	OD1	ASP	205	162.797	154.206	-31.505	1.00	55.19	BS2
ATOM	15339	O	ASP	198	151.075	151.891	-17.731	1.00	49.43	BS2	ATOM	15392	OD2	ASP	205	164.342	153.354	-30.220	1.00	55.19	BS2
ATOM	15340	N	TYR	199	153.052	152.823	-18.265	1.00	65.87	BS2	ATOM	15393	C	ASP	205	163.631	156.910	-29.437	1.00	72.64	BS2
ATOM	15341	CA	TYR	199	152.492	154.028	-18.869	1.00	65.87	BS2	ATOM	15394	O	ASP	205	164.308	157.303	-28.496	1.00	72.64	BS2
ATOM	15342	CB	TYR	199	152.570	155.203	-17.893	1.00	49.75	BS2	ATOM	15395	N	ASP	206	163.965	157.100	-30.707	1.00	139.09	BS2
ATOM	15343	CG	TYR	199	151.768	154.942	-16.633	1.00	49.75	BS2	ATOM	15396	CA	ASP	206	165.184	157.779	-31.111	1.00	139.09	BS2
ATOM	15344	CD1	TYR	199	152.383	154.482	-15.469	1.00	49.75	BS2	ATOM	15397	CB	ASP	206	165.857	156.966	-32.215	1.00	135.27	BS2
ATOM	15345	CE1	TYR	199	151.628	154.154	-14.344	1.00	49.75	BS2	ATOM	15398	CG	ASP	206	166.960	157.727	-32.902	1.00	135.27	BS2
ATOM	15346	CD2	TYR	199	150.372	155.072	-16.637	1.00	49.75	BS2	ATOM	15399	OD1	ASP	206	167.948	158.069	-32.221	1.00	135.27	BS2
ATOM	15347	CE2	TYR	199	149.610	154.740	-15.526	1.00	49.75	BS2	ATOM	15400	OD2	ASP	206	166.832	157.992	-34.117	1.00	135.27	BS2
ATOM	15348	CZ	TYR	199	150.242	154.281	-14.384	1.00	49.75	BS2	ATOM	15401	C	ASP	206	164.875	159.193	-31.605	1.00	139.09	BS2
ATOM	15349	OH	TYR	199	149.488	153.926	-13.294	1.00	49.75	BS2	ATOM	15402	O	ASP	206	163.709	159.585	-31.658	1.00	139.09	BS2
ATOM	15350	C	TYR	199	153.347	154.264	-20.096	1.00	65.87	BS2	ATOM	15403	N	ALA	207	165.919	159.957	-31.939	1.00	80.18	BS2
ATOM	15351	O	TYR	199	154.455	154.797	-20.015	1.00	65.87	BS2	ATOM	15404	CA	ALA	207	165.767	161.323	-32.457	1.00	80.18	BS2
ATOM	15352	N	ILE	200	152.817	153.822	-21.230	1.00	69.93	BS2	ATOM	15405	CB	ALA	207	164.678	161.363	-33.546	1.00	50.20	BS2
ATOM	15353	CA	ILE	200	153.500	153.895	-22.514	1.00	69.93	BS2	ATOM	15406	C	ALA	207	165.488	162.402	-31.412	1.00	80.18	BS2
ATOM	15354	CB	ILE	200	153.041	152.745	-23.429	1.00	95.71	BS2	ATOM	15407	O	ALA	207	164.376	162.512	-30.883	1.00	80.18	BS2
ATOM	15355	CG2	ILE	200	153.936	152.649	-24.636	1.00	95.71	BS2	ATOM	15408	N	ILE	208	166.510	163.213	-31.149	1.00	70.76	BS2
ATOM	15356	CG1	ILE	200	153.071	151.427	-22.662	1.00	95.71	BS2	ATOM	15409	CA	ILE	208	166.429	164.302	-30.186	1.00	70.76	BS2
ATOM	15357	CD1	ILE	200	152.323	150.290	-23.352	1.00	95.71	BS2	ATOM	15410	CB	ILE	208	167.644	165.239	-30.316	1.00	85.89	BS2
ATOM	15358	C	ILE	200	153.257	155.177	-23.280	1.00	69.93	BS2	ATOM	15411	CG2	ILE	208	167.416	166.511	-29.516	1.00	85.89	BS2
ATOM	15359	O	ILE	200	152.116	155.612	-23.417	1.00	69.93	BS2	ATOM	15412	CG1	ILE	208	168.900	164.511	-29.840	1.00	85.89	BS2
ATOM	15360	N	ILE	201	154.335	155.777	-23.777	1.00	70.33	BS2	ATOM	15413	CD1	ILE	208	170.158	165.339	-29.904	1.00	85.89	BS2
ATOM	15361	CA	ILE	201	154.238	156.973	-24.611	1.00	70.33	BS2	ATOM	15414	C	ILE	208	165.164	165.130	-30.338	1.00	70.76	BS2
ATOM	15362	CB	ILE	201	155.089	158.146	-24.079	1.00	86.68	BS2	ATOM	15415	O	ILE	208	164.422	165.319	-29.378	1.00	70.76	BS2
ATOM	15363	CG2	ILE	201	154.910	159.364	-24.978	1.00	86.68	BS2	ATOM	15416	N	ARG	209	164.921	165.628	-31.541	1.00	89.27	BS2
ATOM	15364	CG1	ILE	201	154.648	158.518	-22.666	1.00	86.68	BS2	ATOM	15417	CA	ARG	209	163.739	166.441	-31.776	1.00	89.27	BS2
ATOM	15365	CD1	ILE	201	155.411	159.696	-22.079	1.00	86.68	BS2	ATOM	15418	CB	ARG	209	163.456	166.534	-33.284	1.00	93.07	BS2
ATOM	15366	C	ILE	201	154.789	156.509	-25.961	1.00	70.33	BS2	ATOM	15419	CG	ARG	209	162.335	167.500	-33.647	1.00	93.07	BS2
ATOM	15367	O	ILE	201	155.939	156.781	-26.319	1.00	70.33	BS2	ATOM	15420	CD	ARG	209	162.523	168.843	-32.965	1.00	93.07	BS2
ATOM	15368	N	PRO	202	153.966	155.774	-26.718	1.00	53.15	BS2	ATOM	15421	NE	ARG	209	163.267	169.787	-33.788	1.00	93.07	BS2
ATOM	15369	CD	PRO	202	152.523	155.607	-26.483	1.00	39.50	BS2	ATOM	15422	CZ	ARG	209	162.730	170.470	-34.792	1.00	93.07	BS2
ATOM	15370	CA	PRO	202	154.332	155.243	-28.029	1.00	53.15	BS2	ATOM	15423	NH1	ARG	209	161.446	170.309	-35.086	1.00	93.07	BS2
ATOM	15371	CB	PRO	202	153.069	154.502	-28.461	1.00	39.50	BS2	ATOM	15424	NH2	ARG	209	163.472	171.310	-35.499	1.00	93.07	BS2
ATOM	15372	CG	PRO	202	151.997	155.356	-27.881	1.00	39.50	BS2	ATOM	15425	C	ARG	209	162.525	165.871	-31.035	1.00	89.27	BS2
ATOM	15373	C	PRO	202	154.720	156.347	-28.996	1.00	53.15	BS2	ATOM	15426	O	ARG	209	161.709	166.620	-30.482	1.00	89.27	BS2
ATOM	15374	O	PRO	202	153.878	157.121	-29.451	1.00	53.15	BS2	ATOM	15427	N	SER	210	162.424	164.543	-31.009	1.00	76.96	BS2
ATOM	15375	N	GLY	203	156.006	156.409	-29.303	1.00	65.58	BS2	ATOM	15428	CA	SER	210	161.315	163.849	-30.348	1.00	76.96	BS2
ATOM	15376	CA	GLY	203	156.490	157.420	-30.212	1.00	65.58	BS2	ATOM	15429	CB	SER	210	161.121	162.475	-30.989	1.00	86.66	BS2
ATOM	15377	C	GLY	203	157.973	157.239	-30.405	1.00	65.58	BS2	ATOM	15430	OG	SER	210	160.314	161.648	-30.177	1.00	86.66	BS2
ATOM	15378	O	GLY	203	158.607	156.476	-29.682	1.00	65.58	BS2	ATOM	15431	C	SER	210	161.497	163.687	-28.838	1.00	76.96	BS2
ATOM	15379	N	ASN	204	158.523	157.957	-31.374	1.00	59.69	BS2	ATOM	15432	O	SER	210	160.698	164.188	-28.046	1.00	76.96	BS2
ATOM	15380	CA	ASN	204	159.935	157.881	-31.697	1.00	59.69	BS2	ATOM	15433	N	ILE	211	162.545	162.968	-28.453	1.00	63.87	BS2
ATOM	15381	CB	ASN	204	160.308	159.109	-32.518	1.00	109.12	BS2	ATOM	15434	CA	ILE	211	162.854	162.738	-27.050	1.00	63.87	BS2
ATOM	15382	CG	ASN	204	161.587	158.921	-33.279	1.00	109.12	BS2	ATOM	15435	CB	ILE	211	164.294	162.272	-26.880	1.00	61.83	BS2
ATOM	15383	OD1	ASN	204	161.913	159.702	-34.169	1.00	109.12	BS2	ATOM	15436	CG2	ILE	211	164.639	162.207	-25.404	1.00	61.83	BS2
ATOM	15384	ND2	ASN	204	162.331	157.883	-32.931	1.00	109.12	BS2	ATOM	15437	CG1	ILE	211	164.484	160.928	-27.575	1.00	61.83	BS2
ATOM	15385	C	ASN	204	160.888	157.724	-30.497	1.00	59.69	BS2	ATOM	15438	CD1	ILE	211	165.923	160.466	-27.632	1.00	61.83	BS2
ATOM	15386	O	ASN	204	161.166	158.689	-29.780	1.00	59.69	BS2	ATOM	15439	C	ILE	211	162.694	164.014	-26.243	1.00	63.87	BS2
ATOM	15387	N	ASP	205	161.382	156.496	-30.299	1.00	72.64	BS2	ATOM	15440	O	ILE	211	162.072	164.013	-25.182	1.00	63.87	BS2
ATOM	15388	CA	ASP	205	162.319	156.170	-29.210	1.00	72.64	BS2	ATOM	15441	N	GLN	212	163.272	165.094	-26.757	1.00	79.19	BS2

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ATOM  15442  CA  GLN  212      163.222 166.401 -26.113  1.00 79.19      BS2
ATOM  15443  CB  GLN  212      164.006 167.410 -26.960  1.00 81.68      BS2
ATOM  15444  CG  GLN  212      164.159 168.810 -26.368  1.00 81.68      BS2
ATOM  15445  CD  GLN  212      162.863 169.597 -26.359  1.00 81.68      BS2
ATOM  15446  OE1 GLN  212      162.110 169.583 -27.332  1.00 81.68      BS2
ATOM  15447  NE2 GLN  212      162.606 170.305 -25.264  1.00 81.68      BS2
ATOM  15448  C   GLN  212      161.782 166.880 -25.920  1.00 79.19      BS2
ATOM  15449  O   GLN  212      161.404 167.328 -24.837  1.00 79.19      BS2
ATOM  15450  N   LEU  213      160.979 166.783 -26.970  1.00 61.01      BS2
ATOM  15451  CA  LEU  213      159.592 167.223 -26.901  1.00 61.01      BS2
ATOM  15452  CB  LEU  213      158.862 166.841 -28.183  1.00 62.97      BS2
ATOM  15453  CG  LEU  213      157.493 167.479 -28.442  1.00 62.97      BS2
ATOM  15454  CD1 LEU  213      157.036 166.995 -29.795  1.00 62.97      BS2
ATOM  15455  CD2 LEU  213      156.463 167.142 -27.366  1.00 62.97      BS2
ATOM  15456  C   LEU  213      158.861 166.615 -25.717  1.00 61.01      BS2
ATOM  15457  O   LEU  213      158.455 167.313 -24.784  1.00 61.01      BS2
ATOM  15458  N   ILE  214      158.683 165.303 -25.775  1.00 63.79      BS2
ATOM  15459  CA  ILE  214      157.986 164.588 -24.729  1.00 63.79      BS2
ATOM  15460  CB  ILE  214      158.117 163.083 -24.921  1.00 42.93      BS2
ATOM  15461  CG2 ILE  214      157.355 162.361 -23.839  1.00 42.93      BS2
ATOM  15462  CG1 ILE  214      157.569 162.688 -26.282  1.00 42.93      BS2
ATOM  15463  CD1 ILE  214      156.140 163.091 -26.511  1.00 42.93      BS2
ATOM  15464  C   ILE  214      158.500 164.950 -23.348  1.00 63.79      BS2
ATOM  15465  O   ILE  214      157.782 165.549 -22.555  1.00 63.79      BS2
ATOM  15466  N   LEU  215      159.741 164.588 -23.058  1.00 63.29      BS2
ATOM  15467  CA  LEU  215      160.298 164.890 -21.755  1.00 63.29      BS2
ATOM  15468  CB  LEU  215      161.808 164.681 -21.745  1.00 61.68      BS2
ATOM  15469  CG  LEU  215      162.280 163.234 -21.834  1.00 61.68      BS2
ATOM  15470  CD1 LEU  215      163.691 163.141 -21.270  1.00 61.68      BS2
ATOM  15471  CD2 LEU  215      161.352 162.340 -21.036  1.00 61.68      BS2
ATOM  15472  C   LEU  215      159.980 166.306 -21.310  1.00 63.29      BS2
ATOM  15473  O   LEU  215      159.159 166.505 -20.415  1.00 63.29      BS2
ATOM  15474  N   SER  216      160.636 167.284 -21.930  1.00 66.51      BS2
ATOM  15475  CA  SER  216      160.424 168.695 -21.606  1.00 66.51      BS2
ATOM  15476  CB  SER  216      160.554 169.542 -22.865  1.00 85.03      BS2
ATOM  15477  OG  SER  216      159.501 169.234 -23.762  1.00 85.03      BS2
ATOM  15478  C   SER  216      159.033 168.892 -21.017  1.00 66.51      BS2
ATOM  15479  O   SER  216      158.894 169.332 -19.876  1.00 66.51      BS2
ATOM  15480  N   ARG  217      158.011 168.552 -21.807  1.00 52.78      BS2
ATOM  15481  CA  ARG  217      156.620 168.670 -21.376  1.00 52.78      BS2
ATOM  15482  CB  ARG  217      155.672 168.166 -22.463  1.00 64.88      BS2
ATOM  15483  CG  ARG  217      155.741 168.958 -23.741  1.00 64.88      BS2
ATOM  15484  CD  ARG  217      155.511 170.447 -23.479  1.00 64.88      BS2
ATOM  15485  NE  ARG  217      155.445 171.209 -24.726  1.00 64.88      BS2
ATOM  15486  CZ  ARG  217      154.387 171.249 -25.536  1.00 64.88      BS2
ATOM  15487  NH1 ARG  217      153.276 170.580 -25.233  1.00 64.88      BS2
ATOM  15488  NH2 ARG  217      154.454 171.934 -26.672  1.00 64.88      BS2
ATOM  15489  C   ARG  217      156.398 167.870 -20.103  1.00 52.78      BS2
ATOM  15490  O   ARG  217      156.064 168.420 -19.059  1.00 52.78      BS2
ATOM  15491  N   ALA  218      156.583 166.562 -20.193  1.00 66.66      BS2
ATOM  15492  CA  ALA  218      156.411 165.711 -19.033  1.00 66.66      BS2
ATOM  15493  CB  ALA  218      157.057 164.352 -19.287  1.00 62.42      BS2
ATOM  15494  C   ALA  218      157.033 166.389 -17.802  1.00 66.66      BS2
ATOM  15495  O   ALA  218      156.618 166.138 -16.671  1.00 66.66      BS2
ATOM  15496  N   VAL  219      158.020 167.254 -18.020  1.00 62.04      BS2
ATOM  15497  CA  VAL  219      158.655 167.950 -16.907  1.00 62.04      BS2
ATOM  15498  CB  VAL  219      160.076 168.417 -17.260  1.00 55.04      BS2
ATOM  15499  CG1 VAL  219      160.818 168.815 -15.984  1.00 55.04      BS2
ATOM  15500  CG2 VAL  219      160.813 167.321 -18.009  1.00 55.04      BS2
ATOM  15501  C   VAL  219      157.817 169.174 -16.553  1.00 62.04      BS2
ATOM  15502  O   VAL  219      157.553 169.439 -15.378  1.00 62.04      BS2
ATOM  15503  N   ASP  220      157.407 169.925 -17.574  1.00 81.05      BS2
ATOM  15504  CA  ASP  220      156.576 171.104 -17.361  1.00 81.05      BS2
ATOM  15505  CB  ASP  220      155.947 171.590 -18.680  1.00102.80      BS2
ATOM  15506  CG  ASP  220      156.982 172.051 -19.709  1.00102.80      BS2
ATOM  15507  OD1 ASP  220      157.951 172.737 -19.322  1.00102.80      BS2
ATOM  15508  OD2 ASP  220      156.812 171.746 -20.913  1.00102.80      BS2
ATOM  15509  C   ASP  220      155.464 170.648 -16.425  1.00 81.05      BS2
ATOM  15510  O   ASP  220      155.251 171.219 -15.354  1.00 81.05      BS2
ATOM  15511  N   LEU  221      154.775 169.593 -16.851  1.00 55.50      BS2
ATOM  15512  CA  LEU  221      153.673 168.996 -16.108  1.00 55.50      BS2
ATOM  15513  CB  LEU  221      153.263 167.691 -16.790  1.00 54.68      BS2
ATOM  15514  CG  LEU  221      151.908 167.085 -16.436  1.00 54.68      BS2
ATOM  15515  CD1 LEU  221      151.920 166.551 -15.022  1.00 54.68      BS2
ATOM  15516  CD2 LEU  221      150.838 168.139 -16.615  1.00 54.68      BS2
ATOM  15517  C   LEU  221      154.059 168.739 -14.652  1.00 55.50      BS2
ATOM  15518  O   LEU  221      153.243 168.911 -13.747  1.00 55.50      BS2
ATOM  15519  N   ILE  222      155.300 168.319 -14.430  1.00 73.30      BS2
ATOM  15520  CA  ILE  222      155.775 168.071 -13.074  1.00 73.30      BS2
ATOM  15521  CB  ILE  222      157.221 167.482 -13.059  1.00 70.85      BS2
ATOM  15522  CG2 ILE  222      157.910 167.807 -11.741  1.00 70.85      BS2
ATOM  15523  CG1 ILE  222      157.185 165.967 -13.272  1.00 70.85      BS2
ATOM  15524  CD1 ILE  222      158.530 165.287 -13.038  1.00 70.85      BS2
ATOM  15525  C   ILE  222      155.770 169.383 -12.287  1.00 73.30      BS2
ATOM  15526  O   ILE  222      155.301 169.425 -11.149  1.00 73.30      BS2
ATOM  15527  N   ILE  223      156.299 170.448 -12.896  1.00 60.24      BS2
ATOM  15528  CA  ILE  223      156.353 171.770 -12.256  1.00 60.24      BS2
ATOM  15529  CB  ILE  223      157.102 172.794 -13.159  1.00 76.34      BS2
ATOM  15530  CG2 ILE  223      156.705 174.209 -12.792  1.00 76.34      BS2
ATOM  15531  CG1 ILE  223      158.619 172.615 -13.020  1.00 76.34      BS2
ATOM  15532  CD1 ILE  223      159.165 171.405 -13.719  1.00 76.34      BS2
ATOM  15533  C   ILE  223      154.936 172.278 -11.949  1.00 60.24      BS2
ATOM  15534  O   ILE  223      154.659 172.798 -10.865  1.00 60.24      BS2
ATOM  15535  N   GLN  224      154.051 172.112 -12.923  1.00 61.74      BS2
ATOM  15536  CA  GLN  224      152.654 172.489 -12.786  1.00 61.74      BS2
ATOM  15537  CB  GLN  224      151.900 172.161 -14.072  1.00 85.90      BS2
ATOM  15538  CG  GLN  224      151.541 173.346 -14.927  1.00 85.90      BS2
ATOM  15539  CD  GLN  224      150.461 172.997 -15.930  1.00 85.90      BS2
ATOM  15540  OE1 GLN  224      149.495 172.301 -15.598  1.00 85.90      BS2
ATOM  15541  NE2 GLN  224      150.608 173.483 -17.160  1.00 85.90      BS2
ATOM  15542  C   GLN  224      152.023 171.687 -11.647  1.00 61.74      BS2
ATOM  15543  O   GLN  224      150.803 171.618 -11.535  1.00 61.74      BS2
ATOM  15544  N   ALA  225      152.847 171.055 -10.824  1.00 83.18      BS2
ATOM  15545  CA  ALA  225      152.335 170.269  -9.714  1.00 83.18      BS2
ATOM  15546  CB  ALA  225      152.977 168.918  -9.692  1.00 90.52      BS2
ATOM  15547  C   ALA  225      152.629 170.990  -8.423  1.00 83.18      BS2
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ATOM	15548	O	ALA	225	151.918	170.814	-7.433	1.00 83.18	BS2	ATOM	15601	OG	SER	233	163.496	172.493	-21.420	1.00113.71	BS2
ATOM	15549	N	ARG	226	153.689	171.791	-8.430	1.00103.73	BS2	ATOM	15602	C	SER	233	164.049	175.152	-21.981	1.00103.56	BS2
ATOM	15550	CA	ARG	226	154.061	172.552	-7.247	1.00103.73	BS2	ATOM	15603	O	SER	233	163.922	175.454	-23.170	1.00103.56	BS2
ATOM	15551	CB	ARG	226	155.196	171.846	-6.491	1.00135.46	BS2	ATOM	15604	N	PRO	234	165.251	175.072	-21.388	1.00129.44	BS2
ATOM	15552	CG	ARG	226	154.730	170.679	-5.621	1.00135.46	BS2	ATOM	15605	CD	PRO	234	165.511	174.871	-19.948	1.00 81.57	BS2
ATOM	15553	CD	ARG	226	153.577	171.098	-4.690	1.00135.46	BS2	ATOM	15606	CA	PRO	234	166.495	175.346	-22.107	1.00129.44	BS2
ATOM	15554	NE	ARG	226	153.213	170.061	-3.720	1.00135.46	BS2	ATOM	15607	CB	PRO	234	167.501	175.545	-20.975	1.00 81.57	BS2
ATOM	15555	CZ	ARG	226	153.819	169.879	-2.547	1.00135.46	BS2	ATOM	15608	CG	PRO	234	167.001	174.608	-19.916	1.00 81.57	BS2
ATOM	15556	NH1	ARG	226	154.823	170.670	-2.182	1.00135.46	BS2	ATOM	15609	C	PRO	234	166.849	174.155	-23.006	1.00129.44	BS2
ATOM	15557	NH2	ARG	226	153.427	168.899	-1.740	1.00135.46	BS2	ATOM	15610	O	PRO	234	167.516	174.316	-24.027	1.00129.44	BS2
ATOM	15558	C	ARG	226	154.442	174.003	-7.563	1.00103.73	BS2	ATOM	15611	N	SER	235	166.371	172.974	-22.607	1.00124.64	BS2
ATOM	15559	O	ARG	226	153.584	174.796	-7.964	1.00103.73	BS2	ATOM	15612	CA	SER	235	166.592	171.701	-23.300	1.00124.64	BS2
ATOM	15560	N	GLY	227	155.721	174.338	-7.370	1.00148.31	BS2	ATOM	15613	CB	SER	235	165.354	171.305	-24.117	1.00 84.97	BS2
ATOM	15561	CA	GLY	227	156.219	175.685	-7.622	1.00148.31	BS2	ATOM	15614	OG	SER	235	165.222	172.091	-25.290	1.00 84.97	BS2
ATOM	15562	C	GLY	227	155.384	176.488	-8.600	1.00148.31	BS2	ATOM	15615	C	SER	235	167.812	171.698	-24.209	1.00124.64	BS2
ATOM	15563	O	GLY	227	154.987	177.622	-8.315	1.00148.31	BS2	ATOM	15616	O	SER	235	168.846	171.139	-23.784	1.00124.64	BS2
ATOM	15564	N	GLY	228	155.126	175.888	-9.759	1.00100.42	BS2	ATOM	15617	OXT	SER	235	167.726	172.258	-25.327	1.00128.53	BS2
ATOM	15565	CA	GLY	228	154.321	176.527	-10.780	1.00100.42	BS2	ATOM	15618	CB	PRO	1	154.010	109.996	-72.700	1.00 61.60	OS15
ATOM	15566	C	GLY	228	155.025	177.614	-11.564	1.00100.42	BS2	ATOM	15619	CG	PRO	1	155.462	109.672	-73.051	1.00 61.60	OS15
ATOM	15567	O	GLY	228	156.123	178.051	-11.204	1.00100.42	BS2	ATOM	15620	C	PRO	1	151.938	108.706	-73.272	1.00108.77	OS15
ATOM	15568	N	VAL	229	154.373	178.037	-12.645	1.00164.99	BS2	ATOM	15621	O	PRO	1	151.604	108.112	-74.300	1.00108.77	OS15
ATOM	15569	CA	VAL	229	154.864	179.087	-13.535	1.00164.99	BS2	ATOM	15622	N	PRO	1	154.204	107.789	-73.659	1.00108.77	OS15
ATOM	15570	CB	VAL	229	154.471	180.498	-13.010	1.00143.59	BS2	ATOM	15623	CD	PRO	1	155.365	108.572	-74.120	1.00 61.60	OS15
ATOM	15571	CG1	VAL	229	154.700	181.548	-14.097	1.00143.59	BS2	ATOM	15624	CA	PRO	1	153.370	108.616	-72.755	1.00108.77	OS15
ATOM	15572	CG2	VAL	229	153.018	180.504	-12.556	1.00143.59	BS2	ATOM	15625	N	ILE	2	151.095	109.451	-72.564	1.00 66.13	OS15
ATOM	15573	C	VAL	229	156.374	179.060	-13.740	1.00164.99	BS2	ATOM	15626	CA	ILE	2	149.707	109.595	-72.974	1.00 66.13	OS15
ATOM	15574	O	VAL	229	157.007	180.111	-13.856	1.00164.99	BS2	ATOM	15627	CB	ILE	2	148.729	109.283	-71.834	1.00 93.27	OS15
ATOM	15575	N	VAL	230	156.966	177.872	-13.779	1.00115.91	BS2	ATOM	15628	CG2	ILE	2	147.349	109.038	-72.415	1.00 93.27	OS15
ATOM	15576	CA	VAL	230	158.401	177.812	-13.987	1.00115.91	BS2	ATOM	15629	CG1	ILE	2	149.192	108.062	-71.038	1.00 93.27	OS15
ATOM	15577	CB	VAL	230	159.040	176.601	-13.264	1.00107.05	BS2	ATOM	15630	CD1	ILE	2	150.181	108.389	-69.938	1.00 93.27	OS15
ATOM	15578	CG1	VAL	230	160.550	176.620	-13.462	1.00107.05	BS2	ATOM	15631	C	ILE	2	149.420	111.012	-73.436	1.00 66.13	OS15
ATOM	15579	CG2	VAL	230	158.726	176.661	-11.768	1.00107.05	BS2	ATOM	15632	O	ILE	2	149.434	111.944	-72.635	1.00 66.13	OS15
ATOM	15580	C	VAL	230	158.664	177.763	-15.490	1.00115.91	BS2	ATOM	15633	N	THR	3	149.145	111.168	-74.727	1.00 86.29	OS15
ATOM	15581	O	VAL	230	158.791	176.696	-16.088	1.00115.91	BS2	ATOM	15634	CA	THR	3	148.853	112.477	-75.306	1.00 86.29	OS15
ATOM	15582	N	GLU	231	158.718	178.962	-16.068	1.00150.19	BS2	ATOM	15635	CB	THR	3	148.620	112.358	-76.832	1.00 80.26	OS15
ATOM	15583	CA	GLU	231	158.946	179.245	-17.491	1.00150.19	BS2	ATOM	15636	OG1	THR	3	147.622	111.360	-77.094	1.00 80.26	OS15
ATOM	15584	CB	GLU	231	159.468	180.684	-17.616	1.00119.32	BS2	ATOM	15637	CG2	THR	3	149.908	111.978	-77.537	1.00 80.26	OS15
ATOM	15585	CG	GLU	231	160.377	181.133	-16.467	1.00119.32	BS2	ATOM	15638	C	THR	3	147.622	113.131	-74.677	1.00 86.29	OS15
ATOM	15586	CD	GLU	231	161.443	180.106	-16.113	1.00119.32	BS2	ATOM	15639	O	THR	3	146.787	112.447	-74.083	1.00 86.29	OS15
ATOM	15587	OE1	GLU	231	162.217	179.712	-17.012	1.00119.32	BS2	ATOM	15640	N	LYS	4	147.517	114.455	-74.801	1.00 64.60	OS15
ATOM	15588	OE2	GLU	231	161.504	179.693	-14.933	1.00119.32	BS2	ATOM	15641	CA	LYS	4	146.359	115.167	-74.265	1.00 64.60	OS15
ATOM	15589	C	GLU	231	159.826	178.325	-18.364	1.00150.19	BS2	ATOM	15642	CB	LYS	4	146.437	116.662	-74.579	1.00 97.26	OS15
ATOM	15590	O	GLU	231	160.765	177.680	-17.877	1.00150.19	BS2	ATOM	15643	CG	LYS	4	147.714	117.334	-74.120	1.00 97.26	OS15
ATOM	15591	N	PRO	232	159.533	178.290	-19.687	1.00131.18	BS2	ATOM	15644	CD	LYS	4	147.786	118.765	-74.631	1.00 97.26	OS15
ATOM	15592	CD	PRO	232	158.472	179.147	-20.259	1.00 73.02	BS2	ATOM	15645	CE	LYS	4	149.203	119.315	-74.523	1.00 97.26	OS15
ATOM	15593	CA	PRO	232	160.174	177.527	-20.766	1.00131.18	BS2	ATOM	15646	NZ	LYS	4	149.372	120.590	-75.274	1.00 97.26	OS15
ATOM	15594	CB	PRO	232	160.180	178.532	-21.907	1.00 73.02	BS2	ATOM	15647	C	LYS	4	145.177	114.564	-74.998	1.00 64.60	OS15
ATOM	15595	CG	PRO	232	158.752	179.088	-21.784	1.00 73.02	BS2	ATOM	15648	O	LYS	4	144.064	114.479	-74.469	1.00 64.60	OS15
ATOM	15596	C	PRO	232	161.531	176.855	-20.540	1.00131.18	BS2	ATOM	15649	N	GLU	5	145.454	114.137	-76.228	1.00 61.82	OS15
ATOM	15597	O	PRO	232	162.409	177.363	-19.836	1.00131.18	BS2	ATOM	15650	CA	GLU	5	144.472	113.517	-77.104	1.00 61.82	OS15
ATOM	15598	N	SER	233	161.668	175.700	-21.188	1.00103.56	BS2	ATOM	15651	CB	GLU	5	145.101	113.219	-78.466	1.00156.14	OS15
ATOM	15599	CA	SER	233	162.838	174.826	-21.111	1.00103.56	BS2	ATOM	15652	CG	GLU	5	146.009	114.320	-78.987	1.00156.14	OS15
ATOM	15600	CB	SER	233	162.400	173.386	-21.412	1.00113.71	BS2	ATOM	15653	CD	GLU	5	145.349	115.685	-78.961	1.00156.14	OS15

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ATOM  15654  OE1 GLU     5     144.267 115.838 -79.566  1.00156.14      OS15
ATOM  15655  OE2 GLU     5     145.915 116.606 -78.337  1.00156.14      OS15
ATOM  15656  C   GLU     5     143.980 112.219 -76.481  1.00 61.82      OS15
ATOM  15657  O   GLU     5     142.838 112.126 -76.031  1.00 61.82      OS15
ATOM  15658  N   GLU     6     144.847 111.213 -76.447  1.00 68.28      OS15
ATOM  15659  CA  GLU     6     144.456 109.938 -75.876  1.00 68.28      OS15
ATOM  15660  CB  GLU     6     145.626 108.953 -75.883  1.00159.98      OS15
ATOM  15661  CG  GLU     6     145.573 107.982 -77.058  1.00159.98      OS15
ATOM  15662  CD  GLU     6     144.254 107.209 -77.133  1.00159.98      OS15
ATOM  15663  OE1 GLU     6     143.188 107.845 -77.272  1.00159.98      OS15
ATOM  15664  OE2 GLU     6     144.280 105.962 -77.057  1.00159.98      OS15
ATOM  15665  C   GLU     6     143.896 110.082 -74.473  1.00 68.28      OS15
ATOM  15666  O   GLU     6     143.216 109.185 -73.972  1.00 68.28      OS15
ATOM  15667  N   LYS     7     144.166 111.217 -73.839  1.00 70.93      OS15
ATOM  15668  CA  LYS     7     143.650 111.438 -72.501  1.00 70.93      OS15
ATOM  15669  CB  LYS     7     144.415 112.552 -71.802  1.00 52.09      OS15
ATOM  15670  CG  LYS     7     144.156 112.580 -70.317  1.00 52.09      OS15
ATOM  15671  CD  LYS     7     145.026 113.596 -69.621  1.00 52.09      OS15
ATOM  15672  CE  LYS     7     144.861 113.495 -68.116  1.00 52.09      OS15
ATOM  15673  NZ  LYS     7     145.705 114.491 -67.403  1.00 52.09      OS15
ATOM  15674  C   LYS     7     142.179 111.812 -72.588  1.00 70.93      OS15
ATOM  15675  O   LYS     7     141.307 111.064 -72.141  1.00 70.93      OS15
ATOM  15676  N   GLN     8     141.902 112.969 -73.175  1.00 72.35      OS15
ATOM  15677  CA  GLN     8     140.527 113.414 -73.308  1.00 72.35      OS15
ATOM  15678  CB  GLN     8     140.490 114.756 -74.031  1.00126.41      OS15
ATOM  15679  CG  GLN     8     141.274 115.817 -73.287  1.00126.41      OS15
ATOM  15680  CD  GLN     8     141.115 117.195 -73.883  1.00126.41      OS15
ATOM  15681  OE1 GLN     8     140.006 117.724 -73.964  1.00126.41      OS15
ATOM  15682  NE2 GLN     8     142.226 117.791 -74.300  1.00126.41      OS15
ATOM  15683  C   GLN     8     139.669 112.372 -74.026  1.00 72.35      OS15
ATOM  15684  O   GLN     8     138.465 112.274 -73.785  1.00 72.35      OS15
ATOM  15685  N   LYS     9     140.285 111.583 -74.898  1.00 72.50      OS15
ATOM  15686  CA  LYS     9     139.546 110.547 -75.605  1.00 72.50      OS15
ATOM  15687  CB  LYS     9     140.493 109.721 -76.479  1.00115.57      OS15
ATOM  15688  CG  LYS     9     139.829 108.555 -77.200  1.00115.57      OS15
ATOM  15689  CD  LYS     9     138.783 109.032 -78.194  1.00115.57      OS15
ATOM  15690  CE  LYS     9     138.111 107.863 -78.906  1.00115.57      OS15
ATOM  15691  NZ  LYS     9     137.120 108.313 -79.930  1.00115.57      OS15
ATOM  15692  C   LYS     9     138.887 109.648 -74.560  1.00 72.50      OS15
ATOM  15693  O   LYS     9     137.733 109.237 -74.707  1.00 72.50      OS15
ATOM  15694  N   VAL    10     139.633 109.357 -73.497  1.00 61.84      OS15
ATOM  15695  CA  VAL    10     139.140 108.511 -72.414  1.00 61.84      OS15
ATOM  15696  CB  VAL    10     140.298 107.985 -71.540  1.00 64.21      OS15
ATOM  15697  CG1 VAL    10     139.746 107.173 -70.387  1.00 64.21      OS15
ATOM  15698  CG2 VAL    10     141.233 107.135 -72.369  1.00 64.21      OS15
ATOM  15699  C   VAL    10     138.194 109.300 -71.526  1.00 61.84      OS15
ATOM  15700  O   VAL    10     137.160 108.795 -71.098  1.00 61.84      OS15
ATOM  15701  N   ILE    11     138.561 110.543 -71.246  1.00 47.16      OS15
ATOM  15702  CA  ILE    11     137.737 111.391 -70.413  1.00 47.16      OS15
ATOM  15703  CB  ILE    11     138.394 112.766 -70.227  1.00 49.97      OS15
ATOM  15704  CG2 ILE    11     137.444 113.717 -69.503  1.00 49.97      OS15
ATOM  15705  CG1 ILE    11     139.714 112.577 -69.464  1.00 49.97      OS15
ATOM  15706  CD1 ILE    11     140.451 113.860 -69.085  1.00 49.97      OS15
ATOM  15707  C   ILE    11     136.335 111.545 -70.996  1.00 47.16      OS15
ATOM  15708  O   ILE    11     135.340 111.371 -70.294  1.00 47.16      OS15
ATOM  15709  N   GLN    12     136.243 111.856 -72.282  1.00 88.70      OS15
ATOM  15710  CA  GLN    12     134.935 112.008 -72.905  1.00 88.70      OS15
ATOM  15711  CB  GLN    12     135.082 112.623 -74.291  1.00137.52      OS15
ATOM  15712  CG  GLN    12     135.586 114.047 -74.261  1.00137.52      OS15
ATOM  15713  CD  GLN    12     135.889 114.575 -75.641  1.00137.52      OS15
ATOM  15714  OE1 GLN    12     136.235 115.744 -75.808  1.00137.52      OS15
ATOM  15715  NE2 GLN    12     135.767 113.712 -76.646  1.00137.52      OS15
ATOM  15716  C   GLN    12     134.228 110.663 -73.009  1.00 88.70      OS15
ATOM  15717  O   GLN    12     133.005 110.584 -72.899  1.00 88.70      OS15
ATOM  15718  N   GLU    13     135.010 109.606 -73.207  1.00 65.70      OS15
ATOM  15719  CA  GLU    13     134.466 108.259 -73.336  1.00 65.70      OS15
ATOM  15720  CB  GLU    13     135.548 107.306 -73.857  1.00121.34      OS15
ATOM  15721  CG  GLU    13     135.186 105.826 -73.750  1.00121.34      OS15
ATOM  15722  CD  GLU    13     133.919 105.459 -74.511  1.00121.34      OS15
ATOM  15723  OE1 GLU    13     133.329 104.397 -74.210  1.00121.34      OS15
ATOM  15724  OE2 GLU    13     133.520 106.225 -75.415  1.00121.34      OS15
ATOM  15725  C   GLU    13     133.870 107.703 -72.044  1.00 65.70      OS15
ATOM  15726  O   GLU    13     133.240 106.646 -72.051  1.00 65.70      OS15
ATOM  15727  N   PHE    14     134.061 108.404 -70.934  1.00 67.88      OS15
ATOM  15728  CA  PHE    14     133.525 107.921 -69.669  1.00 67.88      OS15
ATOM  15729  CB  PHE    14     134.652 107.457 -68.748  1.00 45.92      OS15
ATOM  15730  CG  PHE    14     135.160 106.086 -69.076  1.00 45.92      OS15
ATOM  15731  CD1 PHE    14     136.045 105.892 -70.129  1.00 45.92      OS15
ATOM  15732  CD2 PHE    14     134.686 104.977 -68.384  1.00 45.92      OS15
ATOM  15733  CE1 PHE    14     136.442 104.621 -70.492  1.00 45.92      OS15
ATOM  15734  CE2 PHE    14     135.081 103.695 -68.744  1.00 45.92      OS15
ATOM  15735  CZ  PHE    14     135.959 103.519 -69.801  1.00 45.92      OS15
ATOM  15736  C   PHE    14     132.662 108.920 -68.941  1.00 67.88      OS15
ATOM  15737  O   PHE    14     131.769 108.531 -68.197  1.00 67.88      OS15
ATOM  15738  N   ALA    15     132.925 110.202 -69.158  1.00 46.77      OS15
ATOM  15739  CA  ALA    15     132.161 111.264 -68.513  1.00 46.77      OS15
ATOM  15740  CB  ALA    15     132.283 112.544 -69.318  1.00 26.15      OS15
ATOM  15741  C   ALA    15     130.690 110.887 -68.342  1.00 46.77      OS15
ATOM  15742  O   ALA    15     130.093 110.283 -69.229  1.00 46.77      OS15
ATOM  15743  N   ARG    16     130.116 111.230 -67.192  1.00 82.37      OS15
ATOM  15744  CA  ARG    16     128.716 110.924 -66.906  1.00 82.37      OS15
ATOM  15745  CB  ARG    16     128.444 111.037 -65.403  1.00 83.01      OS15
ATOM  15746  CG  ARG    16     129.119 109.969 -64.549  1.00 83.01      OS15
ATOM  15747  CD  ARG    16     128.160 108.838 -64.170  1.00 83.01      OS15
ATOM  15748  NE  ARG    16     127.046 109.286 -63.329  1.00 83.01      OS15
ATOM  15749  CZ  ARG    16     127.177 109.961 -62.184  1.00 83.01      OS15
ATOM  15750  NH1 ARG    16     128.377 110.285 -61.717  1.00 83.01      OS15
ATOM  15751  NH2 ARG    16     126.100 110.314 -61.496  1.00 83.01      OS15
ATOM  15752  C   ARG    16     127.806 111.883 -67.664  1.00 82.37      OS15
ATOM  15753  O   ARG    16     126.625 111.606 -67.863  1.00 82.37      OS15
ATOM  15754  N   PHE    17     128.371 113.010 -68.087  1.00 61.70      OS15
ATOM  15755  CA  PHE    17     127.630 114.026 -68.824  1.00 61.70      OS15
ATOM  15756  CB  PHE    17     126.610 114.686 -67.903  1.00 81.85      OS15
ATOM  15757  CG  PHE    17     127.189 115.148 -66.609  1.00 81.85      OS15
ATOM  15758  CD1 PHE    17     127.913 116.333 -66.541  1.00 81.85      OS15
ATOM  15759  CD2 PHE    17     127.059 114.368 -65.463  1.00 81.85      OS15
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ATOM	15760	CE1	PHE	17	128.506	116.737	-65.345	1.00	81.85	OS15	ATOM	15813	OE1	GLU	25	129.779	105.363	-62.787	1.00	59.43	OS15
ATOM	15761	CE2	PHE	17	127.646	114.759	-64.265	1.00	81.85	OS15	ATOM	15814	OE2	GLU	25	131.126	107.061	-62.408	1.00	59.43	OS15
ATOM	15762	CZ	PHE	17	128.374	115.947	-64.204	1.00	81.85	OS15	ATOM	15815	C	GLU	25	135.205	107.026	-64.359	1.00	66.07	OS15
ATOM	15763	C	PHE	17	128.591	115.074	-69.385	1.00	61.70	OS15	ATOM	15816	O	GLU	25	136.125	106.271	-64.674	1.00	66.07	OS15
ATOM	15764	O	PHE	17	129.720	115.210	-68.910	1.00	61.70	OS15	ATOM	15817	N	VAL	26	135.219	108.331	-64.611	1.00	39.66	OS15
ATOM	15765	N	PRO	18	128.153	115.825	-70.411	1.00	90.79	OS15	ATOM	15818	CA	VAL	26	136.337	108.946	-65.320	1.00	39.66	OS15
ATOM	15766	CD	PRO	18	126.830	115.733	-71.052	1.00	78.57	OS15	ATOM	15819	CB	VAL	26	136.165	110.489	-65.441	1.00	36.02	OS15
ATOM	15767	CA	PRO	18	128.958	116.866	-71.055	1.00	90.79	OS15	ATOM	15820	CG1	VAL	26	137.420	111.114	-66.032	1.00	36.02	OS15
ATOM	15768	CB	PRO	18	127.930	117.622	-71.879	1.00	78.57	OS15	ATOM	15821	CG2	VAL	26	134.968	110.812	-66.332	1.00	36.02	OS15
ATOM	15769	CG	PRO	18	127.033	116.527	-72.323	1.00	78.57	OS15	ATOM	15822	C	VAL	26	137.657	108.637	-64.628	1.00	39.66	OS15
ATOM	15770	C	PRO	18	129.698	117.774	-70.087	1.00	90.79	OS15	ATOM	15823	O	VAL	26	138.529	107.963	-65.191	1.00	39.66	OS15
ATOM	15771	O	PRO	18	129.101	118.663	-69.480	1.00	90.79	OS15	ATOM	15824	N	GLN	27	137.800	109.122	-63.401	1.00	53.53	OS15
ATOM	15772	N	GLY	19	131.001	117.540	-69.951	1.00	84.60	OS15	ATOM	15825	CA	GLN	27	139.014	108.889	-62.649	1.00	53.53	OS15
ATOM	15773	CA	GLY	19	131.813	118.351	-69.064	1.00	84.60	OS15	ATOM	15826	CB	GLN	27	138.786	109.214	-61.187	1.00	60.46	OS15
ATOM	15774	C	GLY	19	132.277	117.615	-67.826	1.00	84.60	OS15	ATOM	15827	CG	GLN	27	138.567	110.683	-60.964	1.00	60.46	OS15
ATOM	15775	O	GLY	19	132.961	118.187	-66.980	1.00	84.60	OS15	ATOM	15828	CD	GLN	27	138.329	111.002	-59.518	1.00	60.46	OS15
ATOM	15776	N	ASP	20	131.909	116.345	-67.713	1.00	95.45	OS15	ATOM	15829	OE1	GLN	27	139.151	110.691	-58.664	1.00	60.46	OS15
ATOM	15777	CA	ASP	20	132.301	115.548	-66.558	1.00	95.45	OS15	ATOM	15830	NE2	GLN	27	137.195	111.625	-59.227	1.00	60.46	OS15
ATOM	15778	CB	ASP	20	131.519	114.243	-66.521	1.00	88.76	OS15	ATOM	15831	C	GLN	27	139.474	107.457	-62.810	1.00	53.53	OS15
ATOM	15779	CG	ASP	20	131.955	113.352	-65.386	1.00	88.76	OS15	ATOM	15832	O	GLN	27	140.588	107.216	-63.270	1.00	53.53	OS15
ATOM	15780	OD1	ASP	20	131.807	112.117	-65.499	1.00	88.76	OS15	ATOM	15833	N	VAL	28	138.617	106.504	-62.459	1.00	36.91	OS15
ATOM	15781	OD2	ASP	20	132.445	113.894	-64.373	1.00	88.76	OS15	ATOM	15834	CA	VAL	28	138.988	105.103	-62.591	1.00	36.91	OS15
ATOM	15782	C	ASP	20	133.788	115.214	-66.585	1.00	95.45	OS15	ATOM	15835	CB	VAL	28	137.819	104.170	-62.266	1.00	33.75	OS15
ATOM	15783	O	ASP	20	134.236	114.440	-67.433	1.00	95.45	OS15	ATOM	15836	CG1	VAL	28	138.190	102.726	-62.563	1.00	33.75	OS15
ATOM	15784	N	THR	21	134.551	115.777	-65.653	1.00	56.96	OS15	ATOM	15837	CG2	VAL	28	137.473	104.305	-60.802	1.00	33.75	OS15
ATOM	15785	CA	THR	21	135.983	115.509	-65.610	1.00	56.96	OS15	ATOM	15838	C	VAL	28	139.494	104.785	-63.986	1.00	36.91	OS15
ATOM	15786	CB	THR	21	136.822	116.822	-65.642	1.00	52.35	OS15	ATOM	15839	O	VAL	28	140.489	104.070	-64.135	1.00	36.91	OS15
ATOM	15787	OG1	THR	21	136.457	117.666	-64.540	1.00	52.35	OS15	ATOM	15840	N	ALA	29	138.828	105.314	-65.008	1.00	43.89	OS15
ATOM	15788	CG2	THR	21	136.605	117.565	-66.937	1.00	52.35	OS15	ATOM	15841	CA	ALA	29	139.255	105.053	-66.383	1.00	43.89	OS15
ATOM	15789	C	THR	21	136.422	114.714	-64.386	1.00	56.96	OS15	ATOM	15842	CB	ALA	29	138.324	105.756	-67.369	1.00	48.58	OS15
ATOM	15790	O	THR	21	137.493	114.115	-64.396	1.00	56.96	OS15	ATOM	15843	C	ALA	29	140.700	105.515	-66.593	1.00	43.89	OS15
ATOM	15791	N	GLY	22	135.598	114.701	-63.339	1.00	44.02	OS15	ATOM	15844	O	ALA	29	141.555	104.733	-67.028	1.00	43.89	OS15
ATOM	15792	CA	GLY	22	135.971	114.002	-62.119	1.00	44.02	OS15	ATOM	15845	N	LEU	30	140.955	106.781	-66.264	1.00	48.71	OS15
ATOM	15793	C	GLY	22	135.011	112.977	-61.550	1.00	44.02	OS15	ATOM	15846	CA	LEU	30	142.279	107.394	-66.392	1.00	48.71	OS15
ATOM	15794	O	GLY	22	135.026	112.724	-60.351	1.00	44.02	OS15	ATOM	15847	CB	LEU	30	142.243	108.834	-65.870	1.00	57.50	OS15
ATOM	15795	N	SER	23	134.165	112.387	-62.382	1.00	69.44	OS15	ATOM	15848	CG	LEU	30	141.517	109.902	-66.693	1.00	57.50	OS15
ATOM	15796	CA	SER	23	133.257	111.374	-61.878	1.00	69.44	OS15	ATOM	15849	CD1	LEU	30	140.163	109.384	-67.100	1.00	57.50	OS15
ATOM	15797	CB	SER	23	132.194	111.023	-62.913	1.00	120.31	OS15	ATOM	15850	CD2	LEU	30	141.366	111.181	-65.882	1.00	57.50	OS15
ATOM	15798	OG	SER	23	131.266	112.077	-63.052	1.00	120.31	OS15	ATOM	15851	C	LEU	30	143.365	106.610	-65.646	1.00	48.71	OS15
ATOM	15799	C	SER	23	134.114	110.158	-61.622	1.00	69.44	OS15	ATOM	15852	O	LEU	30	144.487	106.465	-66.141	1.00	48.71	OS15
ATOM	15800	O	SER	23	135.074	109.917	-62.348	1.00	69.44	OS15	ATOM	15853	N	LEU	31	143.034	106.120	-64.453	1.00	61.36	OS15
ATOM	15801	N	THR	24	133.781	109.396	-60.592	1.00	55.95	OS15	ATOM	15854	CA	LEU	31	143.974	105.332	-63.660	1.00	61.36	OS15
ATOM	15802	CA	THR	24	134.535	108.196	-60.290	1.00	55.95	OS15	ATOM	15855	CB	LEU	31	143.400	105.048	-62.282	1.00	55.98	OS15
ATOM	15803	CB	THR	24	133.773	107.303	-59.352	1.00	40.61	OS15	ATOM	15856	CG	LEU	31	143.384	106.248	-61.352	1.00	55.98	OS15
ATOM	15804	OG1	THR	24	133.363	108.065	-58.213	1.00	40.61	OS15	ATOM	15857	CD1	LEU	31	142.510	105.947	-60.153	1.00	55.98	OS15
ATOM	15805	CG2	THR	24	134.639	106.152	-58.913	1.00	40.61	OS15	ATOM	15858	CD2	LEU	31	144.804	106.565	-60.938	1.00	55.98	OS15
ATOM	15806	C	THR	24	134.806	107.404	-61.562	1.00	55.95	OS15	ATOM	15859	C	LEU	31	144.239	104.012	-64.356	1.00	61.36	OS15
ATOM	15807	O	THR	24	135.924	106.952	-61.791	1.00	55.95	OS15	ATOM	15860	O	LEU	31	145.370	103.537	-64.410	1.00	61.36	OS15
ATOM	15808	N	GLU	25	133.787	107.230	-62.393	1.00	66.07	OS15	ATOM	15861	N	THR	32	143.182	103.412	-64.881	1.00	53.08	OS15
ATOM	15809	CA	GLU	25	133.978	106.493	-63.634	1.00	66.07	OS15	ATOM	15862	CA	THR	32	143.325	102.153	-65.578	1.00	53.08	OS15
ATOM	15810	CB	GLU	25	132.757	106.618	-64.555	1.00	59.43	OS15	ATOM	15863	CB	THR	32	141.987	101.666	-66.084	1.00	49.56	OS15
ATOM	15811	CG	GLU	25	131.621	105.648	-64.265	1.00	59.43	OS15	ATOM	15864	OG1	THR	32	141.007	101.882	-65.064	1.00	49.56	OS15
ATOM	15812	CD	GLU	25	130.784	106.053	-63.068	1.00	59.43	OS15	ATOM	15865	CG2	THR	32	142.062	100.172	-66.424	1.00	49.56	OS15

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ATOM  15866  C   THR  32     144.248 102.362 -66.763  1.00 53.08      OS15
ATOM  15867  O   THR  32     145.012 101.470 -67.135  1.00 53.08      OS15
ATOM  15868  N   LEU  33     144.179 103.548 -67.352  1.00 45.30      OS15
ATOM  15869  CA  LEU  33     145.021 103.850 -68.493  1.00 45.30      OS15
ATOM  15870  CB  LEU  33     144.552 105.142 -69.169  1.00 45.27      OS15
ATOM  15871  CG  LEU  33     145.067 105.444 -70.581  1.00 45.27      OS15
ATOM  15872  CD1 LEU  33     144.465 106.742 -71.037  1.00 45.27      OS15
ATOM  15873  CD2 LEU  33     146.582 105.542 -70.607  1.00 45.27      OS15
ATOM  15874  C   LEU  33     146.481 103.979 -68.055  1.00 45.30      OS15
ATOM  15875  O   LEU  33     147.377 103.392 -68.669  1.00 45.30      OS15
ATOM  15876  N   ARG  34     146.725 104.744 -66.997  1.00 37.52      OS15
ATOM  15877  CA  ARG  34     148.090 104.921 -66.521  1.00 37.52      OS15
ATOM  15878  CB  ARG  34     148.149 105.947 -65.387  1.00 65.34      OS15
ATOM  15879  CG  ARG  34     147.677 107.336 -65.771  1.00 65.34      OS15
ATOM  15880  CD  ARG  34     147.964 108.329 -64.663  1.00 65.34      OS15
ATOM  15881  NE  ARG  34     149.401 108.499 -64.471  1.00 65.34      OS15
ATOM  15882  CZ  ARG  34     150.011 108.466 -63.290  1.00 65.34      OS15
ATOM  15883  NH1 ARG  34     149.307 108.267 -62.178  1.00 65.34      OS15
ATOM  15884  NH2 ARG  34     151.326 108.625 -63.222  1.00 65.34      OS15
ATOM  15885  C   ARG  34     148.664 103.598 -66.033  1.00 37.52      OS15
ATOM  15886  O   ARG  34     149.832 103.300 -66.274  1.00 37.52      OS15
ATOM  15887  N   ILE  35     147.843 102.810 -65.346  1.00 32.49      OS15
ATOM  15888  CA  ILE  35     148.285 101.531 -64.834  1.00 32.49      OS15
ATOM  15889  CB  ILE  35     147.158 100.808 -64.086  1.00 34.36      OS15
ATOM  15890  CG2 ILE  35     147.583  99.396 -63.725  1.00 34.36      OS15
ATOM  15891  CG1 ILE  35     146.808 101.586 -62.819  1.00 34.36      OS15
ATOM  15892  CD1 ILE  35     145.848 100.853 -61.884  1.00 34.36      OS15
ATOM  15893  C   ILE  35     148.754 100.653 -65.979  1.00 32.49      OS15
ATOM  15894  O   ILE  35     149.906 100.198 -66.009  1.00 32.49      OS15
ATOM  15895  N   ASN  36     147.868 100.419 -66.936  1.00 48.88      OS15
ATOM  15896  CA  ASN  36     148.215  99.583 -68.063  1.00 48.88      OS15
ATOM  15897  CB  ASN  36     147.076  99.599 -69.051  1.00 51.19      OS15
ATOM  15898  CG  ASN  36     145.888  98.831 -68.534  1.00 51.19      OS15
ATOM  15899  OD1 ASN  36     144.805  98.875 -69.108  1.00 51.19      OS15
ATOM  15900  ND2 ASN  36     146.093  98.103 -67.438  1.00 51.19      OS15
ATOM  15901  C   ASN  36     149.526  99.979 -68.701  1.00 48.88      OS15
ATOM  15902  O   ASN  36     150.348  99.119 -68.989  1.00 48.88      OS15
ATOM  15903  N   ARG  37     149.736 101.273 -68.904  1.00 45.34      OS15
ATOM  15904  CA  ARG  37     150.995 101.738 -69.474  1.00 45.34      OS15
ATOM  15905  CB  ARG  37     151.020 103.260 -69.591  1.00 74.76      OS15
ATOM  15906  CG  ARG  37     150.031 103.835 -70.567  1.00 74.76      OS15
ATOM  15907  CD  ARG  37     150.188 103.209 -71.938  1.00 74.76      OS15
ATOM  15908  NE  ARG  37     149.615 104.047 -72.988  1.00 74.76      OS15
ATOM  15909  CZ  ARG  37     150.222 105.110 -73.506  1.00 74.76      OS15
ATOM  15910  NH1 ARG  37     151.431 105.466 -73.077  1.00 74.76      OS15
ATOM  15911  NH2 ARG  37     149.615 105.827 -74.444  1.00 74.76      OS15
ATOM  15912  C   ARG  37     152.141 101.309 -68.560  1.00 45.34      OS15
ATOM  15913  O   ARG  37     153.118 100.706 -69.010  1.00 45.34      OS15
ATOM  15914  N   LEU  38     152.014 101.625 -67.272  1.00 36.36      OS15
ATOM  15915  CA  LEU  38     153.050 101.294 -66.303  1.00 36.36      OS15
ATOM  15916  CB  LEU  38     152.687 101.807 -64.906  1.00 57.95      OS15
ATOM  15917  CG  LEU  38     153.834 102.440 -64.103  1.00 57.95      OS15
ATOM  15918  CD1 LEU  38     153.352 102.783 -62.714  1.00 57.95      OS15
ATOM  15919  CD2 LEU  38     155.009 101.491 -64.024  1.00 57.95      OS15
ATOM  15920  C   LEU  38     153.260  99.806 -66.251  1.00 36.36      OS15
ATOM  15921  O   LEU  38     154.386  99.346 -66.374  1.00 36.36      OS15
ATOM  15922  N   SER  39     152.182  99.054 -66.056  1.00 39.58      OS15
ATOM  15923  CA  SER  39     152.279  97.595 -66.007  1.00 39.58      OS15
ATOM  15924  CB  SER  39     150.890  96.961 -66.049  1.00 82.12      OS15
ATOM  15925  OG  SER  39     150.129  97.334 -64.919  1.00 82.12      OS15
ATOM  15926  C   SER  39     153.078  97.128 -67.219  1.00 39.58      OS15
ATOM  15927  O   SER  39     153.891  96.202 -67.129  1.00 39.58      OS15
ATOM  15928  N   GLU  40     152.826  97.796 -68.344  1.00 57.16      OS15
ATOM  15929  CA  GLU  40     153.486  97.515 -69.606  1.00 57.16      OS15
ATOM  15930  CB  GLU  40     152.883  98.379 -70.708  1.00104.78      OS15
ATOM  15931  CG  GLU  40     153.034  97.797 -72.084  1.00104.78      OS15
ATOM  15932  CD  GLU  40     152.319  96.470 -72.213  1.00104.78      OS15
ATOM  15933  OE1 GLU  40     152.317  95.900 -73.324  1.00104.78      OS15
ATOM  15934  OE2 GLU  40     151.758  95.996 -71.201  1.00104.78      OS15
ATOM  15935  C   GLU  40     154.958  97.847 -69.449  1.00 57.16      OS15
ATOM  15936  O   GLU  40     155.812  96.961 -69.477  1.00 57.16      OS15
ATOM  15937  N   HIS  41     155.249  99.135 -69.289  1.00 48.16      OS15
ATOM  15938  CA  HIS  41     156.617  99.606 -69.099  1.00 48.16      OS15
ATOM  15939  CB  HIS  41     156.607 100.964 -68.390  1.00 58.85      OS15
ATOM  15940  CG  HIS  41     157.933 101.362 -67.818  1.00 58.85      OS15
ATOM  15941  CD2 HIS  41     158.342 101.515 -66.536  1.00 58.85      OS15
ATOM  15942  ND1 HIS  41     159.027 101.658 -68.603  1.00 58.85      OS15
ATOM  15943  CE1 HIS  41     160.051 101.980 -67.832  1.00 58.85      OS15
ATOM  15944  NE2 HIS  41     159.662 101.901 -66.573  1.00 58.85      OS15
ATOM  15945  C   HIS  41     157.392  98.607 -68.251  1.00 48.16      OS15
ATOM  15946  O   HIS  41     158.509  98.242 -68.583  1.00 48.16      OS15
ATOM  15947  N   LEU  42     156.774  98.161 -67.163  1.00 39.15      OS15
ATOM  15948  CA  LEU  42     157.393  97.232 -66.239  1.00 39.15      OS15
ATOM  15949  CB  LEU  42     156.667  97.286 -64.894  1.00 51.25      OS15
ATOM  15950  CG  LEU  42     156.806  98.574 -64.079  1.00 51.25      OS15
ATOM  15951  CD1 LEU  42     155.957  98.477 -62.815  1.00 51.25      OS15
ATOM  15952  CD2 LEU  42     158.265  98.803 -63.722  1.00 51.25      OS15
ATOM  15953  C   LEU  42     157.522  95.778 -66.693  1.00 39.15      OS15
ATOM  15954  O   LEU  42     158.220  94.993 -66.036  1.00 39.15      OS15
ATOM  15955  N   LYS  43     156.861  95.391 -67.784  1.00 49.75      OS15
ATOM  15956  CA  LYS  43     156.997  94.005 -68.254  1.00 49.75      OS15
ATOM  15957  CB  LYS  43     156.078  93.722 -69.448  1.00101.17      OS15
ATOM  15958  CG  LYS  43     154.600  93.654 -69.074  1.00101.17      OS15
ATOM  15959  CD  LYS  43     153.740  93.141 -70.221  1.00101.17      OS15
ATOM  15960  CE  LYS  43     152.246  93.335 -69.944  1.00101.17      OS15
ATOM  15961  NZ  LYS  43     151.770  92.637 -68.716  1.00101.17      OS15
ATOM  15962  C   LYS  43     158.462  93.884 -68.644  1.00 49.75      OS15
ATOM  15963  O   LYS  43     159.076  92.825 -68.543  1.00 49.75      OS15
ATOM  15964  N   VAL  44     158.997  95.012 -69.086  1.00 69.03      OS15
ATOM  15965  CA  VAL  44     160.395  95.164 -69.438  1.00 69.03      OS15
ATOM  15966  CB  VAL  44     160.553  96.006 -70.697  1.00 38.14      OS15
ATOM  15967  CG1 VAL  44     161.984  95.917 -71.200  1.00 38.14      OS15
ATOM  15968  CG2 VAL  44     159.533  95.585 -71.731  1.00 38.14      OS15
ATOM  15969  C   VAL  44     160.801  96.034 -68.253  1.00 69.03      OS15
ATOM  15970  O   VAL  44     159.927  96.566 -67.574  1.00 69.03      OS15
ATOM  15971  N   HIS  45     162.088  96.205 -67.982  1.00 68.69      OS15
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ATOM	15972	CA	HIS	45	162.476	97.045	-66.842	1.00	68.69	OS15	ATOM	16025	C	HIS	50	159.752	103.313	-58.773	1.00	43.19	OS15
ATOM	15973	CB	HIS	45	161.919	98.458	-67.021	1.00	60.55	OS15	ATOM	16026	O	HIS	50	158.850	103.829	-58.123	1.00	43.19	OS15
ATOM	15974	CG	HIS	45	162.289	99.085	-68.322	1.00	60.55	OS15	ATOM	16027	N	SER	51	159.632	102.981	-60.053	1.00	37.44	OS15
ATOM	15975	CD2	HIS	45	163.045	100.172	-68.607	1.00	60.55	OS15	ATOM	16028	CA	SER	51	158.395	103.219	-60.780	1.00	37.44	OS15
ATOM	15976	ND1	HIS	45	161.890	98.566	-69.533	1.00	60.55	OS15	ATOM	16029	CB	SER	51	158.618	103.011	-62.279	1.00	36.76	OS15
ATOM	15977	CE1	HIS	45	162.385	99.307	-70.509	1.00	60.55	OS15	ATOM	16030	OG	SER	51	159.321	104.106	-62.846	1.00	36.76	OS15
ATOM	15978	NE2	HIS	45	163.091	100.288	-69.975	1.00	60.55	OS15	ATOM	16031	C	SER	51	157.308	102.276	-60.273	1.00	37.44	OS15
ATOM	15979	C	HIS	45	161.978	96.478	-65.508	1.00	68.69	OS15	ATOM	16032	O	SER	51	156.128	102.632	-60.218	1.00	37.44	OS15
ATOM	15980	O	HIS	45	161.441	97.196	-64.665	1.00	68.69	OS15	ATOM	16033	N	HIS	52	157.717	101.076	-59.884	1.00	46.60	OS15
ATOM	15981	N	LYS	46	162.164	95.183	-65.319	1.00	60.17	OS15	ATOM	16034	CA	HIS	52	156.788	100.077	-59.397	1.00	46.60	OS15
ATOM	15982	CA	LYS	46	161.735	94.543	-64.097	1.00	60.17	OS15	ATOM	16035	CB	HIS	52	157.545	98.796	-59.067	1.00	41.22	OS15
ATOM	15983	CB	LYS	46	161.879	93.031	-64.248	1.00	70.84	OS15	ATOM	16036	CG	HIS	52	156.672	97.705	-58.540	1.00	41.22	OS15
ATOM	15984	CG	LYS	46	161.138	92.498	-65.455	1.00	70.84	OS15	ATOM	16037	CD2	HIS	52	155.762	96.918	-59.158	1.00	41.22	OS15
ATOM	15985	CD	LYS	46	161.234	90.992	-65.568	1.00	70.84	OS15	ATOM	16038	ND1	HIS	52	156.649	97.348	-57.210	1.00	41.22	OS15
ATOM	15986	CE	LYS	46	160.421	90.492	-66.754	1.00	70.84	OS15	ATOM	16039	CE1	HIS	52	155.761	96.387	-57.031	1.00	41.22	OS15
ATOM	15987	NZ	LYS	46	160.473	89.009	-66.875	1.00	70.84	OS15	ATOM	16040	NE2	HIS	52	155.208	96.109	-58.198	1.00	41.22	OS15
ATOM	15988	C	LYS	46	162.554	95.047	-62.912	1.00	60.17	OS15	ATOM	16041	C	HIS	52	155.990	100.559	-58.183	1.00	46.60	OS15
ATOM	15989	O	LYS	46	162.301	94.671	-61.768	1.00	60.17	OS15	ATOM	16042	O	HIS	52	154.804	100.225	-58.025	1.00	46.60	OS15
ATOM	15990	N	LYS	47	163.527	95.907	-63.194	1.00	59.06	OS15	ATOM	16043	N	ARG	53	156.631	101.327	-57.311	1.00	49.50	OS15
ATOM	15991	CA	LYS	47	164.400	96.461	-62.162	1.00	59.06	OS15	ATOM	16044	CA	ARG	53	155.918	101.850	-56.158	1.00	49.50	OS15
ATOM	15992	CB	LYS	47	165.820	96.569	-62.688	1.00	73.28	OS15	ATOM	16045	CB	ARG	53	156.870	102.629	-55.249	1.00	35.03	OS15
ATOM	15993	CG	LYS	47	166.545	95.274	-62.922	1.00	73.28	OS15	ATOM	16046	CG	ARG	53	156.182	103.615	-54.342	1.00	35.03	OS15
ATOM	15994	CD	LYS	47	167.783	95.603	-63.745	1.00	73.28	OS15	ATOM	16047	CD	ARG	53	156.950	103.813	-53.066	1.00	35.03	OS15
ATOM	15995	CE	LYS	47	168.827	94.520	-63.704	1.00	73.28	OS15	ATOM	16048	NE	ARG	53	156.378	104.869	-52.228	1.00	35.03	OS15
ATOM	15996	NZ	LYS	47	169.971	94.842	-64.609	1.00	73.28	OS15	ATOM	16049	CZ	ARG	53	156.412	106.165	-52.528	1.00	35.03	OS15
ATOM	15997	C	LYS	47	163.965	97.846	-61.691	1.00	59.06	OS15	ATOM	16050	NH1	ARG	53	156.994	106.570	-53.651	1.00	35.03	OS15
ATOM	15998	O	LYS	47	164.288	98.265	-60.577	1.00	59.06	OS15	ATOM	16051	NH2	ARG	53	155.870	107.054	-51.703	1.00	35.03	OS15
ATOM	15999	N	ASP	48	163.257	98.567	-62.551	1.00	40.86	OS15	ATOM	16052	C	ARG	53	154.828	102.767	-56.715	1.00	49.50	OS15
ATOM	16000	CA	ASP	48	162.790	99.901	-62.205	1.00	40.86	OS15	ATOM	16053	O	ARG	53	153.703	102.792	-56.225	1.00	49.50	OS15
ATOM	16001	CB	ASP	48	162.187	100.575	-63.446	1.00	43.68	OS15	ATOM	16054	N	GLY	54	155.172	103.507	-57.760	1.00	48.92	OS15
ATOM	16002	CG	ASP	48	161.656	101.967	-63.166	1.00	43.68	OS15	ATOM	16055	CA	GLY	54	154.209	104.392	-58.366	1.00	48.92	OS15
ATOM	16003	OD1	ASP	48	161.997	102.542	-62.118	1.00	43.68	OS15	ATOM	16056	C	GLY	54	152.984	103.597	-58.764	1.00	48.92	OS15
ATOM	16004	OD2	ASP	48	160.903	102.492	-64.009	1.00	43.68	OS15	ATOM	16057	O	GLY	54	151.859	104.067	-58.591	1.00	48.92	OS15
ATOM	16005	C	ASP	48	161.756	99.789	-61.089	1.00	40.86	OS15	ATOM	16058	N	LEU	55	153.198	102.393	-59.294	1.00	37.61	OS15
ATOM	16006	O	ASP	48	160.563	99.993	-61.312	1.00	40.86	OS15	ATOM	16059	CA	LEU	55	152.097	101.541	-59.719	1.00	37.61	OS15
ATOM	16007	N	HIS	49	162.230	99.458	-59.890	1.00	48.19	OS15	ATOM	16060	CB	LEU	55	152.622	100.317	-60.456	1.00	24.02	OS15
ATOM	16008	CA	HIS	49	161.367	99.306	-58.729	1.00	48.19	OS15	ATOM	16061	CG	LEU	55	151.552	99.322	-60.924	1.00	24.02	OS15
ATOM	16009	CB	HIS	49	162.159	98.779	-57.550	1.00	42.31	OS15	ATOM	16062	CD1	LEU	55	151.213	99.550	-62.380	1.00	24.02	OS15
ATOM	16010	CG	HIS	49	162.908	97.522	-57.839	1.00	42.31	OS15	ATOM	16063	CD2	LEU	55	152.073	97.934	-60.754	1.00	24.02	OS15
ATOM	16011	CD2	HIS	49	164.197	97.180	-57.611	1.00	42.31	OS15	ATOM	16064	C	LEU	55	151.282	101.081	-58.520	1.00	37.61	OS15
ATOM	16012	ND1	HIS	49	162.311	96.416	-58.398	1.00	42.31	OS15	ATOM	16065	O	LEU	55	150.054	101.151	-58.533	1.00	37.61	OS15
ATOM	16013	CE1	HIS	49	163.202	95.445	-58.503	1.00	42.31	OS15	ATOM	16066	N	LEU	56	151.970	100.598	-57.489	1.00	54.04	OS15
ATOM	16014	NE2	HIS	49	164.354	95.883	-58.031	1.00	42.31	OS15	ATOM	16067	CA	LEU	56	151.308	100.132	-56.275	1.00	54.04	OS15
ATOM	16015	C	HIS	49	160.762	100.635	-58.326	1.00	48.19	OS15	ATOM	16068	CB	LEU	56	152.336	99.850	-55.190	1.00	40.64	OS15
ATOM	16016	O	HIS	49	159.619	100.704	-57.870	1.00	48.19	OS15	ATOM	16069	CG	LEU	56	152.553	98.374	-54.881	1.00	40.64	OS15
ATOM	16017	N	HIS	50	161.546	101.695	-58.476	1.00	43.19	OS15	ATOM	16070	CD1	LEU	56	152.636	97.571	-56.161	1.00	40.64	OS15
ATOM	16018	CA	HIS	50	161.070	103.014	-58.122	1.00	43.19	OS15	ATOM	16071	CD2	LEU	56	153.821	98.225	-54.077	1.00	40.64	OS15
ATOM	16019	CB	HIS	50	162.098	104.061	-58.501	1.00	53.46	OS15	ATOM	16072	C	LEU	56	150.340	101.170	-55.772	1.00	54.04	OS15
ATOM	16020	CG	HIS	50	163.223	104.145	-57.528	1.00	53.46	OS15	ATOM	16073	O	LEU	56	149.280	100.845	-55.250	1.00	54.04	OS15
ATOM	16021	CD2	HIS	50	163.676	105.171	-56.771	1.00	53.46	OS15	ATOM	16074	N	MET	57	150.721	102.427	-55.934	1.00	51.89	OS15
ATOM	16022	ND1	HIS	50	163.982	103.049	-57.184	1.00	53.46	OS15	ATOM	16075	CA	MET	57	149.890	103.527	-55.498	1.00	51.89	OS15
ATOM	16023	CE1	HIS	50	164.852	103.394	-56.253	1.00	53.46	OS15	ATOM	16076	CB	MET	57	150.716	104.807	-55.428	1.00	41.46	OS15
ATOM	16024	NE2	HIS	50	164.687	104.677	-55.985	1.00	53.46	OS15	ATOM	16077	CG	MET	57	151.953	104.666	-54.574	1.00	41.46	OS15

ATOM	16078	SD	MET	57	152.596	106.250	-54.005	1.00	41.46	OS15	ATOM	16131	O	ARG	63	139.006	100.133	-54.489	1.00	42.04	OS15
ATOM	16079	CE	MET	57	153.371	106.887	-55.465	1.00	41.46	OS15	ATOM	16132	N	ARG	64	140.563	101.729	-54.268	1.00	34.27	OS15
ATOM	16080	C	MET	57	148.694	103.723	-56.423	1.00	51.89	OS15	ATOM	16133	CA	ARG	64	139.837	102.452	-53.238	1.00	34.27	OS15
ATOM	16081	O	MET	57	147.576	103.936	-55.955	1.00	51.89	OS15	ATOM	16134	CB	ARG	64	140.835	103.337	-52.487	1.00	62.88	OS15
ATOM	16082	N	MET	58	148.921	103.656	-57.732	1.00	43.49	OS15	ATOM	16135	CG	ARG	64	140.422	103.702	-51.090	1.00	62.88	OS15
ATOM	16083	CA	MET	58	147.834	103.827	-58.690	1.00	43.49	OS15	ATOM	16136	CD	ARG	64	141.637	104.029	-50.238	1.00	62.88	OS15
ATOM	16084	CB	MET	58	148.373	103.758	-60.123	1.00	65.87	OS15	ATOM	16137	NE	ARG	64	142.598	104.887	-50.922	1.00	62.88	OS15
ATOM	16085	CG	MET	58	149.664	104.540	-60.300	1.00	65.87	OS15	ATOM	16138	CZ	ARG	64	143.725	104.446	-51.470	1.00	62.88	OS15
ATOM	16086	SD	MET	58	150.054	105.057	-61.981	1.00	65.87	OS15	ATOM	16139	NH1	ARG	64	144.030	103.155	-51.409	1.00	62.88	OS15
ATOM	16087	CE	MET	58	150.135	103.491	-62.830	1.00	65.87	OS15	ATOM	16140	NH2	ARG	64	144.548	105.291	-52.079	1.00	62.88	OS15
ATOM	16088	C	MET	58	146.812	102.725	-58.444	1.00	43.49	OS15	ATOM	16141	C	ARG	64	138.646	103.268	-53.789	1.00	34.27	OS15
ATOM	16089	O	MET	58	145.638	102.986	-58.176	1.00	43.49	OS15	ATOM	16142	O	ARG	64	137.644	103.461	-53.098	1.00	34.27	OS15
ATOM	16090	N	VAL	59	147.273	101.485	-58.517	1.00	44.42	OS15	ATOM	16143	N	LEU	65	138.757	103.749	-55.027	1.00	52.75	OS15
ATOM	16091	CA	VAL	59	146.401	100.355	-58.286	1.00	44.42	OS15	ATOM	16144	CA	LEU	65	137.673	104.505	-55.648	1.00	52.75	OS15
ATOM	16092	CB	VAL	59	147.204	99.041	-58.258	1.00	31.82	OS15	ATOM	16145	CB	LEU	65	138.160	105.216	-56.913	1.00	50.45	OS15
ATOM	16093	CG1	VAL	59	146.390	97.911	-57.606	1.00	31.82	OS15	ATOM	16146	CG	LEU	65	138.809	106.597	-56.765	1.00	50.45	OS15
ATOM	16094	CG2	VAL	59	147.577	98.666	-59.681	1.00	31.82	OS15	ATOM	16147	CD1	LEU	65	139.307	107.068	-58.108	1.00	50.45	OS15
ATOM	16095	C	VAL	59	145.702	100.563	-56.965	1.00	44.42	OS15	ATOM	16148	CD2	LEU	65	137.808	107.592	-56.216	1.00	50.45	OS15
ATOM	16096	O	VAL	59	144.525	100.255	-56.818	1.00	44.42	OS15	ATOM	16149	C	LEU	65	136.548	103.537	-56.002	1.00	52.75	OS15
ATOM	16097	N	GLY	60	146.433	101.107	-56.006	1.00	48.86	OS15	ATOM	16150	O	LEU	65	135.381	103.807	-55.739	1.00	52.75	OS15
ATOM	16098	CA	GLY	60	145.849	101.349	-54.701	1.00	48.86	OS15	ATOM	16151	N	LEU	66	136.902	102.408	-56.603	1.00	48.67	OS15
ATOM	16099	C	GLY	60	144.667	102.300	-54.744	1.00	48.86	OS15	ATOM	16152	CA	LEU	66	135.913	101.406	-56.958	1.00	48.67	OS15
ATOM	16100	O	GLY	60	143.562	101.937	-54.334	1.00	48.86	OS15	ATOM	16153	CB	LEU	66	136.579	100.196	-57.587	1.00	42.99	OS15
ATOM	16101	N	GLN	61	144.907	103.512	-55.245	1.00	69.27	OS15	ATOM	16154	CG	LEU	66	137.313	100.432	-58.889	1.00	42.99	OS15
ATOM	16102	CA	GLN	61	143.881	104.545	-55.346	1.00	69.27	OS15	ATOM	16155	CD1	LEU	66	137.626	99.090	-59.487	1.00	42.99	OS15
ATOM	16103	CB	GLN	61	144.469	105.806	-55.980	1.00	62.29	OS15	ATOM	16156	CD2	LEU	66	136.448	101.236	-59.844	1.00	42.99	OS15
ATOM	16104	CG	GLN	61	143.561	107.035	-55.958	1.00	62.29	OS15	ATOM	16157	C	LEU	66	135.167	100.942	-55.720	1.00	48.67	OS15
ATOM	16105	CD	GLN	61	143.181	107.475	-54.548	1.00	62.29	OS15	ATOM	16158	O	LEU	66	133.958	100.721	-55.755	1.00	48.67	OS15
ATOM	16106	OE1	GLN	61	143.949	107.304	-53.598	1.00	62.29	OS15	ATOM	16159	N	ARG	67	135.899	100.768	-54.626	1.00	47.83	OS15
ATOM	16107	NE2	GLN	61	141.994	108.062	-54.412	1.00	62.29	OS15	ATOM	16160	CA	ARG	67	135.287	100.328	-53.384	1.00	47.83	OS15
ATOM	16108	C	GLN	61	142.682	104.075	-56.157	1.00	69.27	OS15	ATOM	16161	CB	ARG	67	136.326	100.286	-52.276	1.00	83.29	OS15
ATOM	16109	O	GLN	61	141.541	104.355	-55.802	1.00	69.27	OS15	ATOM	16162	CG	ARG	67	135.735	100.054	-50.920	1.00	83.29	OS15
ATOM	16110	N	ARG	62	142.928	103.361	-57.249	1.00	44.43	OS15	ATOM	16163	CD	ARG	67	136.755	100.349	-49.855	1.00	83.29	OS15
ATOM	16111	CA	ARG	62	141.818	102.893	-58.060	1.00	44.43	OS15	ATOM	16164	NE	ARG	67	137.640	99.221	-49.605	1.00	83.29	OS15
ATOM	16112	CB	ARG	62	142.319	102.198	-59.326	1.00	45.48	OS15	ATOM	16165	CZ	ARG	67	138.877	99.342	-49.137	1.00	83.29	OS15
ATOM	16113	CG	ARG	62	141.210	101.798	-60.281	1.00	45.48	OS15	ATOM	16166	NH1	ARG	67	139.372	100.553	-48.882	1.00	83.29	OS15
ATOM	16114	CD	ARG	62	141.754	101.217	-61.578	1.00	45.48	OS15	ATOM	16167	NH2	ARG	67	139.609	98.255	-48.902	1.00	83.29	OS15
ATOM	16115	NE	ARG	62	142.380	99.916	-61.379	1.00	45.48	OS15	ATOM	16168	C	ARG	67	134.179	101.300	-53.018	1.00	47.83	OS15
ATOM	16116	CZ	ARG	62	142.828	99.148	-62.368	1.00	45.48	OS15	ATOM	16169	O	ARG	67	133.124	100.907	-52.522	1.00	47.83	OS15
ATOM	16117	NH1	ARG	62	142.719	99.548	-63.625	1.00	45.48	OS15	ATOM	16170	N	TYR	68	134.432	102.574	-53.284	1.00	55.64	OS15
ATOM	16118	NH2	ARG	62	143.386	97.978	-62.102	1.00	45.48	OS15	ATOM	16171	CA	TYR	68	133.481	103.640	-53.003	1.00	55.64	OS15
ATOM	16119	C	ARG	62	140.992	101.924	-57.239	1.00	44.43	OS15	ATOM	16172	CB	TYR	68	134.159	105.002	-53.161	1.00	56.12	OS15
ATOM	16120	O	ARG	62	139.778	102.060	-57.139	1.00	44.43	OS15	ATOM	16173	CG	TYR	68	133.184	106.143	-53.226	1.00	56.12	OS15
ATOM	16121	N	ARG	63	141.658	100.946	-56.643	1.00	42.04	OS15	ATOM	16174	CD1	TYR	68	132.534	106.590	-52.084	1.00	56.12	OS15
ATOM	16122	CA	ARG	63	140.971	99.948	-55.835	1.00	42.04	OS15	ATOM	16175	CE1	TYR	68	131.582	107.604	-52.150	1.00	56.12	OS15
ATOM	16123	CB	ARG	63	141.989	99.023	-55.155	1.00	112.87	OS15	ATOM	16176	CD2	TYR	68	132.865	106.737	-54.442	1.00	56.12	OS15
ATOM	16124	CG	ARG	63	141.500	98.404	-53.859	1.00	112.87	OS15	ATOM	16177	CE2	TYR	68	131.915	107.749	-54.521	1.00	56.12	OS15
ATOM	16125	CD	ARG	63	142.227	97.120	-53.552	1.00	112.87	OS15	ATOM	16178	CZ	TYR	68	131.276	108.176	-53.372	1.00	56.12	OS15
ATOM	16126	NE	ARG	63	141.957	96.125	-54.586	1.00	112.87	OS15	ATOM	16179	OH	TYR	68	130.318	109.159	-53.445	1.00	56.12	OS15
ATOM	16127	CZ	ARG	63	141.911	94.813	-54.371	1.00	112.87	OS15	ATOM	16180	C	TYR	68	132.279	103.574	-53.931	1.00	55.64	OS15
ATOM	16128	NH1	ARG	63	142.117	94.328	-53.151	1.00	112.87	OS15	ATOM	16181	O	TYR	68	131.189	104.011	-53.568	1.00	55.64	OS15
ATOM	16129	NH2	ARG	63	141.649	93.982	-55.374	1.00	112.87	OS15	ATOM	16182	N	LEU	69	132.486	103.034	-55.128	1.00	55.22	OS15
ATOM	16130	C	ARG	63	140.093	100.610	-54.794	1.00	42.04	OS15	ATOM	16183	CA	LEU	69	131.420	102.921	-56.120	1.00	55.22	OS15

ATOM	16184	CB	LEU	69	132.002	102.539	-57.488	1.00	65.29	OS15	ATOM	16237	CG	GLU	75	123.378	99.946	-62.556	1.00	133.34	OS15
ATOM	16185	CG	LEU	69	131.361	103.131	-58.751	1.00	65.29	OS15	ATOM	16238	CD	GLU	75	123.426	98.536	-63.112	1.00	133.34	OS15
ATOM	16186	CD1	LEU	69	129.908	102.741	-58.823	1.00	65.29	OS15	ATOM	16239	OE1	GLU	75	122.651	97.681	-62.631	1.00	133.34	OS15
ATOM	16187	CD2	LEU	69	131.489	104.635	-58.745	1.00	65.29	OS15	ATOM	16240	OE2	GLU	75	124.239	98.281	-64.028	1.00	133.34	OS15
ATOM	16188	C	LEU	69	130.367	101.904	-55.689	1.00	55.22	OS15	ATOM	16241	C	GLU	75	126.142	99.849	-61.527	1.00	71.97	OS15
ATOM	16189	O	LEU	69	129.191	102.248	-55.640	1.00	55.22	OS15	ATOM	16242	O	GLU	75	126.776	99.115	-62.294	1.00	71.97	OS15
ATOM	16190	N	GLN	70	130.766	100.666	-55.379	1.00	49.80	OS15	ATOM	16243	N	ARG	76	126.402	101.145	-61.378	1.00	66.85	OS15
ATOM	16191	CA	GLN	70	129.792	99.665	-54.938	1.00	49.80	OS15	ATOM	16244	CA	ARG	76	127.478	101.798	-62.107	1.00	66.85	OS15
ATOM	16192	CB	GLN	70	130.440	98.464	-54.282	1.00	77.83	OS15	ATOM	16245	CB	ARG	76	127.654	103.228	-61.625	1.00	68.51	OS15
ATOM	16193	CG	GLN	70	131.269	97.604	-55.147	1.00	77.83	OS15	ATOM	16246	CG	ARG	76	126.535	104.139	-62.034	1.00	68.51	OS15
ATOM	16194	CD	GLN	70	131.893	96.497	-54.332	1.00	77.83	OS15	ATOM	16247	CD	ARG	76	126.975	105.574	-61.912	1.00	68.51	OS15
ATOM	16195	OE1	GLN	70	132.426	96.740	-53.244	1.00	77.83	OS15	ATOM	16248	NE	ARG	76	126.995	106.032	-60.530	1.00	68.51	OS15
ATOM	16196	NE2	GLN	70	131.834	95.273	-54.846	1.00	77.83	OS15	ATOM	16249	CZ	ARG	76	127.719	107.061	-60.103	1.00	68.51	OS15
ATOM	16197	C	GLN	70	128.961	100.317	-53.866	1.00	49.80	OS15	ATOM	16250	NH1	ARG	76	128.490	107.724	-60.951	1.00	68.51	OS15
ATOM	16198	O	GLN	70	127.769	100.556	-54.036	1.00	49.80	OS15	ATOM	16251	NH2	ARG	76	127.653	107.450	-58.837	1.00	68.51	OS15
ATOM	16199	N	ARG	71	129.615	100.595	-52.747	1.00	59.33	OS15	ATOM	16252	C	ARG	76	128.773	101.038	-61.898	1.00	66.85	OS15
ATOM	16200	CA	ARG	71	128.973	101.224	-51.609	1.00	59.33	OS15	ATOM	16253	O	ARG	76	129.628	100.990	-62.779	1.00	66.85	OS15
ATOM	16201	CB	ARG	71	130.033	101.934	-50.772	1.00	75.09	OS15	ATOM	16254	N	TYR	77	128.908	100.444	-60.719	1.00	73.27	OS15
ATOM	16202	CG	ARG	71	129.554	102.403	-49.428	1.00	75.09	OS15	ATOM	16255	CA	TYR	77	130.091	99.671	-60.381	1.00	73.27	OS15
ATOM	16203	CD	ARG	71	130.582	102.075	-48.369	1.00	75.09	OS15	ATOM	16256	CB	TYR	77	129.935	99.048	-58.998	1.00	55.35	OS15
ATOM	16204	NE	ARG	71	131.924	102.553	-48.705	1.00	75.09	OS15	ATOM	16257	CG	TYR	77	131.119	98.210	-58.615	1.00	55.35	OS15
ATOM	16205	CZ	ARG	71	132.259	103.836	-48.844	1.00	75.09	OS15	ATOM	16258	CD1	TYR	77	132.355	98.796	-58.375	1.00	55.35	OS15
ATOM	16206	NH1	ARG	71	131.341	104.791	-48.685	1.00	75.09	OS15	ATOM	16259	CE1	TYR	77	133.474	98.023	-58.104	1.00	55.35	OS15
ATOM	16207	NH2	ARG	71	133.522	104.166	-49.115	1.00	75.09	OS15	ATOM	16260	CD2	TYR	77	131.026	96.826	-58.563	1.00	55.35	OS15
ATOM	16208	C	ARG	71	127.864	102.194	-52.042	1.00	59.33	OS15	ATOM	16261	CE2	TYR	77	132.134	96.045	-58.291	1.00	55.35	OS15
ATOM	16209	O	ARG	71	126.746	102.116	-51.534	1.00	59.33	OS15	ATOM	16262	CZ	TYR	77	133.356	96.647	-58.067	1.00	55.35	OS15
ATOM	16210	N	GLU	72	128.156	103.085	-52.992	1.00	59.21	OS15	ATOM	16263	OH	TYR	77	134.471	95.872	-57.840	1.00	55.35	OS15
ATOM	16211	CA	GLU	72	127.147	104.035	-53.454	1.00	59.21	OS15	ATOM	16264	C	TYR	77	130.314	98.570	-61.412	1.00	73.27	OS15
ATOM	16212	CB	GLU	72	127.800	105.326	-53.937	1.00	92.77	OS15	ATOM	16265	O	TYR	77	131.289	98.600	-62.161	1.00	73.27	OS15
ATOM	16213	CG	GLU	72	128.511	106.082	-52.829	1.00	92.77	OS15	ATOM	16266	N	ARG	78	129.404	97.601	-61.444	1.00	92.96	OS15
ATOM	16214	CD	GLU	72	127.847	105.894	-51.471	1.00	92.77	OS15	ATOM	16267	CA	ARG	78	129.500	96.496	-62.389	1.00	92.96	OS15
ATOM	16215	OE1	GLU	72	126.611	106.060	-51.381	1.00	92.77	OS15	ATOM	16268	CB	ARG	78	128.256	95.616	-62.316	1.00	151.43	OS15
ATOM	16216	OE2	GLU	72	128.564	105.581	-50.492	1.00	92.77	OS15	ATOM	16269	CG	ARG	78	127.990	95.016	-60.960	1.00	151.43	OS15
ATOM	16217	C	GLU	72	126.231	103.471	-54.535	1.00	59.21	OS15	ATOM	16270	CD	ARG	78	126.736	94.176	-61.006	1.00	151.43	OS15
ATOM	16218	O	GLU	72	125.100	103.081	-54.245	1.00	59.21	OS15	ATOM	16271	NE	ARG	78	126.409	93.617	-59.701	1.00	151.43	OS15
ATOM	16219	N	ASP	73	126.690	103.424	-55.779	1.00	56.32	OS15	ATOM	16272	CZ	ARG	78	125.398	92.784	-59.481	1.00	151.43	OS15
ATOM	16220	CA	ASP	73	125.848	102.872	-56.835	1.00	56.32	OS15	ATOM	16273	NH1	ARG	78	124.612	92.410	-60.485	1.00	151.43	OS15
ATOM	16221	CB	ASP	73	125.753	103.850	-58.008	1.00	93.88	OS15	ATOM	16274	NH2	ARG	78	125.174	92.320	-58.258	1.00	151.43	OS15
ATOM	16222	CG	ASP	73	124.797	103.374	-59.086	1.00	93.88	OS15	ATOM	16275	C	ARG	78	129.617	97.055	-63.793	1.00	92.96	OS15
ATOM	16223	OD1	ASP	73	124.978	102.242	-59.583	1.00	93.88	OS15	ATOM	16276	O	ARG	78	130.241	96.451	-64.667	1.00	92.96	OS15
ATOM	16224	OD2	ASP	73	123.866	104.130	-59.438	1.00	93.88	OS15	ATOM	16277	N	ALA	79	129.003	98.214	-64.000	1.00	70.84	OS15
ATOM	16225	C	ASP	73	126.401	101.531	-57.324	1.00	56.32	OS15	ATOM	16278	CA	ALA	79	129.023	98.873	-65.296	1.00	70.84	OS15
ATOM	16226	O	ASP	73	127.242	101.494	-58.220	1.00	56.32	OS15	ATOM	16279	CB	ALA	79	128.106	100.068	-65.270	1.00	34.05	OS15
ATOM	16227	N	PRO	74	125.922	100.409	-56.750	1.00	41.76	OS15	ATOM	16280	C	ALA	79	130.425	99.314	-65.686	1.00	70.84	OS15
ATOM	16228	CD	PRO	74	124.763	100.322	-55.843	1.00	40.36	OS15	ATOM	16281	O	ALA	79	130.864	99.087	-66.815	1.00	70.84	OS15
ATOM	16229	CA	PRO	74	126.385	99.066	-57.139	1.00	41.76	OS15	ATOM	16282	N	LEU	80	131.122	99.944	-64.744	1.00	63.78	OS15
ATOM	16230	CB	PRO	74	125.590	98.147	-56.220	1.00	40.36	OS15	ATOM	16283	CA	LEU	80	132.475	100.438	-64.978	1.00	63.78	OS15
ATOM	16231	CG	PRO	74	124.291	98.899	-56.063	1.00	40.36	OS15	ATOM	16284	CB	LEU	80	132.955	101.268	-63.782	1.00	40.40	OS15
ATOM	16232	C	PRO	74	126.169	98.742	-58.624	1.00	41.76	OS15	ATOM	16285	CG	LEU	80	133.787	102.521	-64.073	1.00	40.40	OS15
ATOM	16233	O	PRO	74	126.799	97.833	-59.171	1.00	41.76	OS15	ATOM	16286	CD1	LEU	80	134.549	102.927	-62.821	1.00	40.40	OS15
ATOM	16234	N	GLU	75	125.277	99.493	-59.269	1.00	71.97	OS15	ATOM	16287	CD2	LEU	80	134.744	102.246	-65.216	1.00	40.40	OS15
ATOM	16235	CA	GLU	75	124.993	99.296	-60.685	1.00	71.97	OS15	ATOM	16288	C	LEU	80	133.441	99.286	-65.204	1.00	63.78	OS15
ATOM	16236	CB	GLU	75	123.684	99.993	-61.067	1.00	133.34	OS15	ATOM	16289	O	LEU	80	134.217	99.291	-66.161	1.00	63.78	OS15

ATOM	16290	N	ILE	81	133.394	98.308	-64.304	1.00	68.47	OS15	ATOM	16343	NH1	ARG	87	137.542	91.012	-57.195	1.00137.40	OS15
ATOM	16291	CA	ILE	81	134.256	97.137	-64.396	1.00	68.47	OS15	ATOM	16344	NH2	ARG	87	135.932	92.451	-56.417	1.00137.40	OS15
ATOM	16292	CB	ILE	81	133.826	96.043	-63.406	1.00	83.50	OS15	ATOM	16345	C	ARG	87	140.201	91.636	-62.880	1.00164.86	OS15
ATOM	16293	CG2	ILE	81	134.576	94.751	-63.694	1.00	83.50	OS15	ATOM	16346	O	ARG	87	141.165	91.931	-63.589	1.00164.86	OS15
ATOM	16294	CG1	ILE	81	134.087	96.501	-61.977	1.00	83.50	OS15	ATOM	16347	N	GLY	88	139.858	90.381	-62.610	1.00169.21	OS15
ATOM	16295	CD1	ILE	81	133.769	95.438	-60.965	1.00	83.50	OS15	ATOM	16348	CA	GLY	88	140.620	89.273	-63.157	1.00169.21	OS15
ATOM	16296	C	ILE	81	134.177	96.554	-65.796	1.00	68.47	OS15	ATOM	16349	C	GLY	88	141.361	88.487	-62.092	1.00169.21	OS15
ATOM	16297	O	ILE	81	135.120	96.669	-66.575	1.00	68.47	OS15	ATOM	16350	O	GLY	88	141.088	87.276	-61.952	1.00169.21	OS15
ATOM	16298	N	GLU	82	133.041	95.929	-66.097	1.00	88.81	OS15	ATOM	16351	OXT	GLY	88	142.214	89.079	-61.396	1.00117.22	OS15
ATOM	16299	CA	GLU	82	132.801	95.309	-67.394	1.00	88.81	OS15	ATOM	16352	CB	MET	1	140.373	113.845	-41.708	1.00119.57	HS8
ATOM	16300	CB	GLU	82	131.294	95.170	-67.626	1.00	151.67	OS15	ATOM	16353	CG	MET	1	138.942	114.380	-41.624	1.00119.57	HS8
ATOM	16301	CG	GLU	82	130.885	94.358	-68.853	1.00	151.67	OS15	ATOM	16354	SD	MET	1	137.707	113.057	-41.512	1.00119.57	HS8
ATOM	16302	CD	GLU	82	131.225	95.040	-70.168	1.00	151.67	OS15	ATOM	16355	CE	MET	1	137.472	112.646	-43.255	1.00119.57	HS8
ATOM	16303	OE1	GLU	82	132.383	94.928	-70.624	1.00	151.67	OS15	ATOM	16356	C	MET	1	141.243	115.413	-39.973	1.00 74.91	HS8
ATOM	16304	OE2	GLU	82	130.330	95.694	-70.745	1.00	151.67	OS15	ATOM	16357	O	MET	1	142.069	115.190	-39.079	1.00 74.91	HS8
ATOM	16305	C	GLU	82	133.425	96.149	-68.498	1.00	88.81	OS15	ATOM	16358	N	MET	1	142.814	114.212	-41.465	1.00 74.91	HS8
ATOM	16306	O	GLU	82	134.268	95.671	-69.261	1.00	88.81	OS15	ATOM	16359	CA	MET	1	141.470	114.869	-41.382	1.00 74.91	HS8
ATOM	16307	N	LYS	83	133.010	97.408	-68.568	1.00	55.05	OS15	ATOM	16360	N	LEU	2	140.145	116.142	-39.771	1.00 60.32	HS8
ATOM	16308	CA	LYS	83	133.514	98.328	-69.573	1.00	55.05	OS15	ATOM	16361	CA	LEU	2	139.853	116.639	-38.428	1.00 60.32	HS8
ATOM	16309	CB	LYS	83	132.891	99.697	-69.347	1.00	52.07	OS15	ATOM	16362	CB	LEU	2	138.932	117.872	-38.452	1.00 56.05	HS8
ATOM	16310	CG	LYS	83	133.137	100.690	-70.444	1.00	52.07	OS15	ATOM	16363	CG	LEU	2	139.591	119.137	-37.869	1.00 56.05	HS8
ATOM	16311	CD	LYS	83	132.310	101.934	-70.183	1.00	52.07	OS15	ATOM	16364	CD1	LEU	2	138.646	120.334	-37.923	1.00 56.05	HS8
ATOM	16312	CE	LYS	83	132.440	102.957	-71.292	1.00	52.07	OS15	ATOM	16365	CD2	LEU	2	140.005	118.863	-36.437	1.00 56.05	HS8
ATOM	16313	NZ	LYS	83	131.533	104.106	-71.021	1.00	52.07	OS15	ATOM	16366	C	LEU	2	139.192	115.460	-37.725	1.00 60.32	HS8
ATOM	16314	C	LYS	83	135.042	98.406	-69.516	1.00	55.05	OS15	ATOM	16367	O	LEU	2	138.116	115.011	-38.091	1.00 60.32	HS8
ATOM	16315	O	LYS	83	135.726	97.823	-70.353	1.00	55.05	OS15	ATOM	16368	N	THR	3	139.882	114.949	-36.724	1.00 45.43	HS8
ATOM	16316	N	LEU	84	135.577	99.113	-68.525	1.00	66.38	OS15	ATOM	16369	CA	THR	3	139.455	113.786	-35.969	1.00 45.43	HS8
ATOM	16317	CA	LEU	84	137.026	99.240	-68.378	1.00	66.38	OS15	ATOM	16370	CB	THR	3	140.733	113.108	-35.410	1.00 50.52	HS8
ATOM	16318	CB	LEU	84	137.381	99.847	-67.024	1.00	64.88	OS15	ATOM	16371	OG1	THR	3	140.393	112.015	-34.566	1.00 50.52	HS8
ATOM	16319	CG	LEU	84	137.494	101.366	-66.933	1.00	64.88	OS15	ATOM	16372	CG2	THR	3	141.550	114.112	-34.634	1.00 50.52	HS8
ATOM	16320	CD1	LEU	84	137.962	101.730	-65.541	1.00	64.88	OS15	ATOM	16373	C	THR	3	138.413	114.080	-34.862	1.00 45.43	HS8
ATOM	16321	CD2	LEU	84	138.480	101.890	-67.965	1.00	64.88	OS15	ATOM	16374	O	THR	3	137.428	113.353	-34.724	1.00 45.43	HS8
ATOM	16322	C	LEU	84	137.750	97.910	-68.494	1.00	66.38	OS15	ATOM	16375	N	ASP	4	138.626	115.140	-34.085	1.00 41.65	HS8
ATOM	16323	O	LEU	84	138.928	97.872	-68.840	1.00	66.38	OS15	ATOM	16376	CA	ASP	4	137.692	115.505	-33.026	1.00 41.65	HS8
ATOM	16324	N	GLY	85	137.046	96.824	-68.185	1.00	75.80	OS15	ATOM	16377	CB	ASP	4	138.260	115.156	-31.652	1.00 78.65	HS8
ATOM	16325	CA	GLY	85	137.645	95.503	-68.241	1.00	75.80	OS15	ATOM	16378	CG	ASP	4	137.230	115.321	-30.539	1.00 78.65	HS8
ATOM	16326	C	GLY	85	138.467	95.184	-67.001	1.00	75.80	OS15	ATOM	16379	OD1	ASP	4	136.445	116.291	-30.579	1.00 78.65	HS8
ATOM	16327	O	GLY	85	139.341	94.316	-67.045	1.00	75.80	OS15	ATOM	16380	OD2	ASP	4	137.205	114.484	-29.616	1.00 78.65	HS8
ATOM	16328	N	ILE	86	138.185	95.875	-65.896	1.00	82.38	OS15	ATOM	16381	C	ASP	4	137.392	117.003	-33.070	1.00 41.65	HS8
ATOM	16329	CA	ILE	86	138.908	95.682	-64.633	1.00	82.38	OS15	ATOM	16382	O	ASP	4	138.119	117.813	-32.487	1.00 41.65	HS8
ATOM	16330	CB	ILE	86	138.693	96.882	-63.674	1.00	81.39	OS15	ATOM	16383	N	PRO	5	136.306	117.395	-33.753	1.00 47.79	HS8
ATOM	16331	CG2	ILE	86	139.241	96.570	-62.291	1.00	81.39	OS15	ATOM	16384	CD	PRO	5	135.404	116.571	-34.570	1.00 47.92	HS8
ATOM	16332	CG1	ILE	86	139.392	98.120	-64.235	1.00	81.39	OS15	ATOM	16385	CA	PRO	5	135.936	118.805	-33.857	1.00 47.79	HS8
ATOM	16333	CD1	ILE	86	139.266	99.341	-63.353	1.00	81.39	OS15	ATOM	16386	CB	PRO	5	134.608	118.745	-34.589	1.00 47.92	HS8
ATOM	16334	C	ILE	86	138.537	94.400	-63.896	1.00	82.38	OS15	ATOM	16387	CG	PRO	5	134.811	117.599	-35.505	1.00 47.92	HS8
ATOM	16335	O	ILE	86	137.449	93.857	-64.081	1.00	82.38	OS15	ATOM	16388	C	PRO	5	135.838	119.523	-32.523	1.00 47.79	HS8
ATOM	16336	N	ARG	87	139.465	93.945	-63.056	1.00	164.86	OS15	ATOM	16389	O	PRO	5	136.270	120.665	-32.401	1.00 47.79	HS8
ATOM	16337	CA	ARG	87	139.336	92.727	-62.259	1.00	164.86	OS15	ATOM	16390	N	ILE	6	135.264	118.848	-31.531	1.00 30.86	HS8
ATOM	16338	CB	ARG	87	137.876	92.265	-62.179	1.00	137.40	OS15	ATOM	16391	CA	ILE	6	135.102	119.408	-30.192	1.00 30.86	HS8
ATOM	16339	CG	ARG	87	137.090	92.870	-61.028	1.00	137.40	OS15	ATOM	16392	CB	ILE	6	134.299	118.475	-29.260	1.00 24.18	HS8
ATOM	16340	CD	ARG	87	137.541	92.258	-59.715	1.00	137.40	OS15	ATOM	16393	CG2	ILE	6	134.314	119.028	-27.836	1.00 24.18	HS8
ATOM	16341	NE	ARG	87	136.702	92.646	-58.585	1.00	137.40	OS15	ATOM	16394	CG1	ILE	6	132.866	118.339	-29.760	1.00 24.18	HS8
ATOM	16342	CZ	ARG	87	136.724	92.038	-57.400	1.00	137.40	OS15	ATOM	16395	CD1	ILE	6	132.196	119.665	-29.982	1.00 24.18	HS8

ATOM	16396	C	ILE	6	136.430	119.643	-29.521	1.00	30.86	HS8	ATOM	16449	CG1	ILE	13	138.068	128.064	-27.536	1.00	23.36	HS8
ATOM	16397	O	ILE	6	136.653	120.688	-28.916	1.00	30.86	HS8	ATOM	16450	CD1	ILE	13	136.744	127.560	-27.013	1.00	23.36	HS8
ATOM	16398	N	ALA	7	137.305	118.653	-29.591	1.00	39.26	HS8	ATOM	16451	C	ILE	13	141.713	128.232	-26.246	1.00	27.33	HS8
ATOM	16399	CA	ALA	7	138.605	118.800	-28.972	1.00	39.26	HS8	ATOM	16452	O	ILE	13	142.185	129.285	-25.799	1.00	27.33	HS8
ATOM	16400	CB	ALA	7	139.371	117.505	-29.040	1.00	14.50	HS8	ATOM	16453	N	ARG	14	142.156	127.039	-25.861	1.00	36.08	HS8
ATOM	16401	C	ALA	7	139.345	119.888	-29.719	1.00	39.26	HS8	ATOM	16454	CA	ARG	14	143.249	126.956	-24.906	1.00	36.08	HS8
ATOM	16402	O	ALA	7	140.052	120.693	-29.125	1.00	39.26	HS8	ATOM	16455	CB	ARG	14	143.613	125.500	-24.624	1.00	32.21	HS8
ATOM	16403	N	ASP	8	139.169	119.933	-31.029	1.00	51.34	HS8	ATOM	16456	CG	ARG	14	144.634	125.329	-23.521	1.00	32.21	HS8
ATOM	16404	CA	ASP	8	139.849	120.959	-31.790	1.00	51.34	HS8	ATOM	16457	CD	ARG	14	145.054	123.866	-23.321	1.00	32.21	HS8
ATOM	16405	CB	ASP	8	139.491	120.876	-33.264	1.00	51.02	HS8	ATOM	16458	NE	ARG	14	143.943	122.916	-23.336	1.00	32.21	HS8
ATOM	16406	CG	ASP	8	140.348	121.788	-34.099	1.00	51.02	HS8	ATOM	16459	CZ	ARG	14	143.579	122.212	-24.409	1.00	32.21	HS8
ATOM	16407	OD1	ASP	8	141.572	121.531	-34.193	1.00	51.02	HS8	ATOM	16460	NH1	ARG	14	144.247	122.352	-25.549	1.00	32.21	HS8
ATOM	16408	OD2	ASP	8	139.805	122.767	-34.644	1.00	51.02	HS8	ATOM	16461	NH2	ARG	14	142.542	121.375	-24.355	1.00	32.21	HS8
ATOM	16409	C	ASP	8	139.485	122.341	-31.274	1.00	51.34	HS8	ATOM	16462	C	ARG	14	144.447	127.668	-25.519	1.00	36.08	HS8
ATOM	16410	O	ASP	8	140.344	123.210	-31.147	1.00	51.34	HS8	ATOM	16463	O	ARG	14	145.104	128.454	-24.861	1.00	36.08	HS8
ATOM	16411	N	MET	9	138.209	122.536	-30.968	1.00	45.41	HS8	ATOM	16464	N	ASN	15	144.712	127.405	-26.796	1.00	40.45	HS8
ATOM	16412	CA	MET	9	137.738	123.820	-30.486	1.00	45.41	HS8	ATOM	16465	CA	ASN	15	145.850	128.011	-27.476	1.00	40.45	HS8
ATOM	16413	CB	MET	9	136.213	123.857	-30.487	1.00	45.60	HS8	ATOM	16466	CB	ASN	15	146.066	127.384	-28.865	1.00	41.09	HS8
ATOM	16414	CG	MET	9	135.640	125.134	-29.899	1.00	45.60	HS8	ATOM	16467	CG	ASN	15	146.543	125.933	-28.808	1.00	41.09	HS8
ATOM	16415	SD	MET	9	133.840	125.159	-29.881	1.00	45.60	HS8	ATOM	16468	OD1	ASN	15	147.169	125.504	-27.839	1.00	41.09	HS8
ATOM	16416	CE	MET	9	133.495	124.132	-28.449	1.00	45.60	HS8	ATOM	16469	ND2	ASN	15	146.265	125.182	-29.869	1.00	41.09	HS8
ATOM	16417	C	MET	9	138.255	124.192	-29.103	1.00	45.41	HS8	ATOM	16470	C	ASN	15	145.760	129.524	-27.636	1.00	40.45	HS8
ATOM	16418	O	MET	9	138.623	125.339	-28.864	1.00	45.41	HS8	ATOM	16471	O	ASN	15	146.736	130.230	-27.380	1.00	40.45	HS8
ATOM	16419	N	LEU	10	138.290	123.237	-28.187	1.00	38.31	HS8	ATOM	16472	N	ALA	16	144.606	130.027	-28.070	1.00	31.06	HS8
ATOM	16420	CA	LEU	10	138.753	123.542	-26.842	1.00	38.31	HS8	ATOM	16473	CA	ALA	16	144.435	131.470	-28.261	1.00	31.06	HS8
ATOM	16421	CB	LEU	10	138.534	122.328	-25.927	1.00	30.96	HS8	ATOM	16474	CB	ALA	16	143.088	131.767	-28.904	1.00	25.58	HS8
ATOM	16422	CG	LEU	10	137.152	121.662	-26.024	1.00	30.96	HS8	ATOM	16475	C	ALA	16	144.556	132.234	-26.957	1.00	31.06	HS8
ATOM	16423	CD1	LEU	10	137.047	120.533	-25.012	1.00	30.96	HS8	ATOM	16476	O	ALA	16	145.166	133.289	-26.904	1.00	31.06	HS8
ATOM	16424	CD2	LEU	10	136.061	122.702	-25.783	1.00	30.96	HS8	ATOM	16477	N	THR	17	143.975	131.708	-25.897	1.00	32.05	HS8
ATOM	16425	C	LEU	10	140.233	123.920	-26.901	1.00	38.31	HS8	ATOM	16478	CA	THR	17	144.058	132.402	-24.635	1.00	32.05	HS8
ATOM	16426	O	LEU	10	140.728	124.763	-26.140	1.00	38.31	HS8	ATOM	16479	CB	THR	17	143.139	131.760	-23.597	1.00	26.50	HS8
ATOM	16427	N	THR	11	140.934	123.298	-27.836	1.00	41.81	HS8	ATOM	16480	OG1	THR	17	143.556	130.413	-23.340	1.00	26.50	HS8
ATOM	16428	CA	THR	11	142.350	123.552	-27.991	1.00	41.81	HS8	ATOM	16481	CG2	THR	17	141.716	131.755	-24.113	1.00	26.50	HS8
ATOM	16429	CB	THR	11	143.009	122.431	-28.801	1.00	47.09	HS8	ATOM	16482	C	THR	17	145.474	132.462	-24.077	1.00	32.05	HS8
ATOM	16430	OG1	THR	11	142.869	121.196	-28.087	1.00	47.09	HS8	ATOM	16483	O	THR	17	145.856	133.462	-23.477	1.00	32.05	HS8
ATOM	16431	CG2	THR	11	144.480	122.720	-29.004	1.00	47.09	HS8	ATOM	16484	N	ARG	18	146.262	131.410	-24.266	1.00	42.20	HS8
ATOM	16432	C	THR	11	142.585	124.900	-28.649	1.00	41.81	HS8	ATOM	16485	CA	ARG	18	147.614	131.415	-23.727	1.00	42.20	HS8
ATOM	16433	O	THR	11	143.443	125.660	-28.210	1.00	41.81	HS8	ATOM	16486	CB	ARG	18	148.279	130.056	-23.923	1.00	70.80	HS8
ATOM	16434	N	ARG	12	141.828	125.201	-29.699	1.00	41.65	HS8	ATOM	16487	CG	ARG	18	148.047	129.128	-22.754	1.00	70.80	HS8
ATOM	16435	CA	ARG	12	141.981	126.484	-30.357	1.00	41.65	HS8	ATOM	16488	CD	ARG	18	146.577	129.081	-22.419	1.00	70.80	HS8
ATOM	16436	CB	ARG	12	140.870	126.718	-31.374	1.00	31.81	HS8	ATOM	16489	NE	ARG	18	146.311	128.525	-21.097	1.00	70.80	HS8
ATOM	16437	CG	ARG	12	140.859	125.753	-32.536	1.00	31.81	HS8	ATOM	16490	CZ	ARG	18	145.162	128.681	-20.440	1.00	70.80	HS8
ATOM	16438	CD	ARG	12	140.229	126.394	-33.767	1.00	31.81	HS8	ATOM	16491	NH1	ARG	18	144.163	129.376	-20.979	1.00	70.80	HS8
ATOM	16439	NE	ARG	12	140.428	125.586	-34.968	1.00	31.81	HS8	ATOM	16492	NH2	ARG	18	145.015	128.158	-19.230	1.00	70.80	HS8
ATOM	16440	CZ	ARG	12	140.316	126.051	-36.210	1.00	31.81	HS8	ATOM	16493	C	ARG	18	148.473	132.529	-24.296	1.00	42.20	HS8
ATOM	16441	NH1	ARG	12	140.005	127.320	-36.420	1.00	31.81	HS8	ATOM	16494	O	ARG	18	149.486	132.898	-23.706	1.00	42.20	HS8
ATOM	16442	NH2	ARG	12	140.527	125.255	-37.246	1.00	31.81	HS8	ATOM	16495	N	VAL	19	148.082	133.072	-25.442	1.00	39.34	HS8
ATOM	16443	C	ARG	12	141.881	127.525	-29.260	1.00	41.65	HS8	ATOM	16496	CA	VAL	19	148.833	134.184	-26.013	1.00	39.34	HS8
ATOM	16444	O	ARG	12	142.711	128.432	-29.186	1.00	41.65	HS8	ATOM	16497	CB	VAL	19	149.149	133.987	-27.490	1.00	34.17	HS8
ATOM	16445	N	ILE	13	140.865	127.360	-28.403	1.00	27.33	HS8	ATOM	16498	CG1	VAL	19	150.428	133.198	-27.632	1.00	34.17	HS8
ATOM	16446	CA	ILE	13	140.576	128.251	-27.271	1.00	27.33	HS8	ATOM	16499	CG2	VAL	19	148.004	133.279	-28.169	1.00	34.17	HS8
ATOM	16447	CB	ILE	13	139.232	127.840	-26.575	1.00	23.36	HS8	ATOM	16500	C	VAL	19	148.025	135.458	-25.838	1.00	39.34	HS8
ATOM	16448	CG2	ILE	13	138.991	128.644	-25.292	1.00	23.36	HS8	ATOM	16501	O	VAL	19	148.494	136.545	-26.119	1.00	39.34	HS8

ATOM	16502	N	TYR	20	146.796	135.304	-25.372	1.00	28.52	HS8	ATOM	16555	CB	VAL	26	136.365	127.271	-33.581	1.00 25.81	HS8
ATOM	16503	CA	TYR	20	145.932	136.430	-25.096	1.00	28.52	HS8	ATOM	16556	CG1	VAL	26	136.328	128.355	-32.532	1.00 25.81	HS8
ATOM	16504	CB	TYR	20	146.701	137.487	-24.308	1.00	28.95	HS8	ATOM	16557	CG2	VAL	26	135.091	126.438	-33.551	1.00 25.81	HS8
ATOM	16505	CG	TYR	20	147.104	136.990	-22.950	1.00	28.95	HS8	ATOM	16558	C	VAL	26	135.435	127.503	-35.909	1.00 53.54	HS8
ATOM	16506	CD1	TYR	20	146.240	137.089	-21.872	1.00	28.95	HS8	ATOM	16559	O	VAL	26	134.339	128.042	-35.790	1.00 53.54	HS8
ATOM	16507	CE1	TYR	20	146.584	136.593	-20.624	1.00	28.95	HS8	ATOM	16560	N	PRO	27	135.679	126.573	-36.842	1.00 45.22	HS8
ATOM	16508	CD2	TYR	20	148.329	136.377	-22.753	1.00	28.95	HS8	ATOM	16561	CD	PRO	27	136.937	125.831	-37.022	1.00 38.43	HS8
ATOM	16509	CE2	TYR	20	148.687	135.878	-21.513	1.00	28.95	HS8	ATOM	16562	CA	PRO	27	134.669	126.093	-37.778	1.00 45.22	HS8
ATOM	16510	CZ	TYR	20	147.812	135.992	-20.447	1.00	28.95	HS8	ATOM	16563	CB	PRO	27	135.311	124.846	-38.348	1.00 38.43	HS8
ATOM	16511	OH	TYR	20	148.185	135.543	-19.194	1.00	28.95	HS8	ATOM	16564	CG	PRO	27	136.739	125.204	-38.372	1.00 38.43	HS8
ATOM	16512	C	TYR	20	145.276	137.058	-26.285	1.00	28.52	HS8	ATOM	16565	C	PRO	27	133.393	125.785	-37.012	1.00 45.22	HS8
ATOM	16513	O	TYR	20	145.165	138.275	-26.354	1.00	28.52	HS8	ATOM	16566	O	PRO	27	133.419	125.058	-36.012	1.00 45.22	HS8
ATOM	16514	N	LYS	21	144.833	136.232	-27.224	1.00	29.93	HS8	ATOM	16567	N	ALA	28	132.282	126.335	-37.499	1.00 56.12	HS8
ATOM	16515	CA	LYS	21	144.131	136.751	-28.387	1.00	29.93	HS8	ATOM	16568	CA	ALA	28	130.978	126.178	-36.869	1.00 56.12	HS8
ATOM	16516	CB	LYS	21	143.842	135.625	-29.384	1.00	66.96	HS8	ATOM	16569	CB	ALA	28	130.061	127.295	-37.328	1.00129.32	HS8
ATOM	16517	CG	LYS	21	145.069	134.896	-29.876	1.00	66.96	HS8	ATOM	16570	C	ALA	28	130.285	124.839	-37.065	1.00 56.12	HS8
ATOM	16518	CD	LYS	21	146.186	135.878	-30.210	1.00	66.96	HS8	ATOM	16571	O	ALA	28	130.314	124.244	-38.146	1.00 56.12	HS8
ATOM	16519	CE	LYS	21	146.938	135.474	-31.467	1.00	66.96	HS8	ATOM	16572	N	SER	29	129.654	124.390	-35.986	1.00 43.41	HS8
ATOM	16520	NZ	LYS	21	146.047	135.552	-32.665	1.00	66.96	HS8	ATOM	16573	CA	SER	29	128.905	123.143	-35.945	1.00 43.41	HS8
ATOM	16521	C	LYS	21	142.808	137.368	-27.907	1.00	29.93	HS8	ATOM	16574	CB	SER	29	129.782	121.984	-35.461	1.00 50.79	HS8
ATOM	16522	O	LYS	21	142.237	136.948	-26.907	1.00	29.93	HS8	ATOM	16575	OG	SER	29	129.964	122.020	-34.053	1.00 50.79	HS8
ATOM	16523	N	GLU	22	142.323	138.380	-28.600	1.00	42.70	HS8	ATOM	16576	C	SER	29	127.831	123.397	-34.908	1.00 43.41	HS8
ATOM	16524	CA	GLU	22	141.059	138.962	-28.208	1.00	42.70	HS8	ATOM	16577	O	SER	29	128.122	124.011	-33.868	1.00 43.41	HS8
ATOM	16525	CB	GLU	22	140.913	140.339	-28.847	1.00	101.13	HS8	ATOM	16578	N	ARG	30	126.603	122.943	-35.178	1.00 41.62	HS8
ATOM	16526	CG	GLU	22	140.279	141.360	-27.938	1.00	101.13	HS8	ATOM	16579	CA	ARG	30	125.499	123.128	-34.225	1.00 41.62	HS8
ATOM	16527	CD	GLU	22	140.018	142.669	-28.645	1.00	101.13	HS8	ATOM	16580	CB	ARG	30	124.338	122.175	-34.529	1.00 99.52	HS8
ATOM	16528	OE1	GLU	22	139.350	142.640	-29.703	1.00	101.13	HS8	ATOM	16581	CG	ARG	30	123.368	122.620	-35.610	1.00 99.52	HS8
ATOM	16529	OE2	GLU	22	140.477	143.721	-28.144	1.00	101.13	HS8	ATOM	16582	CD	ARG	30	122.448	123.738	-35.144	1.00 99.52	HS8
ATOM	16530	C	GLU	22	139.969	137.992	-28.715	1.00	42.70	HS8	ATOM	16583	NE	ARG	30	121.446	124.045	-36.163	1.00 99.52	HS8
ATOM	16531	O	GLU	22	139.170	137.458	-27.944	1.00	42.70	HS8	ATOM	16584	CZ	ARG	30	120.707	125.152	-36.188	1.00 99.52	HS8
ATOM	16532	N	SER	23	139.969	137.751	-30.020	1.00	47.40	HS8	ATOM	16585	NH1	ARG	30	120.852	126.073	-35.242	1.00 99.52	HS8
ATOM	16533	CA	SER	23	139.018	136.856	-30.661	1.00	47.40	HS8	ATOM	16586	NH2	ARG	30	119.829	125.343	-37.168	1.00 99.52	HS8
ATOM	16534	CB	SER	23	138.574	137.483	-31.986	1.00	54.00	HS8	ATOM	16587	C	ARG	30	126.019	122.820	-32.830	1.00 41.62	HS8
ATOM	16535	OG	SER	23	137.704	136.640	-32.718	1.00	54.00	HS8	ATOM	16588	O	ARG	30	126.003	123.676	-31.944	1.00 41.62	HS8
ATOM	16536	C	SER	23	139.716	135.513	-30.908	1.00	47.40	HS8	ATOM	16589	N	PHE	31	126.505	121.588	-32.668	1.00 35.44	HS8
ATOM	16537	O	SER	23	140.737	135.230	-30.291	1.00	47.40	HS8	ATOM	16590	CA	PHE	31	127.036	121.104	-31.399	1.00 35.44	HS8
ATOM	16538	N	THR	24	139.148	134.697	-31.800	1.00	47.54	HS8	ATOM	16591	CB	PHE	31	127.667	119.727	-31.594	1.00 38.72	HS8
ATOM	16539	CA	THR	24	139.667	133.377	-32.204	1.00	47.54	HS8	ATOM	16592	CG	PHE	31	128.043	119.046	-30.308	1.00 38.72	HS8
ATOM	16540	CB	THR	24	140.201	132.548	-31.019	1.00	35.66	HS8	ATOM	16593	CD1	PHE	31	127.112	118.866	-29.302	1.00 38.72	HS8
ATOM	16541	OG1	THR	24	140.309	131.171	-31.402	1.00	35.66	HS8	ATOM	16594	CD2	PHE	31	129.312	118.537	-30.123	1.00 38.72	HS8
ATOM	16542	CG2	THR	24	139.271	132.644	-29.855	1.00	35.66	HS8	ATOM	16595	CE1	PHE	31	127.445	118.180	-28.135	1.00 38.72	HS8
ATOM	16543	C	THR	24	138.536	132.600	-32.870	1.00	47.54	HS8	ATOM	16596	CE2	PHE	31	129.644	117.855	-28.960	1.00 38.72	HS8
ATOM	16544	O	THR	24	137.511	132.340	-32.251	1.00	47.54	HS8	ATOM	16597	CZ	PHE	31	128.708	117.677	-27.971	1.00 38.72	HS8
ATOM	16545	N	ASP	25	138.736	132.238	-34.135	1.00	39.30	HS8	ATOM	16598	C	PHE	31	128.052	122.027	-30.726	1.00 35.44	HS8
ATOM	16546	CA	ASP	25	137.735	131.526	-34.922	1.00	39.30	HS8	ATOM	16599	O	PHE	31	127.960	122.278	-29.520	1.00 35.44	HS8
ATOM	16547	CB	ASP	25	137.857	131.935	-36.385	1.00	61.76	HS8	ATOM	16600	N	LYS	32	129.025	122.516	-31.500	1.00 36.26	HS8
ATOM	16548	CG	ASP	25	137.675	133.424	-36.588	1.00	61.76	HS8	ATOM	16601	CA	LYS	32	130.059	123.394	-30.963	1.00 36.26	HS8
ATOM	16549	OD1	ASP	25	137.824	134.179	-35.599	1.00	61.76	HS8	ATOM	16602	CB	LYS	32	131.104	123.696	-32.039	1.00 40.28	HS8
ATOM	16550	OD2	ASP	25	137.396	133.841	-37.738	1.00	61.76	HS8	ATOM	16603	CG	LYS	32	132.383	122.896	-31.887	1.00 40.28	HS8
ATOM	16551	C	ASP	25	137.827	130.015	-34.837	1.00	39.30	HS8	ATOM	16604	CD	LYS	32	133.390	123.180	-33.002	1.00 40.28	HS8
ATOM	16552	O	ASP	25	138.900	129.465	-34.614	1.00	39.30	HS8	ATOM	16605	CE	LYS	32	133.069	122.413	-34.287	1.00 40.28	HS8
ATOM	16553	N	VAL	26	136.683	129.355	-35.006	1.00	53.54	HS8	ATOM	16606	NZ	LYS	32	134.061	122.633	-35.390	1.00 40.28	HS8
ATOM	16554	CA	VAL	26	136.594	127.893	-35.008	1.00	53.54	HS8	ATOM	16607	C	LYS	32	129.455	124.685	-30.432	1.00 36.26	HS8

ATOM	16608	O	LYS	32	129.888	125.217	-29.401	1.00	36.26	HS8	ATOM	16661	O	ILE	38	128.665	128.823	-20.398	1.00	37.33	HS8
ATOM	16609	N	GLU	33	128.449	125.180	-31.149	1.00	44.58	HS8	ATOM	16662	N	LEU	39	129.692	128.038	-22.248	1.00	43.71	HS8
ATOM	16610	CA	GLU	33	127.750	126.396	-30.764	1.00	44.58	HS8	ATOM	16663	CA	LEU	39	130.924	128.753	-21.963	1.00	43.71	HS8
ATOM	16611	CB	GLU	33	126.751	126.783	-31.848	1.00	60.52	HS8	ATOM	16664	CB	LEU	39	131.897	128.672	-23.143	1.00	48.59	HS8
ATOM	16612	CG	GLU	33	126.007	128.059	-31.562	1.00	60.52	HS8	ATOM	16665	CG	LEU	39	132.851	127.479	-23.155	1.00	48.59	HS8
ATOM	16613	CD	GLU	33	125.278	128.600	-32.776	1.00	60.52	HS8	ATOM	16666	CD1	LEU	39	133.339	127.193	-21.737	1.00	48.59	HS8
ATOM	16614	OE1	GLU	33	124.608	127.807	-33.483	1.00	60.52	HS8	ATOM	16667	CD2	LEU	39	132.124	126.285	-23.720	1.00	48.59	HS8
ATOM	16615	OE2	GLU	33	125.369	129.826	-33.009	1.00	60.52	HS8	ATOM	16668	C	LEU	39	130.654	130.207	-21.626	1.00	43.71	HS8
ATOM	16616	C	GLU	33	127.034	126.121	-29.448	1.00	44.58	HS8	ATOM	16669	O	LEU	39	131.234	130.762	-20.686	1.00	43.71	HS8
ATOM	16617	O	GLU	33	126.962	126.981	-28.570	1.00	44.58	HS8	ATOM	16670	N	ALA	40	129.770	130.826	-22.397	1.00	52.75	HS8
ATOM	16618	N	GLU	34	126.517	124.906	-29.306	1.00	34.34	HS8	ATOM	16671	CA	ALA	40	129.442	132.218	-22.160	1.00	52.75	HS8
ATOM	16619	CA	GLU	34	125.834	124.519	-28.081	1.00	34.34	HS8	ATOM	16672	CB	ALA	40	128.638	132.753	-23.316	1.00	26.49	HS8
ATOM	16620	CB	GLU	34	125.289	123.098	-28.195	1.00	85.32	HS8	ATOM	16673	C	ALA	40	128.660	132.351	-20.855	1.00	52.75	HS8
ATOM	16621	CG	GLU	34	123.953	123.042	-28.882	1.00	85.32	HS8	ATOM	16674	O	ALA	40	129.100	133.024	-19.921	1.00	52.75	HS8
ATOM	16622	CD	GLU	34	122.917	123.873	-28.159	1.00	85.32	HS8	ATOM	16675	N	ARG	41	127.505	131.693	-20.795	1.00	27.04	HS8
ATOM	16623	OE1	GLU	34	121.878	124.176	-28.775	1.00	85.32	HS8	ATOM	16676	CA	ARG	41	126.655	131.728	-19.615	1.00	27.04	HS8
ATOM	16624	OE2	GLU	34	123.137	124.218	-26.976	1.00	85.32	HS8	ATOM	16677	CB	ARG	41	125.607	130.628	-19.703	1.00	56.66	HS8
ATOM	16625	C	GLU	34	126.758	124.614	-26.882	1.00	34.34	HS8	ATOM	16678	CG	ARG	41	124.459	130.791	-18.743	1.00	56.66	HS8
ATOM	16626	O	GLU	34	126.365	125.098	-25.834	1.00	34.34	HS8	ATOM	16679	CD	ARG	41	123.611	129.557	-18.785	1.00	56.66	HS8
ATOM	16627	N	ILE	35	127.990	124.154	-27.042	1.00	43.18	HS8	ATOM	16680	NE	ARG	41	123.236	129.223	-20.156	1.00	56.66	HS8
ATOM	16628	CA	ILE	35	128.964	124.187	-25.962	1.00	43.18	HS8	ATOM	16681	CZ	ARG	41	123.159	127.977	-20.625	1.00	56.66	HS8
ATOM	16629	CB	ILE	35	130.204	123.345	-26.368	1.00	35.58	HS8	ATOM	16682	NH1	ARG	41	123.440	126.947	-19.830	1.00	56.66	HS8
ATOM	16630	CG2	ILE	35	131.261	123.365	-25.270	1.00	35.58	HS8	ATOM	16683	NH2	ARG	41	122.794	127.753	-21.887	1.00	56.66	HS8
ATOM	16631	CG1	ILE	35	129.738	121.907	-26.629	1.00	35.58	HS8	ATOM	16684	C	ARG	41	127.474	131.561	-18.342	1.00	27.04	HS8
ATOM	16632	CD1	ILE	35	130.773	120.980	-27.142	1.00	35.58	HS8	ATOM	16685	O	ARG	41	127.323	132.319	-17.401	1.00	27.04	HS8
ATOM	16633	C	ILE	35	129.335	125.637	-25.619	1.00	43.18	HS8	ATOM	16686	N	GLU	42	128.358	130.573	-18.312	1.00	37.35	HS8
ATOM	16634	O	ILE	35	129.398	126.033	-24.445	1.00	43.18	HS8	ATOM	16687	CA	GLU	42	129.163	130.352	-17.124	1.00	37.35	HS8
ATOM	16635	N	LEU	36	129.553	126.436	-26.654	1.00	45.51	HS8	ATOM	16688	CB	GLU	42	129.762	128.952	-17.154	1.00	87.47	HS8
ATOM	16636	CA	LEU	36	129.889	127.829	-26.453	1.00	45.51	HS8	ATOM	16689	CG	GLU	42	128.733	127.864	-16.901	1.00	87.47	HS8
ATOM	16637	CB	LEU	36	130.081	128.502	-27.807	1.00	30.17	HS8	ATOM	16690	CD	GLU	42	127.962	128.086	-15.608	1.00	87.47	HS8
ATOM	16638	CG	LEU	36	131.288	128.063	-28.641	1.00	30.17	HS8	ATOM	16691	OE1	GLU	42	128.608	128.372	-14.572	1.00	87.47	HS8
ATOM	16639	CD1	LEU	36	131.196	128.709	-30.014	1.00	30.17	HS8	ATOM	16692	OE2	GLU	42	126.716	127.967	-15.628	1.00	87.47	HS8
ATOM	16640	CD2	LEU	36	132.599	128.461	-27.950	1.00	30.17	HS8	ATOM	16693	C	GLU	42	130.246	131.404	-16.923	1.00	37.35	HS8
ATOM	16641	C	LEU	36	128.795	128.542	-25.643	1.00	45.51	HS8	ATOM	16694	O	GLU	42	131.028	131.331	-15.969	1.00	37.35	HS8
ATOM	16642	O	LEU	36	129.109	129.394	-24.795	1.00	45.51	HS8	ATOM	16695	N	GLY	43	130.293	132.372	-17.830	1.00	50.55	HS8
ATOM	16643	N	ARG	37	127.524	128.197	-25.904	1.00	43.10	HS8	ATOM	16696	CA	GLY	43	131.258	133.450	-17.720	1.00	50.55	HS8
ATOM	16644	CA	ARG	37	126.397	128.793	-25.183	1.00	43.10	HS8	ATOM	16697	C	GLY	43	132.692	133.208	-18.154	1.00	50.55	HS8
ATOM	16645	CB	ARG	37	125.065	128.074	-25.497	1.00	73.87	HS8	ATOM	16698	O	GLY	43	133.550	134.041	-17.869	1.00	50.55	HS8
ATOM	16646	CG	ARG	37	124.054	128.866	-26.365	1.00	73.87	HS8	ATOM	16699	N	PHE	44	132.962	132.099	-18.843	1.00	48.36	HS8
ATOM	16647	CD	ARG	37	122.567	128.403	-26.193	1.00	73.87	HS8	ATOM	16700	CA	PHE	44	134.319	131.781	-19.297	1.00	48.36	HS8
ATOM	16648	NE	ARG	37	121.691	128.927	-27.262	1.00	73.87	HS8	ATOM	16701	CB	PHE	44	134.445	130.280	-19.573	1.00	31.97	HS8
ATOM	16649	CZ	ARG	37	120.362	128.758	-27.347	1.00	73.87	HS8	ATOM	16702	CG	PHE	44	134.467	129.445	-18.336	1.00	31.97	HS8
ATOM	16650	NH1	ARG	37	119.713	128.076	-26.415	1.00	73.87	HS8	ATOM	16703	CD1	PHE	44	135.494	129.590	-17.405	1.00	31.97	HS8
ATOM	16651	NH2	ARG	37	119.679	129.246	-28.388	1.00	73.87	HS8	ATOM	16704	CD2	PHE	44	133.453	128.526	-18.082	1.00	31.97	HS8
ATOM	16652	C	ARG	37	126.688	128.693	-23.683	1.00	43.10	HS8	ATOM	16705	CE1	PHE	44	135.516	128.831	-16.228	1.00	31.97	HS8
ATOM	16653	O	ARG	37	126.528	129.673	-22.958	1.00	43.10	HS8	ATOM	16706	CE2	PHE	44	133.458	127.760	-16.908	1.00	31.97	HS8
ATOM	16654	N	ILE	38	127.127	127.519	-23.220	1.00	37.33	HS8	ATOM	16707	CZ	PHE	44	134.498	127.915	-15.977	1.00	31.97	HS8
ATOM	16655	CA	ILE	38	127.432	127.339	-21.797	1.00	37.33	HS8	ATOM	16708	C	PHE	44	134.745	132.562	-20.533	1.00	48.36	HS8
ATOM	16656	CB	ILE	38	127.762	125.869	-21.405	1.00	42.41	HS8	ATOM	16709	O	PHE	44	135.930	132.781	-20.756	1.00	48.36	HS8
ATOM	16657	CG2	ILE	38	128.270	125.808	-19.980	1.00	42.41	HS8	ATOM	16710	N	ILE	45	133.784	132.970	-21.346	1.00	52.88	HS8
ATOM	16658	CG1	ILE	38	126.530	124.992	-21.501	1.00	42.41	HS8	ATOM	16711	CA	ILE	45	134.106	133.729	-22.538	1.00	52.88	HS8
ATOM	16659	CD1	ILE	38	126.099	124.749	-22.913	1.00	42.41	HS8	ATOM	16712	CB	ILE	45	133.961	132.888	-23.803	1.00	17.74	HS8
ATOM	16660	C	ILE	38	128.653	128.143	-21.424	1.00	37.33	HS8	ATOM	16713	CG2	ILE	45	135.027	131.797	-23.831	1.00	17.74	HS8

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ATOM  16714  CG1 ILE   45     132.544 132.331 -23.875  1.00 17.74      HS8
ATOM  16715  CD1 ILE   45     132.230 131.619 -25.179  1.00 17.74      HS8
ATOM  16716  C   ILE   45     133.160 134.903 -22.664  1.00 52.88      HS8
ATOM  16717  O   ILE   45     131.973 134.764 -22.389  1.00 52.88      HS8
ATOM  16718  N   LYS   46     133.680 136.056 -23.082  1.00 49.07      HS8
ATOM  16719  CA  LYS   46     132.840 137.231 -23.245  1.00 49.07      HS8
ATOM  16720  CB  LYS   46     133.588 138.341 -23.979  1.00 47.98      HS8
ATOM  16721  CG  LYS   46     134.684 139.009 -23.186  1.00 47.98      HS8
ATOM  16722  CD  LYS   46     134.917 140.422 -23.709  1.00 47.98      HS8
ATOM  16723  CE  LYS   46     136.161 141.062 -23.104  1.00 47.98      HS8
ATOM  16724  NZ  LYS   46     137.443 140.506 -23.680  1.00 47.98      HS8
ATOM  16725  C   LYS   46     131.604 136.855 -24.045  1.00 49.07      HS8
ATOM  16726  O   LYS   46     130.545 137.445 -23.875  1.00 49.07      HS8
ATOM  16727  N   GLY   47     131.745 135.856 -24.908  1.00 43.89      HS8
ATOM  16728  CA  GLY   47     130.636 135.427 -25.733  1.00 43.89      HS8
ATOM  16729  C   GLY   47     131.212 135.017 -27.066  1.00 43.89      HS8
ATOM  16730  O   GLY   47     132.423 134.954 -27.200  1.00 43.89      HS8
ATOM  16731  N   TYR   48     130.369 134.762 -28.056  1.00 46.15      HS8
ATOM  16732  CA  TYR   48     130.848 134.340 -29.361  1.00 46.15      HS8
ATOM  16733  CB  TYR   48     130.946 132.835 -29.370  1.00 52.24      HS8
ATOM  16734  CG  TYR   48     129.591 132.194 -29.482  1.00 52.24      HS8
ATOM  16735  CD1 TYR   48     129.081 131.818 -30.724  1.00 52.24      HS8
ATOM  16736  CE1 TYR   48     127.804 131.273 -30.845  1.00 52.24      HS8
ATOM  16737  CD2 TYR   48     128.793 132.012 -28.361  1.00 52.24      HS8
ATOM  16738  CE2 TYR   48     127.514 131.472 -28.468  1.00 52.24      HS8
ATOM  16739  CZ  TYR   48     127.025 131.104 -29.713  1.00 52.24      HS8
ATOM  16740  OH  TYR   48     125.757 130.576 -29.834  1.00 52.24      HS8
ATOM  16741  C   TYR   48     129.822 134.763 -30.397  1.00 46.15      HS8
ATOM  16742  O   TYR   48     128.748 135.214 -30.033  1.00 46.15      HS8
ATOM  16743  N   GLU   49     130.127 134.597 -31.680  1.00 37.78      HS8
ATOM  16744  CA  GLU   49     129.176 134.966 -32.728  1.00 37.78      HS8
ATOM  16745  CB  GLU   49     129.103 136.480 -32.879  1.00 87.01      HS8
ATOM  16746  CG  GLU   49     130.402 137.108 -33.294  1.00 87.01      HS8
ATOM  16747  CD  GLU   49     130.235 138.562 -33.671  1.00 87.01      HS8
ATOM  16748  OE1 GLU   49     129.439 138.841 -34.595  1.00 87.01      HS8
ATOM  16749  OE2 GLU   49     130.894 139.426 -33.048  1.00 87.01      HS8
ATOM  16750  C   GLU   49     129.502 134.344 -34.079  1.00 37.78      HS8
ATOM  16751  O   GLU   49     130.666 134.191 -34.441  1.00 37.78      HS8
ATOM  16752  N   ARG   50     128.457 133.973 -34.814  1.00 55.30      HS8
ATOM  16753  CA  ARG   50     128.610 133.366 -36.126  1.00 55.30      HS8
ATOM  16754  CB  ARG   50     127.248 133.016 -36.702  1.00 63.55      HS8
ATOM  16755  CG  ARG   50     126.516 131.972 -35.912  1.00 63.55      HS8
ATOM  16756  CD  ARG   50     125.127 131.750 -36.455  1.00 63.55      HS8
ATOM  16757  NE  ARG   50     124.606 130.459 -36.025  1.00 63.55      HS8
ATOM  16758  CZ  ARG   50     123.451 129.939 -36.429  1.00 63.55      HS8
ATOM  16759  NH1 ARG   50     122.679 130.605 -37.281  1.00 63.55      HS8
ATOM  16760  NH2 ARG   50     123.076 128.739 -35.995  1.00 63.55      HS8
ATOM  16761  C   ARG   50     129.303 134.375 -37.014  1.00 55.30      HS8
ATOM  16762  O   ARG   50     129.094 135.577 -36.870  1.00 55.30      HS8
ATOM  16763  N   VAL   51     130.121 133.883 -37.937  1.00 53.81      HS8
ATOM  16764  CA  VAL   51     130.885 134.737 -38.840  1.00 53.81      HS8
ATOM  16765  CB  VAL   51     132.220 135.183 -38.164  1.00 55.09      HS8
ATOM  16766  CG1 VAL   51     133.248 135.553 -39.195  1.00 55.09      HS8
ATOM  16767  CG2 VAL   51     131.977 136.370 -37.252  1.00 55.09      HS8
ATOM  16768  C   VAL   51     131.193 133.894 -40.057  1.00 53.81      HS8
ATOM  16769  O   VAL   51     131.082 132.674 -39.998  1.00 53.81      HS8
ATOM  16770  N   ASP   52     131.565 134.532 -41.160  1.00 58.88      HS8
ATOM  16771  CA  ASP   52     131.909 133.798 -42.372  1.00 58.88      HS8
ATOM  16772  CB  ASP   52     130.936 134.139 -43.503  1.00 79.29      HS8
ATOM  16773  CG  ASP   52     129.818 133.116 -43.637  1.00 79.29      HS8
ATOM  16774  OD1 ASP   52     129.244 132.716 -42.601  1.00 79.29      HS8
ATOM  16775  OD2 ASP   52     129.508 132.714 -44.778  1.00 79.29      HS8
ATOM  16776  C   ASP   52     133.341 134.074 -42.810  1.00 58.88      HS8
ATOM  16777  O   ASP   52     133.674 135.185 -43.210  1.00 58.88      HS8
ATOM  16778  N   VAL   53     134.185 133.049 -42.712  1.00 59.60      HS8
ATOM  16779  CA  VAL   53     135.589 133.135 -43.104  1.00 59.60      HS8
ATOM  16780  CB  VAL   53     136.503 132.498 -42.037  1.00 53.95      HS8
ATOM  16781  CG1 VAL   53     137.867 132.196 -42.623  1.00 53.95      HS8
ATOM  16782  CG2 VAL   53     136.658 133.446 -40.866  1.00 53.95      HS8
ATOM  16783  C   VAL   53     135.819 132.422 -44.438  1.00 59.60      HS8
ATOM  16784  O   VAL   53     135.658 131.201 -44.544  1.00 59.60      HS8
ATOM  16785  N   ASP   54     136.187 133.191 -45.457  1.00 55.78      HS8
ATOM  16786  CA  ASP   54     136.445 132.621 -46.772  1.00 55.78      HS8
ATOM  16787  CB  ASP   54     137.521 131.533 -46.662  1.00188.52      HS8
ATOM  16788  CG  ASP   54     137.893 130.935 -48.004  1.00188.52      HS8
ATOM  16789  OD1 ASP   54     138.436 131.669 -48.858  1.00188.52      HS8
ATOM  16790  OD2 ASP   54     137.641 129.728 -48.206  1.00188.52      HS8
ATOM  16791  C   ASP   54     135.171 132.036 -47.373  1.00 55.78      HS8
ATOM  16792  O   ASP   54     135.215 131.295 -48.350  1.00 55.78      HS8
ATOM  16793  N   GLY   55     134.030 132.365 -46.791  1.00 53.92      HS8
ATOM  16794  CA  GLY   55     132.790 131.846 -47.328  1.00 53.92      HS8
ATOM  16795  C   GLY   55     132.186 130.763 -46.464  1.00 53.92      HS8
ATOM  16796  O   GLY   55     130.996 130.454 -46.576  1.00 53.92      HS8
ATOM  16797  N   LYS   56     132.999 130.183 -45.592  1.00 55.40      HS8
ATOM  16798  CA  LYS   56     132.497 129.140 -44.722  1.00 55.40      HS8
ATOM  16799  CB  LYS   56     133.481 127.978 -44.669  1.00 79.27      HS8
ATOM  16800  CG  LYS   56     133.566 127.199 -45.957  1.00 79.27      HS8
ATOM  16801  CD  LYS   56     134.297 127.978 -47.015  1.00 79.27      HS8
ATOM  16802  CE  LYS   56     134.426 127.160 -48.280  1.00 79.27      HS8
ATOM  16803  NZ  LYS   56     135.260 127.868 -49.290  1.00 79.27      HS8
ATOM  16804  C   LYS   56     132.200 129.640 -43.312  1.00 55.40      HS8
ATOM  16805  O   LYS   56     132.832 130.570 -42.812  1.00 55.40      HS8
ATOM  16806  N   PRO   57     131.219 129.020 -42.655  1.00 43.98      HS8
ATOM  16807  CD  PRO   57     130.431 127.912 -43.214  1.00 20.09      HS8
ATOM  16808  CA  PRO   57     130.767 129.330 -41.300  1.00 43.98      HS8
ATOM  16809  CB  PRO   57     129.560 128.426 -41.140  1.00 20.09      HS8
ATOM  16810  CG  PRO   57     129.937 127.246 -41.977  1.00 20.09      HS8
ATOM  16811  C   PRO   57     131.789 129.078 -40.210  1.00 43.98      HS8
ATOM  16812  O   PRO   57     132.407 128.023 -40.169  1.00 43.98      HS8
ATOM  16813  N   TYR   58     131.953 130.055 -39.328  1.00 40.31      HS8
ATOM  16814  CA  TYR   58     132.873 129.952 -38.206  1.00 40.31      HS8
ATOM  16815  CB  TYR   58     134.180 130.690 -38.475  1.00 46.32      HS8
ATOM  16816  CG  TYR   58     135.112 129.907 -39.344  1.00 46.32      HS8
ATOM  16817  CD1 TYR   58     134.745 129.572 -40.639  1.00 46.32      HS8
ATOM  16818  CE1 TYR   58     135.538 128.782 -41.423  1.00 46.32      HS8
ATOM  16819  CD2 TYR   58     136.324 129.431 -38.854  1.00 46.32      HS8
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ATOM	16820	CE2	TYR	58	137.134	128.634	-39.639	1.00	46.32	HS8	ATOM	16873	CB	LYS	64	136.830	136.679	-20.840	1.00	45.88	HS8
ATOM	16821	CZ	TYR	58	136.727	128.309	-40.929	1.00	46.32	HS8	ATOM	16874	CG	LYS	64	136.489	137.305	-19.521	1.00	45.88	HS8
ATOM	16822	OH	TYR	58	137.477	127.488	-41.739	1.00	46.32	HS8	ATOM	16875	CD	LYS	64	135.034	136.957	-19.279	1.00	45.88	HS8
ATOM	16823	C	TYR	58	132.219	130.580	-37.013	1.00	40.31	HS8	ATOM	16876	CE	LYS	64	134.500	137.497	-17.982	1.00	45.88	HS8
ATOM	16824	O	TYR	58	131.209	131.265	-37.146	1.00	40.31	HS8	ATOM	16877	NZ	LYS	64	133.081	137.066	-17.839	1.00	45.88	HS8
ATOM	16825	N	LEU	59	132.793	130.345	-35.843	1.00	34.36	HS8	ATOM	16878	C	LYS	64	139.331	136.642	-20.509	1.00	42.66	HS8
ATOM	16826	CA	LEU	59	132.259	130.930	-34.637	1.00	34.36	HS8	ATOM	16879	O	LYS	64	139.649	135.483	-20.276	1.00	42.66	HS8
ATOM	16827	CB	LEU	59	131.775	129.840	-33.678	1.00	43.82	HS8	ATOM	16880	N	TYR	65	139.938	137.674	-19.943	1.00	32.29	HS8
ATOM	16828	CG	LEU	59	130.671	128.898	-34.181	1.00	43.82	HS8	ATOM	16881	CA	TYR	65	141.061	137.480	-19.041	1.00	32.29	HS8
ATOM	16829	CD1	LEU	59	130.375	127.809	-33.141	1.00	43.82	HS8	ATOM	16882	CB	TYR	65	142.370	137.882	-19.728	1.00	36.19	HS8
ATOM	16830	CD2	LEU	59	129.416	129.703	-34.482	1.00	43.82	HS8	ATOM	16883	CG	TYR	65	142.498	137.335	-21.122	1.00	36.19	HS8
ATOM	16831	C	LEU	59	133.366	131.750	-33.990	1.00	34.36	HS8	ATOM	16884	CD1	TYR	65	141.906	137.982	-22.205	1.00	36.19	HS8
ATOM	16832	O	LEU	59	134.386	131.204	-33.572	1.00	34.36	HS8	ATOM	16885	CE1	TYR	65	141.949	137.435	-23.484	1.00	36.19	HS8
ATOM	16833	N	ARG	60	133.186	133.068	-33.949	1.00	38.17	HS8	ATOM	16886	CD2	TYR	65	143.147	136.127	-21.355	1.00	36.19	HS8
ATOM	16834	CA	ARG	60	134.167	133.928	-33.310	1.00	38.17	HS8	ATOM	16887	CE2	TYR	65	143.194	135.571	-22.639	1.00	36.19	HS8
ATOM	16835	CB	ARG	60	133.876	135.395	-33.568	1.00	64.08	HS8	ATOM	16888	CZ	TYR	65	142.589	136.235	-23.687	1.00	36.19	HS8
ATOM	16836	CG	ARG	60	134.370	135.891	-34.866	1.00	64.08	HS8	ATOM	16889	OH	TYR	65	142.603	135.670	-24.922	1.00	36.19	HS8
ATOM	16837	CD	ARG	60	135.869	135.988	-34.872	1.00	64.08	HS8	ATOM	16890	C	TYR	65	140.901	138.309	-17.793	1.00	32.29	HS8
ATOM	16838	NE	ARG	60	136.293	136.251	-36.233	1.00	64.08	HS8	ATOM	16891	O	TYR	65	139.991	139.126	-17.700	1.00	32.29	HS8
ATOM	16839	CZ	ARG	60	135.898	137.310	-36.921	1.00	64.08	HS8	ATOM	16892	N	GLY	66	141.799	138.093	-16.840	1.00	49.65	HS8
ATOM	16840	NH1	ARG	60	135.090	138.196	-36.354	1.00	64.08	HS8	ATOM	16893	CA	GLY	66	141.765	138.848	-15.610	1.00	49.65	HS8
ATOM	16841	NH2	ARG	60	136.273	137.462	-38.180	1.00	64.08	HS8	ATOM	16894	C	GLY	66	142.378	140.197	-15.906	1.00	49.65	HS8
ATOM	16842	C	ARG	60	134.008	133.693	-31.832	1.00	38.17	HS8	ATOM	16895	O	GLY	66	142.545	140.545	-17.075	1.00	49.65	HS8
ATOM	16843	O	ARG	60	132.902	133.750	-31.309	1.00	38.17	HS8	ATOM	16896	N	PRO	67	142.709	140.996	-14.883	1.00	51.49	HS8
ATOM	16844	N	VAL	61	135.102	133.421	-31.146	1.00	40.65	HS8	ATOM	16897	CD	PRO	67	142.303	140.972	-13.465	1.00	18.77	HS8
ATOM	16845	CA	VAL	61	135.011	133.223	-29.720	1.00	40.65	HS8	ATOM	16898	CA	PRO	67	143.301	142.286	-15.201	1.00	51.49	HS8
ATOM	16846	CB	VAL	61	135.613	131.881	-29.308	1.00	20.26	HS8	ATOM	16899	CB	PRO	67	142.844	143.137	-14.037	1.00	18.77	HS8
ATOM	16847	CG1	VAL	61	135.450	131.696	-27.805	1.00	20.26	HS8	ATOM	16900	CG	PRO	67	142.979	142.223	-12.915	1.00	18.77	HS8
ATOM	16848	CG2	VAL	61	134.930	130.751	-30.072	1.00	20.26	HS8	ATOM	16901	C	PRO	67	144.817	142.165	-15.255	1.00	51.49	HS8
ATOM	16849	C	VAL	61	135.753	134.367	-29.055	1.00	40.65	HS8	ATOM	16902	O	PRO	67	145.372	141.090	-15.017	1.00	51.49	HS8
ATOM	16850	O	VAL	61	136.958	134.530	-29.232	1.00	40.65	HS8	ATOM	16903	N	ARG	68	145.469	143.280	-15.564	1.00	34.54	HS8
ATOM	16851	N	TYR	62	135.012	135.182	-28.319	1.00	26.64	HS8	ATOM	16904	CA	ARG	68	146.922	143.368	-15.643	1.00	34.54	HS8
ATOM	16852	CA	TYR	62	135.594	136.320	-27.626	1.00	26.64	HS8	ATOM	16905	CB	ARG	68	147.314	144.774	-16.076	1.00	72.93	HS8
ATOM	16853	CB	TYR	62	134.568	137.441	-27.536	1.00	29.37	HS8	ATOM	16906	CG	ARG	68	148.758	144.952	-16.445	1.00	72.93	HS8
ATOM	16854	CG	TYR	62	134.292	137.999	-28.901	1.00	29.37	HS8	ATOM	16907	CD	ARG	68	148.913	146.231	-17.243	1.00	72.93	HS8
ATOM	16855	CD1	TYR	62	135.189	138.865	-29.506	1.00	29.37	HS8	ATOM	16908	NE	ARG	68	150.255	146.390	-17.779	1.00	72.93	HS8
ATOM	16856	CE1	TYR	62	135.009	139.288	-30.809	1.00	29.37	HS8	ATOM	16909	CZ	ARG	68	151.344	146.477	-17.028	1.00	72.93	HS8
ATOM	16857	CD2	TYR	62	133.193	137.578	-29.634	1.00	29.37	HS8	ATOM	16910	NH1	ARG	68	151.247	146.420	-15.705	1.00	72.93	HS8
ATOM	16858	CE2	TYR	62	132.999	137.998	-30.943	1.00	29.37	HS8	ATOM	16911	NH2	ARG	68	152.528	146.624	-17.601	1.00	72.93	HS8
ATOM	16859	CZ	TYR	62	133.915	138.848	-31.530	1.00	29.37	HS8	ATOM	16912	C	ARG	68	147.451	143.087	-14.252	1.00	34.54	HS8
ATOM	16860	OH	TYR	62	133.773	139.211	-32.859	1.00	29.37	HS8	ATOM	16913	O	ARG	68	146.724	143.258	-13.286	1.00	34.54	HS8
ATOM	16861	C	TYR	62	136.136	135.944	-26.258	1.00	26.64	HS8	ATOM	16914	N	ARG	69	148.702	142.658	-14.139	1.00	41.68	HS8
ATOM	16862	O	TYR	62	135.393	135.692	-25.313	1.00	26.64	HS8	ATOM	16915	CA	ARG	69	149.264	142.358	-12.831	1.00	41.68	HS8
ATOM	16863	N	LEU	63	137.459	135.911	-26.188	1.00	32.28	HS8	ATOM	16916	CB	ARG	69	149.611	140.874	-12.736	1.00	74.81	HS8
ATOM	16864	CA	LEU	63	138.168	135.541	-24.988	1.00	32.28	HS8	ATOM	16917	CG	ARG	69	148.403	139.950	-12.757	1.00	74.81	HS8
ATOM	16865	CB	LEU	63	139.607	135.196	-25.352	1.00	29.64	HS8	ATOM	16918	CD	ARG	69	148.791	138.556	-12.296	1.00	74.81	HS8
ATOM	16866	CG	LEU	63	139.778	133.776	-25.914	1.00	29.64	HS8	ATOM	16919	NE	ARG	69	149.747	137.936	-13.208	1.00	74.81	HS8
ATOM	16867	CD1	LEU	63	138.570	133.333	-26.701	1.00	29.64	HS8	ATOM	16920	CZ	ARG	69	150.692	137.077	-12.834	1.00	74.81	HS8
ATOM	16868	CD2	LEU	63	141.011	133.746	-26.776	1.00	29.64	HS8	ATOM	16921	NH1	ARG	69	150.807	136.740	-11.557	1.00	74.81	HS8
ATOM	16869	C	LEU	63	138.105	136.599	-23.908	1.00	32.28	HS8	ATOM	16922	NH2	ARG	69	151.526	136.562	-13.733	1.00	74.81	HS8
ATOM	16870	O	LEU	63	137.924	137.785	-24.189	1.00	32.28	HS8	ATOM	16923	C	ARG	69	150.480	143.192	-12.429	1.00	41.68	HS8
ATOM	16871	N	LYS	64	138.279	136.137	-22.673	1.00	42.66	HS8	ATOM	16924	O	ARG	69	151.011	143.989	-13.214	1.00	41.68	HS8
ATOM	16872	CA	LYS	64	138.192	136.962	-21.474	1.00	42.66	HS8	ATOM	16925	N	GLN	70	150.911	142.996	-11.185	1.00	59.66	HS8

ATOM	16926	CA	GLN	70	152.047	143.715	-10.620	1.00	59.66	HS8	ATOM	16979	CA	GLU	77	145.410	135.640	-14.946	1.00	41.22	HS8
ATOM	16927	CB	GLN	70	151.806	143.987	-9.135	1.00	95.87	HS8	ATOM	16980	CB	GLU	77	144.839	135.627	-13.539	1.00	76.33	HS8
ATOM	16928	CG	GLN	70	150.585	144.829	-8.844	1.00	95.87	HS8	ATOM	16981	CG	GLU	77	144.384	134.262	-13.111	1.00	76.33	HS8
ATOM	16929	CD	GLN	70	150.662	146.192	-9.493	1.00	95.87	HS8	ATOM	16982	CD	GLU	77	143.802	134.268	-11.725	1.00	76.33	HS8
ATOM	16930	OE1	GLN	70	151.613	146.945	-9.273	1.00	95.87	HS8	ATOM	16983	OE1	GLU	77	144.393	134.918	-10.836	1.00	76.33	HS8
ATOM	16931	NE2	GLN	70	149.659	146.519	-10.300	1.00	95.87	HS8	ATOM	16984	OE2	GLU	77	142.761	133.612	-11.519	1.00	76.33	HS8
ATOM	16932	C	GLN	70	153.343	142.943	-10.765	1.00	59.66	HS8	ATOM	16985	C	GLU	77	144.332	135.190	-15.914	1.00	41.22	HS8
ATOM	16933	O	GLN	70	153.340	141.764	-11.103	1.00	59.66	HS8	ATOM	16986	O	GLU	77	143.519	136.001	-16.337	1.00	41.22	HS8
ATOM	16934	N	GLY	71	154.451	143.622	-10.489	1.00	73.11	HS8	ATOM	16987	N	GLN	78	144.314	133.913	-16.276	1.00	56.69	HS8
ATOM	16935	CA	GLY	71	155.754	142.994	-10.578	1.00	73.11	HS8	ATOM	16988	CA	GLN	78	143.299	133.444	-17.212	1.00	56.69	HS8
ATOM	16936	C	GLY	71	156.046	142.463	-11.962	1.00	73.11	HS8	ATOM	16989	CB	GLN	78	143.718	132.123	-17.838	1.00	46.29	HS8
ATOM	16937	O	GLY	71	155.367	142.827	-12.922	1.00	73.11	HS8	ATOM	16990	CG	GLN	78	145.030	132.164	-18.575	1.00	46.29	HS8
ATOM	16938	N	PRO	72	157.070	141.610	-12.103	1.00	58.60	HS8	ATOM	16991	CD	GLN	78	144.904	132.726	-19.969	1.00	46.29	HS8
ATOM	16939	CD	PRO	72	158.044	141.238	-11.064	1.00	24.03	HS8	ATOM	16992	OE1	GLN	78	143.876	132.552	-20.619	1.00	46.29	HS8
ATOM	16940	CA	PRO	72	157.444	141.027	-13.395	1.00	58.60	HS8	ATOM	16993	NE2	GLN	78	145.959	133.383	-20.452	1.00	46.29	HS8
ATOM	16941	CB	PRO	72	158.690	140.214	-13.062	1.00	24.03	HS8	ATOM	16994	C	GLN	78	141.982	133.238	-16.490	1.00	56.69	HS8
ATOM	16942	CG	PRO	72	158.566	139.936	-11.584	1.00	24.03	HS8	ATOM	16995	O	GLN	78	141.956	133.035	-15.275	1.00	56.69	HS8
ATOM	16943	C	PRO	72	156.331	140.180	-13.982	1.00	58.60	HS8	ATOM	16996	N	VAL	79	140.888	133.312	-17.238	1.00	64.76	HS8
ATOM	16944	O	PRO	72	155.583	139.525	-13.255	1.00	58.60	HS8	ATOM	16997	CA	VAL	79	139.575	133.076	-16.659	1.00	64.76	HS8
ATOM	16945	N	ASP	73	156.230	140.190	-15.303	1.00	61.53	HS8	ATOM	16998	CB	VAL	79	138.493	133.856	-17.392	1.00	42.66	HS8
ATOM	16946	CA	ASP	73	155.183	139.448	-16.006	1.00	61.53	HS8	ATOM	16999	CG1	VAL	79	137.128	133.483	-16.876	1.00	42.66	HS8
ATOM	16947	CB	ASP	73	155.240	137.943	-15.724	1.00	49.73	HS8	ATOM	17000	CG2	VAL	79	138.727	135.320	-17.191	1.00	42.66	HS8
ATOM	16948	CG	ASP	73	154.264	137.156	-16.595	1.00	49.73	HS8	ATOM	17001	C	VAL	79	139.374	131.586	-16.854	1.00	64.76	HS8
ATOM	16949	OD1	ASP	73	154.178	135.920	-16.449	1.00	49.73	HS8	ATOM	17002	O	VAL	79	138.715	130.925	-16.047	1.00	64.76	HS8
ATOM	16950	OD2	ASP	73	153.583	137.778	-17.438	1.00	49.73	HS8	ATOM	17003	N	ILE	80	139.964	131.073	-17.937	1.00	25.75	HS8
ATOM	16951	C	ASP	73	153.800	139.954	-15.625	1.00	61.53	HS8	ATOM	17004	CA	ILE	80	139.932	129.650	-18.256	1.00	25.75	HS8
ATOM	16952	O	ASP	73	153.093	139.354	-14.812	1.00	61.53	HS8	ATOM	17005	CB	ILE	80	139.731	129.408	-19.739	1.00	11.85	HS8
ATOM	16953	N	PRO	74	153.399	141.076	-16.219	1.00	52.45	HS8	ATOM	17006	CG2	ILE	80	139.912	127.942	-20.031	1.00	11.85	HS8
ATOM	16954	CD	PRO	74	154.184	141.892	-17.163	1.00	45.11	HS8	ATOM	17007	CG1	ILE	80	138.342	129.894	-20.159	1.00	11.85	HS8
ATOM	16955	CA	PRO	74	152.097	141.681	-15.958	1.00	52.45	HS8	ATOM	17008	CD1	ILE	80	137.908	129.429	-21.541	1.00	11.85	HS8
ATOM	16956	CB	PRO	74	152.260	143.073	-16.547	1.00	45.11	HS8	ATOM	17009	C	ILE	80	141.278	129.056	-17.877	1.00	25.75	HS8
ATOM	16957	CG	PRO	74	153.133	142.806	-17.745	1.00	45.11	HS8	ATOM	17010	O	ILE	80	142.154	128.922	-18.724	1.00	25.75	HS8
ATOM	16958	C	PRO	74	150.967	140.909	-16.630	1.00	52.45	HS8	ATOM	17011	N	HIS	81	141.451	128.726	-16.601	1.00	40.27	HS8
ATOM	16959	O	PRO	74	149.819	141.331	-16.579	1.00	52.45	HS8	ATOM	17012	CA	HIS	81	142.706	128.160	-16.141	1.00	40.27	HS8
ATOM	16960	N	ARG	75	151.286	139.785	-17.268	1.00	44.11	HS8	ATOM	17013	CB	HIS	81	142.737	127.996	-14.631	1.00	55.37	HS8
ATOM	16961	CA	ARG	75	150.259	139.008	-17.949	1.00	44.11	HS8	ATOM	17014	CG	HIS	81	142.539	129.259	-13.868	1.00	55.37	HS8
ATOM	16962	CB	ARG	75	150.848	137.760	-18.588	1.00	44.62	HS8	ATOM	17015	CD2	HIS	81	143.377	129.949	-13.061	1.00	55.37	HS8
ATOM	16963	CG	ARG	75	151.207	137.960	-20.046	1.00	44.62	HS8	ATOM	17016	ND1	HIS	81	141.330	129.916	-13.820	1.00	55.37	HS8
ATOM	16964	CD	ARG	75	151.710	136.674	-20.634	1.00	44.62	HS8	ATOM	17017	CE1	HIS	81	141.431	130.955	-13.011	1.00	55.37	HS8
ATOM	16965	NE	ARG	75	152.829	136.180	-19.853	1.00	44.62	HS8	ATOM	17018	NE2	HIS	81	142.663	130.997	-12.537	1.00	55.37	HS8
ATOM	16966	CZ	ARG	75	153.474	135.055	-20.114	1.00	44.62	HS8	ATOM	17019	C	HIS	81	142.884	126.772	-16.711	1.00	40.27	HS8
ATOM	16967	NH1	ARG	75	153.102	134.307	-21.145	1.00	44.62	HS8	ATOM	17020	O	HIS	81	144.008	126.310	-16.910	1.00	40.27	HS8
ATOM	16968	NH2	ARG	75	154.485	134.681	-19.346	1.00	44.62	HS8	ATOM	17021	N	HIS	82	141.768	126.104	-16.963	1.00	32.00	HS8
ATOM	16969	C	ARG	75	149.095	138.633	-17.056	1.00	44.11	HS8	ATOM	17022	CA	HIS	82	141.793	124.738	-17.441	1.00	32.00	HS8
ATOM	16970	O	ARG	75	149.256	138.060	-15.984	1.00	44.11	HS8	ATOM	17023	CB	HIS	82	141.562	123.830	-16.254	1.00	43.94	HS8
ATOM	16971	N	PRO	76	147.889	138.945	-17.514	1.00	33.53	HS8	ATOM	17024	CG	HIS	82	141.781	122.384	-16.541	1.00	43.94	HS8
ATOM	16972	CD	PRO	76	147.645	139.401	-18.885	1.00	20.70	HS8	ATOM	17025	CD2	HIS	82	140.904	121.384	-16.794	1.00	43.94	HS8
ATOM	16973	CA	PRO	76	146.625	138.694	-16.830	1.00	33.53	HS8	ATOM	17026	ND1	HIS	82	143.036	121.813	-16.559	1.00	43.94	HS8
ATOM	16974	CB	PRO	76	145.578	139.148	-17.855	1.00	20.70	HS8	ATOM	17027	CE1	HIS	82	142.922	120.521	-16.808	1.00	43.94	HS8
ATOM	16975	CG	PRO	76	146.323	140.075	-18.733	1.00	20.70	HS8	ATOM	17028	NE2	HIS	82	141.639	120.235	-16.955	1.00	43.94	HS8
ATOM	16976	C	PRO	76	146.428	137.236	-16.465	1.00	33.53	HS8	ATOM	17029	C	HIS	82	140.681	124.543	-18.439	1.00	32.00	HS8
ATOM	16977	O	PRO	76	146.905	136.352	-17.171	1.00	33.53	HS8	ATOM	17030	O	HIS	82	139.807	125.386	-18.563	1.00	32.00	HS8
ATOM	16978	N	GLU	77	145.723	136.996	-15.364	1.00	41.22	HS8	ATOM	17031	N	ILE	83	140.714	123.425	-19.143	1.00	32.10	HS8

ATOM	17032	CA	ILE	83	139.702	123.086	-20.130	1.00	32.10	HS8	ATOM	17085	CD	PRO	89	137.160	111.293	-29.923	1.00	13.56	HS8
ATOM	17033	CB	ILE	83	139.383	124.273	-21.097	1.00	20.78	HS8	ATOM	17086	CA	PRO	89	136.470	108.966	-30.062	1.00	29.20	HS8
ATOM	17034	CG2	ILE	83	140.643	124.794	-21.779	1.00	20.78	HS8	ATOM	17087	CB	PRO	89	136.814	109.517	-31.439	1.00	13.56	HS8
ATOM	17035	CG1	ILE	83	138.376	123.810	-22.155	1.00	20.78	HS8	ATOM	17088	CG	PRO	89	137.754	110.685	-31.136	1.00	13.56	HS8
ATOM	17036	CD1	ILE	83	137.945	124.892	-23.108	1.00	20.78	HS8	ATOM	17089	C	PRO	89	137.346	107.798	-29.656	1.00	29.20	HS8
ATOM	17037	C	ILE	83	140.233	121.916	-20.937	1.00	32.10	HS8	ATOM	17090	O	PRO	89	138.495	107.989	-29.247	1.00	29.20	HS8
ATOM	17038	O	ILE	83	141.009	122.116	-21.866	1.00	32.10	HS8	ATOM	17091	N	GLY	90	136.825	106.585	-29.743	1.00	51.96	HS8
ATOM	17039	N	ARG	84	139.834	120.695	-20.578	1.00	31.25	HS8	ATOM	17092	CA	GLY	90	137.645	105.465	-29.317	1.00	51.96	HS8
ATOM	17040	CA	ARG	84	140.304	119.514	-21.305	1.00	31.25	HS8	ATOM	17093	C	GLY	90	138.085	105.667	-27.866	1.00	51.96	HS8
ATOM	17041	CB	ARG	84	141.408	118.809	-20.506	1.00	72.49	HS8	ATOM	17094	O	GLY	90	139.277	105.638	-27.535	1.00	51.96	HS8
ATOM	17042	CG	ARG	84	140.921	117.921	-19.385	1.00	72.49	HS8	ATOM	17095	N	ARG	91	137.082	105.905	-27.024	1.00	49.98	HS8
ATOM	17043	CD	ARG	84	141.919	116.808	-19.145	1.00	72.49	HS8	ATOM	17096	CA	ARG	91	137.193	106.104	-25.583	1.00	49.98	HS8
ATOM	17044	NE	ARG	84	141.419	115.812	-18.203	1.00	72.49	HS8	ATOM	17097	CB	ARG	91	138.542	106.632	-25.159	1.00	47.31	HS8
ATOM	17045	CZ	ARG	84	142.050	114.677	-17.912	1.00	72.49	HS8	ATOM	17098	CG	ARG	91	139.138	105.851	-23.981	1.00	47.31	HS8
ATOM	17046	NH1	ARG	84	143.208	114.392	-18.491	1.00	72.49	HS8	ATOM	17099	CD	ARG	91	138.241	105.709	-22.748	1.00	47.31	HS8
ATOM	17047	NH2	ARG	84	141.531	113.827	-17.037	1.00	72.49	HS8	ATOM	17100	NE	ARG	91	139.088	105.433	-21.587	1.00	47.31	HS8
ATOM	17048	C	ARG	84	139.231	118.488	-21.696	1.00	31.25	HS8	ATOM	17101	CZ	ARG	91	138.646	105.141	-20.371	1.00	47.31	HS8
ATOM	17049	O	ARG	84	138.301	118.237	-20.939	1.00	31.25	HS8	ATOM	17102	NH1	ARG	91	137.344	105.080	-20.137	1.00	47.31	HS8
ATOM	17050	N	ARG	85	139.380	117.896	-22.882	1.00	54.96	HS8	ATOM	17103	NH2	ARG	91	139.508	104.902	-19.391	1.00	47.31	HS8
ATOM	17051	CA	ARG	85	138.441	116.889	-23.360	1.00	54.96	HS8	ATOM	17104	C	ARG	91	136.136	107.064	-25.111	1.00	49.98	HS8
ATOM	17052	CB	ARG	85	138.779	116.440	-24.768	1.00	34.60	HS8	ATOM	17105	O	ARG	91	136.419	108.064	-24.449	1.00	49.98	HS8
ATOM	17053	CG	ARG	85	137.829	116.985	-25.792	1.00	34.60	HS8	ATOM	17106	N	ARG	92	134.906	106.741	-25.483	1.00	31.35	HS8
ATOM	17054	CD	ARG	85	137.136	115.898	-26.580	1.00	34.60	HS8	ATOM	17107	CA	ARG	92	133.749	107.506	-25.093	1.00	31.35	HS8
ATOM	17055	NE	ARG	85	135.721	115.822	-26.259	1.00	34.60	HS8	ATOM	17108	CB	ARG	92	132.529	106.957	-25.820	1.00	38.25	HS8
ATOM	17056	CZ	ARG	85	134.814	115.311	-27.080	1.00	34.60	HS8	ATOM	17109	CG	ARG	92	131.916	107.921	-26.804	1.00	38.25	HS8
ATOM	17057	NH1	ARG	85	135.189	114.849	-28.267	1.00	34.60	HS8	ATOM	17110	CD	ARG	92	132.798	108.165	-27.991	1.00	38.25	HS8
ATOM	17058	NH2	ARG	85	133.538	115.236	-26.711	1.00	34.60	HS8	ATOM	17111	NE	ARG	92	132.583	109.513	-28.502	1.00	38.25	HS8
ATOM	17059	C	ARG	85	138.475	115.675	-22.473	1.00	54.96	HS8	ATOM	17112	CZ	ARG	92	132.800	109.865	-29.759	1.00	38.25	HS8
ATOM	17060	O	ARG	85	139.504	115.360	-21.873	1.00	54.96	HS8	ATOM	17113	NH1	ARG	92	133.231	108.966	-30.630	1.00	38.25	HS8
ATOM	17061	N	ILE	86	137.349	114.980	-22.405	1.00	44.35	HS8	ATOM	17114	NH2	ARG	92	132.598	111.112	-30.142	1.00	38.25	HS8
ATOM	17062	CA	ILE	86	137.252	113.799	-21.578	1.00	44.35	HS8	ATOM	17115	C	ARG	92	133.559	107.377	-23.573	1.00	31.35	HS8
ATOM	17063	CB	ILE	86	136.316	114.048	-20.410	1.00	35.65	HS8	ATOM	17116	O	ARG	92	133.858	106.343	-22.967	1.00	31.35	HS8
ATOM	17064	CG2	ILE	86	136.012	112.755	-19.706	1.00	35.65	HS8	ATOM	17117	N	VAL	93	133.053	108.430	-22.954	1.00	52.39	HS8
ATOM	17065	CG1	ILE	86	136.970	115.028	-19.447	1.00	35.65	HS8	ATOM	17118	CA	VAL	93	132.841	108.397	-21.524	1.00	52.39	HS8
ATOM	17066	CD1	ILE	86	136.129	115.349	-18.271	1.00	35.65	HS8	ATOM	17119	CB	VAL	93	133.898	109.234	-20.821	1.00	17.95	HS8
ATOM	17067	C	ILE	86	136.759	112.643	-22.414	1.00	44.35	HS8	ATOM	17120	CG1	VAL	93	133.511	109.475	-19.369	1.00	17.95	HS8
ATOM	17068	O	ILE	86	137.461	111.655	-22.602	1.00	44.35	HS8	ATOM	17121	CG2	VAL	93	135.216	108.511	-20.918	1.00	17.95	HS8
ATOM	17069	N	SER	87	135.539	112.744	-22.903	1.00	27.12	HS8	ATOM	17122	C	VAL	93	131.461	108.887	-21.145	1.00	52.39	HS8
ATOM	17070	CA	SER	87	135.046	111.698	-23.762	1.00	27.12	HS8	ATOM	17123	O	VAL	93	131.129	110.052	-21.368	1.00	52.39	HS8
ATOM	17071	CB	SER	87	133.531	111.836	-23.953	1.00	22.99	HS8	ATOM	17124	N	TYR	94	130.660	107.987	-20.577	1.00	39.84	HS8
ATOM	17072	OG	SER	87	133.009	110.839	-24.823	1.00	22.99	HS8	ATOM	17125	CA	TYR	94	129.304	108.329	-20.157	1.00	39.84	HS8
ATOM	17073	C	SER	87	135.800	112.029	-25.051	1.00	27.12	HS8	ATOM	17126	CB	TYR	94	128.298	107.425	-20.839	1.00	35.88	HS8
ATOM	17074	O	SER	87	136.012	113.197	-25.354	1.00	27.12	HS8	ATOM	17127	CG	TYR	94	128.513	107.319	-22.311	1.00	35.88	HS8
ATOM	17075	N	LYS	88	136.259	111.014	-25.772	1.00	35.73	HS8	ATOM	17128	CD1	TYR	94	129.108	106.186	-22.875	1.00	35.88	HS8
ATOM	17076	CA	LYS	88	136.963	111.225	-27.035	1.00	35.73	HS8	ATOM	17129	CE1	TYR	94	129.298	106.082	-24.253	1.00	35.88	HS8
ATOM	17077	CB	LYS	88	138.478	111.296	-26.865	1.00	33.81	HS8	ATOM	17130	CD2	TYR	94	128.118	108.346	-23.148	1.00	35.88	HS8
ATOM	17078	CG	LYS	88	138.960	111.726	-25.516	1.00	33.81	HS8	ATOM	17131	CE2	TYR	94	128.304	108.256	-24.523	1.00	35.88	HS8
ATOM	17079	CD	LYS	88	140.378	112.234	-25.631	1.00	33.81	HS8	ATOM	17132	CZ	TYR	94	128.891	107.126	-25.067	1.00	35.88	HS8
ATOM	17080	CE	LYS	88	141.123	112.141	-24.318	1.00	33.81	HS8	ATOM	17133	OH	TYR	94	129.051	107.072	-26.429	1.00	35.88	HS8
ATOM	17081	NZ	LYS	88	141.280	110.696	-23.967	1.00	33.81	HS8	ATOM	17134	C	TYR	94	129.142	108.194	-18.656	1.00	39.84	HS8
ATOM	17082	C	LYS	88	136.661	109.996	-27.839	1.00	35.73	HS8	ATOM	17135	O	TYR	94	129.842	107.411	-18.026	1.00	39.84	HS8
ATOM	17083	O	LYS	88	136.362	108.942	-27.274	1.00	35.73	HS8	ATOM	17136	N	VAL	95	128.218	108.961	-18.089	1.00	45.26	HS8
ATOM	17084	N	PRO	89	136.740	110.104	-29.170	1.00	29.20	HS8	ATOM	17137	CA	VAL	95	127.981	108.900	-16.655	1.00	45.26	HS8

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ATOM  17138  CB  VAL    95     128.699 110.032 -15.907  1.00 23.37      HS8
ATOM  17139  CG1 VAL    95     130.198 109.786 -15.877  1.00 23.37      HS8
ATOM  17140  CG2 VAL    95     128.372 111.351 -16.572  1.00 23.37      HS8
ATOM  17141  C   VAL    95     126.518 108.960 -16.250  1.00 45.26      HS8
ATOM  17142  O   VAL    95     125.695 109.596 -16.907  1.00 45.26      HS8
ATOM  17143  N   GLY    96     126.213 108.274 -15.155  1.00 50.61      HS8
ATOM  17144  CA  GLY    96     124.868 108.282 -14.625  1.00 50.61      HS8
ATOM  17145  C   GLY    96     124.732 109.575 -13.844  1.00 50.61      HS8
ATOM  17146  O   GLY    96     125.731 110.216 -13.512  1.00 50.61      HS8
ATOM  17147  N   VAL    97     123.505 109.969 -13.541  1.00 68.22      HS8
ATOM  17148  CA  VAL    97     123.296 111.212 -12.822  1.00 68.22      HS8
ATOM  17149  CB  VAL    97     121.794 111.524 -12.723  1.00 45.24      HS8
ATOM  17150  CG1 VAL    97     121.078 110.365 -12.094  1.00 45.24      HS8
ATOM  17151  CG2 VAL    97     121.576 112.796 -11.949  1.00 45.24      HS8
ATOM  17152  C   VAL    97     123.936 111.143 -11.444  1.00 68.22      HS8
ATOM  17153  O   VAL    97     124.164 112.164 -10.801  1.00 68.22      HS8
ATOM  17154  N   LYS    98     124.245 109.932 -11.000  1.00 39.51      HS8
ATOM  17155  CA  LYS    98     124.884 109.751  -9.703  1.00 39.51      HS8
ATOM  17156  CB  LYS    98     124.514 108.390  -9.113  1.00 93.36      HS8
ATOM  17157  CG  LYS    98     123.027 108.135  -8.925  1.00 93.36      HS8
ATOM  17158  CD  LYS    98     122.785 106.637  -8.727  1.00 93.36      HS8
ATOM  17159  CE  LYS    98     121.312 106.282  -8.569  1.00 93.36      HS8
ATOM  17160  NZ  LYS    98     120.806 106.554  -7.195  1.00 93.36      HS8
ATOM  17161  C   LYS    98     126.410 109.828  -9.849  1.00 39.51      HS8
ATOM  17162  O   LYS    98     127.122 110.089  -8.886  1.00 39.51      HS8
ATOM  17163  N   GLU    99     126.900 109.605 -11.066  1.00 69.08      HS8
ATOM  17164  CA  GLU    99     128.332 109.611 -11.350  1.00 69.08      HS8
ATOM  17165  CB  GLU    99     128.657 108.476 -12.319  1.00 94.51      HS8
ATOM  17166  CG  GLU    99     128.264 107.097 -11.829  1.00 94.51      HS8
ATOM  17167  CD  GLU    99     128.605 106.007 -12.834  1.00 94.51      HS8
ATOM  17168  OE1 GLU    99     127.997 105.980 -13.930  1.00 94.51      HS8
ATOM  17169  OE2 GLU    99     129.490 105.177 -12.529  1.00 94.51      HS8
ATOM  17170  C   GLU    99     128.893 110.922 -11.915  1.00 69.08      HS8
ATOM  17171  O   GLU    99     130.084 111.011 -12.209  1.00 69.08      HS8
ATOM  17172  N   ILE   100     128.047 111.932 -12.080  1.00 47.11      HS8
ATOM  17173  CA  ILE   100     128.488 113.218 -12.610  1.00 47.11      HS8
ATOM  17174  CB  ILE   100     127.316 114.191 -12.723  1.00 51.75      HS8
ATOM  17175  CG2 ILE   100     127.768 115.464 -13.382  1.00 51.75      HS8
ATOM  17176  CG1 ILE   100     126.199 113.554 -13.546  1.00 51.75      HS8
ATOM  17177  CD1 ILE   100     124.904 114.313 -13.511  1.00 51.75      HS8
ATOM  17178  C   ILE   100     129.518 113.811 -11.662  1.00 47.11      HS8
ATOM  17179  O   ILE   100     129.230 114.054 -10.498  1.00 47.11      HS8
ATOM  17180  N   PRO   101     130.738 114.056 -12.147  1.00 51.55      HS8
ATOM  17181  CD  PRO   101     131.269 113.695 -13.472  1.00 46.78      HS8
ATOM  17182  CA  PRO   101     131.789 114.621 -11.292  1.00 51.55      HS8
ATOM  17183  CB  PRO   101     133.023 114.565 -12.184  1.00 46.78      HS8
ATOM  17184  CG  PRO   101     132.447 114.602 -13.584  1.00 46.78      HS8
ATOM  17185  C   PRO   101     131.559 116.013 -10.726  1.00 51.55      HS8
ATOM  17186  O   PRO   101     130.747 116.777 -11.240  1.00 51.55      HS8
ATOM  17187  N   ARG   102     132.271 116.316  -9.642  1.00 52.28      HS8
ATOM  17188  CA  ARG   102     132.216 117.625  -8.995  1.00 52.28      HS8
ATOM  17189  CB  ARG   102     132.067 117.498  -7.484  1.00165.57      HS8
ATOM  17190  CG  ARG   102     130.660 117.237  -7.020  1.00165.57      HS8
ATOM  17191  CD  ARG   102     130.622 117.134  -5.512  1.00165.57      HS8
ATOM  17192  NE  ARG   102     129.277 116.874  -5.012  1.00165.57      HS8
ATOM  17193  CZ  ARG   102     128.994 116.643  -3.735  1.00165.57      HS8
ATOM  17194  NH1 ARG   102     129.965 116.640  -2.831  1.00165.57      HS8
ATOM  17195  NH2 ARG   102     127.742 116.416  -3.361  1.00165.57      HS8
ATOM  17196  C   ARG   102     133.560 118.251  -9.315  1.00 52.28      HS8
ATOM  17197  O   ARG   102     134.558 117.986  -8.644  1.00 52.28      HS8
ATOM  17198  N   VAL   103     133.581 119.070 -10.360  1.00 27.23      HS8
ATOM  17199  CA  VAL   103     134.797 119.731 -10.815  1.00 27.23      HS8
ATOM  17200  CB  VAL   103     134.576 120.352 -12.185  1.00 22.57      HS8
ATOM  17201  CG1 VAL   103     135.900 120.664 -12.825  1.00 22.57      HS8
ATOM  17202  CG2 VAL   103     133.763 119.404 -13.041  1.00 22.57      HS8
ATOM  17203  C   VAL   103     135.319 120.813  -9.886  1.00 27.23      HS8
ATOM  17204  O   VAL   103     134.561 121.635  -9.373  1.00 27.23      HS8
ATOM  17205  N   ARG   104     136.633 120.800  -9.694  1.00 51.14      HS8
ATOM  17206  CA  ARG   104     137.324 121.768  -8.848  1.00 51.14      HS8
ATOM  17207  CB  ARG   104     137.596 123.053  -9.630  1.00 62.64      HS8
ATOM  17208  CG  ARG   104     139.051 123.267 -10.020  1.00 62.64      HS8
ATOM  17209  CD  ARG   104     139.838 123.745  -8.833  1.00 62.64      HS8
ATOM  17210  NE  ARG   104     141.097 124.390  -9.200  1.00 62.64      HS8
ATOM  17211  CZ  ARG   104     142.144 123.762  -9.721  1.00 62.64      HS8
ATOM  17212  NH1 ARG   104     142.094 122.457  -9.954  1.00 62.64      HS8
ATOM  17213  NH2 ARG   104     143.255 124.436  -9.974  1.00 62.64      HS8
ATOM  17214  C   ARG   104     136.559 122.093  -7.582  1.00 51.14      HS8
ATOM  17215  O   ARG   104     136.324 123.262  -7.276  1.00 51.14      HS8
ATOM  17216  N   ARG   105     136.176 121.042  -6.860  1.00 43.72      HS8
ATOM  17217  CA  ARG   105     135.449 121.169  -5.604  1.00 43.72      HS8
ATOM  17218  CB  ARG   105     136.385 121.661  -4.501  1.00 88.16      HS8
ATOM  17219  CG  ARG   105     136.193 120.967  -3.179  1.00 88.16      HS8
ATOM  17220  CD  ARG   105     136.863 119.609  -3.215  1.00 88.16      HS8
ATOM  17221  NE  ARG   105     136.747 118.908  -1.943  1.00 88.16      HS8
ATOM  17222  CZ  ARG   105     135.617 118.395  -1.472  1.00 88.16      HS8
ATOM  17223  NH1 ARG   105     134.489 118.497  -2.167  1.00 88.16      HS8
ATOM  17224  NH2 ARG   105     135.618 117.781  -0.299  1.00 88.16      HS8
ATOM  17225  C   ARG   105     134.281 122.133  -5.712  1.00 43.72      HS8
ATOM  17226  O   ARG   105     133.924 122.782  -4.737  1.00 43.72      HS8
ATOM  17227  N   GLY   106     133.699 122.241  -6.900  1.00 34.26      HS8
ATOM  17228  CA  GLY   106     132.572 123.134  -7.079  1.00 34.26      HS8
ATOM  17229  C   GLY   106     132.852 124.389  -7.876  1.00 34.26      HS8
ATOM  17230  O   GLY   106     131.951 124.886  -8.539  1.00 34.26      HS8
ATOM  17231  N   LEU   107     134.083 124.899  -7.830  1.00 33.31      HS8
ATOM  17232  CA  LEU   107     134.440 126.124  -8.556  1.00 33.31      HS8
ATOM  17233  CB  LEU   107     135.708 126.735  -7.968  1.00 31.63      HS8
ATOM  17234  CG  LEU   107     135.752 126.807  -6.448  1.00 31.63      HS8
ATOM  17235  CD1 LEU   107     136.994 127.568  -6.001  1.00 31.63      HS8
ATOM  17236  CD2 LEU   107     134.489 127.480  -5.952  1.00 31.63      HS8
ATOM  17237  C   LEU   107     134.636 125.970 -10.061  1.00 33.31      HS8
ATOM  17238  O   LEU   107     134.842 126.954 -10.767  1.00 33.31      HS8
ATOM  17239  N   GLY   108     134.600 124.742 -10.550  1.00 47.73      HS8
ATOM  17240  CA  GLY   108     134.763 124.530 -11.973  1.00 47.73      HS8
ATOM  17241  C   GLY   108     133.550 123.795 -12.489  1.00 47.73      HS8
ATOM  17242  O   GLY   108     132.767 123.267 -11.706  1.00 47.73      HS8
ATOM  17243  N   ILE   109     133.366 123.747 -13.796  1.00 39.74      HS8
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ATOM	17244	CA	ILE	109	132.214	123.037	-14.308	1.00	39.74	HS8	ATOM	17297	NZ	LYS	116	114.332	116.669	-17.357	1.00	79.71	HS8
ATOM	17245	CB	ILE	109	131.356	123.927	-15.187	1.00	33.73	HS8	ATOM	17298	C	LYS	116	118.708	117.960	-22.965	1.00	48.19	HS8
ATOM	17246	CG2	ILE	109	131.141	125.246	-14.503	1.00	33.73	HS8	ATOM	17299	O	LYS	116	118.456	119.074	-22.513	1.00	48.19	HS8
ATOM	17247	CG1	ILE	109	132.027	124.125	-16.545	1.00	33.73	HS8	ATOM	17300	N	GLY	117	119.708	117.720	-23.820	1.00	41.16	HS8
ATOM	17248	CD1	ILE	109	131.068	124.572	-17.608	1.00	33.73	HS8	ATOM	17301	CA	GLY	117	120.575	118.786	-24.315	1.00	41.16	HS8
ATOM	17249	C	ILE	109	132.602	121.819	-15.126	1.00	39.74	HS8	ATOM	17302	C	GLY	117	121.930	118.933	-23.627	1.00	41.16	HS8
ATOM	17250	O	ILE	109	133.774	121.457	-15.235	1.00	39.74	HS8	ATOM	17303	O	GLY	117	122.266	118.175	-22.718	1.00	41.16	HS8
ATOM	17251	N	ALA	110	131.597	121.195	-15.710	1.00	42.80	HS8	ATOM	17304	N	VAL	118	122.719	119.914	-24.056	1.00	41.02	HS8
ATOM	17252	CA	ALA	110	131.810	120.029	-16.526	1.00	42.80	HS8	ATOM	17305	CA	VAL	118	124.036	120.134	-23.460	1.00	41.02	HS8
ATOM	17253	CB	ALA	110	131.793	118.818	-15.676	1.00	11.70	HS8	ATOM	17306	CB	VAL	118	124.971	120.923	-24.415	1.00	41.13	HS8
ATOM	17254	C	ALA	110	130.650	120.005	-17.485	1.00	42.80	HS8	ATOM	17307	CG1	VAL	118	126.245	121.294	-23.699	1.00	41.13	HS8
ATOM	17255	O	ALA	110	129.501	119.957	-17.073	1.00	42.80	HS8	ATOM	17308	CG2	VAL	118	125.300	120.091	-25.642	1.00	41.13	HS8
ATOM	17256	N	ILE	111	130.933	120.048	-18.771	1.00	42.27	HS8	ATOM	17309	C	VAL	118	123.852	120.930	-22.183	1.00	41.02	HS8
ATOM	17257	CA	ILE	111	129.857	120.048	-19.734	1.00	42.27	HS8	ATOM	17310	O	VAL	118	123.326	122.031	-22.223	1.00	41.02	HS8
ATOM	17258	CB	ILE	111	130.251	120.876	-20.946	1.00	20.64	HS8	ATOM	17311	N	LEU	119	124.289	120.380	-21.054	1.00	32.44	HS8
ATOM	17259	CG2	ILE	111	129.115	120.891	-21.962	1.00	20.64	HS8	ATOM	17312	CA	LEU	119	124.130	121.054	-19.760	1.00	32.44	HS8
ATOM	17260	CG1	ILE	111	130.643	122.277	-20.490	1.00	20.64	HS8	ATOM	17313	CB	LEU	119	123.041	120.365	-18.930	1.00	49.55	HS8
ATOM	17261	CD1	ILE	111	130.849	123.240	-21.632	1.00	20.64	HS8	ATOM	17314	CG	LEU	119	121.765	119.856	-19.607	1.00	49.55	HS8
ATOM	17262	C	ILE	111	129.472	118.647	-20.181	1.00	42.27	HS8	ATOM	17315	CD1	LEU	119	120.959	118.967	-18.653	1.00	49.55	HS8
ATOM	17263	O	ILE	111	130.298	117.905	-20.710	1.00	42.27	HS8	ATOM	17316	CD2	LEU	119	120.960	121.041	-20.068	1.00	49.55	HS8
ATOM	17264	N	LEU	112	128.213	118.287	-19.958	1.00	40.35	HS8	ATOM	17317	C	LEU	119	125.414	121.007	-18.952	1.00	32.44	HS8
ATOM	17265	CA	LEU	112	127.730	116.980	-20.359	1.00	40.35	HS8	ATOM	17318	O	LEU	119	126.374	120.340	-19.329	1.00	32.44	HS8
ATOM	17266	CB	LEU	112	126.895	116.323	-19.271	1.00	31.62	HS8	ATOM	17319	N	THR	120	125.421	121.704	-17.825	1.00	27.61	HS8
ATOM	17267	CG	LEU	112	127.385	116.193	-17.841	1.00	31.62	HS8	ATOM	17320	CA	THR	120	126.583	121.707	-16.963	1.00	27.61	HS8
ATOM	17268	CD1	LEU	112	126.903	114.853	-17.305	1.00	31.62	HS8	ATOM	17321	CB	THR	120	126.786	123.074	-16.325	1.00	29.44	HS8
ATOM	17269	CD2	LEU	112	128.899	116.258	-17.781	1.00	31.62	HS8	ATOM	17322	OG1	THR	120	125.781	123.292	-15.331	1.00	29.44	HS8
ATOM	17270	C	LEU	112	126.828	117.174	-21.534	1.00	40.35	HS8	ATOM	17323	CG2	THR	120	126.688	124.162	-17.380	1.00	29.44	HS8
ATOM	17271	O	LEU	112	126.389	118.289	-21.807	1.00	40.35	HS8	ATOM	17324	C	THR	120	126.333	120.676	-15.868	1.00	27.61	HS8
ATOM	17272	N	SER	113	126.553	116.079	-22.231	1.00	30.17	HS8	ATOM	17325	O	THR	120	125.199	120.244	-15.671	1.00	27.61	HS8
ATOM	17273	CA	SER	113	125.629	116.096	-23.358	1.00	30.17	HS8	ATOM	17326	N	ASP	121	127.378	120.280	-15.149	1.00	55.20	HS8
ATOM	17274	CB	SER	113	126.333	115.712	-24.654	1.00	27.95	HS8	ATOM	17327	CA	ASP	121	127.214	119.285	-14.101	1.00	55.20	HS8
ATOM	17275	OG	SER	113	125.412	115.648	-25.728	1.00	27.95	HS8	ATOM	17328	CB	ASP	121	128.559	118.989	-13.405	1.00	66.36	HS8
ATOM	17276	C	SER	113	124.578	115.049	-22.989	1.00	30.17	HS8	ATOM	17329	CG	ASP	121	129.220	120.226	-12.811	1.00	66.36	HS8
ATOM	17277	O	SER	113	124.862	113.858	-22.963	1.00	30.17	HS8	ATOM	17330	OD1	ASP	121	129.287	121.263	-13.506	1.00	66.36	HS8
ATOM	17278	N	THR	114	123.370	115.506	-22.682	1.00	38.89	HS8	ATOM	17331	OD2	ASP	121	129.697	120.151	-11.651	1.00	66.36	HS8
ATOM	17279	CA	THR	114	122.287	114.616	-22.280	1.00	38.89	HS8	ATOM	17332	C	ASP	121	126.145	119.672	-13.089	1.00	55.20	HS8
ATOM	17280	CB	THR	114	121.701	115.093	-20.978	1.00	43.70	HS8	ATOM	17333	O	ASP	121	125.711	118.854	-12.302	1.00	55.20	HS8
ATOM	17281	OG1	THR	114	121.081	116.368	-21.191	1.00	43.70	HS8	ATOM	17334	N	ARG	122	125.706	120.919	-13.114	1.00	48.16	HS8
ATOM	17282	CG2	THR	114	122.805	115.246	-19.936	1.00	43.70	HS8	ATOM	17335	CA	ARG	122	124.669	121.350	-12.193	1.00	48.16	HS8
ATOM	17283	C	THR	114	121.166	114.591	-23.302	1.00	38.89	HS8	ATOM	17336	CB	ARG	122	124.989	122.730	-11.632	1.00	80.91	HS8
ATOM	17284	O	THR	114	121.115	115.444	-24.184	1.00	38.89	HS8	ATOM	17337	CG	ARG	122	125.973	122.674	-10.503	1.00	80.91	HS8
ATOM	17285	N	SER	115	120.265	113.620	-23.187	1.00	57.65	HS8	ATOM	17338	CD	ARG	122	126.360	124.057	-10.017	1.00	80.91	HS8
ATOM	17286	CA	SER	115	119.147	113.552	-24.123	1.00	57.65	HS8	ATOM	17339	NE	ARG	122	127.051	123.985	-8.729	1.00	80.91	HS8
ATOM	17287	CB	SER	115	118.385	112.225	-23.995	1.00	54.58	HS8	ATOM	17340	CZ	ARG	122	127.711	124.991	-8.163	1.00	80.91	HS8
ATOM	17288	OG	SER	115	117.814	112.048	-22.715	1.00	54.58	HS8	ATOM	17341	NH1	ARG	122	127.787	126.171	-8.766	1.00	80.91	HS8
ATOM	17289	C	SER	115	118.226	114.742	-23.856	1.00	57.65	HS8	ATOM	17342	NH2	ARG	122	128.290	124.815	-6.982	1.00	80.91	HS8
ATOM	17290	O	SER	115	117.209	114.918	-24.521	1.00	57.65	HS8	ATOM	17343	C	ARG	122	123.313	121.357	-12.886	1.00	48.16	HS8
ATOM	17291	N	LYS	116	118.606	115.553	-22.871	1.00	48.19	HS8	ATOM	17344	O	ARG	122	122.307	121.013	-12.273	1.00	48.16	HS8
ATOM	17292	CA	LYS	116	117.878	116.765	-22.524	1.00	48.19	HS8	ATOM	17345	N	GLU	123	123.276	121.752	-14.155	1.00	43.43	HS8
ATOM	17293	CB	LYS	116	117.652	116.879	-21.019	1.00	79.71	HS8	ATOM	17346	CA	GLU	123	122.018	121.756	-14.898	1.00	43.43	HS8
ATOM	17294	CG	LYS	116	116.430	116.163	-20.503	1.00	79.71	HS8	ATOM	17347	CB	GLU	123	122.226	122.320	-16.299	1.00	85.16	HS8
ATOM	17295	CD	LYS	116	116.082	116.654	-19.111	1.00	79.71	HS8	ATOM	17348	CG	GLU	123	122.326	123.824	-16.335	1.00	85.16	HS8
ATOM	17296	CE	LYS	116	114.773	116.057	-18.638	1.00	79.71	HS8	ATOM	17349	CD	GLU	123	123.019	124.323	-17.581	1.00	85.16	HS8

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ATOM  17350  OE1 GLU  123      122.788 123.752 -18.671  1.00 85.16      HS8
ATOM  17351  OE2 GLU  123      123.794 125.297 -17.472  1.00 85.16      HS8
ATOM  17352  C   GLU  123      121.598 120.297 -14.962  1.00 43.43      HS8
ATOM  17353  O   GLU  123      120.453 119.946 -14.681  1.00 43.43      HS8
ATOM  17354  N   ALA  124      122.536 119.445 -15.356  1.00 83.07      HS8
ATOM  17355  CA  ALA  124      122.274 118.020 -15.374  1.00 83.07      HS8
ATOM  17356  CB  ALA  124      123.429 117.280 -16.021  1.00 79.33      HS8
ATOM  17357  C   ALA  124      122.296 117.835 -13.871  1.00 83.07      HS8
ATOM  17358  O   ALA  124      123.115 118.463 -13.201  1.00 83.07      HS8
ATOM  17359  N   ARG  125      121.411 117.005 -13.341  1.00 52.18      HS8
ATOM  17360  CA  ARG  125      121.320 116.789 -11.898  1.00 52.18      HS8
ATOM  17361  CB  ARG  125      122.508 117.375 -11.127  1.00 64.25      HS8
ATOM  17362  CG  ARG  125      123.316 116.306 -10.454  1.00 64.25      HS8
ATOM  17363  CD  ARG  125      124.235 116.830  -9.381  1.00 64.25      HS8
ATOM  17364  NE  ARG  125      125.539 117.197  -9.915  1.00 64.25      HS8
ATOM  17365  CZ  ARG  125      126.691 117.015  -9.273  1.00 64.25      HS8
ATOM  17366  NH1 ARG  125      126.696 116.463  -8.060  1.00 64.25      HS8
ATOM  17367  NH2 ARG  125      127.840 117.377  -9.845  1.00 64.25      HS8
ATOM  17368  C   ARG  125      120.051 117.484 -11.461  1.00 52.18      HS8
ATOM  17369  O   ARG  125      119.164 116.854 -10.883  1.00 52.18      HS8
ATOM  17370  N   LYS  126      119.959 118.785 -11.722  1.00 70.05      HS8
ATOM  17371  CA  LYS  126      118.736 119.493 -11.391  1.00 70.05      HS8
ATOM  17372  CB  LYS  126      118.793 120.956 -11.842  1.00112.47      HS8
ATOM  17373  CG  LYS  126      117.471 121.694 -11.630  1.00112.47      HS8
ATOM  17374  CD  LYS  126      117.555 123.188 -11.922  1.00112.47      HS8
ATOM  17375  CE  LYS  126      116.221 123.868 -11.613  1.00112.47      HS8
ATOM  17376  NZ  LYS  126      116.299 125.351 -11.699  1.00112.47      HS8
ATOM  17377  C   LYS  126      117.701 118.729 -12.212  1.00 70.05      HS8
ATOM  17378  O   LYS  126      116.684 118.277 -11.690  1.00 70.05      HS8
ATOM  17379  N   LEU  127      117.998 118.566 -13.499  1.00 34.81      HS8
ATOM  17380  CA  LEU  127      117.137 117.842 -14.422  1.00 34.81      HS8
ATOM  17381  CB  LEU  127      117.534 118.145 -15.865  1.00 35.26      HS8
ATOM  17382  CG  LEU  127      117.178 119.494 -16.474  1.00 35.26      HS8
ATOM  17383  CD1 LEU  127      115.676 119.549 -16.644  1.00 35.26      HS8
ATOM  17384  CD2 LEU  127      117.676 120.640 -15.594  1.00 35.26      HS8
ATOM  17385  C   LEU  127      117.296 116.346 -14.175  1.00 34.81      HS8
ATOM  17386  O   LEU  127      116.707 115.521 -14.886  1.00 34.81      HS8
ATOM  17387  N   GLY  128      118.111 116.002 -13.181  1.00 40.71      HS8
ATOM  17388  CA  GLY  128      118.353 114.608 -12.843  1.00 40.71      HS8
ATOM  17389  C   GLY  128      118.688 113.660 -13.987  1.00 40.71      HS8
ATOM  17390  O   GLY  128      118.050 112.622 -14.132  1.00 40.71      HS8
ATOM  17391  N   VAL  129      119.688 113.990 -14.800  1.00 69.00      HS8
ATOM  17392  CA  VAL  129      120.051 113.108 -15.908  1.00 69.00      HS8
ATOM  17393  CB  VAL  129      119.458 113.597 -17.245  1.00 28.71      HS8
ATOM  17394  CG1 VAL  129      117.935 113.677 -17.151  1.00 28.71      HS8
ATOM  17395  CG2 VAL  129      120.046 114.944 -17.603  1.00 28.71      HS8
ATOM  17396  C   VAL  129      121.557 112.998 -16.079  1.00 69.00      HS8
ATOM  17397  O   VAL  129      122.317 113.719 -15.437  1.00 69.00      HS8
ATOM  17398  N   GLY  130      121.979 112.089 -16.950  1.00 47.75      HS8
ATOM  17399  CA  GLY  130      123.395 111.902 -17.202  1.00 47.75      HS8
ATOM  17400  C   GLY  130      123.650 111.867 -18.696  1.00 47.75      HS8
ATOM  17401  O   GLY  130      122.757 112.209 -19.478  1.00 47.75      HS8
ATOM  17402  N   GLY  131      124.856 111.459 -19.094  1.00 67.43      HS8
ATOM  17403  CA  GLY  131      125.190 111.387 -20.508  1.00 67.43      HS8
ATOM  17404  C   GLY  131      126.676 111.512 -20.767  1.00 67.43      HS8
ATOM  17405  O   GLY  131      127.453 111.578 -19.820  1.00 67.43      HS8
ATOM  17406  N   GLU  132      127.066 111.544 -22.042  1.00 46.07      HS8
ATOM  17407  CA  GLU  132      128.471 111.669 -22.453  1.00 46.07      HS8
ATOM  17408  CB  GLU  132      128.564 111.820 -23.969  1.00 62.82      HS8
ATOM  17409  CG  GLU  132      129.969 111.712 -24.500  1.00 62.82      HS8
ATOM  17410  CD  GLU  132      130.004 111.513 -26.000  1.00 62.82      HS8
ATOM  17411  OE1 GLU  132      129.279 110.619 -26.499  1.00 62.82      HS8
ATOM  17412  OE2 GLU  132      130.761 112.242 -26.679  1.00 62.82      HS8
ATOM  17413  C   GLU  132      129.152 112.857 -21.786  1.00 46.07      HS8
ATOM  17414  O   GLU  132      128.635 113.969 -21.820  1.00 46.07      HS8
ATOM  17415  N   LEU  133      130.315 112.614 -21.188  1.00 58.59      HS8
ATOM  17416  CA  LEU  133      131.067 113.648 -20.480  1.00 58.59      HS8
ATOM  17417  CB  LEU  133      131.889 113.008 -19.357  1.00 29.36      HS8
ATOM  17418  CG  LEU  133      131.901 113.682 -17.985  1.00 29.36      HS8
ATOM  17419  CD1 LEU  133      132.681 112.838 -17.015  1.00 29.36      HS8
ATOM  17420  CD2 LEU  133      132.510 115.050 -18.077  1.00 29.36      HS8
ATOM  17421  C   LEU  133      131.992 114.427 -21.410  1.00 58.59      HS8
ATOM  17422  O   LEU  133      133.200 114.211 -21.424  1.00 58.59      HS8
ATOM  17423  N   ILE  134      131.415 115.345 -22.174  1.00 56.08      HS8
ATOM  17424  CA  ILE  134      132.157 116.168 -23.125  1.00 56.08      HS8
ATOM  17425  CB  ILE  134      131.272 117.293 -23.636  1.00 39.76      HS8
ATOM  17426  CG2 ILE  134      132.097 118.309 -24.412  1.00 39.76      HS8
ATOM  17427  CG1 ILE  134      130.162 116.678 -24.482  1.00 39.76      HS8
ATOM  17428  CD1 ILE  134      128.956 117.555 -24.613  1.00 39.76      HS8
ATOM  17429  C   ILE  134      133.470 116.769 -22.648  1.00 56.08      HS8
ATOM  17430  O   ILE  134      134.500 116.580 -23.284  1.00 56.08      HS8
ATOM  17431  N   CYS  135      133.441 117.510 -21.550  1.00 39.78      HS8
ATOM  17432  CA  CYS  135      134.666 118.110 -21.057  1.00 39.78      HS8
ATOM  17433  CB  CYS  135      135.095 119.248 -21.983  1.00 42.53      HS8
ATOM  17434  SG  CYS  135      133.935 120.604 -22.101  1.00 42.53      HS8
ATOM  17435  C   CYS  135      134.633 118.602 -19.611  1.00 39.78      HS8
ATOM  17436  O   CYS  135      133.693 118.351 -18.862  1.00 39.78      HS8
ATOM  17437  N   GLU  136      135.672 119.330 -19.235  1.00 52.58      HS8
ATOM  17438  CA  GLU  136      135.832 119.817 -17.879  1.00 52.58      HS8
ATOM  17439  CB  GLU  136      136.763 118.837 -17.166  1.00 74.12      HS8
ATOM  17440  CG  GLU  136      137.268 119.222 -15.808  1.00 74.12      HS8
ATOM  17441  CD  GLU  136      138.399 118.304 -15.351  1.00 74.12      HS8
ATOM  17442  OE1 GLU  136      139.506 118.388 -15.930  1.00 74.12      HS8
ATOM  17443  OE2 GLU  136      138.176 117.495 -14.422  1.00 74.12      HS8
ATOM  17444  C   GLU  136      136.458 121.202 -17.990  1.00 52.58      HS8
ATOM  17445  O   GLU  136      137.443 121.376 -18.697  1.00 52.58      HS8
ATOM  17446  N   VAL  137      135.894 122.194 -17.311  1.00 52.42      HS8
ATOM  17447  CA  VAL  137      136.445 123.545 -17.392  1.00 52.42      HS8
ATOM  17448  CB  VAL  137      135.591 124.464 -18.271  1.00 39.88      HS8
ATOM  17449  CG1 VAL  137      136.276 125.799 -18.408  1.00 39.88      HS8
ATOM  17450  CG2 VAL  137      135.357 123.844 -19.624  1.00 39.88      HS8
ATOM  17451  C   VAL  137      136.501 124.206 -16.039  1.00 52.42      HS8
ATOM  17452  O   VAL  137      135.583 124.043 -15.242  1.00 52.42      HS8
ATOM  17453  N   TRP  138      137.569 124.958 -15.782  1.00 36.57      HS8
ATOM  17454  CA  TRP  138      137.705 125.675 -14.518  1.00 36.57      HS8
ATOM  17455  CB  TRP  138      137.804 124.708 -13.326  1.00 45.09      HS8
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ATOM	17456	CG	TRP	138	138.799	123.591	-13.432	1.00	45.09	HS8	ATOM	17509	CG	LEU	12	124.603	42.184	4.055	1.00	28.30	TS20
ATOM	17457	CD2	TRP	138	140.205	123.684	-13.227	1.00	45.09	HS8	ATOM	17510	CD1	LEU	12	124.361	41.870	5.518	1.00	28.30	TS20
ATOM	17458	CE2	TRP	138	140.731	122.366	-13.293	1.00	45.09	HS8	ATOM	17511	CD2	LEU	12	125.505	41.132	3.435	1.00	28.30	TS20
ATOM	17459	CE3	TRP	138	141.074	124.749	-12.988	1.00	45.09	HS8	ATOM	17512	C	LEU	12	121.261	43.049	2.248	1.00	85.75	TS20
ATOM	17460	CD1	TRP	138	138.530	122.253	-13.627	1.00	45.09	HS8	ATOM	17513	O	LEU	12	121.198	42.892	1.028	1.00	85.75	TS20
ATOM	17461	NE1	TRP	138	139.690	121.511	-13.540	1.00	45.09	HS8	ATOM	17514	N	LYS	13	120.269	42.813	3.102	1.00	31.50	TS20
ATOM	17462	CZ2	TRP	138	142.072	122.096	-13.130	1.00	45.09	HS8	ATOM	17515	CA	LYS	13	118.918	42.429	2.742	1.00	31.50	TS20
ATOM	17463	CZ3	TRP	138	142.403	124.486	-12.830	1.00	45.09	HS8	ATOM	17516	CB	LYS	13	117.993	42.761	3.916	1.00	33.28	TS20
ATOM	17464	CH2	TRP	138	142.898	123.166	-12.898	1.00	45.09	HS8	ATOM	17517	CG	LYS	13	116.542	42.407	3.683	1.00	33.28	TS20
ATOM	17465	C	TRP	138	138.834	126.697	-14.464	1.00	36.57	HS8	ATOM	17518	CD	LYS	13	115.680	42.814	4.854	1.00	33.28	TS20
ATOM	17466	O	TRP	138	139.293	127.115	-15.546	1.00	36.57	HS8	ATOM	17519	CE	LYS	13	114.227	42.473	4.585	1.00	33.28	TS20
ATOM	17467	OXT	TRP	138	139.216	127.101	-13.344	1.00	74.06	HS8	ATOM	17520	NZ	LYS	13	113.380	42.735	5.799	1.00	33.28	TS20
ATOM	17468	CB	ARG	8	131.880	43.053	10.683	1.00	153.88	TS20	ATOM	17521	C	LYS	13	118.477	43.189	1.498	1.00	31.50	TS20
ATOM	17469	CG	ARG	8	132.297	42.429	9.380	1.00	153.88	TS20	ATOM	17522	O	LYS	13	117.840	42.626	0.609	1.00	31.50	TS20
ATOM	17470	CD	ARG	8	133.129	41.203	9.652	1.00	99.94	TS20	ATOM	17523	N	ARG	14	118.825	44.476	1.450	1.00	35.02	TS20
ATOM	17471	NE	ARG	8	133.806	40.722	8.455	1.00	99.94	TS20	ATOM	17524	CA	ARG	14	118.494	45.334	0.317	1.00	35.02	TS20
ATOM	17472	CZ	ARG	8	134.533	39.610	8.411	1.00	99.94	TS20	ATOM	17525	CB	ARG	14	119.081	46.721	0.533	1.00	40.03	TS20
ATOM	17473	NH1	ARG	8	134.671	38.864	9.502	1.00	99.94	TS20	ATOM	17526	CG	ARG	14	118.194	47.662	1.305	1.00	40.03	TS20
ATOM	17474	NH2	ARG	8	135.129	39.248	7.280	1.00	99.94	TS20	ATOM	17527	CD	ARG	14	116.917	47.955	0.540	1.00	40.03	TS20
ATOM	17475	C	ARG	8	129.533	43.755	10.221	1.00	100.86	TS20	ATOM	17528	NE	ARG	14	116.216	49.116	1.084	1.00	40.03	TS20
ATOM	17476	O	ARG	8	128.750	43.465	11.123	1.00	100.86	TS20	ATOM	17529	CZ	ARG	14	115.043	49.559	0.639	1.00	40.03	TS20
ATOM	17477	N	ARG	8	130.912	45.012	11.818	1.00	100.86	TS20	ATOM	17530	NH1	ARG	14	114.429	48.935	-0.359	1.00	40.03	TS20
ATOM	17478	CA	ARG	8	130.939	44.244	10.542	1.00	100.86	TS20	ATOM	17531	NH2	ARG	14	114.489	50.631	1.184	1.00	40.03	TS20
ATOM	17479	N	ASN	8A	129.212	43.673	8.937	1.00	91.48	TS20	ATOM	17532	C	ARG	14	119.029	44.740	-0.982	1.00	35.02	TS20
ATOM	17480	CA	ASN	8A	127.897	43.214	8.508	1.00	91.48	TS20	ATOM	17533	O	ARG	14	118.317	44.644	-1.997	1.00	35.02	TS20
ATOM	17481	CB	ASN	8A	127.571	41.863	9.147	1.00	133.81	TS20	ATOM	17534	N	HIS	15	120.293	44.344	-0.954	1.00	42.07	TS20
ATOM	17482	CG	ASN	8A	128.460	40.751	8.637	1.00	133.81	TS20	ATOM	17535	CA	HIS	15	120.869	43.750	-2.139	1.00	42.07	TS20
ATOM	17483	OD1	ASN	8A	129.691	40.865	8.654	1.00	133.81	TS20	ATOM	17536	CB	HIS	15	122.324	43.403	-1.915	1.00	56.38	TS20
ATOM	17484	ND2	ASN	8A	127.843	39.662	8.179	1.00	133.81	TS20	ATOM	17537	CG	HIS	15	122.994	42.903	-3.147	1.00	56.38	TS20
ATOM	17485	C	ASN	8A	126.767	44.187	8.810	1.00	91.48	TS20	ATOM	17538	CD2	HIS	15	123.988	43.429	-3.895	1.00	56.38	TS20
ATOM	17486	O	ASN	8A	126.359	44.345	9.960	1.00	91.48	TS20	ATOM	17539	ND1	HIS	15	122.617	41.736	-3.774	1.00	56.38	TS20
ATOM	17487	N	LEU	9	126.272	44.838	7.762	1.00	49.98	TS20	ATOM	17540	CE1	HIS	15	123.354	41.563	-4.854	1.00	56.38	TS20
ATOM	17488	CA	LEU	9	125.166	45.773	7.870	1.00	49.98	TS20	ATOM	17541	NE2	HIS	15	124.195	42.576	-4.950	1.00	56.38	TS20
ATOM	17489	CB	LEU	9	125.369	46.946	6.907	1.00	66.92	TS20	ATOM	17542	C	HIS	15	120.089	42.483	-2.445	1.00	42.07	TS20
ATOM	17490	CG	LEU	9	124.598	48.257	7.100	1.00	66.92	TS20	ATOM	17543	O	HIS	15	119.691	42.228	-3.589	1.00	42.07	TS20
ATOM	17491	CD1	LEU	9	123.105	48.001	7.176	1.00	66.92	TS20	ATOM	17544	N	ARG	16	119.882	41.701	-1.390	1.00	45.99	TS20
ATOM	17492	CD2	LEU	9	125.094	48.933	8.375	1.00	66.92	TS20	ATOM	17545	CA	ARG	16	119.142	40.450	-1.439	1.00	45.99	TS20
ATOM	17493	C	LEU	9	123.986	44.929	7.415	1.00	49.98	TS20	ATOM	17546	CB	ARG	16	118.844	40.034	-0.004	1.00	35.63	TS20
ATOM	17494	O	LEU	9	123.741	44.811	6.221	1.00	49.98	TS20	ATOM	17547	CG	ARG	16	118.897	38.560	0.277	1.00	35.63	TS20
ATOM	17495	N	SER	10	123.269	44.330	8.359	1.00	46.65	TS20	ATOM	17548	CD	ARG	16	118.463	38.298	1.717	1.00	35.63	TS20
ATOM	17496	CA	SER	10	122.145	43.471	8.021	1.00	46.65	TS20	ATOM	17549	NE	ARG	16	119.418	38.795	2.706	1.00	35.63	TS20
ATOM	17497	CB	SER	10	121.341	43.101	9.276	1.00	35.74	TS20	ATOM	17550	CZ	ARG	16	119.084	39.199	3.934	1.00	35.63	TS20
ATOM	17498	OG	SER	10	121.877	41.938	9.896	1.00	35.74	TS20	ATOM	17551	NH1	ARG	16	117.815	39.174	4.326	1.00	35.63	TS20
ATOM	17499	C	SER	10	121.233	44.005	6.922	1.00	46.65	TS20	ATOM	17552	NH2	ARG	16	120.025	39.616	4.783	1.00	35.63	TS20
ATOM	17500	O	SER	10	120.340	43.289	6.454	1.00	46.65	TS20	ATOM	17553	C	ARG	16	117.829	40.638	-2.227	1.00	45.99	TS20
ATOM	17501	N	ALA	11	121.446	45.252	6.508	1.00	70.68	TS20	ATOM	17554	O	ARG	16	117.464	39.827	-3.087	1.00	45.99	TS20
ATOM	17502	CA	ALA	11	120.675	45.801	5.400	1.00	70.68	TS20	ATOM	17555	N	GLN	17	117.138	41.731	-1.931	1.00	38.41	TS20
ATOM	17503	CB	ALA	11	120.636	47.315	5.464	1.00	86.51	TS20	ATOM	17556	CA	GLN	17	115.871	42.038	-2.564	1.00	38.41	TS20
ATOM	17504	C	ALA	11	121.345	45.323	4.084	1.00	70.68	TS20	ATOM	17557	CB	GLN	17	115.106	43.028	-1.710	1.00	55.38	TS20
ATOM	17505	O	ALA	11	121.370	46.041	3.087	1.00	70.68	TS20	ATOM	17558	CG	GLN	17	115.200	42.737	-0.248	1.00	55.38	TS20
ATOM	17506	N	LEU	12	121.929	44.118	4.124	1.00	85.75	TS20	ATOM	17559	CD	GLN	17	114.338	43.655	0.545	1.00	55.38	TS20
ATOM	17507	CA	LEU	12	122.526	43.480	2.945	1.00	85.75	TS20	ATOM	17560	OE1	GLN	17	113.122	43.670	0.374	1.00	55.38	TS20
ATOM	17508	CB	LEU	12	123.277	42.201	3.299	1.00	28.30	TS20	ATOM	17561	NE2	GLN	17	114.951	44.444	1.415	1.00	55.38	TS20

ATOM	17562	C	GLN	17	116.037	42.619	-3.945	1.00	38.41	TS20
ATOM	17563	O	GLN	17	115.227	42.355	-4.838	1.00	38.41	TS20
ATOM	17564	N	SER	18	117.070	43.438	-4.114	1.00	42.78	TS20
ATOM	17565	CA	SER	18	117.325	44.074	-5.404	1.00	42.78	TS20
ATOM	17566	CB	SER	18	118.663	44.807	-5.368	1.00	68.48	TS20
ATOM	17567	OG	SER	18	119.736	43.884	-5.371	1.00	68.48	TS20
ATOM	17568	C	SER	18	117.361	43.010	-6.498	1.00	42.78	TS20
ATOM	17569	O	SER	18	116.759	43.155	-7.563	1.00	42.78	TS20
ATOM	17570	N	LEU	19	118.069	41.930	-6.205	1.00	41.24	TS20
ATOM	17571	CA	LEU	19	118.217	40.836	-7.140	1.00	41.24	TS20
ATOM	17572	CB	LEU	19	119.058	39.746	-6.509	1.00	38.28	TS20
ATOM	17573	CG	LEU	19	120.500	40.170	-6.273	1.00	38.28	TS20
ATOM	17574	CD1	LEU	19	121.154	39.165	-5.363	1.00	38.28	TS20
ATOM	17575	CD2	LEU	19	121.239	40.255	-7.596	1.00	38.28	TS20
ATOM	17576	C	LEU	19	116.892	40.267	-7.579	1.00	41.24	TS20
ATOM	17577	O	LEU	19	116.716	39.929	-8.743	1.00	41.24	TS20
ATOM	17578	N	LYS	20	115.958	40.151	-6.649	1.00	43.58	TS20
ATOM	17579	CA	LYS	20	114.658	39.606	-6.999	1.00	43.58	TS20
ATOM	17580	CB	LYS	20	113.807	39.403	-5.747	1.00	52.80	TS20
ATOM	17581	CG	LYS	20	114.429	38.519	-4.703	1.00	52.80	TS20
ATOM	17582	CD	LYS	20	113.410	38.272	-3.630	1.00	52.80	TS20
ATOM	17583	CE	LYS	20	113.975	37.513	-2.454	1.00	52.80	TS20
ATOM	17584	NZ	LYS	20	112.926	37.447	-1.387	1.00	52.80	TS20
ATOM	17585	C	LYS	20	113.952	40.568	-7.943	1.00	43.58	TS20
ATOM	17586	O	LYS	20	113.590	40.213	-9.080	1.00	43.58	TS20
ATOM	17587	N	ARG	21	113.751	41.787	-7.444	1.00	35.93	TS20
ATOM	17588	CA	ARG	21	113.101	42.846	-8.196	1.00	35.93	TS20
ATOM	17589	CB	ARG	21	113.282	44.172	-7.458	1.00	59.26	TS20
ATOM	17590	CG	ARG	21	112.605	44.226	-6.101	1.00	59.26	TS20
ATOM	17591	CD	ARG	21	112.786	45.586	-5.427	1.00	59.26	TS20
ATOM	17592	NE	ARG	21	111.742	45.829	-4.433	1.00	59.26	TS20
ATOM	17593	CZ	ARG	21	110.540	46.329	-4.715	1.00	59.26	TS20
ATOM	17594	NH1	ARG	21	110.228	46.655	-5.967	1.00	59.26	TS20
ATOM	17595	NH2	ARG	21	109.636	46.473	-3.753	1.00	59.26	TS20
ATOM	17596	C	ARG	21	113.748	42.902	-9.578	1.00	35.93	TS20
ATOM	17597	O	ARG	21	113.066	43.004	-10.595	1.00	35.93	TS20
ATOM	17598	N	ARG	22	115.073	42.812	-9.604	1.00	34.00	TS20
ATOM	17599	CA	ARG	22	115.791	42.826	-10.864	1.00	34.00	TS20
ATOM	17600	CB	ARG	22	117.281	42.629	-10.635	1.00	72.18	TS20
ATOM	17601	CG	ARG	22	118.039	42.343	-11.900	1.00	72.18	TS20
ATOM	17602	CD	ARG	22	119.526	42.311	-11.658	1.00	72.18	TS20
ATOM	17603	NE	ARG	22	120.187	41.557	-12.712	1.00	72.18	TS20
ATOM	17604	CZ	ARG	22	119.968	40.264	-12.936	1.00	72.18	TS20
ATOM	17605	NH1	ARG	22	119.108	39.590	-12.174	1.00	72.18	TS20
ATOM	17606	NH2	ARG	22	120.598	39.644	-13.927	1.00	72.18	TS20
ATOM	17607	C	ARG	22	115.269	41.718	-11.756	1.00	34.00	TS20
ATOM	17608	O	ARG	22	114.867	41.957	-12.894	1.00	34.00	TS20
ATOM	17609	N	LEU	23	115.251	40.500	-11.231	1.00	55.01	TS20
ATOM	17610	CA	LEU	23	114.781	39.375	-12.020	1.00	55.01	TS20
ATOM	17611	CB	LEU	23	115.042	38.064	-11.282	1.00	82.09	TS20
ATOM	17612	CG	LEU	23	114.937	36.846	-12.196	1.00	82.09	TS20
ATOM	17613	CD1	LEU	23	115.937	36.970	-13.340	1.00	82.09	TS20
ATOM	17614	CD2	LEU	23	115.206	35.599	-11.397	1.00	82.09	TS20
ATOM	17615	C	LEU	23	113.300	39.498	-12.364	1.00	55.01	TS20
ATOM	17616	O	LEU	23	112.848	39.001	-13.396	1.00	55.01	TS20
ATOM	17617	N	ARG	24	112.548	40.168	-11.501	1.00	61.16	TS20
ATOM	17618	CA	ARG	24	111.126	40.332	-11.740	1.00	61.16	TS20
ATOM	17619	CB	ARG	24	110.436	40.847	-10.478	1.00	88.21	TS20
ATOM	17620	CG	ARG	24	108.921	40.725	-10.508	1.00	88.21	TS20
ATOM	17621	CD	ARG	24	108.446	39.701	-9.488	1.00	88.21	TS20
ATOM	17622	NE	ARG	24	108.960	40.000	-8.151	1.00	88.21	TS20
ATOM	17623	CZ	ARG	24	108.749	39.247	-7.074	1.00	88.21	TS20
ATOM	17624	NH1	ARG	24	108.026	38.137	-7.167	1.00	88.21	TS20
ATOM	17625	NH2	ARG	24	109.270	39.603	-5.905	1.00	88.21	TS20
ATOM	17626	C	ARG	24	110.897	41.300	-12.897	1.00	61.16	TS20
ATOM	17627	O	ARG	24	110.073	41.034	-13.777	1.00	61.16	TS20
ATOM	17628	N	ASN	25	111.625	42.419	-12.888	1.00	48.29	TS20
ATOM	17629	CA	ASN	25	111.501	43.428	-13.940	1.00	48.29	TS20
ATOM	17630	CB	ASN	25	112.356	44.659	-13.642	1.00	36.57	TS20
ATOM	17631	CG	ASN	25	111.827	45.476	-12.488	1.00	36.57	TS20
ATOM	17632	OD1	ASN	25	110.615	45.591	-12.301	1.00	36.57	TS20
ATOM	17633	ND2	ASN	25	112.738	46.073	-11.713	1.00	36.57	TS20
ATOM	17634	C	ASN	25	111.987	42.827	-15.237	1.00	48.29	TS20
ATOM	17635	O	ASN	25	111.283	42.829	-16.245	1.00	48.29	TS20
ATOM	17636	N	LYS	26	113.214	42.324	-15.192	1.00	51.60	TS20
ATOM	17637	CA	LYS	26	113.856	41.691	-16.333	1.00	51.60	TS20
ATOM	17638	CB	LYS	26	115.013	40.830	-15.818	1.00	72.42	TS20
ATOM	17639	CG	LYS	26	115.944	40.300	-16.869	1.00	72.42	TS20
ATOM	17640	CD	LYS	26	115.637	38.855	-17.224	1.00	72.42	TS20
ATOM	17641	CE	LYS	26	116.651	38.317	-18.240	1.00	72.42	TS20
ATOM	17642	NZ	LYS	26	116.378	36.919	-18.694	1.00	72.42	TS20
ATOM	17643	C	LYS	26	112.837	40.840	-17.098	1.00	51.60	TS20
ATOM	17644	O	LYS	26	112.749	40.903	-18.324	1.00	51.60	TS20
ATOM	17645	N	ALA	27	112.039	40.086	-16.345	1.00	34.70	TS20
ATOM	17646	CA	ALA	27	111.030	39.176	-16.888	1.00	34.70	TS20
ATOM	17647	CB	ALA	27	110.627	38.172	-15.826	1.00	52.56	TS20
ATOM	17648	C	ALA	27	109.792	39.845	-17.439	1.00	34.70	TS20
ATOM	17649	O	ALA	27	109.124	39.297	-18.303	1.00	34.70	TS20
ATOM	17650	N	LYS	28	109.464	41.018	-16.926	1.00	40.09	TS20
ATOM	17651	CA	LYS	28	108.289	41.725	-17.407	1.00	40.09	TS20
ATOM	17652	CB	LYS	28	107.966	42.884	-16.476	1.00	60.51	TS20
ATOM	17653	CG	LYS	28	107.553	42.465	-15.079	1.00	60.51	TS20
ATOM	17654	CD	LYS	28	106.060	42.612	-14.926	1.00	60.51	TS20
ATOM	17655	CE	LYS	28	105.627	42.493	-13.482	1.00	60.51	TS20
ATOM	17656	NZ	LYS	28	104.184	42.864	-13.378	1.00	60.51	TS20
ATOM	17657	C	LYS	28	108.577	42.255	-18.796	1.00	40.09	TS20
ATOM	17658	O	LYS	28	107.854	41.970	-19.754	1.00	40.09	TS20
ATOM	17659	N	LYS	29	109.658	43.019	-18.889	1.00	70.66	TS20
ATOM	17660	CA	LYS	29	110.073	43.627	-20.139	1.00	70.66	TS20
ATOM	17661	CB	LYS	29	111.321	44.494	-19.910	1.00	51.93	TS20
ATOM	17662	CG	LYS	29	110.998	45.882	-19.335	1.00	51.93	TS20
ATOM	17663	CD	LYS	29	112.236	46.704	-18.964	1.00	51.93	TS20
ATOM	17664	CE	LYS	29	113.012	46.081	-17.798	1.00	51.93	TS20
ATOM	17665	NZ	LYS	29	114.013	47.019	-17.197	1.00	51.93	TS20
ATOM	17666	C	LYS	29	110.309	42.636	-21.266	1.00	70.66	TS20
ATOM	17667	O	LYS	29	109.794	42.821	-22.368	1.00	70.66	TS20

ATOM	17668	N	SER	30	111.069	41.581	-21.006	1.00	52.62	TS20	ATOM	17721	CD	LYS	37	111.092	41.407	-31.140	1.00	62.00	TS20
ATOM	17669	CA	SER	30	111.331	40.617	-22.066	1.00	52.62	TS20	ATOM	17722	CE	LYS	37	112.213	41.973	-30.276	1.00	62.00	TS20
ATOM	17670	CB	SER	30	112.147	39.443	-21.528	1.00	62.48	TS20	ATOM	17723	NZ	LYS	37	113.217	40.922	-29.917	1.00	62.00	TS20
ATOM	17671	OG	SER	30	111.557	38.930	-20.357	1.00	62.48	TS20	ATOM	17724	C	LYS	37	106.473	41.692	-32.835	1.00	52.65	TS20
ATOM	17672	C	SER	30	110.031	40.131	-22.708	1.00	52.62	TS20	ATOM	17725	O	LYS	37	105.883	42.048	-33.856	1.00	52.65	TS20
ATOM	17673	O	SER	30	109.966	39.918	-23.921	1.00	52.62	TS20	ATOM	17726	N	LYS	38	106.205	40.558	-32.185	1.00	58.48	TS20
ATOM	17674	N	ALA	31	108.990	39.978	-21.895	1.00	49.31	TS20	ATOM	17727	CA	LYS	38	105.180	39.622	-32.623	1.00	58.48	TS20
ATOM	17675	CA	ALA	31	107.690	39.531	-22.390	1.00	49.31	TS20	ATOM	17728	CB	LYS	38	104.639	38.836	-31.426	1.00	107.68	TS20
ATOM	17676	CB	ALA	31	106.752	39.275	-21.228	1.00	29.92	TS20	ATOM	17729	CG	LYS	38	105.015	37.367	-31.431	1.00	107.68	TS20
ATOM	17677	C	ALA	31	107.127	40.630	-23.271	1.00	49.31	TS20	ATOM	17730	CD	LYS	38	104.067	36.540	-32.293	1.00	107.68	TS20
ATOM	17678	O	ALA	31	106.617	40.384	-24.365	1.00	49.31	TS20	ATOM	17731	CE	LYS	38	104.746	35.268	-32.822	1.00	107.68	TS20
ATOM	17679	N	ILE	32	107.225	41.851	-22.761	1.00	41.10	TS20	ATOM	17732	NZ	LYS	38	105.477	34.476	-31.780	1.00	107.68	TS20
ATOM	17680	CA	ILE	32	106.762	43.029	-23.465	1.00	41.10	TS20	ATOM	17733	C	LYS	38	104.049	40.382	-33.287	1.00	58.48	TS20
ATOM	17681	CB	ILE	32	107.201	44.288	-22.719	1.00	37.08	TS20	ATOM	17734	O	LYS	38	103.605	40.024	-34.371	1.00	58.48	TS20
ATOM	17682	CG2	ILE	32	106.993	45.514	-23.580	1.00	37.08	TS20	ATOM	17735	N	ALA	39	103.599	41.444	-32.631	1.00	63.28	TS20
ATOM	17683	CG1	ILE	32	106.436	44.371	-21.400	1.00	37.08	TS20	ATOM	17736	CA	ALA	39	102.517	42.259	-33.150	1.00	63.28	TS20
ATOM	17684	CD1	ILE	32	106.806	45.560	-20.526	1.00	37.08	TS20	ATOM	17737	CB	ALA	39	102.033	43.210	-32.092	1.00	20.14	TS20
ATOM	17685	C	ILE	32	107.337	43.043	-24.872	1.00	41.10	TS20	ATOM	17738	C	ALA	39	102.980	43.036	-34.364	1.00	63.28	TS20
ATOM	17686	O	ILE	32	106.599	42.925	-25.844	1.00	41.10	TS20	ATOM	17739	O	ALA	39	102.429	42.868	-35.455	1.00	63.28	TS20
ATOM	17687	N	LYS	33	108.659	43.162	-24.971	1.00	48.52	TS20	ATOM	17740	N	VAL	40	103.988	43.889	-34.169	1.00	57.25	TS20
ATOM	17688	CA	LYS	33	109.343	43.202	-26.262	1.00	48.52	TS20	ATOM	17741	CA	VAL	40	104.548	44.713	-35.247	1.00	57.25	TS20
ATOM	17689	CB	LYS	33	110.854	43.140	-26.047	1.00	55.11	TS20	ATOM	17742	CB	VAL	40	105.878	45.376	-34.823	1.00	33.92	TS20
ATOM	17690	CG	LYS	33	111.359	44.225	-25.111	1.00	55.11	TS20	ATOM	17743	CG1	VAL	40	106.543	45.975	-36.023	1.00	33.92	TS20
ATOM	17691	CD	LYS	33	112.826	44.046	-24.732	1.00	55.11	TS20	ATOM	17744	CG2	VAL	40	105.630	46.454	-33.771	1.00	33.92	TS20
ATOM	17692	CE	LYS	33	113.263	45.114	-23.731	1.00	55.11	TS20	ATOM	17745	C	VAL	40	104.821	43.862	-36.478	1.00	57.25	TS20
ATOM	17693	NZ	LYS	33	114.660	44.921	-23.241	1.00	55.11	TS20	ATOM	17746	O	VAL	40	104.450	44.210	-37.598	1.00	57.25	TS20
ATOM	17694	C	LYS	33	108.902	42.070	-27.184	1.00	48.52	TS20	ATOM	17747	N	GLN	41	105.472	42.734	-36.254	1.00	46.78	TS20
ATOM	17695	O	LYS	33	108.444	42.308	-28.309	1.00	48.52	TS20	ATOM	17748	CA	GLN	41	105.801	41.830	-37.333	1.00	46.78	TS20
ATOM	17696	N	THR	34	109.028	40.840	-26.700	1.00	67.92	TS20	ATOM	17749	CB	GLN	41	106.754	40.757	-36.803	1.00	84.31	TS20
ATOM	17697	CA	THR	34	108.648	39.678	-27.490	1.00	67.92	TS20	ATOM	17750	CG	GLN	41	107.775	40.322	-37.819	1.00	84.31	TS20
ATOM	17698	CB	THR	34	108.612	38.427	-26.641	1.00	58.85	TS20	ATOM	17751	CD	GLN	41	107.142	39.550	-38.941	1.00	84.31	TS20
ATOM	17699	OG1	THR	34	109.921	38.163	-26.133	1.00	58.85	TS20	ATOM	17752	OE1	GLN	41	107.663	39.505	-40.052	1.00	84.31	TS20
ATOM	17700	CG2	THR	34	108.169	37.259	-27.473	1.00	58.85	TS20	ATOM	17753	NE2	GLN	41	106.008	38.923	-38.653	1.00	84.31	TS20
ATOM	17701	C	THR	34	107.285	39.843	-28.129	1.00	67.92	TS20	ATOM	17754	C	GLN	41	104.545	41.208	-37.980	1.00	46.78	TS20
ATOM	17702	O	THR	34	107.100	39.542	-29.309	1.00	67.92	TS20	ATOM	17755	O	GLN	41	104.559	40.841	-39.151	1.00	46.78	TS20
ATOM	17703	N	LEU	35	106.331	40.315	-27.336	1.00	52.33	TS20	ATOM	17756	N	LEU	42	103.459	41.101	-37.224	1.00	77.56	TS20
ATOM	17704	CA	LEU	35	104.985	40.525	-27.821	1.00	52.33	TS20	ATOM	17757	CA	LEU	42	102.220	40.543	-37.764	1.00	77.56	TS20
ATOM	17705	CB	LEU	35	104.046	40.822	-26.656	1.00	38.58	TS20	ATOM	17758	CB	LEU	42	101.252	40.158	-36.646	1.00	65.52	TS20
ATOM	17706	CG	LEU	35	103.391	39.624	-25.972	1.00	38.58	TS20	ATOM	17759	CG	LEU	42	101.219	38.676	-36.283	1.00	65.52	TS20
ATOM	17707	CD1	LEU	35	102.233	40.093	-25.094	1.00	38.58	TS20	ATOM	17760	CD1	LEU	42	100.022	38.426	-35.381	1.00	65.52	TS20
ATOM	17708	CD2	LEU	35	102.869	38.675	-27.028	1.00	38.58	TS20	ATOM	17761	CD2	LEU	42	101.122	37.827	-37.550	1.00	65.52	TS20
ATOM	17709	C	LEU	35	104.887	41.645	-28.847	1.00	52.33	TS20	ATOM	17762	C	LEU	42	101.534	41.550	-38.663	1.00	77.56	TS20
ATOM	17710	O	LEU	35	104.302	41.455	-29.909	1.00	52.33	TS20	ATOM	17763	O	LEU	42	101.019	41.195	-39.727	1.00	77.56	TS20
ATOM	17711	N	SER	36	105.453	42.808	-28.533	1.00	44.79	TS20	ATOM	17764	N	ALA	43	101.511	42.800	-38.203	1.00	75.20	TS20
ATOM	17712	CA	SER	36	105.409	43.963	-29.435	1.00	44.79	TS20	ATOM	17765	CA	ALA	43	100.915	43.908	-38.947	1.00	75.20	TS20
ATOM	17713	CB	SER	36	106.268	45.093	-28.886	1.00	57.30	TS20	ATOM	17766	CB	ALA	43	101.010	45.189	-38.132	1.00	47.96	TS20
ATOM	17714	OG	SER	36	106.494	44.915	-27.504	1.00	57.30	TS20	ATOM	17767	C	ALA	43	101.755	44.034	-40.199	1.00	75.20	TS20
ATOM	17715	C	SER	36	105.894	43.605	-30.834	1.00	44.79	TS20	ATOM	17768	O	ALA	43	101.246	44.205	-41.313	1.00	75.20	TS20
ATOM	17716	O	SER	36	105.238	43.927	-31.826	1.00	44.79	TS20	ATOM	17769	N	GLN	44	103.062	43.941	-39.969	1.00	67.38	TS20
ATOM	17717	N	LYS	37	107.055	42.960	-30.920	1.00	52.65	TS20	ATOM	17770	CA	GLN	44	104.088	44.008	-40.996	1.00	67.38	TS20
ATOM	17718	CA	LYS	37	107.567	42.556	-32.221	1.00	52.65	TS20	ATOM	17771	CB	GLN	44	105.376	43.405	-40.428	1.00	83.81	TS20
ATOM	17719	CB	LYS	37	108.833	41.724	-32.075	1.00	62.00	TS20	ATOM	17772	CG	GLN	44	106.659	43.930	-41.021	1.00	83.81	TS20
ATOM	17720	CG	LYS	37	109.946	42.388	-31.320	1.00	62.00	TS20	ATOM	17773	CD	GLN	44	106.657	43.859	-42.518	1.00	83.81	TS20

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ATOM  17774  OE1 GLN  44     106.264  42.847 -43.100  1.00 83.81      TS20
ATOM  17775  NE2 GLN  44     107.103  44.932 -43.160  1.00 83.81      TS20
ATOM  17776  C   GLN  44     103.628  43.218 -42.223  1.00 67.38      TS20
ATOM  17777  O   GLN  44     103.531  43.761 -43.316  1.00 67.38      TS20
ATOM  17778  N   GLU  45     103.324  41.939 -42.008  1.00 65.61      TS20
ATOM  17779  CA  GLU  45     102.879  41.027 -43.061  1.00 65.61      TS20
ATOM  17780  CB  GLU  45     103.053  39.588 -42.607  1.00113.52      TS20
ATOM  17781  CG  GLU  45     104.354  39.297 -41.929  1.00113.52      TS20
ATOM  17782  CD  GLU  45     104.375  37.889 -41.400  1.00113.52      TS20
ATOM  17783  OE1 GLU  45     104.437  36.948 -42.222  1.00113.52      TS20
ATOM  17784  OE2 GLU  45     104.308  37.721 -40.164  1.00113.52      TS20
ATOM  17785  C   GLU  45     101.430  41.197 -43.498  1.00 65.61      TS20
ATOM  17786  O   GLU  45     100.892  40.333 -44.195  1.00 65.61      TS20
ATOM  17787  N   GLY  46     100.789  42.281 -43.074  1.00 79.17      TS20
ATOM  17788  CA  GLY  46      99.407  42.513 -43.466  1.00 79.17      TS20
ATOM  17789  C   GLY  46      98.295  41.894 -42.626  1.00 79.17      TS20
ATOM  17790  O   GLY  46      97.209  42.462 -42.563  1.00 79.17      TS20
ATOM  17791  N   LYS  47      98.541  40.750 -41.986  1.00 77.92      TS20
ATOM  17792  CA  LYS  47      97.518  40.084 -41.165  1.00 77.92      TS20
ATOM  17793  CB  LYS  47      98.085  38.808 -40.543  1.00 78.13      TS20
ATOM  17794  CG  LYS  47      98.492  37.765 -41.569  1.00 78.13      TS20
ATOM  17795  CD  LYS  47      99.077  36.537 -40.914  1.00 78.13      TS20
ATOM  17796  CE  LYS  47     100.211  35.994 -41.750  1.00 78.13      TS20
ATOM  17797  NZ  LYS  47     101.264  37.037 -41.950  1.00 78.13      TS20
ATOM  17798  C   LYS  47      96.946  40.982 -40.070  1.00 77.92      TS20
ATOM  17799  O   LYS  47      97.521  41.114 -38.989  1.00 77.92      TS20
ATOM  17800  N   ALA  48      95.790  41.571 -40.363  1.00 73.44      TS20
ATOM  17801  CA  ALA  48      95.108  42.496 -39.460  1.00 73.44      TS20
ATOM  17802  CB  ALA  48      93.868  43.050 -40.144  1.00110.17      TS20
ATOM  17803  C   ALA  48      94.732  41.955 -38.089  1.00 73.44      TS20
ATOM  17804  O   ALA  48      95.359  42.302 -37.091  1.00 73.44      TS20
ATOM  17805  N   GLU  49      93.695  41.123 -38.042  1.00 88.86      TS20
ATOM  17806  CA  GLU  49      93.222  40.556 -36.782  1.00 88.86      TS20
ATOM  17807  CB  GLU  49      92.361  39.319 -37.037  1.00 92.21      TS20
ATOM  17808  CG  GLU  49      90.865  39.593 -37.063  1.00 92.21      TS20
ATOM  17809  CD  GLU  49      90.044  38.330 -36.866  1.00 92.21      TS20
ATOM  17810  OE1 GLU  49      90.222  37.371 -37.648  1.00 92.21      TS20
ATOM  17811  OE2 GLU  49      89.222  38.292 -35.926  1.00 92.21      TS20
ATOM  17812  C   GLU  49      94.299  40.199 -35.763  1.00 88.86      TS20
ATOM  17813  O   GLU  49      94.474  40.907 -34.771  1.00 88.86      TS20
ATOM  17814  N   GLU  50      95.017  39.104 -36.003  1.00 82.02      TS20
ATOM  17815  CA  GLU  50      96.044  38.668 -35.065  1.00 82.02      TS20
ATOM  17816  CB  GLU  50      96.697  37.367 -35.552  1.00123.95      TS20
ATOM  17817  CG  GLU  50      97.249  37.392 -36.961  1.00123.95      TS20
ATOM  17818  CD  GLU  50      97.755  36.024 -37.404  1.00123.95      TS20
ATOM  17819  OE1 GLU  50      98.532  35.400 -36.651  1.00123.95      TS20
ATOM  17820  OE2 GLU  50      97.381  35.571 -38.507  1.00123.95      TS20
ATOM  17821  C   GLU  50      97.105  39.725 -34.743  1.00 82.02      TS20
ATOM  17822  O   GLU  50      97.711  39.695 -33.667  1.00 82.02      TS20
ATOM  17823  N   ALA  51      97.323  40.668 -35.654  1.00 64.05      TS20
ATOM  17824  CA  ALA  51      98.302  41.723 -35.406  1.00 64.05      TS20
ATOM  17825  CB  ALA  51      98.544  42.533 -36.674  1.00 58.72      TS20
ATOM  17826  C   ALA  51      97.776  42.625 -34.287  1.00 64.05      TS20
ATOM  17827  O   ALA  51      98.516  43.006 -33.384  1.00 64.05      TS20
ATOM  17828  N   LEU  52      96.490  42.958 -34.343  1.00 46.77      TS20
ATOM  17829  CA  LEU  52      95.890  43.802 -33.317  1.00 46.77      TS20
ATOM  17830  CB  LEU  52      94.532  44.327 -33.787  1.00 78.45      TS20
ATOM  17831  CG  LEU  52      94.567  45.223 -35.031  1.00 78.45      TS20
ATOM  17832  CD1 LEU  52      93.154  45.528 -35.470  1.00 78.45      TS20
ATOM  17833  CD2 LEU  52      95.324  46.513 -34.738  1.00 78.45      TS20
ATOM  17834  C   LEU  52      95.726  43.000 -32.032  1.00 46.77      TS20
ATOM  17835  O   LEU  52      96.096  43.468 -30.952  1.00 46.77      TS20
ATOM  17836  N   LYS  53      95.179  41.788 -32.168  1.00 66.90      TS20
ATOM  17837  CA  LYS  53      94.955  40.871 -31.047  1.00 66.90      TS20
ATOM  17838  CB  LYS  53      94.669  39.456 -31.556  1.00102.52      TS20
ATOM  17839  CG  LYS  53      93.235  39.004 -31.370  1.00102.52      TS20
ATOM  17840  CD  LYS  53      92.926  37.779 -32.214  1.00102.52      TS20
ATOM  17841  CE  LYS  53      91.428  37.552 -32.295  1.00102.52      TS20
ATOM  17842  NZ  LYS  53      91.075  36.573 -33.351  1.00102.52      TS20
ATOM  17843  C   LYS  53      96.172  40.832 -30.157  1.00 66.90      TS20
ATOM  17844  O   LYS  53      96.064  40.976 -28.942  1.00 66.90      TS20
ATOM  17845  N   ILE  54      97.333  40.624 -30.766  1.00 53.12      TS20
ATOM  17846  CA  ILE  54      98.565  40.592 -30.005  1.00 53.12      TS20
ATOM  17847  CB  ILE  54      99.733  40.158 -30.860  1.00 51.30      TS20
ATOM  17848  CG2 ILE  54     101.014  40.207 -30.047  1.00 51.30      TS20
ATOM  17849  CG1 ILE  54      99.490  38.753 -31.378  1.00 51.30      TS20
ATOM  17850  CD1 ILE  54     100.646  38.227 -32.195  1.00 51.30      TS20
ATOM  17851  C   ILE  54      98.869  41.985 -29.465  1.00 53.12      TS20
ATOM  17852  O   ILE  54      99.242  42.137 -28.298  1.00 53.12      TS20
ATOM  17853  N   MET  55      98.713  43.001 -30.312  1.00 46.00      TS20
ATOM  17854  CA  MET  55      98.970  44.367 -29.890  1.00 46.00      TS20
ATOM  17855  CB  MET  55      98.437  45.355 -30.919  1.00 69.11      TS20
ATOM  17856  CG  MET  55      98.725  46.793 -30.545  1.00 69.11      TS20
ATOM  17857  SD  MET  55      97.508  47.925 -31.201  1.00 69.11      TS20
ATOM  17858  CE  MET  55      98.181  48.213 -32.812  1.00 69.11      TS20
ATOM  17859  C   MET  55      98.320  44.664 -28.531  1.00 46.00      TS20
ATOM  17860  O   MET  55      98.998  45.127 -27.598  1.00 46.00      TS20
ATOM  17861  N   ARG  56      97.013  44.403 -28.421  1.00 57.01      TS20
ATOM  17862  CA  ARG  56      96.293  44.643 -27.174  1.00 57.01      TS20
ATOM  17863  CB  ARG  56      94.870  44.086 -27.235  1.00 89.48      TS20
ATOM  17864  CG  ARG  56      94.001  44.601 -28.360  1.00 89.48      TS20
ATOM  17865  CD  ARG  56      93.799  43.497 -29.386  1.00 89.48      TS20
ATOM  17866  NE  ARG  56      92.415  43.370 -29.837  1.00 89.48      TS20
ATOM  17867  CZ  ARG  56      91.374  43.216 -29.024  1.00 89.48      TS20
ATOM  17868  NH1 ARG  56      91.550  43.175 -27.707  1.00 89.48      TS20
ATOM  17869  NH2 ARG  56      90.153  43.091 -29.528  1.00 89.48      TS20
ATOM  17870  C   ARG  56      97.016  44.020 -25.971  1.00 57.01      TS20
ATOM  17871  O   ARG  56      97.111  44.653 -24.919  1.00 57.01      TS20
ATOM  17872  N   LYS  57      97.511  42.785 -26.110  1.00 49.34      TS20
ATOM  17873  CA  LYS  57      98.228  42.141 -25.007  1.00 49.34      TS20
ATOM  17874  CB  LYS  57      98.711  40.738 -25.389  1.00 82.80      TS20
ATOM  17875  CG  LYS  57      97.595  39.720 -25.565  1.00 82.80      TS20
ATOM  17876  CD  LYS  57      98.138  38.318 -25.845  1.00 82.80      TS20
ATOM  17877  CE  LYS  57      97.013  37.321 -26.144  1.00 82.80      TS20
ATOM  17878  NZ  LYS  57      97.541  35.962 -26.467  1.00 82.80      TS20
ATOM  17879  C   LYS  57      99.426  43.016 -24.688  1.00 49.34      TS20
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ATOM	17880	O	LYS	57	99.676	43.369	-23.523	1.00	49.34	TS20	ATOM	17933	O	LYS	64	102.411	47.250	-14.408	1.00	53.11	TS20
ATOM	17881	N	ALA	58	100.162	43.370	-25.739	1.00	38.43	TS20	ATOM	17934	N	ALA	65	103.035	46.879	-16.526	1.00	57.66	TS20
ATOM	17882	CA	ALA	58	101.320	44.222	-25.581	1.00	38.43	TS20	ATOM	17935	CA	ALA	65	104.450	47.041	-16.231	1.00	57.66	TS20
ATOM	17883	CB	ALA	58	101.836	44.639	-26.929	1.00	56.09	TS20	ATOM	17936	CB	ALA	65	105.265	47.002	-17.520	1.00	63.98	TS20
ATOM	17884	C	ALA	58	100.884	45.442	-24.774	1.00	38.43	TS20	ATOM	17937	C	ALA	65	104.655	48.374	-15.517	1.00	57.66	TS20
ATOM	17885	O	ALA	58	101.416	45.706	-23.693	1.00	38.43	TS20	ATOM	17938	O	ALA	65	105.503	48.492	-14.631	1.00	57.66	TS20
ATOM	17886	N	GLU	59	99.899	46.170	-25.291	1.00	48.30	TS20	ATOM	17939	N	ALA	66	103.861	49.370	-15.902	1.00	58.81	TS20
ATOM	17887	CA	GLU	59	99.402	47.351	-24.598	1.00	48.30	TS20	ATOM	17940	CA	ALA	66	103.961	50.697	-15.305	1.00	58.81	TS20
ATOM	17888	CB	GLU	59	98.108	47.857	-25.246	1.00	63.31	TS20	ATOM	17941	CB	ALA	66	103.463	51.749	-16.275	1.00	25.18	TS20
ATOM	17889	CG	GLU	59	97.525	49.082	-24.552	1.00	63.31	TS20	ATOM	17942	C	ALA	66	103.187	50.794	-14.009	1.00	58.81	TS20
ATOM	17890	CD	GLU	59	96.339	49.685	-25.288	1.00	63.31	TS20	ATOM	17943	O	ALA	66	103.278	51.808	-13.306	1.00	58.81	TS20
ATOM	17891	OE1	GLU	59	95.833	50.734	-24.842	1.00	63.31	TS20	ATOM	17944	N	LYS	67	102.416	49.747	-13.709	1.00	44.65	TS20
ATOM	17892	OE2	GLU	59	95.902	49.118	-26.310	1.00	63.31	TS20	ATOM	17945	CA	LYS	67	101.622	49.688	-12.483	1.00	44.65	TS20
ATOM	17893	C	GLU	59	99.150	47.043	-23.126	1.00	48.30	TS20	ATOM	17946	CB	LYS	67	100.747	48.426	-12.484	1.00	98.41	TS20
ATOM	17894	O	GLU	59	99.554	47.802	-22.240	1.00	48.30	TS20	ATOM	17947	CG	LYS	67	99.420	48.577	-11.763	1.00	98.41	TS20
ATOM	17895	N	SER	60	98.498	45.912	-22.872	1.00	49.39	TS20	ATOM	17948	CD	LYS	67	98.555	49.631	-12.442	1.00	98.41	TS20
ATOM	17896	CA	SER	60	98.176	45.499	-21.509	1.00	49.39	TS20	ATOM	17949	CE	LYS	67	97.408	50.099	-11.544	1.00	98.41	TS20
ATOM	17897	CB	SER	60	97.366	44.209	-21.528	1.00	64.19	TS20	ATOM	17950	NZ	LYS	67	96.521	51.130	-12.184	1.00	98.41	TS20
ATOM	17898	OG	SER	60	97.097	43.785	-20.209	1.00	64.19	TS20	ATOM	17951	C	LYS	67	102.637	49.649	-11.338	1.00	44.65	TS20
ATOM	17899	C	SER	60	99.412	45.302	-20.640	1.00	49.39	TS20	ATOM	17952	O	LYS	67	102.668	50.531	-10.480	1.00	44.65	TS20
ATOM	17900	O	SER	60	99.586	45.972	-19.617	1.00	49.39	TS20	ATOM	17953	N	GLY	68	103.473	48.621	-11.335	1.00	76.51	TS20
ATOM	17901	N	LEU	61	100.271	44.379	-21.047	1.00	56.69	TS20	ATOM	17954	CA	GLY	68	104.503	48.527	-10.323	1.00	76.51	TS20
ATOM	17902	CA	LEU	61	101.476	44.116	-20.285	1.00	56.69	TS20	ATOM	17955	C	GLY	68	105.672	49.303	-10.893	1.00	76.51	TS20
ATOM	17903	CB	LEU	61	102.404	43.189	-21.067	1.00	47.05	TS20	ATOM	17956	O	GLY	68	105.618	49.726	-12.047	1.00	76.51	TS20
ATOM	17904	CG	LEU	61	101.787	41.851	-21.461	1.00	47.05	TS20	ATOM	17957	N	SER	69	106.734	49.485	-10.120	1.00	36.97	TS20
ATOM	17905	CD1	LEU	61	102.905	40.871	-21.762	1.00	47.05	TS20	ATOM	17958	CA	SER	69	107.885	50.245	-10.609	1.00	36.97	TS20
ATOM	17906	CD2	LEU	61	100.919	41.335	-20.328	1.00	47.05	TS20	ATOM	17959	CB	SER	69	108.755	50.733	-9.432	1.00	32.36	TS20
ATOM	17907	C	LEU	61	102.207	45.404	-19.948	1.00	56.69	TS20	ATOM	17960	OG	SER	69	109.318	49.673	-8.672	1.00	32.36	TS20
ATOM	17908	O	LEU	61	102.709	45.574	-18.835	1.00	56.69	TS20	ATOM	17961	C	SER	69	108.776	49.528	-11.613	1.00	36.97	TS20
ATOM	17909	N	ILE	62	102.261	46.314	-20.911	1.00	56.46	TS20	ATOM	17962	O	SER	69	109.981	49.506	-11.442	1.00	36.97	TS20
ATOM	17910	CA	ILE	62	102.941	47.576	-20.700	1.00	56.46	TS20	ATOM	17963	N	THR	70	108.204	48.944	-12.654	1.00	61.23	TS20
ATOM	17911	CB	ILE	62	102.971	48.417	-21.986	1.00	27.70	TS20	ATOM	17964	CA	THR	70	109.032	48.263	-13.637	1.00	61.23	TS20
ATOM	17912	CG2	ILE	62	103.646	49.764	-21.717	1.00	27.70	TS20	ATOM	17965	CB	THR	70	108.341	47.018	-14.232	1.00	55.65	TS20
ATOM	17913	CG1	ILE	62	103.742	47.658	-23.069	1.00	27.70	TS20	ATOM	17966	OG1	THR	70	108.232	46.006	-13.227	1.00	55.65	TS20
ATOM	17914	CD1	ILE	62	103.906	48.429	-24.371	1.00	27.70	TS20	ATOM	17967	CG2	THR	70	109.139	46.476	-15.418	1.00	55.65	TS20
ATOM	17915	C	ILE	62	102.306	48.390	-19.579	1.00	56.46	TS20	ATOM	17968	C	THR	70	109.321	49.200	-14.781	1.00	61.23	TS20
ATOM	17916	O	ILE	62	102.969	48.716	-18.589	1.00	56.46	TS20	ATOM	17969	O	THR	70	110.385	49.807	-14.853	1.00	61.23	TS20
ATOM	17917	N	ASP	63	101.024	48.714	-19.714	1.00	52.73	TS20	ATOM	17970	N	LEU	71	108.336	49.312	-15.663	1.00	62.43	TS20
ATOM	17918	CA	ASP	63	100.386	49.507	-18.673	1.00	52.73	TS20	ATOM	17971	CA	LEU	71	108.407	50.128	-16.858	1.00	62.43	TS20
ATOM	17919	CB	ASP	63	98.928	49.780	-19.016	1.00	83.43	TS20	ATOM	17972	CB	LEU	71	107.745	49.351	-17.986	1.00	43.13	TS20
ATOM	17920	CG	ASP	63	98.748	51.091	-19.750	1.00	83.43	TS20	ATOM	17973	CG	LEU	71	107.781	49.672	-19.477	1.00	43.13	TS20
ATOM	17921	OD1	ASP	63	99.310	52.116	-19.293	1.00	83.43	TS20	ATOM	17974	CD1	LEU	71	106.542	50.448	-19.857	1.00	43.13	TS20
ATOM	17922	OD2	ASP	63	98.040	51.099	-20.776	1.00	83.43	TS20	ATOM	17975	CD2	LEU	71	109.061	50.386	-19.834	1.00	43.13	TS20
ATOM	17923	C	ASP	63	100.500	48.875	-17.292	1.00	52.73	TS20	ATOM	17976	C	LEU	71	107.668	51.417	-16.589	1.00	62.43	TS20
ATOM	17924	O	ASP	63	100.539	49.583	-16.281	1.00	52.73	TS20	ATOM	17977	O	LEU	71	107.159	52.049	-17.502	1.00	62.43	TS20
ATOM	17925	N	LYS	64	100.556	47.546	-17.253	1.00	53.11	TS20	ATOM	17978	N	HIS	72	107.629	51.806	-15.321	1.00	46.42	TS20
ATOM	17926	CA	LYS	64	100.694	46.829	-15.997	1.00	53.11	TS20	ATOM	17979	CA	HIS	72	106.932	53.012	-14.879	1.00	46.42	TS20
ATOM	17927	CB	LYS	64	100.413	45.347	-16.181	1.00	59.94	TS20	ATOM	17980	CB	HIS	72	107.532	53.485	-13.553	1.00	103.37	TS20
ATOM	17928	CG	LYS	64	98.980	45.033	-16.489	1.00	59.94	TS20	ATOM	17981	CG	HIS	72	106.584	53.389	-12.398	1.00	103.37	TS20
ATOM	17929	CD	LYS	64	98.745	43.545	-16.469	1.00	59.94	TS20	ATOM	17982	CD2	HIS	72	106.334	54.240	-11.376	1.00	103.37	TS20
ATOM	17930	CE	LYS	64	97.263	43.242	-16.506	1.00	59.94	TS20	ATOM	17983	ND1	HIS	72	105.762	52.301	-12.201	1.00	103.37	TS20
ATOM	17931	NZ	LYS	64	97.007	41.777	-16.349	1.00	59.94	TS20	ATOM	17984	CE1	HIS	72	105.045	52.488	-11.108	1.00	103.37	TS20
ATOM	17932	C	LYS	64	102.126	47.006	-15.571	1.00	53.11	TS20	ATOM	17985	NE2	HIS	72	105.372	53.656	-10.589	1.00	103.37	TS20

ATOM	17986	C	HIS	72	106.763	54.214	-15.828	1.00	46.42	TS20	ATOM	18039	NH2	ARG	79	111.261	49.950	-21.816	1.00 68.06	TS20
ATOM	17987	O	HIS	72	107.726	54.730	-16.399	1.00	46.42	TS20	ATOM	18040	C	ARG	79	104.814	51.898	-26.426	1.00 59.58	TS20
ATOM	17988	N	LYS	73	105.490	54.620	-15.935	1.00	96.88	TS20	ATOM	18041	O	ARG	79	104.813	51.453	-27.578	1.00 59.58	TS20
ATOM	17989	CA	LYS	73	104.928	55.727	-16.720	1.00	96.88	TS20	ATOM	18042	N	LYS	80	103.713	52.276	-25.793	1.00 60.73	TS20
ATOM	17990	CB	LYS	73	104.191	56.679	-15.783	1.00	84.37	TS20	ATOM	18043	CA	LYS	80	102.422	52.163	-26.436	1.00 60.73	TS20
ATOM	17991	CG	LYS	73	102.709	56.795	-16.055	1.00	84.37	TS20	ATOM	18044	CB	LYS	80	101.325	52.617	-25.472	1.00 63.10	TS20
ATOM	17992	CD	LYS	73	102.440	57.238	-17.490	1.00	84.37	TS20	ATOM	18045	CG	LYS	80	101.239	51.716	-24.241	1.00 63.10	TS20
ATOM	17993	CE	LYS	73	102.297	56.064	-18.467	1.00	84.37	TS20	ATOM	18046	CD	LYS	80	100.428	52.328	-23.121	1.00 63.10	TS20
ATOM	17994	NZ	LYS	73	100.967	55.362	-18.360	1.00	84.37	TS20	ATOM	18047	CE	LYS	80	98.982	52.493	-23.512	1.00 63.10	TS20
ATOM	17995	C	LYS	73	105.818	56.546	-17.629	1.00	96.88	TS20	ATOM	18048	NZ	LYS	80	98.226	53.154	-22.414	1.00 63.10	TS20
ATOM	17996	O	LYS	73	106.982	56.785	-17.314	1.00	96.88	TS20	ATOM	18049	C	LYS	80	102.344	52.910	-27.760	1.00 60.73	TS20
ATOM	17997	N	ASN	74	105.223	57.025	-18.728	1.00	49.96	TS20	ATOM	18050	O	LYS	80	102.077	52.294	-28.789	1.00 60.73	TS20
ATOM	17998	CA	ASN	74	105.912	57.810	-19.771	1.00	49.96	TS20	ATOM	18051	N	SER	81	102.589	54.217	-27.761	1.00 54.41	TS20
ATOM	17999	CB	ASN	74	106.934	58.790	-19.182	1.00	56.24	TS20	ATOM	18052	CA	SER	81	102.520	54.956	-29.021	1.00 54.41	TS20
ATOM	18000	CG	ASN	74	106.287	60.007	-18.522	1.00	56.24	TS20	ATOM	18053	CB	SER	81	102.821	56.431	-28.795	1.00 46.30	TS20
ATOM	18001	OD1	ASN	74	105.330	59.886	-17.770	1.00	56.24	TS20	ATOM	18054	OG	SER	81	103.951	56.563	-27.971	1.00 46.30	TS20
ATOM	18002	ND2	ASN	74	106.834	61.187	-18.791	1.00	56.24	TS20	ATOM	18055	C	SER	81	103.458	54.390	-30.095	1.00 54.41	TS20
ATOM	18003	C	ASN	74	106.630	56.736	-20.572	1.00	49.96	TS20	ATOM	18056	O	SER	81	103.009	54.084	-31.196	1.00 54.41	TS20
ATOM	18004	O	ASN	74	106.504	56.650	-21.803	1.00	49.96	TS20	ATOM	18057	N	ARG	82	104.749	54.253	-29.785	1.00 43.51	TS20
ATOM	18005	N	ALA	75	107.378	55.908	-19.841	1.00	40.54	TS20	ATOM	18058	CA	ARG	82	105.712	53.700	-30.744	1.00 43.51	TS20
ATOM	18006	CA	ALA	75	108.094	54.776	-20.414	1.00	40.54	TS20	ATOM	18059	CB	ARG	82	107.073	53.476	-30.076	1.00122.48	TS20
ATOM	18007	CB	ALA	75	108.790	53.999	-19.325	1.00	48.91	TS20	ATOM	18060	CG	ARG	82	107.861	54.750	-29.841	1.00122.48	TS20
ATOM	18008	C	ALA	75	106.974	53.954	-20.997	1.00	40.54	TS20	ATOM	18061	CD	ARG	82	109.135	54.505	-29.042	1.00122.48	TS20
ATOM	18009	O	ALA	75	107.060	53.474	-22.117	1.00	40.54	TS20	ATOM	18062	NE	ARG	82	109.950	55.716	-28.952	1.00122.48	TS20
ATOM	18010	N	ALA	76	105.908	53.826	-20.212	1.00	37.90	TS20	ATOM	18063	CZ	ARG	82	111.020	55.855	-28.174	1.00122.48	TS20
ATOM	18011	CA	ALA	76	104.732	53.083	-20.627	1.00	37.90	TS20	ATOM	18064	NH1	ARG	82	111.419	54.854	-27.398	1.00122.48	TS20
ATOM	18012	CB	ALA	76	103.714	53.062	-19.502	1.00	104.16	TS20	ATOM	18065	NH2	ARG	82	111.699	56.997	-28.179	1.00122.48	TS20
ATOM	18013	C	ALA	76	104.141	53.761	-21.856	1.00	37.90	TS20	ATOM	18066	C	ARG	82	105.201	52.372	-31.308	1.00 43.51	TS20
ATOM	18014	O	ALA	76	103.946	53.133	-22.907	1.00	37.90	TS20	ATOM	18067	O	ARG	82	105.542	51.993	-32.430	1.00 43.51	TS20
ATOM	18015	N	ALA	77	103.867	55.055	-21.711	1.00	55.83	TS20	ATOM	18068	N	LEU	83	104.364	51.685	-30.527	1.00 51.89	TS20
ATOM	18016	CA	ALA	77	103.293	55.851	-22.785	1.00	55.83	TS20	ATOM	18069	CA	LEU	83	103.793	50.390	-30.912	1.00 51.89	TS20
ATOM	18017	CB	ALA	77	103.205	57.302	-22.352	1.00	31.41	TS20	ATOM	18070	CB	LEU	83	103.416	49.597	-29.650	1.00 41.88	TS20
ATOM	18018	C	ALA	77	104.095	55.730	-24.079	1.00	55.83	TS20	ATOM	18071	CG	LEU	83	103.339	48.060	-29.670	1.00 41.88	TS20
ATOM	18019	O	ALA	77	103.515	55.482	-25.145	1.00	55.83	TS20	ATOM	18072	CD1	LEU	83	102.177	47.662	-28.793	1.00 41.88	TS20
ATOM	18020	N	ARG	78	105.419	55.903	-23.985	1.00	44.28	TS20	ATOM	18073	CD2	LEU	83	103.139	47.494	-31.076	1.00 41.88	TS20
ATOM	18021	CA	ARG	78	106.286	55.798	-25.160	1.00	44.28	TS20	ATOM	18074	C	LEU	83	102.563	50.526	-31.822	1.00 51.89	TS20
ATOM	18022	CB	ARG	78	107.765	55.872	-24.789	1.00	70.84	TS20	ATOM	18075	O	LEU	83	102.533	49.963	-32.914	1.00 51.89	TS20
ATOM	18023	CG	ARG	78	108.285	57.213	-24.335	1.00	70.84	TS20	ATOM	18076	N	MET	84	101.550	51.256	-31.357	1.00 76.93	TS20
ATOM	18024	CD	ARG	78	109.749	57.342	-24.725	1.00	70.84	TS20	ATOM	18077	CA	MET	84	100.322	51.473	-32.130	1.00 76.93	TS20
ATOM	18025	NE	ARG	78	110.437	56.049	-24.707	1.00	70.84	TS20	ATOM	18078	CB	MET	84	99.299	52.253	-31.294	1.00 69.87	TS20
ATOM	18026	CZ	ARG	78	110.949	55.467	-23.621	1.00	70.84	TS20	ATOM	18079	CG	MET	84	98.660	51.435	-30.185	1.00 69.87	TS20
ATOM	18027	NH1	ARG	78	110.867	56.056	-22.425	1.00	70.84	TS20	ATOM	18080	SD	MET	84	97.753	52.417	-28.976	1.00 69.87	TS20
ATOM	18028	NH2	ARG	78	111.551	54.284	-23.737	1.00	70.84	TS20	ATOM	18081	CE	MET	84	96.344	52.871	-29.913	1.00 69.87	TS20
ATOM	18029	C	ARG	78	106.064	54.470	-25.858	1.00	44.28	TS20	ATOM	18082	C	MET	84	100.646	52.239	-33.412	1.00 76.93	TS20
ATOM	18030	O	ARG	78	105.734	54.429	-27.039	1.00	44.28	TS20	ATOM	18083	O	MET	84	99.929	52.153	-34.413	1.00 76.93	TS20
ATOM	18031	N	ARG	79	106.257	53.386	-25.111	1.00	59.58	TS20	ATOM	18084	N	ARG	85	101.738	52.993	-33.358	1.00 80.26	TS20
ATOM	18032	CA	ARG	79	106.103	52.039	-25.643	1.00	59.58	TS20	ATOM	18085	CA	ARG	85	102.215	53.763	-34.494	1.00 80.26	TS20
ATOM	18033	CB	ARG	79	106.087	51.023	-24.513	1.00	68.06	TS20	ATOM	18086	CB	ARG	85	103.427	54.595	-34.072	1.00112.51	TS20
ATOM	18034	CG	ARG	79	107.223	51.151	-23.532	1.00	68.06	TS20	ATOM	18087	CG	ARG	85	103.528	55.961	-34.702	1.00112.51	TS20
ATOM	18035	CD	ARG	79	108.528	50.726	-24.121	1.00	68.06	TS20	ATOM	18088	CD	ARG	85	102.923	57.007	-33.798	1.00112.51	TS20
ATOM	18036	NE	ARG	79	109.580	50.812	-23.121	1.00	68.06	TS20	ATOM	18089	NE	ARG	85	103.060	58.342	-34.368	1.00112.51	TS20
ATOM	18037	CZ	ARG	79	110.315	49.779	-22.732	1.00	68.06	TS20	ATOM	18090	CZ	ARG	85	102.582	59.449	-33.807	1.00112.51	TS20
ATOM	18038	NH1	ARG	79	110.107	48.577	-23.263	1.00	68.06	TS20	ATOM	18091	NH1	ARG	85	101.934	59.381	-32.654	1.00112.51	TS20

ATOM	18092	NH2	ARG	85	102.748	60.625	-34.399	1.00	112.51	TS20	ATOM	18145	C	LEU	91	98.423	48.402	-43.064	1.00 78.38	TS20
ATOM	18093	C	ARG	85	102.649	52.719	-35.528	1.00	80.26	TS20	ATOM	18146	O	LEU	91	97.461	47.959	-43.697	1.00 78.38	TS20
ATOM	18094	O	ARG	85	101.972	52.496	-36.536	1.00	80.26	TS20	ATOM	18147	N	GLU	92	99.107	49.487	-43.436	1.00 71.93	TS20
ATOM	18095	N	LYS	86	103.776	52.067	-35.246	1.00	54.02	TS20	ATOM	18148	CA	GLU	92	98.816	50.216	-44.674	1.00 71.93	TS20
ATOM	18096	CA	LYS	86	104.324	51.048	-36.126	1.00	54.02	TS20	ATOM	18149	CB	GLU	92	99.382	51.636	-44.622	1.00 107.69	TS20
ATOM	18097	CB	LYS	86	105.382	50.229	-35.382	1.00	88.60	TS20	ATOM	18150	CG	GLU	92	98.968	52.420	-43.392	1.00 107.69	TS20
ATOM	18098	CG	LYS	86	106.617	51.016	-35.004	1.00	88.60	TS20	ATOM	18151	CD	GLU	92	97.498	52.784	-43.387	1.00 107.69	TS20
ATOM	18099	CD	LYS	86	107.489	50.270	-33.990	1.00	88.60	TS20	ATOM	18152	OE1	GLU	92	97.130	53.787	-44.040	1.00 107.69	TS20
ATOM	18100	CE	LYS	86	108.567	51.198	-33.395	1.00	88.60	TS20	ATOM	18153	OE2	GLU	92	96.711	52.064	-42.734	1.00 107.69	TS20
ATOM	18101	NZ	LYS	86	109.296	50.628	-32.219	1.00	88.60	TS20	ATOM	18154	C	GLU	92	99.564	49.407	-45.727	1.00 71.93	TS20
ATOM	18102	C	LYS	86	103.275	50.103	-36.705	1.00	54.02	TS20	ATOM	18155	O	GLU	92	100.569	49.846	-46.284	1.00 71.93	TS20
ATOM	18103	O	LYS	86	103.382	49.697	-37.864	1.00	54.02	TS20	ATOM	18156	N	ALA	93	99.071	48.196	-45.950	1.00 76.86	TS20
ATOM	18104	N	VAL	87	102.255	49.759	-35.922	1.00	65.62	TS20	ATOM	18157	CA	ALA	93	99.658	47.268	-46.899	1.00 76.86	TS20
ATOM	18105	CA	VAL	87	101.245	48.820	-36.404	1.00	65.62	TS20	ATOM	18158	CB	ALA	93	100.558	46.281	-46.162	1.00 48.07	TS20
ATOM	18106	CB	VAL	87	100.457	48.190	-35.241	1.00	63.47	TS20	ATOM	18159	C	ALA	93	98.514	46.528	-47.565	1.00 76.86	TS20
ATOM	18107	CG1	VAL	87	99.349	47.298	-35.788	1.00	63.47	TS20	ATOM	18160	O	ALA	93	98.709	45.448	-48.118	1.00 76.86	TS20
ATOM	18108	CG2	VAL	87	101.402	47.366	-34.365	1.00	63.47	TS20	ATOM	18161	N	ALA	94	97.327	47.130	-47.488	1.00 99.64	TS20
ATOM	18109	C	VAL	87	100.261	49.341	-37.442	1.00	65.62	TS20	ATOM	18162	CA	ALA	94	96.080	46.590	-48.041	1.00 99.64	TS20
ATOM	18110	O	VAL	87	99.949	48.627	-38.398	1.00	65.62	TS20	ATOM	18163	CB	ALA	94	96.355	45.521	-49.104	1.00 81.27	TS20
ATOM	18111	N	ARG	88	99.758	50.559	-37.270	1.00	77.83	TS20	ATOM	18164	C	ALA	94	95.270	45.985	-46.909	1.00 99.64	TS20
ATOM	18112	CA	ARG	88	98.830	51.098	-38.262	1.00	77.83	TS20	ATOM	18165	O	ALA	94	94.312	45.247	-47.141	1.00 99.64	TS20
ATOM	18113	CB	ARG	88	98.341	52.491	-37.888	1.00	55.73	TS20	ATOM	18166	N	GLY	95	95.658	46.309	-45.681	1.00 89.18	TS20
ATOM	18114	CG	ARG	88	96.994	52.503	-37.255	1.00	55.73	TS20	ATOM	18167	CA	GLY	95	94.973	45.761	-44.529	1.00 89.18	TS20
ATOM	18115	CD	ARG	88	96.313	53.843	-37.374	1.00	55.73	TS20	ATOM	18168	C	GLY	95	94.043	46.716	-43.826	1.00 89.18	TS20
ATOM	18116	NE	ARG	88	95.137	53.853	-36.517	1.00	55.73	TS20	ATOM	18169	O	GLY	95	94.399	47.857	-43.540	1.00 89.18	TS20
ATOM	18117	CZ	ARG	88	94.183	54.772	-36.544	1.00	55.73	TS20	ATOM	18170	N	ALA	96	92.840	46.236	-43.547	1.00 80.83	TS20
ATOM	18118	NH1	ARG	88	94.257	55.775	-37.401	1.00	55.73	TS20	ATOM	18171	CA	ALA	96	91.841	47.028	-42.860	1.00 80.83	TS20
ATOM	18119	NH2	ARG	88	93.154	54.688	-35.710	1.00	55.73	TS20	ATOM	18172	CB	ALA	96	90.508	46.798	-43.498	1.00 17.29	TS20
ATOM	18120	C	ARG	88	99.549	51.207	-39.586	1.00	77.83	TS20	ATOM	18173	C	ALA	96	91.823	46.565	-41.407	1.00 80.83	TS20
ATOM	18121	O	ARG	88	99.158	50.604	-40.583	1.00	77.83	TS20	ATOM	18174	O	ALA	96	91.676	45.371	-41.144	1.00 80.83	TS20
ATOM	18122	N	GLN	89	100.613	51.997	-39.572	1.00	87.23	TS20	ATOM	18175	N	PRO	97	91.967	47.500	-40.443	1.00 159.43	TS20
ATOM	18123	CA	GLN	89	101.421	52.235	-40.749	1.00	87.23	TS20	ATOM	18176	CD	PRO	97	91.967	48.967	-40.594	1.00 78.37	TS20
ATOM	18124	CB	GLN	89	102.705	52.941	-40.330	1.00	95.86	TS20	ATOM	18177	CA	PRO	97	91.967	47.133	-39.021	1.00 159.43	TS20
ATOM	18125	CG	GLN	89	102.473	53.880	-39.156	1.00	95.86	TS20	ATOM	18178	CB	PRO	97	92.230	48.469	-38.317	1.00 78.37	TS20
ATOM	18126	CD	GLN	89	103.647	54.785	-38.883	1.00	95.86	TS20	ATOM	18179	CG	PRO	97	91.552	49.440	-39.201	1.00 78.37	TS20
ATOM	18127	OE1	GLN	89	104.785	54.465	-39.235	1.00	95.86	TS20	ATOM	18180	C	PRO	97	90.673	46.469	-38.559	1.00 159.43	TS20
ATOM	18128	NE2	GLN	89	103.384	55.921	-38.238	1.00	95.86	TS20	ATOM	18181	O	PRO	97	89.781	47.128	-38.024	1.00 159.43	TS20
ATOM	18129	C	GLN	89	101.720	50.930	-41.475	1.00	87.23	TS20	ATOM	18182	N	LEU	98	90.588	45.158	-38.769	1.00 113.38	TS20
ATOM	18130	O	GLN	89	101.483	50.818	-42.674	1.00	87.23	TS20	ATOM	18183	CA	LEU	98	89.419	44.375	-38.383	1.00 113.38	TS20
ATOM	18131	N	LEU	90	102.227	49.938	-40.752	1.00	64.54	TS20	ATOM	18184	CB	LEU	98	89.663	42.889	-38.657	1.00 77.63	TS20
ATOM	18132	CA	LEU	90	102.536	48.650	-41.360	1.00	64.54	TS20	ATOM	18185	CG	LEU	98	89.989	42.470	-40.092	1.00 77.63	TS20
ATOM	18133	CB	LEU	90	103.202	47.741	-40.335	1.00	50.72	TS20	ATOM	18186	CD1	LEU	98	90.294	40.979	-40.139	1.00 77.63	TS20
ATOM	18134	CG	LEU	90	104.705	47.972	-40.253	1.00	50.72	TS20	ATOM	18187	CD2	LEU	98	88.817	42.812	-40.995	1.00 77.63	TS20
ATOM	18135	CD1	LEU	90	105.237	47.526	-38.918	1.00	50.72	TS20	ATOM	18188	C	LEU	98	89.104	44.560	-36.904	1.00 113.38	TS20
ATOM	18136	CD2	LEU	90	105.377	47.222	-41.388	1.00	50.72	TS20	ATOM	18189	O	LEU	98	88.283	45.400	-36.529	1.00 113.38	TS20
ATOM	18137	C	LEU	90	101.286	47.987	-41.919	1.00	64.54	TS20	ATOM	18190	N	ILE	99	89.767	43.761	-36.072	1.00 69.52	TS20
ATOM	18138	O	LEU	90	101.355	47.221	-42.880	1.00	64.54	TS20	ATOM	18191	CA	ILE	99	89.587	43.804	-34.623	1.00 69.52	TS20
ATOM	18139	N	LEU	91	100.141	48.285	-41.315	1.00	78.38	TS20	ATOM	18192	CB	ILE	99	90.739	43.060	-33.898	1.00 179.42	TS20
ATOM	18140	CA	LEU	91	98.885	47.720	-41.779	1.00	78.38	TS20	ATOM	18193	CG2	ILE	99	90.643	43.273	-32.394	1.00 179.42	TS20
ATOM	18141	CB	LEU	91	97.816	47.826	-40.688	1.00	55.45	TS20	ATOM	18194	CG1	ILE	99	90.685	41.569	-34.233	1.00 179.42	TS20
ATOM	18142	CG	LEU	91	97.903	46.729	-39.620	1.00	55.45	TS20	ATOM	18195	CD1	ILE	99	91.780	40.757	-33.592	1.00 179.42	TS20
ATOM	18143	CD1	LEU	91	97.015	47.062	-38.431	1.00	55.45	TS20	ATOM	18196	C	ILE	99	89.527	45.233	-34.098	1.00 69.52	TS20
ATOM	18144	CD2	LEU	91	97.499	45.396	-40.236	1.00	55.45	TS20	ATOM	18197	O	ILE	99	88.900	45.504	-33.070	1.00 69.52	TS20

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ATOM  18198  N   GLY   100      90.186  46.140 -34.812  1.00171.57      TS20
ATOM  18199  CA  GLY   100      90.211  47.529 -34.404  1.00171.57      TS20
ATOM  18200  C   GLY   100      90.446  47.615 -32.914  1.00171.57      TS20
ATOM  18201  O   GLY   100      90.011  48.564 -32.272  1.00171.57      TS20
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ATOM  18203  CA  GLY   101      91.408  46.577 -30.950  1.00105.37      TS20
ATOM  18204  C   GLY   101      91.994  47.887 -30.474  1.00105.37      TS20
ATOM  18205  O   GLY   101      91.300  48.900 -30.399  1.00105.37      TS20
ATOM  18206  N   GLY   102      93.277  47.875 -30.141  1.00143.42      TS20
ATOM  18207  CA  GLY   102      93.916  49.092 -29.685  1.00143.42      TS20
ATOM  18208  C   GLY   102      94.100  50.050 -30.842  1.00143.42      TS20
ATOM  18209  O   GLY   102      95.225  50.427 -31.163  1.00143.42      TS20
ATOM  18210  N   LEU   103      92.997  50.433 -31.480  1.00 70.84      TS20
ATOM  18211  CA  LEU   103      93.048  51.357 -32.608  1.00 70.84      TS20
ATOM  18212  CB  LEU   103      93.393  50.634 -33.910  1.00 53.36      TS20
ATOM  18213  CG  LEU   103      94.871  50.376 -34.207  1.00 53.36      TS20
ATOM  18214  CD1 LEU   103      95.008  49.912 -35.644  1.00 53.36      TS20
ATOM  18215  CD2 LEU   103      95.675  51.635 -34.004  1.00 53.36      TS20
ATOM  18216  C   LEU   103      91.763  52.119 -32.820  1.00 70.84      TS20
ATOM  18217  O   LEU   103      90.783  51.577 -33.319  1.00 70.84      TS20
ATOM  18218  N   SER   104      91.780  53.387 -32.437  1.00 77.28      TS20
ATOM  18219  CA  SER   104      90.628  54.255 -32.599  1.00 77.28      TS20
ATOM  18220  CB  SER   104      90.857  55.558 -31.828  1.00 74.96      TS20
ATOM  18221  OG  SER   104      90.074  56.611 -32.344  1.00 74.96      TS20
ATOM  18222  C   SER   104      90.476  54.539 -34.085  1.00 77.28      TS20
ATOM  18223  O   SER   104      90.950  55.556 -34.582  1.00 77.28      TS20
ATOM  18224  N   ALA   105      89.828  53.625 -34.796  1.00 94.56      TS20
ATOM  18225  CA  ALA   105      89.629  53.786 -36.231  1.00 94.56      TS20
ATOM  18226  CB  ALA   105      88.837  52.609 -36.787  1.00 48.02      TS20
ATOM  18227  C   ALA   105      88.906  55.092 -36.518  1.00 94.56      TS20
ATOM  18228  O   ALA   105      89.294  55.772 -37.492  1.00 94.56      TS20
ATOM  18229  OXT ALA   105      87.958  55.410 -35.766  1.00 76.99      TS20
ATOM  18230  CB  PRO     4     149.970 101.492 -24.869  1.00 15.33      LS12
ATOM  18231  CG  PRO     4     150.849 101.711 -23.638  1.00 15.33      LS12
ATOM  18232  C   PRO     4     148.685 103.438 -25.721  1.00 27.29      LS12
ATOM  18233  O   PRO     4     148.189 103.979 -24.725  1.00 27.29      LS12
ATOM  18234  N   PRO     4     150.884 103.727 -24.818  1.00 27.29      LS12
ATOM  18235  CD  PRO     4     150.958 103.219 -23.442  1.00 15.33      LS12
ATOM  18236  CA  PRO     4     150.065 102.811 -25.625  1.00 27.29      LS12
ATOM  18237  N   THR     5     148.070 103.357 -26.904  1.00 25.99      LS12
ATOM  18238  CA  THR     5     146.738 103.914 -27.123  1.00 25.99      LS12
ATOM  18239  CB  THR     5     146.337 103.873 -28.591  1.00 33.61      LS12
ATOM  18240  OG1 THR     5     145.969 102.536 -28.935  1.00 33.61      LS12
ATOM  18241  CG2 THR     5     147.475 104.310 -29.471  1.00 33.61      LS12
ATOM  18242  C   THR     5     145.712 103.085 -26.364  1.00 25.99      LS12
ATOM  18243  O   THR     5     145.980 101.943 -25.994  1.00 25.99      LS12
ATOM  18244  N   ILE     6     144.536 103.657 -26.126  1.00 41.63      LS12
ATOM  18245  CA  ILE     6     143.501 102.921 -25.420  1.00 41.63      LS12
ATOM  18246  CB  ILE     6     142.221 103.776 -25.230  1.00 18.65      LS12
ATOM  18247  CG2 ILE     6     140.980 102.888 -25.079  1.00 18.65      LS12
ATOM  18248  CG1 ILE     6     142.380 104.636 -23.984  1.00 18.65      LS12
ATOM  18249  CD1 ILE     6     142.478 103.835 -22.722  1.00 18.65      LS12
ATOM  18250  C   ILE     6     143.176 101.660 -26.198  1.00 41.63      LS12
ATOM  18251  O   ILE     6     143.079 100.587 -25.619  1.00 41.63      LS12
ATOM  18252  N   ASN     7     143.022 101.781 -27.511  1.00 39.71      LS12
ATOM  18253  CA  ASN     7     142.719 100.615 -28.320  1.00 39.71      LS12
ATOM  18254  CB  ASN     7     142.525 101.010 -29.777  1.00 40.66      LS12
ATOM  18255  CG  ASN     7     142.067  99.851 -30.629  1.00 40.66      LS12
ATOM  18256  OD1 ASN     7     141.047  99.236 -30.348  1.00 40.66      LS12
ATOM  18257  ND2 ASN     7     142.820  99.544 -31.676  1.00 40.66      LS12
ATOM  18258  C   ASN     7     143.829  99.564 -28.219  1.00 39.71      LS12
ATOM  18259  O   ASN     7     143.555  98.358 -28.266  1.00 39.71      LS12
ATOM  18260  N   GLN     8     145.077 100.011 -28.087  1.00 29.77      LS12
ATOM  18261  CA  GLN     8     146.188  99.074 -27.970  1.00 29.77      LS12
ATOM  18262  CB  GLN     8     147.537  99.796 -27.996  1.00 31.07      LS12
ATOM  18263  CG  GLN     8     147.902 100.436 -29.329  1.00 31.07      LS12
ATOM  18264  CD  GLN     8     149.271 101.094 -29.313  1.00 31.07      LS12
ATOM  18265  OE1 GLN     8     149.628 101.817 -28.381  1.00 31.07      LS12
ATOM  18266  NE2 GLN     8     150.039 100.855 -30.359  1.00 31.07      LS12
ATOM  18267  C   GLN     8     146.046  98.350 -26.650  1.00 29.77      LS12
ATOM  18268  O   GLN     8     146.206  97.141 -26.573  1.00 29.77      LS12
ATOM  18269  N   LEU     9     145.748  99.107 -25.602  1.00 30.19      LS12
ATOM  18270  CA  LEU     9     145.585  98.546 -24.271  1.00 30.19      LS12
ATOM  18271  CB  LEU     9     145.200  99.633 -23.276  1.00 39.15      LS12
ATOM  18272  CG  LEU     9     146.365 100.376 -22.639  1.00 39.15      LS12
ATOM  18273  CD1 LEU     9     145.875 101.562 -21.828  1.00 39.15      LS12
ATOM  18274  CD2 LEU     9     147.113  99.397 -21.759  1.00 39.15      LS12
ATOM  18275  C   LEU     9     144.512  97.505 -24.305  1.00 30.19      LS12
ATOM  18276  O   LEU     9     144.613  96.488 -23.654  1.00 30.19      LS12
ATOM  18277  N   VAL    10     143.469  97.761 -25.072  1.00 38.76      LS12
ATOM  18278  CA  VAL    10     142.390  96.800 -25.155  1.00 38.76      LS12
ATOM  18279  CB  VAL    10     141.202  97.330 -25.950  1.00 19.26      LS12
ATOM  18280  CG1 VAL    10     140.150  96.256 -26.023  1.00 19.26      LS12
ATOM  18281  CG2 VAL    10     140.637  98.571 -25.284  1.00 19.26      LS12
ATOM  18282  C   VAL    10     142.861  95.534 -25.831  1.00 38.76      LS12
ATOM  18283  O   VAL    10     142.369  94.457 -25.530  1.00 38.76      LS12
ATOM  18284  N   ARG    11     143.810  95.668 -26.750  1.00 42.89      LS12
ATOM  18285  CA  ARG    11     144.328  94.518 -27.471  1.00 42.89      LS12
ATOM  18286  CB  ARG    11     144.955  94.944 -28.792  1.00 44.71      LS12
ATOM  18287  CG  ARG    11     143.952  95.249 -29.886  1.00 44.71      LS12
ATOM  18288  CD  ARG    11     144.642  95.339 -31.244  1.00 44.71      LS12
ATOM  18289  NE  ARG    11     145.537  96.487 -31.310  1.00 44.71      LS12
ATOM  18290  CZ  ARG    11     146.753  96.467 -31.845  1.00 44.71      LS12
ATOM  18291  NH1 ARG    11     147.235  95.353 -32.368  1.00 44.71      LS12
ATOM  18292  NH2 ARG    11     147.492  97.565 -31.849  1.00 44.71      LS12
ATOM  18293  C   ARG    11     145.343  93.735 -26.669  1.00 42.89      LS12
ATOM  18294  O   ARG    11     145.106  92.588 -26.322  1.00 42.89      LS12
ATOM  18295  N   LYS    12     146.473  94.356 -26.365  1.00 36.57      LS12
ATOM  18296  CA  LYS    12     147.524  93.686 -25.619  1.00 36.57      LS12
ATOM  18297  CB  LYS    12     148.870  94.191 -26.122  1.00 68.41      LS12
ATOM  18298  CG  LYS    12     148.939  94.062 -27.624  1.00 68.41      LS12
ATOM  18299  CD  LYS    12     150.190  94.632 -28.234  1.00 68.41      LS12
ATOM  18300  CE  LYS    12     150.148  94.434 -29.750  1.00 68.41      LS12
ATOM  18301  NZ  LYS    12     151.364  94.952 -30.458  1.00 68.41      LS12
ATOM  18302  C   LYS    12     147.384  93.845 -24.108  1.00 36.57      LS12
ATOM  18303  O   LYS    12     147.628  92.912 -23.359  1.00 36.57      LS12
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ATOM	18304	N	GLY	13	146.992	95.016	-23.640	1.00	34.85	LS12	ATOM	18357	CB	LYS	19	157.700	88.512	-6.836	1.00	137.71	LS12
ATOM	18305	CA	GLY	13	146.832	95.168	-22.205	1.00	34.85	LS12	ATOM	18358	CG	LYS	19	157.017	89.871	-6.770	1.00	137.71	LS12
ATOM	18306	C	GLY	13	148.119	95.083	-21.419	1.00	34.85	LS12	ATOM	18359	CD	LYS	19	156.495	90.161	-5.364	1.00	137.71	LS12
ATOM	18307	O	GLY	13	149.146	94.672	-21.946	1.00	34.85	LS12	ATOM	18360	CE	LYS	19	155.766	91.496	-5.296	1.00	137.71	LS12
ATOM	18308	N	ARG	14	148.060	95.475	-20.149	1.00	40.23	LS12	ATOM	18361	NZ	LYS	19	155.284	91.789	-3.917	1.00	137.71	LS12
ATOM	18309	CA	ARG	14	149.238	95.460	-19.288	1.00	40.23	LS12	ATOM	18362	C	LYS	19	158.911	86.768	-8.159	1.00	67.79	LS12
ATOM	18310	CB	ARG	14	149.018	96.377	-18.094	1.00	50.14	LS12	ATOM	18363	O	LYS	19	158.262	85.721	-8.093	1.00	67.79	LS12
ATOM	18311	CG	ARG	14	148.696	97.805	-18.486	1.00	50.14	LS12	ATOM	18364	N	LYS	20	160.242	86.787	-8.192	1.00	68.17	LS12
ATOM	18312	CD	ARG	14	149.831	98.454	-19.250	1.00	50.14	LS12	ATOM	18365	CA	LYS	20	161.021	85.551	-8.109	1.00	68.17	LS12
ATOM	18313	NE	ARG	14	149.580	99.874	-19.494	1.00	50.14	LS12	ATOM	18366	CB	LYS	20	162.352	85.676	-8.857	1.00	137.76	LS12
ATOM	18314	CZ	ARG	14	150.468	100.725	-20.007	1.00	50.14	LS12	ATOM	18367	CG	LYS	20	162.251	86.086	-10.313	1.00	137.76	LS12
ATOM	18315	NH1	ARG	14	151.687	100.307	-20.338	1.00	50.14	LS12	ATOM	18368	CD	LYS	20	163.640	86.297	-10.899	1.00	137.76	LS12
ATOM	18316	NH2	ARG	14	150.136	101.997	-20.192	1.00	50.14	LS12	ATOM	18369	CE	LYS	20	163.584	86.854	-12.314	1.00	137.76	LS12
ATOM	18317	C	ARG	14	149.594	94.062	-18.809	1.00	40.23	LS12	ATOM	18370	NZ	LYS	20	164.953	87.081	-12.866	1.00	137.76	LS12
ATOM	18318	O	ARG	14	148.723	93.216	-18.653	1.00	40.23	LS12	ATOM	18371	C	LYS	20	161.321	85.377	-6.637	1.00	68.17	LS12
ATOM	18319	N	GLU	15	150.884	93.826	-18.596	1.00	32.37	LS12	ATOM	18372	O	LYS	20	161.608	86.354	-5.949	1.00	68.17	LS12
ATOM	18320	CA	GLU	15	151.383	92.537	-18.139	1.00	32.37	LS12	ATOM	18373	N	SER	21	161.254	84.149	-6.140	1.00	61.79	LS12
ATOM	18321	CB	GLU	15	152.666	92.183	-18.884	1.00	95.49	LS12	ATOM	18374	CA	SER	21	161.547	83.925	-4.730	1.00	61.79	LS12
ATOM	18322	CG	GLU	15	153.630	91.345	-18.080	1.00	95.49	LS12	ATOM	18375	CB	SER	21	161.206	82.502	-4.316	1.00	57.04	LS12
ATOM	18323	CD	GLU	15	154.827	90.911	-18.892	1.00	95.49	LS12	ATOM	18376	OG	SER	21	161.798	82.216	-3.064	1.00	57.04	LS12
ATOM	18324	OE1	GLU	15	155.434	91.772	-19.567	1.00	95.49	LS12	ATOM	18377	C	SER	21	163.020	84.137	-4.489	1.00	61.79	LS12
ATOM	18325	OE2	GLU	15	155.162	89.706	-18.851	1.00	95.49	LS12	ATOM	18378	O	SER	21	163.805	84.160	-5.425	1.00	61.79	LS12
ATOM	18326	C	GLU	15	151.656	92.624	-16.653	1.00	32.37	LS12	ATOM	18379	N	LYS	22	163.404	84.298	-3.236	1.00	47.71	LS12
ATOM	18327	O	GLU	15	152.274	93.584	-16.204	1.00	32.37	LS12	ATOM	18380	CA	LYS	22	164.812	84.459	-2.926	1.00	47.71	LS12
ATOM	18328	N	LYS	16	151.196	91.631	-15.891	1.00	51.13	LS12	ATOM	18381	CB	LYS	22	165.093	85.865	-2.401	1.00	65.81	LS12
ATOM	18329	CA	LYS	16	151.390	91.619	-14.442	1.00	51.13	LS12	ATOM	18382	CG	LYS	22	165.137	86.887	-3.516	1.00	65.81	LS12
ATOM	18330	CB	LYS	16	150.395	90.656	-13.797	1.00	149.90	LS12	ATOM	18383	CD	LYS	22	165.464	88.278	-3.028	1.00	65.81	LS12
ATOM	18331	CG	LYS	16	148.946	91.101	-13.912	1.00	149.90	LS12	ATOM	18384	CE	LYS	22	165.388	89.263	-4.185	1.00	65.81	LS12
ATOM	18332	CD	LYS	16	148.737	92.465	-13.259	1.00	149.90	LS12	ATOM	18385	NZ	LYS	22	165.513	90.698	-3.766	1.00	65.81	LS12
ATOM	18333	CE	LYS	16	147.270	92.860	-13.255	1.00	149.90	LS12	ATOM	18386	C	LYS	22	165.214	83.409	-1.906	1.00	47.71	LS12
ATOM	18334	NZ	LYS	16	146.446	91.887	-12.482	1.00	149.90	LS12	ATOM	18387	O	LYS	22	166.295	83.470	-1.326	1.00	47.71	LS12
ATOM	18335	C	LYS	16	152.812	91.253	-14.025	1.00	51.13	LS12	ATOM	18388	N	VAL	23	164.344	82.424	-1.716	1.00	52.82	LS12
ATOM	18336	O	LYS	16	153.450	90.400	-14.630	1.00	51.13	LS12	ATOM	18389	CA	VAL	23	164.595	81.381	-0.743	1.00	52.82	LS12
ATOM	18337	N	VAL	17	153.305	91.898	-12.978	1.00	85.73	LS12	ATOM	18390	CB	VAL	23	164.114	81.825	0.672	1.00	52.33	LS12
ATOM	18338	CA	VAL	17	154.658	91.638	-12.500	1.00	85.73	LS12	ATOM	18391	CG1	VAL	23	164.127	80.645	1.639	1.00	52.33	LS12
ATOM	18339	CB	VAL	17	155.167	92.819	-11.640	1.00	95.83	LS12	ATOM	18392	CG2	VAL	23	165.015	82.922	1.208	1.00	52.33	LS12
ATOM	18340	CG1	VAL	17	156.498	92.461	-10.990	1.00	95.83	LS12	ATOM	18393	C	VAL	23	163.905	80.074	-1.096	1.00	52.82	LS12
ATOM	18341	CG2	VAL	17	155.308	94.070	-12.509	1.00	95.83	LS12	ATOM	18394	O	VAL	23	162.842	79.775	-0.561	1.00	52.82	LS12
ATOM	18342	C	VAL	17	154.790	90.351	-11.687	1.00	85.73	LS12	ATOM	18395	N	PRO	24	164.465	79.301	-2.044	1.00	55.28	LS12
ATOM	18343	O	VAL	17	154.021	90.116	-10.756	1.00	85.73	LS12	ATOM	18396	CD	PRO	24	165.236	79.795	-3.205	1.00	32.68	LS12
ATOM	18344	N	ARG	18	155.773	89.525	-12.044	1.00	85.72	LS12	ATOM	18397	CA	PRO	24	163.794	78.028	-2.361	1.00	55.28	LS12
ATOM	18345	CA	ARG	18	156.033	88.267	-11.340	1.00	85.72	LS12	ATOM	18398	CB	PRO	24	164.445	77.619	-3.668	1.00	32.68	LS12
ATOM	18346	CB	ARG	18	156.324	87.142	-12.326	1.00	128.41	LS12	ATOM	18399	CG	PRO	24	164.658	78.981	-4.335	1.00	32.68	LS12
ATOM	18347	CG	ARG	18	155.128	86.602	-13.045	1.00	128.41	LS12	ATOM	18400	C	PRO	24	163.923	76.974	-1.236	1.00	55.28	LS12
ATOM	18348	CD	ARG	18	155.561	85.493	-13.970	1.00	128.41	LS12	ATOM	18401	O	PRO	24	164.501	75.891	-1.389	1.00	55.28	LS12
ATOM	18349	NE	ARG	18	154.428	84.888	-14.656	1.00	128.41	LS12	ATOM	18402	N	ALA	25	163.367	77.350	-0.086	1.00	97.40	LS12
ATOM	18350	CZ	ARG	18	154.539	83.974	-15.613	1.00	128.41	LS12	ATOM	18403	CA	ALA	25	163.304	76.513	1.104	1.00	97.40	LS12
ATOM	18351	NH1	ARG	18	155.739	83.561	-15.998	1.00	128.41	LS12	ATOM	18404	CB	ALA	25	162.921	77.377	2.354	1.00	10.49	LS12
ATOM	18352	NH2	ARG	18	153.451	83.477	-16.186	1.00	128.41	LS12	ATOM	18405	C	ALA	25	162.154	75.601	0.713	1.00	97.40	LS12
ATOM	18353	C	ARG	18	157.237	88.401	-10.428	1.00	85.72	LS12	ATOM	18406	O	ALA	25	161.503	74.994	1.557	1.00	97.40	LS12
ATOM	18354	O	ARG	18	158.302	88.810	-10.867	1.00	85.72	LS12	ATOM	18407	N	LEU	26	161.922	75.550	-0.600	1.00	78.95	LS12
ATOM	18355	N	LYS	19	157.081	88.044	-9.162	1.00	67.79	LS12	ATOM	18408	CA	LEU	26	160.860	74.779	-1.245	1.00	78.95	LS12
ATOM	18356	CA	LYS	19	158.198	88.122	-8.229	1.00	67.79	LS12	ATOM	18409	CB	LEU	26	161.220	73.291	-1.352	1.00	84.01	LS12

ATOM	18410	CG	LEU	26	160.336	72.418	-2.260	1.00	84.01	LS12
ATOM	18411	CD1	LEU	26	160.592	72.782	-3.721	1.00	84.01	LS12
ATOM	18412	CD2	LEU	26	160.637	70.942	-2.032	1.00	84.01	LS12
ATOM	18413	C	LEU	26	159.576	74.926	-0.473	1.00	78.95	LS12
ATOM	18414	O	LEU	26	159.550	75.573	0.569	1.00	78.95	LS12
ATOM	18415	N	LYS	27	158.516	74.317	-0.994	1.00	135.57	LS12
ATOM	18416	CA	LYS	27	157.203	74.367	-0.369	1.00	135.57	LS12
ATOM	18417	CB	LYS	27	157.070	73.271	0.693	1.00	168.57	LS12
ATOM	18418	CG	LYS	27	157.182	71.848	0.178	1.00	168.57	LS12
ATOM	18419	CD	LYS	27	156.965	70.864	1.318	1.00	168.57	LS12
ATOM	18420	CE	LYS	27	157.098	69.421	0.861	1.00	168.57	LS12
ATOM	18421	NZ	LYS	27	156.847	68.466	1.982	1.00	168.57	LS12
ATOM	18422	C	LYS	27	156.983	75.717	0.291	1.00	135.57	LS12
ATOM	18423	O	LYS	27	156.127	75.840	1.169	1.00	135.57	LS12
ATOM	18424	N	GLY	28	157.746	76.724	-0.139	1.00	50.74	LS12
ATOM	18425	CA	GLY	28	157.630	78.043	0.456	1.00	50.74	LS12
ATOM	18426	C	GLY	28	157.292	77.858	1.918	1.00	50.74	LS12
ATOM	18427	O	GLY	28	156.236	78.278	2.391	1.00	50.74	LS12
ATOM	18428	N	ALA	29	158.181	77.181	2.628	1.00	46.76	LS12
ATOM	18429	CA	ALA	29	157.978	76.901	4.034	1.00	46.76	LS12
ATOM	18430	CB	ALA	29	158.542	75.562	4.361	1.00	21.11	LS12
ATOM	18431	C	ALA	29	158.664	77.964	4.850	1.00	46.76	LS12
ATOM	18432	O	ALA	29	159.489	78.707	4.332	1.00	46.76	LS12
ATOM	18433	N	PRO	30	158.305	78.076	6.134	1.00	22.84	LS12
ATOM	18434	CD	PRO	30	157.079	77.524	6.729	1.00	49.33	LS12
ATOM	18435	CA	PRO	30	158.908	79.071	7.028	1.00	22.84	LS12
ATOM	18436	CB	PRO	30	157.971	79.069	8.236	1.00	49.33	LS12
ATOM	18437	CG	PRO	30	156.666	78.632	7.662	1.00	49.33	LS12
ATOM	18438	C	PRO	30	160.313	78.616	7.405	1.00	22.84	LS12
ATOM	18439	O	PRO	30	161.213	79.425	7.599	1.00	22.84	LS12
ATOM	18440	N	PHE	31	160.480	77.306	7.516	1.00	60.31	LS12
ATOM	18441	CA	PHE	31	161.760	76.717	7.869	1.00	60.31	LS12
ATOM	18442	CB	PHE	31	161.877	76.555	9.378	1.00	32.56	LS12
ATOM	18443	CG	PHE	31	161.647	77.811	10.141	1.00	32.56	LS12
ATOM	18444	CD1	PHE	31	162.659	78.743	10.286	1.00	32.56	LS12
ATOM	18445	CD2	PHE	31	160.407	78.061	10.726	1.00	32.56	LS12
ATOM	18446	CE1	PHE	31	162.443	79.912	11.006	1.00	32.56	LS12
ATOM	18447	CE2	PHE	31	160.178	79.222	11.446	1.00	32.56	LS12
ATOM	18448	CZ	PHE	31	161.197	80.154	11.589	1.00	32.56	LS12
ATOM	18449	C	PHE	31	161.881	75.339	7.242	1.00	60.31	LS12
ATOM	18450	O	PHE	31	160.886	74.697	6.884	1.00	60.31	LS12
ATOM	18451	N	ARG	32	163.115	74.881	7.118	1.00	62.20	LS12
ATOM	18452	CA	ARG	32	163.362	73.571	6.567	1.00	62.20	LS12
ATOM	18453	CB	ARG	32	163.739	73.682	5.095	1.00	98.60	LS12
ATOM	18454	CG	ARG	32	163.679	72.369	4.349	1.00	98.60	LS12
ATOM	18455	CD	ARG	32	162.404	72.236	3.521	1.00	98.60	LS12
ATOM	18456	NE	ARG	32	161.173	72.150	4.306	1.00	98.60	LS12
ATOM	18457	CZ	ARG	32	159.973	71.924	3.772	1.00	98.60	LS12
ATOM	18458	NH1	ARG	32	159.853	71.762	2.458	1.00	98.60	LS12
ATOM	18459	NH2	ARG	32	158.891	71.860	4.542	1.00	98.60	LS12
ATOM	18460	C	ARG	32	164.521	73.016	7.371	1.00	62.20	LS12
ATOM	18461	O	ARG	32	165.433	73.762	7.729	1.00	62.20	LS12
ATOM	18462	N	ARG	33	164.469	71.723	7.687	1.00	45.78	LS12
ATOM	18463	CA	ARG	33	165.550	71.090	8.436	1.00	45.78	LS12
ATOM	18464	CB	ARG	33	165.011	70.228	9.571	1.00	70.82	LS12
ATOM	18465	CG	ARG	33	164.520	68.885	9.134	1.00	70.82	LS12
ATOM	18466	CD	ARG	33	164.731	67.916	10.250	1.00	70.82	LS12
ATOM	18467	NE	ARG	33	164.193	66.604	9.939	1.00	70.82	LS12
ATOM	18468	CZ	ARG	33	164.232	65.579	10.781	1.00	70.82	LS12
ATOM	18469	NH1	ARG	33	164.788	65.723	11.979	1.00	70.82	LS12
ATOM	18470	NH2	ARG	33	163.699	64.417	10.436	1.00	70.82	LS12
ATOM	18471	C	ARG	33	166.424	70.232	7.518	1.00	45.78	LS12
ATOM	18472	O	ARG	33	165.929	69.514	6.645	1.00	45.78	LS12
ATOM	18473	N	GLY	34	167.731	70.331	7.731	1.00	60.76	LS12
ATOM	18474	CA	GLY	34	168.678	69.589	6.930	1.00	60.76	LS12
ATOM	18475	C	GLY	34	169.778	68.972	7.765	1.00	60.76	LS12
ATOM	18476	O	GLY	34	169.761	69.048	8.999	1.00	60.76	LS12
ATOM	18477	N	VAL	35	170.743	68.358	7.088	1.00	45.90	LS12
ATOM	18478	CA	VAL	35	171.847	67.711	7.778	1.00	45.90	LS12
ATOM	18479	CB	VAL	35	171.817	66.204	7.523	1.00	33.77	LS12
ATOM	18480	CG1	VAL	35	172.957	65.545	8.231	1.00	33.77	LS12
ATOM	18481	CG2	VAL	35	170.500	65.628	8.014	1.00	33.77	LS12
ATOM	18482	C	VAL	35	173.194	68.286	7.356	1.00	45.90	LS12
ATOM	18483	O	VAL	35	173.463	68.462	6.168	1.00	45.90	LS12
ATOM	18484	N	CYS	36	174.032	68.587	8.342	1.00	59.90	LS12
ATOM	18485	CA	CYS	36	175.347	69.151	8.076	1.00	59.90	LS12
ATOM	18486	CB	CYS	36	175.969	69.675	9.371	1.00	84.06	LS12
ATOM	18487	SG	CYS	36	175.412	71.324	9.824	1.00	84.06	LS12
ATOM	18488	C	CYS	36	176.326	68.206	7.387	1.00	59.90	LS12
ATOM	18489	O	CYS	36	176.636	67.119	7.878	1.00	59.90	LS12
ATOM	18490	N	THR	37	176.823	68.654	6.243	1.00	65.80	LS12
ATOM	18491	CA	THR	37	177.769	67.889	5.457	1.00	65.80	LS12
ATOM	18492	CB	THR	37	177.385	67.945	3.982	1.00	79.79	LS12
ATOM	18493	OG1	THR	37	176.132	67.278	3.803	1.00	79.79	LS12
ATOM	18494	CG2	THR	37	178.447	67.284	3.123	1.00	79.79	LS12
ATOM	18495	C	THR	37	179.178	68.440	5.615	1.00	65.80	LS12
ATOM	18496	O	THR	37	180.149	67.692	5.688	1.00	65.80	LS12
ATOM	18497	N	VAL	38	179.280	69.761	5.678	1.00	67.72	LS12
ATOM	18498	CA	VAL	38	180.570	70.417	5.789	1.00	67.72	LS12
ATOM	18499	CB	VAL	38	181.073	70.810	4.395	1.00	37.32	LS12
ATOM	18500	CG1	VAL	38	182.505	71.302	4.469	1.00	37.32	LS12
ATOM	18501	CG2	VAL	38	180.947	69.636	3.468	1.00	37.32	LS12
ATOM	18502	C	VAL	38	180.517	71.682	6.632	1.00	67.72	LS12
ATOM	18503	O	VAL	38	179.887	72.664	6.246	1.00	67.72	LS12
ATOM	18504	N	VAL	39	181.173	71.668	7.783	1.00	52.44	LS12
ATOM	18505	CA	VAL	39	181.208	72.856	8.625	1.00	52.44	LS12
ATOM	18506	CB	VAL	39	181.248	72.483	10.111	1.00	43.53	LS12
ATOM	18507	CG1	VAL	39	181.506	73.734	10.954	1.00	43.53	LS12
ATOM	18508	CG2	VAL	39	179.941	71.818	10.501	1.00	43.53	LS12
ATOM	18509	C	VAL	39	182.503	73.553	8.250	1.00	52.44	LS12
ATOM	18510	O	VAL	39	183.564	73.076	8.602	1.00	52.44	LS12
ATOM	18511	N	ARG	40	182.428	74.674	7.545	1.00	44.61	LS12
ATOM	18512	CA	ARG	40	183.641	75.350	7.108	1.00	44.61	LS12
ATOM	18513	CB	ARG	40	183.671	75.371	5.584	1.00	86.96	LS12
ATOM	18514	CG	ARG	40	184.998	75.775	5.013	1.00	86.96	LS12
ATOM	18515	CD	ARG	40	184.847	76.150	3.580	1.00	86.96	LS12

ATOM	18516	NE	ARG	40	184.147	75.095	2.868	1.00	86.96	LS12	ATOM	18569	CD	PRO	47	183.730	95.293	0.852	1.00	34.20	LS12
ATOM	18517	CZ	ARG	40	184.022	75.051	1.548	1.00	86.96	LS12	ATOM	18570	CA	PRO	47	185.930	94.985	1.765	1.00	111.10	LS12
ATOM	18518	NH1	ARG	40	184.558	76.015	0.803	1.00	86.96	LS12	ATOM	18571	CB	PRO	47	185.329	96.303	2.233	1.00	34.20	LS12
ATOM	18519	NH2	ARG	40	183.366	74.044	0.975	1.00	86.96	LS12	ATOM	18572	CG	PRO	47	183.904	96.023	2.176	1.00	34.20	LS12
ATOM	18520	C	ARG	40	183.873	76.773	7.631	1.00	44.61	LS12	ATOM	18573	C	PRO	47	186.116	94.021	2.923	1.00	111.10	LS12
ATOM	18521	O	ARG	40	183.298	77.200	8.629	1.00	44.61	LS12	ATOM	18574	O	PRO	47	187.187	93.450	3.117	1.00	111.10	LS12
ATOM	18522	N	THR	41	184.758	77.484	6.943	1.00	69.83	LS12	ATOM	18575	N	ASN	48	185.063	93.876	3.706	1.00	54.00	LS12
ATOM	18523	CA	THR	41	185.123	78.859	7.242	1.00	69.83	LS12	ATOM	18576	CA	ASN	48	185.071	93.008	4.861	1.00	54.00	LS12
ATOM	18524	CB	THR	41	186.455	78.946	7.973	1.00	110.74	LS12	ATOM	18577	CB	ASN	48	183.650	92.540	5.128	1.00	60.68	LS12
ATOM	18525	OG1	THR	41	186.327	78.349	9.264	1.00	110.74	LS12	ATOM	18578	CG	ASN	48	182.781	93.663	5.622	1.00	60.68	LS12
ATOM	18526	CG2	THR	41	186.879	80.390	8.122	1.00	110.74	LS12	ATOM	18579	OD1	ASN	48	181.576	93.513	5.779	1.00	60.68	LS12
ATOM	18527	C	THR	41	185.298	79.508	5.881	1.00	69.83	LS12	ATOM	18580	ND2	ASN	48	183.405	94.814	5.886	1.00	60.68	LS12
ATOM	18528	O	THR	41	186.075	79.038	5.054	1.00	69.83	LS12	ATOM	18581	C	ASN	48	186.016	91.825	4.805	1.00	54.00	LS12
ATOM	18529	N	VAL	42	184.575	80.587	5.643	1.00	43.26	LS12	ATOM	18582	O	ASN	48	186.229	91.230	3.754	1.00	54.00	LS12
ATOM	18530	CA	VAL	42	184.655	81.262	4.363	1.00	43.26	LS12	ATOM	18583	N	SER	49	186.590	91.507	5.959	1.00	43.36	LS12
ATOM	18531	CB	VAL	42	183.267	81.281	3.696	1.00	61.60	LS12	ATOM	18584	CA	SER	49	187.513	90.390	6.102	1.00	43.36	LS12
ATOM	18532	CG1	VAL	42	183.266	82.196	2.497	1.00	61.60	LS12	ATOM	18585	CB	SER	49	188.950	90.900	6.028	1.00	55.05	LS12
ATOM	18533	CG2	VAL	42	182.895	79.880	3.279	1.00	61.60	LS12	ATOM	18586	OG	SER	49	189.869	89.875	6.351	1.00	55.05	LS12
ATOM	18534	C	VAL	42	185.166	82.681	4.545	1.00	43.26	LS12	ATOM	18587	C	SER	49	187.263	89.699	7.445	1.00	43.36	LS12
ATOM	18535	O	VAL	42	184.998	83.275	5.603	1.00	43.26	LS12	ATOM	18588	O	SER	49	186.981	90.367	8.443	1.00	43.36	LS12
ATOM	18536	N	THR	43	185.815	83.222	3.527	1.00	65.18	LS12	ATOM	18589	N	ALA	50	187.350	88.370	7.463	1.00	52.01	LS12
ATOM	18537	CA	THR	43	186.297	84.581	3.645	1.00	65.18	LS12	ATOM	18590	CA	ALA	50	187.141	87.591	8.689	1.00	52.01	LS12
ATOM	18538	CB	THR	43	187.673	84.783	2.959	1.00	73.11	LS12	ATOM	18591	CB	ALA	50	185.994	88.174	9.509	1.00	83.87	LS12
ATOM	18539	OG1	THR	43	187.526	84.676	1.540	1.00	73.11	LS12	ATOM	18592	C	ALA	50	186.845	86.136	8.372	1.00	52.01	LS12
ATOM	18540	CG2	THR	43	188.671	83.748	3.448	1.00	73.11	LS12	ATOM	18593	O	ALA	50	186.634	85.781	7.224	1.00	52.01	LS12
ATOM	18541	C	THR	43	185.263	85.478	2.978	1.00	65.18	LS12	ATOM	18594	N	LEU	51	186.831	85.292	9.392	1.00	84.60	LS12
ATOM	18542	O	THR	43	184.711	85.132	1.928	1.00	65.18	LS12	ATOM	18595	CA	LEU	51	186.545	83.881	9.187	1.00	84.60	LS12
ATOM	18543	N	PRO	44	184.969	86.632	3.596	1.00	49.93	LS12	ATOM	18596	CB	LEU	51	187.369	83.016	10.143	1.00	76.66	LS12
ATOM	18544	CD	PRO	44	185.507	87.080	4.891	1.00	65.53	LS12	ATOM	18597	CG	LEU	51	188.887	83.032	9.972	1.00	76.66	LS12
ATOM	18545	CA	PRO	44	184.000	87.600	3.077	1.00	49.93	LS12	ATOM	18598	CD1	LEU	51	189.503	82.134	11.027	1.00	76.66	LS12
ATOM	18546	CB	PRO	44	183.893	88.613	4.210	1.00	65.53	LS12	ATOM	18599	CD2	LEU	51	189.272	82.571	8.571	1.00	76.66	LS12
ATOM	18547	CG	PRO	44	185.252	88.548	4.836	1.00	65.53	LS12	ATOM	18600	C	LEU	51	185.065	83.632	9.417	1.00	84.60	LS12
ATOM	18548	C	PRO	44	184.391	88.245	1.741	1.00	49.93	LS12	ATOM	18601	O	LEU	51	184.644	83.262	10.516	1.00	84.60	LS12
ATOM	18549	O	PRO	44	185.508	88.084	1.244	1.00	49.93	LS12	ATOM	18602	N	ARG	52	184.279	83.849	8.372	1.00	71.13	LS12
ATOM	18550	N	LYS	45	183.445	88.989	1.186	1.00	39.99	LS12	ATOM	18603	CA	ARG	52	182.839	83.653	8.441	1.00	71.13	LS12
ATOM	18551	CA	LYS	45	183.585	89.664	-0.098	1.00	39.99	LS12	ATOM	18604	CB	ARG	52	182.198	84.226	7.182	1.00	57.18	LS12
ATOM	18552	CB	LYS	45	182.203	89.630	-0.781	1.00	97.46	LS12	ATOM	18605	CG	ARG	52	181.093	85.223	7.444	1.00	57.18	LS12
ATOM	18553	CG	LYS	45	182.059	90.327	-2.122	1.00	97.46	LS12	ATOM	18606	CD	ARG	52	181.422	86.604	6.906	1.00	57.18	LS12
ATOM	18554	CD	LYS	45	180.586	90.488	-2.461	1.00	97.46	LS12	ATOM	18607	NE	ARG	52	181.817	87.512	7.977	1.00	57.18	LS12
ATOM	18555	CE	LYS	45	180.373	91.360	-3.684	1.00	97.46	LS12	ATOM	18608	CZ	ARG	52	181.909	88.830	7.837	1.00	57.18	LS12
ATOM	18556	NZ	LYS	45	180.933	90.755	-4.925	1.00	97.46	LS12	ATOM	18609	NH1	ARG	52	181.633	89.388	6.665	1.00	57.18	LS12
ATOM	18557	C	LYS	45	184.124	91.116	-0.021	1.00	39.99	LS12	ATOM	18610	NH2	ARG	52	182.262	89.586	8.865	1.00	57.18	LS12
ATOM	18558	O	LYS	45	184.544	91.607	1.027	1.00	39.99	LS12	ATOM	18611	C	ARG	52	182.557	82.156	8.562	1.00	71.13	LS12
ATOM	18559	N	LYS	46	184.090	91.787	-1.164	1.00	93.82	LS12	ATOM	18612	O	ARG	52	183.006	81.372	7.730	1.00	71.13	LS12
ATOM	18560	CA	LYS	46	184.535	93.160	-1.301	1.00	93.82	LS12	ATOM	18613	N	LYS	53	181.817	81.760	9.594	1.00	55.73	LS12
ATOM	18561	CB	LYS	46	183.314	94.068	-1.510	1.00	109.60	LS12	ATOM	18614	CA	LYS	53	181.520	80.347	9.820	1.00	55.73	LS12
ATOM	18562	CG	LYS	46	182.553	93.775	-2.799	1.00	109.60	LS12	ATOM	18615	CB	LYS	53	181.475	80.084	11.317	1.00	115.72	LS12
ATOM	18563	CD	LYS	46	181.499	94.830	-3.098	1.00	109.60	LS12	ATOM	18616	CG	LYS	53	182.726	80.591	11.995	1.00	115.72	LS12
ATOM	18564	CE	LYS	46	180.944	94.666	-4.514	1.00	109.60	LS12	ATOM	18617	CD	LYS	53	182.691	80.384	13.479	1.00	115.72	LS12
ATOM	18565	NZ	LYS	46	180.005	95.763	-4.907	1.00	109.60	LS12	ATOM	18618	CE	LYS	53	183.961	80.915	14.098	1.00	115.72	LS12
ATOM	18566	C	LYS	46	185.446	93.632	-0.167	1.00	93.82	LS12	ATOM	18619	NZ	LYS	53	184.001	80.631	15.557	1.00	115.72	LS12
ATOM	18567	O	LYS	46	186.557	93.126	-0.059	1.00	93.82	LS12	ATOM	18620	C	LYS	53	180.241	79.865	9.144	1.00	55.73	LS12
ATOM	18568	N	PRO	47	185.003	94.563	0.709	1.00	111.10	LS12	ATOM	18621	O	LYS	53	179.130	80.205	9.554	1.00	55.73	LS12

ATOM	18622	N	VAL	54	180.418	79.048	8.109	1.00	67.78	LS12	ATOM	18675	O	THR	60	162.884	67.145	1.722	1.00	80.50	LS12
ATOM	18623	CA	VAL	54	179.307	78.524	7.327	1.00	67.78	LS12	ATOM	18676	N	SER	61	164.011	69.094	1.672	1.00	82.55	LS12
ATOM	18624	CB	VAL	54	179.499	78.904	5.860	1.00	61.08	LS12	ATOM	18677	CA	SER	61	163.347	69.576	0.472	1.00	82.55	LS12
ATOM	18625	CG1	VAL	54	178.172	78.935	5.171	1.00	61.08	LS12	ATOM	18678	CB	SER	61	163.278	71.106	0.474	1.00	51.36	LS12
ATOM	18626	CG2	VAL	54	180.188	80.259	5.758	1.00	61.08	LS12	ATOM	18679	OG	SER	61	164.562	71.696	0.478	1.00	51.36	LS12
ATOM	18627	C	VAL	54	179.146	77.001	7.442	1.00	67.78	LS12	ATOM	18680	C	SER	61	164.081	69.089	-0.772	1.00	82.55	LS12
ATOM	18628	O	VAL	54	179.926	76.341	8.123	1.00	67.78	LS12	ATOM	18681	O	SER	61	163.696	69.418	-1.898	1.00	82.55	LS12
ATOM	18629	N	ALA	55	178.134	76.447	6.772	1.00	54.81	LS12	ATOM	18682	N	GLY	62	165.138	68.307	-0.558	1.00	72.50	LS12
ATOM	18630	CA	ALA	55	177.867	75.008	6.820	1.00	54.81	LS12	ATOM	18683	CA	GLY	62	165.904	67.769	-1.665	1.00	72.50	LS12
ATOM	18631	CB	ALA	55	177.214	74.656	8.144	1.00	22.47	LS12	ATOM	18684	C	GLY	62	167.085	68.617	-2.084	1.00	72.50	LS12
ATOM	18632	C	ALA	55	176.970	74.523	5.684	1.00	54.81	LS12	ATOM	18685	O	GLY	62	167.993	68.110	-2.743	1.00	72.50	LS12
ATOM	18633	O	ALA	55	175.871	75.032	5.506	1.00	54.81	LS12	ATOM	18686	N	TYR	63	167.083	69.897	-1.707	1.00	75.34	LS12
ATOM	18634	N	LYS	56	177.429	73.536	4.918	1.00	86.23	LS12	ATOM	18687	CA	TYR	63	168.169	70.819	-2.060	1.00	75.34	LS12
ATOM	18635	CA	LYS	56	176.613	72.998	3.833	1.00	86.23	LS12	ATOM	18688	CB	TYR	63	167.674	72.274	-2.092	1.00	93.52	LS12
ATOM	18636	CB	LYS	56	177.470	72.241	2.817	1.00	89.13	LS12	ATOM	18689	CG	TYR	63	166.593	72.588	-3.105	1.00	93.52	LS12
ATOM	18637	CG	LYS	56	178.339	73.172	2.006	1.00	89.13	LS12	ATOM	18690	CD1	TYR	63	165.379	71.899	-3.100	1.00	93.52	LS12
ATOM	18638	CD	LYS	56	178.758	72.577	0.682	1.00	89.13	LS12	ATOM	18691	CE1	TYR	63	164.357	72.226	-3.989	1.00	93.52	LS12
ATOM	18639	CE	LYS	56	179.443	73.638	-0.178	1.00	89.13	LS12	ATOM	18692	CD2	TYR	63	166.761	73.617	-4.035	1.00	93.52	LS12
ATOM	18640	NZ	LYS	56	179.801	73.136	-1.539	1.00	89.13	LS12	ATOM	18693	CE2	TYR	63	165.746	73.956	-4.930	1.00	93.52	LS12
ATOM	18641	C	LYS	56	175.562	72.080	4.436	1.00	86.23	LS12	ATOM	18694	CZ	TYR	63	164.545	73.256	-4.899	1.00	93.52	LS12
ATOM	18642	O	LYS	56	175.858	71.269	5.312	1.00	86.23	LS12	ATOM	18695	OH	TYR	63	163.526	73.587	-5.764	1.00	93.52	LS12
ATOM	18643	N	VAL	57	174.330	72.216	3.960	1.00	46.95	LS12	ATOM	18696	C	TYR	63	169.346	70.742	-1.084	1.00	75.34	LS12
ATOM	18644	CA	VAL	57	173.220	71.436	4.483	1.00	46.95	LS12	ATOM	18697	O	TYR	63	169.173	70.435	0.099	1.00	75.34	LS12
ATOM	18645	CB	VAL	57	172.232	72.342	5.258	1.00	60.83	LS12	ATOM	18698	N	GLU	64	170.540	71.031	-1.602	1.00	59.24	LS12
ATOM	18646	CG1	VAL	57	171.092	71.501	5.819	1.00	60.83	LS12	ATOM	18699	CA	GLU	64	171.783	71.026	-0.828	1.00	59.24	LS12
ATOM	18647	CG2	VAL	57	172.962	73.105	6.364	1.00	60.83	LS12	ATOM	18700	CB	GLU	64	172.829	70.139	-1.514	1.00	92.64	LS12
ATOM	18648	C	VAL	57	172.428	70.725	3.405	1.00	46.95	LS12	ATOM	18701	CG	GLU	64	172.510	68.624	-1.562	1.00	92.64	LS12
ATOM	18649	O	VAL	57	172.196	71.280	2.334	1.00	46.95	LS12	ATOM	18702	CD	GLU	64	171.330	68.231	-2.475	1.00	92.64	LS12
ATOM	18650	N	ARG	58	172.014	69.496	3.702	1.00	57.82	LS12	ATOM	18703	OE1	GLU	64	171.232	68.749	-3.614	1.00	92.64	LS12
ATOM	18651	CA	ARG	58	171.209	68.704	2.779	1.00	57.82	LS12	ATOM	18704	OE2	GLU	64	170.509	67.376	-2.057	1.00	92.64	LS12
ATOM	18652	CB	ARG	58	171.628	67.236	2.825	1.00	113.29	LS12	ATOM	18705	C	GLU	64	172.248	72.482	-0.810	1.00	59.24	LS12
ATOM	18653	CG	ARG	58	170.918	66.343	1.816	1.00	113.29	LS12	ATOM	18706	O	GLU	64	172.667	73.018	-1.834	1.00	59.24	LS12
ATOM	18654	CD	ARG	58	171.807	66.107	0.606	1.00	113.29	LS12	ATOM	18707	N	VAL	65	172.172	73.121	0.354	1.00	59.47	LS12
ATOM	18655	NE	ARG	58	173.081	65.498	0.994	1.00	113.29	LS12	ATOM	18708	CA	VAL	65	172.537	74.531	0.461	1.00	59.47	LS12
ATOM	18656	CZ	ARG	58	174.129	65.349	0.186	1.00	113.29	LS12	ATOM	18709	CB	VAL	65	171.279	75.369	0.739	1.00	50.21	LS12
ATOM	18657	NH1	ARG	58	174.072	65.762	-1.074	1.00	113.29	LS12	ATOM	18710	CG1	VAL	65	170.229	75.076	-0.319	1.00	50.21	LS12
ATOM	18658	NH2	ARG	58	175.240	64.789	0.646	1.00	113.29	LS12	ATOM	18711	CG2	VAL	65	170.745	75.069	2.133	1.00	50.21	LS12
ATOM	18659	C	ARG	58	169.802	68.828	3.334	1.00	57.82	LS12	ATOM	18712	C	VAL	65	173.597	74.917	1.495	1.00	59.47	LS12
ATOM	18660	O	ARG	58	169.519	68.257	4.378	1.00	57.82	LS12	ATOM	18713	O	VAL	65	173.968	74.124	2.353	1.00	59.47	LS12
ATOM	18661	N	LEU	59	168.928	69.569	2.658	1.00	78.67	LS12	ATOM	18714	N	THR	66	174.072	76.156	1.387	1.00	61.28	LS12
ATOM	18662	CA	LEU	59	167.562	69.754	3.150	1.00	78.67	LS12	ATOM	18715	CA	THR	66	175.079	76.727	2.286	1.00	61.28	LS12
ATOM	18663	CB	LEU	59	166.911	71.014	2.551	1.00	50.02	LS12	ATOM	18716	CB	THR	66	176.158	77.501	1.485	1.00	65.82	LS12
ATOM	18664	CG	LEU	59	167.428	72.434	2.791	1.00	50.02	LS12	ATOM	18717	OG1	THR	66	177.057	76.578	0.854	1.00	65.82	LS12
ATOM	18665	CD1	LEU	59	168.036	72.531	4.180	1.00	50.02	LS12	ATOM	18718	CG2	THR	66	176.931	78.423	2.387	1.00	65.82	LS12
ATOM	18666	CD2	LEU	59	168.435	72.799	1.724	1.00	50.02	LS12	ATOM	18719	C	THR	66	174.371	77.704	3.228	1.00	61.28	LS12
ATOM	18667	C	LEU	59	166.635	68.580	2.875	1.00	78.67	LS12	ATOM	18720	O	THR	66	173.714	78.644	2.781	1.00	61.28	LS12
ATOM	18668	O	LEU	59	166.920	67.724	2.032	1.00	78.67	LS12	ATOM	18721	N	ALA	67	174.514	77.496	4.530	1.00	51.19	LS12
ATOM	18669	N	THR	60	165.518	68.562	3.601	1.00	80.50	LS12	ATOM	18722	CA	ALA	67	173.846	78.358	5.496	1.00	51.19	LS12
ATOM	18670	CA	THR	60	164.502	67.532	3.444	1.00	80.50	LS12	ATOM	18723	CB	ALA	67	172.763	77.565	6.206	1.00	24.87	LS12
ATOM	18671	CB	THR	60	163.514	67.498	4.635	1.00	79.82	LS12	ATOM	18724	C	ALA	67	174.775	78.997	6.522	1.00	51.19	LS12
ATOM	18672	OG1	THR	60	162.890	68.779	4.781	1.00	79.82	LS12	ATOM	18725	O	ALA	67	175.717	78.370	6.999	1.00	51.19	LS12
ATOM	18673	CG2	THR	60	164.227	67.146	5.916	1.00	79.82	LS12	ATOM	18726	N	TYR	68	174.499	80.249	6.868	1.00	48.48	LS12
ATOM	18674	C	THR	60	163.725	67.906	2.196	1.00	80.50	LS12	ATOM	18727	CA	TYR	68	175.310	80.954	7.848	1.00	48.48	LS12

ATOM	18728	CB	TYR	68	175.002	82.443	7.811	1.00	60.20	LS12
ATOM	18729	CG	TYR	68	175.953	83.263	8.644	1.00	60.20	LS12
ATOM	18730	CD1	TYR	68	177.165	83.689	8.115	1.00	60.20	LS12
ATOM	18731	CE1	TYR	68	178.072	84.419	8.880	1.00	60.20	LS12
ATOM	18732	CD2	TYR	68	175.664	83.588	9.972	1.00	60.20	LS12
ATOM	18733	CE2	TYR	68	176.569	84.321	10.752	1.00	60.20	LS12
ATOM	18734	CZ	TYR	68	177.770	84.729	10.190	1.00	60.20	LS12
ATOM	18735	OH	TYR	68	178.695	85.429	10.914	1.00	60.20	LS12
ATOM	18736	C	TYR	68	175.032	80.434	9.259	1.00	48.48	LS12
ATOM	18737	O	TYR	68	173.946	79.921	9.540	1.00	48.48	LS12
ATOM	18738	N	ILE	69	176.017	80.566	10.144	1.00	46.88	LS12
ATOM	18739	CA	ILE	69	175.865	80.139	11.537	1.00	46.88	LS12
ATOM	18740	CB	ILE	69	176.867	79.027	11.913	1.00	45.86	LS12
ATOM	18741	CG2	ILE	69	176.540	78.491	13.293	1.00	45.86	LS12
ATOM	18742	CG1	ILE	69	176.795	77.885	10.894	1.00	45.86	LS12
ATOM	18743	CD1	ILE	69	177.668	76.702	11.217	1.00	45.86	LS12
ATOM	18744	C	ILE	69	176.150	81.371	12.387	1.00	46.88	LS12
ATOM	18745	O	ILE	69	177.299	81.661	12.716	1.00	46.88	LS12
ATOM	18746	N	PRO	70	175.099	82.116	12.751	1.00	49.75	LS12
ATOM	18747	CD	PRO	70	173.695	81.687	12.625	1.00	55.42	LS12
ATOM	18748	CA	PRO	70	175.191	83.338	13.556	1.00	49.75	LS12
ATOM	18749	CB	PRO	70	173.738	83.782	13.661	1.00	55.42	LS12
ATOM	18750	CG	PRO	70	173.013	82.488	13.712	1.00	55.42	LS12
ATOM	18751	C	PRO	70	175.817	83.122	14.917	1.00	49.75	LS12
ATOM	18752	O	PRO	70	176.240	82.028	15.234	1.00	49.75	LS12
ATOM	18753	N	GLY	71	175.896	84.184	15.706	1.00	60.58	LS12
ATOM	18754	CA	GLY	71	176.451	84.081	17.045	1.00	60.58	LS12
ATOM	18755	C	GLY	71	177.946	83.857	17.234	1.00	60.58	LS12
ATOM	18756	O	GLY	71	178.631	83.329	16.349	1.00	60.58	LS12
ATOM	18757	N	GLU	72	178.432	84.272	18.413	1.00	56.51	LS12
ATOM	18758	CA	GLU	72	179.833	84.145	18.831	1.00	56.51	LS12
ATOM	18759	CB	GLU	72	180.008	84.657	20.270	1.00	82.09	LS12
ATOM	18760	CG	GLU	72	179.786	86.166	20.492	1.00	82.09	LS12
ATOM	18761	CD	GLU	72	180.943	87.015	19.973	1.00	82.09	LS12
ATOM	18762	OE1	GLU	72	180.990	88.235	20.264	1.00	82.09	LS12
ATOM	18763	OE2	GLU	72	181.806	86.452	19.268	1.00	82.09	LS12
ATOM	18764	C	GLU	72	180.209	82.671	18.776	1.00	56.51	LS12
ATOM	18765	O	GLU	72	180.218	81.976	19.795	1.00	56.51	LS12
ATOM	18766	N	GLY	73	180.483	82.209	17.561	1.00	76.51	LS12
ATOM	18767	CA	GLY	73	180.858	80.830	17.312	1.00	76.51	LS12
ATOM	18768	C	GLY	73	180.432	79.754	18.288	1.00	76.51	LS12
ATOM	18769	O	GLY	73	181.155	78.774	18.456	1.00	76.51	LS12
ATOM	18770	N	HIS	74	179.280	79.898	18.933	1.00	110.38	LS12
ATOM	18771	CA	HIS	74	178.851	78.851	19.850	1.00	110.38	LS12
ATOM	18772	CB	HIS	74	177.448	79.154	20.430	1.00	93.06	LS12
ATOM	18773	CG	HIS	74	176.288	78.760	19.549	1.00	93.06	LS12
ATOM	18774	CD2	HIS	74	176.123	77.746	18.663	1.00	93.06	LS12
ATOM	18775	ND1	HIS	74	175.081	79.423	19.588	1.00	93.06	LS12
ATOM	18776	CE1	HIS	74	174.226	78.839	18.770	1.00	93.06	LS12
ATOM	18777	NE2	HIS	74	174.834	77.820	18.193	1.00	93.06	LS12
ATOM	18778	C	HIS	74	178.866	77.566	19.016	1.00	110.38	LS12
ATOM	18779	O	HIS	74	178.712	76.455	19.538	1.00	110.38	LS12
ATOM	18780	N	ASN	75	179.050	77.762	17.708	1.00	47.47	LS12
ATOM	18781	CA	ASN	75	179.121	76.704	16.711	1.00	47.47	LS12
ATOM	18782	CB	ASN	75	180.177	77.104	15.668	1.00	53.02	LS12
ATOM	18783	CG	ASN	75	180.162	76.235	14.416	1.00	53.02	LS12
ATOM	18784	OD1	ASN	75	180.133	75.001	14.478	1.00	53.02	LS12
ATOM	18785	ND2	ASN	75	180.215	76.888	13.265	1.00	53.02	LS12
ATOM	18786	C	ASN	75	179.506	75.389	17.389	1.00	47.47	LS12
ATOM	18787	O	ASN	75	180.374	75.362	18.255	1.00	47.47	LS12
ATOM	18788	N	LEU	76	178.842	74.310	16.998	1.00	50.68	LS12
ATOM	18789	CA	LEU	76	179.111	72.980	17.523	1.00	50.68	LS12
ATOM	18790	CB	LEU	76	178.323	72.731	18.812	1.00	34.18	LS12
ATOM	18791	CG	LEU	76	176.799	72.787	18.662	1.00	34.18	LS12
ATOM	18792	CD1	LEU	76	176.095	71.988	19.738	1.00	34.18	LS12
ATOM	18793	CD2	LEU	76	176.372	74.243	18.677	1.00	34.18	LS12
ATOM	18794	C	LEU	76	178.617	72.033	16.439	1.00	50.68	LS12
ATOM	18795	O	LEU	76	178.169	70.924	16.730	1.00	50.68	LS12
ATOM	18796	N	GLN	77	178.697	72.493	15.189	1.00	65.03	LS12
ATOM	18797	CA	GLN	77	178.230	71.741	14.022	1.00	65.03	LS12
ATOM	18798	CB	GLN	77	177.883	72.719	12.899	1.00	99.28	LS12
ATOM	18799	CG	GLN	77	177.260	74.027	13.353	1.00	99.28	LS12
ATOM	18800	CD	GLN	77	175.992	73.818	14.134	1.00	99.28	LS12
ATOM	18801	OE1	GLN	77	175.089	73.115	13.693	1.00	99.28	LS12
ATOM	18802	NE2	GLN	77	175.912	74.434	15.305	1.00	99.28	LS12
ATOM	18803	C	GLN	77	179.272	70.752	13.500	1.00	65.03	LS12
ATOM	18804	O	GLN	77	180.456	70.912	13.792	1.00	65.03	LS12
ATOM	18805	N	GLU	78	178.846	69.755	12.712	1.00	56.78	LS12
ATOM	18806	CA	GLU	78	179.797	68.775	12.171	1.00	56.78	LS12
ATOM	18807	CB	GLU	78	180.561	68.136	13.331	1.00	78.46	LS12
ATOM	18808	CG	GLU	78	179.660	67.433	14.332	1.00	78.46	LS12
ATOM	18809	CD	GLU	78	180.423	66.877	15.513	1.00	78.46	LS12
ATOM	18810	OE1	GLU	78	180.920	67.675	16.336	1.00	78.46	LS12
ATOM	18811	OE2	GLU	78	180.527	65.638	15.610	1.00	78.46	LS12
ATOM	18812	C	GLU	78	179.261	67.649	11.265	1.00	56.78	LS12
ATOM	18813	O	GLU	78	180.014	67.049	10.488	1.00	56.78	LS12
ATOM	18814	N	HIS	79	177.970	67.361	11.364	1.00	69.23	LS12
ATOM	18815	CA	HIS	79	177.360	66.281	10.588	1.00	69.23	LS12
ATOM	18816	CB	HIS	79	178.197	65.017	10.762	1.00	92.42	LS12
ATOM	18817	CG	HIS	79	177.723	63.859	9.950	1.00	92.42	LS12
ATOM	18818	CD2	HIS	79	177.055	62.738	10.304	1.00	92.42	LS12
ATOM	18819	ND1	HIS	79	177.917	63.779	8.589	1.00	92.42	LS12
ATOM	18820	CE1	HIS	79	177.388	62.656	8.137	1.00	92.42	LS12
ATOM	18821	NE2	HIS	79	176.859	62.007	9.158	1.00	92.42	LS12
ATOM	18822	C	HIS	79	175.993	66.095	11.241	1.00	69.23	LS12
ATOM	18823	O	HIS	79	175.319	65.070	11.096	1.00	69.23	LS12
ATOM	18824	N	SER	80	175.611	67.142	11.959	1.00	77.21	LS12
ATOM	18825	CA	SER	80	174.390	67.203	12.736	1.00	77.21	LS12
ATOM	18826	CB	SER	80	174.698	68.001	13.996	1.00	74.41	LS12
ATOM	18827	OG	SER	80	175.719	68.953	13.724	1.00	74.41	LS12
ATOM	18828	C	SER	80	173.158	67.777	12.059	1.00	77.21	LS12
ATOM	18829	O	SER	80	173.243	68.433	11.017	1.00	77.21	LS12
ATOM	18830	N	VAL	81	172.009	67.522	12.683	1.00	60.72	LS12
ATOM	18831	CA	VAL	81	170.723	68.006	12.197	1.00	60.72	LS12
ATOM	18832	CB	VAL	81	169.559	67.224	12.818	1.00	50.99	LS12
ATOM	18833	CG1	VAL	81	168.243	67.798	12.344	1.00	50.99	LS12

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ATOM  18834  CG2 VAL   81     169.661  65.765  12.444  1.00 50.99      LS12
ATOM  18835  C   VAL   81     170.564  69.480  12.564  1.00 60.72      LS12
ATOM  18836  O   VAL   81     170.842  69.890  13.696  1.00 60.72      LS12
ATOM  18837  N   VAL   82     170.087  70.266  11.606  1.00 65.69      LS12
ATOM  18838  CA  VAL   82     169.933  71.695  11.811  1.00 65.69      LS12
ATOM  18839  CB  VAL   82     171.165  72.417  11.178  1.00 47.15      LS12
ATOM  18840  CG1 VAL   82     171.074  72.390   9.663  1.00 47.15      LS12
ATOM  18841  CG2 VAL   82     171.270  73.825  11.679  1.00 47.15      LS12
ATOM  18842  C   VAL   82     168.621  72.220  11.200  1.00 65.69      LS12
ATOM  18843  O   VAL   82     167.944  71.505  10.461  1.00 65.69      LS12
ATOM  18844  N   LEU   83     168.251  73.454  11.541  1.00 55.05      LS12
ATOM  18845  CA  LEU   83     167.053  74.084  10.983  1.00 55.05      LS12
ATOM  18846  CB  LEU   83     166.044  74.441  12.084  1.00 46.33      LS12
ATOM  18847  CG  LEU   83     164.668  74.964  11.622  1.00 46.33      LS12
ATOM  18848  CD1 LEU   83     163.874  73.810  11.032  1.00 46.33      LS12
ATOM  18849  CD2 LEU   83     163.898  75.596  12.780  1.00 46.33      LS12
ATOM  18850  C   LEU   83     167.487  75.360  10.253  1.00 55.05      LS12
ATOM  18851  O   LEU   83     168.300  76.129  10.756  1.00 55.05      LS12
ATOM  18852  N   ILE   84     166.938  75.578   9.065  1.00 47.97      LS12
ATOM  18853  CA  ILE   84     167.265  76.745   8.246  1.00 47.97      LS12
ATOM  18854  CB  ILE   84     167.565  76.294   6.816  1.00 63.44      LS12
ATOM  18855  CG2 ILE   84     167.316  77.421   5.829  1.00 63.44      LS12
ATOM  18856  CG1 ILE   84     168.989  75.773   6.750  1.00 63.44      LS12
ATOM  18857  CD1 ILE   84     169.328  75.234   5.411  1.00 63.44      LS12
ATOM  18858  C   ILE   84     166.132  77.768   8.220  1.00 47.97      LS12
ATOM  18859  O   ILE   84     164.970  77.401   8.051  1.00 47.97      LS12
ATOM  18860  N   ARG   85     166.458  79.051   8.353  1.00 74.63      LS12
ATOM  18861  CA  ARG   85     165.397  80.047   8.366  1.00 74.63      LS12
ATOM  18862  CB  ARG   85     165.377  80.806   9.693  1.00 43.43      LS12
ATOM  18863  CG  ARG   85     166.472  81.815   9.871  1.00 43.43      LS12
ATOM  18864  CD  ARG   85     166.207  82.620  11.131  1.00 43.43      LS12
ATOM  18865  NE  ARG   85     167.314  83.502  11.471  1.00 43.43      LS12
ATOM  18866  CZ  ARG   85     167.853  84.362  10.619  1.00 43.43      LS12
ATOM  18867  NH1 ARG   85     167.382  84.448   9.380  1.00 43.43      LS12
ATOM  18868  NH2 ARG   85     168.862  85.134  11.002  1.00 43.43      LS12
ATOM  18869  C   ARG   85     165.349  81.062   7.246  1.00 74.63      LS12
ATOM  18870  O   ARG   85     164.466  81.917   7.235  1.00 74.63      LS12
ATOM  18871  N   GLY   86     166.268  80.996   6.299  1.00 33.73      LS12
ATOM  18872  CA  GLY   86     166.190  81.978   5.236  1.00 33.73      LS12
ATOM  18873  C   GLY   86     166.660  83.337   5.707  1.00 33.73      LS12
ATOM  18874  O   GLY   86     166.288  83.818   6.773  1.00 33.73      LS12
ATOM  18875  N   GLY   87     167.486  83.962   4.886  1.00 43.93      LS12
ATOM  18876  CA  GLY   87     168.056  85.247   5.216  1.00 43.93      LS12
ATOM  18877  C   GLY   87     169.472  85.121   4.712  1.00 43.93      LS12
ATOM  18878  O   GLY   87     170.257  84.315   5.211  1.00 43.93      LS12
ATOM  18879  N   ARG   88     169.796  85.896   3.693  1.00 42.93      LS12
ATOM  18880  CA  ARG   88     171.120  85.854   3.110  1.00 42.93      LS12
ATOM  18881  CB  ARG   88     171.060  86.475   1.713  1.00 87.85      LS12
ATOM  18882  CG  ARG   88     169.893  85.940   0.884  1.00 87.85      LS12
ATOM  18883  CD  ARG   88     170.166  86.074  -0.609  1.00 87.85      LS12
ATOM  18884  NE  ARG   88     169.125  85.482  -1.457  1.00 87.85      LS12
ATOM  18885  CZ  ARG   88     169.241  85.320  -2.775  1.00 87.85      LS12
ATOM  18886  NH1 ARG   88     170.350  85.698  -3.401  1.00 87.85      LS12
ATOM  18887  NH2 ARG   88     168.247  84.790  -3.475  1.00 87.85      LS12
ATOM  18888  C   ARG   88     172.159  86.566   3.989  1.00 42.93      LS12
ATOM  18889  O   ARG   88     171.840  87.063   5.078  1.00 42.93      LS12
ATOM  18890  N   VAL   89     173.403  86.585   3.515  1.00 58.76      LS12
ATOM  18891  CA  VAL   89     174.503  87.246   4.209  1.00 58.76      LS12
ATOM  18892  CB  VAL   89     175.468  86.228   4.848  1.00 51.18      LS12
ATOM  18893  CG1 VAL   89     176.560  86.963   5.625  1.00 51.18      LS12
ATOM  18894  CG2 VAL   89     174.699  85.296   5.771  1.00 51.18      LS12
ATOM  18895  C   VAL   89     175.256  88.052   3.158  1.00 58.76      LS12
ATOM  18896  O   VAL   89     175.991  87.490   2.351  1.00 58.76      LS12
ATOM  18897  N   LYS   90     175.068  89.367   3.175  1.00 59.56      LS12
ATOM  18898  CA  LYS   90     175.693  90.256   2.199  1.00 59.56      LS12
ATOM  18899  CB  LYS   90     175.668  91.698   2.710  1.00103.43      LS12
ATOM  18900  CG  LYS   90     175.689  92.752   1.612  1.00103.43      LS12
ATOM  18901  CD  LYS   90     174.399  92.711   0.817  1.00103.43      LS12
ATOM  18902  CE  LYS   90     174.310  93.865  -0.167  1.00103.43      LS12
ATOM  18903  NZ  LYS   90     173.007  93.880  -0.909  1.00103.43      LS12
ATOM  18904  C   LYS   90     177.117  89.903   1.786  1.00 59.56      LS12
ATOM  18905  O   LYS   90     177.430  89.900   0.605  1.00 59.56      LS12
ATOM  18906  N   ASP   91     177.978  89.601   2.749  1.00 60.22      LS12
ATOM  18907  CA  ASP   91     179.371  89.277   2.455  1.00 60.22      LS12
ATOM  18908  CB  ASP   91     180.205  89.426   3.706  1.00 64.97      LS12
ATOM  18909  CG  ASP   91     180.370  90.844   4.077  1.00 64.97      LS12
ATOM  18910  OD1 ASP   91     179.896  91.693   3.275  1.00 64.97      LS12
ATOM  18911  OD2 ASP   91     180.969  91.110   5.140  1.00 64.97      LS12
ATOM  18912  C   ASP   91     179.682  87.936   1.862  1.00 60.22      LS12
ATOM  18913  O   ASP   91     180.681  87.787   1.175  1.00 60.22      LS12
ATOM  18914  N   LEU   92     178.840  86.955   2.136  1.00 78.01      LS12
ATOM  18915  CA  LEU   92     179.083  85.619   1.642  1.00 78.01      LS12
ATOM  18916  CB  LEU   92     178.838  84.625   2.758  1.00 52.35      LS12
ATOM  18917  CG  LEU   92     179.695  84.932   3.978  1.00 52.35      LS12
ATOM  18918  CD1 LEU   92     179.416  83.894   5.053  1.00 52.35      LS12
ATOM  18919  CD2 LEU   92     181.165  84.940   3.580  1.00 52.35      LS12
ATOM  18920  C   LEU   92     178.259  85.250   0.436  1.00 78.01      LS12
ATOM  18921  O   LEU   92     177.100  84.851   0.556  1.00 78.01      LS12
ATOM  18922  N   PRO   93     178.856  85.366  -0.754  1.00 77.21      LS12
ATOM  18923  CD  PRO   93     180.242  85.741  -1.070  1.00113.71      LS12
ATOM  18924  CA  PRO   93     178.119  85.025  -1.965  1.00 77.21      LS12
ATOM  18925  CB  PRO   93     179.125  85.317  -3.078  1.00113.71      LS12
ATOM  18926  CG  PRO   93     180.089  86.295  -2.449  1.00113.71      LS12
ATOM  18927  C   PRO   93     177.786  83.548  -1.881  1.00 77.21      LS12
ATOM  18928  O   PRO   93     178.659  82.737  -1.583  1.00 77.21      LS12
ATOM  18929  N   GLY   94     176.526  83.202  -2.109  1.00 49.63      LS12
ATOM  18930  CA  GLY   94     176.151  81.802  -2.069  1.00 49.63      LS12
ATOM  18931  C   GLY   94     175.511  81.331  -0.782  1.00 49.63      LS12
ATOM  18932  O   GLY   94     175.130  80.161  -0.655  1.00 49.63      LS12
ATOM  18933  N   VAL   95     175.397  82.227   0.188  1.00 54.70      LS12
ATOM  18934  CA  VAL   95     174.772  81.859   1.443  1.00 54.70      LS12
ATOM  18935  CB  VAL   95     175.636  82.270   2.633  1.00 33.80      LS12
ATOM  18936  CG1 VAL   95     175.318  81.377   3.818  1.00 33.80      LS12
ATOM  18937  CG2 VAL   95     177.097  82.168   2.269  1.00 33.80      LS12
ATOM  18938  C   VAL   95     173.442  82.594   1.478  1.00 54.70      LS12
ATOM  18939  O   VAL   95     173.405  83.821   1.587  1.00 54.70      LS12
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ATOM	18940	N	ARG	96	172.355	81.833	1.371	1.00	56.32	LS12
ATOM	18941	CA	ARG	96	171.019	82.407	1.346	1.00	56.32	LS12
ATOM	18942	CB	ARG	96	170.244	81.876	0.148	1.00	74.98	LS12
ATOM	18943	CG	ARG	96	170.845	82.221	-1.191	1.00	74.98	LS12
ATOM	18944	CD	ARG	96	169.943	81.699	-2.282	1.00	74.98	LS12
ATOM	18945	NE	ARG	96	170.373	82.086	-3.620	1.00	74.98	LS12
ATOM	18946	CZ	ARG	96	169.664	81.836	-4.713	1.00	74.98	LS12
ATOM	18947	NH1	ARG	96	168.500	81.205	-4.614	1.00	74.98	LS12
ATOM	18948	NH2	ARG	96	170.112	82.217	-5.901	1.00	74.98	LS12
ATOM	18949	C	ARG	96	170.171	82.188	2.579	1.00	56.32	LS12
ATOM	18950	O	ARG	96	169.139	82.828	2.725	1.00	56.32	LS12
ATOM	18951	N	TYR	97	170.578	81.290	3.462	1.00	42.35	LS12
ATOM	18952	CA	TYR	97	169.778	81.044	4.648	1.00	42.35	LS12
ATOM	18953	CB	TYR	97	169.066	79.693	4.527	1.00	61.14	LS12
ATOM	18954	CG	TYR	97	168.620	79.341	3.117	1.00	61.14	LS12
ATOM	18955	CD1	TYR	97	169.538	78.889	2.164	1.00	61.14	LS12
ATOM	18956	CE1	TYR	97	169.139	78.582	0.848	1.00	61.14	LS12
ATOM	18957	CD2	TYR	97	167.285	79.478	2.724	1.00	61.14	LS12
ATOM	18958	CE2	TYR	97	166.875	79.174	1.406	1.00	61.14	LS12
ATOM	18959	CZ	TYR	97	167.808	78.726	0.472	1.00	61.14	LS12
ATOM	18960	OH	TYR	97	167.417	78.428	-0.828	1.00	61.14	LS12
ATOM	18961	C	TYR	97	170.649	81.066	5.896	1.00	42.35	LS12
ATOM	18962	O	TYR	97	171.857	80.862	5.821	1.00	42.35	LS12
ATOM	18963	N	HIS	98	170.034	81.343	7.041	1.00	55.20	LS12
ATOM	18964	CA	HIS	98	170.741	81.362	8.318	1.00	55.20	LS12
ATOM	18965	CB	HIS	98	170.278	82.532	9.185	1.00	46.19	LS12
ATOM	18966	CG	HIS	98	170.985	83.818	8.915	1.00	46.19	LS12
ATOM	18967	CD2	HIS	98	171.643	84.662	9.745	1.00	46.19	LS12
ATOM	18968	ND1	HIS	98	171.037	84.394	7.666	1.00	46.19	LS12
ATOM	18969	CE1	HIS	98	171.696	85.539	7.736	1.00	46.19	LS12
ATOM	18970	NE2	HIS	98	172.075	85.725	8.988	1.00	46.19	LS12
ATOM	18971	C	HIS	98	170.358	80.080	9.039	1.00	55.20	LS12
ATOM	18972	O	HIS	98	169.377	79.423	8.677	1.00	55.20	LS12
ATOM	18973	N	ILE	99	171.121	79.721	10.061	1.00	60.89	LS12
ATOM	18974	CA	ILE	99	170.788	78.539	10.835	1.00	60.89	LS12
ATOM	18975	CB	ILE	99	172.018	77.688	11.144	1.00	43.50	LS12
ATOM	18976	CG2	ILE	99	171.813	76.912	12.446	1.00	43.50	LS12
ATOM	18977	CG1	ILE	99	172.267	76.750	9.965	1.00	43.50	LS12
ATOM	18978	CD1	ILE	99	173.516	75.921	10.084	1.00	43.50	LS12
ATOM	18979	C	ILE	99	170.139	78.982	12.128	1.00	60.89	LS12
ATOM	18980	O	ILE	99	170.567	79.950	12.747	1.00	60.89	LS12
ATOM	18981	N	VAL	100	169.089	78.276	12.519	1.00	51.18	LS12
ATOM	18982	CA	VAL	100	168.372	78.598	13.732	1.00	51.18	LS12
ATOM	18983	CB	VAL	100	166.956	78.056	13.684	1.00	42.67	LS12
ATOM	18984	CG1	VAL	100	166.319	78.158	15.046	1.00	42.67	LS12
ATOM	18985	CG2	VAL	100	166.155	78.833	12.678	1.00	42.67	LS12
ATOM	18986	C	VAL	100	169.063	78.012	14.939	1.00	51.18	LS12
ATOM	18987	O	VAL	100	168.903	76.830	15.238	1.00	51.18	LS12
ATOM	18988	N	ARG	101	169.827	78.839	15.639	1.00	52.82	LS12
ATOM	18989	CA	ARG	101	170.531	78.382	16.820	1.00	52.82	LS12
ATOM	18990	CB	ARG	101	171.526	79.445	17.255	1.00	87.77	LS12
ATOM	18991	CG	ARG	101	172.318	79.979	16.091	1.00	87.77	LS12
ATOM	18992	CD	ARG	101	173.553	80.713	16.541	1.00	87.77	LS12
ATOM	18993	NE	ARG	101	174.765	79.930	16.313	1.00	87.77	LS12
ATOM	18994	CZ	ARG	101	175.937	80.193	16.881	1.00	87.77	LS12
ATOM	18995	NH1	ARG	101	176.054	81.214	17.718	1.00	87.77	LS12
ATOM	18996	NH2	ARG	101	176.996	79.446	16.608	1.00	87.77	LS12
ATOM	18997	C	ARG	101	169.533	78.084	17.938	1.00	52.82	LS12
ATOM	18998	O	ARG	101	168.613	78.860	18.194	1.00	52.82	LS12
ATOM	18999	N	GLY	102	169.707	76.944	18.594	1.00	57.63	LS12
ATOM	19000	CA	GLY	102	168.806	76.586	19.670	1.00	57.63	LS12
ATOM	19001	C	GLY	102	167.814	75.521	19.254	1.00	57.63	LS12
ATOM	19002	O	GLY	102	166.948	75.127	20.041	1.00	57.63	LS12
ATOM	19003	N	VAL	103	167.940	75.050	18.018	1.00	61.65	LS12
ATOM	19004	CA	VAL	103	167.047	74.019	17.507	1.00	61.65	LS12
ATOM	19005	CB	VAL	103	166.169	74.560	16.352	1.00	52.28	LS12
ATOM	19006	CG1	VAL	103	165.347	73.442	15.743	1.00	52.28	LS12
ATOM	19007	CG2	VAL	103	165.244	75.637	16.877	1.00	52.28	LS12
ATOM	19008	C	VAL	103	167.843	72.821	17.018	1.00	61.65	LS12
ATOM	19009	O	VAL	103	168.886	72.980	16.387	1.00	61.65	LS12
ATOM	19010	N	TYR	104	167.341	71.629	17.331	1.00	80.85	LS12
ATOM	19011	CA	TYR	104	167.962	70.368	16.942	1.00	80.85	LS12
ATOM	19012	CB	TYR	104	167.985	70.253	15.421	1.00	47.28	LS12
ATOM	19013	CG	TYR	104	166.606	70.246	14.790	1.00	47.28	LS12
ATOM	19014	CD1	TYR	104	166.338	71.008	13.648	1.00	47.28	LS12
ATOM	19015	CE1	TYR	104	165.080	70.981	13.035	1.00	47.28	LS12
ATOM	19016	CD2	TYR	104	165.580	69.456	15.311	1.00	47.28	LS12
ATOM	19017	CE2	TYR	104	164.319	69.419	14.708	1.00	47.28	LS12
ATOM	19018	CZ	TYR	104	164.073	70.183	13.567	1.00	47.28	LS12
ATOM	19019	OH	TYR	104	162.838	70.139	12.944	1.00	47.28	LS12
ATOM	19020	C	TYR	104	169.366	70.174	17.512	1.00	80.85	LS12
ATOM	19021	O	TYR	104	169.529	70.049	18.725	1.00	80.85	LS12
ATOM	19022	N	ASP	105	170.376	70.148	16.646	1.00	56.34	LS12
ATOM	19023	CA	ASP	105	171.754	69.948	17.091	1.00	56.34	LS12
ATOM	19024	CB	ASP	105	172.494	69.070	16.093	1.00	61.42	LS12
ATOM	19025	CG	ASP	105	171.985	67.648	16.085	1.00	61.42	LS12
ATOM	19026	OD1	ASP	105	172.179	66.955	15.060	1.00	61.42	LS12
ATOM	19027	OD2	ASP	105	171.399	67.223	17.110	1.00	61.42	LS12
ATOM	19028	C	ASP	105	172.535	71.236	17.299	1.00	56.34	LS12
ATOM	19029	O	ASP	105	173.572	71.243	17.968	1.00	56.34	LS12
ATOM	19030	N	ALA	106	172.053	72.325	16.716	1.00	75.69	LS12
ATOM	19031	CA	ALA	106	172.728	73.602	16.865	1.00	75.69	LS12
ATOM	19032	CB	ALA	106	172.246	74.573	15.803	1.00	123.96	LS12
ATOM	19033	C	ALA	106	172.426	74.147	18.251	1.00	75.69	LS12
ATOM	19034	O	ALA	106	171.331	74.652	18.499	1.00	75.69	LS12
ATOM	19035	N	ALA	107	173.387	74.029	19.162	1.00	58.75	LS12
ATOM	19036	CA	ALA	107	173.197	74.531	20.516	1.00	58.75	LS12
ATOM	19037	CB	ALA	107	174.412	74.216	21.367	1.00	60.64	LS12
ATOM	19038	C	ALA	107	173.006	76.035	20.426	1.00	58.75	LS12
ATOM	19039	O	ALA	107	173.210	76.612	19.372	1.00	58.75	LS12
ATOM	19040	N	GLY	108	172.601	76.660	21.526	1.00	51.32	LS12
ATOM	19041	CA	GLY	108	172.414	78.101	21.541	1.00	51.32	LS12
ATOM	19042	C	GLY	108	173.737	78.764	21.867	1.00	51.32	LS12
ATOM	19043	O	GLY	108	174.702	78.078	22.183	1.00	51.32	LS12
ATOM	19044	N	VAL	109	173.805	80.088	21.798	1.00	64.52	LS12
ATOM	19045	CA	VAL	109	175.062	80.761	22.084	1.00	64.52	LS12

ATOM	19046	CB	VAL	109	175.058	82.219	21.598	1.00	44.87	LS12
ATOM	19047	CG1	VAL	109	176.465	82.809	21.740	1.00	44.87	LS12
ATOM	19048	CG2	VAL	109	174.609	82.284	20.148	1.00	44.87	LS12
ATOM	19049	C	VAL	109	175.388	80.723	23.564	1.00	64.52	LS12
ATOM	19050	O	VAL	109	174.496	80.720	24.406	1.00	64.52	LS12
ATOM	19051	N	LYS	110	176.682	80.693	23.866	1.00	84.45	LS12
ATOM	19052	CA	LYS	110	177.169	80.629	25.235	1.00	84.45	LS12
ATOM	19053	CB	LYS	110	178.698	80.627	25.236	1.00	114.44	LS12
ATOM	19054	CG	LYS	110	179.312	79.420	24.548	1.00	114.44	LS12
ATOM	19055	CD	LYS	110	178.941	78.119	25.254	1.00	114.44	LS12
ATOM	19056	CE	LYS	110	179.592	76.916	24.579	1.00	114.44	LS12
ATOM	19057	NZ	LYS	110	179.300	75.643	25.292	1.00	114.44	LS12
ATOM	19058	C	LYS	110	176.660	81.725	26.165	1.00	84.45	LS12
ATOM	19059	O	LYS	110	175.501	81.717	26.584	1.00	84.45	LS12
ATOM	19060	N	ASP	111	177.536	82.668	26.491	1.00	78.20	LS12
ATOM	19061	CA	ASP	111	177.186	83.741	27.410	1.00	78.20	LS12
ATOM	19062	CB	ASP	111	178.446	84.233	28.128	1.00	90.56	LS12
ATOM	19063	CG	ASP	111	179.137	83.128	28.919	1.00	90.56	LS12
ATOM	19064	OD1	ASP	111	179.758	82.238	28.297	1.00	90.56	LS12
ATOM	19065	OD2	ASP	111	179.049	83.142	30.165	1.00	90.56	LS12
ATOM	19066	C	ASP	111	176.459	84.905	26.758	1.00	78.20	LS12
ATOM	19067	O	ASP	111	176.881	86.058	26.853	1.00	78.20	LS12
ATOM	19068	N	ARG	112	175.351	84.592	26.102	1.00	75.54	LS12
ATOM	19069	CA	ARG	112	174.544	85.601	25.435	1.00	75.54	LS12
ATOM	19070	CB	ARG	112	173.745	84.956	24.304	1.00	69.73	LS12
ATOM	19071	CG	ARG	112	174.092	85.505	22.940	1.00	69.73	LS12
ATOM	19072	CD	ARG	112	173.619	86.925	22.816	1.00	69.73	LS12
ATOM	19073	NE	ARG	112	174.246	87.596	21.691	1.00	69.73	LS12
ATOM	19074	CZ	ARG	112	173.851	88.771	21.227	1.00	69.73	LS12
ATOM	19075	NH1	ARG	112	172.824	89.396	21.793	1.00	69.73	LS12
ATOM	19076	NH2	ARG	112	174.484	89.322	20.208	1.00	69.73	LS12
ATOM	19077	C	ARG	112	173.603	86.237	26.445	1.00	75.54	LS12
ATOM	19078	O	ARG	112	172.724	85.575	26.992	1.00	75.54	LS12
ATOM	19079	N	LYS	113	173.780	87.528	26.688	1.00	67.81	LS12
ATOM	19080	CA	LYS	113	172.942	88.208	27.659	1.00	67.81	LS12
ATOM	19081	CB	LYS	113	173.828	88.857	28.725	1.00	93.19	LS12
ATOM	19082	CG	LYS	113	174.881	87.897	29.276	1.00	93.19	LS12
ATOM	19083	CD	LYS	113	175.612	88.464	30.478	1.00	93.19	LS12
ATOM	19084	CE	LYS	113	174.701	88.532	31.698	1.00	93.19	LS12
ATOM	19085	NZ	LYS	113	175.403	89.091	32.890	1.00	93.19	LS12
ATOM	19086	C	LYS	113	171.996	89.233	27.047	1.00	67.81	LS12
ATOM	19087	O	LYS	113	171.181	89.816	27.754	1.00	67.81	LS12
ATOM	19088	N	LYS	114	172.089	89.443	25.736	1.00	72.96	LS12
ATOM	19089	CA	LYS	114	171.212	90.403	25.074	1.00	72.96	LS12
ATOM	19090	CB	LYS	114	172.017	91.390	24.238	1.00	49.94	LS12
ATOM	19091	CG	LYS	114	173.056	92.148	25.025	1.00	49.94	LS12
ATOM	19092	CD	LYS	114	172.625	93.540	25.435	1.00	49.94	LS12
ATOM	19093	CE	LYS	114	173.776	94.225	26.169	1.00	49.94	LS12
ATOM	19094	NZ	LYS	114	173.474	95.631	26.553	1.00	49.94	LS12
ATOM	19095	C	LYS	114	170.155	89.769	24.187	1.00	72.96	LS12
ATOM	19096	O	LYS	114	169.268	89.058	24.662	1.00	72.96	LS12
ATOM	19097	N	SER	115	170.260	90.039	22.894	1.00	54.44	LS12
ATOM	19098	CA	SER	115	169.306	89.551	21.906	1.00	54.44	LS12
ATOM	19099	CB	SER	115	169.703	90.073	20.526	1.00	53.20	LS12
ATOM	19100	OG	SER	115	169.931	91.475	20.551	1.00	53.20	LS12
ATOM	19101	C	SER	115	169.206	88.037	21.864	1.00	54.44	LS12
ATOM	19102	O	SER	115	169.274	87.443	20.795	1.00	54.44	LS12
ATOM	19103	N	ARG	116	169.012	87.420	23.023	1.00	42.51	LS12
ATOM	19104	CA	ARG	116	168.933	85.965	23.138	1.00	42.51	LS12
ATOM	19105	CB	ARG	116	168.830	85.543	24.609	1.00	61.58	LS12
ATOM	19106	CG	ARG	116	169.772	86.241	25.592	1.00	61.58	LS12
ATOM	19107	CD	ARG	116	169.765	85.470	26.895	1.00	61.58	LS12
ATOM	19108	NE	ARG	116	168.414	85.002	27.186	1.00	61.58	LS12
ATOM	19109	CZ	ARG	116	167.512	85.707	27.858	1.00	61.58	LS12
ATOM	19110	NH1	ARG	116	167.821	86.909	28.328	1.00	61.58	LS12
ATOM	19111	NH2	ARG	116	166.289	85.229	28.025	1.00	61.58	LS12
ATOM	19112	C	ARG	116	167.788	85.309	22.375	1.00	42.51	LS12
ATOM	19113	O	ARG	116	167.861	84.127	22.071	1.00	42.51	LS12
ATOM	19114	N	SER	117	166.725	86.053	22.086	1.00	54.92	LS12
ATOM	19115	CA	SER	117	165.590	85.490	21.362	1.00	54.92	LS12
ATOM	19116	CB	SER	117	164.583	86.584	21.021	1.00	94.46	LS12
ATOM	19117	OG	SER	117	163.416	86.036	20.450	1.00	94.46	LS12
ATOM	19118	C	SER	117	166.137	84.847	20.092	1.00	54.92	LS12
ATOM	19119	O	SER	117	165.604	83.863	19.594	1.00	54.92	LS12
ATOM	19120	N	LYS	118	167.205	85.429	19.569	1.00	58.46	LS12
ATOM	19121	CA	LYS	118	167.891	84.913	18.395	1.00	58.46	LS12
ATOM	19122	CB	LYS	118	168.279	86.075	17.509	1.00	36.04	LS12
ATOM	19123	CG	LYS	118	167.459	87.325	17.835	1.00	36.04	LS12
ATOM	19124	CD	LYS	118	167.627	88.425	16.800	1.00	36.04	LS12
ATOM	19125	CE	LYS	118	166.828	89.662	17.181	1.00	36.04	LS12
ATOM	19126	NZ	LYS	118	166.905	90.737	16.142	1.00	36.04	LS12
ATOM	19127	C	LYS	118	169.108	84.342	19.097	1.00	58.46	LS12
ATOM	19128	O	LYS	118	169.467	84.841	20.159	1.00	58.46	LS12
ATOM	19129	N	TYR	119	169.752	83.319	18.552	1.00	67.46	LS12
ATOM	19130	CA	TYR	119	170.904	82.709	19.245	1.00	67.46	LS12
ATOM	19131	CB	TYR	119	171.800	83.771	19.904	1.00	37.33	LS12
ATOM	19132	CG	TYR	119	172.212	84.893	18.980	1.00	37.33	LS12
ATOM	19133	CD1	TYR	119	172.032	86.230	19.346	1.00	37.33	LS12
ATOM	19134	CE1	TYR	119	172.370	87.264	18.473	1.00	37.33	LS12
ATOM	19135	CD2	TYR	119	172.748	84.617	17.722	1.00	37.33	LS12
ATOM	19136	CE2	TYR	119	173.091	85.640	16.840	1.00	37.33	LS12
ATOM	19137	CZ	TYR	119	172.898	86.962	17.213	1.00	37.33	LS12
ATOM	19138	OH	TYR	119	173.195	87.957	16.298	1.00	37.33	LS12
ATOM	19139	C	TYR	119	170.348	81.796	20.341	1.00	67.46	LS12
ATOM	19140	O	TYR	119	171.039	81.464	21.291	1.00	67.46	LS12
ATOM	19141	N	GLY	120	169.081	81.425	20.189	1.00	69.28	LS12
ATOM	19142	CA	GLY	120	168.380	80.559	21.124	1.00	69.28	LS12
ATOM	19143	C	GLY	120	168.944	80.213	22.494	1.00	69.28	LS12
ATOM	19144	O	GLY	120	169.153	79.034	22.785	1.00	69.28	LS12
ATOM	19145	N	THR	121	169.171	81.214	23.344	1.00	52.90	LS12
ATOM	19146	CA	THR	121	169.680	80.966	24.693	1.00	52.90	LS12
ATOM	19147	CB	THR	121	170.936	81.791	24.979	1.00	60.16	LS12
ATOM	19148	OG1	THR	121	170.591	83.176	25.021	1.00	60.16	LS12
ATOM	19149	CG2	THR	121	171.965	81.580	23.903	1.00	60.16	LS12
ATOM	19150	C	THR	121	168.629	81.303	25.768	1.00	52.90	LS12
ATOM	19151	O	THR	121	168.034	82.397	25.765	1.00	52.90	LS12

ATOM	19152	N	LYS	122	168.408	80.356	26.684	1.00	47.79	LS12	ATOM	19205	C1'	ADE	1	206.612	108.609	-24.315	1.00	94.39	XMES
ATOM	19153	CA	LYS	122	167.435	80.530	27.766	1.00	47.79	LS12	ATOM	19206	N9	ADE	1	206.206	109.835	-25.013	1.00	112.28	XMES
ATOM	19154	CB	LYS	122	167.363	79.271	28.631	1.00	58.07	LS12	ATOM	19207	C4	ADE	1	205.550	110.923	-24.475	1.00	112.28	XMES
ATOM	19155	CG	LYS	122	167.221	77.974	27.856	1.00	58.07	LS12	ATOM	19208	N3	ADE	1	205.115	111.077	-23.209	1.00	112.28	XMES
ATOM	19156	CD	LYS	122	165.829	77.765	27.275	1.00	58.07	LS12	ATOM	19209	C2	ADE	1	204.544	112.278	-23.047	1.00	112.28	XMES
ATOM	19157	CE	LYS	122	165.794	76.470	26.464	1.00	58.07	LS12	ATOM	19210	N1	ADE	1	204.377	113.271	-23.938	1.00	112.28	XMES
ATOM	19158	NZ	LYS	122	164.446	76.153	25.943	1.00	58.07	LS12	ATOM	19211	C6	ADE	1	204.832	113.089	-25.199	1.00	112.28	XMES
ATOM	19159	C	LYS	122	167.817	81.722	28.640	1.00	47.79	LS12	ATOM	19212	N6	ADE	1	204.692	114.086	-26.082	1.00	112.28	XMES
ATOM	19160	O	LYS	122	168.927	82.255	28.539	1.00	47.79	LS12	ATOM	19213	C5	ADE	1	205.444	111.849	-25.505	1.00	112.28	XMES
ATOM	19161	N	LYS	123	166.903	82.133	29.511	1.00	67.02	LS12	ATOM	19214	N7	ADE	1	205.998	111.345	-26.675	1.00	112.28	XMES
ATOM	19162	CA	LYS	123	167.177	83.278	30.362	1.00	67.02	LS12	ATOM	19215	C8	ADE	1	206.429	110.153	-26.334	1.00	112.28	XMES
ATOM	19163	CB	LYS	123	165.880	83.857	30.943	1.00	60.85	LS12	ATOM	19216	C2'	ADE	1	205.470	107.688	-23.871	1.00	94.39	XMES
ATOM	19164	CG	LYS	123	166.138	85.099	31.794	1.00	60.85	LS12	ATOM	19217	O2'	ADE	1	205.708	107.215	-22.552	1.00	94.39	XMES
ATOM	19165	CD	LYS	123	165.130	86.213	31.571	1.00	60.85	LS12	ATOM	19218	C3'	ADE	1	205.506	106.599	-24.949	1.00	94.39	XMES
ATOM	19166	CE	LYS	123	165.603	87.486	32.259	1.00	60.85	LS12	ATOM	19219	O3'	ADE	1	205.042	105.352	-24.445	1.00	94.39	XMES
ATOM	19167	NZ	LYS	123	164.588	88.566	32.228	1.00	60.85	LS12	ATOM	19220	P	URI	2	203.687	104.713	-25.022	1.00	68.66	XMES
ATOM	19168	C	LYS	123	168.148	82.981	31.491	1.00	67.02	LS12	ATOM	19221	O1P	URI	2	203.881	104.555	-26.484	1.00	51.29	XMES
ATOM	19169	O	LYS	123	167.960	82.029	32.250	1.00	67.02	LS12	ATOM	19222	O2P	URI	2	202.539	105.507	-24.514	1.00	51.29	XMES
ATOM	19170	N	PRO	124	169.203	83.805	31.616	1.00	75.93	LS12	ATOM	19223	O5'	URI	2	203.647	103.288	-24.314	1.00	68.66	XMES
ATOM	19171	CD	PRO	124	169.470	84.999	30.793	1.00	95.29	LS12	ATOM	19224	C5'	URI	2	202.972	102.179	-24.909	1.00	68.66	XMES
ATOM	19172	CA	PRO	124	170.223	83.660	32.650	1.00	75.93	LS12	ATOM	19225	C4'	URI	2	203.134	100.961	-24.043	1.00	68.66	XMES
ATOM	19173	CB	PRO	124	170.959	84.990	32.589	1.00	95.29	LS12	ATOM	19226	O4'	URI	2	204.545	100.639	-23.927	1.00	68.66	XMES
ATOM	19174	CG	PRO	124	170.908	85.319	31.145	1.00	95.29	LS12	ATOM	19227	C1'	URI	2	204.821	100.139	-22.626	1.00	68.66	XMES
ATOM	19175	C	PRO	124	169.576	83.427	34.005	1.00	75.93	LS12	ATOM	19228	N1	URI	2	205.759	101.052	-21.947	1.00	51.29	XMES
ATOM	19176	O	PRO	124	168.734	84.212	34.456	1.00	75.93	LS12	ATOM	19229	C6	URI	2	206.035	102.311	-22.447	1.00	51.29	XMES
ATOM	19177	N	LYS	125	169.981	82.330	34.633	1.00	135.72	LS12	ATOM	19230	C2	URI	2	206.355	100.609	-20.761	1.00	51.29	XMES
ATOM	19178	CA	LYS	125	169.494	81.906	35.942	1.00	135.72	LS12	ATOM	19231	O2	URI	2	206.149	99.497	-20.273	1.00	51.29	XMES
ATOM	19179	CB	LYS	125	170.176	80.590	36.313	1.00	132.41	LS12	ATOM	19232	N3	URI	2	207.193	101.516	-20.164	1.00	51.29	XMES
ATOM	19180	CG	LYS	125	171.624	80.500	35.810	1.00	132.41	LS12	ATOM	19233	C4	URI	2	207.493	102.786	-20.604	1.00	51.29	XMES
ATOM	19181	CD	LYS	125	172.451	81.715	36.233	1.00	132.41	LS12	ATOM	19234	O4	URI	2	208.207	103.509	-19.904	1.00	51.29	XMES
ATOM	19182	CE	LYS	125	173.755	81.807	35.459	1.00	132.41	LS12	ATOM	19235	C5	URI	2	206.855	103.166	-21.834	1.00	51.29	XMES
ATOM	19183	NZ	LYS	125	174.496	83.054	35.793	1.00	132.41	LS12	ATOM	19236	C2'	URI	2	203.494	100.071	-21.875	1.00	68.66	XMES
ATOM	19184	C	LYS	125	169.742	82.928	37.048	1.00	135.72	LS12	ATOM	19237	O2'	URI	2	202.951	98.769	-21.982	1.00	68.66	XMES
ATOM	19185	O	LYS	125	169.287	82.742	38.175	1.00	135.72	LS12	ATOM	19238	C3'	URI	2	202.683	101.131	-22.604	1.00	68.66	XMES
ATOM	19186	N	GLU	126	170.467	83.993	36.713	1.00	132.53	LS12	ATOM	19239	O3'	URI	2	201.285	100.957	-22.439	1.00	68.66	XMES
ATOM	19187	CA	GLU	126	170.824	85.057	37.651	1.00	132.53	LS12	ATOM	19240	P	CYT	3	200.513	101.812	-21.317	1.00	60.78	XMES
ATOM	19188	CB	GLU	126	171.105	86.358	36.885	1.00	174.36	LS12	ATOM	19241	O1P	CYT	3	199.087	101.358	-21.318	1.00	49.72	XMES
ATOM	19189	CG	GLU	126	169.886	87.017	36.246	1.00	174.36	LS12	ATOM	19242	O2P	CYT	3	200.842	103.249	-21.554	1.00	49.72	XMES
ATOM	19190	CD	GLU	126	169.240	88.066	37.141	1.00	174.36	LS12	ATOM	19243	O5'	CYT	3	201.158	101.301	-19.957	1.00	60.78	XMES
ATOM	19191	OE1	GLU	126	168.773	87.717	38.244	1.00	174.36	LS12	ATOM	19244	C5'	CYT	3	201.028	99.920	-19.597	1.00	60.78	XMES
ATOM	19192	OE2	GLU	126	169.200	89.248	36.737	1.00	174.36	LS12	ATOM	19245	C4'	CYT	3	201.823	99.609	-18.354	1.00	60.78	XMES
ATOM	19193	C	GLU	126	169.819	85.327	38.768	1.00	132.53	LS12	ATOM	19246	O4'	CYT	3	203.224	99.941	-18.558	1.00	60.78	XMES
ATOM	19194	O	GLU	126	168.680	84.857	38.731	1.00	132.53	LS12	ATOM	19247	C1'	CYT	3	203.796	100.336	-17.327	1.00	60.78	XMES
ATOM	19195	N	ALA	127	170.269	86.105	39.750	1.00	131.96	LS12	ATOM	19248	N1	CYT	3	204.363	101.693	-17.461	1.00	49.72	XMES
ATOM	19196	CA	ALA	127	169.493	86.486	40.932	1.00	131.96	LS12	ATOM	19249	C6	CYT	3	204.090	102.480	-18.549	1.00	49.72	XMES
ATOM	19197	CB	ALA	127	167.986	86.279	40.707	1.00	110.11	LS12	ATOM	19250	C2	CYT	3	205.211	102.166	-16.441	1.00	49.72	XMES
ATOM	19198	C	ALA	127	169.967	85.653	42.114	1.00	131.96	LS12	ATOM	19251	O2	CYT	3	205.402	101.455	-15.430	1.00	49.72	XMES
ATOM	19199	O	ALA	127	170.994	84.954	41.963	1.00	131.96	LS12	ATOM	19252	N3	CYT	3	205.789	103.380	-16.574	1.00	49.72	XMES
ATOM	19200	OXT	ALA	127	169.318	85.717	43.177	1.00	139.08	LS12	ATOM	19253	C4	CYT	3	205.536	104.124	-17.646	1.00	49.72	XMES
ATOM	19201	O5'	ADE	1	207.287	106.875	-27.833	1.00	94.39	XMES	ATOM	19254	N4	CYT	3	206.147	105.301	-17.734	1.00	49.72	XMES
ATOM	19202	C5'	ADE	1	207.319	105.966	-26.708	1.00	94.39	XMES	ATOM	19255	C5	CYT	3	204.648	103.691	-18.679	1.00	49.72	XMES
ATOM	19203	C4'	ADE	1	206.982	106.512	-25.320	1.00	94.39	XMES	ATOM	19256	C2'	CYT	3	202.710	100.240	-16.257	1.00	60.78	XMES
ATOM	19204	O4'	ADE	1	207.477	107.870	-25.168	1.00	94.39	XMES	ATOM	19257	O2'	CYT	3	202.826	98.975	-15.637	1.00	60.78	XMES

ATOM	19258	C3'	CYT	3	201.441	100.355	-17.090	1.00	60.78	XMES	ATOM	19311	C6	GUA	6	138.083	114.153	4.130	1.00	57.78	A16S
ATOM	19259	O3'	CYT	3	200.329	99.752	-16.448	1.00	60.78	XMES	ATOM	19312	O6	GUA	6	137.558	115.273	4.068	1.00	57.78	A16S
ATOM	19260	P	CYT	4	199.354	100.650	-15.534	1.00	78.75	XMES	ATOM	19313	C5	GUA	6	138.343	113.239	3.079	1.00	57.78	A16S
ATOM	19261	O1P	CYT	4	198.369	99.694	-14.978	1.00	51.45	XMES	ATOM	19314	N7	GUA	6	138.100	113.349	1.721	1.00	57.78	A16S
ATOM	19262	O2P	CYT	4	198.875	101.847	-16.286	1.00	51.45	XMES	ATOM	19315	C8	GUA	6	138.540	112.230	1.218	1.00	57.78	A16S
ATOM	19263	O5'	CYT	4	200.282	101.153	-14.339	1.00	78.75	XMES	ATOM	19316	C2'	GUA	6	141.009	109.725	2.509	1.00	48.23	A16S
ATOM	19264	C5'	CYT	4	200.627	100.273	-13.251	1.00	78.75	XMES	ATOM	19317	O2'	GUA	6	141.834	109.204	1.491	1.00	48.23	A16S
ATOM	19265	C4'	CYT	4	201.518	100.985	-12.262	1.00	78.75	XMES	ATOM	19318	C3'	GUA	6	140.647	108.608	3.486	1.00	48.23	A16S
ATOM	19266	O4'	CYT	4	202.722	101.432	-12.936	1.00	78.75	XMES	ATOM	19319	O3'	GUA	6	141.719	107.684	3.586	1.00	48.23	A16S
ATOM	19267	C1'	CYT	4	203.144	102.671	-12.384	1.00	78.75	XMES	ATOM	19320	P	GUA	7	143.127	108.135	4.217	1.00	48.00	A16S
ATOM	19268	N1	CYT	4	203.159	103.684	-13.461	1.00	51.45	XMES	ATOM	19321	O1P	GUA	7	142.956	109.433	4.907	1.00	49.66	A16S
ATOM	19269	C6	CYT	4	202.377	103.537	-14.574	1.00	51.45	XMES	ATOM	19322	O2P	GUA	7	143.688	106.979	4.968	1.00	49.66	A16S
ATOM	19270	C2	CYT	4	203.998	104.807	-13.331	1.00	51.45	XMES	ATOM	19323	O5'	GUA	7	144.027	108.421	2.937	1.00	48.00	A16S
ATOM	19271	O2	CYT	4	204.683	104.939	-12.300	1.00	51.45	XMES	ATOM	19324	C5'	GUA	7	145.066	107.513	2.521	1.00	48.00	A16S
ATOM	19272	N3	CYT	4	204.035	105.725	-14.329	1.00	51.45	XMES	ATOM	19325	C4'	GUA	7	145.999	108.210	1.562	1.00	48.00	A16S
ATOM	19273	C4	CYT	4	203.270	105.567	-15.411	1.00	51.45	XMES	ATOM	19326	O4'	GUA	7	145.325	108.476	0.323	1.00	48.00	A16S
ATOM	19274	N4	CYT	4	203.336	106.506	-16.369	1.00	51.45	XMES	ATOM	19327	C1'	GUA	7	145.974	109.548	-0.306	1.00	48.00	A16S
ATOM	19275	C5	CYT	4	202.401	104.444	-15.562	1.00	51.45	XMES	ATOM	19328	N9	GUA	7	145.027	110.204	-1.190	1.00	49.66	A16S
ATOM	19276	C2'	CYT	4	202.195	103.018	-11.232	1.00	78.75	XMES	ATOM	19329	C4	GUA	7	145.244	110.515	-2.504	1.00	49.66	A16S
ATOM	19277	O2'	CYT	4	202.749	102.537	-10.021	1.00	78.75	XMES	ATOM	19330	N3	GUA	7	146.385	110.297	-3.191	1.00	49.66	A16S
ATOM	19278	C3'	CYT	4	200.947	102.248	-11.636	1.00	78.75	XMES	ATOM	19331	C2	GUA	7	146.281	110.672	-4.449	1.00	49.66	A16S
ATOM	19279	O3'	CYT	4	199.867	102.130	-10.704	1.00	78.75	XMES	ATOM	19332	N2	GUA	7	147.315	110.507	-5.280	1.00	49.66	A16S
ATOM	19280	O5'	URI	5	133.534	110.624	1.569	1.00	53.99	A16S	ATOM	19333	N1	GUA	7	145.155	111.233	-4.990	1.00	49.66	A16S
ATOM	19281	C5'	URI	5	133.710	109.633	2.593	1.00	53.99	A16S	ATOM	19334	C6	GUA	7	143.971	111.479	-4.301	1.00	49.66	A16S
ATOM	19282	C4'	URI	5	134.887	109.900	3.516	1.00	53.99	A16S	ATOM	19335	O6	GUA	7	143.009	112.007	-4.885	1.00	49.66	A16S
ATOM	19283	O4'	URI	5	134.834	111.272	3.965	1.00	53.99	A16S	ATOM	19336	C5	GUA	7	144.063	111.064	-2.949	1.00	49.66	A16S
ATOM	19284	C1'	URI	5	135.435	111.373	5.236	1.00	53.99	A16S	ATOM	19337	N7	GUA	7	143.129	111.115	-1.924	1.00	49.66	A16S
ATOM	19285	N1	URI	5	134.721	112.366	6.055	1.00	91.96	A16S	ATOM	19338	C8	GUA	7	143.749	110.603	-0.899	1.00	49.66	A16S
ATOM	19286	C6	URI	5	133.781	113.200	5.490	1.00	91.96	A16S	ATOM	19339	C2'	GUA	7	146.539	110.453	0.782	1.00	48.00	A16S
ATOM	19287	C2	URI	5	135.044	112.473	7.401	1.00	91.96	A16S	ATOM	19340	O2'	GUA	7	147.841	110.837	0.438	1.00	48.00	A16S
ATOM	19288	O2	URI	5	135.840	111.735	7.960	1.00	91.96	A16S	ATOM	19341	C3'	GUA	7	146.442	109.580	2.034	1.00	48.00	A16S
ATOM	19289	N3	URI	5	134.395	113.482	8.069	1.00	91.96	A16S	ATOM	19342	O3'	GUA	7	147.593	109.530	2.892	1.00	48.00	A16S
ATOM	19290	C4	URI	5	133.472	114.368	7.547	1.00	91.96	A16S	ATOM	19343	P	ADE	8	148.946	108.784	2.428	1.00	41.72	A16S
ATOM	19291	O4	URI	5	133.032	115.272	8.256	1.00	91.96	A16S	ATOM	19344	O1P	ADE	8	148.987	108.630	0.948	1.00	45.62	A16S
ATOM	19292	C5	URI	5	133.168	114.169	6.169	1.00	91.96	A16S	ATOM	19345	O2P	ADE	8	149.052	107.573	3.284	1.00	45.62	A16S
ATOM	19293	C2'	URI	5	135.701	109.972	5.794	1.00	53.99	A16S	ATOM	19346	O5'	ADE	8	150.082	109.791	2.899	1.00	41.72	A16S
ATOM	19294	O2'	URI	5	137.100	109.853	5.806	1.00	53.99	A16S	ATOM	19347	C5'	ADE	8	150.278	111.035	2.232	1.00	41.72	A16S
ATOM	19295	C3'	URI	5	134.969	109.059	4.795	1.00	53.99	A16S	ATOM	19348	C4'	ADE	8	151.688	111.505	2.452	1.00	41.72	A16S
ATOM	19296	O3'	URI	5	135.579	107.773	4.467	1.00	53.99	A16S	ATOM	19349	O4'	ADE	8	151.811	111.986	3.808	1.00	41.72	A16S
ATOM	19297	P	GUA	6	136.736	107.103	5.401	1.00	48.23	A16S	ATOM	19350	C1'	ADE	8	152.825	111.280	4.467	1.00	41.72	A16S
ATOM	19298	O1P	GUA	6	136.620	105.657	5.086	1.00	57.78	A16S	ATOM	19351	N9	ADE	8	152.408	111.075	5.847	1.00	45.62	A16S
ATOM	19299	O2P	GUA	6	136.714	107.538	6.828	1.00	57.78	A16S	ATOM	19352	C4	ADE	8	153.242	111.040	6.932	1.00	45.62	A16S
ATOM	19300	O5'	GUA	6	138.106	107.608	4.760	1.00	48.23	A16S	ATOM	19353	N3	ADE	8	154.575	111.186	6.935	1.00	45.62	A16S
ATOM	19301	C5'	GUA	6	138.578	107.010	3.550	1.00	48.23	A16S	ATOM	19354	C2	ADE	8	155.055	111.072	8.166	1.00	45.62	A16S
ATOM	19302	C4'	GUA	6	139.476	107.947	2.781	1.00	48.23	A16S	ATOM	19355	N1	ADE	8	154.406	110.844	9.307	1.00	45.62	A16S
ATOM	19303	O4'	GUA	6	138.735	109.052	2.212	1.00	48.23	A16S	ATOM	19356	C6	ADE	8	153.063	110.704	9.266	1.00	45.62	A16S
ATOM	19304	C1'	GUA	6	139.652	110.073	1.877	1.00	48.23	A16S	ATOM	19357	N6	ADE	8	152.406	110.473	10.406	1.00	45.62	A16S
ATOM	19305	N9	GUA	6	139.068	111.386	2.158	1.00	57.78	A16S	ATOM	19358	C5	ADE	8	152.434	110.808	8.020	1.00	45.62	A16S
ATOM	19306	C4	GUA	6	138.941	112.034	3.373	1.00	57.78	A16S	ATOM	19359	N7	ADE	8	151.107	110.708	7.633	1.00	45.62	A16S
ATOM	19307	N3	GUA	6	139.339	111.570	4.574	1.00	57.78	A16S	ATOM	19360	C8	ADE	8	151.147	110.873	6.337	1.00	45.62	A16S
ATOM	19308	C2	GUA	6	139.092	112.435	5.544	1.00	57.78	A16S	ATOM	19361	C2'	ADE	8	153.013	109.977	3.696	1.00	41.72	A16S
ATOM	19309	N2	GUA	6	139.424	112.143	6.803	1.00	57.78	A16S	ATOM	19362	O2'	ADE	8	154.315	109.469	3.888	1.00	41.72	A16S
ATOM	19310	N1	GUA	6	138.501	113.653	5.355	1.00	57.78	A16S	ATOM	19363	C3'	ADE	8	152.746	110.423	2.267	1.00	41.72	A16S

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ATOM  19364  O3' ADE   8     153.936 110.987   1.719  1.00 41.72      A16S
ATOM  19365  P   GUA   9     154.190 110.945   0.129  1.00 36.84      A16S
ATOM  19366  O1P GUA   9     153.670 112.235  -0.428  1.00 37.31      A16S
ATOM  19367  O2P GUA   9     153.684 109.654  -0.401  1.00 37.31      A16S
ATOM  19368  O5' GUA   9     155.774 110.900  -0.002  1.00 36.84      A16S
ATOM  19369  C5' GUA   9     156.588 111.775   0.764  1.00 36.84      A16S
ATOM  19370  C4' GUA   9     157.228 111.035   1.913  1.00 36.84      A16S
ATOM  19371  O4' GUA   9     156.541 109.791   2.193  1.00 36.84      A16S
ATOM  19372  C1' GUA   9     157.462 108.838   2.707  1.00 36.84      A16S
ATOM  19373  N9  GUA   9     157.519 107.692   1.806  1.00 37.31      A16S
ATOM  19374  C4  GUA   9     158.285 106.565   1.975  1.00 37.31      A16S
ATOM  19375  N3  GUA   9     159.088 106.303   3.024  1.00 37.31      A16S
ATOM  19376  C2  GUA   9     159.701 105.138   2.899  1.00 37.31      A16S
ATOM  19377  N2  GUA   9     160.532 104.718   3.856  1.00 37.31      A16S
ATOM  19378  N1  GUA   9     159.542 104.303   1.826  1.00 37.31      A16S
ATOM  19379  C6  GUA   9     158.723 104.562   0.730  1.00 37.31      A16S
ATOM  19380  O6  GUA   9     158.654 103.750  -0.198  1.00 37.31      A16S
ATOM  19381  C5  GUA   9     158.058 105.798   0.857  1.00 37.31      A16S
ATOM  19382  N7  GUA   9     157.153 106.417   0.009  1.00 37.31      A16S
ATOM  19383  C8  GUA   9     156.854 107.532   0.615  1.00 37.31      A16S
ATOM  19384  C2' GUA   9     158.819 109.521   2.769  1.00 36.84      A16S
ATOM  19385  O2' GUA   9     158.958 110.048   4.066  1.00 36.84      A16S
ATOM  19386  C3' GUA   9     158.661 110.604   1.713  1.00 36.84      A16S
ATOM  19387  O3' GUA   9     159.535 111.687   1.923  1.00 36.84      A16S
ATOM  19388  P   ADE  10     160.925 111.731   1.141  1.00 36.74      A16S
ATOM  19389  O1P ADE  10     161.481 113.105   1.300  1.00 37.97      A16S
ATOM  19390  O2P ADE  10     160.672 111.197  -0.234  1.00 37.97      A16S
ATOM  19391  O5' ADE  10     161.808 110.706   1.981  1.00 36.74      A16S
ATOM  19392  C5' ADE  10     162.071 110.953   3.366  1.00 36.74      A16S
ATOM  19393  C4' ADE  10     162.832 109.801   3.984  1.00 36.74      A16S
ATOM  19394  O4' ADE  10     162.014 108.604   3.958  1.00 36.74      A16S
ATOM  19395  C1' ADE  10     162.822 107.473   3.678  1.00 36.74      A16S
ATOM  19396  N9  ADE  10     162.454 106.997   2.342  1.00 37.97      A16S
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ATOM  19398  N3  ADE  10     163.400 104.748   2.335  1.00 37.97      A16S
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ATOM  19400  N1  ADE  10     162.929 103.596   0.269  1.00 37.97      A16S
ATOM  19401  C6  ADE  10     162.272 104.649  -0.258  1.00 37.97      A16S
ATOM  19402  N6  ADE  10     161.774 104.543  -1.488  1.00 37.97      A16S
ATOM  19403  C5  ADE  10     162.151 105.798   0.524  1.00 37.97      A16S
ATOM  19404  N7  ADE  10     161.529 107.013   0.293  1.00 37.97      A16S
ATOM  19405  C8  ADE  10     161.745 107.689   1.392  1.00 37.97      A16S
ATOM  19406  C2' ADE  10     164.272 107.945   3.734  1.00 36.74      A16S
ATOM  19407  O2' ADE  10     164.756 107.866   5.061  1.00 36.74      A16S
ATOM  19408  C3' ADE  10     164.120 109.390   3.297  1.00 36.74      A16S
ATOM  19409  O3' ADE  10     165.232 110.173   3.671  1.00 36.74      A16S
ATOM  19410  P   GUA  11     166.437 110.362   2.630  1.00 41.70      A16S
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ATOM  19412  O2P GUA  11     165.867 110.572   1.268  1.00 33.97      A16S
ATOM  19413  O5' GUA  11     167.180 108.959   2.680  1.00 41.70      A16S
ATOM  19414  C5' GUA  11     167.807 108.536   3.897  1.00 41.70      A16S
ATOM  19415  C4' GUA  11     168.484 107.213   3.702  1.00 41.70      A16S
ATOM  19416  O4' GUA  11     167.475 106.202   3.470  1.00 41.70      A16S
ATOM  19417  C1' GUA  11     167.949 105.260   2.529  1.00 41.70      A16S
ATOM  19418  N9  GUA  11     167.095 105.351   1.352  1.00 33.97      A16S
ATOM  19419  C4  GUA  11     166.875 104.369   0.425  1.00 33.97      A16S
ATOM  19420  N3  GUA  11     167.384 103.121   0.458  1.00 33.97      A16S
ATOM  19421  C2  GUA  11     167.012 102.408  -0.589  1.00 33.97      A16S
ATOM  19422  N2  GUA  11     167.416 101.142  -0.707  1.00 33.97      A16S
ATOM  19423  N1  GUA  11     166.212 102.881  -1.598  1.00 33.97      A16S
ATOM  19424  C6  GUA  11     165.675 104.161  -1.662  1.00 33.97      A16S
ATOM  19425  O6  GUA  11     164.972 104.489  -2.634  1.00 33.97      A16S
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ATOM  19427  N7  GUA  11     165.742 106.248  -0.184  1.00 33.97      A16S
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ATOM  19429  C2' GUA  11     169.401 105.628   2.211  1.00 41.70      A16S
ATOM  19430  O2' GUA  11     170.273 104.924   3.075  1.00 41.70      A16S
ATOM  19431  C3' GUA  11     169.405 107.120   2.501  1.00 41.70      A16S
ATOM  19432  O3' GUA  11     170.696 107.647   2.757  1.00 41.70      A16S
ATOM  19433  P   URI  12     171.453 108.469   1.597  1.00 38.15      A16S
ATOM  19434  O1P URI  12     172.719 108.994   2.141  1.00 40.93      A16S
ATOM  19435  O2P URI  12     170.505 109.401   0.927  1.00 40.93      A16S
ATOM  19436  O5' URI  12     171.841 107.334   0.555  1.00 38.15      A16S
ATOM  19437  C5' URI  12     172.795 106.320   0.891  1.00 38.15      A16S
ATOM  19438  C4' URI  12     172.812 105.252  -0.168  1.00 38.15      A16S
ATOM  19439  O4' URI  12     171.523 104.590  -0.206  1.00 38.15      A16S
ATOM  19440  C1' URI  12     171.234 104.172  -1.526  1.00 38.15      A16S
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ATOM  19448  C5  URI  12     168.666 106.802  -2.054  1.00 40.93      A16S
ATOM  19449  C2' URI  12     172.430 104.560  -2.392  1.00 38.15      A16S
ATOM  19450  O2' URI  12     173.316 103.455  -2.478  1.00 38.15      A16S
ATOM  19451  C3' URI  12     173.021 105.717  -1.596  1.00 38.15      A16S
ATOM  19452  O3' URI  12     174.394 105.946  -1.896  1.00 38.15      A16S
ATOM  19453  P   URI  13     174.813 107.272  -2.703  1.00 46.16      A16S
ATOM  19454  O1P URI  13     176.208 107.603  -2.327  1.00 41.57      A16S
ATOM  19455  O2P URI  13     173.737 108.267  -2.471  1.00 41.57      A16S
ATOM  19456  O5' URI  13     174.748 106.881  -4.255  1.00 46.16      A16S
ATOM  19457  C5' URI  13     174.944 105.522  -4.701  1.00 46.16      A16S
ATOM  19458  C4' URI  13     175.468 105.485  -6.126  1.00 46.16      A16S
ATOM  19459  O4' URI  13     174.448 105.143  -7.104  1.00 46.16      A16S
ATOM  19460  C1' URI  13     174.695 105.884  -8.278  1.00 46.16      A16S
ATOM  19461  N1  URI  13     173.469 105.964  -9.087  1.00 41.57      A16S
ATOM  19462  C6  URI  13     172.656 107.057  -9.053  1.00 41.57      A16S
ATOM  19463  C2  URI  13     173.168 104.896  -9.894  1.00 41.57      A16S
ATOM  19464  O2  URI  13     173.863 103.912  -9.965  1.00 41.57      A16S
ATOM  19465  N3  URI  13     172.020 105.019 -10.626  1.00 41.57      A16S
ATOM  19466  C4  URI  13     171.157 106.089 -10.635  1.00 41.57      A16S
ATOM  19467  O4  URI  13     170.150 106.066 -11.356  1.00 41.57      A16S
ATOM  19468  C5  URI  13     171.543 107.156  -9.779  1.00 41.57      A16S
ATOM  19469  C2' URI  13     175.283 107.201  -7.777  1.00 46.16      A16S
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ATOM  19470  O2' URI    13     175.979 107.841  -8.823  1.00 46.16      A16S
ATOM  19471  C3' URI    13     176.207 106.707  -6.668  1.00 46.16      A16S
ATOM  19472  O3' URI    13     177.413 106.278  -7.281  1.00 46.16      A16S
ATOM  19473  P   URI    14     178.817 106.690  -6.637  1.00 35.09      A16S
ATOM  19474  O1P URI    14     179.855 105.911  -7.356  1.00 44.94      A16S
ATOM  19475  O2P URI    14     178.693 106.555  -5.145  1.00 44.94      A16S
ATOM  19476  O5' URI    14     178.980 108.224  -7.036  1.00 35.09      A16S
ATOM  19477  C5' URI    14     179.310 108.580  -8.371  1.00 35.09      A16S
ATOM  19478  C4' URI    14     179.498 110.067  -8.492  1.00 35.09      A16S
ATOM  19479  O4' URI    14     178.218 110.732  -8.401  1.00 35.09      A16S
ATOM  19480  C1' URI    14     178.380 111.983  -7.746  1.00 35.09      A16S
ATOM  19481  N1  URI    14     177.613 111.954  -6.487  1.00 44.94      A16S
ATOM  19482  C6  URI    14     177.333 110.763  -5.861  1.00 44.94      A16S
ATOM  19483  C2  URI    14     177.203 113.155  -5.941  1.00 44.94      A16S
ATOM  19484  O2  URI    14     177.398 114.228  -6.470  1.00 44.94      A16S
ATOM  19485  N3  URI    14     176.549 113.044  -4.745  1.00 44.94      A16S
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ATOM  19494  O1P GUA    15     184.140 110.203  -7.161  1.00 41.40      A16S
ATOM  19495  O2P GUA    15     182.240 109.528  -5.573  1.00 41.40      A16S
ATOM  19496  O5' GUA    15     182.882 111.932  -5.912  1.00 41.41      A16S
ATOM  19497  C5' GUA    15     183.519 112.133  -4.641  1.00 41.41      A16S
ATOM  19498  C4' GUA    15     183.552 113.596  -4.315  1.00 41.41      A16S
ATOM  19499  O4' GUA    15     184.354 114.274  -5.309  1.00 41.41      A16S
ATOM  19500  C1' GUA    15     183.771 115.522  -5.632  1.00 41.41      A16S
ATOM  19501  N9  GUA    15     183.421 115.490  -7.044  1.00 41.40      A16S
ATOM  19502  C4  GUA    15     182.908 116.521  -7.783  1.00 41.40      A16S
ATOM  19503  N3  GUA    15     182.628 117.755  -7.328  1.00 41.40      A16S
ATOM  19504  C2  GUA    15     182.148 118.525  -8.281  1.00 41.40      A16S
ATOM  19505  N2  GUA    15     181.823 119.796  -8.009  1.00 41.40      A16S
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ATOM  19507  C6  GUA    15     182.220 116.834 -10.060  1.00 41.40      A16S
ATOM  19508  O6  GUA    15     181.980 116.541 -11.248  1.00 41.40      A16S
ATOM  19509  C5  GUA    15     182.747 116.011  -9.056  1.00 41.40      A16S
ATOM  19510  N7  GUA    15     183.153 114.688  -9.114  1.00 41.40      A16S
ATOM  19511  C8  GUA    15     183.541 114.420  -7.899  1.00 41.40      A16S
ATOM  19512  C2' GUA    15     182.564 115.720  -4.720  1.00 41.41      A16S
ATOM  19513  O2' GUA    15     183.002 116.476  -3.614  1.00 41.41      A16S
ATOM  19514  C3' GUA    15     182.200 114.277  -4.378  1.00 41.41      A16S
ATOM  19515  O3' GUA    15     181.509 114.114  -3.145  1.00 41.41      A16S
ATOM  19516  P   ADE    16     180.008 113.525  -3.147  1.00 38.99      A16S
ATOM  19517  O1P ADE    16     179.624 113.219  -1.733  1.00 39.07      A16S
ATOM  19518  O2P ADE    16     179.908 112.447  -4.167  1.00 39.07      A16S
ATOM  19519  O5' ADE    16     179.135 114.768  -3.625  1.00 38.99      A16S
ATOM  19520  C5' ADE    16     178.927 115.863  -2.734  1.00 38.99      A16S
ATOM  19521  C4' ADE    16     178.573 117.109  -3.491  1.00 38.99      A16S
ATOM  19522  O4' ADE    16     179.545 117.333  -4.543  1.00 38.99      A16S
ATOM  19523  C1' ADE    16     178.924 117.999  -5.631  1.00 38.99      A16S
ATOM  19524  N9  ADE    16     179.092 117.195  -6.846  1.00 39.07      A16S
ATOM  19525  C4  ADE    16     178.729 117.582  -8.113  1.00 39.07      A16S
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ATOM  19527  C2  ADE    16     177.953 118.765  -9.788  1.00 39.07      A16S
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ATOM  19531  C5  ADE    16     179.022 116.515  -8.931  1.00 39.07      A16S
ATOM  19532  N7  ADE    16     179.571 115.473  -8.203  1.00 39.07      A16S
ATOM  19533  C8  ADE    16     179.600 115.928  -6.975  1.00 39.07      A16S
ATOM  19534  C2' ADE    16     177.453 118.197  -5.260  1.00 38.99      A16S
ATOM  19535  O2' ADE    16     177.291 119.488  -4.719  1.00 38.99      A16S
ATOM  19536  C3' ADE    16     177.250 117.105  -4.220  1.00 38.99      A16S
ATOM  19537  O3' ADE    16     176.169 117.373  -3.360  1.00 38.99      A16S
ATOM  19538  P   URI    17     174.735 116.733  -3.684  1.00 47.46      A16S
ATOM  19539  O1P URI    17     173.808 117.273  -2.660  1.00 39.11      A16S
ATOM  19540  O2P URI    17     174.874 115.258  -3.834  1.00 39.11      A16S
ATOM  19541  O5' URI    17     174.349 117.366  -5.098  1.00 47.46      A16S
ATOM  19542  C5' URI    17     174.231 118.782  -5.233  1.00 47.46      A16S
ATOM  19543  C4' URI    17     173.671 119.150  -6.577  1.00 47.46      A16S
ATOM  19544  O4' URI    17     174.674 119.006  -7.607  1.00 47.46      A16S
ATOM  19545  C1' URI    17     174.047 118.684  -8.839  1.00 47.46      A16S
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ATOM  19553  C5  URI    17     175.582 115.299  -8.859  1.00 39.11      A16S
ATOM  19554  C2' URI    17     172.543 118.645  -8.587  1.00 47.46      A16S
ATOM  19555  O2' URI    17     172.023 119.911  -8.926  1.00 47.46      A16S
ATOM  19556  C3' URI    17     172.485 118.359  -7.092  1.00 47.46      A16S
ATOM  19557  O3' URI    17     171.261 118.788  -6.520  1.00 47.46      A16S
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ATOM  19559  O1P CYT    18     169.296 118.274  -5.115  1.00 37.83      A16S
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ATOM  19561  O5' CYT    18     169.265 117.655  -7.532  1.00 37.78      A16S
ATOM  19562  C5' CYT    18     168.683 118.840  -8.055  1.00 37.78      A16S
ATOM  19563  C4' CYT    18     168.386 118.665  -9.516  1.00 37.78      A16S
ATOM  19564  O4' CYT    18     169.627 118.601 -10.266  1.00 37.78      A16S
ATOM  19565  C1' CYT    18     169.472 117.721 -11.368  1.00 37.78      A16S
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ATOM  19569  O2  CYT    18     170.327 116.161 -13.420  1.00 37.83      A16S
ATOM  19570  N3  CYT    18     171.526 114.722 -12.115  1.00 37.83      A16S
ATOM  19571  C4  CYT    18     171.963 114.409 -10.898  1.00 37.83      A16S
ATOM  19572  N4  CYT    18     172.741 113.342 -10.765  1.00 37.83      A16S
ATOM  19573  C5  CYT    18     171.623 115.180  -9.757  1.00 37.83      A16S
ATOM  19574  C2' CYT    18     168.019 117.250 -11.371  1.00 37.78      A16S
ATOM  19575  O2' CYT    18     167.230 118.091 -12.196  1.00 37.78      A16S
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ATOM  19576  C3' CYT  18     167.667 117.382  -9.900  1.00 37.78      A16S
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ATOM  19583  C4' CYT  19     165.090 114.908 -12.937  1.00 38.70      A16S
ATOM  19584  O4' CYT  19     166.501 114.931 -13.280  1.00 38.70      A16S
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ATOM  19596  C3' CYT  19     164.751 113.432 -12.848  1.00 38.70      A16S
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ATOM  19605  C1' URI  20     166.241 108.672 -14.954  1.00 32.75      A16S
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ATOM  19621  O5' GUA  21     163.003 105.455 -14.039  1.00 34.92      A16S
ATOM  19622  C5' GUA  21     163.588 104.538 -14.943  1.00 34.92      A16S
ATOM  19623  C4' GUA  21     164.558 103.648 -14.217  1.00 34.92      A16S
ATOM  19624  O4' GUA  21     165.702 104.427 -13.774  1.00 34.92      A16S
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ATOM  19646  C4' GUA  22     164.828  98.602 -11.019  1.00 43.19      A16S
ATOM  19647  O4' GUA  22     165.862  99.612 -10.928  1.00 43.19      A16S
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ATOM  19661  O2' GUA  22     166.743  97.052  -9.476  1.00 43.19      A16S
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ATOM  19666  O2P CYT  23     162.207  97.637  -7.913  1.00 41.94      A16S
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ATOM  19669  C4' CYT  23     166.322  95.801  -5.995  1.00 30.20      A16S
ATOM  19670  O4' CYT  23     166.979  97.080  -6.154  1.00 30.20      A16S
ATOM  19671  C1' CYT  23     167.188  97.669  -4.885  1.00 30.20      A16S
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ATOM  19673  C6  CYT  23     165.285  99.067  -5.621  1.00 41.94      A16S
ATOM  19674  C2  CYT  23     166.735  99.888  -3.905  1.00 41.94      A16S
ATOM  19675  O2  CYT  23     167.715  99.709  -3.170  1.00 41.94      A16S
ATOM  19676  N3  CYT  23     166.005 101.017  -3.845  1.00 41.94      A16S
ATOM  19677  C4  CYT  23     164.952 101.178  -4.646  1.00 41.94      A16S
ATOM  19678  N4  CYT  23     164.276 102.333  -4.567  1.00 41.94      A16S
ATOM  19679  C5  CYT  23     164.551 100.177  -5.568  1.00 41.94      A16S
ATOM  19680  C2' CYT  23     166.749  96.643  -3.842  1.00 30.20      A16S
ATOM  19681  O2' CYT  23     167.857  95.830  -3.528  1.00 30.20      A16S
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ATOM  19682  C3' CYT  23     165.704  95.869  -4.619  1.00 30.20      A16S
ATOM  19683  O3' CYT  23     165.467  94.594  -4.091  1.00 30.20      A16S
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ATOM  19687  O5' URI  24     164.663  95.310  -1.865  1.00 37.24      A16S
ATOM  19688  C5' URI  24     165.794  94.964  -1.079  1.00 37.24      A16S
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ATOM  19690  O4' URI  24     166.346  97.235  -0.468  1.00 37.24      A16S
ATOM  19691  C1' URI  24     165.822  98.249   0.366  1.00 37.24      A16S
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ATOM  19702  C3' URI  24     164.728  96.222   0.880  1.00 37.24      A16S
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ATOM  19705  O1P CYT  25     162.871  93.753   3.129  1.00 35.46      A16S
ATOM  19706  O2P CYT  25     161.991  95.273   1.271  1.00 35.46      A16S
ATOM  19707  O5' CYT  25     162.810  96.220   3.424  1.00 45.17      A16S
ATOM  19708  C5' CYT  25     163.681  96.273   4.559  1.00 45.17      A16S
ATOM  19709  C4' CYT  25     163.453  97.542   5.335  1.00 45.17      A16S
ATOM  19710  O4' CYT  25     163.769  98.685   4.498  1.00 45.17      A16S
ATOM  19711  C1' CYT  25     162.897  99.759   4.803  1.00 45.17      A16S
ATOM  19712  N1  CYT  25     162.107 100.070   3.595  1.00 35.46      A16S
ATOM  19713  C6  CYT  25     161.777  99.085   2.703  1.00 35.46      A16S
ATOM  19714  C2  CYT  25     161.698 101.393   3.370  1.00 35.46      A16S
ATOM  19715  O2  CYT  25     161.990 102.266   4.204  1.00 35.46      A16S
ATOM  19716  N3  CYT  25     160.995 101.683   2.255  1.00 35.46      A16S
ATOM  19717  C4  CYT  25     160.693 100.713   1.384  1.00 35.46      A16S
ATOM  19718  N4  CYT  25     160.017 101.045   0.278  1.00 35.46      A16S
ATOM  19719  C5  CYT  25     161.077  99.359   1.601  1.00 35.46      A16S
ATOM  19720  C2' CYT  25     162.026  99.317   5.976  1.00 45.17      A16S
ATOM  19721  O2' CYT  25     162.662  99.745   7.169  1.00 45.17      A16S
ATOM  19722  C3' CYT  25     162.031  97.803   5.794  1.00 45.17      A16S
ATOM  19723  O3' CYT  25     161.714  97.077   6.967  1.00 45.17      A16S
ATOM  19724  P   ADE  26     160.185  96.699   7.273  1.00 47.28      A16S
ATOM  19725  O1P ADE  26     160.161  95.753   8.419  1.00 35.79      A16S
ATOM  19726  O2P ADE  26     159.491  96.339   6.023  1.00 35.79      A16S
ATOM  19727  O5' ADE  26     159.585  98.087   7.753  1.00 47.28      A16S
ATOM  19728  C5' ADE  26     160.072  98.718   8.940  1.00 47.28      A16S
ATOM  19729  C4' ADE  26     159.381 100.039   9.137  1.00 47.28      A16S
ATOM  19730  O4' ADE  26     159.660 100.895   8.005  1.00 47.28      A16S
ATOM  19731  C1' ADE  26     158.569 101.758   7.796  1.00 47.28      A16S
ATOM  19732  N9  ADE  26     158.136 101.648   6.411  1.00 35.79      A16S
ATOM  19733  C4  ADE  26     157.715 102.705   5.644  1.00 35.79      A16S
ATOM  19734  N3  ADE  26     157.625 103.994   6.016  1.00 35.79      A16S
ATOM  19735  C2  ADE  26     157.174 104.739   5.013  1.00 35.79      A16S
ATOM  19736  N1  ADE  26     156.841 104.375   3.771  1.00 35.79      A16S
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ATOM  19738  N6  ADE  26     156.650 102.695   2.177  1.00 35.79      A16S
ATOM  19739  C5  ADE  26     157.403 102.171   4.407  1.00 35.79      A16S
ATOM  19740  N7  ADE  26     157.609 100.796   4.394  1.00 35.79      A16S
ATOM  19741  C8  ADE  26     158.049 100.535   5.603  1.00 35.79      A16S
ATOM  19742  C2' ADE  26     157.474 101.407   8.803  1.00 47.28      A16S
ATOM  19743  O2' ADE  26     157.583 102.318   9.874  1.00 47.28      A16S
ATOM  19744  C3' ADE  26     157.864  99.997   9.218  1.00 47.28      A16S
ATOM  19745  O3' ADE  26     157.446  99.733  10.552  1.00 47.28      A16S
ATOM  19746  P   GUA  27     156.311  98.636  10.829  1.00 48.48      A16S
ATOM  19747  O1P GUA  27     155.912  98.751  12.260  1.00 37.50      A16S
ATOM  19748  O2P GUA  27     156.790  97.336  10.311  1.00 37.50      A16S
ATOM  19749  O5' GUA  27     155.096  99.122   9.922  1.00 48.48      A16S
ATOM  19750  C5' GUA  27     154.341 100.299  10.266  1.00 48.48      A16S
ATOM  19751  C4' GUA  27     152.981 100.255   9.615  1.00 48.48      A16S
ATOM  19752  O4' GUA  27     153.134 100.313   8.176  1.00 48.48      A16S
ATOM  19753  C1' GUA  27     152.139  99.526   7.552  1.00 48.48      A16S
ATOM  19754  N9  GUA  27     152.795  98.437   6.840  1.00 37.50      A16S
ATOM  19755  C4  GUA  27     152.237  97.627   5.881  1.00 37.50      A16S
ATOM  19756  N3  GUA  27     150.989  97.730   5.380  1.00 37.50      A16S
ATOM  19757  C2  GUA  27     150.731  96.776   4.493  1.00 37.50      A16S
ATOM  19758  N2  GUA  27     149.537  96.727   3.883  1.00 37.50      A16S
ATOM  19759  N1  GUA  27     151.620  95.803   4.138  1.00 37.50      A16S
ATOM  19760  C6  GUA  27     152.906  95.681   4.639  1.00 37.50      A16S
ATOM  19761  O6  GUA  27     153.623  94.756   4.256  1.00 37.50      A16S
ATOM  19762  C5  GUA  27     153.203  96.699   5.580  1.00 37.50      A16S
ATOM  19763  N7  GUA  27     154.360  96.944   6.299  1.00 37.50      A16S
ATOM  19764  C8  GUA  27     154.074  97.988   7.025  1.00 37.50      A16S
ATOM  19765  C2' GUA  27     151.238  98.984   8.657  1.00 48.48      A16S
ATOM  19766  O2' GUA  27     150.162  99.876   8.842  1.00 48.48      A16S
ATOM  19767  C3' GUA  27     152.177  98.991   9.848  1.00 48.48      A16S
ATOM  19768  O3' GUA  27     151.465  99.039  11.061  1.00 48.48      A16S
ATOM  19769  P   GUA  28     151.082  97.669  11.812  1.00 43.13      A16S
ATOM  19770  O1P GUA  28     150.424  98.109  13.074  1.00 33.30      A16S
ATOM  19771  O2P GUA  28     152.270  96.770  11.882  1.00 33.30      A16S
ATOM  19772  O5' GUA  28     149.976  96.997  10.875  1.00 43.13      A16S
ATOM  19773  C5' GUA  28     148.675  97.593  10.745  1.00 43.13      A16S
ATOM  19774  C4' GUA  28     147.889  96.938   9.638  1.00 43.13      A16S
ATOM  19775  O4' GUA  28     148.566  97.120   8.367  1.00 43.13      A16S
ATOM  19776  C1' GUA  28     148.346  95.991   7.536  1.00 43.13      A16S
ATOM  19777  N9  GUA  28     149.614  95.287   7.359  1.00 33.30      A16S
ATOM  19778  C4  GUA  28     149.872  94.259   6.472  1.00 33.30      A16S
ATOM  19779  N3  GUA  28     149.008  93.739   5.574  1.00 33.30      A16S
ATOM  19780  C2  GUA  28     149.554  92.750   4.882  1.00 33.30      A16S
ATOM  19781  N2  GUA  28     148.853  92.120   3.945  1.00 33.30      A16S
ATOM  19782  N1  GUA  28     150.833  92.307   5.056  1.00 33.30      A16S
ATOM  19783  C6  GUA  28     151.740  92.831   5.966  1.00 33.30      A16S
ATOM  19784  O6  GUA  28     152.880  92.372   6.033  1.00 33.30      A16S
ATOM  19785  C5  GUA  28     151.176  93.888   6.718  1.00 33.30      A16S
ATOM  19786  N7  GUA  28     151.734  94.673   7.720  1.00 33.30      A16S
ATOM  19787  C8  GUA  28     150.776  95.488   8.065  1.00 33.30      A16S
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ATOM	19788	C2'	GUA	28	147.381	95.085	8.284	1.00	43.13	A16S	ATOM	19841	O4'	GUA	31	143.597	78.291	9.375	1.00	58.94	A16S
ATOM	19789	O2'	GUA	28	146.069	95.436	7.917	1.00	43.13	A16S	ATOM	19842	C1'	GUA	31	144.749	77.508	9.157	1.00	58.94	A16S
ATOM	19790	C3'	GUA	28	147.701	95.441	9.725	1.00	43.13	A16S	ATOM	19843	N9	GUA	31	144.743	77.122	7.751	1.00	53.65	A16S
ATOM	19791	O3'	GUA	28	146.677	95.057	10.607	1.00	43.13	A16S	ATOM	19844	C4	GUA	31	144.428	75.891	7.255	1.00	53.65	A16S
ATOM	19792	P	GUA	29	146.853	93.714	11.466	1.00	50.80	A16S	ATOM	19845	N3	GUA	31	144.106	74.811	7.987	1.00	53.65	A16S
ATOM	19793	O1P	GUA	29	145.718	93.667	12.421	1.00	46.57	A16S	ATOM	19846	C2	GUA	31	143.802	73.783	7.222	1.00	53.65	A16S
ATOM	19794	O2P	GUA	29	148.247	93.678	11.978	1.00	46.57	A16S	ATOM	19847	N2	GUA	31	143.428	72.618	7.774	1.00	53.65	A16S
ATOM	19795	O5'	GUA	29	146.687	92.538	10.406	1.00	50.80	A16S	ATOM	19848	N1	GUA	31	143.831	73.817	5.850	1.00	53.65	A16S
ATOM	19796	C5'	GUA	29	145.504	92.442	9.622	1.00	50.80	A16S	ATOM	19849	C6	GUA	31	144.170	74.923	5.082	1.00	53.65	A16S
ATOM	19797	C4'	GUA	29	145.654	91.376	8.568	1.00	50.80	A16S	ATOM	19850	O6	GUA	31	144.165	74.847	3.850	1.00	53.65	A16S
ATOM	19798	O4'	GUA	29	146.739	91.718	7.671	1.00	50.80	A16S	ATOM	19851	C5	GUA	31	144.483	76.022	5.882	1.00	53.65	A16S
ATOM	19799	C1'	GUA	29	147.278	90.534	7.108	1.00	50.80	A16S	ATOM	19852	N7	GUA	31	144.858	77.304	5.522	1.00	53.65	A16S
ATOM	19800	N9	GUA	29	148.715	90.471	7.364	1.00	46.57	A16S	ATOM	19853	C8	GUA	31	145.011	77.921	6.661	1.00	53.65	A16S
ATOM	19801	C4	GUA	29	149.598	89.635	6.727	1.00	46.57	A16S	ATOM	19854	C2'	GUA	31	145.953	78.355	9.562	1.00	58.94	A16S
ATOM	19802	N3	GUA	29	149.293	88.780	5.734	1.00	46.57	A16S	ATOM	19855	O2'	GUA	31	146.967	77.501	10.053	1.00	58.94	A16S
ATOM	19803	C2	GUA	29	150.341	88.097	5.331	1.00	46.57	A16S	ATOM	19856	C3'	GUA	31	145.373	79.246	10.658	1.00	58.94	A16S
ATOM	19804	N2	GUA	29	150.209	87.222	4.324	1.00	46.57	A16S	ATOM	19857	O3'	GUA	31	145.452	78.552	11.897	1.00	58.94	A16S
ATOM	19805	N1	GUA	29	151.587	88.227	5.876	1.00	46.57	A16S	ATOM	19858	P	ADE	32	146.122	79.263	13.171	1.00	46.72	A16S
ATOM	19806	C6	GUA	29	151.923	89.098	6.898	1.00	46.57	A16S	ATOM	19859	O1P	ADE	32	146.396	78.213	14.181	1.00	48.81	A16S
ATOM	19807	O6	GUA	29	153.079	89.130	7.320	1.00	46.57	A16S	ATOM	19860	O2P	ADE	32	145.294	80.430	13.552	1.00	48.81	A16S
ATOM	19808	C5	GUA	29	150.811	89.856	7.324	1.00	46.57	A16S	ATOM	19861	O5'	ADE	32	147.505	79.805	12.610	1.00	46.72	A16S
ATOM	19809	N7	GUA	29	150.710	90.845	8.293	1.00	46.57	A16S	ATOM	19862	C5'	ADE	32	148.752	79.384	13.165	1.00	46.72	A16S
ATOM	19810	C8	GUA	29	149.450	91.182	8.280	1.00	46.57	A16S	ATOM	19863	C4'	ADE	32	149.637	78.858	12.069	1.00	46.72	A16S
ATOM	19811	C2'	GUA	29	146.544	89.350	7.733	1.00	50.80	A16S	ATOM	19864	O4'	ADE	32	149.807	79.870	11.048	1.00	46.72	A16S
ATOM	19812	O2'	GUA	29	145.517	88.928	6.856	1.00	50.80	A16S	ATOM	19865	C1'	ADE	32	151.117	79.801	10.524	1.00	46.72	A16S
ATOM	19813	C3'	GUA	29	145.993	89.965	9.012	1.00	50.80	A16S	ATOM	19866	N9	ADE	32	151.761	81.096	10.770	1.00	48.81	A16S
ATOM	19814	O3'	GUA	29	144.863	89.239	9.450	1.00	50.80	A16S	ATOM	19867	C4	ADE	32	153.033	81.493	10.422	1.00	48.81	A16S
ATOM	19815	P	URI	30	145.067	87.998	10.441	1.00	52.73	A16S	ATOM	19868	N3	ADE	32	153.970	80.777	9.782	1.00	48.81	A16S
ATOM	19816	O1P	URI	30	143.722	87.541	10.831	1.00	43.57	A16S	ATOM	19869	C2	ADE	32	155.078	81.498	9.621	1.00	48.81	A16S
ATOM	19817	O2P	URI	30	146.033	88.418	11.495	1.00	43.57	A16S	ATOM	19870	N1	ADE	32	155.335	82.759	9.995	1.00	48.81	A16S
ATOM	19818	O5'	URI	30	145.750	86.869	9.540	1.00	52.73	A16S	ATOM	19871	C6	ADE	32	154.368	83.449	10.632	1.00	48.81	A16S
ATOM	19819	C5'	URI	30	144.989	86.067	8.593	1.00	52.73	A16S	ATOM	19872	N6	ADE	32	154.608	84.705	11.000	1.00	48.81	A16S
ATOM	19820	C4'	URI	30	145.862	84.960	8.030	1.00	52.73	A16S	ATOM	19873	C5	ADE	32	153.155	82.800	10.869	1.00	48.81	A16S
ATOM	19821	O4'	URI	30	147.092	85.579	7.599	1.00	52.73	A16S	ATOM	19874	N7	ADE	32	151.990	83.220	11.486	1.00	48.81	A16S
ATOM	19822	C1'	URI	30	148.166	84.691	7.801	1.00	52.73	A16S	ATOM	19875	C8	ADE	32	151.197	82.177	11.401	1.00	48.81	A16S
ATOM	19823	N1	URI	30	149.285	85.423	8.398	1.00	43.57	A16S	ATOM	19876	C2'	ADE	32	151.803	78.593	11.177	1.00	46.72	A16S
ATOM	19824	C6	URI	30	149.083	86.483	9.233	1.00	43.57	A16S	ATOM	19877	O2'	ADE	32	151.569	77.432	10.389	1.00	46.72	A16S
ATOM	19825	C2	URI	30	150.562	85.008	8.061	1.00	43.57	A16S	ATOM	19878	C3'	ADE	32	151.044	78.485	12.486	1.00	46.72	A16S
ATOM	19826	O2	URI	30	150.783	84.038	7.338	1.00	43.57	A16S	ATOM	19879	O3'	ADE	32	151.056	77.168	12.997	1.00	46.72	A16S
ATOM	19827	N3	URI	30	151.574	85.763	8.601	1.00	43.57	A16S	ATOM	19880	P	ADE	33	151.515	76.915	14.513	1.00	44.38	A16S
ATOM	19828	C4	URI	30	151.437	86.849	9.434	1.00	43.57	A16S	ATOM	19881	O1P	ADE	33	150.766	75.725	15.021	1.00	47.60	A16S
ATOM	19829	O4	URI	30	152.442	87.406	9.868	1.00	43.57	A16S	ATOM	19882	O2P	ADE	33	151.447	78.205	15.252	1.00	47.60	A16S
ATOM	19830	C5	URI	30	150.085	87.194	9.747	1.00	43.57	A16S	ATOM	19883	O5'	ADE	33	153.054	76.524	14.376	1.00	44.38	A16S
ATOM	19831	C2'	URI	30	147.678	83.464	8.567	1.00	52.73	A16S	ATOM	19884	C5'	ADE	33	153.480	75.435	13.527	1.00	44.38	A16S
ATOM	19832	O2'	URI	30	147.657	82.323	7.724	1.00	52.73	A16S	ATOM	19885	C4'	ADE	33	154.805	75.767	12.884	1.00	44.38	A16S
ATOM	19833	C3'	URI	30	146.299	83.904	9.045	1.00	52.73	A16S	ATOM	19886	O4'	ADE	33	154.649	76.949	12.062	1.00	44.38	A16S
ATOM	19834	O3'	URI	30	145.490	82.714	9.092	1.00	52.73	A16S	ATOM	19887	C1'	ADE	33	155.805	77.758	12.152	1.00	44.38	A16S
ATOM	19835	P	GUA	31	144.560	82.262	7.834	1.00	58.94	A16S	ATOM	19888	N9	ADE	33	155.412	79.065	12.687	1.00	47.60	A16S
ATOM	19836	O1P	GUA	31	145.386	82.054	6.608	1.00	53.65	A16S	ATOM	19889	C4	ADE	33	156.171	80.216	12.692	1.00	47.60	A16S
ATOM	19837	O2P	GUA	31	143.363	83.151	7.776	1.00	53.65	A16S	ATOM	19890	N3	ADE	33	157.415	80.380	12.208	1.00	47.60	A16S
ATOM	19838	O5'	GUA	31	144.075	80.822	8.315	1.00	58.94	A16S	ATOM	19891	C2	ADE	33	157.836	81.630	12.410	1.00	47.60	A16S
ATOM	19839	C5'	GUA	31	143.465	80.670	9.613	1.00	58.94	A16S	ATOM	19892	N1	ADE	33	157.203	82.656	12.990	1.00	47.60	A16S
ATOM	19840	C4'	GUA	31	143.905	79.387	10.269	1.00	58.94	A16S	ATOM	19893	C6	ADE	33	155.952	82.461	13.455	1.00	47.60	A16S

ATOM	19894	N6	ADE	33	155.316	83.483	14.020	1.00	47.60	A16S	ATOM	19947	O2P	CYT	36	162.927	78.194	23.004	1.00	35.34	A16S
ATOM	19895	C5	ADE	33	155.392	81.179	13.311	1.00	47.60	A16S	ATOM	19948	O5'	CYT	36	164.161	80.087	24.082	1.00	58.87	A16S
ATOM	19896	N7	ADE	33	154.164	80.652	13.686	1.00	47.60	A16S	ATOM	19949	C5'	CYT	36	165.304	80.929	24.314	1.00	58.87	A16S
ATOM	19897	C8	ADE	33	154.224	79.401	13.293	1.00	47.60	A16S	ATOM	19950	C4'	CYT	36	164.863	82.271	24.839	1.00	58.87	A16S
ATOM	19898	C2'	ADE	33	156.811	77.026	13.037	1.00	44.38	A16S	ATOM	19951	O4'	CYT	36	164.169	82.995	23.788	1.00	58.87	A16S
ATOM	19899	O2'	ADE	33	157.696	76.295	12.217	1.00	44.38	A16S	ATOM	19952	C1'	CYT	36	163.097	83.741	24.349	1.00	58.87	A16S
ATOM	19900	C3'	ADE	33	155.898	76.136	13.862	1.00	44.38	A16S	ATOM	19953	N1	CYT	36	161.830	83.223	23.813	1.00	35.34	A16S
ATOM	19901	O3'	ADE	33	156.544	74.988	14.360	1.00	44.38	A16S	ATOM	19954	C6	CYT	36	161.742	81.952	23.325	1.00	35.34	A16S
ATOM	19902	P	CYT	34	157.071	74.977	15.876	1.00	53.29	A16S	ATOM	19955	C2	CYT	36	160.699	84.051	23.835	1.00	35.34	A16S
ATOM	19903	O1P	CYT	34	157.473	73.576	16.155	1.00	53.80	A16S	ATOM	19956	O2	CYT	36	160.818	85.219	24.245	1.00	35.34	A16S
ATOM	19904	O2P	CYT	34	156.079	75.636	16.761	1.00	53.80	A16S	ATOM	19957	N3	CYT	36	159.511	83.561	23.405	1.00	35.34	A16S
ATOM	19905	O5'	CYT	34	158.370	75.901	15.828	1.00	53.29	A16S	ATOM	19958	C4	CYT	36	159.436	82.308	22.952	1.00	35.34	A16S
ATOM	19906	C5'	CYT	34	159.566	75.452	15.166	1.00	53.29	A16S	ATOM	19959	N4	CYT	36	158.246	81.852	22.554	1.00	35.34	A16S
ATOM	19907	C4'	CYT	34	160.603	76.543	15.166	1.00	53.29	A16S	ATOM	19960	C5	CYT	36	160.578	81.460	22.889	1.00	35.34	A16S
ATOM	19908	O4'	CYT	34	160.123	77.644	14.356	1.00	53.29	A16S	ATOM	19961	C2'	CYT	36	163.136	83.548	25.862	1.00	58.87	A16S
ATOM	19909	C1'	CYT	34	160.559	78.873	14.913	1.00	53.29	A16S	ATOM	19962	O2'	CYT	36	163.847	84.611	26.454	1.00	58.87	A16S
ATOM	19910	N1	CYT	34	159.381	79.667	15.302	1.00	53.80	A16S	ATOM	19963	C3'	CYT	36	163.852	82.210	25.974	1.00	58.87	A16S
ATOM	19911	C6	CYT	34	158.132	79.105	15.346	1.00	53.80	A16S	ATOM	19964	O3'	CYT	36	164.434	81.989	27.244	1.00	58.87	A16S
ATOM	19912	C2	CYT	34	159.566	81.012	15.668	1.00	53.80	A16S	ATOM	19965	P	URI	37	163.640	81.100	28.324	1.00	55.59	A16S
ATOM	19913	O2	CYT	34	160.707	81.503	15.601	1.00	53.80	A16S	ATOM	19966	O1P	URI	37	164.514	81.068	29.528	1.00	45.03	A16S
ATOM	19914	N3	CYT	34	158.502	81.730	16.095	1.00	53.80	A16S	ATOM	19967	O2P	URI	37	163.200	79.819	27.686	1.00	45.03	A16S
ATOM	19915	C4	CYT	34	157.299	81.153	16.181	1.00	53.80	A16S	ATOM	19968	O5'	URI	37	162.342	81.963	28.666	1.00	55.59	A16S
ATOM	19916	N4	CYT	34	156.294	81.875	16.671	1.00	53.80	A16S	ATOM	19969	C5'	URI	37	162.463	83.236	29.330	1.00	55.59	A16S
ATOM	19917	C5	CYT	34	157.077	79.803	15.783	1.00	53.80	A16S	ATOM	19970	C4'	URI	37	161.118	83.924	29.436	1.00	55.59	A16S
ATOM	19918	C2'	CYT	34	161.414	78.553	16.140	1.00	53.29	A16S	ATOM	19971	O4'	URI	37	160.628	84.308	28.119	1.00	55.59	A16S
ATOM	19919	O2'	CYT	34	162.780	78.604	15.782	1.00	53.29	A16S	ATOM	19972	C1'	URI	37	159.206	84.318	28.124	1.00	55.59	A16S
ATOM	19920	C3'	CYT	34	160.902	77.167	16.518	1.00	53.29	A16S	ATOM	19973	N1	URI	37	158.700	83.290	27.199	1.00	45.03	A16S
ATOM	19921	O3'	CYT	34	161.841	76.414	17.272	1.00	53.29	A16S	ATOM	19974	C6	URI	37	159.500	82.268	26.748	1.00	45.03	A16S
ATOM	19922	P	GUA	35	161.734	76.390	18.881	1.00	44.30	A16S	ATOM	19975	C2	URI	37	157.356	83.357	26.825	1.00	45.03	A16S
ATOM	19923	O1P	GUA	35	162.626	75.314	19.381	1.00	45.19	A16S	ATOM	19976	O2	URI	37	156.611	84.277	27.145	1.00	45.03	A16S
ATOM	19924	O2P	GUA	35	160.294	76.386	19.257	1.00	45.19	A16S	ATOM	19977	N3	URI	37	156.916	82.305	26.057	1.00	45.03	A16S
ATOM	19925	O5'	GUA	35	162.390	77.768	19.331	1.00	44.30	A16S	ATOM	19978	C4	URI	37	157.658	81.232	25.613	1.00	45.03	A16S
ATOM	19926	C5'	GUA	35	163.768	78.019	19.054	1.00	44.30	A16S	ATOM	19979	O4	URI	37	157.096	80.319	24.999	1.00	45.03	A16S
ATOM	19927	C4'	GUA	35	164.134	79.425	19.429	1.00	44.30	A16S	ATOM	19980	C5	URI	37	159.037	81.267	25.992	1.00	45.03	A16S
ATOM	19928	O4'	GUA	35	163.413	80.368	18.600	1.00	44.30	A16S	ATOM	19981	C2'	URI	37	158.765	83.948	29.536	1.00	55.59	A16S
ATOM	19929	C1'	GUA	35	163.115	81.535	19.348	1.00	44.30	A16S	ATOM	19982	O2'	URI	37	158.561	85.124	30.292	1.00	55.59	A16S
ATOM	19930	N9	GUA	35	161.661	81.670	19.431	1.00	45.19	A16S	ATOM	19983	C3'	URI	37	159.957	83.143	30.027	1.00	55.59	A16S
ATOM	19931	C4	GUA	35	160.949	82.815	19.723	1.00	45.19	A16S	ATOM	19984	O3'	URI	37	159.957	83.045	31.441	1.00	55.59	A16S
ATOM	19932	N3	GUA	35	161.470	84.026	19.989	1.00	45.19	A16S	ATOM	19985	P	GUA	38	159.154	81.836	32.149	1.00	48.99	A16S
ATOM	19933	C2	GUA	35	160.533	84.921	20.239	1.00	45.19	A16S	ATOM	19986	O1P	GUA	38	159.355	82.016	33.610	1.00	58.72	A16S
ATOM	19934	N2	GUA	35	160.870	86.179	20.533	1.00	45.19	A16S	ATOM	19987	O2P	GUA	38	159.542	80.559	31.514	1.00	58.72	A16S
ATOM	19935	N1	GUA	35	159.194	84.654	20.221	1.00	45.19	A16S	ATOM	19988	O5'	GUA	38	157.619	82.105	31.801	1.00	48.99	A16S
ATOM	19936	C6	GUA	35	158.628	83.415	19.952	1.00	45.19	A16S	ATOM	19989	C5'	GUA	38	156.966	83.282	32.296	1.00	48.99	A16S
ATOM	19937	O6	GUA	35	157.387	83.276	19.971	1.00	45.19	A16S	ATOM	19990	C4'	GUA	38	155.539	83.344	31.827	1.00	48.99	A16S
ATOM	19938	C5	GUA	35	159.622	82.440	19.688	1.00	45.19	A16S	ATOM	19991	O4'	GUA	38	155.510	83.410	30.387	1.00	48.99	A16S
ATOM	19939	N7	GUA	35	159.497	81.089	19.388	1.00	45.19	A16S	ATOM	19992	C1'	GUA	38	154.342	82.759	29.905	1.00	48.99	A16S
ATOM	19940	C8	GUA	35	160.727	80.675	19.239	1.00	45.19	A16S	ATOM	19993	N9	GUA	38	154.727	81.626	29.071	1.00	58.72	A16S
ATOM	19941	C2'	GUA	35	163.760	81.352	20.716	1.00	44.30	A16S	ATOM	19994	C4	GUA	38	153.881	80.912	28.270	1.00	58.72	A16S
ATOM	19942	O2'	GUA	35	165.071	81.843	20.619	1.00	44.30	A16S	ATOM	19995	N3	GUA	38	152.571	81.159	28.097	1.00	58.72	A16S
ATOM	19943	C3'	GUA	35	163.787	79.840	20.836	1.00	44.30	A16S	ATOM	19996	C2	GUA	38	152.013	80.302	27.272	1.00	58.72	A16S
ATOM	19944	O3'	GUA	35	164.755	79.382	21.750	1.00	44.30	A16S	ATOM	19997	N2	GUA	38	150.712	80.419	26.969	1.00	58.72	A16S
ATOM	19945	P	CYT	36	164.278	78.795	23.165	1.00	58.87	A16S	ATOM	19998	N1	GUA	38	152.685	79.273	26.677	1.00	58.72	A16S
ATOM	19946	O1P	CYT	36	165.391	77.968	23.667	1.00	35.34	A16S	ATOM	19999	C6	GUA	38	154.033	78.994	26.848	1.00	58.72	A16S

ATOM	20000	O6	GUA	38	154.540	78.024	26.271	1.00	58.72	A16S
ATOM	20001	C5	GUA	38	154.648	79.920	27.716	1.00	58.72	A16S
ATOM	20002	N7	GUA	38	155.967	80.018	28.144	1.00	58.72	A16S
ATOM	20003	C8	GUA	38	155.967	81.046	28.945	1.00	58.72	A16S
ATOM	20004	C2'	GUA	38	153.555	82.260	31.109	1.00	48.99	A16S
ATOM	20005	O2'	GUA	38	152.553	83.205	31.406	1.00	48.99	A16S
ATOM	20006	C3'	GUA	38	154.655	82.156	32.159	1.00	48.99	A16S
ATOM	20007	O3'	GUA	38	154.135	82.221	33.473	1.00	48.99	A16S
ATOM	20008	P	GUA	39	153.944	80.867	34.317	1.00	57.61	A16S
ATOM	20009	O1P	GUA	39	155.022	80.846	35.351	1.00	63.99	A16S
ATOM	20010	O2P	GUA	39	153.793	79.720	33.388	1.00	63.99	A16S
ATOM	20011	O5'	GUA	39	152.543	81.089	35.030	1.00	57.61	A16S
ATOM	20012	C5'	GUA	39	151.328	81.152	34.262	1.00	57.61	A16S
ATOM	20013	C4'	GUA	39	150.233	81.790	35.078	1.00	57.61	A16S
ATOM	20014	O4'	GUA	39	150.487	83.217	35.229	1.00	57.61	A16S
ATOM	20015	C1'	GUA	39	149.255	83.921	35.246	1.00	57.61	A16S
ATOM	20016	N9	GUA	39	149.188	84.798	34.080	1.00	63.99	A16S
ATOM	20017	C4	GUA	39	148.215	85.734	33.838	1.00	63.99	A16S
ATOM	20018	N3	GUA	39	147.202	86.055	34.670	1.00	63.99	A16S
ATOM	20019	C2	GUA	39	146.406	86.973	34.150	1.00	63.99	A16S
ATOM	20020	N2	GUA	39	145.363	87.425	34.857	1.00	63.99	A16S
ATOM	20021	N1	GUA	39	146.579	87.518	32.903	1.00	63.99	A16S
ATOM	20022	C6	GUA	39	147.613	87.200	32.029	1.00	63.99	A16S
ATOM	20023	O6	GUA	39	147.668	87.743	30.926	1.00	63.99	A16S
ATOM	20024	C5	GUA	39	148.488	86.232	32.585	1.00	63.99	A16S
ATOM	20025	N7	GUA	39	149.639	85.660	32.069	1.00	63.99	A16S
ATOM	20026	C8	GUA	39	150.025	84.823	32.992	1.00	63.99	A16S
ATOM	20027	C2'	GUA	39	148.138	82.882	35.147	1.00	57.61	A16S
ATOM	20028	O2'	GUA	39	147.678	82.527	36.432	1.00	57.61	A16S
ATOM	20029	C3'	GUA	39	148.852	81.730	34.459	1.00	57.61	A16S
ATOM	20030	O3'	GUA	39	148.205	80.492	34.688	1.00	57.61	A16S
ATOM	20031	P	CYT	40	146.945	80.086	33.780	1.00	74.98	A16S
ATOM	20032	O1P	CYT	40	146.470	78.738	34.192	1.00	67.06	A16S
ATOM	20033	O2P	CYT	40	147.318	80.328	32.365	1.00	67.06	A16S
ATOM	20034	O5'	CYT	40	145.834	81.152	34.189	1.00	74.98	A16S
ATOM	20035	C5'	CYT	40	145.300	81.179	35.521	1.00	74.98	A16S
ATOM	20036	C4'	CYT	40	144.072	82.046	35.572	1.00	74.98	A16S
ATOM	20037	O4'	CYT	40	144.448	83.431	35.379	1.00	74.98	A16S
ATOM	20038	C1'	CYT	40	143.447	84.096	34.622	1.00	74.98	A16S
ATOM	20039	N1	CYT	40	144.037	84.560	33.356	1.00	67.06	A16S
ATOM	20040	C6	CYT	40	145.251	84.102	32.928	1.00	67.06	A16S
ATOM	20041	C2	CYT	40	143.317	85.464	32.584	1.00	67.06	A16S
ATOM	20042	O2	CYT	40	142.231	85.879	33.013	1.00	67.06	A16S
ATOM	20043	N3	CYT	40	143.816	85.865	31.394	1.00	67.06	A16S
ATOM	20044	C4	CYT	40	144.996	85.403	30.979	1.00	67.06	A16S
ATOM	20045	N4	CYT	40	145.455	85.821	29.797	1.00	67.06	A16S
ATOM	20046	C5	CYT	40	145.761	84.493	31.757	1.00	67.06	A16S
ATOM	20047	C2'	CYT	40	142.325	83.097	34.352	1.00	74.98	A16S
ATOM	20048	O2'	CYT	40	141.304	83.270	35.307	1.00	74.98	A16S
ATOM	20049	C3'	CYT	40	143.067	81.774	34.471	1.00	74.98	A16S
ATOM	20050	O3'	CYT	40	142.226	80.688	34.781	1.00	74.98	A16S
ATOM	20051	P	GUA	41	141.654	79.772	33.592	1.00	57.39	A16S
ATOM	20052	O1P	GUA	41	141.034	78.602	34.273	1.00	65.06	A16S
ATOM	20053	O2P	GUA	41	142.714	79.555	32.561	1.00	65.06	A16S
ATOM	20054	O5'	GUA	41	140.490	80.659	32.959	1.00	57.39	A16S
ATOM	20055	C5'	GUA	41	139.348	81.018	33.753	1.00	57.39	A16S
ATOM	20056	C4'	GUA	41	138.526	82.083	33.065	1.00	57.39	A16S
ATOM	20057	O4'	GUA	41	139.315	83.284	32.861	1.00	57.39	A16S
ATOM	20058	C1'	GUA	41	138.865	83.955	31.697	1.00	57.39	A16S
ATOM	20059	N9	GUA	41	139.994	84.122	30.784	1.00	65.06	A16S
ATOM	20060	C4	GUA	41	140.030	84.933	29.675	1.00	65.06	A16S
ATOM	20061	N3	GUA	41	139.036	85.741	29.251	1.00	65.06	A16S
ATOM	20062	C2	GUA	41	139.369	86.401	28.153	1.00	65.06	A16S
ATOM	20063	N2	GUA	41	138.506	87.266	27.610	1.00	65.06	A16S
ATOM	20064	N1	GUA	41	140.575	86.264	27.509	1.00	65.06	A16S
ATOM	20065	C6	GUA	41	141.609	85.427	27.920	1.00	65.06	A16S
ATOM	20066	O6	GUA	41	142.648	85.359	27.254	1.00	65.06	A16S
ATOM	20067	C5	GUA	41	141.274	84.732	29.114	1.00	65.06	A16S
ATOM	20068	N7	GUA	41	142.015	83.831	29.867	1.00	65.06	A16S
ATOM	20069	C8	GUA	41	141.217	83.497	30.845	1.00	65.06	A16S
ATOM	20070	C2'	GUA	41	137.728	83.127	31.095	1.00	57.39	A16S
ATOM	20071	O2'	GUA	41	136.485	83.651	31.505	1.00	57.39	A16S
ATOM	20072	C3'	GUA	41	137.987	81.750	31.689	1.00	57.39	A16S
ATOM	20073	O3'	GUA	41	136.799	80.985	31.767	1.00	57.39	A16S
ATOM	20074	P	GUA	42	136.270	80.220	30.464	1.00	65.83	A16S
ATOM	20075	O1P	GUA	42	135.149	79.343	30.862	1.00	56.17	A16S
ATOM	20076	O2P	GUA	42	137.431	79.637	29.757	1.00	56.17	A16S
ATOM	20077	O5'	GUA	42	135.676	81.386	29.559	1.00	65.83	A16S
ATOM	20078	C5'	GUA	42	134.452	82.047	29.919	1.00	65.83	A16S
ATOM	20079	C4'	GUA	42	134.043	83.015	28.837	1.00	65.83	A16S
ATOM	20080	O4'	GUA	42	135.036	84.065	28.736	1.00	65.83	A16S
ATOM	20081	C1'	GUA	42	135.208	84.429	27.378	1.00	65.83	A16S
ATOM	20082	N9	GUA	42	136.579	84.105	26.994	1.00	56.17	A16S
ATOM	20083	C4	GUA	42	137.266	84.602	25.910	1.00	56.17	A16S
ATOM	20084	N3	GUA	42	136.797	85.494	25.012	1.00	56.17	A16S
ATOM	20085	C2	GUA	42	137.693	85.775	24.083	1.00	56.17	A16S
ATOM	20086	N2	GUA	42	137.393	86.645	23.105	1.00	56.17	A16S
ATOM	20087	N1	GUA	42	138.947	85.225	24.042	1.00	56.17	A16S
ATOM	20088	C6	GUA	42	139.446	84.302	24.952	1.00	56.17	A16S
ATOM	20089	O6	GUA	42	140.587	83.858	24.815	1.00	56.17	A16S
ATOM	20090	C5	GUA	42	138.501	83.994	25.952	1.00	56.17	A16S
ATOM	20091	N7	GUA	42	138.593	83.137	27.040	1.00	56.17	A16S
ATOM	20092	C8	GUA	42	137.434	83.236	27.630	1.00	56.17	A16S
ATOM	20093	C2'	GUA	42	134.192	83.639	26.552	1.00	65.83	A16S
ATOM	20094	O2'	GUA	42	133.013	84.400	26.362	1.00	65.83	A16S
ATOM	20095	C3'	GUA	42	133.963	82.427	27.438	1.00	65.83	A16S
ATOM	20096	O3'	GUA	42	132.716	81.814	27.176	1.00	65.83	A16S
ATOM	20097	P	CYT	43	132.647	80.600	26.131	1.00	52.40	A16S
ATOM	20098	O1P	CYT	43	131.257	80.057	26.128	1.00	47.05	A16S
ATOM	20099	O2P	CYT	43	133.799	79.695	26.423	1.00	47.05	A16S
ATOM	20100	O5'	CYT	43	132.883	81.289	24.715	1.00	52.40	A16S
ATOM	20101	C5'	CYT	43	131.866	82.111	24.137	1.00	52.40	A16S
ATOM	20102	C4'	CYT	43	132.395	82.829	22.929	1.00	52.40	A16S
ATOM	20103	O4'	CYT	43	133.588	83.548	23.310	1.00	52.40	A16S
ATOM	20104	C1'	CYT	43	134.477	83.608	22.214	1.00	52.40	A16S
ATOM	20105	N1	CYT	43	135.747	82.989	22.602	1.00	47.05	A16S

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ATOM  20106  C6  CYT  43     135.856  82.256  23.748  1.00 47.05      A16S
ATOM  20107  C2  CYT  43     136.856  83.165  21.771  1.00 47.05      A16S
ATOM  20108  O2  CYT  43     136.726  83.832  20.736  1.00 47.05      A16S
ATOM  20109  N3  CYT  43     138.039  82.606  22.115  1.00 47.05      A16S
ATOM  20110  C4  CYT  43     138.133  81.898  23.240  1.00 47.05      A16S
ATOM  20111  N4  CYT  43     139.315  81.374  23.550  1.00 47.05      A16S
ATOM  20112  C5  CYT  43     137.018  81.700  24.101  1.00 47.05      A16S
ATOM  20113  C2' CYT  43     133.819  82.887  21.045  1.00 52.40      A16S
ATOM  20114  O2' CYT  43     133.137  83.830  20.243  1.00 52.40      A16S
ATOM  20115  C3' CYT  43     132.845  81.973  21.762  1.00 52.40      A16S
ATOM  20116  O3' CYT  43     131.779  81.636  20.897  1.00 52.40      A16S
ATOM  20117  P   GUA  44     131.803  80.219  20.143  1.00 63.05      A16S
ATOM  20118  O1P GUA  44     130.533  80.166  19.353  1.00 51.42      A16S
ATOM  20119  O2P GUA  44     132.099  79.175  21.160  1.00 51.42      A16S
ATOM  20120  O5' GUA  44     133.068  80.267  19.170  1.00 63.05      A16S
ATOM  20121  C5' GUA  44     133.034  81.070  17.994  1.00 63.05      A16S
ATOM  20122  C4' GUA  44     134.429  81.357  17.480  1.00 63.05      A16S
ATOM  20123  O4' GUA  44     135.336  81.681  18.569  1.00 63.05      A16S
ATOM  20124  C1' GUA  44     136.669  81.509  18.124  1.00 63.05      A16S
ATOM  20125  N9  GUA  44     137.448  80.755  19.108  1.00 51.42      A16S
ATOM  20126  C4  GUA  44     138.806  80.538  19.046  1.00 51.42      A16S
ATOM  20127  N3  GUA  44     139.630  80.982  18.081  1.00 51.42      A16S
ATOM  20128  C2  GUA  44     140.875  80.617  18.284  1.00 51.42      A16S
ATOM  20129  N2  GUA  44     141.817  80.992  17.424  1.00 51.42      A16S
ATOM  20130  N1  GUA  44     141.290  79.864  19.345  1.00 51.42      A16S
ATOM  20131  C6  GUA  44     140.470  79.389  20.353  1.00 51.42      A16S
ATOM  20132  O6  GUA  44     140.957  78.712  21.263  1.00 51.42      A16S
ATOM  20133  C5  GUA  44     139.112  79.785  20.153  1.00 51.42      A16S
ATOM  20134  N7  GUA  44     137.973  79.533  20.906  1.00 51.42      A16S
ATOM  20135  C8  GUA  44     137.011  80.126  20.248  1.00 51.42      A16S
ATOM  20136  C2' GUA  44     136.601  80.808  16.771  1.00 63.05      A16S
ATOM  20137  O2' GUA  44     136.749  81.783  15.765  1.00 63.05      A16S
ATOM  20138  C3' GUA  44     135.184  80.256  16.769  1.00 63.05      A16S
ATOM  20139  O3' GUA  44     134.754  80.057  15.435  1.00 63.05      A16S
ATOM  20140  P   URI  45     135.001  78.623  14.740  1.00 46.41      A16S
ATOM  20141  O1P URI  45     134.553  78.762  13.326  1.00 48.27      A16S
ATOM  20142  O2P URI  45     134.409  77.558  15.606  1.00 48.27      A16S
ATOM  20143  O5' URI  45     136.588  78.442  14.756  1.00 46.41      A16S
ATOM  20144  C5' URI  45     137.408  79.175  13.832  1.00 46.41      A16S
ATOM  20145  C4' URI  45     138.870  78.888  14.062  1.00 46.41      A16S
ATOM  20146  O4' URI  45     139.220  79.242  15.415  1.00 46.41      A16S
ATOM  20147  C1' URI  45     140.222  78.366  15.892  1.00 46.41      A16S
ATOM  20148  N1  URI  45     139.703  77.656  17.069  1.00 48.27      A16S
ATOM  20149  C6  URI  45     138.345  77.561  17.323  1.00 48.27      A16S
ATOM  20150  C2  URI  45     140.630  77.083  17.916  1.00 48.27      A16S
ATOM  20151  O2  URI  45     141.832  77.134  17.715  1.00 48.27      A16S
ATOM  20152  N3  URI  45     140.097  76.445  19.000  1.00 48.27      A16S
ATOM  20153  C4  URI  45     138.762  76.321  19.317  1.00 48.27      A16S
ATOM  20154  O4  URI  45     138.445  75.747  20.361  1.00 48.27      A16S
ATOM  20155  C5  URI  45     137.859  76.931  18.385  1.00 48.27      A16S
ATOM  20156  C2' URI  45     140.588  77.414  14.762  1.00 46.41      A16S
ATOM  20157  O2' URI  45     141.723  77.942  14.118  1.00 46.41      A16S
ATOM  20158  C3' URI  45     139.324  77.451  13.918  1.00 46.41      A16S
ATOM  20159  O3' URI  45     139.578  77.124  12.573  1.00 46.41      A16S
ATOM  20160  P   GUA  46     139.622  75.585  12.145  1.00 46.35      A16S
ATOM  20161  O1P GUA  46     139.762  75.525  10.668  1.00 42.74      A16S
ATOM  20162  O2P GUA  46     138.483  74.888  12.795  1.00 42.74      A16S
ATOM  20163  O5' GUA  46     140.988  75.076  12.789  1.00 46.35      A16S
ATOM  20164  C5' GUA  46     142.250  75.389  12.163  1.00 46.35      A16S
ATOM  20165  C4' GUA  46     143.369  74.644  12.837  1.00 46.35      A16S
ATOM  20166  O4' GUA  46     143.499  75.124  14.196  1.00 46.35      A16S
ATOM  20167  C1' GUA  46     143.778  74.041  15.071  1.00 46.35      A16S
ATOM  20168  N9  GUA  46     142.642  73.874  15.978  1.00 42.74      A16S
ATOM  20169  C4  GUA  46     142.679  73.358  17.247  1.00 42.74      A16S
ATOM  20170  N3  GUA  46     143.782  72.940  17.895  1.00 42.74      A16S
ATOM  20171  C2  GUA  46     143.503  72.479  19.098  1.00 42.74      A16S
ATOM  20172  N2  GUA  46     144.491  72.024  19.871  1.00 42.74      A16S
ATOM  20173  N1  GUA  46     142.238  72.429  19.628  1.00 42.74      A16S
ATOM  20174  C6  GUA  46     141.078  72.842  18.976  1.00 42.74      A16S
ATOM  20175  O6  GUA  46     139.965  72.729  19.540  1.00 42.74      A16S
ATOM  20176  C5  GUA  46     141.370  73.350  17.679  1.00 42.74      A16S
ATOM  20177  N7  GUA  46     140.527  73.868  16.707  1.00 42.74      A16S
ATOM  20178  C8  GUA  46     141.324  74.170  15.720  1.00 42.74      A16S
ATOM  20179  C2' GUA  46     143.970  72.802  14.200  1.00 46.35      A16S
ATOM  20180  O2' GUA  46     145.339  72.649  13.899  1.00 46.35      A16S
ATOM  20181  C3' GUA  46     143.129  73.156  12.986  1.00 46.35      A16S
ATOM  20182  O3' GUA  46     143.482  72.427  11.835  1.00 46.35      A16S
ATOM  20183  P   CYT  47     142.586  71.174  11.406  1.00 47.17      A16S
ATOM  20184  O1P CYT  47     141.359  71.670  10.735  1.00 64.90      A16S
ATOM  20185  O2P CYT  47     142.467  70.295  12.589  1.00 64.90      A16S
ATOM  20186  O5' CYT  47     143.472  70.431  10.318  1.00 47.17      A16S
ATOM  20187  C5' CYT  47     144.710  69.804  10.685  1.00 47.17      A16S
ATOM  20188  C4' CYT  47     145.647  69.804   9.513  1.00 47.17      A16S
ATOM  20189  O4' CYT  47     146.969  69.386   9.929  1.00 47.17      A16S
ATOM  20190  C1' CYT  47     147.404  68.335   9.101  1.00 47.17      A16S
ATOM  20191  N1  CYT  47     148.272  67.444   9.880  1.00 64.90      A16S
ATOM  20192  C6  CYT  47     148.020  67.192  11.201  1.00 64.90      A16S
ATOM  20193  C2  CYT  47     149.385  66.870   9.248  1.00 64.90      A16S
ATOM  20194  O2  CYT  47     149.569  67.076   8.036  1.00 64.90      A16S
ATOM  20195  N3  CYT  47     150.227  66.105   9.972  1.00 64.90      A16S
ATOM  20196  C4  CYT  47     149.990  65.892  11.269  1.00 64.90      A16S
ATOM  20197  N4  CYT  47     150.872  65.162  11.953  1.00 64.90      A16S
ATOM  20198  C5  CYT  47     148.844  66.429  11.925  1.00 64.90      A16S
ATOM  20199  C2' CYT  47     146.145  67.691   8.532  1.00 47.17      A16S
ATOM  20200  O2' CYT  47     146.457  67.045   7.316  1.00 47.17      A16S
ATOM  20201  C3' CYT  47     145.252  68.911   8.344  1.00 47.17      A16S
ATOM  20202  O3' CYT  47     145.682  69.599   7.184  1.00 47.17      A16S
ATOM  20203  P   CYT  48     144.841  69.512   5.829  1.00 55.22      A16S
ATOM  20204  O1P CYT  48     143.523  70.176   6.064  1.00 65.20      A16S
ATOM  20205  O2P CYT  48     144.881  68.111   5.327  1.00 65.20      A16S
ATOM  20206  O5' CYT  48     145.711  70.440   4.872  1.00 55.22      A16S
ATOM  20207  C5' CYT  48     145.965  71.803   5.244  1.00 55.22      A16S
ATOM  20208  C4' CYT  48     146.952  72.449   4.306  1.00 55.22      A16S
ATOM  20209  O4' CYT  48     146.967  73.855   4.584  1.00 55.22      A16S
ATOM  20210  C1' CYT  48     148.265  74.364   4.444  1.00 55.22      A16S
ATOM  20211  N1  CYT  48     148.488  75.303   5.547  1.00 65.20      A16S
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ATOM  20212  C6  CYT  48     148.583  74.867   6.837  1.00 65.20      A16S
ATOM  20213  C2  CYT  48     148.590  76.665   5.254  1.00 65.20      A16S
ATOM  20214  O2  CYT  48     148.486  77.040   4.073  1.00 65.20      A16S
ATOM  20215  N3  CYT  48     148.793  77.543   6.258  1.00 65.20      A16S
ATOM  20216  C4  CYT  48     148.893  77.109   7.513  1.00 65.20      A16S
ATOM  20217  N4  CYT  48     149.116  78.015   8.474  1.00 65.20      A16S
ATOM  20218  C5  CYT  48     148.778  75.728   7.841  1.00 65.20      A16S
ATOM  20219  C2' CYT  48     149.256  73.210   4.275  1.00 55.22      A16S
ATOM  20220  O2' CYT  48     149.963  73.308   3.062  1.00 55.22      A16S
ATOM  20221  C3' CYT  48     148.378  71.972   4.473  1.00 55.22      A16S
ATOM  20222  O3' CYT  48     148.609  70.864   3.579  1.00 55.22      A16S
ATOM  20223  P   URI  49     148.366  71.008   1.971  1.00 56.91      A16S
ATOM  20224  O1P URI  49     147.397  69.922   1.615  1.00 71.24      A16S
ATOM  20225  O2P URI  49     148.085  72.403   1.550  1.00 71.24      A16S
ATOM  20226  O5' URI  49     149.766  70.606   1.345  1.00 56.91      A16S
ATOM  20227  C5' URI  49     150.025  69.244   1.089  1.00 56.91      A16S
ATOM  20228  C4' URI  49     151.478  68.913   1.279  1.00 56.91      A16S
ATOM  20229  O4' URI  49     152.002  69.386   2.552  1.00 56.91      A16S
ATOM  20230  C1' URI  49     152.475  68.284   3.302  1.00 56.91      A16S
ATOM  20231  N1  URI  49     152.244  68.545   4.729  1.00 71.24      A16S
ATOM  20232  C6  URI  49     151.029  68.982   5.185  1.00 71.24      A16S
ATOM  20233  C2  URI  49     153.300  68.349   5.600  1.00 71.24      A16S
ATOM  20234  O2  URI  49     154.389  67.923   5.248  1.00 71.24      A16S
ATOM  20235  N3  URI  49     153.035  68.663   6.906  1.00 71.24      A16S
ATOM  20236  C4  URI  49     151.846  69.132   7.422  1.00 71.24      A16S
ATOM  20237  O4  URI  49     151.787  69.461   8.609  1.00 71.24      A16S
ATOM  20238  C5  URI  49     150.800  69.271   6.465  1.00 71.24      A16S
ATOM  20239  C2' URI  49     151.733  67.065   2.765  1.00 56.91      A16S
ATOM  20240  O2' URI  49     152.417  65.851   2.994  1.00 56.91      A16S
ATOM  20241  C3' URI  49     151.625  67.408   1.289  1.00 56.91      A16S
ATOM  20242  O3' URI  49     152.762  67.026   0.568  1.00 56.91      A16S
ATOM  20243  P   ADE  50     152.587  65.997  -0.628  1.00 59.79      A16S
ATOM  20244  O1P ADE  50     151.882  66.701  -1.728  1.00 68.00      A16S
ATOM  20245  O2P ADE  50     153.914  65.394  -0.865  1.00 68.00      A16S
ATOM  20246  O5' ADE  50     151.626  64.894  -0.008  1.00 59.79      A16S
ATOM  20247  C5' ADE  50     150.666  64.186  -0.813  1.00 59.79      A16S
ATOM  20248  C4' ADE  50     150.137  62.997  -0.041  1.00 59.79      A16S
ATOM  20249  O4' ADE  50     151.191  62.004   0.086  1.00 59.79      A16S
ATOM  20250  C1' ADE  50     151.477  61.786   1.451  1.00 59.79      A16S
ATOM  20251  N9  ADE  50     152.921  61.611   1.583  1.00 68.00      A16S
ATOM  20252  C4  ADE  50     153.563  60.701   2.385  1.00 68.00      A16S
ATOM  20253  N3  ADE  50     153.002  59.798   3.208  1.00 68.00      A16S
ATOM  20254  C2  ADE  50     153.937  59.088   3.829  1.00 68.00      A16S
ATOM  20255  N1  ADE  50     155.270  59.171   3.728  1.00 68.00      A16S
ATOM  20256  C6  ADE  50     155.797  60.085   2.889  1.00 68.00      A16S
ATOM  20257  N6  ADE  50     157.122  60.166   2.785  1.00 68.00      A16S
ATOM  20258  C5  ADE  50     154.912  60.899   2.173  1.00 68.00      A16S
ATOM  20259  N7  ADE  50     155.118  61.911   1.249  1.00 68.00      A16S
ATOM  20260  C8  ADE  50     153.911  62.300   0.934  1.00 68.00      A16S
ATOM  20261  C2' ADE  50     150.921  62.991   2.210  1.00 59.79      A16S
ATOM  20262  O2' ADE  50     150.616  62.667   3.546  1.00 59.79      A16S
ATOM  20263  C3' ADE  50     149.689  63.332   1.379  1.00 59.79      A16S
ATOM  20264  O3' ADE  50     148.614  62.465   1.732  1.00 59.79      A16S
ATOM  20265  P   ADE  51     147.218  63.074   2.242  1.00 53.93      A16S
ATOM  20266  O1P ADE  51     146.853  62.377   3.521  1.00 60.36      A16S
ATOM  20267  O2P ADE  51     147.354  64.557   2.222  1.00 60.36      A16S
ATOM  20268  O5' ADE  51     146.177  62.647   1.116  1.00 53.93      A16S
ATOM  20269  C5' ADE  51     146.300  63.187  -0.190  1.00 53.93      A16S
ATOM  20270  C4' ADE  51     145.716  62.251  -1.205  1.00 53.93      A16S
ATOM  20271  O4' ADE  51     144.284  62.267  -1.100  1.00 53.93      A16S
ATOM  20272  C1' ADE  51     143.716  62.092  -2.381  1.00 53.93      A16S
ATOM  20273  N9  ADE  51     142.494  62.901  -2.477  1.00 60.36      A16S
ATOM  20274  C4  ADE  51     141.424  62.673  -3.312  1.00 60.36      A16S
ATOM  20275  N3  ADE  51     141.313  61.724  -4.254  1.00 60.36      A16S
ATOM  20276  C2  ADE  51     140.114  61.778  -4.833  1.00 60.36      A16S
ATOM  20277  N1  ADE  51     139.087  62.603  -4.590  1.00 60.36      A16S
ATOM  20278  C6  ADE  51     139.227  63.539  -3.633  1.00 60.36      A16S
ATOM  20279  N6  ADE  51     138.194  64.341  -3.374  1.00 60.36      A16S
ATOM  20280  C5  ADE  51     140.461  63.600  -2.955  1.00 60.36      A16S
ATOM  20281  N7  ADE  51     140.930  64.430  -1.949  1.00 60.36      A16S
ATOM  20282  C8  ADE  51     142.140  63.987  -1.713  1.00 60.36      A16S
ATOM  20283  C2' ADE  51     144.808  62.233  -3.447  1.00 53.93      A16S
ATOM  20284  O2' ADE  51     145.024  61.018  -4.128  1.00 53.93      A16S
ATOM  20285  C3' ADE  51     146.007  62.693  -2.627  1.00 53.93      A16S
ATOM  20286  O3' ADE  51     147.311  62.232  -3.073  1.00 53.93      A16S
ATOM  20287  P   GUA  52     147.833  60.714  -2.758  1.00 47.34      A16S
ATOM  20288  O1P GUA  52     146.845  59.669  -3.154  1.00 58.36      A16S
ATOM  20289  O2P GUA  52     149.197  60.689  -3.351  1.00 58.36      A16S
ATOM  20290  O5' GUA  52     148.026  60.653  -1.173  1.00 47.34      A16S
ATOM  20291  C5' GUA  52     147.547  59.534  -0.408  1.00 47.34      A16S
ATOM  20292  C4' GUA  52     148.674  58.572  -0.109  1.00 47.34      A16S
ATOM  20293  O4' GUA  52     149.654  59.158   0.793  1.00 47.34      A16S
ATOM  20294  C1' GUA  52     150.142  58.162   1.688  1.00 47.34      A16S
ATOM  20295  N9  GUA  52     149.817  58.564   3.056  1.00 58.36      A16S
ATOM  20296  C4  GUA  52     150.225  57.952   4.222  1.00 58.36      A16S
ATOM  20297  N3  GUA  52     151.004  56.854   4.319  1.00 58.36      A16S
ATOM  20298  C2  GUA  52     151.210  56.507   5.583  1.00 58.36      A16S
ATOM  20299  N2  GUA  52     151.955  55.432   5.877  1.00 58.36      A16S
ATOM  20300  N1  GUA  52     150.699  57.187   6.649  1.00 58.36      A16S
ATOM  20301  C6  GUA  52     149.898  58.315   6.567  1.00 58.36      A16S
ATOM  20302  O6  GUA  52     149.490  58.850   7.590  1.00 58.36      A16S
ATOM  20303  C5  GUA  52     149.663  58.693   5.236  1.00 58.36      A16S
ATOM  20304  N7  GUA  52     148.915  59.741   4.727  1.00 58.36      A16S
ATOM  20305  C8  GUA  52     149.037  59.627   3.435  1.00 58.36      A16S
ATOM  20306  C2' GUA  52     149.480  56.840   1.311  1.00 47.34      A16S
ATOM  20307  O2' GUA  52     150.327  56.125   0.446  1.00 47.34      A16S
ATOM  20308  C3' GUA  52     148.219  57.320   0.608  1.00 47.34      A16S
ATOM  20309  O3' GUA  52     147.724  56.380  -0.316  1.00 47.34      A16S
ATOM  20310  P   ADE  53     146.593  55.352   0.149  1.00 49.92      A16S
ATOM  20311  O1P ADE  53     146.417  54.367  -0.950  1.00 53.72      A16S
ATOM  20312  O2P ADE  53     145.422  56.118   0.649  1.00 53.72      A16S
ATOM  20313  O5' ADE  53     147.283  54.608   1.371  1.00 49.92      A16S
ATOM  20314  C5' ADE  53     148.392  53.727   1.151  1.00 49.92      A16S
ATOM  20315  C4' ADE  53     148.738  53.009   2.424  1.00 49.92      A16S
ATOM  20316  O4' ADE  53     149.363  53.931   3.346  1.00 49.92      A16S
ATOM  20317  C1' ADE  53     149.002  53.591   4.673  1.00 49.92      A16S
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ATOM  20318  N9  ADE  53     148.279  54.723   5.253  1.00 53.72      A16S
ATOM  20319  C4  ADE  53     148.172  55.022   6.588  1.00 53.72      A16S
ATOM  20320  N3  ADE  53     148.710  54.354   7.618  1.00 53.72      A16S
ATOM  20321  C2  ADE  53     148.405  54.946   8.767  1.00 53.72      A16S
ATOM  20322  N1  ADE  53     147.682  56.042   8.983  1.00 53.72      A16S
ATOM  20323  C6  ADE  53     147.155  56.682   7.924  1.00 53.72      A16S
ATOM  20324  N6  ADE  53     146.436  57.775   8.136  1.00 53.72      A16S
ATOM  20325  C5  ADE  53     147.399  56.158   6.658  1.00 53.72      A16S
ATOM  20326  N7  ADE  53     147.013  56.568   5.394  1.00 53.72      A16S
ATOM  20327  C8  ADE  53     147.563  55.689   4.597  1.00 53.72      A16S
ATOM  20328  C2' ADE  53     148.117  52.345   4.605  1.00 49.92      A16S
ATOM  20329  O2' ADE  53     148.875  51.166   4.765  1.00 49.92      A16S
ATOM  20330  C3' ADE  53     147.560  52.447   3.200  1.00 49.92      A16S
ATOM  20331  O3' ADE  53     147.116  51.193   2.724  1.00 49.92      A16S
ATOM  20332  P   CYT  54     145.680  50.648   3.177  1.00 43.35      A16S
ATOM  20333  O1P CYT  54     145.633  49.216   2.762  1.00 47.93      A16S
ATOM  20334  O2P CYT  54     144.619  51.578   2.710  1.00 47.93      A16S
ATOM  20335  O5' CYT  54     145.807  50.731   4.758  1.00 43.35      A16S
ATOM  20336  C5' CYT  54     144.678  50.696   5.622  1.00 43.35      A16S
ATOM  20337  C4' CYT  54     145.166  50.766   7.040  1.00 43.35      A16S
ATOM  20338  O4' CYT  54     145.897  52.004   7.225  1.00 43.35      A16S
ATOM  20339  C1' CYT  54     145.743  52.448   8.562  1.00 43.35      A16S
ATOM  20340  N1  CYT  54     145.138  53.787   8.554  1.00 47.93      A16S
ATOM  20341  C6  CYT  54     144.519  54.273   7.440  1.00 47.93      A16S
ATOM  20342  C2  CYT  54     145.173  54.546   9.730  1.00 47.93      A16S
ATOM  20343  O2  CYT  54     145.797  54.113  10.705  1.00 47.93      A16S
ATOM  20344  N3  CYT  54     144.534  55.727   9.773  1.00 47.93      A16S
ATOM  20345  C4  CYT  54     143.893  56.173   8.694  1.00 47.93      A16S
ATOM  20346  N4  CYT  54     143.237  57.326   8.791  1.00 47.93      A16S
ATOM  20347  C5  CYT  54     143.887  55.448   7.466  1.00 47.93      A16S
ATOM  20348  C2' CYT  54     144.851  51.439   9.301  1.00 43.35      A16S
ATOM  20349  O2' CYT  54     145.647  50.586  10.104  1.00 43.35      A16S
ATOM  20350  C3' CYT  54     144.126  50.743   8.146  1.00 43.35      A16S
ATOM  20351  O3' CYT  54     143.759  49.395   8.455  1.00 43.35      A16S
ATOM  20352  P   ADE  55     142.695  49.100   9.622  1.00 41.70      A16S
ATOM  20353  O1P ADE  55     142.019  47.811   9.300  1.00 66.30      A16S
ATOM  20354  O2P ADE  55     141.873  50.320   9.830  1.00 66.30      A16S
ATOM  20355  O5' ADE  55     143.611  48.902  10.915  1.00 41.70      A16S
ATOM  20356  C5' ADE  55     144.524  47.784  11.015  1.00 41.70      A16S
ATOM  20357  C4' ADE  55     144.723  47.373  12.463  1.00 41.70      A16S
ATOM  20358  O4' ADE  55     145.583  48.318  13.145  1.00 41.70      A16S
ATOM  20359  C1' ADE  55     145.236  48.376  14.517  1.00 41.70      A16S
ATOM  20360  N9  ADE  55     144.950  49.768  14.866  1.00 66.30      A16S
ATOM  20361  C4  ADE  55     144.555  50.234  16.097  1.00 66.30      A16S
ATOM  20362  N3  ADE  55     144.366  49.519  17.218  1.00 66.30      A16S
ATOM  20363  C2  ADE  55     143.958  50.305  18.213  1.00 66.30      A16S
ATOM  20364  N1  ADE  55     143.733  51.619  18.215  1.00 66.30      A16S
ATOM  20365  C6  ADE  55     143.929  52.307  17.072  1.00 66.30      A16S
ATOM  20366  N6  ADE  55     143.693  53.621  17.071  1.00 66.30      A16S
ATOM  20367  C5  ADE  55     144.367  51.592  15.945  1.00 66.30      A16S
ATOM  20368  N7  ADE  55     144.656  51.984  14.647  1.00 66.30      A16S
ATOM  20369  C8  ADE  55     145.000  50.869  14.051  1.00 66.30      A16S
ATOM  20370  C2' ADE  55     144.051  47.430  14.742  1.00 41.70      A16S
ATOM  20371  O2' ADE  55     144.505  46.204  15.262  1.00 41.70      A16S
ATOM  20372  C3' ADE  55     143.485  47.277  13.337  1.00 41.70      A16S
ATOM  20373  O3' ADE  55     142.814  46.034  13.195  1.00 41.70      A16S
ATOM  20374  P   URI  56     141.222  45.974  13.391  1.00 54.52      A16S
ATOM  20375  O1P URI  56     140.803  44.555  13.487  1.00 70.23      A16S
ATOM  20376  O2P URI  56     140.598  46.853  12.360  1.00 70.23      A16S
ATOM  20377  O5' URI  56     140.993  46.648  14.816  1.00 54.52      A16S
ATOM  20378  C5' URI  56     141.286  45.948  16.035  1.00 54.52      A16S
ATOM  20379  C4' URI  56     140.829  46.763  17.226  1.00 54.52      A16S
ATOM  20380  O4' URI  56     141.679  47.932  17.384  1.00 54.52      A16S
ATOM  20381  C1' URI  56     140.899  49.038  17.826  1.00 54.52      A16S
ATOM  20382  N1  URI  56     140.932  50.082  16.785  1.00 70.23      A16S
ATOM  20383  C6  URI  56     141.305  49.784  15.489  1.00 70.23      A16S
ATOM  20384  C2  URI  56     140.587  51.383  17.142  1.00 70.23      A16S
ATOM  20385  O2  URI  56     140.214  51.696  18.265  1.00 70.23      A16S
ATOM  20386  N3  URI  56     140.687  52.302  16.126  1.00 70.23      A16S
ATOM  20387  C4  URI  56     141.074  52.064  14.820  1.00 70.23      A16S
ATOM  20388  O4  URI  56     141.157  53.006  14.031  1.00 70.23      A16S
ATOM  20389  C5  URI  56     141.385  50.704  14.526  1.00 70.23      A16S
ATOM  20390  C2' URI  56     139.484  48.524  18.075  1.00 54.52      A16S
ATOM  20391  O2' URI  56     139.344  48.141  19.430  1.00 54.52      A16S
ATOM  20392  C3' URI  56     139.426  47.339  17.126  1.00 54.52      A16S
ATOM  20393  O3' URI  56     138.406  46.431  17.476  1.00 54.52      A16S
ATOM  20394  P   GUA  57     136.922  46.681  16.921  1.00 59.85      A16S
ATOM  20395  O1P GUA  57     136.061  45.544  17.333  1.00 56.43      A16S
ATOM  20396  O2P GUA  57     137.014  47.042  15.488  1.00 56.43      A16S
ATOM  20397  O5' GUA  57     136.434  47.954  17.734  1.00 59.85      A16S
ATOM  20398  C5' GUA  57     136.190  47.870  19.145  1.00 59.85      A16S
ATOM  20399  C4' GUA  57     135.604  49.164  19.645  1.00 59.85      A16S
ATOM  20400  O4' GUA  57     136.601  50.215  19.526  1.00 59.85      A16S
ATOM  20401  C1' GUA  57     135.968  51.433  19.172  1.00 59.85      A16S
ATOM  20402  N9  GUA  57     136.443  51.841  17.853  1.00 56.43      A16S
ATOM  20403  C4  GUA  57     136.524  53.132  17.401  1.00 56.43      A16S
ATOM  20404  N3  GUA  57     136.218  54.238  18.114  1.00 56.43      A16S
ATOM  20405  C2  GUA  57     136.385  55.338  17.411  1.00 56.43      A16S
ATOM  20406  N2  GUA  57     136.141  56.524  17.972  1.00 56.43      A16S
ATOM  20407  N1  GUA  57     136.805  55.355  16.109  1.00 56.43      A16S
ATOM  20408  C6  GUA  57     137.120  54.237  15.351  1.00 56.43      A16S
ATOM  20409  O6  GUA  57     137.469  54.375  14.179  1.00 56.43      A16S
ATOM  20410  C5  GUA  57     136.963  53.039  16.098  1.00 56.43      A16S
ATOM  20411  N7  GUA  57     137.175  51.712  15.741  1.00 56.43      A16S
ATOM  20412  C8  GUA  57     136.859  51.039  16.813  1.00 56.43      A16S
ATOM  20413  C2' GUA  57     134.459  51.181  19.147  1.00 59.85      A16S
ATOM  20414  O2' GUA  57     133.880  51.515  20.398  1.00 59.85      A16S
ATOM  20415  C3' GUA  57     134.410  49.689  18.859  1.00 59.85      A16S
ATOM  20416  O3' GUA  57     133.176  49.100  19.230  1.00 59.85      A16S
ATOM  20417  P   CYT  58     132.070  48.820  18.099  1.00 65.37      A16S
ATOM  20418  O1P CYT  58     131.007  47.995  18.723  1.00 56.32      A16S
ATOM  20419  O2P CYT  58     132.748  48.344  16.861  1.00 56.32      A16S
ATOM  20420  O5' CYT  58     131.440  50.251  17.803  1.00 65.37      A16S
ATOM  20421  C5' CYT  58     130.591  50.882  18.775  1.00 65.37      A16S
ATOM  20422  C4' CYT  58     130.508  52.366  18.527  1.00 65.37      A16S
ATOM  20423  O4' CYT  58     131.845  52.936  18.510  1.00 65.37      A16S
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ATOM	20424	C1'	CYT	58	131.889	54.024	17.601	1.00	65.37	A16S	ATOM	20477	C2'	ADE	60	123.096	52.945	9.519	1.00	49.46	A16S
ATOM	20425	N1	CYT	58	132.805	53.686	16.491	1.00	56.32	A16S	ATOM	20478	O2'	ADE	60	122.411	51.791	9.082	1.00	49.46	A16S
ATOM	20426	C6	CYT	58	133.014	52.386	16.126	1.00	56.32	A16S	ATOM	20479	C3'	ADE	60	124.066	52.709	10.680	1.00	49.46	A16S
ATOM	20427	C2	CYT	58	133.441	54.729	15.784	1.00	56.32	A16S	ATOM	20480	O3'	ADE	60	124.433	51.350	11.032	1.00	49.46	A16S
ATOM	20428	O2	CYT	58	133.269	55.909	16.150	1.00	56.32	A16S	ATOM	20481	P	GUA	61	123.342	50.298	11.634	1.00	56.24	A16S
ATOM	20429	N3	CYT	58	134.226	54.423	14.724	1.00	56.32	A16S	ATOM	20482	O1P	GUA	61	124.097	49.496	12.630	1.00	36.97	A16S
ATOM	20430	C4	CYT	58	134.397	53.152	14.370	1.00	56.32	A16S	ATOM	20483	O2P	GUA	61	122.565	49.610	10.551	1.00	36.97	A16S
ATOM	20431	N4	CYT	58	135.163	52.901	13.317	1.00	56.32	A16S	ATOM	20484	O5'	GUA	61	122.341	51.150	12.523	1.00	56.24	A16S
ATOM	20432	C5	CYT	58	133.790	52.079	15.082	1.00	56.32	A16S	ATOM	20485	C5'	GUA	61	121.102	50.599	12.991	1.00	56.24	A16S
ATOM	20433	C2'	CYT	58	130.471	54.210	17.066	1.00	65.37	A16S	ATOM	20486	C4'	GUA	61	120.038	51.653	12.899	1.00	56.24	A16S
ATOM	20434	O2'	CYT	58	129.765	55.116	17.891	1.00	65.37	A16S	ATOM	20487	O4'	GUA	61	119.882	52.021	11.510	1.00	56.24	A16S
ATOM	20435	C3'	CYT	58	129.909	52.809	17.206	1.00	65.37	A16S	ATOM	20488	C1'	GUA	61	118.532	52.358	11.251	1.00	56.24	A16S
ATOM	20436	O3'	CYT	58	128.496	52.836	17.217	1.00	65.37	A16S	ATOM	20489	N9	GUA	61	118.025	51.423	10.250	1.00	36.97	A16S
ATOM	20437	P	ADE	59	127.696	52.717	15.828	1.00	66.28	A16S	ATOM	20490	C4	GUA	61	116.877	51.546	9.498	1.00	36.97	A16S
ATOM	20438	O1P	ADE	59	126.238	52.721	16.170	1.00	77.46	A16S	ATOM	20491	N3	GUA	61	115.979	52.554	9.566	1.00	36.97	A16S
ATOM	20439	O2P	ADE	59	128.272	51.575	15.073	1.00	77.46	A16S	ATOM	20492	C2	GUA	61	115.004	52.401	8.675	1.00	36.97	A16S
ATOM	20440	O5'	ADE	59	128.066	54.047	15.027	1.00	66.28	A16S	ATOM	20493	N2	GUA	61	114.031	53.311	8.577	1.00	36.97	A16S
ATOM	20441	C5'	ADE	59	127.739	55.344	15.560	1.00	66.28	A16S	ATOM	20494	N1	GUA	61	114.914	51.343	7.808	1.00	36.97	A16S
ATOM	20442	C4'	ADE	59	128.147	56.439	14.599	1.00	66.28	A16S	ATOM	20495	C6	GUA	61	115.819	50.293	7.739	1.00	36.97	A16S
ATOM	20443	O4'	ADE	59	129.583	56.423	14.403	1.00	66.28	A16S	ATOM	20496	O6	GUA	61	115.636	49.377	6.937	1.00	36.97	A16S
ATOM	20444	C1'	ADE	59	129.892	56.802	13.071	1.00	66.28	A16S	ATOM	20497	C5	GUA	61	116.869	50.446	8.665	1.00	36.97	A16S
ATOM	20445	N9	ADE	59	130.611	55.700	12.424	1.00	77.46	A16S	ATOM	20498	N7	GUA	61	117.968	49.640	8.903	1.00	36.97	A16S
ATOM	20446	C4	ADE	59	130.943	55.618	11.093	1.00	77.46	A16S	ATOM	20499	C8	GUA	61	118.620	50.251	9.852	1.00	36.97	A16S
ATOM	20447	N3	ADE	59	130.687	56.518	10.131	1.00	77.46	A16S	ATOM	20500	C2'	GUA	61	117.799	52.306	12.586	1.00	56.24	A16S
ATOM	20448	C2	ADE	59	131.149	56.095	8.955	1.00	77.46	A16S	ATOM	20501	O2'	GUA	61	117.894	53.591	13.181	1.00	56.24	A16S
ATOM	20449	N1	ADE	59	131.785	54.962	8.655	1.00	77.46	A16S	ATOM	20502	C3'	GUA	61	118.639	51.290	13.342	1.00	56.24	A16S
ATOM	20450	C6	ADE	59	132.025	54.080	9.645	1.00	77.46	A16S	ATOM	20503	O3'	GUA	61	118.503	51.416	14.742	1.00	56.24	A16S
ATOM	20451	N6	ADE	59	132.652	52.948	9.347	1.00	77.46	A16S	ATOM	20504	P	URI	62	117.771	50.250	15.566	1.00	47.59	A16S
ATOM	20452	C5	ADE	59	131.592	54.410	10.939	1.00	77.46	A16S	ATOM	20505	O1P	URI	62	117.902	48.981	14.789	1.00	55.28	A16S
ATOM	20453	N7	ADE	59	131.679	53.742	12.151	1.00	77.46	A16S	ATOM	20506	O2P	URI	62	118.246	50.300	16.973	1.00	55.28	A16S
ATOM	20454	C8	ADE	59	131.085	54.545	12.997	1.00	77.46	A16S	ATOM	20507	O5'	URI	62	116.232	50.643	15.520	1.00	47.59	A16S
ATOM	20455	C2'	ADE	59	128.576	57.149	12.375	1.00	66.28	A16S	ATOM	20508	C5'	URI	62	115.820	51.998	15.431	1.00	47.59	A16S
ATOM	20456	O2'	ADE	59	128.385	58.542	12.480	1.00	66.28	A16S	ATOM	20509	C4'	URI	62	114.577	52.086	14.591	1.00	47.59	A16S
ATOM	20457	C3'	ADE	59	127.567	56.359	13.199	1.00	66.28	A16S	ATOM	20510	O4'	URI	62	114.881	51.879	13.197	1.00	47.59	A16S
ATOM	20458	O3'	ADE	59	126.279	56.943	13.152	1.00	66.28	A16S	ATOM	20511	C1'	URI	62	113.799	51.238	12.564	1.00	47.59	A16S
ATOM	20459	P	ADE	60	125.329	56.657	11.895	1.00	49.46	A16S	ATOM	20512	N1	URI	62	114.319	50.093	11.808	1.00	55.28	A16S
ATOM	20460	O1P	ADE	60	126.030	57.154	10.691	1.00	57.30	A16S	ATOM	20513	C6	URI	62	115.491	49.457	12.160	1.00	55.28	A16S
ATOM	20461	O2P	ADE	60	123.952	57.129	12.195	1.00	57.30	A16S	ATOM	20514	C2	URI	62	113.597	49.690	10.705	1.00	55.28	A16S
ATOM	20462	O5'	ADE	60	125.323	55.074	11.757	1.00	49.46	A16S	ATOM	20515	O2	URI	62	112.544	50.212	10.373	1.00	55.28	A16S
ATOM	20463	C5'	ADE	60	124.564	54.242	12.647	1.00	49.46	A16S	ATOM	20516	N3	URI	62	114.149	48.660	9.995	1.00	55.28	A16S
ATOM	20464	C4'	ADE	60	123.522	53.496	11.863	1.00	49.46	A16S	ATOM	20517	C4	URI	62	115.330	48.003	10.260	1.00	55.28	A16S
ATOM	20465	O4'	ADE	60	122.623	54.461	11.312	1.00	49.46	A16S	ATOM	20518	O4	URI	62	115.772	47.200	9.421	1.00	55.28	A16S
ATOM	20466	C1'	ADE	60	122.129	53.989	10.087	1.00	49.46	A16S	ATOM	20519	C5	URI	62	116.009	48.457	11.444	1.00	55.28	A16S
ATOM	20467	N9	ADE	60	121.821	55.162	9.275	1.00	57.30	A16S	ATOM	20520	C2'	URI	62	112.739	50.927	13.618	1.00	47.59	A16S
ATOM	20468	C4	ADE	60	120.615	55.431	8.678	1.00	57.30	A16S	ATOM	20521	O2'	URI	62	111.709	51.882	13.511	1.00	47.59	A16S
ATOM	20469	N3	ADE	60	119.530	54.642	8.643	1.00	57.30	A16S	ATOM	20522	C3'	URI	62	113.544	51.032	14.911	1.00	47.59	A16S
ATOM	20470	C2	ADE	60	118.524	55.255	8.026	1.00	57.30	A16S	ATOM	20523	O3'	URI	62	112.811	51.478	16.039	1.00	47.59	A16S
ATOM	20471	N1	ADE	60	118.481	56.472	7.483	1.00	57.30	A16S	ATOM	20524	P	CYT	63	111.768	50.500	16.758	1.00	45.23	A16S
ATOM	20472	C6	ADE	60	119.589	57.237	7.531	1.00	57.30	A16S	ATOM	20525	O1P	CYT	63	112.302	49.116	16.668	1.00	37.79	A16S
ATOM	20473	N6	ADE	60	119.540	58.457	6.997	1.00	57.30	A16S	ATOM	20526	O2P	CYT	63	111.432	51.078	18.101	1.00	37.79	A16S
ATOM	20474	C5	ADE	60	120.730	56.699	8.152	1.00	57.30	A16S	ATOM	20527	O5'	CYT	63	110.505	50.628	15.813	1.00	45.23	A16S
ATOM	20475	N7	ADE	60	122.004	57.201	8.363	1.00	57.30	A16S	ATOM	20528	C5'	CYT	63	109.553	49.622	15.820	1.00	45.23	A16S
ATOM	20476	C8	ADE	60	122.615	56.245	9.018	1.00	57.30	A16S	ATOM	20529	C4'	CYT	63	108.533	49.863	14.771	1.00	45.23	A16S

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ATOM  20530  O4' CYT  63     109.161  50.107  13.499  1.00 45.23      A16S
ATOM  20531  C1' CYT  63     108.516  49.332  12.495  1.00 45.23      A16S
ATOM  20532  N1  CYT  63     109.506  48.369  11.944  1.00 37.79      A16S
ATOM  20533  C6  CYT  63     110.634  48.041  12.654  1.00 37.79      A16S
ATOM  20534  C2  CYT  63     109.280  47.800  10.675  1.00 37.79      A16S
ATOM  20535  O2  CYT  63     108.236  48.086  10.059  1.00 37.79      A16S
ATOM  20536  N3  CYT  63     110.204  46.950  10.165  1.00 37.79      A16S
ATOM  20537  C4  CYT  63     111.299  46.652  10.869  1.00 37.79      A16S
ATOM  20538  N4  CYT  63     112.176  45.819  10.332  1.00 37.79      A16S
ATOM  20539  C5  CYT  63     111.544  47.198  12.158  1.00 37.79      A16S
ATOM  20540  C2' CYT  63     107.303  48.653  13.142  1.00 45.23      A16S
ATOM  20541  O2' CYT  63     106.130  49.422  12.952  1.00 45.23      A16S
ATOM  20542  C3' CYT  63     107.750  48.591  14.591  1.00 45.23      A16S
ATOM  20543  O3' CYT  63     106.749  48.556  15.574  1.00 45.23      A16S
ATOM  20544  P   GUA  64     106.966  47.654  16.880  1.00 60.62      A16S
ATOM  20545  O1P GUA  64     106.242  48.305  17.989  1.00 52.17      A16S
ATOM  20546  O2P GUA  64     108.392  47.304  17.062  1.00 52.17      A16S
ATOM  20547  O5' GUA  64     106.176  46.339  16.482  1.00 60.62      A16S
ATOM  20548  C5' GUA  64     104.801  46.403  16.051  1.00 60.62      A16S
ATOM  20549  C4' GUA  64     104.165  45.060  16.246  1.00 60.62      A16S
ATOM  20550  O4' GUA  64     104.955  44.131  15.485  1.00 60.62      A16S
ATOM  20551  C1' GUA  64     104.967  42.899  16.147  1.00 60.62      A16S
ATOM  20552  N9  GUA  64     106.289  42.295  16.056  1.00 52.17      A16S
ATOM  20553  C4  GUA  64     106.556  41.121  15.401  1.00 52.17      A16S
ATOM  20554  N3  GUA  64     105.651  40.372  14.725  1.00 52.17      A16S
ATOM  20555  C2  GUA  64     106.194  39.289  14.210  1.00 52.17      A16S
ATOM  20556  N2  GUA  64     105.439  38.446  13.489  1.00 52.17      A16S
ATOM  20557  N1  GUA  64     107.520  38.954  14.357  1.00 52.17      A16S
ATOM  20558  C6  GUA  64     108.469  39.707  15.042  1.00 52.17      A16S
ATOM  20559  O6  GUA  64     109.636  39.311  15.104  1.00 52.17      A16S
ATOM  20560  C5  GUA  64     107.898  40.888  15.595  1.00 52.17      A16S
ATOM  20561  N7  GUA  64     108.471  41.913  16.341  1.00 52.17      A16S
ATOM  20562  C8  GUA  64     107.479  42.726  16.591  1.00 52.17      A16S
ATOM  20563  C2' GUA  64     104.357  43.048  17.539  1.00 60.62      A16S
ATOM  20564  O2' GUA  64     103.090  42.409  17.563  1.00 60.62      A16S
ATOM  20565  C3' GUA  64     104.234  44.556  17.690  1.00 60.62      A16S
ATOM  20566  O3' GUA  64     103.049  44.744  18.497  1.00 60.62      A16S
ATOM  20567  P   URI  65     101.752  45.534  17.939  1.00 65.63      A16S
ATOM  20568  O1P URI  65     100.576  44.867  18.553  1.00 84.79      A16S
ATOM  20569  O2P URI  65     101.970  46.991  18.145  1.00 84.79      A16S
ATOM  20570  O5' URI  65     101.674  45.249  16.378  1.00 65.63      A16S
ATOM  20571  C5' URI  65     100.410  45.102  15.709  1.00 65.63      A16S
ATOM  20572  C4' URI  65     100.214  46.196  14.674  1.00 65.63      A16S
ATOM  20573  O4' URI  65      99.248  47.175  15.127  1.00 65.63      A16S
ATOM  20574  C1' URI  65      99.773  48.467  14.937  1.00 65.63      A16S
ATOM  20575  N1  URI  65      99.176  49.365  15.932  1.00 84.79      A16S
ATOM  20576  C6  URI  65      99.475  49.278  17.269  1.00 84.79      A16S
ATOM  20577  C2  URI  65      98.279  50.303  15.463  1.00 84.79      A16S
ATOM  20578  O2  URI  65      97.991  50.413  14.280  1.00 84.79      A16S
ATOM  20579  N3  URI  65      97.727  51.105  16.425  1.00 84.79      A16S
ATOM  20580  C4  URI  65      97.972  51.065  17.775  1.00 84.79      A16S
ATOM  20581  O4  URI  65      97.374  51.839  18.518  1.00 84.79      A16S
ATOM  20582  C5  URI  65      98.916  50.072  18.183  1.00 84.79      A16S
ATOM  20583  C2' URI  65     101.292  48.310  14.944  1.00 65.63      A16S
ATOM  20584  O2' URI  65     101.914  49.393  14.266  1.00 65.63      A16S
ATOM  20585  C3' URI  65     101.439  46.978  14.209  1.00 65.63      A16S
ATOM  20586  O3' URI  65     101.281  47.230  12.815  1.00 65.63      A16S
ATOM  20587  P   GUA  66     102.458  46.856  11.796  1.00 61.46      A16S
ATOM  20588  O1P GUA  66     103.595  46.272  12.579  1.00 46.56      A16S
ATOM  20589  O2P GUA  66     102.687  48.034  10.913  1.00 46.56      A16S
ATOM  20590  O5' GUA  66     101.824  45.709  10.907  1.00 61.46      A16S
ATOM  20591  C5' GUA  66     100.570  45.901  10.250  1.00 61.46      A16S
ATOM  20592  C4' GUA  66     100.523  45.050   9.018  1.00 61.46      A16S
ATOM  20593  O4' GUA  66     101.616  45.472   8.169  1.00 61.46      A16S
ATOM  20594  C1' GUA  66     102.255  44.343   7.606  1.00 61.46      A16S
ATOM  20595  N9  GUA  66     103.593  44.245   8.193  1.00 46.56      A16S
ATOM  20596  C4  GUA  66     104.523  43.266   7.934  1.00 46.56      A16S
ATOM  20597  N3  GUA  66     104.362  42.233   7.084  1.00 46.56      A16S
ATOM  20598  C2  GUA  66     105.419  41.452   7.057  1.00 46.56      A16S
ATOM  20599  N2  GUA  66     105.426  40.375   6.257  1.00 46.56      A16S
ATOM  20600  N1  GUA  66     106.546  41.668   7.807  1.00 46.56      A16S
ATOM  20601  C6  GUA  66     106.739  42.730   8.680  1.00 46.56      A16S
ATOM  20602  O6  GUA  66     107.806  42.842   9.290  1.00 46.56      A16S
ATOM  20603  C5  GUA  66     105.611  43.572   8.725  1.00 46.56      A16S
ATOM  20604  N7  GUA  66     105.378  44.724   9.464  1.00 46.56      A16S
ATOM  20605  C8  GUA  66     104.173  45.092   9.117  1.00 46.56      A16S
ATOM  20606  C2' GUA  66     101.395  43.129   7.952  1.00 61.46      A16S
ATOM  20607  O2' GUA  66     100.404  42.919   6.964  1.00 61.46      A16S
ATOM  20608  C3' GUA  66     100.786  43.575   9.266  1.00 61.46      A16S
ATOM  20609  O3' GUA  66      99.629  42.835   9.625  1.00 61.46      A16S
ATOM  20610  P   CYT  67      99.768  41.623  10.674  1.00 65.44      A16S
ATOM  20611  O1P CYT  67      98.399  41.063  10.857  1.00 33.54      A16S
ATOM  20612  O2P CYT  67     100.537  42.106  11.851  1.00 33.54      A16S
ATOM  20613  O5' CYT  67     100.672  40.545   9.926  1.00 65.44      A16S
ATOM  20614  C5' CYT  67     100.254  39.973   8.673  1.00 65.44      A16S
ATOM  20615  C4' CYT  67     101.199  38.868   8.251  1.00 65.44      A16S
ATOM  20616  O4' CYT  67     102.504  39.412   7.922  1.00 65.44      A16S
ATOM  20617  C1' CYT  67     103.502  38.439   8.186  1.00 65.44      A16S
ATOM  20618  N1  CYT  67     104.491  38.984   9.132  1.00 33.54      A16S
ATOM  20619  C6  CYT  67     104.201  40.044   9.941  1.00 33.54      A16S
ATOM  20620  C2  CYT  67     105.759  38.378   9.189  1.00 33.54      A16S
ATOM  20621  O2  CYT  67     105.995  37.408   8.450  1.00 33.54      A16S
ATOM  20622  N3  CYT  67     106.687  38.859  10.044  1.00 33.54      A16S
ATOM  20623  C4  CYT  67     106.393  39.895  10.825  1.00 33.54      A16S
ATOM  20624  N4  CYT  67     107.343  40.338  11.647  1.00 33.54      A16S
ATOM  20625  C5  CYT  67     105.111  40.525  10.796  1.00 33.54      A16S
ATOM  20626  C2' CYT  67     102.813  37.200   8.745  1.00 65.44      A16S
ATOM  20627  O2' CYT  67     102.611  36.295   7.683  1.00 65.44      A16S
ATOM  20628  C3' CYT  67     101.510  37.785   9.275  1.00 65.44      A16S
ATOM  20629  O3' CYT  67     100.487  36.804   9.358  1.00 65.44      A16S
ATOM  20630  P   GUA  68     100.258  36.012  10.735  1.00 53.03      A16S
ATOM  20631  O1P GUA  68      98.883  35.476  10.655  1.00 41.94      A16S
ATOM  20632  O2P GUA  68     100.659  36.837  11.892  1.00 41.94      A16S
ATOM  20633  O5' GUA  68     101.284  34.804  10.647  1.00 53.03      A16S
ATOM  20634  C5' GUA  68     101.169  33.832   9.602  1.00 53.03      A16S
ATOM  20635  C4' GUA  68     102.447  33.049   9.481  1.00 53.03      A16S
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ATOM	20636	O4'	GUA	68	103.530	33.946	9.120	1.00	53.03	A16S	ATOM	20689	N1	GUA	70	113.530	32.987	18.834	1.00	51.21	A16S
ATOM	20637	C1'	GUA	68	104.753	33.448	9.629	1.00	53.03	A16S	ATOM	20690	C6	GUA	70	112.169	32.914	18.524	1.00	51.21	A16S
ATOM	20638	N9	GUA	68	105.371	34.449	10.491	1.00	41.94	A16S	ATOM	20691	O6	GUA	70	111.372	33.763	18.991	1.00	51.21	A16S
ATOM	20639	C4	GUA	68	106.716	34.553	10.757	1.00	41.94	A16S	ATOM	20692	C5	GUA	70	111.892	31.813	17.659	1.00	51.21	A16S
ATOM	20640	N3	GUA	68	107.690	33.775	10.238	1.00	41.94	A16S	ATOM	20693	N7	GUA	70	110.689	31.362	17.132	1.00	51.21	A16S
ATOM	20641	C2	GUA	68	108.883	34.096	10.710	1.00	41.94	A16S	ATOM	20694	C8	GUA	70	111.022	30.335	16.399	1.00	51.21	A16S
ATOM	20642	N2	GUA	68	109.975	33.420	10.313	1.00	41.94	A16S	ATOM	20695	C2'	GUA	70	113.491	27.856	16.524	1.00	62.14	A16S
ATOM	20643	N1	GUA	68	109.100	35.101	11.610	1.00	41.94	A16S	ATOM	20696	O2'	GUA	70	114.707	27.318	16.047	1.00	62.14	A16S
ATOM	20644	C6	GUA	68	108.116	35.912	12.152	1.00	41.94	A16S	ATOM	20697	C3'	GUA	70	112.315	26.914	16.313	1.00	62.14	A16S
ATOM	20645	O6	GUA	68	108.428	36.783	12.958	1.00	41.94	A16S	ATOM	20698	O3'	GUA	70	112.606	25.559	16.565	1.00	62.14	A16S
ATOM	20646	C5	GUA	68	106.832	35.582	11.661	1.00	41.94	A16S	ATOM	20699	P	CYT	71	112.178	24.919	17.972	1.00	58.45	A16S
ATOM	20647	N7	GUA	68	105.591	36.133	11.942	1.00	41.94	A16S	ATOM	20700	O1P	CYT	71	112.495	23.468	17.853	1.00	57.13	A16S
ATOM	20648	C8	GUA	68	104.754	35.435	11.220	1.00	41.94	A16S	ATOM	20701	O2P	CYT	71	110.782	25.338	18.295	1.00	57.13	A16S
ATOM	20649	C2'	GUA	68	104.436	32.178	10.408	1.00	53.03	A16S	ATOM	20702	O5'	CYT	71	113.204	25.599	18.988	1.00	58.45	A16S
ATOM	20650	O2'	GUA	68	104.680	31.054	9.578	1.00	53.03	A16S	ATOM	20703	C5'	CYT	71	114.614	25.349	18.859	1.00	58.45	A16S
ATOM	20651	C3'	GUA	68	102.962	32.382	10.740	1.00	53.03	A16S	ATOM	20704	C4'	CYT	71	115.407	26.328	19.684	1.00	58.45	A16S
ATOM	20652	O3'	GUA	68	102.296	31.167	11.044	1.00	53.03	A16S	ATOM	20705	O4'	CYT	71	115.158	27.670	19.200	1.00	58.45	A16S
ATOM	20653	P	GUA	69	102.691	30.362	12.384	1.00	50.32	A16S	ATOM	20706	C1'	CYT	71	115.166	28.586	20.285	1.00	58.45	A16S
ATOM	20654	O1P	GUA	69	101.785	29.187	12.399	1.00	48.31	A16S	ATOM	20707	N1	CYT	71	113.827	29.201	20.389	1.00	57.13	A16S
ATOM	20655	O2P	GUA	69	102.720	31.282	13.555	1.00	48.31	A16S	ATOM	20708	C6	CYT	71	112.751	28.672	19.728	1.00	57.13	A16S
ATOM	20656	O5'	GUA	69	104.187	29.885	12.100	1.00	50.32	A16S	ATOM	20709	C2	CYT	71	113.670	30.334	21.191	1.00	57.13	A16S
ATOM	20657	C5'	GUA	69	105.110	29.625	13.164	1.00	50.32	A16S	ATOM	20710	O2	CYT	71	114.665	30.798	21.774	1.00	57.13	A16S
ATOM	20658	C4'	GUA	69	106.519	29.558	12.621	1.00	50.32	A16S	ATOM	20711	N3	CYT	71	112.445	30.893	21.312	1.00	57.13	A16S
ATOM	20659	O4'	GUA	69	106.895	30.879	12.147	1.00	50.32	A16S	ATOM	20712	C4	CYT	71	111.405	30.366	20.669	1.00	57.13	A16S
ATOM	20660	C1'	GUA	69	108.256	31.149	12.474	1.00	50.32	A16S	ATOM	20713	N4	CYT	71	110.221	30.947	20.820	1.00	57.13	A16S
ATOM	20661	N9	GUA	69	108.285	32.279	13.400	1.00	48.31	A16S	ATOM	20714	C5	CYT	71	111.535	29.218	19.840	1.00	57.13	A16S
ATOM	20662	C4	GUA	69	109.395	32.847	13.993	1.00	48.31	A16S	ATOM	20715	C2'	CYT	71	115.512	27.800	21.548	1.00	58.45	A16S
ATOM	20663	N3	GUA	69	110.686	32.492	13.791	1.00	48.31	A16S	ATOM	20716	O2'	CYT	71	116.895	27.896	21.831	1.00	58.45	A16S
ATOM	20664	C2	GUA	69	111.522	33.216	14.535	1.00	48.31	A16S	ATOM	20717	C3'	CYT	71	115.059	26.399	21.159	1.00	58.45	A16S
ATOM	20665	N2	GUA	69	112.847	33.021	14.455	1.00	48.31	A16S	ATOM	20718	O3'	CYT	71	115.667	25.383	21.936	1.00	58.45	A16S
ATOM	20666	N1	GUA	69	111.118	34.189	15.411	1.00	48.31	A16S	ATOM	20719	P	CYT	72	114.874	24.797	23.203	1.00	86.33	A16S
ATOM	20667	C6	GUA	69	109.796	34.564	15.638	1.00	48.31	A16S	ATOM	20720	O1P	CYT	72	115.630	23.616	23.684	1.00	49.72	A16S
ATOM	20668	O6	GUA	69	109.531	35.446	16.473	1.00	48.31	A16S	ATOM	20721	O2P	CYT	72	113.437	24.653	22.830	1.00	49.72	A16S
ATOM	20669	C5	GUA	69	108.897	33.818	14.833	1.00	48.31	A16S	ATOM	20722	O5'	CYT	72	115.001	25.953	24.288	1.00	86.33	A16S
ATOM	20670	N7	GUA	69	107.514	33.887	14.741	1.00	48.31	A16S	ATOM	20723	C5'	CYT	72	116.273	26.265	24.871	1.00	86.33	A16S
ATOM	20671	C8	GUA	69	107.199	32.964	13.881	1.00	48.31	A16S	ATOM	20724	C4'	CYT	72	116.118	27.334	25.922	1.00	86.33	A16S
ATOM	20672	C2'	GUA	69	108.838	29.881	13.104	1.00	50.32	A16S	ATOM	20725	O4'	CYT	72	115.772	28.591	25.287	1.00	86.33	A16S
ATOM	20673	O2'	GUA	69	109.530	29.127	12.128	1.00	50.32	A16S	ATOM	20726	C1'	CYT	72	114.863	29.308	26.109	1.00	86.33	A16S
ATOM	20674	C3'	GUA	69	107.581	29.211	13.652	1.00	50.32	A16S	ATOM	20727	N1	CYT	72	113.573	29.402	25.404	1.00	49.72	A16S
ATOM	20675	O3'	GUA	69	107.720	27.813	13.855	1.00	50.32	A16S	ATOM	20728	C6	CYT	72	113.261	28.539	24.387	1.00	49.72	A16S
ATOM	20676	P	GUA	70	108.078	27.257	15.326	1.00	62.14	A16S	ATOM	20729	C2	CYT	72	112.655	30.385	25.805	1.00	49.72	A16S
ATOM	20677	O1P	GUA	70	107.810	25.799	15.282	1.00	51.21	A16S	ATOM	20730	O2	CYT	72	112.969	31.159	26.728	1.00	49.72	A16S
ATOM	20678	O2P	GUA	70	107.426	28.093	16.373	1.00	51.21	A16S	ATOM	20731	N3	CYT	72	111.450	30.459	25.178	1.00	49.72	A16S
ATOM	20679	O5'	GUA	70	109.651	27.456	15.447	1.00	62.14	A16S	ATOM	20732	C4	CYT	72	111.153	29.596	24.198	1.00	49.72	A16S
ATOM	20680	C5'	GUA	70	110.536	26.806	14.530	1.00	62.14	A16S	ATOM	20733	N4	CYT	72	109.954	29.681	23.626	1.00	49.72	A16S
ATOM	20681	C4'	GUA	70	111.959	27.140	14.863	1.00	62.14	A16S	ATOM	20734	C5	CYT	72	112.075	28.598	23.766	1.00	49.72	A16S
ATOM	20682	O4'	GUA	70	112.202	28.554	14.657	1.00	62.14	A16S	ATOM	20735	C2'	CYT	72	114.690	28.519	27.403	1.00	86.33	A16S
ATOM	20683	C1'	GUA	70	113.080	29.043	15.656	1.00	62.14	A16S	ATOM	20736	O2'	CYT	72	115.587	29.010	28.377	1.00	86.33	A16S
ATOM	20684	N9	GUA	70	112.376	30.082	16.403	1.00	51.21	A16S	ATOM	20737	C3'	CYT	72	115.003	27.105	26.931	1.00	86.33	A16S
ATOM	20685	C4	GUA	70	112.942	31.021	17.234	1.00	51.21	A16S	ATOM	20738	O3'	CYT	72	115.363	26.224	27.985	1.00	86.33	A16S
ATOM	20686	N3	GUA	70	114.256	31.121	17.543	1.00	51.21	A16S	ATOM	20739	P	GUA	73	114.259	25.218	28.585	1.00	84.29	A16S
ATOM	20687	C2	GUA	70	114.497	32.129	18.368	1.00	51.21	A16S	ATOM	20740	O1P	GUA	73	115.018	24.458	29.603	1.00	57.02	A16S
ATOM	20688	N2	GUA	70	115.747	32.356	18.807	1.00	51.21	A16S	ATOM	20741	O2P	GUA	73	113.572	24.490	27.482	1.00	57.02	A16S

ATOM	20742	O5'	GUA	73	113.189	26.175	29.296	1.00	84.29	A16S	ATOM	20795	N1	GUA	75	99.760	27.745	28.532	1.00	50.93	A16S
ATOM	20743	C5'	GUA	73	113.587	26.972	30.426	1.00	84.29	A16S	ATOM	20796	C6	GUA	75	100.971	27.150	28.880	1.00	50.93	A16S
ATOM	20744	C4'	GUA	73	112.488	27.914	30.888	1.00	84.29	A16S	ATOM	20797	O6	GUA	75	101.503	26.338	28.111	1.00	50.93	A16S
ATOM	20745	O4'	GUA	73	112.177	28.909	29.880	1.00	84.29	A16S	ATOM	20798	C5	GUA	75	101.423	27.590	30.161	1.00	50.93	A16S
ATOM	20746	C1'	GUA	73	110.950	29.534	30.219	1.00	84.29	A16S	ATOM	20799	N7	GUA	75	102.576	27.275	30.868	1.00	50.93	A16S
ATOM	20747	N9	GUA	73	110.056	29.564	29.065	1.00	57.02	A16S	ATOM	20800	C8	GUA	75	102.458	27.933	31.988	1.00	50.93	A16S
ATOM	20748	C4	GUA	73	108.971	30.394	28.925	1.00	57.02	A16S	ATOM	20801	C2'	GUA	75	99.664	28.657	33.884	1.00	51.96	A16S
ATOM	20749	N3	GUA	73	108.597	31.357	29.794	1.00	57.02	A16S	ATOM	20802	O2'	GUA	75	98.744	29.561	34.465	1.00	51.96	A16S
ATOM	20750	C2	GUA	73	107.476	31.951	29.421	1.00	57.02	A16S	ATOM	20803	C3'	GUA	75	100.437	27.853	34.913	1.00	51.96	A16S
ATOM	20751	N2	GUA	73	106.950	32.924	30.187	1.00	57.02	A16S	ATOM	20804	O3'	GUA	75	99.622	27.366	35.947	1.00	51.96	A16S
ATOM	20752	N1	GUA	73	106.782	31.632	28.276	1.00	57.02	A16S	ATOM	20805	P	GUA	76	98.955	25.919	35.786	1.00	46.59	A16S
ATOM	20753	C6	GUA	73	107.149	30.646	27.367	1.00	57.02	A16S	ATOM	20806	O1P	GUA	76	98.337	25.588	37.096	1.00	52.55	A16S
ATOM	20754	O6	GUA	73	106.442	30.431	26.374	1.00	57.02	A16S	ATOM	20807	O2P	GUA	76	99.953	25.000	35.202	1.00	52.55	A16S
ATOM	20755	C5	GUA	73	108.353	29.997	27.758	1.00	57.02	A16S	ATOM	20808	O5'	GUA	76	97.817	26.148	34.700	1.00	46.59	A16S
ATOM	20756	N7	GUA	73	109.061	28.969	27.151	1.00	57.02	A16S	ATOM	20809	C5'	GUA	76	96.824	27.136	34.931	1.00	46.59	A16S
ATOM	20757	C8	GUA	73	110.071	28.755	27.954	1.00	57.02	A16S	ATOM	20810	C4'	GUA	76	95.857	27.195	33.789	1.00	46.59	A16S
ATOM	20758	C2'	GUA	73	110.319	28.713	31.344	1.00	84.29	A16S	ATOM	20811	O4'	GUA	76	96.537	27.642	32.595	1.00	46.59	A16S
ATOM	20759	O2'	GUA	73	110.502	29.409	32.561	1.00	84.29	A16S	ATOM	20812	C1'	GUA	76	95.940	27.047	31.458	1.00	46.59	A16S
ATOM	20760	C3'	GUA	73	111.110	27.406	31.277	1.00	84.29	A16S	ATOM	20813	N9	GUA	76	96.955	26.258	30.770	1.00	52.55	A16S
ATOM	20761	O3'	GUA	73	111.074	26.754	32.544	1.00	84.29	A16S	ATOM	20814	C4	GUA	76	96.869	25.755	29.496	1.00	52.55	A16S
ATOM	20762	P	CYT	74	109.777	25.883	32.960	1.00	60.47	A16S	ATOM	20815	N3	GUA	76	95.834	25.910	28.655	1.00	52.55	A16S
ATOM	20763	O1P	CYT	74	110.105	25.270	34.269	1.00	50.42	A16S	ATOM	20816	C2	GUA	76	96.047	25.327	27.499	1.00	52.55	A16S
ATOM	20764	O2P	CYT	74	109.357	25.010	31.828	1.00	50.42	A16S	ATOM	20817	N2	GUA	76	95.125	25.399	26.540	1.00	52.55	A16S
ATOM	20765	O5'	CYT	74	108.640	26.974	33.196	1.00	60.47	A16S	ATOM	20818	N1	GUA	76	97.178	24.634	27.191	1.00	52.55	A16S
ATOM	20766	C5'	CYT	74	108.743	27.908	34.277	1.00	60.47	A16S	ATOM	20819	C6	GUA	76	98.255	24.451	28.043	1.00	52.55	A16S
ATOM	20767	C4'	CYT	74	107.541	28.819	34.315	1.00	60.47	A16S	ATOM	20820	O6	GUA	76	99.233	23.791	27.667	1.00	52.55	A16S
ATOM	20768	O4'	CYT	74	107.554	29.707	33.167	1.00	60.47	A16S	ATOM	20821	C5	GUA	76	98.046	25.085	29.288	1.00	52.55	A16S
ATOM	20769	C1'	CYT	74	106.223	30.005	32.784	1.00	60.47	A16S	ATOM	20822	N7	GUA	76	98.861	25.160	30.408	1.00	52.55	A16S
ATOM	20770	N1	CYT	74	105.975	29.473	31.436	1.00	50.42	A16S	ATOM	20823	C8	GUA	76	98.174	25.865	31.262	1.00	52.55	A16S
ATOM	20771	C6	CYT	74	106.768	28.498	30.899	1.00	50.42	A16S	ATOM	20824	C2'	GUA	76	94.788	26.171	31.948	1.00	46.59	A16S
ATOM	20772	C2	CYT	74	104.882	29.966	30.718	1.00	50.42	A16S	ATOM	20825	O2'	GUA	76	93.561	26.872	31.856	1.00	46.59	A16S
ATOM	20773	O2	CYT	74	104.197	30.873	31.216	1.00	50.42	A16S	ATOM	20826	C3'	GUA	76	95.217	25.888	33.382	1.00	46.59	A16S
ATOM	20774	N3	CYT	74	104.598	29.443	29.501	1.00	50.42	A16S	ATOM	20827	O3'	GUA	76	94.130	25.520	34.210	1.00	46.59	A16S
ATOM	20775	C4	CYT	74	105.362	28.475	29.000	1.00	50.42	A16S	ATOM	20828	P	GUA	77	93.519	24.044	34.075	1.00	55.31	A16S
ATOM	20776	N4	CYT	74	105.032	27.973	27.816	1.00	50.42	A16S	ATOM	20829	O1P	GUA	77	94.678	23.108	34.137	1.00	49.51	A16S
ATOM	20777	C5	CYT	74	106.498	27.973	29.697	1.00	50.42	A16S	ATOM	20830	O2P	GUA	77	92.390	23.893	35.032	1.00	49.51	A16S
ATOM	20778	C2'	CYT	74	105.295	29.303	33.770	1.00	60.47	A16S	ATOM	20831	O5'	GUA	77	92.924	24.052	32.599	1.00	55.31	A16S
ATOM	20779	O2'	CYT	74	104.944	30.193	34.809	1.00	60.47	A16S	ATOM	20832	C5'	GUA	77	92.702	22.845	31.874	1.00	55.31	A16S
ATOM	20780	C3'	CYT	74	106.175	28.159	34.244	1.00	60.47	A16S	ATOM	20833	C4'	GUA	77	92.371	23.180	30.446	1.00	55.31	A16S
ATOM	20781	O3'	CYT	74	105.716	27.606	35.466	1.00	60.47	A16S	ATOM	20834	O4'	GUA	77	93.546	23.706	29.780	1.00	55.31	A16S
ATOM	20782	P	GUA	75	104.601	26.448	35.427	1.00	51.96	A16S	ATOM	20835	C1'	GUA	77	93.561	23.277	28.426	1.00	55.31	A16S
ATOM	20783	O1P	GUA	75	104.470	25.890	36.800	1.00	50.93	A16S	ATOM	20836	N9	GUA	77	94.760	22.467	28.212	1.00	49.51	A16S
ATOM	20784	O2P	GUA	75	104.895	25.534	34.285	1.00	50.93	A16S	ATOM	20837	C4	GUA	77	95.081	21.764	27.068	1.00	49.51	A16S
ATOM	20785	O5'	GUA	75	103.262	27.228	35.072	1.00	51.96	A16S	ATOM	20838	N3	GUA	77	94.342	21.700	25.935	1.00	49.51	A16S
ATOM	20786	C5'	GUA	75	102.744	28.226	35.954	1.00	51.96	A16S	ATOM	20839	C2	GUA	77	94.913	20.937	25.017	1.00	49.51	A16S
ATOM	20787	C4'	GUA	75	101.498	28.837	35.369	1.00	51.96	A16S	ATOM	20840	N2	GUA	77	94.328	20.762	23.823	1.00	49.51	A16S
ATOM	20788	O4'	GUA	75	101.843	29.557	34.158	1.00	51.96	A16S	ATOM	20841	N1	GUA	77	96.103	20.291	25.197	1.00	49.51	A16S
ATOM	20789	C1'	GUA	75	100.795	29.425	33.206	1.00	51.96	A16S	ATOM	20842	C6	GUA	77	96.880	20.348	26.345	1.00	49.51	A16S
ATOM	20790	N9	GUA	75	101.289	28.653	32.069	1.00	50.93	A16S	ATOM	20843	O6	GUA	77	97.945	19.727	26.394	1.00	49.51	A16S
ATOM	20791	C4	GUA	75	100.634	28.464	30.878	1.00	50.93	A16S	ATOM	20844	C5	GUA	77	96.287	21.161	27.338	1.00	49.51	A16S
ATOM	20792	N3	GUA	75	99.452	29.017	30.526	1.00	50.93	A16S	ATOM	20845	N7	GUA	77	96.723	21.479	28.616	1.00	49.51	A16S
ATOM	20793	C2	GUA	75	99.062	28.632	29.320	1.00	50.93	A16S	ATOM	20846	C8	GUA	77	95.789	22.252	29.096	1.00	49.51	A16S
ATOM	20794	N2	GUA	75	97.930	29.121	28.799	1.00	50.93	A16S	ATOM	20847	C2'	GUA	77	92.275	22.488	28.179	1.00	55.31	A16S

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ATOM  20848  O2' GUA  77      91.288  23.345  27.627  1.00 55.31      A16S
ATOM  20849  C3' GUA  77      91.953  22.008  29.587  1.00 55.31      A16S
ATOM  20850  O3' GUA  77      90.596  21.715  29.785  1.00 55.31      A16S
ATOM  20851  P   GUA  78      90.175  20.228  30.167  1.00 63.32      A16S
ATOM  20852  O1P GUA  78      88.750  20.327  30.560  1.00 60.75      A16S
ATOM  20853  O2P GUA  78      91.161  19.652  31.114  1.00 60.75      A16S
ATOM  20854  O5' GUA  78      90.301  19.437  28.792  1.00 63.32      A16S
ATOM  20855  C5' GUA  78      89.353  19.665  27.746  1.00 63.32      A16S
ATOM  20856  C4' GUA  78      89.742  18.917  26.498  1.00 63.32      A16S
ATOM  20857  O4' GUA  78      90.991  19.447  25.973  1.00 63.32      A16S
ATOM  20858  C1' GUA  78      91.700  18.420  25.302  1.00 63.32      A16S
ATOM  20859  N9  GUA  78      92.988  18.233  25.964  1.00 60.75      A16S
ATOM  20860  C4  GUA  78      94.040  17.463  25.513  1.00 60.75      A16S
ATOM  20861  N3  GUA  78      94.069  16.753  24.366  1.00 60.75      A16S
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ATOM  20872  C3' GUA  78      89.991  17.421  26.614  1.00 63.32      A16S
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ATOM  20897  O5' URI  80      91.622  11.604  31.784  1.00 87.69      A16S
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ATOM  20916  O2P URI  81      95.403  12.445  32.098  1.00 67.74      A16S
ATOM  20917  O5' URI  81      96.630  10.821  33.510  1.00 95.40      A16S
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ATOM  20919  C4' URI  81      98.149   9.191  34.382  1.00 95.40      A16S
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ATOM  20921  C1' URI  81      97.919   7.290  33.031  1.00 95.40      A16S
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ATOM  20937  O5' URI  82     101.337  10.331  31.246  1.00 95.16      A16S
ATOM  20938  C5' URI  82     102.405   9.378  31.417  1.00 95.16      A16S
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ATOM  20950  C2' URI  82     102.202   7.956  27.938  1.00 95.16      A16S
ATOM  20951  O2' URI  82     103.163   6.939  27.729  1.00 95.16      A16S
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ATOM  20953  O3' URI  82     103.996   9.504  28.575  1.00 95.16      A16S
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ATOM	20954	P	ADE	83	104.221	10.926	27.846	1.00	98.91	A16S	ATOM	21007	O2	URI	85	97.181	18.647	23.425	1.00	57.52	A16S
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ATOM	20956	O2P	ADE	83	103.179	11.878	28.350	1.00	56.43	A16S	ATOM	21009	C4	URI	85	100.580	18.322	24.424	1.00	57.52	A16S
ATOM	20957	O5'	ADE	83	103.889	10.647	26.309	1.00	98.91	A16S	ATOM	21010	O4	URI	85	101.190	18.413	25.489	1.00	57.52	A16S
ATOM	20958	C5'	ADE	83	104.661	9.711	25.536	1.00	98.91	A16S	ATOM	21011	C5	URI	85	101.133	17.926	23.167	1.00	57.52	A16S
ATOM	20959	C4'	ADE	83	103.962	9.414	24.230	1.00	98.91	A16S	ATOM	21012	C2'	URI	85	97.916	19.261	20.263	1.00	57.66	A16S
ATOM	20960	O4'	ADE	83	102.672	8.815	24.508	1.00	98.91	A16S	ATOM	21013	O2'	URI	85	96.628	19.316	19.673	1.00	57.66	A16S
ATOM	20961	C1'	ADE	83	101.715	9.256	23.559	1.00	98.91	A16S	ATOM	21014	C3'	URI	85	99.003	19.222	19.203	1.00	57.66	A16S
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ATOM	20964	N3	ADE	83	98.865	9.946	22.643	1.00	56.43	A16S	ATOM	21017	O1P	CYT	86	99.072	22.169	16.841	1.00	36.95	A16S
ATOM	20965	C2	ADE	83	97.632	10.438	22.539	1.00	56.43	A16S	ATOM	21018	O2P	CYT	86	100.367	21.777	19.042	1.00	36.95	A16S
ATOM	20966	N1	ADE	83	96.942	11.196	23.412	1.00	56.43	A16S	ATOM	21019	O5'	CYT	86	97.921	22.319	19.025	1.00	46.49	A16S
ATOM	20967	C6	ADE	83	97.533	11.536	24.583	1.00	56.43	A16S	ATOM	21020	C5'	CYT	86	96.638	22.471	18.405	1.00	46.49	A16S
ATOM	20968	N6	ADE	83	96.860	12.296	25.456	1.00	56.43	A16S	ATOM	21021	C4'	CYT	86	95.693	23.196	19.328	1.00	46.49	A16S
ATOM	20969	C5	ADE	83	98.829	11.071	24.815	1.00	56.43	A16S	ATOM	21022	O4'	CYT	86	95.477	22.412	20.533	1.00	46.49	A16S
ATOM	20970	N7	ADE	83	99.693	11.234	25.887	1.00	56.43	A16S	ATOM	21023	C1'	CYT	86	95.323	23.277	21.639	1.00	46.49	A16S
ATOM	20971	C8	ADE	83	100.770	10.582	25.522	1.00	56.43	A16S	ATOM	21024	N1	CYT	86	96.438	23.060	22.560	1.00	36.95	A16S
ATOM	20972	C2'	ADE	83	102.451	10.127	22.541	1.00	98.91	A16S	ATOM	21025	C6	CYT	86	97.578	22.427	22.154	1.00	36.95	A16S
ATOM	20973	O2'	ADE	83	102.818	9.330	21.430	1.00	98.91	A16S	ATOM	21026	C2	CYT	86	96.321	23.533	23.872	1.00	36.95	A16S
ATOM	20974	C3'	ADE	83	103.642	10.616	23.358	1.00	98.91	A16S	ATOM	21027	O2	CYT	86	95.263	24.087	24.222	1.00	36.95	A16S
ATOM	20975	O3'	ADE	83	104.748	10.977	22.541	1.00	98.91	A16S	ATOM	21028	N3	CYT	86	97.358	23.375	24.728	1.00	36.95	A16S
ATOM	20976	P	CYT	84	105.032	12.527	22.229	1.00	56.45	A16S	ATOM	21029	C4	CYT	86	98.470	22.763	24.318	1.00	36.95	A16S
ATOM	20977	O1P	CYT	84	106.160	12.587	21.266	1.00	68.40	A16S	ATOM	21030	N4	CYT	86	99.466	22.630	25.198	1.00	36.95	A16S
ATOM	20978	O2P	CYT	84	105.134	13.257	23.525	1.00	68.40	A16S	ATOM	21031	C5	CYT	86	98.610	22.258	22.988	1.00	36.95	A16S
ATOM	20979	O5'	CYT	84	103.720	13.001	21.463	1.00	56.45	A16S	ATOM	21032	C2'	CYT	86	95.352	24.706	21.111	1.00	46.49	A16S
ATOM	20980	C5'	CYT	84	103.389	12.441	20.186	1.00	56.45	A16S	ATOM	21033	O2'	CYT	86	94.024	25.105	20.842	1.00	46.49	A16S
ATOM	20981	C4'	CYT	84	101.992	12.831	19.781	1.00	56.45	A16S	ATOM	21034	C3'	CYT	86	96.171	24.542	19.841	1.00	46.49	A16S
ATOM	20982	O4'	CYT	84	101.038	12.277	20.723	1.00	56.45	A16S	ATOM	21035	O3'	CYT	86	95.932	25.582	18.911	1.00	46.49	A16S
ATOM	20983	C1'	CYT	84	99.948	13.172	20.881	1.00	56.45	A16S	ATOM	21036	P	CYT	87	96.791	26.934	19.004	1.00	54.73	A16S
ATOM	20984	N1	CYT	84	99.939	13.666	22.269	1.00	68.40	A16S	ATOM	21037	O1P	CYT	87	96.383	27.825	17.877	1.00	47.10	A16S
ATOM	20985	C6	CYT	84	101.014	13.483	23.096	1.00	68.40	A16S	ATOM	21038	O2P	CYT	87	98.205	26.528	19.154	1.00	47.10	A16S
ATOM	20986	C2	CYT	84	98.806	14.356	22.725	1.00	68.40	A16S	ATOM	21039	O5'	CYT	87	96.343	27.599	20.378	1.00	54.73	A16S
ATOM	20987	O2	CYT	84	97.830	14.485	21.962	1.00	68.40	A16S	ATOM	21040	C5'	CYT	87	94.996	28.049	20.558	1.00	54.73	A16S
ATOM	20988	N3	CYT	84	98.803	14.861	23.980	1.00	68.40	A16S	ATOM	21041	C4'	CYT	87	94.845	28.722	21.891	1.00	54.73	A16S
ATOM	20989	C4	CYT	84	99.864	14.689	24.771	1.00	68.40	A16S	ATOM	21042	O4'	CYT	87	94.981	27.755	22.963	1.00	54.73	A16S
ATOM	20990	N4	CYT	84	99.819	15.215	25.999	1.00	68.40	A16S	ATOM	21043	C1'	CYT	87	95.595	28.374	24.076	1.00	54.73	A16S
ATOM	20991	C5	CYT	84	101.018	13.973	24.340	1.00	68.40	A16S	ATOM	21044	N1	CYT	87	96.871	27.702	24.327	1.00	47.10	A16S
ATOM	20992	C2'	CYT	84	100.168	14.336	19.918	1.00	56.45	A16S	ATOM	21045	C6	CYT	87	97.427	26.888	23.382	1.00	47.10	A16S
ATOM	20993	O2'	CYT	84	99.450	14.096	18.720	1.00	56.45	A16S	ATOM	21046	C2	CYT	87	97.519	27.905	25.558	1.00	47.10	A16S
ATOM	20994	C3'	CYT	84	101.687	14.318	19.772	1.00	56.45	A16S	ATOM	21047	O2	CYT	87	97.007	28.662	26.394	1.00	47.10	A16S
ATOM	20995	O3'	CYT	84	102.154	14.967	18.599	1.00	56.45	A16S	ATOM	21048	N3	CYT	87	98.688	27.274	25.798	1.00	47.10	A16S
ATOM	20996	P	URI	85	102.675	16.486	18.687	1.00	57.66	A16S	ATOM	21049	C4	CYT	87	99.213	26.472	24.872	1.00	47.10	A16S
ATOM	20997	O1P	URI	85	103.150	16.846	17.322	1.00	57.52	A16S	ATOM	21050	N4	CYT	87	100.357	25.859	25.156	1.00	47.10	A16S
ATOM	20998	O2P	URI	85	103.594	16.621	19.860	1.00	57.52	A16S	ATOM	21051	C5	CYT	87	98.585	26.260	23.611	1.00	47.10	A16S
ATOM	20999	O5'	URI	85	101.355	17.323	18.988	1.00	57.66	A16S	ATOM	21052	C2'	CYT	87	95.820	29.842	23.721	1.00	54.73	A16S
ATOM	21000	C5'	URI	85	100.222	17.217	18.118	1.00	57.66	A16S	ATOM	21053	O2'	CYT	87	94.717	30.620	24.145	1.00	54.73	A16S
ATOM	21001	C4'	URI	85	98.985	17.761	18.786	1.00	57.66	A16S	ATOM	21054	C3'	CYT	87	95.883	29.779	22.208	1.00	54.73	A16S
ATOM	21002	O4'	URI	85	98.746	17.047	20.027	1.00	57.66	A16S	ATOM	21055	O3'	CYT	87	95.576	31.029	21.627	1.00	54.73	A16S
ATOM	21003	C1'	URI	85	98.123	17.914	20.959	1.00	57.66	A16S	ATOM	21056	P	GUA	88	96.718	32.158	21.536	1.00	47.71	A16S
ATOM	21004	N1	URI	85	98.983	18.040	22.149	1.00	57.52	A16S	ATOM	21057	O1P	GUA	88	96.038	33.303	20.869	1.00	51.36	A16S
ATOM	21005	C6	URI	85	100.337	17.798	22.100	1.00	57.52	A16S	ATOM	21058	O2P	GUA	88	97.974	31.612	20.961	1.00	51.36	A16S
ATOM	21006	C2	URI	85	98.379	18.427	23.332	1.00	57.52	A16S	ATOM	21059	O5'	GUA	88	97.020	32.522	23.056	1.00	47.71	A16S

ATOM	21060	C5'	GUA	88	96.030	33.194	23.828	1.00	47.71	A16S	ATOM	21113	C6	GUA	90	109.140	32.813	25.847	1.00	60.56	A16S
ATOM	21061	C4'	GUA	88	96.534	33.453	25.209	1.00	47.71	A16S	ATOM	21114	O6	GUA	90	108.940	32.131	24.837	1.00	60.56	A16S
ATOM	21062	O4'	GUA	88	96.789	32.192	25.866	1.00	47.71	A16S	ATOM	21115	C5	GUA	90	108.329	33.848	26.403	1.00	60.56	A16S
ATOM	21063	C1'	GUA	88	97.861	32.343	26.772	1.00	47.71	A16S	ATOM	21116	N7	GUA	90	107.119	34.383	25.972	1.00	60.56	A16S
ATOM	21064	N9	GUA	88	98.917	31.416	26.393	1.00	51.36	A16S	ATOM	21117	C8	GUA	90	106.834	35.297	26.864	1.00	60.56	A16S
ATOM	21065	C4	GUA	88	100.039	31.116	27.130	1.00	51.36	A16S	ATOM	21118	C2'	GUA	90	108.835	37.407	28.762	1.00	70.49	A16S
ATOM	21066	N3	GUA	88	100.349	31.616	28.345	1.00	51.36	A16S	ATOM	21119	O2'	GUA	90	109.483	37.707	29.982	1.00	70.49	A16S
ATOM	21067	C2	GUA	88	101.508	31.158	28.784	1.00	51.36	A16S	ATOM	21120	C3'	GUA	90	107.934	38.526	28.262	1.00	70.49	A16S
ATOM	21068	N2	GUA	88	101.971	31.556	29.962	1.00	51.36	A16S	ATOM	21121	O3'	GUA	90	108.540	39.798	28.383	1.00	70.49	A16S
ATOM	21069	N1	GUA	88	102.300	30.276	28.094	1.00	51.36	A16S	ATOM	21122	P	GUA	91	109.293	40.430	27.108	1.00	76.84	A16S
ATOM	21070	C6	GUA	88	102.002	29.747	26.843	1.00	51.36	A16S	ATOM	21123	O1P	GUA	91	109.614	41.833	27.485	1.00	52.63	A16S
ATOM	21071	O6	GUA	88	102.789	28.963	26.300	1.00	51.36	A16S	ATOM	21124	O2P	GUA	91	108.494	40.161	25.883	1.00	52.63	A16S
ATOM	21072	C5	GUA	88	100.759	30.232	26.355	1.00	51.36	A16S	ATOM	21125	O5'	GUA	91	110.635	39.578	26.982	1.00	76.84	A16S
ATOM	21073	N7	GUA	88	100.096	29.968	25.164	1.00	51.36	A16S	ATOM	21126	C5'	GUA	91	111.571	39.528	28.068	1.00	76.84	A16S
ATOM	21074	C8	GUA	88	99.009	30.691	25.232	1.00	51.36	A16S	ATOM	21127	C4'	GUA	91	112.652	38.509	27.798	1.00	76.84	A16S
ATOM	21075	C2'	GUA	88	98.333	33.795	26.693	1.00	47.71	A16S	ATOM	21128	O4'	GUA	91	112.084	37.173	27.768	1.00	76.84	A16S
ATOM	21076	O2'	GUA	88	97.715	34.553	27.715	1.00	47.71	A16S	ATOM	21129	C1'	GUA	91	112.856	36.348	26.912	1.00	76.84	A16S
ATOM	21077	C3'	GUA	88	97.848	34.200	25.311	1.00	47.71	A16S	ATOM	21130	N9	GUA	91	112.012	35.828	25.837	1.00	52.63	A16S
ATOM	21078	O3'	GUA	88	97.676	35.603	25.200	1.00	47.71	A16S	ATOM	21131	C4	GUA	91	112.345	34.792	24.999	1.00	52.63	A16S
ATOM	21079	P	URI	89	98.849	36.494	24.566	1.00	61.77	A16S	ATOM	21132	N3	GUA	91	113.478	34.061	25.062	1.00	52.63	A16S
ATOM	21080	O1P	URI	89	98.325	37.876	24.554	1.00	62.31	A16S	ATOM	21133	C2	GUA	91	113.543	33.170	24.090	1.00	52.63	A16S
ATOM	21081	O2P	URI	89	99.315	35.886	23.301	1.00	62.31	A16S	ATOM	21134	N2	GUA	91	114.616	32.367	23.995	1.00	52.63	A16S
ATOM	21082	O5'	URI	89	100.032	36.390	25.635	1.00	61.77	A16S	ATOM	21135	N1	GUA	91	112.567	33.004	23.135	1.00	52.63	A16S
ATOM	21083	C5'	URI	89	99.843	36.857	26.990	1.00	61.77	A16S	ATOM	21136	C6	GUA	91	111.396	33.749	23.048	1.00	52.63	A16S
ATOM	21084	C4'	URI	89	101.020	36.480	27.867	1.00	61.77	A16S	ATOM	21137	O6	GUA	91	110.600	33.536	22.130	1.00	52.63	A16S
ATOM	21085	O4'	URI	89	101.092	35.039	28.011	1.00	61.77	A16S	ATOM	21138	C5	GUA	91	111.310	34.707	24.089	1.00	52.63	A16S
ATOM	21086	C1'	URI	89	102.451	34.627	28.078	1.00	61.77	A16S	ATOM	21139	N7	GUA	91	110.325	35.644	24.371	1.00	52.63	A16S
ATOM	21087	N1	URI	89	102.737	33.771	26.915	1.00	62.31	A16S	ATOM	21140	C8	GUA	91	110.778	36.280	25.421	1.00	52.63	A16S
ATOM	21088	C6	URI	89	101.909	33.763	25.813	1.00	62.31	A16S	ATOM	21141	C2'	GUA	91	113.978	37.212	26.336	1.00	76.84	A16S
ATOM	21089	C2	URI	89	103.873	32.971	26.957	1.00	62.31	A16S	ATOM	21142	O2'	GUA	91	115.148	37.036	27.106	1.00	76.84	A16S
ATOM	21090	O2	URI	89	104.637	32.946	27.911	1.00	62.31	A16S	ATOM	21143	C3'	GUA	91	113.395	38.611	26.478	1.00	76.84	A16S
ATOM	21091	N3	URI	89	104.076	32.202	25.839	1.00	62.31	A16S	ATOM	21144	O3'	GUA	91	114.395	39.625	26.463	1.00	76.84	A16S
ATOM	21092	C4	URI	89	103.278	32.145	24.710	1.00	62.31	A16S	ATOM	21145	P	URI	92	114.611	40.505	25.128	1.00	75.24	A16S
ATOM	21093	O4	URI	89	103.563	31.359	23.803	1.00	62.31	A16S	ATOM	21146	O1P	URI	92	115.481	41.649	25.507	1.00	40.56	A16S
ATOM	21094	C5	URI	89	102.136	33.000	24.743	1.00	62.31	A16S	ATOM	21147	O2P	URI	92	113.295	40.767	24.468	1.00	40.56	A16S
ATOM	21095	C2'	URI	89	103.318	35.882	28.065	1.00	61.77	A16S	ATOM	21148	O5'	URI	92	115.447	39.541	24.179	1.00	75.24	A16S
ATOM	21096	O2'	URI	89	103.683	36.227	29.391	1.00	61.77	A16S	ATOM	21149	C5'	URI	92	116.708	39.020	24.606	1.00	75.24	A16S
ATOM	21097	C3'	URI	89	102.395	36.873	27.356	1.00	61.77	A16S	ATOM	21150	C4'	URI	92	117.059	37.788	23.813	1.00	75.24	A16S
ATOM	21098	O3'	URI	89	102.719	38.236	27.601	1.00	61.77	A16S	ATOM	21151	O4'	URI	92	116.017	36.786	23.986	1.00	75.24	A16S
ATOM	21099	P	GUA	90	103.764	38.982	26.632	1.00	70.49	A16S	ATOM	21152	C1'	URI	92	115.898	36.006	22.804	1.00	75.24	A16S
ATOM	21100	O1P	GUA	90	103.486	40.430	26.774	1.00	60.56	A16S	ATOM	21153	N1	URI	92	114.542	36.152	22.242	1.00	40.56	A16S
ATOM	21101	O2P	GUA	90	103.733	38.353	25.281	1.00	60.56	A16S	ATOM	21154	C6	URI	92	113.645	37.086	22.705	1.00	40.56	A16S
ATOM	21102	O5'	GUA	90	105.175	38.645	27.284	1.00	70.49	A16S	ATOM	21155	C2	URI	92	114.199	35.302	21.189	1.00	40.56	A16S
ATOM	21103	C5'	GUA	90	105.422	38.974	28.650	1.00	70.49	A16S	ATOM	21156	O2	URI	92	114.960	34.452	20.744	1.00	40.56	A16S
ATOM	21104	C4'	GUA	90	106.701	38.342	29.125	1.00	70.49	A16S	ATOM	21157	N3	URI	92	112.942	35.483	20.669	1.00	40.56	A16S
ATOM	21105	O4'	GUA	90	106.555	36.900	29.190	1.00	70.49	A16S	ATOM	21158	C4	URI	92	112.006	36.402	21.070	1.00	40.56	A16S
ATOM	21106	C1'	GUA	90	107.823	36.294	29.005	1.00	70.49	A16S	ATOM	21159	O4	URI	92	110.917	36.452	20.478	1.00	40.56	A16S
ATOM	21107	N9	GUA	90	107.785	35.395	27.855	1.00	60.56	A16S	ATOM	21160	C5	URI	92	112.423	37.241	22.169	1.00	40.56	A16S
ATOM	21108	C4	GUA	90	108.751	34.464	27.561	1.00	60.56	A16S	ATOM	21161	C2'	URI	92	116.941	36.524	21.820	1.00	75.24	A16S
ATOM	21109	N3	GUA	90	109.869	34.236	28.285	1.00	60.56	A16S	ATOM	21162	O2'	URI	92	118.126	35.755	21.916	1.00	75.24	A16S
ATOM	21110	C2	GUA	90	110.613	33.283	27.758	1.00	60.56	A16S	ATOM	21163	C3'	URI	92	117.121	37.952	22.307	1.00	75.24	A16S
ATOM	21111	N2	GUA	90	111.760	32.936	28.354	1.00	60.56	A16S	ATOM	21164	O3'	URI	92	118.305	38.542	21.817	1.00	75.24	A16S
ATOM	21112	N1	GUA	90	110.286	32.601	26.608	1.00	60.56	A16S	ATOM	21165	P	CYT	93	118.259	39.300	20.399	1.00	68.58	A16S

ATOM	21166	O1P	CYT	93	119.588	39.939	20.200	1.00	52.16	A16S	ATOM	21219	N2	GUA	95	108.520	36.425	8.305	1.00	41.07	A16S
ATOM	21167	O2P	CYT	93	117.022	40.125	20.365	1.00	52.16	A16S	ATOM	21220	N1	GUA	95	109.425	37.937	9.784	1.00	41.07	A16S
ATOM	21168	O5'	CYT	93	118.081	38.131	19.330	1.00	68.58	A16S	ATOM	21221	C6	GUA	95	110.437	38.596	10.475	1.00	41.07	A16S
ATOM	21169	C5'	CYT	93	119.067	37.094	19.215	1.00	68.58	A16S	ATOM	21222	O6	GUA	95	110.152	39.490	11.283	1.00	41.07	A16S
ATOM	21170	C4'	CYT	93	118.778	36.215	18.030	1.00	68.58	A16S	ATOM	21223	C5	GUA	95	111.713	38.100	10.126	1.00	41.07	A16S
ATOM	21171	O4'	CYT	93	117.640	35.361	18.298	1.00	68.58	A16S	ATOM	21224	N7	GUA	95	112.973	38.472	10.570	1.00	41.07	A16S
ATOM	21172	C1'	CYT	93	116.932	35.127	17.090	1.00	68.58	A16S	ATOM	21225	C8	GUA	95	113.787	37.671	9.942	1.00	41.07	A16S
ATOM	21173	N1	CYT	93	115.563	35.651	17.232	1.00	52.16	A16S	ATOM	21226	C2'	GUA	95	113.535	36.018	6.800	1.00	54.79	A16S
ATOM	21174	C6	CYT	93	115.276	36.626	18.143	1.00	52.16	A16S	ATOM	21227	O2'	GUA	95	113.346	34.805	6.114	1.00	54.79	A16S
ATOM	21175	C2	CYT	93	114.548	35.135	16.406	1.00	52.16	A16S	ATOM	21228	C3'	GUA	95	114.845	36.701	6.450	1.00	54.79	A16S
ATOM	21176	O2	CYT	93	114.831	34.250	15.569	1.00	52.16	A16S	ATOM	21229	O3'	GUA	95	115.160	36.650	5.074	1.00	54.79	A16S
ATOM	21177	N3	CYT	93	113.286	35.612	16.534	1.00	52.16	A16S	ATOM	21230	P	CYT	96	115.104	38.003	4.220	1.00	46.75	A16S
ATOM	21178	C4	CYT	93	113.021	36.561	17.429	1.00	52.16	A16S	ATOM	21231	O1P	CYT	96	115.856	37.778	2.948	1.00	40.00	A16S
ATOM	21179	N4	CYT	93	111.768	36.996	17.521	1.00	52.16	A16S	ATOM	21232	O2P	CYT	96	115.516	39.105	5.160	1.00	40.00	A16S
ATOM	21180	C5	CYT	93	114.032	37.105	18.271	1.00	52.16	A16S	ATOM	21233	O5'	CYT	96	113.563	38.142	3.864	1.00	46.75	A16S
ATOM	21181	C2'	CYT	93	117.679	35.849	15.971	1.00	68.58	A16S	ATOM	21234	C5'	CYT	96	112.951	37.157	3.053	1.00	46.75	A16S
ATOM	21182	O2'	CYT	93	118.554	34.946	15.327	1.00	68.58	A16S	ATOM	21235	C4'	CYT	96	111.464	37.185	3.220	1.00	46.75	A16S
ATOM	21183	C3'	CYT	93	118.407	36.933	16.749	1.00	68.58	A16S	ATOM	21236	O4'	CYT	96	111.113	37.021	4.612	1.00	46.75	A16S
ATOM	21184	O3'	CYT	93	119.532	37.445	16.065	1.00	68.58	A16S	ATOM	21237	C1'	CYT	96	109.858	37.632	4.853	1.00	46.75	A16S
ATOM	21185	P	ADE	94	119.536	38.985	15.592	1.00	61.27	A16S	ATOM	21238	N1	CYT	96	110.004	38.650	5.904	1.00	40.00	A16S
ATOM	21186	O1P	ADE	94	120.974	39.348	15.504	1.00	50.94	A16S	ATOM	21239	C6	CYT	96	111.223	38.937	6.456	1.00	40.00	A16S
ATOM	21187	O2P	ADE	94	118.633	39.784	16.463	1.00	50.94	A16S	ATOM	21240	C2	CYT	96	108.861	39.344	6.319	1.00	40.00	A16S
ATOM	21188	O5'	ADE	94	118.888	38.950	14.133	1.00	61.27	A16S	ATOM	21241	O2	CYT	96	107.766	39.061	5.804	1.00	40.00	A16S
ATOM	21189	C5'	ADE	94	119.670	38.555	12.995	1.00	61.27	A16S	ATOM	21242	N3	CYT	96	108.975	40.310	7.258	1.00	40.00	A16S
ATOM	21190	C4'	ADE	94	118.951	37.488	12.217	1.00	61.27	A16S	ATOM	21243	C4	CYT	96	110.171	40.603	7.770	1.00	40.00	A16S
ATOM	21191	O4'	ADE	94	118.147	36.727	13.148	1.00	61.27	A16S	ATOM	21244	N4	CYT	96	110.238	41.588	8.670	1.00	40.00	A16S
ATOM	21192	C1'	ADE	94	117.004	36.227	12.484	1.00	61.27	A16S	ATOM	21245	C5	CYT	96	111.353	39.903	7.377	1.00	40.00	A16S
ATOM	21193	N9	ADE	94	115.800	36.688	13.170	1.00	50.94	A16S	ATOM	21246	C2'	CYT	96	109.415	38.281	3.545	1.00	46.75	A16S
ATOM	21194	C4	ADE	94	114.523	36.273	12.864	1.00	50.94	A16S	ATOM	21247	O2'	CYT	96	108.540	37.405	2.862	1.00	46.75	A16S
ATOM	21195	N3	ADE	94	114.163	35.348	11.954	1.00	50.94	A16S	ATOM	21248	C3'	CYT	96	110.744	38.453	2.831	1.00	46.75	A16S
ATOM	21196	C2	ADE	94	112.838	35.228	11.907	1.00	50.94	A16S	ATOM	21249	O3'	CYT	96	110.570	38.556	1.434	1.00	46.75	A16S
ATOM	21197	N1	ADE	94	111.900	35.893	12.600	1.00	50.94	A16S	ATOM	21250	P	GUA	97	110.770	39.983	0.721	1.00	56.11	A16S
ATOM	21198	C6	ADE	94	112.298	36.831	13.489	1.00	50.94	A16S	ATOM	21251	O1P	GUA	97	110.344	39.818	-0.702	1.00	33.45	A16S
ATOM	21199	N6	ADE	94	111.368	37.534	14.133	1.00	50.94	A16S	ATOM	21252	O2P	GUA	97	112.149	40.445	1.025	1.00	33.45	A16S
ATOM	21200	C5	ADE	94	113.680	37.025	13.661	1.00	50.94	A16S	ATOM	21253	O5'	GUA	97	109.720	40.934	1.461	1.00	56.11	A16S
ATOM	21201	N7	ADE	94	114.412	37.859	14.498	1.00	50.94	A16S	ATOM	21254	C5'	GUA	97	108.316	40.847	1.151	1.00	56.11	A16S
ATOM	21202	C8	ADE	94	115.663	37.616	14.173	1.00	50.94	A16S	ATOM	21255	C4'	GUA	97	107.520	41.874	1.924	1.00	56.11	A16S
ATOM	21203	C2'	ADE	94	117.043	36.723	11.039	1.00	61.27	A16S	ATOM	21256	O4'	GUA	97	107.606	41.623	3.349	1.00	56.11	A16S
ATOM	21204	O2'	ADE	94	117.576	35.703	10.219	1.00	61.27	A16S	ATOM	21257	C1'	GUA	97	107.473	42.843	4.062	1.00	56.11	A16S
ATOM	21205	C3'	ADE	94	117.962	37.932	11.146	1.00	61.27	A16S	ATOM	21258	N9	GUA	97	108.669	43.053	4.869	1.00	33.45	A16S
ATOM	21206	O3'	ADE	94	118.605	38.176	9.896	1.00	61.27	A16S	ATOM	21259	C4	GUA	97	108.817	43.970	5.884	1.00	33.45	A16S
ATOM	21207	P	GUA	95	117.852	39.029	8.751	1.00	54.79	A16S	ATOM	21260	N3	GUA	97	107.889	44.857	6.299	1.00	33.45	A16S
ATOM	21208	O1P	GUA	95	118.867	39.324	7.706	1.00	41.07	A16S	ATOM	21261	C2	GUA	97	108.341	45.608	7.303	1.00	33.45	A16S
ATOM	21209	O2P	GUA	95	117.095	40.135	9.373	1.00	41.07	A16S	ATOM	21262	N2	GUA	97	107.570	46.566	7.835	1.00	33.45	A16S
ATOM	21210	O5'	GUA	95	116.751	38.056	8.136	1.00	54.79	A16S	ATOM	21263	N1	GUA	97	109.586	45.483	7.854	1.00	33.45	A16S
ATOM	21211	C5'	GUA	95	117.101	36.760	7.622	1.00	54.79	A16S	ATOM	21264	C6	GUA	97	110.548	44.583	7.439	1.00	33.45	A16S
ATOM	21212	C4'	GUA	95	115.855	35.972	7.312	1.00	54.79	A16S	ATOM	21265	O6	GUA	97	111.633	44.564	7.996	1.00	33.45	A16S
ATOM	21213	O4'	GUA	95	115.130	35.695	8.536	1.00	54.79	A16S	ATOM	21266	C5	GUA	97	110.094	43.780	6.366	1.00	33.45	A16S
ATOM	21214	C1'	GUA	95	113.733	35.740	8.286	1.00	54.79	A16S	ATOM	21267	N7	GUA	97	110.742	42.777	5.662	1.00	33.45	A16S
ATOM	21215	N9	GUA	95	113.139	36.789	9.113	1.00	41.07	A16S	ATOM	21268	C8	GUA	97	109.863	42.378	4.783	1.00	33.45	A16S
ATOM	21216	C4	GUA	95	111.799	37.074	9.217	1.00	41.07	A16S	ATOM	21269	C2'	GUA	97	107.285	43.948	3.036	1.00	56.11	A16S
ATOM	21217	N3	GUA	95	110.806	36.445	8.559	1.00	41.07	A16S	ATOM	21270	O2'	GUA	97	105.892	44.160	2.902	1.00	56.11	A16S
ATOM	21218	C2	GUA	95	109.621	36.926	8.879	1.00	41.07	A16S	ATOM	21271	C3'	GUA	97	107.932	43.326	1.802	1.00	56.11	A16S

ATOM	21272	O3'	GUA	97	107.493	43.916	0.597	1.00	56.11	A16S	ATOM	21325	C4	GUA	100	116.353	52.946	5.315	1.00	45.35	A16S
ATOM	21273	P	GUA	98	108.385	45.063	-0.079	1.00	56.21	A16S	ATOM	21326	N3	GUA	100	117.347	53.133	6.201	1.00	45.35	A16S
ATOM	21274	O1P	GUA	98	107.681	45.439	-1.326	1.00	45.94	A16S	ATOM	21327	C2	GUA	100	118.197	52.124	6.210	1.00	45.35	A16S
ATOM	21275	O2P	GUA	98	109.795	44.599	-0.141	1.00	45.94	A16S	ATOM	21328	N2	GUA	100	119.238	52.146	7.060	1.00	45.35	A16S
ATOM	21276	O5'	GUA	98	108.302	46.278	0.948	1.00	56.21	A16S	ATOM	21329	N1	GUA	100	118.088	51.019	5.396	1.00	45.35	A16S
ATOM	21277	C5'	GUA	98	107.042	46.893	1.212	1.00	56.21	A16S	ATOM	21330	C6	GUA	100	117.068	50.809	4.472	1.00	45.35	A16S
ATOM	21278	C4'	GUA	98	107.136	47.900	2.339	1.00	56.21	A16S	ATOM	21331	O6	GUA	100	117.058	49.784	3.781	1.00	45.35	A16S
ATOM	21279	O4'	GUA	98	107.614	47.282	3.556	1.00	56.21	A16S	ATOM	21332	C5	GUA	100	116.142	51.881	4.468	1.00	45.35	A16S
ATOM	21280	C1'	GUA	98	108.010	48.300	4.452	1.00	56.21	A16S	ATOM	21333	N7	GUA	100	114.999	52.072	3.712	1.00	45.35	A16S
ATOM	21281	N9	GUA	98	109.276	47.943	5.072	1.00	45.94	A16S	ATOM	21334	C8	GUA	100	114.550	53.235	4.095	1.00	45.35	A16S
ATOM	21282	C4	GUA	98	109.821	48.546	6.179	1.00	45.94	A16S	ATOM	21335	C2'	GUA	100	116.266	56.062	4.951	1.00	41.04	A16S
ATOM	21283	N3	GUA	98	109.275	49.568	6.877	1.00	45.94	A16S	ATOM	21336	O2'	GUA	100	116.638	57.124	5.803	1.00	41.04	A16S
ATOM	21284	C2	GUA	98	110.050	49.950	7.884	1.00	45.94	A16S	ATOM	21337	C3'	GUA	100	115.531	56.557	3.721	1.00	41.04	A16S
ATOM	21285	N2	GUA	98	109.671	50.970	8.676	1.00	45.94	A16S	ATOM	21338	O3'	GUA	100	116.162	57.700	3.161	1.00	41.04	A16S
ATOM	21286	N1	GUA	98	111.256	49.362	8.184	1.00	45.94	A16S	ATOM	21339	P	GUA	101	116.959	57.556	1.771	1.00	37.84	A16S
ATOM	21287	C6	GUA	98	111.829	48.305	7.481	1.00	45.94	A16S	ATOM	21340	O1P	GUA	101	117.299	58.917	1.305	1.00	56.53	A16S
ATOM	21288	O6	GUA	98	112.920	47.840	7.838	1.00	45.94	A16S	ATOM	21341	O2P	GUA	101	116.169	56.660	0.887	1.00	56.53	A16S
ATOM	21289	C5	GUA	98	111.017	47.899	6.395	1.00	45.94	A16S	ATOM	21342	O5'	GUA	101	118.296	56.793	2.183	1.00	37.84	A16S
ATOM	21290	N7	GUA	98	111.221	46.909	5.443	1.00	45.94	A16S	ATOM	21343	C5'	GUA	101	118.830	56.934	3.503	1.00	37.84	A16S
ATOM	21291	C8	GUA	98	110.162	46.970	4.681	1.00	45.94	A16S	ATOM	21344	C4'	GUA	101	119.823	55.834	3.827	1.00	37.84	A16S
ATOM	21292	C2'	GUA	98	108.123	49.595	3.654	1.00	56.21	A16S	ATOM	21345	O4'	GUA	101	119.223	54.501	3.779	1.00	37.84	A16S
ATOM	21293	O2'	GUA	98	107.023	50.402	4.022	1.00	56.21	A16S	ATOM	21346	C1'	GUA	101	120.270	53.537	3.781	1.00	37.84	A16S
ATOM	21294	C3'	GUA	98	108.067	49.092	2.210	1.00	56.21	A16S	ATOM	21347	N9	GUA	101	120.115	52.548	2.707	1.00	56.53	A16S
ATOM	21295	O3'	GUA	98	107.545	50.093	1.343	1.00	56.21	A16S	ATOM	21348	C4	GUA	101	119.177	52.504	1.715	1.00	56.53	A16S
ATOM	21296	P	CYT	99	108.550	50.970	0.446	1.00	54.88	A16S	ATOM	21349	N3	GUA	101	118.147	53.349	1.573	1.00	56.53	A16S
ATOM	21297	O1P	CYT	99	107.690	51.668	-0.553	1.00	40.31	A16S	ATOM	21350	C2	GUA	101	117.429	53.065	0.502	1.00	56.53	A16S
ATOM	21298	O2P	CYT	99	109.679	50.119	-0.020	1.00	40.31	A16S	ATOM	21351	N2	GUA	101	116.347	53.822	0.201	1.00	56.53	A16S
ATOM	21299	O5'	CYT	99	109.147	52.028	1.472	1.00	54.88	A16S	ATOM	21352	N1	GUA	101	117.712	52.022	-0.362	1.00	56.53	A16S
ATOM	21300	C5'	CYT	99	108.348	53.136	1.889	1.00	54.88	A16S	ATOM	21353	C6	GUA	101	118.776	51.137	-0.222	1.00	56.53	A16S
ATOM	21301	C4'	CYT	99	108.984	53.842	3.051	1.00	54.88	A16S	ATOM	21354	O6	GUA	101	118.950	50.238	-1.049	1.00	56.53	A16S
ATOM	21302	O4'	CYT	99	109.041	52.952	4.191	1.00	54.88	A16S	ATOM	21355	C5	GUA	101	119.539	51.430	0.913	1.00	56.53	A16S
ATOM	21303	C1'	CYT	99	110.198	53.239	4.961	1.00	54.88	A16S	ATOM	21356	N7	GUA	101	120.663	50.791	1.412	1.00	56.53	A16S
ATOM	21304	N1	CYT	99	111.097	52.085	4.881	1.00	40.31	A16S	ATOM	21357	C8	GUA	101	120.964	51.475	2.481	1.00	56.53	A16S
ATOM	21305	C6	CYT	99	110.990	51.182	3.859	1.00	40.31	A16S	ATOM	21358	C2'	GUA	101	121.563	54.310	3.536	1.00	37.84	A16S
ATOM	21306	C2	CYT	99	112.102	51.949	5.847	1.00	40.31	A16S	ATOM	21359	O2'	GUA	101	122.213	54.519	4.776	1.00	37.84	A16S
ATOM	21307	O2	CYT	99	112.150	52.762	6.788	1.00	40.31	A16S	ATOM	21360	C3'	GUA	101	121.045	55.615	2.952	1.00	37.84	A16S
ATOM	21308	N3	CYT	99	112.995	50.944	5.723	1.00	40.31	A16S	ATOM	21361	O3'	GUA	101	122.075	56.586	3.021	1.00	37.84	A16S
ATOM	21309	C4	CYT	99	112.910	50.099	4.691	1.00	40.31	A16S	ATOM	21362	P	ADE	102	123.180	56.642	1.845	1.00	42.89	A16S
ATOM	21310	N4	CYT	99	113.847	49.161	4.574	1.00	40.31	A16S	ATOM	21363	O1P	ADE	102	123.687	55.256	1.593	1.00	52.38	A16S
ATOM	21311	C5	CYT	99	111.868	50.188	3.725	1.00	40.31	A16S	ATOM	21364	O2P	ADE	102	124.147	57.720	2.173	1.00	52.38	A16S
ATOM	21312	C2'	CYT	99	110.895	54.429	4.307	1.00	54.88	A16S	ATOM	21365	O5'	ADE	102	122.350	57.070	0.552	1.00	42.89	A16S
ATOM	21313	O2'	CYT	99	110.501	55.640	4.926	1.00	54.88	A16S	ATOM	21366	C5'	ADE	102	121.581	58.285	0.548	1.00	42.89	A16S
ATOM	21314	C3'	CYT	99	110.421	54.284	2.868	1.00	54.88	A16S	ATOM	21367	C4'	ADE	102	121.901	59.118	-0.675	1.00	42.89	A16S
ATOM	21315	O3'	CYT	99	110.552	55.464	2.109	1.00	54.88	A16S	ATOM	21368	O4'	ADE	102	121.589	58.365	-1.877	1.00	42.89	A16S
ATOM	21316	P	GUA	100	111.890	55.697	1.255	1.00	41.04	A16S	ATOM	21369	C1'	ADE	102	120.677	59.093	-2.665	1.00	42.89	A16S
ATOM	21317	O1P	GUA	100	111.680	57.057	0.687	1.00	45.35	A16S	ATOM	21370	N9	ADE	102	119.808	58.137	-3.325	1.00	52.38	A16S
ATOM	21318	O2P	GUA	100	112.137	54.549	0.329	1.00	45.35	A16S	ATOM	21371	C4	ADE	102	119.189	57.064	-2.743	1.00	52.38	A16S
ATOM	21319	O5'	GUA	100	113.013	55.771	2.386	1.00	41.04	A16S	ATOM	21372	N3	ADE	102	119.220	56.709	-1.446	1.00	52.38	A16S
ATOM	21320	C5'	GUA	100	112.987	56.861	3.317	1.00	41.04	A16S	ATOM	21373	C2	ADE	102	118.524	55.600	-1.253	1.00	52.38	A16S
ATOM	21321	C4'	GUA	100	114.140	56.794	4.281	1.00	41.04	A16S	ATOM	21374	N1	ADE	102	117.850	54.856	-2.142	1.00	52.38	A16S
ATOM	21322	O4'	GUA	100	113.942	55.709	5.216	1.00	41.04	A16S	ATOM	21375	C6	ADE	102	117.841	55.242	-3.434	1.00	52.38	A16S
ATOM	21323	C1'	GUA	100	115.202	55.179	5.603	1.00	41.04	A16S	ATOM	21376	N6	ADE	102	117.174	54.504	-4.320	1.00	52.38	A16S
ATOM	21324	N9	GUA	100	115.342	53.834	5.044	1.00	45.35	A16S	ATOM	21377	C5	ADE	102	118.540	56.405	-3.768	1.00	52.38	A16S

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ATOM  21378  N7  ADE  102     118.727  57.068  -4.972  1.00 52.38      A16S
ATOM  21379  C8  ADE  102     119.475  58.092  -4.648  1.00 52.38      A16S
ATOM  21380  C2' ADE  102     119.982  60.071  -1.722  1.00 42.89      A16S
ATOM  21381  O2' ADE  102     119.477  61.188  -2.435  1.00 42.89      A16S
ATOM  21382  C3' ADE  102     121.122  60.427  -0.771  1.00 42.89      A16S
ATOM  21383  O3' ADE  102     121.933  61.399  -1.421  1.00 42.89      A16S
ATOM  21384  P   CYT  103     122.848  62.396  -0.567  1.00 47.25      A16S
ATOM  21385  O1P CYT  103     123.064  63.575  -1.445  1.00 57.44      A16S
ATOM  21386  O2P CYT  103     124.019  61.640  -0.054  1.00 57.44      A16S
ATOM  21387  O5' CYT  103     121.946  62.845   0.670  1.00 47.25      A16S
ATOM  21388  C5' CYT  103     120.851  63.777   0.506  1.00 47.25      A16S
ATOM  21389  C4' CYT  103     120.293  64.180   1.854  1.00 47.25      A16S
ATOM  21390  O4' CYT  103     119.805  62.998   2.531  1.00 47.25      A16S
ATOM  21391  C1' CYT  103     120.062  63.102   3.921  1.00 47.25      A16S
ATOM  21392  N1  CYT  103     120.882  61.961   4.356  1.00 57.44      A16S
ATOM  21393  C6  CYT  103     121.639  61.243   3.471  1.00 57.44      A16S
ATOM  21394  C2  CYT  103     120.873  61.625   5.707  1.00 57.44      A16S
ATOM  21395  O2  CYT  103     120.179  62.305   6.493  1.00 57.44      A16S
ATOM  21396  N3  CYT  103     121.618  60.578   6.131  1.00 57.44      A16S
ATOM  21397  C4  CYT  103     122.350  59.882   5.260  1.00 57.44      A16S
ATOM  21398  N4  CYT  103     123.064  58.858   5.725  1.00 57.44      A16S
ATOM  21399  C5  CYT  103     122.380  60.206   3.877  1.00 57.44      A16S
ATOM  21400  C2' CYT  103     120.754  64.435   4.188  1.00 47.25      A16S
ATOM  21401  O2' CYT  103     119.833  65.361   4.727  1.00 47.25      A16S
ATOM  21402  C3' CYT  103     121.310  64.775   2.811  1.00 47.25      A16S
ATOM  21403  O3' CYT  103     121.466  66.168   2.632  1.00 47.25      A16S
ATOM  21404  P   GUA  104     122.871  66.852   2.984  1.00 37.96      A16S
ATOM  21405  O1P GUA  104     122.646  68.324   2.933  1.00 61.68      A16S
ATOM  21406  O2P GUA  104     123.937  66.232   2.151  1.00 61.68      A16S
ATOM  21407  O5' GUA  104     123.148  66.438   4.491  1.00 37.96      A16S
ATOM  21408  C5' GUA  104     122.488  67.112   5.547  1.00 37.96      A16S
ATOM  21409  C4' GUA  104     122.819  66.463   6.844  1.00 37.96      A16S
ATOM  21410  O4' GUA  104     122.356  65.096   6.801  1.00 37.96      A16S
ATOM  21411  C1' GUA  104     123.282  64.252   7.468  1.00 37.96      A16S
ATOM  21412  N9  GUA  104     123.880  63.368   6.470  1.00 61.68      A16S
ATOM  21413  C4  GUA  104     124.507  62.174   6.712  1.00 61.68      A16S
ATOM  21414  N3  GUA  104     124.617  61.571   7.909  1.00 61.68      A16S
ATOM  21415  C2  GUA  104     125.298  60.452   7.829  1.00 61.68      A16S
ATOM  21416  N2  GUA  104     125.489  59.718   8.923  1.00 61.68      A16S
ATOM  21417  N1  GUA  104     125.842  59.969   6.672  1.00 61.68      A16S
ATOM  21418  C6  GUA  104     125.749  60.577   5.429  1.00 61.68      A16S
ATOM  21419  O6  GUA  104     126.299  60.065   4.449  1.00 61.68      A16S
ATOM  21420  C5  GUA  104     125.002  61.766   5.494  1.00 61.68      A16S
ATOM  21421  N7  GUA  104     124.652  62.660   4.495  1.00 61.68      A16S
ATOM  21422  C8  GUA  104     123.979  63.588   5.117  1.00 61.68      A16S
ATOM  21423  C2' GUA  104     124.351  65.159   8.079  1.00 37.96      A16S
ATOM  21424  O2' GUA  104     124.017  65.500   9.416  1.00 37.96      A16S
ATOM  21425  C3' GUA  104     124.296  66.343   7.126  1.00 37.96      A16S
ATOM  21426  O3' GUA  104     124.849  67.535   7.635  1.00 37.96      A16S
ATOM  21427  P   GUA  105     126.184  68.112   6.963  1.00 41.38      A16S
ATOM  21428  O1P GUA  105     126.485  69.445   7.542  1.00 42.06      A16S
ATOM  21429  O2P GUA  105     125.990  67.954   5.505  1.00 42.06      A16S
ATOM  21430  O5' GUA  105     127.331  67.116   7.424  1.00 41.38      A16S
ATOM  21431  C5' GUA  105     127.681  67.000   8.806  1.00 41.38      A16S
ATOM  21432  C4' GUA  105     128.765  65.970   8.982  1.00 41.38      A16S
ATOM  21433  O4' GUA  105     128.250  64.672   8.574  1.00 41.38      A16S
ATOM  21434  C1' GUA  105     129.289  63.905   7.988  1.00 41.38      A16S
ATOM  21435  N9  GUA  105     128.996  63.734   6.565  1.00 42.06      A16S
ATOM  21436  C4  GUA  105     129.769  63.050   5.658  1.00 42.06      A16S
ATOM  21437  N3  GUA  105     130.911  62.392   5.933  1.00 42.06      A16S
ATOM  21438  C2  GUA  105     131.430  61.831   4.853  1.00 42.06      A16S
ATOM  21439  N2  GUA  105     132.558  61.108   4.950  1.00 42.06      A16S
ATOM  21440  N1  GUA  105     130.880  61.931   3.598  1.00 42.06      A16S
ATOM  21441  C6  GUA  105     129.716  62.615   3.292  1.00 42.06      A16S
ATOM  21442  O6  GUA  105     129.327  62.658   2.127  1.00 42.06      A16S
ATOM  21443  C5  GUA  105     129.133  63.200   4.444  1.00 42.06      A16S
ATOM  21444  N7  GUA  105     127.974  63.947   4.585  1.00 42.06      A16S
ATOM  21445  C8  GUA  105     127.930  64.238   5.857  1.00 42.06      A16S
ATOM  21446  C2' GUA  105     130.568  64.717   8.145  1.00 41.38      A16S
ATOM  21447  O2' GUA  105     131.183  64.406   9.382  1.00 41.38      A16S
ATOM  21448  C3' GUA  105     130.018  66.131   8.133  1.00 41.38      A16S
ATOM  21449  O3' GUA  105     130.960  67.093   8.590  1.00 41.38      A16S
ATOM  21450  P   GUA  106     131.824  67.924   7.502  1.00 52.40      A16S
ATOM  21451  O1P GUA  106     132.629  68.972   8.214  1.00 32.44      A16S
ATOM  21452  O2P GUA  106     130.899  68.311   6.404  1.00 32.44      A16S
ATOM  21453  O5' GUA  106     132.839  66.865   6.882  1.00 52.40      A16S
ATOM  21454  C5' GUA  106     133.655  66.037   7.735  1.00 52.40      A16S
ATOM  21455  C4' GUA  106     134.577  65.178   6.909  1.00 52.40      A16S
ATOM  21456  O4' GUA  106     133.795  64.278   6.091  1.00 52.40      A16S
ATOM  21457  C1' GUA  106     134.449  64.070   4.852  1.00 52.40      A16S
ATOM  21458  N9  GUA  106     133.527  64.422   3.772  1.00 32.44      A16S
ATOM  21459  C4  GUA  106     133.683  64.169   2.425  1.00 32.44      A16S
ATOM  21460  N3  GUA  106     134.748  63.590   1.840  1.00 32.44      A16S
ATOM  21461  C2  GUA  106     134.576  63.444   0.527  1.00 32.44      A16S
ATOM  21462  N2  GUA  106     135.532  62.870  -0.224  1.00 32.44      A16S
ATOM  21463  N1  GUA  106     133.454  63.844  -0.151  1.00 32.44      A16S
ATOM  21464  C6  GUA  106     132.352  64.445   0.429  1.00 32.44      A16S
ATOM  21465  O6  GUA  106     131.393  64.762  -0.276  1.00 32.44      A16S
ATOM  21466  C5  GUA  106     132.518  64.603   1.836  1.00 32.44      A16S
ATOM  21467  N7  GUA  106     131.665  65.144   2.782  1.00 32.44      A16S
ATOM  21468  C8  GUA  106     132.310  65.028   3.909  1.00 32.44      A16S
ATOM  21469  C2' GUA  106     135.758  64.854   4.884  1.00 52.40      A16S
ATOM  21470  O2' GUA  106     136.782  64.010   5.367  1.00 52.40      A16S
ATOM  21471  C3' GUA  106     135.444  65.922   5.912  1.00 52.40      A16S
ATOM  21472  O3' GUA  106     136.623  66.441   6.503  1.00 52.40      A16S
ATOM  21473  P   URI  107     137.179  67.869   6.012  1.00 41.25      A16S
ATOM  21474  O1P URI  107     138.201  68.341   6.989  1.00 36.84      A16S
ATOM  21475  O2P URI  107     136.005  68.736   5.694  1.00 36.84      A16S
ATOM  21476  O5' URI  107     137.893  67.530   4.634  1.00 41.25      A16S
ATOM  21477  C5' URI  107     138.852  66.487   4.549  1.00 41.25      A16S
ATOM  21478  C4' URI  107     139.020  66.075   3.122  1.00 41.25      A16S
ATOM  21479  O4' URI  107     137.787  65.511   2.640  1.00 41.25      A16S
ATOM  21480  C1' URI  107     137.664  65.768   1.258  1.00 41.25      A16S
ATOM  21481  N1  URI  107     136.358  66.392   1.004  1.00 36.84      A16S
ATOM  21482  C6  URI  107     135.604  66.912   2.024  1.00 36.84      A16S
ATOM  21483  C2  URI  107     135.895  66.412  -0.308  1.00 36.84      A16S
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ATOM	21484	O2	URI	107	136.553	66.015	-1.257	1.00	36.84	A16S	ATOM	21537	O3'	ADE	109	144.875	66.478	-8.096	1.00	40.35	A16S
ATOM	21485	N3	URI	107	134.636	66.925	-0.466	1.00	36.84	A16S	ATOM	21538	P	GUA	110	144.785	67.638	-9.203	1.00	39.83	A16S
ATOM	21486	C4	URI	107	133.819	67.422	0.516	1.00	36.84	A16S	ATOM	21539	O1P	GUA	110	144.235	68.832	-8.500	1.00	56.23	A16S
ATOM	21487	O4	URI	107	132.662	67.724	0.235	1.00	36.84	A16S	ATOM	21540	O2P	GUA	110	146.100	67.735	-9.905	1.00	56.23	A16S
ATOM	21488	C5	URI	107	134.389	67.415	1.831	1.00	36.84	A16S	ATOM	21541	O5'	GUA	110	143.685	67.119	-10.239	1.00	39.83	A16S
ATOM	21489	C2'	URI	107	138.874	66.591	0.818	1.00	41.25	A16S	ATOM	21542	C5'	GUA	110	143.830	65.865	-10.929	1.00	39.83	A16S
ATOM	21490	O2'	URI	107	139.842	65.710	0.265	1.00	41.25	A16S	ATOM	21543	C4'	GUA	110	142.497	65.426	-11.489	1.00	39.83	A16S
ATOM	21491	C3'	URI	107	139.332	67.185	2.139	1.00	41.25	A16S	ATOM	21544	O4'	GUA	110	141.576	65.297	-10.382	1.00	39.83	A16S
ATOM	21492	O3'	URI	107	140.719	67.448	2.127	1.00	41.25	A16S	ATOM	21545	C1'	GUA	110	140.305	65.800	-10.749	1.00	39.83	A16S
ATOM	21493	P	GUA	108	141.244	68.915	1.775	1.00	38.79	A16S	ATOM	21546	N9	GUA	110	140.014	66.936	-9.879	1.00	56.23	A16S
ATOM	21494	O1P	GUA	108	142.691	68.923	2.118	1.00	39.87	A16S	ATOM	21547	C4	GUA	110	138.843	67.649	-9.815	1.00	56.23	A16S
ATOM	21495	O2P	GUA	108	140.347	69.888	2.432	1.00	39.87	A16S	ATOM	21548	N3	GUA	110	137.754	67.459	-10.586	1.00	56.23	A16S
ATOM	21496	O5'	GUA	108	141.046	69.007	0.197	1.00	38.79	A16S	ATOM	21549	C2	GUA	110	136.776	68.284	-10.267	1.00	56.23	A16S
ATOM	21497	C5'	GUA	108	141.766	68.130	-0.679	1.00	38.79	A16S	ATOM	21550	N2	GUA	110	135.622	68.238	-10.946	1.00	56.23	A16S
ATOM	21498	C4'	GUA	108	141.293	68.312	-2.096	1.00	38.79	A16S	ATOM	21551	N1	GUA	110	136.856	69.214	-9.260	1.00	56.23	A16S
ATOM	21499	O4'	GUA	108	139.871	68.100	-2.097	1.00	38.79	A16S	ATOM	21552	C6	GUA	110	137.967	69.417	-8.447	1.00	56.23	A16S
ATOM	21500	C1'	GUA	108	139.251	68.995	-2.989	1.00	38.79	A16S	ATOM	21553	O6	GUA	110	137.930	70.252	-7.540	1.00	56.23	A16S
ATOM	21501	N9	GUA	108	137.976	69.405	-2.401	1.00	39.87	A16S	ATOM	21554	C5	GUA	110	139.027	68.561	-8.798	1.00	56.23	A16S
ATOM	21502	C4	GUA	108	136.798	69.630	-3.080	1.00	39.87	A16S	ATOM	21555	N7	GUA	110	140.303	68.457	-8.266	1.00	56.23	A16S
ATOM	21503	N3	GUA	108	136.636	69.606	-4.419	1.00	39.87	A16S	ATOM	21556	C8	GUA	110	140.851	67.484	-8.939	1.00	56.23	A16S
ATOM	21504	C2	GUA	108	135.385	69.833	-4.765	1.00	39.87	A16S	ATOM	21557	C2'	GUA	110	140.352	66.169	-12.229	1.00	39.83	A16S
ATOM	21505	N2	GUA	108	135.053	69.869	-6.056	1.00	39.87	A16S	ATOM	21558	O2'	GUA	110	139.858	65.114	-13.019	1.00	39.83	A16S
ATOM	21506	N1	GUA	108	134.373	70.045	-3.874	1.00	39.87	A16S	ATOM	21559	C3'	GUA	110	141.836	66.422	-12.431	1.00	39.83	A16S
ATOM	21507	C6	GUA	108	134.515	70.059	-2.496	1.00	39.87	A16S	ATOM	21560	O3'	GUA	110	142.217	66.248	-13.790	1.00	39.83	A16S
ATOM	21508	O6	GUA	108	133.535	70.228	-1.786	1.00	39.87	A16S	ATOM	21561	P	URI	111	142.589	67.538	-14.674	1.00	42.59	A16S
ATOM	21509	C5	GUA	108	135.850	69.846	-2.106	1.00	39.87	A16S	ATOM	21562	O1P	URI	111	142.991	67.092	-16.037	1.00	45.05	A16S
ATOM	21510	N7	GUA	108	136.421	69.809	-0.843	1.00	39.87	A16S	ATOM	21563	O2P	URI	111	143.524	68.378	-13.867	1.00	45.05	A16S
ATOM	21511	C8	GUA	108	137.685	69.560	-1.065	1.00	39.87	A16S	ATOM	21564	O5'	URI	111	141.200	68.296	-14.819	1.00	42.59	A16S
ATOM	21512	C2'	GUA	108	140.275	70.008	-3.523	1.00	38.79	A16S	ATOM	21565	C5'	URI	111	140.100	67.653	-15.469	1.00	42.59	A16S
ATOM	21513	O2'	GUA	108	140.383	69.863	-4.927	1.00	38.79	A16S	ATOM	21566	C4'	URI	111	138.862	68.488	-15.344	1.00	42.59	A16S
ATOM	21514	C3'	GUA	108	141.507	69.710	-2.651	1.00	38.79	A16S	ATOM	21567	O4'	URI	111	138.479	68.570	-13.949	1.00	42.59	A16S
ATOM	21515	O3'	GUA	108	142.884	69.863	-3.115	1.00	38.79	A16S	ATOM	21568	C1'	URI	111	137.919	69.840	-13.679	1.00	42.59	A16S
ATOM	21516	P	ADE	109	143.401	69.291	-4.550	1.00	40.35	A16S	ATOM	21569	N1	URI	111	138.754	70.499	-12.658	1.00	45.05	A16S
ATOM	21517	O1P	ADE	109	144.804	69.768	-4.610	1.00	36.40	A16S	ATOM	21570	C6	URI	111	140.052	70.097	-12.448	1.00	45.05	A16S
ATOM	21518	O2P	ADE	109	142.477	69.625	-5.665	1.00	36.40	A16S	ATOM	21571	C2	URI	111	138.204	71.540	-11.904	1.00	45.05	A16S
ATOM	21519	O5'	ADE	109	143.455	67.704	-4.433	1.00	40.35	A16S	ATOM	21572	O2	URI	111	137.063	71.944	-12.049	1.00	45.05	A16S
ATOM	21520	C5'	ADE	109	144.643	66.970	-4.831	1.00	40.35	A16S	ATOM	21573	N3	URI	111	139.049	72.090	-10.970	1.00	45.05	A16S
ATOM	21521	C4'	ADE	109	144.300	65.863	-5.811	1.00	40.35	A16S	ATOM	21574	C4	URI	111	140.352	71.722	-10.711	1.00	45.05	A16S
ATOM	21522	O4'	ADE	109	143.221	65.065	-5.265	1.00	40.35	A16S	ATOM	21575	O4	URI	111	140.975	72.283	-9.811	1.00	45.05	A16S
ATOM	21523	C1'	ADE	109	142.317	64.713	-6.292	1.00	40.35	A16S	ATOM	21576	C5	URI	111	140.844	70.656	-11.526	1.00	45.05	A16S
ATOM	21524	N9	ADE	109	141.083	65.463	-6.065	1.00	36.40	A16S	ATOM	21577	C2'	URI	111	137.862	70.592	-15.013	1.00	42.59	A16S
ATOM	21525	C4	ADE	109	139.879	65.240	-6.677	1.00	36.40	A16S	ATOM	21578	O2'	URI	111	136.609	70.349	-15.633	1.00	42.59	A16S
ATOM	21526	N3	ADE	109	139.596	64.291	-7.576	1.00	36.40	A16S	ATOM	21579	C3'	URI	111	138.988	69.929	-15.788	1.00	42.59	A16S
ATOM	21527	C2	ADE	109	138.332	64.372	-7.941	1.00	36.40	A16S	ATOM	21580	O3'	URI	111	138.819	70.065	-17.186	1.00	42.59	A16S
ATOM	21528	N1	ADE	109	137.390	65.233	-7.543	1.00	36.40	A16S	ATOM	21581	P	ADE	112	139.618	71.220	-17.975	1.00	48.64	A16S
ATOM	21529	C6	ADE	109	137.713	66.176	-6.642	1.00	36.40	A16S	ATOM	21582	O1P	ADE	112	139.150	71.140	-19.395	1.00	39.52	A16S
ATOM	21530	N6	ADE	109	136.776	67.034	-6.254	1.00	36.40	A16S	ATOM	21583	O2P	ADE	112	141.080	71.121	-17.669	1.00	39.52	A16S
ATOM	21531	C5	ADE	109	139.017	66.194	-6.173	1.00	36.40	A16S	ATOM	21584	O5'	ADE	112	139.108	72.585	-17.328	1.00	48.64	A16S
ATOM	21532	N7	ADE	109	139.661	67.008	-5.255	1.00	36.40	A16S	ATOM	21585	C5'	ADE	112	137.891	73.201	-17.769	1.00	48.64	A16S
ATOM	21533	C8	ADE	109	140.880	66.535	-5.221	1.00	36.40	A16S	ATOM	21586	C4'	ADE	112	138.157	74.619	-18.196	1.00	48.64	A16S
ATOM	21534	C2'	ADE	109	142.951	65.125	-7.616	1.00	40.35	A16S	ATOM	21587	O4'	ADE	112	138.692	75.316	-17.063	1.00	48.64	A16S
ATOM	21535	O2'	ADE	109	143.738	64.073	-8.123	1.00	40.35	A16S	ATOM	21588	C1'	ADE	112	139.521	76.356	-17.504	1.00	48.64	A16S
ATOM	21536	C3'	ADE	109	143.808	66.299	-7.182	1.00	40.35	A16S	ATOM	21589	N9	ADE	112	140.590	76.546	-16.523	1.00	39.52	A16S

ATOM	21590	C4	ADE	112	140.739	77.655	-15.727	1.00	39.52	A16S
ATOM	21591	N3	ADE	112	139.951	78.740	-15.687	1.00	39.52	A16S
ATOM	21592	C2	ADE	112	140.410	79.622	-14.802	1.00	39.52	A16S
ATOM	21593	N1	ADE	112	141.485	79.546	-14.013	1.00	39.52	A16S
ATOM	21594	C6	ADE	112	142.254	78.441	-14.081	1.00	39.52	A16S
ATOM	21595	N6	ADE	112	143.327	78.366	-13.305	1.00	39.52	A16S
ATOM	21596	C5	ADE	112	141.875	77.433	-14.976	1.00	39.52	A16S
ATOM	21597	N7	ADE	112	142.433	76.201	-15.281	1.00	39.52	A16S
ATOM	21598	C8	ADE	112	141.632	75.712	-16.201	1.00	39.52	A16S
ATOM	21599	C2'	ADE	112	139.932	76.085	-18.956	1.00	48.64	A16S
ATOM	21600	O2'	ADE	112	139.627	77.182	-19.783	1.00	48.64	A16S
ATOM	21601	C3'	ADE	112	139.222	74.765	-19.264	1.00	48.64	A16S
ATOM	21602	O3'	ADE	112	138.720	74.552	-20.607	1.00	48.64	A16S
ATOM	21603	P	ADE	113	137.465	75.403	-21.189	1.00	52.57	A16S
ATOM	21604	O1P	ADE	113	137.425	75.175	-22.659	1.00	34.93	A16S
ATOM	21605	O2P	ADE	113	137.431	76.789	-20.668	1.00	34.93	A16S
ATOM	21606	O5'	ADE	113	136.187	74.660	-20.611	1.00	52.57	A16S
ATOM	21607	C5'	ADE	113	135.837	73.335	-21.037	1.00	52.57	A16S
ATOM	21608	C4'	ADE	113	134.709	72.829	-20.188	1.00	52.57	A16S
ATOM	21609	O4'	ADE	113	135.137	72.903	-18.809	1.00	52.57	A16S
ATOM	21610	C1'	ADE	113	134.116	73.449	-18.005	1.00	52.57	A16S
ATOM	21611	N9	ADE	113	134.632	74.707	-17.457	1.00	34.93	A16S
ATOM	21612	C4	ADE	113	135.196	74.878	-16.214	1.00	34.93	A16S
ATOM	21613	N3	ADE	113	135.347	73.956	-15.251	1.00	34.93	A16S
ATOM	21614	C2	ADE	113	135.967	74.482	-14.189	1.00	34.93	A16S
ATOM	21615	N1	ADE	113	136.423	75.730	-13.997	1.00	34.93	A16S
ATOM	21616	C6	ADE	113	136.266	76.628	-14.993	1.00	34.93	A16S
ATOM	21617	N6	ADE	113	136.746	77.863	-14.825	1.00	34.93	A16S
ATOM	21618	C5	ADE	113	135.611	76.199	-16.167	1.00	34.93	A16S
ATOM	21619	N7	ADE	113	135.295	76.856	-17.347	1.00	34.93	A16S
ATOM	21620	C8	ADE	113	134.707	75.934	-18.073	1.00	34.93	A16S
ATOM	21621	C2'	ADE	113	132.865	73.541	-18.878	1.00	52.57	A16S
ATOM	21622	O2'	ADE	113	132.186	72.310	-18.744	1.00	52.57	A16S
ATOM	21623	C3'	ADE	113	133.466	73.689	-20.269	1.00	52.57	A16S
ATOM	21624	O3'	ADE	113	132.627	73.156	-21.280	1.00	52.57	A16S
ATOM	21625	P	CYT	114	131.647	74.125	-22.102	1.00	59.91	A16S
ATOM	21626	O1P	CYT	114	130.972	73.287	-23.137	1.00	37.51	A16S
ATOM	21627	O2P	CYT	114	132.417	75.324	-22.513	1.00	37.51	A16S
ATOM	21628	O5'	CYT	114	130.558	74.586	-21.035	1.00	59.91	A16S
ATOM	21629	C5'	CYT	114	129.510	73.701	-20.612	1.00	59.91	A16S
ATOM	21630	C4'	CYT	114	129.034	74.089	-19.238	1.00	59.91	A16S
ATOM	21631	O4'	CYT	114	128.626	75.481	-19.235	1.00	59.91	A16S
ATOM	21632	C1'	CYT	114	127.299	75.596	-18.765	1.00	59.91	A16S
ATOM	21633	N1	CYT	114	126.624	76.659	-19.538	1.00	37.51	A16S
ATOM	21634	C6	CYT	114	126.528	76.559	-20.898	1.00	37.51	A16S
ATOM	21635	C2	CYT	114	126.080	77.779	-18.876	1.00	37.51	A16S
ATOM	21636	O2	CYT	114	126.164	77.872	-17.640	1.00	37.51	A16S
ATOM	21637	N3	CYT	114	125.468	78.735	-19.609	1.00	37.51	A16S
ATOM	21638	C4	CYT	114	125.378	78.610	-20.935	1.00	37.51	A16S
ATOM	21639	N4	CYT	114	124.746	79.557	-21.611	1.00	37.51	A16S
ATOM	21640	C5	CYT	114	125.922	77.506	-21.624	1.00	37.51	A16S
ATOM	21641	C2'	CYT	114	126.671	74.216	-18.958	1.00	59.91	A16S
ATOM	21642	O2'	CYT	114	125.621	74.022	-18.037	1.00	59.91	A16S
ATOM	21643	C3'	CYT	114	127.858	73.288	-18.712	1.00	59.91	A16S
ATOM	21644	O3'	CYT	114	128.028	73.121	-17.319	1.00	59.91	A16S
ATOM	21645	P	GUA	115	128.691	71.780	-16.744	1.00	43.26	A16S
ATOM	21646	O1P	GUA	115	127.726	70.672	-16.942	1.00	50.73	A16S
ATOM	21647	O2P	GUA	115	130.060	71.647	-17.270	1.00	50.73	A16S
ATOM	21648	O5'	GUA	115	128.803	72.112	-15.197	1.00	43.26	A16S
ATOM	21649	C5'	GUA	115	129.161	71.114	-14.259	1.00	43.26	A16S
ATOM	21650	C4'	GUA	115	130.100	71.699	-13.256	1.00	43.26	A16S
ATOM	21651	O4'	GUA	115	131.332	72.056	-13.936	1.00	43.26	A16S
ATOM	21652	C1'	GUA	115	131.869	73.249	-13.377	1.00	43.26	A16S
ATOM	21653	N9	GUA	115	131.941	74.253	-14.435	1.00	50.73	A16S
ATOM	21654	C4	GUA	115	132.435	75.528	-14.324	1.00	50.73	A16S
ATOM	21655	N3	GUA	115	132.981	76.070	-13.222	1.00	50.73	A16S
ATOM	21656	C2	GUA	115	133.343	77.320	-13.419	1.00	50.73	A16S
ATOM	21657	N2	GUA	115	133.921	78.020	-12.421	1.00	50.73	A16S
ATOM	21658	N1	GUA	115	133.169	77.981	-14.603	1.00	50.73	A16S
ATOM	21659	C6	GUA	115	132.599	77.439	-15.744	1.00	50.73	A16S
ATOM	21660	O6	GUA	115	132.463	78.129	-16.756	1.00	50.73	A16S
ATOM	21661	C5	GUA	115	132.229	76.106	-15.552	1.00	50.73	A16S
ATOM	21662	N7	GUA	115	131.650	75.208	-16.431	1.00	50.73	A16S
ATOM	21663	C8	GUA	115	131.500	74.122	-15.728	1.00	50.73	A16S
ATOM	21664	C2'	GUA	115	130.938	73.673	-12.237	1.00	43.26	A16S
ATOM	21665	O2'	GUA	115	131.447	73.230	-10.987	1.00	43.26	A16S
ATOM	21666	C3'	GUA	115	129.632	73.003	-12.649	1.00	43.26	A16S
ATOM	21667	O3'	GUA	115	128.709	72.823	-11.596	1.00	43.26	A16S
ATOM	21668	P	CYT	116	127.490	73.847	-11.458	1.00	43.00	A16S
ATOM	21669	O1P	CYT	116	126.558	73.340	-10.430	1.00	50.68	A16S
ATOM	21670	O2P	CYT	116	127.002	74.101	-12.839	1.00	50.68	A16S
ATOM	21671	O5'	CYT	116	128.179	75.178	-10.926	1.00	43.00	A16S
ATOM	21672	C5'	CYT	116	129.062	75.134	-9.786	1.00	43.00	A16S
ATOM	21673	C4'	CYT	116	129.864	76.419	-9.666	1.00	43.00	A16S
ATOM	21674	O4'	CYT	116	130.776	76.560	-10.790	1.00	43.00	A16S
ATOM	21675	C1'	CYT	116	130.904	77.926	-11.135	1.00	43.00	A16S
ATOM	21676	N1	CYT	116	130.344	78.113	-12.482	1.00	50.68	A16S
ATOM	21677	C6	CYT	116	129.587	77.138	-13.065	1.00	50.68	A16S
ATOM	21678	C2	CYT	116	130.577	79.323	-13.155	1.00	50.68	A16S
ATOM	21679	O2	CYT	116	131.305	80.182	-12.623	1.00	50.68	A16S
ATOM	21680	N3	CYT	116	130.006	79.524	-14.363	1.00	50.68	A16S
ATOM	21681	C4	CYT	116	129.240	78.575	-14.901	1.00	50.68	A16S
ATOM	21682	N4	CYT	116	128.663	78.828	-16.070	1.00	50.68	A16S
ATOM	21683	C5	CYT	116	129.022	77.326	-14.258	1.00	50.68	A16S
ATOM	21684	C2'	CYT	116	130.119	78.730	-10.102	1.00	43.00	A16S
ATOM	21685	O2'	CYT	116	130.995	79.074	-9.054	1.00	43.00	A16S
ATOM	21686	C3'	CYT	116	129.076	77.717	-9.654	1.00	43.00	A16S
ATOM	21687	O3'	CYT	116	128.557	78.009	-8.367	1.00	43.00	A16S
ATOM	21688	P	GUA	117	127.102	78.679	-8.246	1.00	41.92	A16S
ATOM	21689	O1P	GUA	117	126.734	78.696	-6.795	1.00	30.60	A16S
ATOM	21690	O2P	GUA	117	126.205	78.012	-9.215	1.00	30.60	A16S
ATOM	21691	O5'	GUA	117	127.320	80.171	-8.759	1.00	41.92	A16S
ATOM	21692	C5'	GUA	117	128.161	81.082	-8.032	1.00	41.92	A16S
ATOM	21693	C4'	GUA	117	128.251	82.404	-8.751	1.00	41.92	A16S
ATOM	21694	O4'	GUA	117	128.929	82.225	-10.014	1.00	41.92	A16S
ATOM	21695	C1'	GUA	117	128.442	83.160	-10.957	1.00	41.92	A16S

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ATOM  21696  N9  GUA  117     127.953  82.434 -12.122  1.00 30.60      A16S
ATOM  21697  C4  GUA  117     127.795  82.939 -13.388  1.00 30.60      A16S
ATOM  21698  N3  GUA  117     128.024  84.210 -13.767  1.00 30.60      A16S
ATOM  21699  C2  GUA  117     127.802  84.381 -15.057  1.00 30.60      A16S
ATOM  21700  N2  GUA  117     127.960  85.588 -15.607  1.00 30.60      A16S
ATOM  21701  N1  GUA  117     127.404  83.387 -15.902  1.00 30.60      A16S
ATOM  21702  C6  GUA  117     127.154  82.077 -15.531  1.00 30.60      A16S
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ATOM  21704  C5  GUA  117     127.378  81.876 -14.159  1.00 30.60      A16S
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ATOM  21707  C2' GUA  117     127.367  83.987 -10.267  1.00 41.92      A16S
ATOM  21708  O2' GUA  117     127.946  85.157  -9.726  1.00 41.92      A16S
ATOM  21709  C3' GUA  117     126.941  83.053  -9.152  1.00 41.92      A16S
ATOM  21710  O3' GUA  117     126.334  83.776  -8.105  1.00 41.92      A16S
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ATOM  21712  O1P URI  118     124.456  84.642  -6.824  1.00 31.53      A16S
ATOM  21713  O2P URI  118     124.102  82.573  -8.300  1.00 31.53      A16S
ATOM  21714  O5' URI  118     124.393  84.787  -9.333  1.00 33.28      A16S
ATOM  21715  C5' URI  118     124.759  86.162  -9.348  1.00 33.28      A16S
ATOM  21716  C4' URI  118     124.425  86.762 -10.671  1.00 33.28      A16S
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ATOM  21718  C1' URI  118     124.494  86.108 -12.915  1.00 33.28      A16S
ATOM  21719  N1  URI  118     124.379  84.722 -13.395  1.00 31.53      A16S
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ATOM  21726  C5  URI  118     124.324  82.363 -12.975  1.00 31.53      A16S
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ATOM  21735  C5' GUA  119     119.828  88.160 -12.450  1.00 29.51      A16S
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ATOM  21751  O2' GUA  119     118.268  87.556 -16.560  1.00 29.51      A16S
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ATOM  21756  O2P GUA  120     115.714  86.016 -13.151  1.00 35.61      A16S
ATOM  21757  O5' GUA  120     115.516  86.665 -15.578  1.00 47.25      A16S
ATOM  21758  C5' GUA  120     114.786  85.487 -15.903  1.00 47.25      A16S
ATOM  21759  C4' GUA  120     115.090  85.096 -17.318  1.00 47.25      A16S
ATOM  21760  O4' GUA  120     116.509  84.819 -17.422  1.00 47.25      A16S
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ATOM  21780  O5' GUA  121     112.292  81.791 -19.074  1.00 51.23      A16S
ATOM  21781  C5' GUA  121     112.349  82.159 -20.459  1.00 51.23      A16S
ATOM  21782  C4' GUA  121     112.781  80.979 -21.292  1.00 51.23      A16S
ATOM  21783  O4' GUA  121     114.136  80.610 -20.941  1.00 51.23      A16S
ATOM  21784  C1' GUA  121     114.293  79.206 -21.047  1.00 51.23      A16S
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ATOM  21787  N3  GUA  121     115.076  76.368 -20.323  1.00 42.09      A16S
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ATOM  21797  O2' GUA  121     113.019  78.485 -22.944  1.00 51.23      A16S
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ATOM  21816  C2' URI   122     110.077  73.436 -20.480  1.00 53.37      A16S
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ATOM  21824  C5' GUA   123     106.649  72.146 -22.955  1.00 58.02      A16S
ATOM  21825  C4' GUA   123     106.582  72.397 -24.436  1.00 58.02      A16S
ATOM  21826  O4' GUA   123     105.183  72.585 -24.729  1.00 58.02      A16S
ATOM  21827  C1' GUA   123     105.040  73.506 -25.781  1.00 58.02      A16S
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ATOM  21830  N3  GUA   123     102.641  73.958 -27.597  1.00 50.95      A16S
ATOM  21831  C2  GUA   123     101.528  74.350 -28.187  1.00 50.95      A16S
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ATOM  21835  O6  GUA   123      99.948  76.662 -25.992  1.00 50.95      A16S
ATOM  21836  C5  GUA   123     101.983  75.438 -25.751  1.00 50.95      A16S
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ATOM  21839  C2' GUA   123     106.368  74.241 -26.006  1.00 58.02      A16S
ATOM  21840  O2' GUA   123     106.814  74.056 -27.325  1.00 58.02      A16S
ATOM  21841  C3' GUA   123     107.262  73.684 -24.897  1.00 58.02      A16S
ATOM  21842  O3' GUA   123     108.694  73.581 -25.181  1.00 58.02      A16S
ATOM  21843  P   ADE   124     109.277  72.540 -26.294  1.00 47.63      A16S
ATOM  21844  O1P ADE   124     110.697  72.854 -26.469  1.00 55.27      A16S
ATOM  21845  O2P ADE   124     108.437  72.380 -27.481  1.00 55.27      A16S
ATOM  21846  O5' ADE   124     109.273  71.143 -25.551  1.00 47.63      A16S
ATOM  21847  C5' ADE   124     109.336  69.916 -26.286  1.00 47.63      A16S
ATOM  21848  C4' ADE   124     109.777  68.805 -25.372  1.00 47.63      A16S
ATOM  21849  O4' ADE   124     111.201  68.931 -25.128  1.00 47.63      A16S
ATOM  21850  C1' ADE   124     111.445  69.064 -23.746  1.00 47.63      A16S
ATOM  21851  N9  ADE   124     112.559  70.001 -23.574  1.00 55.27      A16S
ATOM  21852  C4  ADE   124     113.790  69.725 -23.017  1.00 55.27      A16S
ATOM  21853  N3  ADE   124     114.218  68.558 -22.503  1.00 55.27      A16S
ATOM  21854  C2  ADE   124     115.471  68.662 -22.075  1.00 55.27      A16S
ATOM  21855  N1  ADE   124     116.288  69.714 -22.101  1.00 55.27      A16S
ATOM  21856  C6  ADE   124     115.835  70.868 -22.627  1.00 55.27      A16S
ATOM  21857  N6  ADE   124     116.658  71.915 -22.668  1.00 55.27      A16S
ATOM  21858  C5  ADE   124     114.515  70.895 -23.110  1.00 55.27      A16S
ATOM  21859  N7  ADE   124     113.754  71.898 -23.696  1.00 55.27      A16S
ATOM  21860  C8  ADE   124     112.607  71.320 -23.948  1.00 55.27      A16S
ATOM  21861  C2' ADE   124     110.127  69.526 -23.131  1.00 47.63      A16S
ATOM  21862  O2' ADE   124     110.077  69.235 -21.752  1.00 47.63      A16S
ATOM  21863  C3' ADE   124     109.102  68.806 -24.008  1.00 47.63      A16S
ATOM  21864  O3' ADE   124     108.889  67.447 -23.620  1.00 47.63      A16S
ATOM  21865  P   CYT   125     107.714  67.079 -22.580  1.00 51.74      A16S
ATOM  21866  O1P CYT   125     107.683  65.595 -22.481  1.00 40.27      A16S
ATOM  21867  O2P CYT   125     106.479  67.809 -22.962  1.00 40.27      A16S
ATOM  21868  O5' CYT   125     108.258  67.671 -21.201  1.00 51.74      A16S
ATOM  21869  C5' CYT   125     107.819  67.159 -19.940  1.00 51.74      A16S
ATOM  21870  C4' CYT   125     108.948  66.440 -19.240  1.00 51.74      A16S
ATOM  21871  O4' CYT   125     110.126  67.279 -19.195  1.00 51.74      A16S
ATOM  21872  C1' CYT   125     110.798  67.100 -17.958  1.00 51.74      A16S
ATOM  21873  N1  CYT   125     110.815  68.392 -17.242  1.00 40.27      A16S
ATOM  21874  C6  CYT   125     110.058  69.439 -17.678  1.00 40.27      A16S
ATOM  21875  C2  CYT   125     111.605  68.528 -16.090  1.00 40.27      A16S
ATOM  21876  O2  CYT   125     112.337  67.597 -15.741  1.00 40.27      A16S
ATOM  21877  N3  CYT   125     111.562  69.678 -15.395  1.00 40.27      A16S
ATOM  21878  C4  CYT   125     110.803  70.685 -15.818  1.00 40.27      A16S
ATOM  21879  N4  CYT   125     110.787  71.801 -15.089  1.00 40.27      A16S
ATOM  21880  C5  CYT   125     110.025  70.593 -17.005  1.00 40.27      A16S
ATOM  21881  C2' CYT   125     110.052  66.017 -17.179  1.00 51.74      A16S
ATOM  21882  O2' CYT   125     110.644  64.757 -17.414  1.00 51.74      A16S
ATOM  21883  C3' CYT   125     108.663  66.110 -17.786  1.00 51.74      A16S
ATOM  21884  O3' CYT   125     107.932  64.904 -17.661  1.00 51.74      A16S
ATOM  21885  P   CYT   126     106.868  64.744 -16.475  1.00 50.94      A16S
ATOM  21886  O1P CYT   126     106.018  63.610 -16.899  1.00 54.61      A16S
ATOM  21887  O2P CYT   126     106.251  66.054 -16.160  1.00 54.61      A16S
ATOM  21888  O5' CYT   126     107.740  64.287 -15.227  1.00 50.94      A16S
ATOM  21889  C5' CYT   126     108.409  63.022 -15.243  1.00 50.94      A16S
ATOM  21890  C4' CYT   126     109.373  62.929 -14.098  1.00 50.94      A16S
ATOM  21891  O4' CYT   126     110.308  64.020 -14.213  1.00 50.94      A16S
ATOM  21892  C1' CYT   126     110.709  64.437 -12.922  1.00 50.94      A16S
ATOM  21893  N1  CYT   126     110.376  65.852 -12.752  1.00 54.61      A16S
ATOM  21894  C6  CYT   126     109.497  66.480 -13.588  1.00 54.61      A16S
ATOM  21895  C2  CYT   126     110.965  66.545 -11.693  1.00 54.61      A16S
ATOM  21896  O2  CYT   126     111.782  65.952 -10.972  1.00 54.61      A16S
ATOM  21897  N3  CYT   126     110.631  67.835 -11.483  1.00 54.61      A16S
ATOM  21898  C4  CYT   126     109.758  68.433 -12.290  1.00 54.61      A16S
ATOM  21899  N4  CYT   126     109.443  69.698 -12.036  1.00 54.61      A16S
ATOM  21900  C5  CYT   126     109.162  67.756 -13.394  1.00 54.61      A16S
ATOM  21901  C2' CYT   126     109.976  63.582 -11.892  1.00 50.94      A16S
ATOM  21902  O2' CYT   126     110.843  62.571 -11.416  1.00 50.94      A16S
ATOM  21903  C3' CYT   126     108.787  63.079 -12.701  1.00 50.94      A16S
ATOM  21904  O3' CYT   126     108.281  61.847 -12.188  1.00 50.94      A16S
ATOM  21905  P   URI   127     107.069  61.858 -11.132  1.00 52.34      A16S
ATOM  21906  O1P URI   127     106.762  60.453 -10.790  1.00 38.67      A16S
ATOM  21907  O2P URI   127     105.996  62.729 -11.697  1.00 38.67      A16S
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ATOM	21908	O5'	URI	127	107.706	62.517	-9.831	1.00	52.34	A16S	ATOM	21961	N4	CYT	129	107.579	65.770	-1.486	1.00	59.88	A16S
ATOM	21909	C5'	URI	127	108.828	61.910	-9.204	1.00	52.34	A16S	ATOM	21962	C5	CYT	129	106.816	63.534	-1.059	1.00	59.88	A16S
ATOM	21910	C4'	URI	127	109.308	62.767	-8.077	1.00	52.34	A16S	ATOM	21963	C2'	CYT	129	106.176	61.792	3.174	1.00	45.09	A16S
ATOM	21911	O4'	URI	127	109.825	64.012	-8.600	1.00	52.34	A16S	ATOM	21964	O2'	CYT	129	106.648	61.201	4.365	1.00	45.09	A16S
ATOM	21912	C1'	URI	127	109.589	65.059	-7.666	1.00	52.34	A16S	ATOM	21965	C3'	CYT	129	104.955	61.060	2.639	1.00	45.09	A16S
ATOM	21913	N1	URI	127	108.864	66.157	-8.330	1.00	38.67	A16S	ATOM	21966	O3'	CYT	129	104.034	60.752	3.663	1.00	45.09	A16S
ATOM	21914	C6	URI	127	108.231	65.980	-9.543	1.00	38.67	A16S	ATOM	21967	P	CYT	130	102.566	61.384	3.598	1.00	51.76	A16S
ATOM	21915	C2	URI	127	108.827	67.380	-7.689	1.00	38.67	A16S	ATOM	21968	O1P	CYT	130	101.819	60.872	4.778	1.00	47.05	A16S
ATOM	21916	O2	URI	127	109.380	67.595	-6.630	1.00	38.67	A16S	ATOM	21969	O2P	CYT	130	102.023	61.193	2.229	1.00	47.05	A16S
ATOM	21917	N3	URI	127	108.114	68.350	-8.339	1.00	38.67	A16S	ATOM	21970	O5'	CYT	130	102.801	62.944	3.747	1.00	51.76	A16S
ATOM	21918	C4	URI	127	107.454	68.236	-9.540	1.00	38.67	A16S	ATOM	21971	C5'	CYT	130	103.357	63.493	4.943	1.00	51.76	A16S
ATOM	21919	O4	URI	127	106.805	69.194	-9.960	1.00	38.67	A16S	ATOM	21972	C4'	CYT	130	103.273	64.992	4.898	1.00	51.76	A16S
ATOM	21920	C5	URI	127	107.549	66.952	-10.154	1.00	38.67	A16S	ATOM	21973	O4'	CYT	130	104.244	65.513	3.953	1.00	51.76	A16S
ATOM	21921	C2'	URI	127	108.820	64.463	-6.485	1.00	52.34	A16S	ATOM	21974	C1'	CYT	130	103.701	66.638	3.289	1.00	51.76	A16S
ATOM	21922	O2'	URI	127	109.701	64.190	-5.415	1.00	52.34	A16S	ATOM	21975	N1	CYT	130	103.606	66.341	1.855	1.00	47.05	A16S
ATOM	21923	C3'	URI	127	108.235	63.201	-7.101	1.00	52.34	A16S	ATOM	21976	C6	CYT	130	103.668	65.060	1.384	1.00	47.05	A16S
ATOM	21924	O3'	URI	127	107.974	62.217	-6.124	1.00	52.34	A16S	ATOM	21977	C2	CYT	130	103.420	67.401	0.978	1.00	47.05	A16S
ATOM	21925	P	ADE	128	106.467	61.999	-5.622	1.00	59.32	A16S	ATOM	21978	O2	CYT	130	103.415	68.553	1.436	1.00	47.05	A16S
ATOM	21926	O1P	ADE	128	105.692	61.416	-6.773	1.00	47.26	A16S	ATOM	21979	N3	CYT	130	103.254	67.155	-0.344	1.00	47.05	A16S
ATOM	21927	O2P	ADE	128	106.029	63.290	-5.006	1.00	47.26	A16S	ATOM	21980	C4	CYT	130	103.288	65.902	-0.793	1.00	47.05	A16S
ATOM	21928	O5'	ADE	128	106.617	60.935	-4.445	1.00	59.32	A16S	ATOM	21981	N4	CYT	130	103.096	65.700	-2.095	1.00	47.05	A16S
ATOM	21929	C5'	ADE	128	106.786	59.521	-4.701	1.00	59.32	A16S	ATOM	21982	C5	CYT	130	103.514	64.797	0.080	1.00	47.05	A16S
ATOM	21930	C4'	ADE	128	107.487	58.876	-3.531	1.00	59.32	A16S	ATOM	21983	C2'	CYT	130	102.313	66.898	3.872	1.00	51.76	A16S
ATOM	21931	O4'	ADE	128	108.861	59.323	-3.527	1.00	59.32	A16S	ATOM	21984	O2'	CYT	130	102.402	67.862	4.899	1.00	51.76	A16S
ATOM	21932	C1'	ADE	128	109.269	59.612	-2.204	1.00	59.32	A16S	ATOM	21985	C3'	CYT	130	101.943	65.523	4.402	1.00	51.76	A16S
ATOM	21933	N9	ADE	128	109.583	61.039	-2.134	1.00	47.26	A16S	ATOM	21986	O3'	CYT	130	100.968	65.567	5.426	1.00	51.76	A16S
ATOM	21934	C4	ADE	128	110.171	61.690	-1.077	1.00	47.26	A16S	ATOM	21987	P	CYT	131	99.420	65.358	5.049	1.00	62.29	A16S
ATOM	21935	N3	ADE	128	110.546	61.162	0.101	1.00	47.26	A16S	ATOM	21988	O1P	CYT	131	98.694	65.152	6.333	1.00	51.97	A16S
ATOM	21936	C2	ADE	128	111.094	62.095	0.878	1.00	47.26	A16S	ATOM	21989	O2P	CYT	131	99.305	64.353	3.956	1.00	51.97	A16S
ATOM	21937	N1	ADE	128	111.300	63.391	0.628	1.00	47.26	A16S	ATOM	21990	O5'	CYT	131	98.992	66.749	4.415	1.00	62.29	A16S
ATOM	21938	C6	ADE	128	110.913	63.882	-0.570	1.00	47.26	A16S	ATOM	21991	C5'	CYT	131	99.186	67.970	5.129	1.00	62.29	A16S
ATOM	21939	N6	ADE	128	111.133	65.168	-0.836	1.00	47.26	A16S	ATOM	21992	C4'	CYT	131	98.802	69.117	4.251	1.00	62.29	A16S
ATOM	21940	C5	ADE	128	110.307	63.003	-1.475	1.00	47.26	A16S	ATOM	21993	O4'	CYT	131	99.761	69.233	3.174	1.00	62.29	A16S
ATOM	21941	N7	ADE	128	109.790	63.187	-2.748	1.00	47.26	A16S	ATOM	21994	C1'	CYT	131	99.100	69.625	1.986	1.00	62.29	A16S
ATOM	21942	C8	ADE	128	109.372	61.998	-3.094	1.00	47.26	A16S	ATOM	21995	N1	CYT	131	99.342	68.620	0.931	1.00	51.97	A16S
ATOM	21943	C2'	ADE	128	108.138	59.211	-1.263	1.00	59.32	A16S	ATOM	21996	C6	CYT	131	99.998	67.447	1.183	1.00	51.97	A16S
ATOM	21944	O2'	ADE	128	108.384	57.917	-0.775	1.00	59.32	A16S	ATOM	21997	C2	CYT	131	98.870	68.897	-0.352	1.00	51.97	A16S
ATOM	21945	C3'	ADE	128	106.933	59.305	-2.182	1.00	59.32	A16S	ATOM	21998	O2	CYT	131	98.287	69.968	-0.548	1.00	51.97	A16S
ATOM	21946	O3'	ADE	128	105.834	58.513	-1.774	1.00	59.32	A16S	ATOM	21999	N3	CYT	131	99.052	68.001	-1.343	1.00	51.97	A16S
ATOM	21947	P	CYT	129	104.396	59.202	-1.580	1.00	45.09	A16S	ATOM	22000	C4	CYT	131	99.676	66.857	-1.092	1.00	51.97	A16S
ATOM	21948	O1P	CYT	129	103.397	58.093	-1.556	1.00	59.88	A16S	ATOM	22001	N4	CYT	131	99.810	65.997	-2.103	1.00	51.97	A16S
ATOM	21949	O2P	CYT	129	104.246	60.282	-2.583	1.00	59.88	A16S	ATOM	22002	C5	CYT	131	100.185	66.543	0.210	1.00	51.97	A16S
ATOM	21950	O5'	CYT	129	104.495	59.878	-0.140	1.00	45.09	A16S	ATOM	22003	C2'	CYT	131	97.615	69.783	2.304	1.00	62.29	A16S
ATOM	21951	C5'	CYT	129	104.769	59.072	0.997	1.00	45.09	A16S	ATOM	22004	O2'	CYT	131	97.313	71.144	2.529	1.00	62.29	A16S
ATOM	21952	C4'	CYT	129	105.579	59.829	2.013	1.00	45.09	A16S	ATOM	22005	C3'	CYT	131	97.479	68.910	3.543	1.00	62.29	A16S
ATOM	21953	O4'	CYT	129	106.787	60.343	1.401	1.00	45.09	A16S	ATOM	22006	O3'	CYT	131	96.372	69.237	4.364	1.00	62.29	A16S
ATOM	21954	C1'	CYT	129	107.188	61.535	2.063	1.00	45.09	A16S	ATOM	22007	P	GUA	132	94.984	68.460	4.154	1.00	68.45	A16S
ATOM	21955	N1	CYT	129	107.254	62.650	1.088	1.00	59.88	A16S	ATOM	22008	O1P	GUA	132	94.141	68.892	5.290	1.00	54.30	A16S
ATOM	21956	C6	CYT	129	106.737	62.528	-0.173	1.00	59.88	A16S	ATOM	22009	O2P	GUA	132	95.236	67.014	3.927	1.00	54.30	A16S
ATOM	21957	C2	CYT	129	107.866	63.848	1.484	1.00	59.88	A16S	ATOM	22010	O5'	GUA	132	94.416	69.060	2.794	1.00	68.45	A16S
ATOM	21958	O2	CYT	129	108.323	63.936	2.637	1.00	59.88	A16S	ATOM	22011	C5'	GUA	132	94.204	70.463	2.662	1.00	68.45	A16S
ATOM	21959	N3	CYT	129	107.946	64.877	0.601	1.00	59.88	A16S	ATOM	22012	C4'	GUA	132	93.717	70.792	1.281	1.00	68.45	A16S
ATOM	21960	C4	CYT	129	107.453	64.738	-0.635	1.00	59.88	A16S	ATOM	22013	O4'	GUA	132	94.793	70.662	0.318	1.00	68.45	A16S

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ATOM  22014  C1' GUA  132      94.244  70.347  -0.958  1.00 68.45      A16S
ATOM  22015  N9  GUA  132      94.867  69.132  -1.465  1.00 54.30      A16S
ATOM  22016  C4  GUA  132      94.826  68.689  -2.763  1.00 54.30      A16S
ATOM  22017  N3  GUA  132      94.218  69.312  -3.791  1.00 54.30      A16S
ATOM  22018  C2  GUA  132      94.307  68.615  -4.915  1.00 54.30      A16S
ATOM  22019  N2  GUA  132      93.710  69.063  -6.031  1.00 54.30      A16S
ATOM  22020  N1  GUA  132      94.970  67.419  -5.025  1.00 54.30      A16S
ATOM  22021  C6  GUA  132      95.606  66.758  -3.978  1.00 54.30      A16S
ATOM  22022  O6  GUA  132      96.164  65.669  -4.180  1.00 54.30      A16S
ATOM  22023  C5  GUA  132      95.499  67.485  -2.761  1.00 54.30      A16S
ATOM  22024  N7  GUA  132      95.970  67.185  -1.490  1.00 54.30      A16S
ATOM  22025  C8  GUA  132      95.579  68.192  -0.755  1.00 54.30      A16S
ATOM  22026  C2' GUA  132      92.737  70.145  -0.785  1.00 68.45      A16S
ATOM  22027  O2' GUA  132      92.029  71.290  -1.224  1.00 68.45      A16S
ATOM  22028  C3' GUA  132      92.630  69.896   0.717  1.00 68.45      A16S
ATOM  22029  O3' GUA  132      91.340  70.170   1.230  1.00 68.45      A16S
ATOM  22030  P   GUA  133      90.268  68.980   1.315  1.00 70.31      A16S
ATOM  22031  O1P GUA  133      89.118  69.536   2.066  1.00 66.44      A16S
ATOM  22032  O2P GUA  133      90.938  67.740   1.814  1.00 66.44      A16S
ATOM  22033  O5' GUA  133      89.859  68.764  -0.210  1.00 70.31      A16S
ATOM  22034  C5' GUA  133      89.280  69.843  -0.955  1.00 70.31      A16S
ATOM  22035  C4' GUA  133      89.099  69.466  -2.405  1.00 70.31      A16S
ATOM  22036  O4' GUA  133      90.390  69.320  -3.049  1.00 70.31      A16S
ATOM  22037  C1' GUA  133      90.295  68.367  -4.100  1.00 70.31      A16S
ATOM  22038  N9  GUA  133      91.215  67.259  -3.834  1.00 66.44      A16S
ATOM  22039  C4  GUA  133      91.667  66.336  -4.759  1.00 66.44      A16S
ATOM  22040  N3  GUA  133      91.371  66.321  -6.078  1.00 66.44      A16S
ATOM  22041  C2  GUA  133      91.922  65.291  -6.699  1.00 66.44      A16S
ATOM  22042  N2  GUA  133      91.716  65.116  -8.010  1.00 66.44      A16S
ATOM  22043  N1  GUA  133      92.711  64.354  -6.081  1.00 66.44      A16S
ATOM  22044  C6  GUA  133      93.035  64.347  -4.728  1.00 66.44      A16S
ATOM  22045  O6  GUA  133      93.756  63.448  -4.272  1.00 66.44      A16S
ATOM  22046  C5  GUA  133      92.443  65.449  -4.043  1.00 66.44      A16S
ATOM  22047  N7  GUA  133      92.502  65.816  -2.702  1.00 66.44      A16S
ATOM  22048  C8  GUA  133      91.769  66.896  -2.625  1.00 66.44      A16S
ATOM  22049  C2' GUA  133      88.848  67.873  -4.138  1.00 70.31      A16S
ATOM  22050  O2' GUA  133      88.135  68.592  -5.121  1.00 70.31      A16S
ATOM  22051  C3' GUA  133      88.383  68.162  -2.714  1.00 70.31      A16S
ATOM  22052  O3' GUA  133      86.969  68.265  -2.617  1.00 70.31      A16S
ATOM  22053  P   ADE  134      86.094  66.955  -2.271  1.00 80.54      A16S
ATOM  22054  O1P ADE  134      84.708  67.450  -2.102  1.00 60.19      A16S
ATOM  22055  O2P ADE  134      86.722  66.163  -1.178  1.00 60.19      A16S
ATOM  22056  O5' ADE  134      86.174  66.078  -3.600  1.00 80.54      A16S
ATOM  22057  C5' ADE  134      85.695  66.590  -4.852  1.00 80.54      A16S
ATOM  22058  C4' ADE  134      85.916  65.580  -5.951  1.00 80.54      A16S
ATOM  22059  O4' ADE  134      87.329  65.470  -6.260  1.00 80.54      A16S
ATOM  22060  C1' ADE  134      87.625  64.145  -6.683  1.00 80.54      A16S
ATOM  22061  N9  ADE  134      88.645  63.576  -5.801  1.00 60.19      A16S
ATOM  22062  C4  ADE  134      89.499  62.549  -6.125  1.00 60.19      A16S
ATOM  22063  N3  ADE  134      89.572  61.884  -7.292  1.00 60.19      A16S
ATOM  22064  C2  ADE  134      90.524  60.956  -7.242  1.00 60.19      A16S
ATOM  22065  N1  ADE  134      91.351  60.642  -6.234  1.00 60.19      A16S
ATOM  22066  C6  ADE  134      91.247  61.330  -5.074  1.00 60.19      A16S
ATOM  22067  N6  ADE  134      92.069  61.027  -4.069  1.00 60.19      A16S
ATOM  22068  C5  ADE  134      90.274  62.334  -4.996  1.00 60.19      A16S
ATOM  22069  N7  ADE  134      89.915  63.205  -3.977  1.00 60.19      A16S
ATOM  22070  C8  ADE  134      88.950  63.921  -4.503  1.00 60.19      A16S
ATOM  22071  C2' ADE  134      86.330  63.339  -6.626  1.00 80.54      A16S
ATOM  22072  O2' ADE  134      85.756  63.251  -7.916  1.00 80.54      A16S
ATOM  22073  C3' ADE  134      85.506  64.155  -5.638  1.00 80.54      A16S
ATOM  22074  O3' ADE  134      84.121  63.931  -5.776  1.00 80.54      A16S
ATOM  22075  P   ADE  135      83.399  62.903  -4.781  1.00 88.65      A16S
ATOM  22076  O1P ADE  135      81.942  63.032  -5.027  1.00 53.06      A16S
ATOM  22077  O2P ADE  135      83.938  63.135  -3.417  1.00 53.06      A16S
ATOM  22078  O5' ADE  135      83.895  61.472  -5.283  1.00 88.65      A16S
ATOM  22079  C5' ADE  135      83.511  60.984  -6.582  1.00 88.65      A16S
ATOM  22080  C4' ADE  135      84.314  59.760  -6.969  1.00 88.65      A16S
ATOM  22081  O4' ADE  135      85.723  60.099  -7.102  1.00 88.65      A16S
ATOM  22082  C1' ADE  135      86.510  58.944  -6.851  1.00 88.65      A16S
ATOM  22083  N9  ADE  135      87.382  59.175  -5.695  1.00 53.06      A16S
ATOM  22084  C4  ADE  135      88.479  58.401  -5.369  1.00 53.06      A16S
ATOM  22085  N3  ADE  135      88.973  57.344  -6.052  1.00 53.06      A16S
ATOM  22086  C2  ADE  135      90.039  56.842  -5.433  1.00 53.06      A16S
ATOM  22087  N1  ADE  135      90.622  57.235  -4.293  1.00 53.06      A16S
ATOM  22088  C6  ADE  135      90.103  58.291  -3.629  1.00 53.06      A16S
ATOM  22089  N6  ADE  135      90.677  58.670  -2.487  1.00 53.06      A16S
ATOM  22090  C5  ADE  135      88.974  58.927  -4.186  1.00 53.06      A16S
ATOM  22091  N7  ADE  135      88.220  60.026  -3.783  1.00 53.06      A16S
ATOM  22092  C8  ADE  135      87.294  60.133  -4.709  1.00 53.06      A16S
ATOM  22093  C2' ADE  135      85.551  57.799  -6.547  1.00 88.65      A16S
ATOM  22094  O2' ADE  135      85.287  57.085  -7.742  1.00 88.65      A16S
ATOM  22095  C3' ADE  135      84.333  58.555  -6.039  1.00 88.65      A16S
ATOM  22096  O3' ADE  135      83.179  57.734  -6.088  1.00 88.65      A16S
ATOM  22097  P   GUA  136      82.860  56.747  -4.850  1.00 89.43      A16S
ATOM  22098  O1P GUA  136      81.503  56.203  -5.107  1.00 51.27      A16S
ATOM  22099  O2P GUA  136      83.137  57.440  -3.567  1.00 51.27      A16S
ATOM  22100  O5' GUA  136      83.928  55.567  -4.987  1.00 89.43      A16S
ATOM  22101  C5' GUA  136      84.002  54.769  -6.187  1.00 89.43      A16S
ATOM  22102  C4' GUA  136      85.198  53.837  -6.145  1.00 89.43      A16S
ATOM  22103  O4' GUA  136      86.431  54.603  -6.073  1.00 89.43      A16S
ATOM  22104  C1' GUA  136      87.396  53.885  -5.321  1.00 89.43      A16S
ATOM  22105  N9  GUA  136      87.735  54.660  -4.133  1.00 51.27      A16S
ATOM  22106  C4  GUA  136      88.805  54.446  -3.296  1.00 51.27      A16S
ATOM  22107  N3  GUA  136      89.738  53.477  -3.432  1.00 51.27      A16S
ATOM  22108  C2  GUA  136      90.649  53.531  -2.476  1.00 51.27      A16S
ATOM  22109  N2  GUA  136      91.653  52.634  -2.456  1.00 51.27      A16S
ATOM  22110  N1  GUA  136      90.641  54.466  -1.472  1.00 51.27      A16S
ATOM  22111  C6  GUA  136      89.688  55.475  -1.323  1.00 51.27      A16S
ATOM  22112  O6  GUA  136      89.777  56.282  -0.386  1.00 51.27      A16S
ATOM  22113  C5  GUA  136      88.714  55.421  -2.329  1.00 51.27      A16S
ATOM  22114  N7  GUA  136      87.613  56.231  -2.548  1.00 51.27      A16S
ATOM  22115  C8  GUA  136      87.061  55.744  -3.624  1.00 51.27      A16S
ATOM  22116  C2' GUA  136      86.777  52.547  -4.938  1.00 89.43      A16S
ATOM  22117  O2' GUA  136      87.127  51.596  -5.918  1.00 89.43      A16S
ATOM  22118  C3' GUA  136      85.290  52.877  -4.971  1.00 89.43      A16S
ATOM  22119  O3' GUA  136      84.511  51.705  -5.169  1.00 89.43      A16S
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ATOM	22120	P	ADE	137	84.077	50.817	-3.897	1.00	89.56	A16S	ATOM	22173	N9	GUA	139	87.349	39.025	-6.388	1.00	78.42	A16S
ATOM	22121	O1P	ADE	137	83.051	49.882	-4.429	1.00	70.40	A16S	ATOM	22174	C4	GUA	139	88.531	38.921	-7.094	1.00	78.42	A16S
ATOM	22122	O2P	ADE	137	83.754	51.697	-2.739	1.00	70.40	A16S	ATOM	22175	N3	GUA	139	88.754	38.122	-8.160	1.00	78.42	A16S
ATOM	22123	O5'	ADE	137	85.388	50.008	-3.495	1.00	89.56	A16S	ATOM	22176	C2	GUA	139	89.996	38.221	-8.599	1.00	78.42	A16S
ATOM	22124	C5'	ADE	137	85.958	49.046	-4.387	1.00	89.56	A16S	ATOM	22177	N2	GUA	139	90.387	37.498	-9.651	1.00	78.42	A16S
ATOM	22125	C4'	ADE	137	87.223	48.475	-3.800	1.00	89.56	A16S	ATOM	22178	N1	GUA	139	90.946	39.037	-8.035	1.00	78.42	A16S
ATOM	22126	O4'	ADE	137	88.205	49.527	-3.630	1.00	89.56	A16S	ATOM	22179	C6	GUA	139	90.739	39.866	-6.936	1.00	78.42	A16S
ATOM	22127	C1'	ADE	137	89.017	49.247	-2.505	1.00	89.56	A16S	ATOM	22180	O6	GUA	139	91.669	40.557	-6.495	1.00	78.42	A16S
ATOM	22128	N9	ADE	137	88.888	50.346	-1.552	1.00	70.40	A16S	ATOM	22181	C5	GUA	139	89.410	39.775	-6.460	1.00	78.42	A16S
ATOM	22129	C4	ADE	137	89.725	50.597	-0.491	1.00	70.40	A16S	ATOM	22182	N7	GUA	139	88.791	40.425	-5.402	1.00	78.42	A16S
ATOM	22130	N3	ADE	137	90.816	49.897	-0.126	1.00	70.40	A16S	ATOM	22183	C8	GUA	139	87.570	39.958	-5.402	1.00	78.42	A16S
ATOM	22131	C2	ADE	137	91.375	50.428	0.965	1.00	70.40	A16S	ATOM	22184	C2'	GUA	139	86.295	36.866	-5.983	1.00	92.65	A16S
ATOM	22132	N1	ADE	137	90.994	51.501	1.677	1.00	70.40	A16S	ATOM	22185	O2'	GUA	139	85.628	35.891	-6.762	1.00	92.65	A16S
ATOM	22133	C6	ADE	137	89.890	52.181	1.283	1.00	70.40	A16S	ATOM	22186	C3'	GUA	139	85.648	37.066	-4.618	1.00	92.65	A16S
ATOM	22134	N6	ADE	137	89.503	53.247	1.994	1.00	70.40	A16S	ATOM	22187	O3'	GUA	139	85.252	35.817	-4.079	1.00	92.65	A16S
ATOM	22135	C5	ADE	137	89.209	51.717	0.138	1.00	70.40	A16S	ATOM	22188	P	GUA	140	86.339	34.901	-3.318	1.00	90.09	A16S
ATOM	22136	N7	ADE	137	88.073	52.168	-0.519	1.00	70.40	A16S	ATOM	22189	O1P	GUA	140	85.594	33.692	-2.883	1.00	75.94	A16S
ATOM	22137	C8	ADE	137	87.926	51.325	-1.511	1.00	70.40	A16S	ATOM	22190	O2P	GUA	140	87.059	35.720	-2.305	1.00	75.94	A16S
ATOM	22138	C2'	ADE	137	88.547	47.920	-1.917	1.00	89.56	A16S	ATOM	22191	O5'	GUA	140	87.391	34.480	-4.449	1.00	90.09	A16S
ATOM	22139	O2'	ADE	137	89.355	46.898	-2.461	1.00	89.56	A16S	ATOM	22192	C5'	GUA	140	87.033	33.540	-5.486	1.00	90.09	A16S
ATOM	22140	C3'	ADE	137	87.112	47.848	-2.422	1.00	89.56	A16S	ATOM	22193	C4'	GUA	140	88.172	33.348	-6.472	1.00	90.09	A16S
ATOM	22141	O3'	ADE	137	86.639	46.512	-2.506	1.00	89.56	A16S	ATOM	22194	O4'	GUA	140	88.533	34.626	-7.061	1.00	90.09	A16S
ATOM	22142	P	GUA	138	85.956	45.824	-1.225	1.00	100.65	A16S	ATOM	22195	C1'	GUA	140	89.909	34.615	-7.421	1.00	90.09	A16S
ATOM	22143	O1P	GUA	138	84.964	46.763	-0.629	1.00	74.98	A16S	ATOM	22196	N9	GUA	140	90.623	35.639	-6.663	1.00	75.94	A16S
ATOM	22144	O2P	GUA	138	87.050	45.282	-0.380	1.00	74.98	A16S	ATOM	22197	C4	GUA	140	91.909	36.057	-6.894	1.00	75.94	A16S
ATOM	22145	O5'	GUA	138	85.166	44.602	-1.862	1.00	100.65	A16S	ATOM	22198	N3	GUA	140	92.707	35.632	-7.891	1.00	75.94	A16S
ATOM	22146	C5'	GUA	138	83.763	44.697	-2.148	1.00	100.65	A16S	ATOM	22199	C2	GUA	140	93.893	36.196	-7.845	1.00	75.94	A16S
ATOM	22147	C4'	GUA	138	83.415	43.824	-3.324	1.00	100.65	A16S	ATOM	22200	N2	GUA	140	94.804	35.881	-8.767	1.00	75.94	A16S
ATOM	22148	O4'	GUA	138	83.841	44.468	-4.550	1.00	100.65	A16S	ATOM	22201	N1	GUA	140	94.270	37.110	-6.892	1.00	75.94	A16S
ATOM	22149	C1'	GUA	138	84.269	43.486	-5.480	1.00	100.65	A16S	ATOM	22202	C6	GUA	140	93.460	37.566	-5.855	1.00	75.94	A16S
ATOM	22150	N9	GUA	138	85.676	43.730	-5.790	1.00	74.98	A16S	ATOM	22203	O6	GUA	140	93.891	38.399	-5.046	1.00	75.94	A16S
ATOM	22151	C4	GUA	138	86.407	43.117	-6.784	1.00	74.98	A16S	ATOM	22204	C5	GUA	140	92.185	36.964	-5.897	1.00	75.94	A16S
ATOM	22152	N3	GUA	138	85.936	42.209	-7.669	1.00	74.98	A16S	ATOM	22205	N7	GUA	140	91.087	37.134	-5.068	1.00	75.94	A16S
ATOM	22153	C2	GUA	138	86.885	41.765	-8.474	1.00	74.98	A16S	ATOM	22206	C8	GUA	140	90.181	36.337	-5.566	1.00	75.94	A16S
ATOM	22154	N2	GUA	138	86.587	40.852	-9.406	1.00	74.98	A16S	ATOM	22207	C2'	GUA	140	90.472	33.248	-7.047	1.00	90.09	A16S
ATOM	22155	N1	GUA	138	88.194	42.180	-8.422	1.00	74.98	A16S	ATOM	22208	O2'	GUA	140	90.476	32.401	-8.178	1.00	90.09	A16S
ATOM	22156	C6	GUA	138	88.706	43.113	-7.520	1.00	74.98	A16S	ATOM	22209	C3'	GUA	140	89.501	32.802	-5.963	1.00	90.09	A16S
ATOM	22157	O6	GUA	138	89.915	43.408	-7.548	1.00	74.98	A16S	ATOM	22210	O3'	GUA	140	89.543	31.391	-5.838	1.00	90.09	A16S
ATOM	22158	C5	GUA	138	87.692	43.603	-6.646	1.00	74.98	A16S	ATOM	22211	P	GUA	141	90.697	30.709	-4.944	1.00	75.72	A16S
ATOM	22159	N7	GUA	138	87.763	44.527	-5.609	1.00	74.98	A16S	ATOM	22212	O1P	GUA	141	90.321	29.277	-4.803	1.00	78.35	A16S
ATOM	22160	C8	GUA	138	86.545	44.577	-5.137	1.00	74.98	A16S	ATOM	22213	O2P	GUA	141	90.931	31.532	-3.728	1.00	78.35	A16S
ATOM	22161	C2'	GUA	138	84.066	42.111	-4.836	1.00	100.65	A16S	ATOM	22214	O5'	GUA	141	92.016	30.801	-5.835	1.00	75.72	A16S
ATOM	22162	O2'	GUA	138	82.844	41.542	-5.261	1.00	100.65	A16S	ATOM	22215	C5'	GUA	141	92.158	30.010	-7.020	1.00	75.72	A16S
ATOM	22163	C3'	GUA	138	84.085	42.459	-3.352	1.00	100.65	A16S	ATOM	22216	C4'	GUA	141	93.449	30.341	-7.729	1.00	75.72	A16S
ATOM	22164	O3'	GUA	138	83.424	41.498	-2.536	1.00	100.65	A16S	ATOM	22217	O4'	GUA	141	93.486	31.763	-8.039	1.00	75.72	A16S
ATOM	22165	P	GUA	139	84.286	40.356	-1.793	1.00	92.65	A16S	ATOM	22218	C1'	GUA	141	94.828	32.227	-8.003	1.00	75.72	A16S
ATOM	22166	O1P	GUA	139	83.325	39.590	-0.956	1.00	78.42	A16S	ATOM	22219	N9	GUA	141	94.977	33.185	-6.908	1.00	78.35	A16S
ATOM	22167	O2P	GUA	139	85.467	40.985	-1.145	1.00	78.42	A16S	ATOM	22220	C4	GUA	141	96.111	33.912	-6.620	1.00	78.35	A16S
ATOM	22168	O5'	GUA	139	84.782	39.427	-2.998	1.00	92.65	A16S	ATOM	22221	N3	GUA	141	97.265	33.897	-7.328	1.00	78.35	A16S
ATOM	22169	C5'	GUA	139	83.818	38.769	-3.847	1.00	92.65	A16S	ATOM	22222	C2	GUA	141	98.183	34.685	-6.795	1.00	78.35	A16S
ATOM	22170	C4'	GUA	139	84.490	37.989	-4.957	1.00	92.65	A16S	ATOM	22223	N2	GUA	141	99.392	34.788	-7.373	1.00	78.35	A16S
ATOM	22171	O4'	GUA	139	85.038	38.883	-5.962	1.00	92.65	A16S	ATOM	22224	N1	GUA	141	97.982	35.428	-5.656	1.00	78.35	A16S
ATOM	22172	C1'	GUA	139	86.131	38.249	-6.615	1.00	92.65	A16S	ATOM	22225	C6	GUA	141	96.806	35.457	-4.912	1.00	78.35	A16S

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ATOM  22226  O6  GUA  141      96.737  36.157  -3.895  1.00 78.35      A16S
ATOM  22227  C5  GUA  141      95.812  34.618  -5.476  1.00 78.35      A16S
ATOM  22228  N7  GUA  141      94.512  34.363  -5.065  1.00 78.35      A16S
ATOM  22229  C8  GUA  141      94.054  33.514  -5.945  1.00 78.35      A16S
ATOM  22230  C2' GUA  141      95.706  31.016  -7.722  1.00 75.72      A16S
ATOM  22231  O2' GUA  141      96.114  30.456  -8.951  1.00 75.72      A16S
ATOM  22232  C3' GUA  141      94.741  30.117  -6.967  1.00 75.72      A16S
ATOM  22233  O3' GUA  141      95.181  28.774  -6.953  1.00 75.72      A16S
ATOM  22234  P   GUA  142      96.150  28.282  -5.764  1.00 79.85      A16S
ATOM  22235  O1P GUA  142      96.347  26.821  -5.905  1.00 67.51      A16S
ATOM  22236  O2P GUA  142      95.646  28.840  -4.481  1.00 67.51      A16S
ATOM  22237  O5' GUA  142      97.549  28.977  -6.068  1.00 79.85      A16S
ATOM  22238  C5' GUA  142      98.210  28.787  -7.326  1.00 79.85      A16S
ATOM  22239  C4' GUA  142      99.481  29.603  -7.382  1.00 79.85      A16S
ATOM  22240  O4' GUA  142      99.179  31.019  -7.273  1.00 79.85      A16S
ATOM  22241  C1' GUA  142     100.239  31.682  -6.603  1.00 79.85      A16S
ATOM  22242  N9  GUA  142      99.710  32.327  -5.406  1.00 67.51      A16S
ATOM  22243  C4  GUA  142     100.356  33.253  -4.618  1.00 67.51      A16S
ATOM  22244  N3  GUA  142     101.601  33.744  -4.818  1.00 67.51      A16S
ATOM  22245  C2  GUA  142     101.934  34.632  -3.893  1.00 67.51      A16S
ATOM  22246  N2  GUA  142     103.131  35.236  -3.936  1.00 67.51      A16S
ATOM  22247  N1  GUA  142     101.116  34.998  -2.858  1.00 67.51      A16S
ATOM  22248  C6  GUA  142      99.834  34.506  -2.638  1.00 67.51      A16S
ATOM  22249  O6  GUA  142      99.172  34.912  -1.675  1.00 67.51      A16S
ATOM  22250  C5  GUA  142      99.464  33.562  -3.617  1.00 67.51      A16S
ATOM  22251  N7  GUA  142      98.285  32.848  -3.768  1.00 67.51      A16S
ATOM  22252  C8  GUA  142      98.476  32.130  -4.838  1.00 67.51      A16S
ATOM  22253  C2' GUA  142     101.300  30.637  -6.265  1.00 79.85      A16S
ATOM  22254  O2' GUA  142     102.287  30.654  -7.272  1.00 79.85      A16S
ATOM  22255  C3' GUA  142     100.485  29.351  -6.273  1.00 79.85      A16S
ATOM  22256  O3' GUA  142     101.289  28.219  -6.546  1.00 79.85      A16S
ATOM  22257  P   ADE  143     102.058  27.488  -5.342  1.00 67.15      A16S
ATOM  22258  O1P ADE  143     102.288  26.086  -5.768  1.00 64.70      A16S
ATOM  22259  O2P ADE  143     101.326  27.771  -4.070  1.00 64.70      A16S
ATOM  22260  O5' ADE  143     103.466  28.225  -5.274  1.00 67.15      A16S
ATOM  22261  C5' ADE  143     104.205  28.510  -6.473  1.00 67.15      A16S
ATOM  22262  C4' ADE  143     105.183  29.639  -6.233  1.00 67.15      A16S
ATOM  22263  O4' ADE  143     104.472  30.860  -5.906  1.00 67.15      A16S
ATOM  22264  C1' ADE  143     105.226  31.615  -4.978  1.00 67.15      A16S
ATOM  22265  N9  ADE  143     104.384  31.872  -3.810  1.00 64.70      A16S
ATOM  22266  C4  ADE  143     104.628  32.785  -2.813  1.00 64.70      A16S
ATOM  22267  N3  ADE  143     105.687  33.602  -2.693  1.00 64.70      A16S
ATOM  22268  C2  ADE  143     105.571  34.361  -1.611  1.00 64.70      A16S
ATOM  22269  N1  ADE  143     104.589  34.399  -0.707  1.00 64.70      A16S
ATOM  22270  C6  ADE  143     103.537  33.569  -0.861  1.00 64.70      A16S
ATOM  22271  N6  ADE  143     102.547  33.618   0.028  1.00 64.70      A16S
ATOM  22272  C5  ADE  143     103.544  32.706  -1.959  1.00 64.70      A16S
ATOM  22273  N7  ADE  143     102.642  31.750  -2.396  1.00 64.70      A16S
ATOM  22274  C8  ADE  143     103.186  31.283  -3.491  1.00 64.70      A16S
ATOM  22275  C2' ADE  143     106.523  30.855  -4.684  1.00 67.15      A16S
ATOM  22276  O2' ADE  143     107.569  31.392  -5.470  1.00 67.15      A16S
ATOM  22277  C3' ADE  143     106.156  29.430  -5.087  1.00 67.15      A16S
ATOM  22278  O3' ADE  143     107.278  28.701  -5.556  1.00 67.15      A16S
ATOM  22279  P   CYT  144     108.194  27.890  -4.520  1.00 53.75      A16S
ATOM  22280  O1P CYT  144     109.097  27.012  -5.315  1.00 63.41      A16S
ATOM  22281  O2P CYT  144     107.321  27.288  -3.469  1.00 63.41      A16S
ATOM  22282  O5' CYT  144     109.087  29.020  -3.829  1.00 53.75      A16S
ATOM  22283  C5' CYT  144     109.909  29.925  -4.601  1.00 53.75      A16S
ATOM  22284  C4' CYT  144     110.448  31.009  -3.701  1.00 53.75      A16S
ATOM  22285  O4' CYT  144     109.361  31.850  -3.242  1.00 53.75      A16S
ATOM  22286  C1' CYT  144     109.594  32.249  -1.899  1.00 53.75      A16S
ATOM  22287  N1  CYT  144     108.422  31.895  -1.073  1.00 63.41      A16S
ATOM  22288  C6  CYT  144     107.655  30.799  -1.357  1.00 63.41      A16S
ATOM  22289  C2  CYT  144     108.095  32.717   0.006  1.00 63.41      A16S
ATOM  22290  O2  CYT  144     108.813  33.691   0.256  1.00 63.41      A16S
ATOM  22291  N3  CYT  144     107.006  32.433   0.749  1.00 63.41      A16S
ATOM  22292  C4  CYT  144     106.256  31.376   0.452  1.00 63.41      A16S
ATOM  22293  N4  CYT  144     105.182  31.146   1.205  1.00 63.41      A16S
ATOM  22294  C5  CYT  144     106.571  30.509  -0.631  1.00 63.41      A16S
ATOM  22295  C2' CYT  144     110.907  31.628  -1.433  1.00 53.75      A16S
ATOM  22296  O2' CYT  144     111.936  32.592  -1.473  1.00 53.75      A16S
ATOM  22297  C3' CYT  144     111.087  30.488  -2.429  1.00 53.75      A16S
ATOM  22298  O3' CYT  144     112.444  30.176  -2.651  1.00 53.75      A16S
ATOM  22299  P   ADE  145     113.273  29.405  -1.519  1.00 43.89      A16S
ATOM  22300  O1P ADE  145     114.619  29.114  -2.087  1.00 51.15      A16S
ATOM  22301  O2P ADE  145     112.445  28.295  -0.958  1.00 51.15      A16S
ATOM  22302  O5' ADE  145     113.431  30.502  -0.386  1.00 43.89      A16S
ATOM  22303  C5' ADE  145     113.893  30.152   0.916  1.00 43.89      A16S
ATOM  22304  C4' ADE  145     114.038  31.394   1.738  1.00 43.89      A16S
ATOM  22305  O4' ADE  145     112.818  32.168   1.654  1.00 43.89      A16S
ATOM  22306  C1' ADE  145     112.583  32.814   2.883  1.00 43.89      A16S
ATOM  22307  N9  ADE  145     111.234  32.471   3.328  1.00 51.15      A16S
ATOM  22308  C4  ADE  145     110.609  32.939   4.457  1.00 51.15      A16S
ATOM  22309  N3  ADE  145     111.117  33.769   5.381  1.00 51.15      A16S
ATOM  22310  C2  ADE  145     110.221  34.023   6.325  1.00 51.15      A16S
ATOM  22311  N1  ADE  145     108.969  33.576   6.443  1.00 51.15      A16S
ATOM  22312  C6  ADE  145     108.488  32.741   5.499  1.00 51.15      A16S
ATOM  22313  N6  ADE  145     107.236  32.294   5.621  1.00 51.15      A16S
ATOM  22314  C5  ADE  145     109.342  32.392   4.441  1.00 51.15      A16S
ATOM  22315  N7  ADE  145     109.172  31.577   3.330  1.00 51.15      A16S
ATOM  22316  C8  ADE  145     110.321  31.653   2.708  1.00 51.15      A16S
ATOM  22317  C2' ADE  145     113.719  32.441   3.840  1.00 43.89      A16S
ATOM  22318  O2' ADE  145     114.671  33.478   3.825  1.00 43.89      A16S
ATOM  22319  C3' ADE  145     114.264  31.164   3.212  1.00 43.89      A16S
ATOM  22320  O3' ADE  145     115.650  30.987   3.449  1.00 43.89      A16S
ATOM  22321  P   ADE  146     116.135  29.847   4.462  1.00 51.66      A16S
ATOM  22322  O1P ADE  146     117.571  30.060   4.786  1.00 46.56      A16S
ATOM  22323  O2P ADE  146     115.692  28.545   3.908  1.00 46.56      A16S
ATOM  22324  O5' ADE  146     115.285  30.157   5.771  1.00 51.66      A16S
ATOM  22325  C5' ADE  146     115.423  31.420   6.429  1.00 51.66      A16S
ATOM  22326  C4' ADE  146     114.334  31.611   7.451  1.00 51.66      A16S
ATOM  22327  O4' ADE  146     113.043  31.682   6.803  1.00 51.66      A16S
ATOM  22328  C1' ADE  146     112.042  31.360   7.746  1.00 51.66      A16S
ATOM  22329  N9  ADE  146     111.076  30.445   7.145  1.00 46.56      A16S
ATOM  22330  C4  ADE  146     109.819  30.225   7.649  1.00 46.56      A16S
ATOM  22331  N3  ADE  146     109.265  30.808   8.727  1.00 46.56      A16S
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ATOM	22332	C2	ADE	146	108.036	30.340	8.934	1.00	46.56	A16S
ATOM	22333	N1	ADE	146	107.348	29.423	8.242	1.00	46.56	A16S
ATOM	22334	C6	ADE	146	107.936	28.854	7.164	1.00	46.56	A16S
ATOM	22335	N6	ADE	146	107.253	27.932	6.481	1.00	46.56	A16S
ATOM	22336	C5	ADE	146	109.243	29.269	6.831	1.00	46.56	A16S
ATOM	22337	N7	ADE	146	110.118	28.900	5.814	1.00	46.56	A16S
ATOM	22338	C8	ADE	146	111.187	29.629	6.040	1.00	46.56	A16S
ATOM	22339	C2'	ADE	146	112.734	30.778	8.982	1.00	51.66	A16S
ATOM	22340	O2'	ADE	146	112.741	31.723	10.036	1.00	51.66	A16S
ATOM	22341	C3'	ADE	146	114.136	30.500	8.460	1.00	51.66	A16S
ATOM	22342	O3'	ADE	146	115.090	30.537	9.502	1.00	51.66	A16S
ATOM	22343	P	CYT	147	115.955	29.223	9.806	1.00	60.02	A16S
ATOM	22344	O1P	CYT	147	116.739	29.454	11.050	1.00	56.97	A16S
ATOM	22345	O2P	CYT	147	116.653	28.854	8.556	1.00	56.97	A16S
ATOM	22346	O5'	CYT	147	114.851	28.111	10.076	1.00	60.02	A16S
ATOM	22347	C5'	CYT	147	114.058	28.145	11.275	1.00	60.02	A16S
ATOM	22348	C4'	CYT	147	113.000	27.071	11.238	1.00	60.02	A16S
ATOM	22349	O4'	CYT	147	112.006	27.386	10.232	1.00	60.02	A16S
ATOM	22350	C1'	CYT	147	111.566	26.193	9.612	1.00	60.02	A16S
ATOM	22351	N1	CYT	147	111.976	26.229	8.203	1.00	56.97	A16S
ATOM	22352	C6	CYT	147	113.060	26.964	7.807	1.00	56.97	A16S
ATOM	22353	C2	CYT	147	111.237	25.496	7.264	1.00	56.97	A16S
ATOM	22354	O2	CYT	147	110.278	24.803	7.652	1.00	56.97	A16S
ATOM	22355	N3	CYT	147	111.592	25.553	5.961	1.00	56.97	A16S
ATOM	22356	C4	CYT	147	112.645	26.284	5.587	1.00	56.97	A16S
ATOM	22357	N4	CYT	147	112.952	26.310	4.300	1.00	56.97	A16S
ATOM	22358	C5	CYT	147	113.426	27.018	6.522	1.00	56.97	A16S
ATOM	22359	C2'	CYT	147	112.231	25.024	10.332	1.00	60.02	A16S
ATOM	22360	O2'	CYT	147	111.388	24.560	11.373	1.00	60.02	A16S
ATOM	22361	C3'	CYT	147	113.492	25.683	10.863	1.00	60.02	A16S
ATOM	22362	O3'	CYT	147	114.031	24.975	11.961	1.00	60.02	A16S
ATOM	22363	P	CYT	148	115.129	23.844	11.697	1.00	79.42	A16S
ATOM	22364	O1P	CYT	148	115.436	23.250	13.019	1.00	74.30	A16S
ATOM	22365	O2P	CYT	148	116.227	24.439	10.888	1.00	74.30	A16S
ATOM	22366	O5'	CYT	148	114.352	22.765	10.820	1.00	79.42	A16S
ATOM	22367	C5'	CYT	148	113.362	21.910	11.417	1.00	79.42	A16S
ATOM	22368	C4'	CYT	148	112.896	20.870	10.427	1.00	79.42	A16S
ATOM	22369	O4'	CYT	148	112.140	21.512	9.366	1.00	79.42	A16S
ATOM	22370	C1'	CYT	148	112.381	20.846	8.134	1.00	79.42	A16S
ATOM	22371	N1	CYT	148	113.051	21.785	7.210	1.00	74.30	A16S
ATOM	22372	C6	CYT	148	113.741	22.866	7.685	1.00	74.30	A16S
ATOM	22373	C2	CYT	148	112.997	21.537	5.834	1.00	74.30	A16S
ATOM	22374	O2	CYT	148	112.346	20.565	5.423	1.00	74.30	A16S
ATOM	22375	N3	CYT	148	113.657	22.361	4.990	1.00	74.30	A16S
ATOM	22376	C4	CYT	148	114.342	23.398	5.471	1.00	74.30	A16S
ATOM	22377	N4	CYT	148	114.992	24.175	4.611	1.00	74.30	A16S
ATOM	22378	C5	CYT	148	114.396	23.684	6.860	1.00	74.30	A16S
ATOM	22379	C2'	CYT	148	113.287	19.649	8.431	1.00	79.42	A16S
ATOM	22380	O2'	CYT	148	112.516	18.481	8.629	1.00	79.42	A16S
ATOM	22381	C3'	CYT	148	113.990	20.106	9.698	1.00	79.42	A16S
ATOM	22382	O3'	CYT	148	114.501	19.011	10.434	1.00	79.42	A16S
ATOM	22383	P	CYT	149	116.065	18.653	10.327	1.00	73.72	A16S
ATOM	22384	O1P	CYT	149	116.341	17.687	11.421	1.00	83.28	A16S
ATOM	22385	O2P	CYT	149	116.828	19.930	10.268	1.00	83.28	A16S
ATOM	22386	O5'	CYT	149	116.214	17.926	8.912	1.00	73.72	A16S
ATOM	22387	C5'	CYT	149	115.531	16.689	8.641	1.00	73.72	A16S
ATOM	22388	C4'	CYT	149	115.806	16.215	7.228	1.00	73.72	A16S
ATOM	22389	O4'	CYT	149	115.133	17.068	6.264	1.00	73.72	A16S
ATOM	22390	C1'	CYT	149	115.884	17.096	5.052	1.00	73.72	A16S
ATOM	22391	N1	CYT	149	116.287	18.483	4.747	1.00	83.28	A16S
ATOM	22392	C6	CYT	149	116.423	19.416	5.740	1.00	83.28	A16S
ATOM	22393	C2	CYT	149	116.566	18.824	3.413	1.00	83.28	A16S
ATOM	22394	O2	CYT	149	116.398	17.972	2.521	1.00	83.28	A16S
ATOM	22395	N3	CYT	149	117.007	20.067	3.131	1.00	83.28	A16S
ATOM	22396	C4	CYT	149	117.165	20.957	4.114	1.00	83.28	A16S
ATOM	22397	N4	CYT	149	117.633	22.161	3.794	1.00	83.28	A16S
ATOM	22398	C5	CYT	149	116.856	20.650	5.471	1.00	83.28	A16S
ATOM	22399	C2'	CYT	149	117.123	16.223	5.243	1.00	73.72	A16S
ATOM	22400	O2'	CYT	149	116.924	14.954	4.660	1.00	73.72	A16S
ATOM	22401	C3'	CYT	149	117.254	16.197	6.761	1.00	73.72	A16S
ATOM	22402	O3'	CYT	149	117.976	15.060	7.184	1.00	73.72	A16S
ATOM	22403	P	GUA	150	119.579	15.094	7.149	1.00	74.41	A16S
ATOM	22404	O1P	GUA	150	120.043	13.863	7.849	1.00	80.42	A16S
ATOM	22405	O2P	GUA	150	120.023	16.424	7.628	1.00	80.42	A16S
ATOM	22406	O5'	GUA	150	119.943	14.994	5.600	1.00	74.41	A16S
ATOM	22407	C5'	GUA	150	119.780	13.754	4.894	1.00	74.41	A16S
ATOM	22408	C4'	GUA	150	120.302	13.868	3.486	1.00	74.41	A16S
ATOM	22409	O4'	GUA	150	119.494	14.825	2.753	1.00	74.41	A16S
ATOM	22410	C1'	GUA	150	120.312	15.535	1.830	1.00	74.41	A16S
ATOM	22411	N9	GUA	150	120.375	16.941	2.239	1.00	80.42	A16S
ATOM	22412	C4	GUA	150	120.845	17.989	1.475	1.00	80.42	A16S
ATOM	22413	N3	GUA	150	121.290	17.906	0.201	1.00	80.42	A16S
ATOM	22414	C2	GUA	150	121.699	19.072	-0.260	1.00	80.42	A16S
ATOM	22415	N2	GUA	150	122.162	19.160	-1.503	1.00	80.42	A16S
ATOM	22416	N1	GUA	150	121.681	20.234	0.468	1.00	80.42	A16S
ATOM	22417	C6	GUA	150	121.235	20.350	1.783	1.00	80.42	A16S
ATOM	22418	O6	GUA	150	121.271	21.452	2.353	1.00	80.42	A16S
ATOM	22419	C5	GUA	150	120.782	19.096	2.293	1.00	80.42	A16S
ATOM	22420	N7	GUA	150	120.263	18.760	3.539	1.00	80.42	A16S
ATOM	22421	C8	GUA	150	120.029	17.478	3.459	1.00	80.42	A16S
ATOM	22422	C2'	GUA	150	121.713	14.927	1.907	1.00	74.41	A16S
ATOM	22423	O2'	GUA	150	121.900	13.906	0.944	1.00	74.41	A16S
ATOM	22424	C3'	GUA	150	121.721	14.390	3.326	1.00	74.41	A16S
ATOM	22425	O3'	GUA	150	122.739	13.430	3.492	1.00	74.41	A16S
ATOM	22426	P	GUA	151	124.209	13.925	3.903	1.00	75.86	A16S
ATOM	22427	O1P	GUA	151	125.042	12.705	3.993	1.00	80.90	A16S
ATOM	22428	O2P	GUA	151	124.084	14.819	5.082	1.00	80.90	A16S
ATOM	22429	O5'	GUA	151	124.705	14.785	2.652	1.00	75.86	A16S
ATOM	22430	C5'	GUA	151	124.933	14.141	1.394	1.00	75.86	A16S
ATOM	22431	C4'	GUA	151	125.460	15.110	0.357	1.00	75.86	A16S
ATOM	22432	O4'	GUA	151	124.464	16.111	0.022	1.00	75.86	A16S
ATOM	22433	C1'	GUA	151	125.111	17.261	-0.498	1.00	75.86	A16S
ATOM	22434	N9	GUA	151	124.840	18.410	0.362	1.00	80.90	A16S
ATOM	22435	C4	GUA	151	125.162	19.714	0.069	1.00	80.90	A16S
ATOM	22436	N3	GUA	151	125.722	20.148	-1.081	1.00	80.90	A16S
ATOM	22437	C2	GUA	151	125.959	21.442	-1.058	1.00	80.90	A16S

ATOM	22438	N2	GUA	151	126.514	22.025	-2.124	1.00	80.90	A16S
ATOM	22439	N1	GUA	151	125.672	22.257	0.014	1.00	80.90	A16S
ATOM	22440	C6	GUA	151	125.104	21.837	1.216	1.00	80.90	A16S
ATOM	22441	O6	GUA	151	124.913	22.656	2.134	1.00	80.90	A16S
ATOM	22442	C5	GUA	151	124.832	20.437	1.197	1.00	80.90	A16S
ATOM	22443	N7	GUA	151	124.275	19.610	2.165	1.00	80.90	A16S
ATOM	22444	C8	GUA	151	124.290	18.420	1.622	1.00	80.90	A16S
ATOM	22445	C2'	GUA	151	126.612	16.981	-0.470	1.00	75.86	A16S
ATOM	22446	O2'	GUA	151	127.015	16.465	-1.723	1.00	75.86	A16S
ATOM	22447	C3'	GUA	151	126.708	15.935	0.630	1.00	75.86	A16S
ATOM	22448	O3'	GUA	151	127.921	15.212	0.498	1.00	75.86	A16S
ATOM	22449	P	GUA	152	129.270	15.806	1.140	1.00	100.72	A16S
ATOM	22450	O1P	GUA	152	130.341	14.803	0.945	1.00	94.42	A16S
ATOM	22451	O2P	GUA	152	128.964	16.291	2.511	1.00	94.42	A16S
ATOM	22452	O5'	GUA	152	129.615	17.050	0.207	1.00	100.72	A16S
ATOM	22453	C5'	GUA	152	129.901	16.862	-1.196	1.00	100.72	A16S
ATOM	22454	C4'	GUA	152	130.331	18.168	-1.837	1.00	100.72	A16S
ATOM	22455	O4'	GUA	152	129.220	19.107	-1.852	1.00	100.72	A16S
ATOM	22456	C1'	GUA	152	129.707	20.427	-1.662	1.00	100.72	A16S
ATOM	22457	N9	GUA	152	129.158	20.957	-0.414	1.00	94.42	A16S
ATOM	22458	C4	GUA	152	129.272	22.254	0.037	1.00	94.42	A16S
ATOM	22459	N3	GUA	152	129.907	23.264	-0.599	1.00	94.42	A16S
ATOM	22460	C2	GUA	152	129.864	24.390	0.093	1.00	94.42	A16S
ATOM	22461	N2	GUA	152	130.458	25.489	-0.389	1.00	94.42	A16S
ATOM	22462	N1	GUA	152	129.238	24.522	1.310	1.00	94.42	A16S
ATOM	22463	C6	GUA	152	128.571	23.501	1.982	1.00	94.42	A16S
ATOM	22464	O6	GUA	152	128.031	23.731	3.070	1.00	94.42	A16S
ATOM	22465	C5	GUA	152	128.622	22.277	1.255	1.00	94.42	A16S
ATOM	22466	N7	GUA	152	128.110	21.023	1.565	1.00	94.42	A16S
ATOM	22467	C8	GUA	152	128.449	20.275	0.549	1.00	94.42	A16S
ATOM	22468	C2'	GUA	152	131.234	20.352	-1.608	1.00	100.72	A16S
ATOM	22469	O2'	GUA	152	131.775	20.598	-2.892	1.00	100.72	A16S
ATOM	22470	C3'	GUA	152	131.454	18.920	-1.138	1.00	100.72	A16S
ATOM	22471	O3'	GUA	152	132.748	18.436	-1.469	1.00	100.72	A16S
ATOM	22472	P	GUA	153	133.912	18.487	-0.364	1.00	114.93	A16S
ATOM	22473	O1P	GUA	153	135.132	17.918	-0.988	1.00	82.09	A16S
ATOM	22474	O2P	GUA	153	133.387	17.909	0.901	1.00	82.09	A16S
ATOM	22475	O5'	GUA	153	134.143	20.043	-0.118	1.00	114.93	A16S
ATOM	22476	C5'	GUA	153	134.802	20.860	-1.106	1.00	114.93	A16S
ATOM	22477	C4'	GUA	153	135.103	22.228	-0.538	1.00	114.93	A16S
ATOM	22478	O4'	GUA	153	133.878	22.991	-0.398	1.00	114.93	A16S
ATOM	22479	C1'	GUA	153	133.971	23.833	0.740	1.00	114.93	A16S
ATOM	22480	N9	GUA	153	132.916	23.469	1.676	1.00	82.09	A16S
ATOM	22481	C4	GUA	153	132.469	24.223	2.738	1.00	82.09	A16S
ATOM	22482	N3	GUA	153	132.920	25.447	3.093	1.00	82.09	A16S
ATOM	22483	C2	GUA	153	132.299	25.911	4.170	1.00	82.09	A16S
ATOM	22484	N2	GUA	153	132.620	27.119	4.663	1.00	82.09	A16S
ATOM	22485	N1	GUA	153	131.318	25.224	4.841	1.00	82.09	A16S
ATOM	22486	C6	GUA	153	130.839	23.965	4.489	1.00	82.09	A16S
ATOM	22487	O6	GUA	153	129.951	23.437	5.157	1.00	82.09	A16S
ATOM	22488	C5	GUA	153	131.494	23.460	3.341	1.00	82.09	A16S
ATOM	22489	N7	GUA	153	131.326	22.258	2.670	1.00	82.09	A16S
ATOM	22490	C8	GUA	153	132.186	22.308	1.690	1.00	82.09	A16S
ATOM	22491	C2'	GUA	153	135.347	23.624	1.370	1.00	114.93	A16S
ATOM	22492	O2'	GUA	153	136.232	24.627	0.921	1.00	114.93	A16S
ATOM	22493	C3'	GUA	153	135.715	22.243	0.853	1.00	114.93	A16S
ATOM	22494	O3'	GUA	153	137.117	22.053	0.840	1.00	114.93	A16S
ATOM	22495	P	ADE	154	137.814	21.298	2.069	1.00	83.00	A16S
ATOM	22496	O1P	ADE	154	139.297	21.400	1.923	1.00	91.11	A16S
ATOM	22497	O2P	ADE	154	137.164	19.961	2.178	1.00	91.11	A16S
ATOM	22498	O5'	ADE	154	137.394	22.157	3.340	1.00	83.00	A16S
ATOM	22499	C5'	ADE	154	137.699	21.688	4.656	1.00	83.00	A16S
ATOM	22500	C4'	ADE	154	138.272	22.802	5.487	1.00	83.00	A16S
ATOM	22501	O4'	ADE	154	139.480	23.301	4.859	1.00	83.00	A16S
ATOM	22502	C1'	ADE	154	139.612	24.688	5.126	1.00	83.00	A16S
ATOM	22503	N9	ADE	154	139.706	25.413	3.857	1.00	91.11	A16S
ATOM	22504	C4	ADE	154	140.050	26.738	3.711	1.00	91.11	A16S
ATOM	22505	N3	ADE	154	140.372	27.613	4.683	1.00	91.11	A16S
ATOM	22506	C2	ADE	154	140.647	28.806	4.165	1.00	91.11	A16S
ATOM	22507	N1	ADE	154	140.633	29.198	2.883	1.00	91.11	A16S
ATOM	22508	C6	ADE	154	140.300	28.296	1.934	1.00	91.11	A16S
ATOM	22509	N6	ADE	154	140.274	28.684	0.660	1.00	91.11	A16S
ATOM	22510	C5	ADE	154	139.994	26.994	2.351	1.00	91.11	A16S
ATOM	22511	N7	ADE	154	139.629	25.854	1.650	1.00	91.11	A16S
ATOM	22512	C8	ADE	154	139.473	24.946	2.584	1.00	91.11	A16S
ATOM	22513	C2'	ADE	154	138.418	25.117	5.978	1.00	83.00	A16S
ATOM	22514	O2'	ADE	154	138.798	25.096	7.338	1.00	83.00	A16S
ATOM	22515	C3'	ADE	154	137.399	24.034	5.653	1.00	83.00	A16S
ATOM	22516	O3'	ADE	154	136.451	23.868	6.699	1.00	83.00	A16S
ATOM	22517	P	ADE	155	134.956	24.420	6.503	1.00	92.24	A16S
ATOM	22518	O1P	ADE	155	134.184	24.095	7.734	1.00	80.70	A16S
ATOM	22519	O2P	ADE	155	134.473	23.942	5.181	1.00	80.70	A16S
ATOM	22520	O5'	ADE	155	135.142	26.001	6.413	1.00	92.24	A16S
ATOM	22521	C5'	ADE	155	135.742	26.745	7.498	1.00	92.24	A16S
ATOM	22522	C4'	ADE	155	136.151	28.129	7.033	1.00	92.24	A16S
ATOM	22523	O4'	ADE	155	137.137	28.006	5.978	1.00	92.24	A16S
ATOM	22524	C1'	ADE	155	136.940	29.028	5.019	1.00	92.24	A16S
ATOM	22525	N9	ADE	155	136.633	28.386	3.741	1.00	80.70	A16S
ATOM	22526	C4	ADE	155	136.865	28.887	2.482	1.00	80.70	A16S
ATOM	22527	N3	ADE	155	137.402	30.074	2.160	1.00	80.70	A16S
ATOM	22528	C2	ADE	155	137.492	30.204	0.840	1.00	80.70	A16S
ATOM	22529	N1	ADE	155	137.131	29.351	-0.122	1.00	80.70	A16S
ATOM	22530	C6	ADE	155	136.587	28.171	0.236	1.00	80.70	A16S
ATOM	22531	N6	ADE	155	136.218	27.320	-0.723	1.00	80.70	A16S
ATOM	22532	C5	ADE	155	136.440	27.909	1.604	1.00	80.70	A16S
ATOM	22533	N7	ADE	155	135.933	26.818	2.293	1.00	80.70	A16S
ATOM	22534	C8	ADE	155	136.067	27.151	3.552	1.00	80.70	A16S
ATOM	22535	C2'	ADE	155	135.818	29.935	5.524	1.00	92.24	A16S
ATOM	22536	O2'	ADE	155	136.388	31.024	6.223	1.00	92.24	A16S
ATOM	22537	C3'	ADE	155	135.048	28.994	6.441	1.00	92.24	A16S
ATOM	22538	O3'	ADE	155	134.353	29.706	7.457	1.00	92.24	A16S
ATOM	22539	P	ADE	156	132.780	30.000	7.296	1.00	102.17	A16S
ATOM	22540	O1P	ADE	156	132.306	30.500	8.619	1.00	84.86	A16S
ATOM	22541	O2P	ADE	156	132.119	28.822	6.674	1.00	84.86	A16S
ATOM	22542	O5'	ADE	156	132.706	31.197	6.248	1.00	102.17	A16S
ATOM	22543	C5'	ADE	156	133.055	32.547	6.622	1.00	102.17	A16S

ATOM	22544	C4'	ADE	156	133.180	33.406	5.388	1.00102.17	A16S	ATOM	22597	C2'	URI	158	126.136	27.287	-2.803	1.00 80.55	A16S
ATOM	22545	O4'	ADE	156	134.206	32.828	4.539	1.00102.17	A16S	ATOM	22598	O2'	URI	158	126.760	26.738	-3.946	1.00 80.55	A16S
ATOM	22546	C1'	ADE	156	133.798	32.878	3.182	1.00102.17	A16S	ATOM	22599	C3'	URI	158	125.723	28.740	-2.987	1.00 80.55	A16S
ATOM	22547	N9	ADE	156	133.590	31.498	2.727	1.00 84.86	A16S	ATOM	22600	O3'	URI	158	125.222	28.998	-4.286	1.00 80.55	A16S
ATOM	22548	C4	ADE	156	133.609	31.046	1.428	1.00 84.86	A16S	ATOM	22601	P	CYT	159	123.675	28.722	-4.607	1.00 75.29	A16S
ATOM	22549	N3	ADE	156	133.823	31.767	0.314	1.00 84.86	A16S	ATOM	22602	O1P	CYT	159	123.378	29.331	-5.934	1.00 81.15	A16S
ATOM	22550	C2	ADE	156	133.772	30.990	-0.763	1.00 84.86	A16S	ATOM	22603	O2P	CYT	159	122.862	29.110	-3.420	1.00 81.15	A16S
ATOM	22551	N1	ADE	156	133.549	29.674	-0.848	1.00 84.86	A16S	ATOM	22604	O5'	CYT	159	123.617	27.142	-4.768	1.00 75.29	A16S
ATOM	22552	C6	ADE	156	133.336	28.979	0.290	1.00 84.86	A16S	ATOM	22605	C5'	CYT	159	124.301	26.497	-5.851	1.00 75.29	A16S
ATOM	22553	N6	ADE	156	133.119	27.666	0.205	1.00 84.86	A16S	ATOM	22606	C4'	CYT	159	123.954	25.034	-5.885	1.00 75.29	A16S
ATOM	22554	C5	ADE	156	133.362	29.687	1.500	1.00 84.86	A16S	ATOM	22607	O4'	CYT	159	124.610	24.346	-4.789	1.00 75.29	A16S
ATOM	22555	N7	ADE	156	133.185	29.288	2.816	1.00 84.86	A16S	ATOM	22608	C1'	CYT	159	123.764	23.320	-4.301	1.00 75.29	A16S
ATOM	22556	C8	ADE	156	133.330	30.392	3.502	1.00 84.86	A16S	ATOM	22609	N1	CYT	159	123.398	23.638	-2.917	1.00 81.15	A16S
ATOM	22557	C2'	ADE	156	132.511	33.700	3.127	1.00102.17	A16S	ATOM	22610	C6	CYT	159	123.511	24.909	-2.428	1.00 81.15	A16S
ATOM	22558	O2'	ADE	156	132.814	35.062	2.896	1.00102.17	A16S	ATOM	22611	C2	CYT	159	122.900	22.618	-2.113	1.00 81.15	A16S
ATOM	22559	C3'	ADE	156	131.937	33.446	4.512	1.00102.17	A16S	ATOM	22612	O2	CYT	159	122.834	21.471	-2.580	1.00 81.15	A16S
ATOM	22560	O3'	ADE	156	131.013	34.445	4.915	1.00102.17	A16S	ATOM	22613	N3	CYT	159	122.500	22.902	-0.851	1.00 81.15	A16S
ATOM	22561	P	CYT	157	129.475	34.046	5.167	1.00 70.20	A16S	ATOM	22614	C4	CYT	159	122.587	24.152	-0.392	1.00 81.15	A16S
ATOM	22562	O1P	CYT	157	128.718	35.320	5.288	1.00100.52	A16S	ATOM	22615	N4	CYT	159	122.152	24.399	0.846	1.00 81.15	A16S
ATOM	22563	O2P	CYT	157	129.443	33.063	6.281	1.00100.52	A16S	ATOM	22616	C5	CYT	159	123.118	25.208	-1.184	1.00 81.15	A16S
ATOM	22564	O5'	CYT	157	129.014	33.298	3.833	1.00 70.20	A16S	ATOM	22617	C2'	CYT	159	122.510	23.297	-5.171	1.00 75.29	A16S
ATOM	22565	C5'	CYT	157	129.234	33.899	2.548	1.00 70.20	A16S	ATOM	22618	O2'	CYT	159	122.653	22.333	-6.192	1.00 75.29	A16S
ATOM	22566	C4'	CYT	157	129.434	32.845	1.483	1.00 70.20	A16S	ATOM	22619	C3'	CYT	159	122.483	24.725	-5.692	1.00 75.29	A16S
ATOM	22567	O4'	CYT	157	130.329	31.809	1.975	1.00 70.20	A16S	ATOM	22620	O3'	CYT	159	121.724	24.876	-6.870	1.00 75.29	A16S
ATOM	22568	C1'	CYT	157	130.007	30.564	1.369	1.00 70.20	A16S	ATOM	22621	P	GUA	160	120.143	25.118	-6.749	1.00 71.91	A16S
ATOM	22569	N1	CYT	157	129.630	29.584	2.414	1.00100.52	A16S	ATOM	22622	O1P	GUA	160	119.621	25.420	-8.113	1.00 83.80	A16S
ATOM	22570	C6	CYT	157	129.546	29.944	3.731	1.00100.52	A16S	ATOM	22623	O2P	GUA	160	119.891	26.070	-5.628	1.00 83.80	A16S
ATOM	22571	C2	CYT	157	129.324	28.267	2.023	1.00100.52	A16S	ATOM	22624	O5'	GUA	160	119.589	23.691	-6.316	1.00 71.91	A16S
ATOM	22572	O2	CYT	157	129.455	27.945	0.835	1.00100.52	A16S	ATOM	22625	C5'	GUA	160	119.732	22.571	-7.196	1.00 71.91	A16S
ATOM	22573	N3	CYT	157	128.899	27.381	2.952	1.00100.52	A16S	ATOM	22626	C4'	GUA	160	119.305	21.297	-6.517	1.00 71.91	A16S
ATOM	22574	C4	CYT	157	128.790	27.755	4.228	1.00100.52	A16S	ATOM	22627	O4'	GUA	160	120.158	21.019	-5.376	1.00 71.91	A16S
ATOM	22575	N4	CYT	157	128.334	26.855	5.105	1.00100.52	A16S	ATOM	22628	C1'	GUA	160	119.424	20.297	-4.400	1.00 71.91	A16S
ATOM	22576	C5	CYT	157	129.135	29.070	4.662	1.00100.52	A16S	ATOM	22629	N9	GUA	160	119.432	21.046	-3.147	1.00 83.80	A16S
ATOM	22577	C2'	CYT	157	128.842	30.822	0.414	1.00 70.20	A16S	ATOM	22630	C4	GUA	160	118.992	20.590	-1.923	1.00 83.80	A16S
ATOM	22578	O2'	CYT	157	129.354	31.056	-0.883	1.00 70.20	A16S	ATOM	22631	N3	GUA	160	118.512	19.355	-1.661	1.00 83.80	A16S
ATOM	22579	C3'	CYT	157	128.215	32.070	1.019	1.00 70.20	A16S	ATOM	22632	C2	GUA	160	118.135	19.231	-0.399	1.00 83.80	A16S
ATOM	22580	O3'	CYT	157	127.454	32.778	0.053	1.00 70.20	A16S	ATOM	22633	N2	GUA	160	117.631	18.069	0.038	1.00 83.80	A16S
ATOM	22581	P	URI	158	125.947	32.308	-0.265	1.00 80.55	A16S	ATOM	22634	N1	GUA	160	118.223	20.235	0.527	1.00 83.80	A16S
ATOM	22582	O1P	URI	158	125.335	33.274	-1.218	1.00 74.06	A16S	ATOM	22635	C6	GUA	160	118.713	21.510	0.278	1.00 83.80	A16S
ATOM	22583	O2P	URI	158	125.258	31.995	1.026	1.00 74.06	A16S	ATOM	22636	O6	GUA	160	118.740	22.342	1.183	1.00 83.80	A16S
ATOM	22584	O5'	URI	158	126.137	30.944	-1.056	1.00 80.55	A16S	ATOM	22637	C5	GUA	160	119.125	21.658	-1.066	1.00 83.80	A16S
ATOM	22585	C5'	URI	158	126.864	30.909	-2.284	1.00 80.55	A16S	ATOM	22638	N7	GUA	160	119.665	22.754	-1.724	1.00 83.80	A16S
ATOM	22586	C4'	URI	158	127.020	29.489	-2.742	1.00 80.55	A16S	ATOM	22639	C8	GUA	160	119.837	22.344	-2.951	1.00 83.80	A16S
ATOM	22587	O4'	URI	158	127.681	28.726	-1.701	1.00 80.55	A16S	ATOM	22640	C2'	GUA	160	118.000	20.129	-4.933	1.00 71.91	A16S
ATOM	22588	C1'	URI	158	127.173	27.405	-1.688	1.00 80.55	A16S	ATOM	22641	O2'	GUA	160	117.869	18.863	-5.546	1.00 71.91	A16S
ATOM	22589	N1	URI	158	126.606	27.115	-0.362	1.00 74.06	A16S	ATOM	22642	C3'	GUA	160	117.910	21.271	-5.933	1.00 71.91	A16S
ATOM	22590	C6	URI	158	126.247	28.109	0.520	1.00 74.06	A16S	ATOM	22643	O3'	GUA	160	116.911	21.060	-6.909	1.00 71.91	A16S
ATOM	22591	C2	URI	158	126.439	25.784	-0.033	1.00 74.06	A16S	ATOM	22644	P	GUA	161	115.414	21.561	-6.607	1.00 65.58	A16S
ATOM	22592	O2	URI	158	126.752	24.875	-0.782	1.00 74.06	A16S	ATOM	22645	O1P	GUA	161	114.573	21.254	-7.802	1.00 80.81	A16S
ATOM	22593	N3	URI	158	125.895	25.553	1.202	1.00 74.06	A16S	ATOM	22646	O2P	GUA	161	115.474	22.953	-6.094	1.00 80.81	A16S
ATOM	22594	C4	URI	158	125.516	26.491	2.125	1.00 74.06	A16S	ATOM	22647	O5'	GUA	161	114.966	20.637	-5.386	1.00 65.58	A16S
ATOM	22595	O4	URI	158	125.045	26.116	3.197	1.00 74.06	A16S	ATOM	22648	C5'	GUA	161	114.909	19.206	-5.528	1.00 65.58	A16S
ATOM	22596	C5	URI	158	125.724	27.850	1.719	1.00 74.06	A16S	ATOM	22649	C4'	GUA	161	114.297	18.573	-4.305	1.00 65.58	A16S

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ATOM  22650  O4'  GUA  161     115.226  18.623  -3.191  1.00 65.58      A16S
ATOM  22651  C1'  GUA  161     114.500  18.748  -1.977  1.00 65.58      A16S
ATOM  22652  N9   GUA  161     114.918  19.973  -1.307  1.00 80.81      A16S
ATOM  22653  C4   GUA  161     114.603  20.338  -0.024  1.00 80.81      A16S
ATOM  22654  N3   GUA  161     113.869  19.613   0.847  1.00 80.81      A16S
ATOM  22655  C2   GUA  161     113.719  20.234   2.002  1.00 80.81      A16S
ATOM  22656  N2   GUA  161     113.010  19.657   2.978  1.00 80.81      A16S
ATOM  22657  N1   GUA  161     114.250  21.467   2.282  1.00 80.81      A16S
ATOM  22658  C6   GUA  161     115.009  22.230   1.397  1.00 80.81      A16S
ATOM  22659  O6   GUA  161     115.441  23.333   1.745  1.00 80.81      A16S
ATOM  22660  C5   GUA  161     115.174  21.576   0.155  1.00 80.81      A16S
ATOM  22661  N7   GUA  161     115.846  21.980  -0.989  1.00 80.81      A16S
ATOM  22662  C8   GUA  161     115.672  20.996  -1.827  1.00 80.81      A16S
ATOM  22663  C2'  GUA  161     113.007  18.792  -2.318  1.00 65.58      A16S
ATOM  22664  O2'  GUA  161     112.411  17.527  -2.116  1.00 65.58      A16S
ATOM  22665  C3'  GUA  161     113.035  19.232  -3.777  1.00 65.58      A16S
ATOM  22666  O3'  GUA  161     111.872  18.851  -4.486  1.00 65.58      A16S
ATOM  22667  P    GUA  162     110.602  19.830  -4.489  1.00 55.95      A16S
ATOM  22668  O1P  GUA  162     109.555  19.247  -5.376  1.00 74.80      A16S
ATOM  22669  O2P  GUA  162     111.086  21.223  -4.741  1.00 74.80      A16S
ATOM  22670  O5'  GUA  162     110.092  19.763  -2.983  1.00 55.95      A16S
ATOM  22671  C5'  GUA  162     109.458  18.588  -2.483  1.00 55.95      A16S
ATOM  22672  C4'  GUA  162     109.017  18.789  -1.057  1.00 55.95      A16S
ATOM  22673  O4'  GUA  162     110.175  18.977  -0.202  1.00 55.95      A16S
ATOM  22674  C1'  GUA  162     109.820  19.782   0.912  1.00 55.95      A16S
ATOM  22675  N9   GUA  162     110.670  20.974   0.927  1.00 74.80      A16S
ATOM  22676  C4   GUA  162     110.829  21.868   1.971  1.00 74.80      A16S
ATOM  22677  N3   GUA  162     110.264  21.778   3.197  1.00 74.80      A16S
ATOM  22678  C2   GUA  162     110.595  22.804   3.972  1.00 74.80      A16S
ATOM  22679  N2   GUA  162     110.144  22.865   5.233  1.00 74.80      A16S
ATOM  22680  N1   GUA  162     111.398  23.840   3.570  1.00 74.80      A16S
ATOM  22681  C6   GUA  162     111.981  23.956   2.315  1.00 74.80      A16S
ATOM  22682  O6   GUA  162     112.676  24.937   2.051  1.00 74.80      A16S
ATOM  22683  C5   GUA  162     111.655  22.856   1.481  1.00 74.80      A16S
ATOM  22684  N7   GUA  162     112.036  22.577   0.175  1.00 74.80      A16S
ATOM  22685  C8   GUA  162     111.437  21.453  -0.109  1.00 74.80      A16S
ATOM  22686  C2'  GUA  162     108.342  20.147   0.748  1.00 55.95      A16S
ATOM  22687  O2'  GUA  162     107.536  19.242   1.472  1.00 55.95      A16S
ATOM  22688  C3'  GUA  162     108.141  19.984  -0.750  1.00 55.95      A16S
ATOM  22689  O3'  GUA  162     106.779  19.754  -1.043  1.00 55.95      A16S
ATOM  22690  P    CYT  163     105.768  21.007  -1.124  1.00 64.85      A16S
ATOM  22691  O1P  CYT  163     104.398  20.497  -1.399  1.00 77.56      A16S
ATOM  22692  O2P  CYT  163     106.366  22.032  -2.024  1.00 77.56      A16S
ATOM  22693  O5'  CYT  163     105.761  21.596   0.355  1.00 64.85      A16S
ATOM  22694  C5'  CYT  163     105.180  20.851   1.423  1.00 64.85      A16S
ATOM  22695  C4'  CYT  163     105.017  21.713   2.643  1.00 64.85      A16S
ATOM  22696  O4'  CYT  163     106.305  22.049   3.211  1.00 64.85      A16S
ATOM  22697  C1'  CYT  163     106.152  23.185   4.040  1.00 64.85      A16S
ATOM  22698  N1   CYT  163     107.246  24.140   3.800  1.00 77.56      A16S
ATOM  22699  C6   CYT  163     107.833  24.259   2.572  1.00 77.56      A16S
ATOM  22700  C2   CYT  163     107.663  24.956   4.863  1.00 77.56      A16S
ATOM  22701  O2   CYT  163     107.134  24.812   5.983  1.00 77.56      A16S
ATOM  22702  N3   CYT  163     108.627  25.879   4.647  1.00 77.56      A16S
ATOM  22703  C4   CYT  163     109.171  26.004   3.437  1.00 77.56      A16S
ATOM  22704  N4   CYT  163     110.093  26.950   3.265  1.00 77.56      A16S
ATOM  22705  C5   CYT  163     108.787  25.170   2.348  1.00 77.56      A16S
ATOM  22706  C2'  CYT  163     104.771  23.780   3.758  1.00 64.85      A16S
ATOM  22707  O2'  CYT  163     103.910  23.440   4.826  1.00 64.85      A16S
ATOM  22708  C3'  CYT  163     104.368  23.072   2.469  1.00 64.85      A16S
ATOM  22709  O3'  CYT  163     102.958  22.986   2.383  1.00 64.85      A16S
ATOM  22710  P    URI  164     102.144  24.145   1.628  1.00 47.34      A16S
ATOM  22711  O1P  URI  164     100.698  23.791   1.681  1.00 54.48      A16S
ATOM  22712  O2P  URI  164     102.802  24.354   0.308  1.00 54.48      A16S
ATOM  22713  O5'  URI  164     102.379  25.443   2.529  1.00 47.34      A16S
ATOM  22714  C5'  URI  164     101.847  25.518   3.869  1.00 47.34      A16S
ATOM  22715  C4'  URI  164     102.279  26.799   4.561  1.00 47.34      A16S
ATOM  22716  O4'  URI  164     103.709  26.811   4.817  1.00 47.34      A16S
ATOM  22717  C1'  URI  164     104.201  28.135   4.715  1.00 47.34      A16S
ATOM  22718  N1   URI  164     105.219  28.172   3.649  1.00 54.48      A16S
ATOM  22719  C6   URI  164     105.113  27.382   2.523  1.00 54.48      A16S
ATOM  22720  C2   URI  164     106.302  29.011   3.818  1.00 54.48      A16S
ATOM  22721  O2   URI  164     106.418  29.759   4.774  1.00 54.48      A16S
ATOM  22722  N3   URI  164     107.246  28.948   2.821  1.00 54.48      A16S
ATOM  22723  C4   URI  164     107.212  28.162   1.691  1.00 54.48      A16S
ATOM  22724  O4   URI  164     108.156  28.193   0.900  1.00 54.48      A16S
ATOM  22725  C5   URI  164     106.046  27.349   1.569  1.00 54.48      A16S
ATOM  22726  C2'  URI  164     103.006  29.055   4.467  1.00 47.34      A16S
ATOM  22727  O2'  URI  164     102.557  29.539   5.717  1.00 47.34      A16S
ATOM  22728  C3'  URI  164     102.002  28.099   3.831  1.00 47.34      A16S
ATOM  22729  O3'  URI  164     100.660  28.506   4.048  1.00 47.34      A16S
ATOM  22730  P    ADE  165     100.015  29.645   3.119  1.00 45.85      A16S
ATOM  22731  O1P  ADE  165      98.542  29.431   3.036  1.00 58.99      A16S
ATOM  22732  O2P  ADE  165     100.820  29.715   1.868  1.00 58.99      A16S
ATOM  22733  O5'  ADE  165     100.278  30.973   3.946  1.00 45.85      A16S
ATOM  22734  C5'  ADE  165      99.904  31.054   5.324  1.00 45.85      A16S
ATOM  22735  C4'  ADE  165     100.220  32.422   5.870  1.00 45.85      A16S
ATOM  22736  O4'  ADE  165     101.616  32.534   6.253  1.00 45.85      A16S
ATOM  22737  C1'  ADE  165     102.053  33.862   6.044  1.00 45.85      A16S
ATOM  22738  N9   ADE  165     103.166  33.833   5.092  1.00 58.99      A16S
ATOM  22739  C4   ADE  165     104.350  34.534   5.175  1.00 58.99      A16S
ATOM  22740  N3   ADE  165     104.723  35.412   6.123  1.00 58.99      A16S
ATOM  22741  C2   ADE  165     105.946  35.878   5.879  1.00 58.99      A16S
ATOM  22742  N1   ADE  165     106.777  35.586   4.880  1.00 58.99      A16S
ATOM  22743  C6   ADE  165     106.377  34.698   3.950  1.00 58.99      A16S
ATOM  22744  N6   ADE  165     107.216  34.387   2.970  1.00 58.99      A16S
ATOM  22745  C5   ADE  165     105.097  34.143   4.080  1.00 58.99      A16S
ATOM  22746  N7   ADE  165     104.392  33.235   3.304  1.00 58.99      A16S
ATOM  22747  C8   ADE  165     103.257  33.089   3.943  1.00 58.99      A16S
ATOM  22748  C2'  ADE  165     100.846  34.665   5.553  1.00 45.85      A16S
ATOM  22749  O2'  ADE  165     100.181  35.214   6.675  1.00 45.85      A16S
ATOM  22750  C3'  ADE  165      99.990  33.582   4.925  1.00 45.85      A16S
ATOM  22751  O3'  ADE  165      98.628  33.944   4.863  1.00 45.85      A16S
ATOM  22752  P    ADE  166      98.069  34.669   3.544  1.00 58.53      A16S
ATOM  22753  O1P  ADE  166      96.588  34.728   3.618  1.00 49.64      A16S
ATOM  22754  O2P  ADE  166      98.711  34.059   2.339  1.00 49.64      A16S
ATOM  22755  O5'  ADE  166      98.611  36.150   3.729  1.00 58.53      A16S
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ATOM	22756	C5'	ADE	166	98.271	36.908	4.899	1.00	58.53	A16S	ATOM	22809	C5	CYT	168	101.624	38.921	0.217	1.00	67.92	A16S
ATOM	22757	C4'	ADE	166	99.105	38.160	4.965	1.00	58.53	A16S	ATOM	22810	C2'	CYT	168	105.113	40.368	-2.530	1.00	50.05	A16S
ATOM	22758	O4'	ADE	166	100.476	37.814	5.283	1.00	58.53	A16S	ATOM	22811	O2'	CYT	168	106.468	40.318	-2.930	1.00	50.05	A16S
ATOM	22759	C1'	ADE	166	101.355	38.690	4.604	1.00	58.53	A16S	ATOM	22812	C3'	CYT	168	104.605	41.791	-2.342	1.00	50.05	A16S
ATOM	22760	N9	ADE	166	102.181	37.903	3.682	1.00	49.64	A16S	ATOM	22813	O3'	CYT	168	105.111	42.694	-3.312	1.00	50.05	A16S
ATOM	22761	C4	ADE	166	103.529	38.060	3.441	1.00	49.64	A16S	ATOM	22814	P	CYT	169	104.216	43.066	-4.592	1.00	59.94	A16S
ATOM	22762	N3	ADE	166	104.383	38.907	4.048	1.00	49.64	A16S	ATOM	22815	O1P	CYT	169	104.994	44.057	-5.370	1.00	64.04	A16S
ATOM	22763	C2	ADE	166	105.595	38.810	3.515	1.00	49.64	A16S	ATOM	22816	O2P	CYT	169	102.828	43.402	-4.156	1.00	64.04	A16S
ATOM	22764	N1	ADE	166	106.015	38.036	2.517	1.00	49.64	A16S	ATOM	22817	O5'	CYT	169	104.175	41.712	-5.427	1.00	59.94	A16S
ATOM	22765	C6	ADE	166	105.132	37.210	1.922	1.00	49.64	A16S	ATOM	22818	C5'	CYT	169	105.318	41.282	-6.177	1.00	59.94	A16S
ATOM	22766	N6	ADE	166	105.540	36.470	0.900	1.00	49.64	A16S	ATOM	22819	C4'	CYT	169	104.950	40.119	-7.052	1.00	59.94	A16S
ATOM	22767	C5	ADE	166	103.827	37.193	2.407	1.00	49.64	A16S	ATOM	22820	O4'	CYT	169	104.622	38.996	-6.199	1.00	59.94	A16S
ATOM	22768	N7	ADE	166	102.710	36.459	2.040	1.00	49.64	A16S	ATOM	22821	C1'	CYT	169	103.565	38.247	-6.780	1.00	59.94	A16S
ATOM	22769	C8	ADE	166	101.766	36.905	2.831	1.00	49.64	A16S	ATOM	22822	N1	CYT	169	102.406	38.272	-5.869	1.00	64.04	A16S
ATOM	22770	C2'	ADE	166	100.497	39.716	3.849	1.00	58.53	A16S	ATOM	22823	C6	CYT	169	102.333	39.180	-4.851	1.00	64.04	A16S
ATOM	22771	O2'	ADE	166	100.337	40.888	4.620	1.00	58.53	A16S	ATOM	22824	C2	CYT	169	101.370	37.349	-6.067	1.00	64.04	A16S
ATOM	22772	C3'	ADE	166	99.191	38.958	3.674	1.00	58.53	A16S	ATOM	22825	O2	CYT	169	101.456	36.528	-7.000	1.00	64.04	A16S
ATOM	22773	O3'	ADE	166	98.059	39.806	3.504	1.00	58.53	A16S	ATOM	22826	N3	CYT	169	100.306	37.373	-5.240	1.00	64.04	A16S
ATOM	22774	P	URI	167	97.841	40.596	2.117	1.00	46.76	A16S	ATOM	22827	C4	CYT	169	100.250	38.261	-4.248	1.00	64.04	A16S
ATOM	22775	O1P	URI	167	98.626	39.912	1.059	1.00	66.36	A16S	ATOM	22828	N4	CYT	169	99.182	38.241	-3.451	1.00	64.04	A16S
ATOM	22776	O2P	URI	167	96.378	40.802	1.916	1.00	66.36	A16S	ATOM	22829	C5	CYT	169	101.286	39.208	-4.026	1.00	64.04	A16S
ATOM	22777	O5'	URI	167	98.521	42.007	2.435	1.00	46.76	A16S	ATOM	22830	C2'	CYT	169	103.225	38.889	-8.123	1.00	59.94	A16S
ATOM	22778	C5'	URI	167	98.224	43.178	1.645	1.00	46.76	A16S	ATOM	22831	O2'	CYT	169	103.908	38.235	-9.174	1.00	59.94	A16S
ATOM	22779	C4'	URI	167	99.356	44.196	1.707	1.00	46.76	A16S	ATOM	22832	C3'	CYT	169	103.709	40.313	-7.907	1.00	59.94	A16S
ATOM	22780	O4'	URI	167	99.131	45.258	2.675	1.00	46.76	A16S	ATOM	22833	O3'	CYT	169	103.927	40.978	-9.140	1.00	59.94	A16S
ATOM	22781	C1'	URI	167	100.357	45.547	3.312	1.00	46.76	A16S	ATOM	22834	P	CYT	170	102.691	41.730	-9.847	1.00	59.60	A16S
ATOM	22782	N1	URI	167	100.109	46.181	4.615	1.00	66.36	A16S	ATOM	22835	O1P	CYT	170	103.209	42.471	-11.022	1.00	62.12	A16S
ATOM	22783	C6	URI	167	99.008	45.880	5.375	1.00	66.36	A16S	ATOM	22836	O2P	CYT	170	101.913	42.466	-8.799	1.00	62.12	A16S
ATOM	22784	C2	URI	167	101.032	47.120	5.044	1.00	66.36	A16S	ATOM	22837	O5'	CYT	170	101.778	40.541	-10.394	1.00	59.60	A16S
ATOM	22785	O2	URI	167	102.029	47.416	4.406	1.00	66.36	A16S	ATOM	22838	C5'	CYT	170	102.271	39.634	-11.392	1.00	59.60	A16S
ATOM	22786	N3	URI	167	100.746	47.706	6.244	1.00	66.36	A16S	ATOM	22839	C4'	CYT	170	101.269	38.535	-11.652	1.00	59.60	A16S
ATOM	22787	C4	URI	167	99.659	47.461	7.044	1.00	66.36	A16S	ATOM	22840	O4'	CYT	170	100.998	37.823	-10.420	1.00	59.60	A16S
ATOM	22788	O4	URI	167	99.556	48.062	8.115	1.00	66.36	A16S	ATOM	22841	C1'	CYT	170	99.676	37.320	-10.446	1.00	59.60	A16S
ATOM	22789	C5	URI	167	98.754	46.475	6.540	1.00	66.36	A16S	ATOM	22842	N1	CYT	170	98.934	37.831	-9.285	1.00	62.12	A16S
ATOM	22790	C2'	URI	167	101.134	44.231	3.307	1.00	46.76	A16S	ATOM	22843	C6	CYT	170	99.478	38.752	-8.437	1.00	62.12	A16S
ATOM	22791	O2'	URI	167	102.519	44.461	3.497	1.00	46.76	A16S	ATOM	22844	C2	CYT	170	97.640	37.354	-9.070	1.00	62.12	A16S
ATOM	22792	C3'	URI	167	100.789	43.707	1.912	1.00	46.76	A16S	ATOM	22845	O2	CYT	170	97.172	36.509	-9.858	1.00	62.12	A16S
ATOM	22793	O3'	URI	167	101.594	44.388	0.976	1.00	46.76	A16S	ATOM	22846	N3	CYT	170	96.931	37.820	-8.022	1.00	62.12	A16S
ATOM	22794	P	CYT	168	101.665	43.858	-0.524	1.00	50.05	A16S	ATOM	22847	C4	CYT	170	97.466	38.723	-7.207	1.00	62.12	A16S
ATOM	22795	O1P	CYT	168	102.122	44.961	-1.413	1.00	67.92	A16S	ATOM	22848	N4	CYT	170	96.723	39.159	-6.195	1.00	62.12	A16S
ATOM	22796	O2P	CYT	168	100.384	43.178	-0.825	1.00	67.92	A16S	ATOM	22849	C5	CYT	170	98.785	39.220	-7.395	1.00	62.12	A16S
ATOM	22797	O5'	CYT	168	102.816	42.767	-0.434	1.00	50.05	A16S	ATOM	22850	C2'	CYT	170	99.034	37.756	-11.758	1.00	59.60	A16S
ATOM	22798	C5'	CYT	168	104.195	43.146	-0.254	1.00	50.05	A16S	ATOM	22851	O2'	CYT	170	99.134	36.684	-12.665	1.00	59.60	A16S
ATOM	22799	C4'	CYT	168	105.082	42.144	-0.943	1.00	50.05	A16S	ATOM	22852	C3'	CYT	170	99.895	38.949	-12.141	1.00	59.60	A16S
ATOM	22800	O4'	CYT	168	105.039	40.895	-0.209	1.00	50.05	A16S	ATOM	22853	O3'	CYT	170	99.888	39.145	-13.535	1.00	59.60	A16S
ATOM	22801	C1'	CYT	168	104.971	39.799	-1.115	1.00	50.05	A16S	ATOM	22854	P	CYT	171	98.749	40.056	-14.196	1.00	68.30	A16S
ATOM	22802	N1	CYT	168	103.692	39.082	-0.892	1.00	67.92	A16S	ATOM	22855	O1P	CYT	171	99.125	40.244	-15.616	1.00	59.39	A16S
ATOM	22803	C6	CYT	168	102.791	39.537	0.029	1.00	67.92	A16S	ATOM	22856	O2P	CYT	171	98.530	41.233	-13.326	1.00	59.39	A16S
ATOM	22804	C2	CYT	168	103.404	37.936	-1.646	1.00	67.92	A16S	ATOM	22857	O5'	CYT	171	97.450	39.143	-14.153	1.00	68.30	A16S
ATOM	22805	O2	CYT	168	104.233	37.528	-2.470	1.00	67.92	A16S	ATOM	22858	C5'	CYT	171	97.335	37.994	-15.011	1.00	68.30	A16S
ATOM	22806	N3	CYT	168	102.228	37.305	-1.459	1.00	67.92	A16S	ATOM	22859	C4'	CYT	171	95.994	37.331	-14.821	1.00	68.30	A16S
ATOM	22807	C4	CYT	168	101.356	37.771	-0.568	1.00	67.92	A16S	ATOM	22860	O4'	CYT	171	95.871	36.885	-13.444	1.00	68.30	A16S
ATOM	22808	N4	CYT	168	100.206	37.124	-0.426	1.00	67.92	A16S	ATOM	22861	C1'	CYT	171	94.524	37.004	-13.022	1.00	68.30	A16S

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ATOM  22862  N1  CYT  171      94.470  37.891 -11.850  1.00 59.39      A16S
ATOM  22863  C6  CYT  171      95.554  38.632 -11.475  1.00 59.39      A16S
ATOM  22864  C2  CYT  171      93.273  37.969 -11.118  1.00 59.39      A16S
ATOM  22865  O2  CYT  171      92.294  37.283 -11.477  1.00 59.39      A16S
ATOM  22866  N3  CYT  171      93.211  38.788 -10.046  1.00 59.39      A16S
ATOM  22867  C4  CYT  171      94.275  39.509  -9.696  1.00 59.39      A16S
ATOM  22868  N4  CYT  171      94.164  40.304  -8.634  1.00 59.39      A16S
ATOM  22869  C5  CYT  171      95.499  39.447 -10.418  1.00 59.39      A16S
ATOM  22870  C2' CYT  171      93.709  37.543 -14.197  1.00 68.30      A16S
ATOM  22871  O2' CYT  171      93.083  36.460 -14.847  1.00 68.30      A16S
ATOM  22872  C3' CYT  171      94.785  38.224 -15.035  1.00 68.30      A16S
ATOM  22873  O3' CYT  171      94.429  38.334 -16.403  1.00 68.30      A16S
ATOM  22874  P   CYT  172      93.587  39.610 -16.889  1.00 80.00      A16S
ATOM  22875  O1P CYT  172      93.375  39.500 -18.358  1.00 77.75      A16S
ATOM  22876  O2P CYT  172      94.235  40.820 -16.322  1.00 77.75      A16S
ATOM  22877  O5' CYT  172      92.175  39.443 -16.169  1.00 80.00      A16S
ATOM  22878  C5' CYT  172      91.274  38.386 -16.546  1.00 80.00      A16S
ATOM  22879  C4' CYT  172      89.987  38.469 -15.757  1.00 80.00      A16S
ATOM  22880  O4' CYT  172      90.231  38.183 -14.354  1.00 80.00      A16S
ATOM  22881  C1' CYT  172      89.272  38.867 -13.560  1.00 80.00      A16S
ATOM  22882  N1  CYT  172      89.953  39.722 -12.569  1.00 77.75      A16S
ATOM  22883  C6  CYT  172      91.216  40.200 -12.784  1.00 77.75      A16S
ATOM  22884  C2  CYT  172      89.266  40.052 -11.391  1.00 77.75      A16S
ATOM  22885  O2  CYT  172      88.127  39.596 -11.212  1.00 77.75      A16S
ATOM  22886  N3  CYT  172      89.859  40.857 -10.481  1.00 77.75      A16S
ATOM  22887  C4  CYT  172      91.086  41.327 -10.706  1.00 77.75      A16S
ATOM  22888  N4  CYT  172      91.627  42.128  -9.784  1.00 77.75      A16S
ATOM  22889  C5  CYT  172      91.814  41.000 -11.888  1.00 77.75      A16S
ATOM  22890  C2' CYT  172      88.384  39.685 -14.495  1.00 80.00      A16S
ATOM  22891  O2' CYT  172      87.189  38.967 -14.721  1.00 80.00      A16S
ATOM  22892  C3' CYT  172      89.262  39.806 -15.736  1.00 80.00      A16S
ATOM  22893  O3' CYT  172      88.488  40.027 -16.906  1.00 80.00      A16S
ATOM  22894  P   ADE  173      88.045  41.527 -17.291  1.00 66.39      A16S
ATOM  22895  O1P ADE  173      87.086  41.415 -18.427  1.00 68.99      A16S
ATOM  22896  O2P ADE  173      89.261  42.366 -17.442  1.00 68.99      A16S
ATOM  22897  O5' ADE  173      87.248  42.041 -16.004  1.00 66.39      A16S
ATOM  22898  C5' ADE  173      85.942  41.523 -15.697  1.00 66.39      A16S
ATOM  22899  C4' ADE  173      85.396  42.152 -14.439  1.00 66.39      A16S
ATOM  22900  O4' ADE  173      86.336  41.980 -13.351  1.00 66.39      A16S
ATOM  22901  C1' ADE  173      86.076  42.956 -12.362  1.00 66.39      A16S
ATOM  22902  N9  ADE  173      87.333  43.521 -11.873  1.00 68.99      A16S
ATOM  22903  C4  ADE  173      87.442  44.414 -10.831  1.00 68.99      A16S
ATOM  22904  N3  ADE  173      86.443  44.943 -10.103  1.00 68.99      A16S
ATOM  22905  C2  ADE  173      86.923  45.754  -9.172  1.00 68.99      A16S
ATOM  22906  N1  ADE  173      88.189  46.070  -8.900  1.00 68.99      A16S
ATOM  22907  C6  ADE  173      89.169  45.518  -9.646  1.00 68.99      A16S
ATOM  22908  N6  ADE  173      90.437  45.821  -9.358  1.00 68.99      A16S
ATOM  22909  C5  ADE  173      88.792  44.648 -10.675  1.00 68.99      A16S
ATOM  22910  N7  ADE  173      89.525  43.935 -11.610  1.00 68.99      A16S
ATOM  22911  C8  ADE  173      88.616  43.287 -12.298  1.00 68.99      A16S
ATOM  22912  C2' ADE  173      85.112  43.984 -12.947  1.00 66.39      A16S
ATOM  22913  O2' ADE  173      83.853  43.770 -12.343  1.00 66.39      A16S
ATOM  22914  C3' ADE  173      85.146  43.651 -14.440  1.00 66.39      A16S
ATOM  22915  O3' ADE  173      83.906  43.975 -15.061  1.00 66.39      A16S
ATOM  22916  P   URI  174      83.708  45.418 -15.740  1.00 71.24      A16S
ATOM  22917  O1P URI  174      82.365  45.427 -16.373  1.00 79.66      A16S
ATOM  22918  O2P URI  174      84.907  45.693 -16.571  1.00 79.66      A16S
ATOM  22919  O5' URI  174      83.686  46.436 -14.513  1.00 71.24      A16S
ATOM  22920  C5' URI  174      82.515  46.559 -13.685  1.00 71.24      A16S
ATOM  22921  C4' URI  174      82.740  47.566 -12.577  1.00 71.24      A16S
ATOM  22922  O4' URI  174      83.759  47.085 -11.663  1.00 71.24      A16S
ATOM  22923  C1' URI  174      84.513  48.179 -11.166  1.00 71.24      A16S
ATOM  22924  N1  URI  174      85.914  48.009 -11.579  1.00 79.66      A16S
ATOM  22925  C6  URI  174      86.257  47.219 -12.655  1.00 79.66      A16S
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ATOM  22939  O5' GUA  175      83.776  51.431 -14.420  1.00 84.23      A16S
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ATOM  22941  C4' GUA  175      84.918  53.433 -13.688  1.00 84.23      A16S
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ATOM  22981  O2P GUA  177      84.761  60.254 -15.951  1.00 70.40      A16S
ATOM  22982  O5' GUA  177      86.216  61.293 -14.145  1.00 80.32      A16S
ATOM  22983  C5' GUA  177      87.319  61.314 -15.062  1.00 80.32      A16S
ATOM  22984  C4' GUA  177      88.593  60.968 -14.337  1.00 80.32      A16S
ATOM  22985  O4' GUA  177      88.455  59.650 -13.748  1.00 80.32      A16S
ATOM  22986  C1' GUA  177      89.679  58.941 -13.861  1.00 80.32      A16S
ATOM  22987  N9  GUA  177      89.455  57.787 -14.733  1.00 70.40      A16S
ATOM  22988  C4  GUA  177      90.314  56.725 -14.948  1.00 70.40      A16S
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ATOM  22998  C2' GUA  177      90.714  59.908 -14.443  1.00 80.32      A16S
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ATOM  23007  C4' GUA  178      94.454  60.633 -16.219  1.00 63.09      A16S
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ATOM  23024  O3' GUA  178      96.089  61.100 -17.983  1.00 63.09      A16S
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ATOM  23029  C5' ADE  179      98.278  59.542 -19.481  1.00 66.13      A16S
ATOM  23030  C4' ADE  179      98.675  58.231 -20.113  1.00 66.13      A16S
ATOM  23031  O4' ADE  179      97.743  57.198 -19.712  1.00 66.13      A16S
ATOM  23032  C1' ADE  179      97.513  56.311 -20.796  1.00 66.13      A16S
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ATOM  23037  N1  ADE  179      93.741  54.299 -23.647  1.00 56.94      A16S
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ATOM  23039  N6  ADE  179      91.942  55.579 -22.996  1.00 56.94      A16S
ATOM  23040  C5  ADE  179      94.128  55.993 -22.052  1.00 56.94      A16S
ATOM  23041  N7  ADE  179      93.952  57.059 -21.180  1.00 56.94      A16S
ATOM  23042  C8  ADE  179      95.143  57.249 -20.671  1.00 56.94      A16S
ATOM  23043  C2' ADE  179      98.425  56.737 -21.946  1.00 66.13      A16S
ATOM  23044  O2' ADE  179      99.620  55.985 -21.906  1.00 66.13      A16S
ATOM  23045  C3' ADE  179      98.638  58.210 -21.628  1.00 66.13      A16S
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ATOM  23047  P   CYT  180      99.745  59.539 -23.569  1.00 49.00      A16S
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ATOM  23063  C2' CYT  180      98.526  55.871 -27.743  1.00 49.00      A16S
ATOM  23064  O2' CYT  180      99.346  54.931 -28.412  1.00 49.00      A16S
ATOM  23065  C3' CYT  180      99.338  57.041 -27.213  1.00 49.00      A16S
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ATOM  23070  O5' CYT  181      99.103  57.839 -30.279  1.00 59.36      A16S
ATOM  23071  C5' CYT  181      99.675  56.726 -30.982  1.00 59.36      A16S
ATOM  23072  C4' CYT  181      98.657  56.096 -31.892  1.00 59.36      A16S
ATOM  23073  O4' CYT  181      97.658  55.395 -31.115  1.00 59.36      A16S
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ATOM  23076  C6  CYT  181      95.887  56.901 -29.804  1.00 64.78      A16S
ATOM  23077  C2  CYT  181      94.086  55.989 -31.092  1.00 64.78      A16S
ATOM  23078  O2  CYT  181      93.720  55.297 -32.056  1.00 64.78      A16S
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ATOM  23080  C4  CYT  181      93.636  57.329 -29.234  1.00 64.78      A16S
ATOM  23081  N4  CYT  181      92.730  57.899 -28.434  1.00 64.78      A16S
ATOM  23082  C5  CYT  181      95.022  57.506 -28.977  1.00 64.78      A16S
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ATOM  23084  O2' CYT  181      96.791  55.337 -34.136  1.00 59.36      A16S
ATOM  23085  C3' CYT  181      97.868  57.053 -32.762  1.00 59.36      A16S
ATOM  23086  O3' CYT  181      98.594  57.387 -33.929  1.00 59.36      A16S
ATOM  23087  P   CYT  182      98.488  58.871 -34.534  1.00 66.26      A16S
ATOM  23088  O1P CYT  182      99.441  58.905 -35.675  1.00 50.55      A16S
ATOM  23089  O2P CYT  182      98.614  59.859 -33.434  1.00 50.55      A16S
ATOM  23090  O5' CYT  182      97.002  58.951 -35.104  1.00 66.26      A16S
ATOM  23091  C5' CYT  182      96.605  58.116 -36.204  1.00 66.26      A16S
ATOM  23092  C4' CYT  182      95.116  58.194 -36.421  1.00 66.26      A16S
ATOM  23093  O4' CYT  182      94.418  57.611 -35.293  1.00 66.26      A16S
ATOM  23094  C1' CYT  182      93.184  58.277 -35.102  1.00 66.26      A16S
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ATOM  23096  C6  CYT  182      94.365  59.143 -33.106  1.00 50.55      A16S
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ATOM  23098  O2  CYT  182      90.919  59.141 -33.850  1.00 50.55      A16S
ATOM  23099  N3  CYT  182      91.974  59.961 -32.020  1.00 50.55      A16S
ATOM  23100  C4  CYT  182      93.123  60.167 -31.375  1.00 50.55      A16S
ATOM  23101  N4  CYT  182      93.070  60.779 -30.194  1.00 50.55      A16S
ATOM  23102  C5  CYT  182      94.375  59.754 -31.914  1.00 50.55      A16S
ATOM  23103  C2' CYT  182      93.052  59.314 -36.213  1.00 66.26      A16S
ATOM  23104  O2' CYT  182      92.342  58.750 -37.298  1.00 66.26      A16S
ATOM  23105  C3' CYT  182      94.510  59.576 -36.552  1.00 66.26      A16S
ATOM  23106  O3' CYT  182      94.663  60.130 -37.848  1.00 66.26      A16S
ATOM  23107  P   GUA  183      94.651  61.728 -38.028  1.00 78.41      A16S
ATOM  23108  O1P GUA  183      94.903  61.971 -39.463  1.00 52.44      A16S
ATOM  23109  O2P GUA  183      95.528  62.353 -37.017  1.00 52.44      A16S
ATOM  23110  O5' GUA  183      93.153  62.140 -37.678  1.00 78.41      A16S
ATOM  23111  C5' GUA  183      92.068  61.763 -38.544  1.00 78.41      A16S
ATOM  23112  C4' GUA  183      90.788  62.431 -38.107  1.00 78.41      A16S
ATOM  23113  O4' GUA  183      90.311  61.818 -36.883  1.00 78.41      A16S
ATOM  23114  C1' GUA  183      89.667  62.794 -36.086  1.00 78.41      A16S
ATOM  23115  N9  GUA  183      90.368  62.889 -34.810  1.00 52.44      A16S
ATOM  23116  C4  GUA  183      89.813  63.234 -33.604  1.00 52.44      A16S
ATOM  23117  N3  GUA  183      88.520  63.535 -33.387  1.00 52.44      A16S
ATOM  23118  C2  GUA  183      88.286  63.830 -32.117  1.00 52.44      A16S
ATOM  23119  N2  GUA  183      87.046  64.143 -31.720  1.00 52.44      A16S
ATOM  23120  N1  GUA  183      89.244  63.835 -31.138  1.00 52.44      A16S
ATOM  23121  C6  GUA  183      90.580  63.524 -31.331  1.00 52.44      A16S
ATOM  23122  O6  GUA  183      91.359  63.547 -30.367  1.00 52.44      A16S
ATOM  23123  C5  GUA  183      90.851  63.203 -32.700  1.00 52.44      A16S
ATOM  23124  N7  GUA  183      92.037  62.842 -33.325  1.00 52.44      A16S
ATOM  23125  C8  GUA  183      91.703  62.665 -34.574  1.00 52.44      A16S
ATOM  23126  C2' GUA  183      89.692  64.115 -36.855  1.00 78.41      A16S
ATOM  23127  O2' GUA  183      88.491  64.242 -37.582  1.00 78.41      A16S
ATOM  23128  C3' GUA  183      90.879  63.915 -37.786  1.00 78.41      A16S
ATOM  23129  O3' GUA  183      90.799  64.744 -38.951  1.00 78.41      A16S
ATOM  23130  P   CYT  184      91.376  66.254 -38.903  1.00 61.96      A16S
ATOM  23131  O1P CYT  184      91.138  66.856 -40.242  1.00 70.73      A16S
ATOM  23132  O2P CYT  184      92.754  66.226 -38.350  1.00 70.73      A16S
ATOM  23133  O5' CYT  184      90.436  66.981 -37.838  1.00 61.96      A16S
ATOM  23134  C5' CYT  184      89.037  67.183 -38.109  1.00 61.96      A16S
ATOM  23135  C4' CYT  184      88.340  67.763 -36.902  1.00 61.96      A16S
ATOM  23136  O4' CYT  184      88.328  66.799 -35.813  1.00 61.96      A16S
ATOM  23137  C1' CYT  184      88.330  67.484 -34.569  1.00 61.96      A16S
ATOM  23138  N1  CYT  184      89.492  67.044 -33.767  1.00 70.73      A16S
ATOM  23139  C6  CYT  184      90.623  66.555 -34.365  1.00 70.73      A16S
ATOM  23140  C2  CYT  184      89.434  67.174 -32.363  1.00 70.73      A16S
ATOM  23141  O2  CYT  184      88.380  67.565 -31.835  1.00 70.73      A16S
ATOM  23142  N3  CYT  184      90.528  66.868 -31.623  1.00 70.73      A16S
ATOM  23143  C4  CYT  184      91.638  66.434 -32.223  1.00 70.73      A16S
ATOM  23144  N4  CYT  184      92.701  66.181 -31.457  1.00 70.73      A16S
ATOM  23145  C5  CYT  184      91.709  66.246 -33.639  1.00 70.73      A16S
ATOM  23146  C2' CYT  184      88.405  68.988 -34.865  1.00 61.96      A16S
ATOM  23147  O2' CYT  184      87.139  69.613 -34.754  1.00 61.96      A16S
ATOM  23148  C3' CYT  184      88.964  69.003 -36.284  1.00 61.96      A16S
ATOM  23149  O3' CYT  184      88.648  70.208 -36.972  1.00 61.96      A16S
ATOM  23150  P   CYT  185      89.615  71.487 -36.810  1.00 76.22      A16S
ATOM  23151  O1P CYT  185      89.298  72.464 -37.896  1.00 61.58      A16S
ATOM  23152  O2P CYT  185      91.020  71.005 -36.635  1.00 61.58      A16S
ATOM  23153  O5' CYT  185      89.157  72.129 -35.432  1.00 76.22      A16S
ATOM  23154  C5' CYT  185      87.856  72.683 -35.293  1.00 76.22      A16S
ATOM  23155  C4' CYT  185      87.642  73.107 -33.875  1.00 76.22      A16S
ATOM  23156  O4' CYT  185      87.746  71.937 -33.030  1.00 76.22      A16S
ATOM  23157  C1' CYT  185      88.384  72.281 -31.810  1.00 76.22      A16S
ATOM  23158  N1  CYT  185      89.634  71.497 -31.694  1.00 61.58      A16S
ATOM  23159  C6  CYT  185      90.136  70.813 -32.765  1.00 61.58      A16S
ATOM  23160  C2  CYT  185      90.309  71.471 -30.464  1.00 61.58      A16S
ATOM  23161  O2  CYT  185      89.825  72.079 -29.498  1.00 61.58      A16S
ATOM  23162  N3  CYT  185      91.471  70.780 -30.361  1.00 61.58      A16S
ATOM  23163  C4  CYT  185      91.956  70.131 -31.422  1.00 61.58      A16S
ATOM  23164  N4  CYT  185      93.113  69.481 -31.286  1.00 61.58      A16S
ATOM  23165  C5  CYT  185      91.281  70.124 -32.674  1.00 61.58      A16S
ATOM  23166  C2' CYT  185      88.636  73.790 -31.835  1.00 76.22      A16S
ATOM  23167  O2' CYT  185      87.574  74.465 -31.180  1.00 76.22      A16S
ATOM  23168  C3' CYT  185      88.694  74.056 -33.333  1.00 76.22      A16S
ATOM  23169  O3' CYT  185      88.446  75.407 -33.694  1.00 76.22      A16S
ATOM  23170  P   CYT  186      89.686  76.384 -34.014  1.00 71.92      A16S
ATOM  23171  O1P CYT  186      89.116  77.599 -34.647  1.00 71.98      A16S
ATOM  23172  O2P CYT  186      90.742  75.620 -34.720  1.00 71.98      A16S
ATOM  23173  O5' CYT  186      90.220  76.791 -32.572  1.00 71.92      A16S
ATOM  23174  C5' CYT  186      89.326  77.406 -31.633  1.00 71.92      A16S
ATOM  23175  C4' CYT  186      89.930  77.424 -30.255  1.00 71.92      A16S
ATOM  23176  O4' CYT  186      90.105  76.068 -29.773  1.00 71.92      A16S
ATOM  23177  C1' CYT  186      91.274  75.993 -28.977  1.00 71.92      A16S
ATOM  23178  N1  CYT  186      92.214  75.039 -29.605  1.00 71.98      A16S
ATOM  23179  C6  CYT  186      92.124  74.726 -30.936  1.00 71.98      A16S
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ATOM  23180  C2  CYT  186      93.216  74.464 -28.811  1.00 71.98      A16S
ATOM  23181  O2  CYT  186      93.267  74.755 -27.602  1.00 71.98      A16S
ATOM  23182  N3  CYT  186      94.100  73.609 -29.379  1.00 71.98      A16S
ATOM  23183  C4  CYT  186      94.008  73.321 -30.679  1.00 71.98      A16S
ATOM  23184  N4  CYT  186      94.909  72.481 -31.197  1.00 71.98      A16S
ATOM  23185  C5  CYT  186      92.991  73.882 -31.507  1.00 71.98      A16S
ATOM  23186  C2' CYT  186      91.854  77.405 -28.879  1.00 71.92      A16S
ATOM  23187  O2' CYT  186      91.378  78.022 -27.699  1.00 71.92      A16S
ATOM  23188  C3' CYT  186      91.304  78.050 -30.146  1.00 71.92      A16S
ATOM  23189  O3' CYT  186      91.215  79.463 -30.063  1.00 71.92      A16S
ATOM  23190  P   CYT  187      92.483  80.362 -30.475  1.00 83.11      A16S
ATOM  23191  O1P CYT  187      92.024  81.775 -30.541  1.00 70.49      A16S
ATOM  23192  O2P CYT  187      93.155  79.748 -31.665  1.00 70.49      A16S
ATOM  23193  O5' CYT  187      93.412  80.243 -29.192  1.00 83.11      A16S
ATOM  23194  C5' CYT  187      94.823  80.192 -29.319  1.00 83.11      A16S
ATOM  23195  C4' CYT  187      95.387  79.200 -28.341  1.00 83.11      A16S
ATOM  23196  O4' CYT  187      94.893  77.869 -28.627  1.00 83.11      A16S
ATOM  23197  C1' CYT  187      95.946  76.927 -28.495  1.00 83.11      A16S
ATOM  23198  N1  CYT  187      96.184  76.335 -29.827  1.00 70.49      A16S
ATOM  23199  C6  CYT  187      95.488  76.776 -30.916  1.00 70.49      A16S
ATOM  23200  C2  CYT  187      97.130  75.306 -29.966  1.00 70.49      A16S
ATOM  23201  O2  CYT  187      97.771  74.929 -28.974  1.00 70.49      A16S
ATOM  23202  N3  CYT  187      97.326  74.751 -31.183  1.00 70.49      A16S
ATOM  23203  C4  CYT  187      96.632  75.189 -32.236  1.00 70.49      A16S
ATOM  23204  N4  CYT  187      96.858  74.609 -33.417  1.00 70.49      A16S
ATOM  23205  C5  CYT  187      95.676  76.238 -32.125  1.00 70.49      A16S
ATOM  23206  C2' CYT  187      97.162  77.675 -27.945  1.00 83.11      A16S
ATOM  23207  O2' CYT  187      97.199  77.610 -26.529  1.00 83.11      A16S
ATOM  23208  C3' CYT  187      96.887  79.080 -28.448  1.00 83.11      A16S
ATOM  23209  O3' CYT  187      97.482  80.093 -27.683  1.00 83.11      A16S
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ATOM  23212  O2P URI  188      98.289  81.009 -29.905  1.00 60.81      A16S
ATOM  23213  O5' URI  188      99.853  80.766 -27.918  1.00 70.37      A16S
ATOM  23214  C5' URI  188     100.912  80.466 -28.845  1.00 70.37      A16S
ATOM  23215  C4' URI  188     101.249  78.997 -28.788  1.00 70.37      A16S
ATOM  23216  O4' URI  188     100.234  78.255 -29.512  1.00 70.37      A16S
ATOM  23217  C1' URI  188     100.835  77.508 -30.546  1.00 70.37      A16S
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ATOM  23219  C6  URI  188      98.947  78.441 -31.863  1.00 60.81      A16S
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ATOM  23222  N3  URI  188      99.262  76.532 -33.706  1.00 60.81      A16S
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ATOM  23224  O4  URI  188      97.511  77.297 -34.899  1.00 60.81      A16S
ATOM  23225  C5  URI  188      98.110  78.438 -32.905  1.00 60.81      A16S
ATOM  23226  C2' URI  188     102.182  78.159 -30.824  1.00 70.37      A16S
ATOM  23227  O2' URI  188     103.075  77.239 -31.420  1.00 70.37      A16S
ATOM  23228  C3' URI  188     102.578  78.630 -29.429  1.00 70.37      A16S
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ATOM  23230  P   URI  189     104.721  77.321 -28.705  1.00 67.87      A16S
ATOM  23231  O1P URI  189     105.119  76.787 -27.381  1.00 53.40      A16S
ATOM  23232  O2P URI  189     105.383  78.539 -29.230  1.00 53.40      A16S
ATOM  23233  O5' URI  189     104.879  76.175 -29.793  1.00 67.87      A16S
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ATOM  23235  C4' URI  189     105.236  73.917 -30.507  1.00 67.87      A16S
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ATOM  23237  C1' URI  189     107.523  73.476 -30.758  1.00 67.87      A16S
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ATOM  23239  C6  URI  189     108.574  75.113 -29.232  1.00 53.40      A16S
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ATOM  23241  O2  URI  189     110.110  73.050 -31.646  1.00 53.40      A16S
ATOM  23242  N3  URI  189     110.994  74.535 -30.176  1.00 53.40      A16S
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ATOM  23251  O1P GUA  190     104.185  69.328 -31.555  1.00 61.95      A16S
ATOM  23252  O2P GUA  190     102.647  71.356 -31.142  1.00 61.95      A16S
ATOM  23253  O5' GUA  190     103.914  70.305 -29.260  1.00 50.60      A16S
ATOM  23254  C5' GUA  190     102.802  69.649 -28.625  1.00 50.60      A16S
ATOM  23255  C4' GUA  190     103.289  68.713 -27.545  1.00 50.60      A16S
ATOM  23256  O4' GUA  190     104.290  67.823 -28.105  1.00 50.60      A16S
ATOM  23257  C1' GUA  190     105.430  67.835 -27.277  1.00 50.60      A16S
ATOM  23258  N9  GUA  190     106.607  67.432 -28.047  1.00 61.95      A16S
ATOM  23259  C4  GUA  190     107.622  66.633 -27.579  1.00 61.95      A16S
ATOM  23260  N3  GUA  190     107.721  66.139 -26.325  1.00 61.95      A16S
ATOM  23261  C2  GUA  190     108.774  65.358 -26.185  1.00 61.95      A16S
ATOM  23262  N2  GUA  190     109.008  64.775 -25.004  1.00 61.95      A16S
ATOM  23263  N1  GUA  190     109.671  65.089 -27.193  1.00 61.95      A16S
ATOM  23264  C6  GUA  190     109.593  65.587 -28.491  1.00 61.95      A16S
ATOM  23265  O6  GUA  190     110.453  65.269 -29.324  1.00 61.95      A16S
ATOM  23266  C5  GUA  190     108.457  66.429 -28.658  1.00 61.95      A16S
ATOM  23267  N7  GUA  190     107.997  67.115 -29.773  1.00 61.95      A16S
ATOM  23268  C8  GUA  190     106.905  67.705 -29.362  1.00 61.95      A16S
ATOM  23269  C2' GUA  190     105.423  69.185 -26.570  1.00 50.60      A16S
ATOM  23270  O2' GUA  190     106.155  69.098 -25.369  1.00 50.60      A16S
ATOM  23271  C3' GUA  190     103.928  69.365 -26.318  1.00 50.60      A16S
ATOM  23272  O3' GUA  190     103.611  68.592 -25.162  1.00 50.60      A16S
ATOM  23273  P   GUA  191     102.125  68.609 -24.549  1.00 53.87      A16S
ATOM  23274  O1P GUA  191     102.233  67.893 -23.250  1.00 52.21      A16S
ATOM  23275  O2P GUA  191     101.176  68.107 -25.586  1.00 52.21      A16S
ATOM  23276  O5' GUA  191     101.823  70.146 -24.255  1.00 53.87      A16S
ATOM  23277  C5' GUA  191     102.291  70.775 -23.044  1.00 53.87      A16S
ATOM  23278  C4' GUA  191     101.392  71.934 -22.674  1.00 53.87      A16S
ATOM  23279  O4' GUA  191     101.376  72.878 -23.772  1.00 53.87      A16S
ATOM  23280  C1' GUA  191     100.060  73.357 -23.991  1.00 53.87      A16S
ATOM  23281  N9  GUA  191      99.612  72.811 -25.268  1.00 52.21      A16S
ATOM  23282  C4  GUA  191      98.393  73.008 -25.867  1.00 52.21      A16S
ATOM  23283  N3  GUA  191      97.382  73.747 -25.373  1.00 52.21      A16S
ATOM  23284  C2  GUA  191      96.330  73.739 -26.173  1.00 52.21      A16S
ATOM  23285  N2  GUA  191      95.225  74.420 -25.820  1.00 52.21      A16S
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ATOM  23287  C6  GUA  191      97.310  72.288 -27.892  1.00 52.21      A16S
ATOM  23288  O6  GUA  191      97.159  71.709 -28.967  1.00 52.21      A16S
ATOM  23289  C5  GUA  191      98.441  72.289 -27.043  1.00 52.21      A16S
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ATOM  23291  C8  GUA  191     100.329  71.990 -26.110  1.00 52.21      A16S
ATOM  23292  C2' GUA  191      99.211  72.865 -22.827  1.00 53.87      A16S
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ATOM  23295  O3' GUA  191      99.673  71.157 -21.145  1.00 53.87      A16S
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ATOM  23297  O1P GUA  192      98.724  69.690 -19.439  1.00 61.79      A16S
ATOM  23298  O2P GUA  192      98.913  68.869 -21.875  1.00 61.79      A16S
ATOM  23299  O5' GUA  192      97.212  70.585 -21.274  1.00 77.42      A16S
ATOM  23300  C5' GUA  192      96.593  71.565 -20.424  1.00 77.42      A16S
ATOM  23301  C4' GUA  192      95.265  72.020 -20.993  1.00 77.42      A16S
ATOM  23302  O4' GUA  192      95.477  72.673 -22.272  1.00 77.42      A16S
ATOM  23303  C1' GUA  192      94.334  72.494 -23.091  1.00 77.42      A16S
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ATOM  23305  C4  GUA  192      93.976  71.604 -25.421  1.00 61.79      A16S
ATOM  23306  N3  GUA  192      92.773  72.168 -25.655  1.00 61.79      A16S
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ATOM  23308  N2  GUA  192      91.117  72.314 -27.238  1.00 61.79      A16S
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ATOM  23311  O6  GUA  192      94.719  69.764 -28.412  1.00 61.79      A16S
ATOM  23312  C5  GUA  192      94.719  70.786 -26.246  1.00 61.79      A16S
ATOM  23313  N7  GUA  192      95.905  70.410 -25.628  1.00 61.79      A16S
ATOM  23314  C8  GUA  192      95.862  70.996 -24.462  1.00 61.79      A16S
ATOM  23315  C2' GUA  192      93.310  71.701 -22.286  1.00 77.42      A16S
ATOM  23316  O2' GUA  192      92.403  72.586 -21.657  1.00 77.42      A16S
ATOM  23317  C3' GUA  192      94.204  70.972 -21.295  1.00 77.42      A16S
ATOM  23318  O3' GUA  192      93.456  70.542 -20.167  1.00 77.42      A16S
ATOM  23319  P   GUA  193      92.679  69.135 -20.235  1.00 73.34      A16S
ATOM  23320  O1P GUA  193      92.044  68.933 -18.903  1.00 66.12      A16S
ATOM  23321  O2P GUA  193      93.621  68.112 -20.756  1.00 66.12      A16S
ATOM  23322  O5' GUA  193      91.550  69.371 -21.343  1.00 73.34      A16S
ATOM  23323  C5' GUA  193      90.505  70.333 -21.119  1.00 73.34      A16S
ATOM  23324  C4' GUA  193      89.513  70.354 -22.263  1.00 73.34      A16S
ATOM  23325  O4' GUA  193      90.153  70.809 -23.480  1.00 73.34      A16S
ATOM  23326  C1' GUA  193      89.482  70.260 -24.601  1.00 73.34      A16S
ATOM  23327  N9  GUA  193      90.419  69.434 -25.349  1.00 66.12      A16S
ATOM  23328  C4  GUA  193      90.286  69.038 -26.661  1.00 66.12      A16S
ATOM  23329  N3  GUA  193      89.274  69.370 -27.493  1.00 66.12      A16S
ATOM  23330  C2  GUA  193      89.405  68.799 -28.682  1.00 66.12      A16S
ATOM  23331  N2  GUA  193      88.476  69.004 -29.624  1.00 66.12      A16S
ATOM  23332  N1  GUA  193      90.451  67.981 -29.032  1.00 66.12      A16S
ATOM  23333  C6  GUA  193      91.504  67.627 -28.194  1.00 66.12      A16S
ATOM  23334  O6  GUA  193      92.392  66.871 -28.606  1.00 66.12      A16S
ATOM  23335  C5  GUA  193      91.373  68.226 -26.910  1.00 66.12      A16S
ATOM  23336  N7  GUA  193      92.182  68.128 -25.784  1.00 66.12      A16S
ATOM  23337  C8  GUA  193      91.582  68.866 -24.888  1.00 66.12      A16S
ATOM  23338  C2' GUA  193      88.347  69.386 -24.078  1.00 73.34      A16S
ATOM  23339  O2' GUA  193      87.138  70.119 -24.081  1.00 73.34      A16S
ATOM  23340  C3' GUA  193      88.835  69.058 -22.673  1.00 73.34      A16S
ATOM  23341  O3' GUA  193      87.745  68.693 -21.838  1.00 73.34      A16S
ATOM  23342  P   URI  194      87.291  67.148 -21.759  1.00 72.15      A16S
ATOM  23343  O1P URI  194      86.129  67.111 -20.828  1.00 78.43      A16S
ATOM  23344  O2P URI  194      88.485  66.302 -21.474  1.00 78.43      A16S
ATOM  23345  O5' URI  194      86.807  66.810 -23.244  1.00 72.15      A16S
ATOM  23346  C5' URI  194      85.695  67.506 -23.830  1.00 72.15      A16S
ATOM  23347  C4' URI  194      85.457  67.034 -25.247  1.00 72.15      A16S
ATOM  23348  O4' URI  194      86.571  67.412 -26.093  1.00 72.15      A16S
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ATOM  23453  C4' CYT   199      94.540  47.649 -23.027  1.00 66.90      A16S
ATOM  23454  O4' CYT   199      94.252  49.011 -23.427  1.00 66.90      A16S
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ATOM  23484  C2' CYT   200      95.349  49.751 -15.389  1.00 54.29      A16S
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ATOM  23492  C5' ADE   201      93.961  47.936 -12.540  1.00 56.47      A16S
ATOM  23493  C4' ADE   201      94.496  48.827 -11.440  1.00 56.47      A16S
ATOM  23494  O4' ADE   201      93.776  50.076 -11.463  1.00 56.47      A16S
ATOM  23495  C1' ADE   201      93.542  50.515 -10.141  1.00 56.47      A16S
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ATOM  23497  C4  ADE   201      91.433  51.625  -9.309  1.00 63.31      A16S
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ATOM	23509	O3'	ADE	201	95.523	47.542	-9.678	1.00	56.47	A16S
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ATOM	23511	O1P	ADE	202	96.690	45.452	-9.035	1.00	55.50	A16S
ATOM	23512	O2P	ADE	202	94.135	45.469	-9.330	1.00	55.50	A16S
ATOM	23513	O5'	ADE	202	95.242	46.576	-7.366	1.00	59.34	A16S
ATOM	23514	C5'	ADE	202	96.382	47.038	-6.618	1.00	59.34	A16S
ATOM	23515	C4'	ADE	202	95.918	47.769	-5.388	1.00	59.34	A16S
ATOM	23516	O4'	ADE	202	94.967	48.762	-5.823	1.00	59.34	A16S
ATOM	23517	C1'	ADE	202	93.899	48.837	-4.911	1.00	59.34	A16S
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ATOM	23519	C4	ADE	202	91.600	49.434	-5.761	1.00	55.50	A16S
ATOM	23520	N3	ADE	202	91.476	50.655	-5.213	1.00	55.50	A16S
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ATOM	23524	N6	ADE	202	88.470	48.928	-7.528	1.00	55.50	A16S
ATOM	23525	C5	ADE	202	90.676	48.782	-6.553	1.00	55.50	A16S
ATOM	23526	N7	ADE	202	91.153	47.540	-6.945	1.00	55.50	A16S
ATOM	23527	C8	ADE	202	92.335	47.466	-6.382	1.00	55.50	A16S
ATOM	23528	C2'	ADE	202	94.180	47.877	-3.755	1.00	59.34	A16S
ATOM	23529	O2'	ADE	202	94.735	48.606	-2.678	1.00	59.34	A16S
ATOM	23530	C3'	ADE	202	95.171	46.904	-4.385	1.00	59.34	A16S
ATOM	23531	O3'	ADE	202	96.088	46.403	-3.402	1.00	59.34	A16S
ATOM	23532	P	ADE	203	96.275	44.818	-3.201	1.00	77.24	A16S
ATOM	23533	O1P	ADE	203	94.958	44.193	-3.476	1.00	65.29	A16S
ATOM	23534	O2P	ADE	203	97.473	44.398	-3.982	1.00	65.29	A16S
ATOM	23535	O5'	ADE	203	96.605	44.657	-1.650	1.00	77.24	A16S
ATOM	23536	C5'	ADE	203	95.988	43.624	-0.858	1.00	77.24	A16S
ATOM	23537	C4'	ADE	203	95.319	44.235	0.347	1.00	77.24	A16S
ATOM	23538	O4'	ADE	203	96.321	44.931	1.097	1.00	77.24	A16S
ATOM	23539	C1'	ADE	203	95.840	46.180	1.516	1.00	77.24	A16S
ATOM	23540	N9	ADE	203	96.918	47.131	1.292	1.00	65.29	A16S
ATOM	23541	C4	ADE	203	97.493	47.912	2.260	1.00	65.29	A16S
ATOM	23542	N3	ADE	203	97.066	48.091	3.519	1.00	65.29	A16S
ATOM	23543	C2	ADE	203	97.935	48.817	4.206	1.00	65.29	A16S
ATOM	23544	N1	ADE	203	99.098	49.338	3.809	1.00	65.29	A16S
ATOM	23545	C6	ADE	203	99.494	49.140	2.533	1.00	65.29	A16S
ATOM	23546	N6	ADE	203	100.667	49.637	2.142	1.00	65.29	A16S
ATOM	23547	C5	ADE	203	98.651	48.405	1.699	1.00	65.29	A16S
ATOM	23548	N7	ADE	203	98.744	48.041	0.366	1.00	65.29	A16S
ATOM	23549	C8	ADE	203	97.672	47.317	0.164	1.00	65.29	A16S
ATOM	23550	C2'	ADE	203	94.409	46.388	1.022	1.00	77.24	A16S
ATOM	23551	O2'	ADE	203	93.546	46.308	2.130	1.00	77.24	A16S
ATOM	23552	C3'	ADE	203	94.242	45.251	0.011	1.00	77.24	A16S
ATOM	23553	O3'	ADE	203	92.962	44.569	-0.010	1.00	77.24	A16S
ATOM	23554	P	GUA	204	92.365	43.820	1.320	1.00	62.58	A16S
ATOM	23555	O1P	GUA	204	91.823	42.530	0.820	1.00	51.25	A16S
ATOM	23556	O2P	GUA	204	91.473	44.736	2.086	1.00	51.25	A16S
ATOM	23557	O5'	GUA	204	93.611	43.428	2.236	1.00	62.58	A16S
ATOM	23558	C5'	GUA	204	93.440	43.156	3.639	1.00	62.58	A16S
ATOM	23559	C4'	GUA	204	94.666	43.595	4.388	1.00	62.58	A16S
ATOM	23560	O4'	GUA	204	95.006	44.926	3.940	1.00	62.58	A16S
ATOM	23561	C1'	GUA	204	95.493	45.693	5.025	1.00	62.58	A16S
ATOM	23562	N9	GUA	204	94.529	46.758	5.304	1.00	51.25	A16S
ATOM	23563	C4	GUA	204	94.731	47.853	6.113	1.00	51.25	A16S
ATOM	23564	N3	GUA	204	95.864	48.143	6.786	1.00	51.25	A16S
ATOM	23565	C2	GUA	204	95.757	49.270	7.474	1.00	51.25	A16S
ATOM	23566	N2	GUA	204	96.798	49.707	8.190	1.00	51.25	A16S
ATOM	23567	N1	GUA	204	94.626	50.044	7.505	1.00	51.25	A16S
ATOM	23568	C6	GUA	204	93.445	49.758	6.829	1.00	51.25	A16S
ATOM	23569	O6	GUA	204	92.475	50.513	6.940	1.00	51.25	A16S
ATOM	23570	C5	GUA	204	93.550	48.559	6.077	1.00	51.25	A16S
ATOM	23571	N7	GUA	204	92.622	47.926	5.262	1.00	51.25	A16S
ATOM	23572	C8	GUA	204	93.243	46.864	4.829	1.00	51.25	A16S
ATOM	23573	C2'	GUA	204	95.625	44.742	6.208	1.00	62.58	A16S
ATOM	23574	O2'	GUA	204	96.898	44.125	6.168	1.00	62.58	A16S
ATOM	23575	C3'	GUA	204	94.536	43.735	5.894	1.00	62.58	A16S
ATOM	23576	O3'	GUA	204	94.751	42.532	6.599	1.00	62.58	A16S
ATOM	23577	P	GUA	205	93.993	42.289	7.995	1.00	55.90	A16S
ATOM	23578	O1P	GUA	205	94.344	40.906	8.418	1.00	49.20	A16S
ATOM	23579	O2P	GUA	205	92.563	42.668	7.795	1.00	49.20	A16S
ATOM	23580	O5'	GUA	205	94.683	43.298	9.019	1.00	55.90	A16S
ATOM	23581	C5'	GUA	205	96.034	43.076	9.448	1.00	55.90	A16S
ATOM	23582	C4'	GUA	205	96.576	44.293	10.154	1.00	55.90	A16S
ATOM	23583	O4'	GUA	205	96.397	45.466	9.318	1.00	55.90	A16S
ATOM	23584	C1'	GUA	205	96.225	46.611	10.137	1.00	55.90	A16S
ATOM	23585	N9	GUA	205	94.921	47.207	9.874	1.00	49.20	A16S
ATOM	23586	C4	GUA	205	94.478	48.388	10.415	1.00	49.20	A16S
ATOM	23587	N3	GUA	205	95.184	49.188	11.242	1.00	49.20	A16S
ATOM	23588	C2	GUA	205	94.503	50.261	11.592	1.00	49.20	A16S
ATOM	23589	N2	GUA	205	95.076	51.182	12.392	1.00	49.20	A16S
ATOM	23590	N1	GUA	205	93.218	50.515	11.181	1.00	49.20	A16S
ATOM	23591	C6	GUA	205	92.467	49.699	10.339	1.00	49.20	A16S
ATOM	23592	O6	GUA	205	91.307	50.019	10.042	1.00	49.20	A16S
ATOM	23593	C5	GUA	205	93.199	48.554	9.935	1.00	49.20	A16S
ATOM	23594	N7	GUA	205	92.847	47.506	9.090	1.00	49.20	A16S
ATOM	23595	C8	GUA	205	93.899	46.730	9.085	1.00	49.20	A16S
ATOM	23596	C2'	GUA	205	96.277	46.159	11.588	1.00	55.90	A16S
ATOM	23597	O2'	GUA	205	97.570	46.416	12.105	1.00	55.90	A16S
ATOM	23598	C3'	GUA	205	95.901	44.687	11.453	1.00	55.90	A16S
ATOM	23599	O3'	GUA	205	96.342	43.912	12.550	1.00	55.90	A16S
ATOM	23600	P	GUA	206	95.331	43.624	13.762	1.00	68.80	A16S
ATOM	23601	O1P	GUA	206	95.992	42.635	14.649	1.00	47.13	A16S
ATOM	23602	O2P	GUA	206	93.997	43.335	13.185	1.00	47.13	A16S
ATOM	23603	O5'	GUA	206	95.245	45.010	14.533	1.00	68.80	A16S

ATOM	23604	C5'	GUA	206	96.435	45.641	15.016	1.00	68.80	A16S	ATOM	23657	O4	URI	208	92.299	56.629	24.822	1.00	117.34	A16S
ATOM	23605	C4'	GUA	206	96.108	46.979	15.623	1.00	68.80	A16S	ATOM	23658	C5	URI	208	91.300	54.537	25.348	1.00	117.34	A16S
ATOM	23606	O4'	GUA	206	95.605	47.873	14.602	1.00	68.80	A16S	ATOM	23659	C2'	URI	208	87.754	52.706	22.580	1.00	164.10	A16S
ATOM	23607	C1'	GUA	206	94.628	48.729	15.160	1.00	68.80	A16S	ATOM	23660	O2'	URI	208	86.424	53.078	22.294	1.00	164.10	A16S
ATOM	23608	N9	GUA	206	93.386	48.564	14.413	1.00	47.13	A16S	ATOM	23661	C3'	URI	208	88.016	51.199	22.632	1.00	164.10	A16S
ATOM	23609	C4	GUA	206	92.371	49.480	14.320	1.00	47.13	A16S	ATOM	23662	O3'	URI	208	87.160	50.402	21.796	1.00	164.10	A16S
ATOM	23610	N3	GUA	206	92.328	50.678	14.940	1.00	47.13	A16S	ATOM	23663	P	URI	209	85.655	50.048	22.273	1.00	105.26	A16S
ATOM	23611	C2	GUA	206	91.235	51.356	14.631	1.00	47.13	A16S	ATOM	23664	O1P	URI	209	84.970	51.275	22.743	1.00	106.46	A16S
ATOM	23612	N2	GUA	206	91.044	52.580	15.151	1.00	47.13	A16S	ATOM	23665	O2P	URI	209	85.749	48.871	23.177	1.00	106.46	A16S
ATOM	23613	N1	GUA	206	90.254	50.886	13.786	1.00	47.13	A16S	ATOM	23666	O5'	URI	209	84.909	49.579	20.949	1.00	105.26	A16S
ATOM	23614	C6	GUA	206	90.279	49.649	13.140	1.00	47.13	A16S	ATOM	23667	C5'	URI	209	84.882	50.415	19.793	1.00	105.26	A16S
ATOM	23615	O6	GUA	206	89.343	49.314	12.394	1.00	47.13	A16S	ATOM	23668	C4'	URI	209	85.050	49.577	18.559	1.00	105.26	A16S
ATOM	23616	C5	GUA	206	91.449	48.921	13.460	1.00	47.13	A16S	ATOM	23669	O4'	URI	209	86.257	48.798	18.678	1.00	105.26	A16S
ATOM	23617	N7	GUA	206	91.863	47.667	13.042	1.00	47.13	A16S	ATOM	23670	C1'	URI	209	86.176	47.743	17.754	1.00	105.26	A16S
ATOM	23618	C8	GUA	206	93.011	47.492	13.641	1.00	47.13	A16S	ATOM	23671	N1	URI	209	87.114	46.660	18.105	1.00	106.46	A16S
ATOM	23619	C2'	GUA	206	94.513	48.403	16.645	1.00	68.80	A16S	ATOM	23672	C6	URI	209	87.997	46.780	19.169	1.00	106.46	A16S
ATOM	23620	O2'	GUA	206	95.338	49.315	17.344	1.00	68.80	A16S	ATOM	23673	C2	URI	209	87.136	45.525	17.291	1.00	106.46	A16S
ATOM	23621	C3'	GUA	206	95.025	46.967	16.682	1.00	68.80	A16S	ATOM	23674	O2	URI	209	86.322	45.324	16.396	1.00	106.46	A16S
ATOM	23622	O3'	GUA	206	95.544	46.567	17.944	1.00	68.80	A16S	ATOM	23675	N3	URI	209	88.144	44.631	17.570	1.00	106.46	A16S
ATOM	23623	P	CYT	207	94.574	45.849	19.006	1.00	103.06	A16S	ATOM	23676	C4	URI	209	89.095	44.726	18.572	1.00	106.46	A16S
ATOM	23624	O1P	CYT	207	95.351	44.831	19.740	1.00	43.71	A16S	ATOM	23677	O4	URI	209	90.029	43.920	18.591	1.00	106.46	A16S
ATOM	23625	O2P	CYT	207	93.305	45.448	18.319	1.00	43.71	A16S	ATOM	23678	C5	URI	209	88.958	45.877	19.421	1.00	106.46	A16S
ATOM	23626	O5'	CYT	207	94.318	47.016	20.055	1.00	103.06	A16S	ATOM	23679	C2'	URI	209	84.696	47.451	17.485	1.00	105.26	A16S
ATOM	23627	C5'	CYT	207	93.036	47.231	20.645	1.00	103.06	A16S	ATOM	23680	O2'	URI	209	84.497	47.583	16.089	1.00	105.26	A16S
ATOM	23628	C4'	CYT	207	92.600	48.647	20.390	1.00	103.06	A16S	ATOM	23681	C3'	URI	209	83.978	48.526	18.325	1.00	105.26	A16S
ATOM	23629	O4'	CYT	207	92.506	48.845	18.967	1.00	103.06	A16S	ATOM	23682	O3'	URI	209	82.940	49.127	17.557	1.00	105.26	A16S
ATOM	23630	C1'	CYT	207	91.430	49.706	18.683	1.00	103.06	A16S	ATOM	23683	P	URI	210	81.651	49.752	18.280	1.00	124.51	A16S
ATOM	23631	N1	CYT	207	90.552	49.057	17.706	1.00	43.71	A16S	ATOM	23684	O1P	URI	210	82.073	50.347	19.574	1.00	174.88	A16S
ATOM	23632	C6	CYT	207	90.770	47.768	17.298	1.00	43.71	A16S	ATOM	23685	O2P	URI	210	80.589	48.713	18.260	1.00	174.88	A16S
ATOM	23633	C2	CYT	207	89.493	49.804	17.166	1.00	43.71	A16S	ATOM	23686	O5'	URI	210	81.221	50.934	17.296	1.00	124.51	A16S
ATOM	23634	O2	CYT	207	89.296	50.956	17.590	1.00	43.71	A16S	ATOM	23687	C5'	URI	210	79.830	51.230	17.046	1.00	124.51	A16S
ATOM	23635	N3	CYT	207	88.718	49.255	16.204	1.00	43.71	A16S	ATOM	23688	C4'	URI	210	79.576	51.342	15.559	1.00	124.51	A16S
ATOM	23636	C4	CYT	207	88.965	48.010	15.780	1.00	43.71	A16S	ATOM	23689	O4'	URI	210	80.230	50.234	14.892	1.00	124.51	A16S
ATOM	23637	N4	CYT	207	88.206	47.524	14.790	1.00	43.71	A16S	ATOM	23690	C1'	URI	210	79.428	49.788	13.816	1.00	124.51	A16S
ATOM	23638	C5	CYT	207	90.013	47.210	16.344	1.00	43.71	A16S	ATOM	23691	N1	URI	210	79.189	48.342	13.965	1.00	174.88	A16S
ATOM	23639	C2'	CYT	207	90.757	50.105	19.995	1.00	103.06	A16S	ATOM	23692	C6	URI	210	79.484	47.680	15.138	1.00	174.88	A16S
ATOM	23640	O2'	CYT	207	91.196	51.405	20.331	1.00	103.06	A16S	ATOM	23693	C2	URI	210	78.664	47.657	12.875	1.00	174.88	A16S
ATOM	23641	C3'	CYT	207	91.236	49.007	20.940	1.00	103.06	A16S	ATOM	23694	O2	URI	210	78.370	48.201	11.819	1.00	174.88	A16S
ATOM	23642	O3'	CYT	207	91.402	49.494	22.263	1.00	103.06	A16S	ATOM	23695	N3	URI	210	78.494	46.309	13.068	1.00	174.88	A16S
ATOM	23643	P	URI	208	90.808	48.667	23.498	1.00	164.10	A16S	ATOM	23696	C4	URI	210	78.784	45.588	14.208	1.00	174.88	A16S
ATOM	23644	O1P	URI	208	91.965	48.249	24.334	1.00	117.34	A16S	ATOM	23697	O4	URI	210	78.637	44.366	14.202	1.00	174.88	A16S
ATOM	23645	O2P	URI	208	89.870	47.633	22.961	1.00	117.34	A16S	ATOM	23698	C5	URI	210	79.305	46.366	15.291	1.00	174.88	A16S
ATOM	23646	O5'	URI	208	90.003	49.775	24.313	1.00	164.10	A16S	ATOM	23699	C2'	URI	210	78.162	50.651	13.755	1.00	124.51	A16S
ATOM	23647	C5'	URI	208	88.599	49.627	24.585	1.00	164.10	A16S	ATOM	23700	O2'	URI	210	78.290	51.599	12.713	1.00	124.51	A16S
ATOM	23648	C4'	URI	208	87.838	50.839	24.099	1.00	164.10	A16S	ATOM	23701	C3'	URI	210	78.104	51.257	15.159	1.00	124.51	A16S
ATOM	23649	O4'	URI	208	88.267	52.013	24.823	1.00	164.10	A16S	ATOM	23702	O3'	URI	210	77.391	52.515	15.109	1.00	124.51	A16S
ATOM	23650	C1'	URI	208	88.113	53.155	24.003	1.00	164.10	A16S	ATOM	23703	P	GUA	211	78.189	53.922	15.075	1.00	152.12	A16S
ATOM	23651	N1	URI	208	89.276	54.040	24.187	1.00	117.34	A16S	ATOM	23704	O1P	GUA	211	78.853	54.101	16.388	1.00	69.86	A16S
ATOM	23652	C6	URI	208	90.262	53.732	25.102	1.00	117.34	A16S	ATOM	23705	O2P	GUA	211	77.291	54.991	14.573	1.00	69.86	A16S
ATOM	23653	C2	URI	208	89.342	55.212	23.440	1.00	117.34	A16S	ATOM	23706	O5'	GUA	211	79.288	53.677	13.948	1.00	152.12	A16S
ATOM	23654	O2	URI	208	88.515	55.513	22.592	1.00	117.34	A16S	ATOM	23707	C5'	GUA	211	79.909	54.767	13.246	1.00	152.12	A16S
ATOM	23655	N3	URI	208	90.419	56.017	23.722	1.00	117.34	A16S	ATOM	23708	C4'	GUA	211	81.149	55.189	13.979	1.00	152.12	A16S
ATOM	23656	C4	URI	208	91.422	55.777	24.643	1.00	117.34	A16S	ATOM	23709	O4'	GUA	211	81.724	54.031	14.627	1.00	152.12	A16S

ATOM	23710	C1'	GUA	211	83.129	54.152	14.644	1.00152.12	A16S	ATOM	23763	O2'	CYT	213	94.930	56.283	14.084	1.00 80.21	A16S
ATOM	23711	N9	GUA	211	83.709	52.970	14.011	1.00 69.86	A16S	ATOM	23764	C3'	CYT	213	93.330	57.632	12.863	1.00 80.21	A16S
ATOM	23712	C4	GUA	211	84.731	52.220	14.532	1.00 69.86	A16S	ATOM	23765	O3'	CYT	213	94.346	58.613	12.812	1.00 80.21	A16S
ATOM	23713	N3	GUA	211	85.396	52.487	15.675	1.00 69.86	A16S	ATOM	23766	P	CYT	214	94.951	59.047	11.391	1.00 79.54	A16S
ATOM	23714	C2	GUA	211	86.304	51.575	15.943	1.00 69.86	A16S	ATOM	23767	O1P	CYT	214	95.757	60.256	11.704	1.00 39.42	A16S
ATOM	23715	N2	GUA	211	87.056	51.713	17.039	1.00 69.86	A16S	ATOM	23768	O2P	CYT	214	93.862	59.107	10.364	1.00 39.42	A16S
ATOM	23716	N1	GUA	211	86.540	50.470	15.156	1.00 69.86	A16S	ATOM	23769	O5'	CYT	214	95.921	57.843	10.999	1.00 79.54	A16S
ATOM	23717	C6	GUA	211	85.868	50.173	13.974	1.00 69.86	A16S	ATOM	23770	C5'	CYT	214	97.091	57.560	11.788	1.00 79.54	A16S
ATOM	23718	O6	GUA	211	86.148	49.147	13.351	1.00 69.86	A16S	ATOM	23771	C4'	CYT	214	97.679	56.214	11.428	1.00 79.54	A16S
ATOM	23719	C5	GUA	211	84.895	51.164	13.663	1.00 69.86	A16S	ATOM	23772	O4'	CYT	214	96.749	55.154	11.771	1.00 79.54	A16S
ATOM	23720	N7	GUA	211	84.022	51.272	12.587	1.00 69.86	A16S	ATOM	23773	C1'	CYT	214	96.898	54.073	10.864	1.00 79.54	A16S
ATOM	23721	C8	GUA	211	83.342	52.363	12.830	1.00 69.86	A16S	ATOM	23774	N1	CYT	214	95.644	53.909	10.100	1.00 39.42	A16S
ATOM	23722	C2'	GUA	211	83.499	55.487	14.003	1.00152.12	A16S	ATOM	23775	C6	CYT	214	94.659	54.856	10.136	1.00 39.42	A16S
ATOM	23723	O2'	GUA	211	83.639	56.454	15.026	1.00152.12	A16S	ATOM	23776	C2	CYT	214	95.481	52.754	9.317	1.00 39.42	A16S
ATOM	23724	C3'	GUA	211	82.276	55.769	13.143	1.00152.12	A16S	ATOM	23777	O2	CYT	214	96.384	51.911	9.297	1.00 39.42	A16S
ATOM	23725	O3'	GUA	211	82.136	57.162	12.932	1.00152.12	A16S	ATOM	23778	N3	CYT	214	94.348	52.592	8.596	1.00 39.42	A16S
ATOM	23726	P	CYT	212	83.073	57.892	11.850	1.00127.37	A16S	ATOM	23779	C4	CYT	214	93.402	53.530	8.625	1.00 39.42	A16S
ATOM	23727	O1P	CYT	212	82.643	59.316	11.825	1.00 73.29	A16S	ATOM	23780	N4	CYT	214	92.319	53.342	7.868	1.00 39.42	A16S
ATOM	23728	O2P	CYT	212	83.021	57.082	10.595	1.00 73.29	A16S	ATOM	23781	C5	CYT	214	93.532	54.709	9.422	1.00 39.42	A16S
ATOM	23729	O5'	CYT	212	84.552	57.807	12.463	1.00127.37	A16S	ATOM	23782	C2'	CYT	214	98.046	54.431	9.928	1.00 79.54	A16S
ATOM	23730	C5'	CYT	212	85.012	58.788	13.426	1.00127.37	A16S	ATOM	23783	O2'	CYT	214	99.250	53.898	10.453	1.00 79.54	A16S
ATOM	23731	C4'	CYT	212	86.278	58.331	14.142	1.00127.37	A16S	ATOM	23784	C3'	CYT	214	97.987	55.950	9.968	1.00 79.54	A16S
ATOM	23732	O4'	CYT	212	86.103	56.994	14.680	1.00127.37	A16S	ATOM	23785	O3'	CYT	214	99.172	56.565	9.513	1.00 79.54	A16S
ATOM	23733	C1'	CYT	212	87.365	56.359	14.799	1.00127.37	A16S	ATOM	23786	P	GUA	215	99.140	57.382	8.130	1.00 75.39	A16S
ATOM	23734	N1	CYT	212	87.396	55.147	13.961	1.00 73.29	A16S	ATOM	23787	O1P	GUA	215	100.496	57.962	7.979	1.00 60.81	A16S
ATOM	23735	C6	CYT	212	86.641	55.042	12.826	1.00 73.29	A16S	ATOM	23788	O2P	GUA	215	97.963	58.277	8.163	1.00 60.81	A16S
ATOM	23736	C2	CYT	212	88.242	54.099	14.343	1.00 73.29	A16S	ATOM	23789	O5'	GUA	215	98.874	56.273	7.005	1.00 75.39	A16S
ATOM	23737	O2	CYT	212	88.916	54.219	15.381	1.00 73.29	A16S	ATOM	23790	C5'	GUA	215	99.803	55.184	6.836	1.00 75.39	A16S
ATOM	23738	N3	CYT	212	88.309	52.990	13.577	1.00 73.29	A16S	ATOM	23791	C4'	GUA	215	99.205	54.034	6.045	1.00 75.39	A16S
ATOM	23739	C4	CYT	212	87.571	52.899	12.473	1.00 73.29	A16S	ATOM	23792	O4'	GUA	215	98.009	53.512	6.680	1.00 75.39	A16S
ATOM	23740	N4	CYT	212	87.665	51.780	11.754	1.00 73.29	A16S	ATOM	23793	C1'	GUA	215	97.287	52.740	5.734	1.00 75.39	A16S
ATOM	23741	C5	CYT	212	86.700	53.948	12.058	1.00 73.29	A16S	ATOM	23794	N9	GUA	215	95.905	53.197	5.643	1.00 60.81	A16S
ATOM	23742	C2'	CYT	212	88.417	57.342	14.311	1.00127.37	A16S	ATOM	23795	C4	GUA	215	94.918	52.584	4.907	1.00 60.81	A16S
ATOM	23743	O2'	CYT	212	88.931	58.042	15.424	1.00127.37	A16S	ATOM	23796	N3	GUA	215	95.047	51.433	4.213	1.00 60.81	A16S
ATOM	23744	C3'	CYT	212	87.597	58.232	13.387	1.00127.37	A16S	ATOM	23797	C2	GUA	215	93.941	51.122	3.560	1.00 60.81	A16S
ATOM	23745	O3'	CYT	212	88.259	59.474	13.223	1.00127.37	A16S	ATOM	23798	N2	GUA	215	93.890	50.006	2.830	1.00 60.81	A16S
ATOM	23746	P	CYT	213	89.458	59.599	12.153	1.00 80.21	A16S	ATOM	23799	N1	GUA	215	92.803	51.879	3.575	1.00 60.81	A16S
ATOM	23747	O1P	CYT	213	90.008	60.965	12.331	1.00 52.93	A16S	ATOM	23800	C6	GUA	215	92.640	53.063	4.283	1.00 60.81	A16S
ATOM	23748	O2P	CYT	213	88.971	59.161	10.816	1.00 52.93	A16S	ATOM	23801	O6	GUA	215	91.562	53.668	4.225	1.00 60.81	A16S
ATOM	23749	O5'	CYT	213	90.567	58.572	12.659	1.00 80.21	A16S	ATOM	23802	C5	GUA	215	93.822	53.409	5.003	1.00 60.81	A16S
ATOM	23750	C5'	CYT	213	91.298	58.830	13.874	1.00 80.21	A16S	ATOM	23803	N7	GUA	215	94.095	54.495	5.823	1.00 60.81	A16S
ATOM	23751	C4'	CYT	213	92.410	57.826	14.053	1.00 80.21	A16S	ATOM	23804	C8	GUA	215	95.338	54.321	6.190	1.00 60.81	A16S
ATOM	23752	O4'	CYT	213	91.858	56.509	14.295	1.00 80.21	A16S	ATOM	23805	C2'	GUA	215	97.950	52.956	4.376	1.00 75.39	A16S
ATOM	23753	C1'	CYT	213	92.690	55.526	13.703	1.00 80.21	A16S	ATOM	23806	O2'	GUA	215	98.781	51.852	4.107	1.00 75.39	A16S
ATOM	23754	N1	CYT	213	91.915	54.822	12.663	1.00 52.93	A16S	ATOM	23807	C3'	GUA	215	98.764	54.225	4.603	1.00 75.39	A16S
ATOM	23755	C6	CYT	213	90.842	55.420	12.063	1.00 52.93	A16S	ATOM	23808	O3'	GUA	215	99.841	54.231	3.674	1.00 75.39	A16S
ATOM	23756	C2	CYT	213	92.293	53.525	12.295	1.00 52.93	A16S	ATOM	23809	P	CYT	216	99.582	54.695	2.147	1.00 50.17	A16S
ATOM	23757	O2	CYT	213	93.290	53.013	12.831	1.00 52.93	A16S	ATOM	23810	O1P	CYT	216	100.919	54.723	1.506	1.00 56.61	A16S
ATOM	23758	N3	CYT	213	91.567	52.866	11.356	1.00 52.93	A16S	ATOM	23811	O2P	CYT	216	98.719	55.902	2.109	1.00 56.61	A16S
ATOM	23759	C4	CYT	213	90.517	53.462	10.783	1.00 52.93	A16S	ATOM	23812	O5'	CYT	216	98.728	53.530	1.489	1.00 50.17	A16S
ATOM	23760	N4	CYT	213	89.829	52.783	9.862	1.00 52.93	A16S	ATOM	23813	C5'	CYT	216	99.299	52.249	1.254	1.00 50.17	A16S
ATOM	23761	C5	CYT	213	90.124	54.783	11.127	1.00 52.93	A16S	ATOM	23814	C4'	CYT	216	98.372	51.433	0.412	1.00 50.17	A16S
ATOM	23762	C2'	CYT	213	93.900	56.248	13.119	1.00 80.21	A16S	ATOM	23815	O4'	CYT	216	97.105	51.289	1.103	1.00 50.17	A16S

ATOM	23816	C1'	CYT	216	96.037	51.340	0.171	1.00	50.17	A16S	ATOM	23869	P	CYT	219	97.444	57.725	-12.099	1.00	68.04	A16S
ATOM	23817	N1	CYT	216	95.151	52.480	0.508	1.00	56.61	A16S	ATOM	23870	O1P	CYT	219	98.185	57.494	-13.374	1.00	44.94	A16S
ATOM	23818	C6	CYT	216	95.506	53.412	1.451	1.00	56.61	A16S	ATOM	23871	O2P	CYT	219	98.199	57.809	-10.814	1.00	44.94	A16S
ATOM	23819	C2	CYT	216	93.923	52.598	-0.173	1.00	56.61	A16S	ATOM	23872	O5'	CYT	219	96.545	59.037	-12.212	1.00	68.04	A16S
ATOM	23820	O2	CYT	216	93.612	51.732	-1.017	1.00	56.61	A16S	ATOM	23873	C5'	CYT	219	95.535	59.133	-13.232	1.00	68.04	A16S
ATOM	23821	N3	CYT	216	93.110	53.647	0.103	1.00	56.61	A16S	ATOM	23874	C4'	CYT	219	94.588	60.280	-12.954	1.00	68.04	A16S
ATOM	23822	C4	CYT	216	93.474	54.553	1.014	1.00	56.61	A16S	ATOM	23875	O4'	CYT	219	93.777	60.011	-11.784	1.00	68.04	A16S
ATOM	23823	N4	CYT	216	92.642	55.574	1.236	1.00	56.61	A16S	ATOM	23876	C1'	CYT	219	93.390	61.235	-11.191	1.00	68.04	A16S
ATOM	23824	C5	CYT	216	94.707	54.452	1.734	1.00	56.61	A16S	ATOM	23877	N1	CYT	219	93.854	61.264	-9.801	1.00	44.94	A16S
ATOM	23825	C2'	CYT	216	96.655	51.455	-1.222	1.00	50.17	A16S	ATOM	23878	C6	CYT	219	94.811	60.397	-9.353	1.00	44.94	A16S
ATOM	23826	O2'	CYT	216	96.765	50.159	-1.772	1.00	50.17	A16S	ATOM	23879	C2	CYT	219	93.310	62.223	-8.934	1.00	44.94	A16S
ATOM	23827	C3'	CYT	216	98.006	52.079	-0.904	1.00	50.17	A16S	ATOM	23880	O2	CYT	219	92.419	62.981	-9.354	1.00	44.94	A16S
ATOM	23828	O3'	CYT	216	98.997	51.828	-1.881	1.00	50.17	A16S	ATOM	23881	N3	CYT	219	93.764	62.302	-7.666	1.00	44.94	A16S
ATOM	23829	P	URI	217	99.247	52.906	-3.046	1.00	55.36	A16S	ATOM	23882	C4	CYT	219	94.721	61.475	-7.249	1.00	44.94	A16S
ATOM	23830	O1P	URI	217	100.412	52.446	-3.845	1.00	55.53	A16S	ATOM	23883	N4	CYT	219	95.169	61.625	-6.006	1.00	44.94	A16S
ATOM	23831	O2P	URI	217	99.252	54.277	-2.433	1.00	55.53	A16S	ATOM	23884	C5	CYT	219	95.270	60.467	-8.094	1.00	44.94	A16S
ATOM	23832	O5'	URI	217	97.958	52.769	-3.965	1.00	55.36	A16S	ATOM	23885	C2'	CYT	219	94.020	62.366	-12.000	1.00	68.04	A16S
ATOM	23833	C5'	URI	217	97.664	51.535	-4.603	1.00	55.36	A16S	ATOM	23886	O2'	CYT	219	93.061	62.863	-12.912	1.00	68.04	A16S
ATOM	23834	C4'	URI	217	96.471	51.696	-5.492	1.00	55.36	A16S	ATOM	23887	C3'	CYT	219	95.180	61.651	-12.683	1.00	68.04	A16S
ATOM	23835	O4'	URI	217	95.280	51.881	-4.694	1.00	55.36	A16S	ATOM	23888	O3'	CYT	219	95.585	62.310	-13.875	1.00	68.04	A16S
ATOM	23836	C1'	URI	217	94.406	52.785	-5.346	1.00	55.36	A16S	ATOM	23889	P	CYT	220	96.784	63.386	-13.822	1.00	66.85	A16S
ATOM	23837	N1	URI	217	94.197	53.938	-4.455	1.00	55.53	A16S	ATOM	23890	O1P	CYT	220	97.172	63.634	-15.246	1.00	61.88	A16S
ATOM	23838	C6	URI	217	95.085	54.222	-3.439	1.00	55.53	A16S	ATOM	23891	O2P	CYT	220	97.807	62.937	-12.851	1.00	61.88	A16S
ATOM	23839	C2	URI	217	93.071	54.724	-4.654	1.00	55.53	A16S	ATOM	23892	O5'	CYT	220	96.116	64.693	-13.191	1.00	66.85	A16S
ATOM	23840	O2	URI	217	92.270	54.529	-5.553	1.00	55.53	A16S	ATOM	23893	C5'	CYT	220	95.076	65.403	-13.888	1.00	66.85	A16S
ATOM	23841	N3	URI	217	92.921	55.752	-3.762	1.00	55.53	A16S	ATOM	23894	C4'	CYT	220	94.477	66.472	-13.006	1.00	66.85	A16S
ATOM	23842	C4	URI	217	93.762	56.078	-2.721	1.00	55.53	A16S	ATOM	23895	O4'	CYT	220	93.858	65.862	-11.845	1.00	66.85	A16S
ATOM	23843	O4	URI	217	93.486	57.041	-1.999	1.00	55.53	A16S	ATOM	23896	C1'	CYT	220	93.968	66.733	-10.733	1.00	66.85	A16S
ATOM	23844	C5	URI	217	94.910	55.233	-2.592	1.00	55.53	A16S	ATOM	23897	N1	CYT	220	94.727	66.059	-9.664	1.00	61.88	A16S
ATOM	23845	C2'	URI	217	95.036	53.143	-6.691	1.00	55.36	A16S	ATOM	23898	C6	CYT	220	95.442	64.918	-9.911	1.00	61.88	A16S
ATOM	23846	O2'	URI	217	94.528	52.257	-7.670	1.00	55.36	A16S	ATOM	23899	C2	CYT	220	94.713	66.618	-8.379	1.00	61.88	A16S
ATOM	23847	C3'	URI	217	96.513	52.909	-6.398	1.00	55.36	A16S	ATOM	23900	O2	CYT	220	94.054	67.654	-8.180	1.00	61.88	A16S
ATOM	23848	O3'	URI	217	97.307	52.647	-7.541	1.00	55.36	A16S	ATOM	23901	N3	CYT	220	95.418	66.019	-7.391	1.00	61.88	A16S
ATOM	23849	P	URI	218	98.194	53.823	-8.182	1.00	59.67	A16S	ATOM	23902	C4	CYT	220	96.115	64.909	-7.645	1.00	61.88	A16S
ATOM	23850	O1P	URI	218	99.122	53.140	-9.124	1.00	49.36	A16S	ATOM	23903	N4	CYT	220	96.802	64.356	-6.638	1.00	61.88	A16S
ATOM	23851	O2P	URI	218	98.737	54.687	-7.110	1.00	49.36	A16S	ATOM	23904	C5	CYT	220	96.143	64.317	-8.941	1.00	61.88	A16S
ATOM	23852	O5'	URI	218	97.138	54.653	-9.027	1.00	59.67	A16S	ATOM	23905	C2'	CYT	220	94.676	67.998	-11.203	1.00	66.85	A16S
ATOM	23853	C5'	URI	218	96.419	54.006	-10.083	1.00	59.67	A16S	ATOM	23906	O2'	CYT	220	93.705	68.970	-11.524	1.00	66.85	A16S
ATOM	23854	C4'	URI	218	95.302	54.879	-10.583	1.00	59.67	A16S	ATOM	23907	C3'	CYT	220	95.438	67.487	-12.418	1.00	66.85	A16S
ATOM	23855	O4'	URI	218	94.207	54.909	-9.635	1.00	59.67	A16S	ATOM	23908	O3'	CYT	220	95.754	68.528	-13.328	1.00	66.85	A16S
ATOM	23856	C1'	URI	218	93.574	56.175	-9.682	1.00	59.67	A16S	ATOM	23909	P	GUA	221	97.235	69.164	-13.314	1.00	74.46	A16S
ATOM	23857	N1	URI	218	93.702	56.816	-8.363	1.00	49.36	A16S	ATOM	23910	O1P	GUA	221	97.289	70.108	-14.475	1.00	54.01	A16S
ATOM	23858	C6	URI	218	94.724	56.486	-7.507	1.00	49.36	A16S	ATOM	23911	O2P	GUA	221	98.208	68.047	-13.238	1.00	54.01	A16S
ATOM	23859	C2	URI	218	92.775	57.784	-8.014	1.00	49.36	A16S	ATOM	23912	O5'	GUA	221	97.307	69.965	-11.935	1.00	74.46	A16S
ATOM	23860	O2	URI	218	91.830	58.080	-8.717	1.00	49.36	A16S	ATOM	23913	C5'	GUA	221	96.501	71.126	-11.748	1.00	74.46	A16S
ATOM	23861	N3	URI	218	92.992	58.390	-6.805	1.00	49.36	A16S	ATOM	23914	C4'	GUA	221	96.496	71.571	-10.306	1.00	74.46	A16S
ATOM	23862	C4	URI	218	94.007	58.121	-5.915	1.00	49.36	A16S	ATOM	23915	O4'	GUA	221	95.918	70.558	-9.441	1.00	74.46	A16S
ATOM	23863	O4	URI	218	94.089	58.773	-4.872	1.00	49.36	A16S	ATOM	23916	C1'	GUA	221	96.370	70.768	-8.110	1.00	74.46	A16S
ATOM	23864	C5	URI	218	94.901	57.087	-6.329	1.00	49.36	A16S	ATOM	23917	N9	GUA	221	97.056	69.577	-7.623	1.00	54.01	A16S
ATOM	23865	C2'	URI	218	94.272	56.985	-10.776	1.00	59.67	A16S	ATOM	23918	C4	GUA	221	97.492	69.384	-6.332	1.00	54.01	A16S
ATOM	23866	O2'	URI	218	93.604	56.773	-12.006	1.00	59.67	A16S	ATOM	23919	N3	GUA	221	97.320	70.238	-5.302	1.00	54.01	A16S
ATOM	23867	C3'	URI	218	95.646	56.337	-10.800	1.00	59.67	A16S	ATOM	23920	C2	GUA	221	97.856	69.785	-4.186	1.00	54.01	A16S
ATOM	23868	O3'	URI	218	96.348	56.549	-12.017	1.00	59.67	A16S	ATOM	23921	N2	GUA	221	97.757	70.499	-3.077	1.00	54.01	A16S

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ATOM  23922  N1  GUA  221      98.522  68.596  -4.081  1.00 54.01      A16S
ATOM  23923  C6  GUA  221      98.717  67.698  -5.124  1.00 54.01      A16S
ATOM  23924  O6  GUA  221      99.335  66.649  -4.920  1.00 54.01      A16S
ATOM  23925  C5  GUA  221      98.132  68.167  -6.337  1.00 54.01      A16S
ATOM  23926  N7  GUA  221      98.083  67.591  -7.601  1.00 54.01      A16S
ATOM  23927  C8  GUA  221      97.430  68.460  -8.329  1.00 54.01      A16S
ATOM  23928  C2' GUA  221      97.375  71.914  -8.152  1.00 74.46      A16S
ATOM  23929  O2' GUA  221      96.724  73.119  -7.795  1.00 74.46      A16S
ATOM  23930  C3' GUA  221      97.808  71.887  -9.612  1.00 74.46      A16S
ATOM  23931  O3' GUA  221      98.385  73.121  -9.979  1.00 74.46      A16S
ATOM  23932  P   GUA  222      99.946  73.375  -9.682  1.00 58.51      A16S
ATOM  23933  O1P GUA  222     100.239  74.671 -10.329  1.00 51.60      A16S
ATOM  23934  O2P GUA  222     100.753  72.173 -10.033  1.00 51.60      A16S
ATOM  23935  O5' GUA  222     100.028  73.591  -8.108  1.00 58.51      A16S
ATOM  23936  C5' GUA  222      99.344  74.681  -7.493  1.00 58.51      A16S
ATOM  23937  C4' GUA  222      99.496  74.602  -6.007  1.00 58.51      A16S
ATOM  23938  O4' GUA  222      99.057  73.293  -5.566  1.00 58.51      A16S
ATOM  23939  C1' GUA  222      99.842  72.873  -4.461  1.00 58.51      A16S
ATOM  23940  N9  GUA  222     100.477  71.592  -4.761  1.00 51.60      A16S
ATOM  23941  C4  GUA  222     101.124  70.794  -3.849  1.00 51.60      A16S
ATOM  23942  N3  GUA  222     101.304  71.075  -2.539  1.00 51.60      A16S
ATOM  23943  C2  GUA  222     101.937  70.102  -1.913  1.00 51.60      A16S
ATOM  23944  N2  GUA  222     102.190  70.209  -0.614  1.00 51.60      A16S
ATOM  23945  N1  GUA  222     102.364  68.947  -2.520  1.00 51.60      A16S
ATOM  23946  C6  GUA  222     102.187  68.639  -3.863  1.00 51.60      A16S
ATOM  23947  O6  GUA  222     102.591  67.565  -4.302  1.00 51.60      A16S
ATOM  23948  C5  GUA  222     101.514  69.676  -4.553  1.00 51.60      A16S
ATOM  23949  N7  GUA  222     101.150  69.781  -5.888  1.00 51.60      A16S
ATOM  23950  C8  GUA  222     100.541  70.933  -5.968  1.00 51.60      A16S
ATOM  23951  C2' GUA  222     100.859  73.966  -4.170  1.00 58.51      A16S
ATOM  23952  O2' GUA  222     100.340  74.749  -3.121  1.00 58.51      A16S
ATOM  23953  C3' GUA  222     100.922  74.689  -5.509  1.00 58.51      A16S
ATOM  23954  O3' GUA  222     101.344  76.029  -5.385  1.00 58.51      A16S
ATOM  23955  P   ADE  223     102.882  76.393  -5.651  1.00 57.90      A16S
ATOM  23956  O1P ADE  223     103.045  77.856  -5.407  1.00 47.23      A16S
ATOM  23957  O2P ADE  223     103.269  75.817  -6.965  1.00 47.23      A16S
ATOM  23958  O5' ADE  223     103.649  75.628  -4.489  1.00 57.90      A16S
ATOM  23959  C5' ADE  223     103.459  76.035  -3.131  1.00 57.90      A16S
ATOM  23960  C4' ADE  223     104.128  75.072  -2.194  1.00 57.90      A16S
ATOM  23961  O4' ADE  223     103.515  73.762  -2.311  1.00 57.90      A16S
ATOM  23962  C1' ADE  223     104.489  72.754  -2.098  1.00 57.90      A16S
ATOM  23963  N9  ADE  223     104.618  71.964  -3.325  1.00 47.23      A16S
ATOM  23964  C4  ADE  223     105.075  70.669  -3.416  1.00 47.23      A16S
ATOM  23965  N3  ADE  223     105.498  69.879  -2.416  1.00 47.23      A16S
ATOM  23966  C2  ADE  223     105.849  68.685  -2.879  1.00 47.23      A16S
ATOM  23967  N1  ADE  223     105.829  68.223  -4.133  1.00 47.23      A16S
ATOM  23968  C6  ADE  223     105.406  69.043  -5.117  1.00 47.23      A16S
ATOM  23969  N6  ADE  223     105.389  68.586  -6.372  1.00 47.23      A16S
ATOM  23970  C5  ADE  223     105.006  70.339  -4.759  1.00 47.23      A16S
ATOM  23971  N7  ADE  223     104.530  71.409  -5.508  1.00 47.23      A16S
ATOM  23972  C8  ADE  223     104.317  72.346  -4.614  1.00 47.23      A16S
ATOM  23973  C2' ADE  223     105.791  73.466  -1.751  1.00 57.90      A16S
ATOM  23974  O2' ADE  223     105.873  73.590  -0.337  1.00 57.90      A16S
ATOM  23975  C3' ADE  223     105.591  74.802  -2.455  1.00 57.90      A16S
ATOM  23976  O3' ADE  223     106.430  75.829  -1.971  1.00 57.90      A16S
ATOM  23977  P   URI  224     107.769  76.192  -2.780  1.00 57.86      A16S
ATOM  23978  O1P URI  224     108.282  77.411  -2.107  1.00 29.42      A16S
ATOM  23979  O2P URI  224     107.502  76.191  -4.255  1.00 29.42      A16S
ATOM  23980  O5' URI  224     108.773  75.005  -2.451  1.00 57.86      A16S
ATOM  23981  C5' URI  224     109.093  74.705  -1.087  1.00 57.86      A16S
ATOM  23982  C4' URI  224     109.773  73.366  -0.981  1.00 57.86      A16S
ATOM  23983  O4' URI  224     108.856  72.292  -1.308  1.00 57.86      A16S
ATOM  23984  C1' URI  224     109.563  71.242  -1.941  1.00 57.86      A16S
ATOM  23985  N1  URI  224     109.079  71.106  -3.322  1.00 29.42      A16S
ATOM  23986  C6  URI  224     108.501  72.156  -3.997  1.00 29.42      A16S
ATOM  23987  C2  URI  224     109.252  69.873  -3.947  1.00 29.42      A16S
ATOM  23988  O2  URI  224     109.726  68.901  -3.371  1.00 29.42      A16S
ATOM  23989  N3  URI  224     108.853  69.820  -5.267  1.00 29.42      A16S
ATOM  23990  C4  URI  224     108.304  70.844  -6.006  1.00 29.42      A16S
ATOM  23991  O4  URI  224     108.094  70.679  -7.206  1.00 29.42      A16S
ATOM  23992  C5  URI  224     108.119  72.069  -5.283  1.00 29.42      A16S
ATOM  23993  C2' URI  224     111.035  71.632  -1.950  1.00 57.86      A16S
ATOM  23994  O2' URI  224     111.641  71.125  -0.782  1.00 57.86      A16S
ATOM  23995  C3' URI  224     110.938  73.148  -1.922  1.00 57.86      A16S
ATOM  23996  O3' URI  224     112.119  73.784  -1.471  1.00 57.86      A16S
ATOM  23997  P   GUA  225     113.213  74.253  -2.546  1.00 58.19      A16S
ATOM  23998  O1P GUA  225     114.229  74.982  -1.752  1.00 37.85      A16S
ATOM  23999  O2P GUA  225     112.545  74.924  -3.701  1.00 37.85      A16S
ATOM  24000  O5' GUA  225     113.827  72.881  -3.070  1.00 58.19      A16S
ATOM  24001  C5' GUA  225     114.497  71.993  -2.163  1.00 58.19      A16S
ATOM  24002  C4' GUA  225     114.765  70.667  -2.824  1.00 58.19      A16S
ATOM  24003  O4' GUA  225     113.510  69.994  -3.111  1.00 58.19      A16S
ATOM  24004  C1' GUA  225     113.635  69.242  -4.309  1.00 58.19      A16S
ATOM  24005  N9  GUA  225     112.748  69.811  -5.320  1.00 37.85      A16S
ATOM  24006  C4  GUA  225     112.405  69.224  -6.513  1.00 37.85      A16S
ATOM  24007  N3  GUA  225     112.758  67.989  -6.916  1.00 37.85      A16S
ATOM  24008  C2  GUA  225     112.294  67.711  -8.121  1.00 37.85      A16S
ATOM  24009  N2  GUA  225     112.499  66.503  -8.652  1.00 37.85      A16S
ATOM  24010  N1  GUA  225     111.584  68.591  -8.887  1.00 37.85      A16S
ATOM  24011  C6  GUA  225     111.227  69.876  -8.500  1.00 37.85      A16S
ATOM  24012  O6  GUA  225     110.610  70.606  -9.285  1.00 37.85      A16S
ATOM  24013  C5  GUA  225     111.673  70.169  -7.187  1.00 37.85      A16S
ATOM  24014  N7  GUA  225     111.507  71.308  -6.413  1.00 37.85      A16S
ATOM  24015  C8  GUA  225     112.153  71.049  -5.311  1.00 37.85      A16S
ATOM  24016  C2' GUA  225     115.075  69.402  -4.795  1.00 58.19      A16S
ATOM  24017  O2' GUA  225     115.868  68.342  -4.320  1.00 58.19      A16S
ATOM  24018  C3' GUA  225     115.457  70.732  -4.171  1.00 58.19      A16S
ATOM  24019  O3' GUA  225     116.855  70.909  -4.080  1.00 58.19      A16S
ATOM  24020  P   GUA  226     117.604  71.798  -5.192  1.00 40.79      A16S
ATOM  24021  O1P GUA  226     118.986  71.978  -4.673  1.00 44.91      A16S
ATOM  24022  O2P GUA  226     116.783  72.991  -5.496  1.00 44.91      A16S
ATOM  24023  O5' GUA  226     117.599  70.879  -6.501  1.00 40.79      A16S
ATOM  24024  C5' GUA  226     118.236  69.590  -6.471  1.00 40.79      A16S
ATOM  24025  C4' GUA  226     117.726  68.676  -7.566  1.00 40.79      A16S
ATOM  24026  O4' GUA  226     116.273  68.674  -7.600  1.00 40.79      A16S
ATOM  24027  C1' GUA  226     115.833  68.272  -8.887  1.00 40.79      A16S
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ATOM	24028	N9	GUA	226	114.979	69.305	-9.469	1.00	44.91	A16S	ATOM	24081	C5	CYT	228	118.583	71.440	-16.008	1.00	41.67	A16S
ATOM	24029	C4	GUA	226	114.382	69.230	-10.699	1.00	44.91	A16S	ATOM	24082	C2'	CYT	228	119.219	70.075	-20.282	1.00	41.27	A16S
ATOM	24030	N3	GUA	226	114.430	68.174	-11.528	1.00	44.91	A16S	ATOM	24083	O2'	CYT	228	118.893	69.431	-21.495	1.00	41.27	A16S
ATOM	24031	C2	GUA	226	113.802	68.405	-12.655	1.00	44.91	A16S	ATOM	24084	C3'	CYT	228	120.529	69.556	-19.706	1.00	41.27	A16S
ATOM	24032	N2	GUA	226	113.746	67.455	-13.585	1.00	44.91	A16S	ATOM	24085	O3'	CYT	228	121.565	69.457	-20.661	1.00	41.27	A16S
ATOM	24033	N1	GUA	226	113.181	69.584	-12.958	1.00	44.91	A16S	ATOM	24086	P	CYT	229	122.611	70.667	-20.807	1.00	42.40	A16S
ATOM	24034	C6	GUA	226	113.127	70.696	-12.128	1.00	44.91	A16S	ATOM	24087	O1P	CYT	229	123.637	70.177	-21.744	1.00	34.91	A16S
ATOM	24035	O6	GUA	226	112.567	71.735	-12.521	1.00	44.91	A16S	ATOM	24088	O2P	CYT	229	123.010	71.197	-19.477	1.00	34.91	A16S
ATOM	24036	C5	GUA	226	113.782	70.451	-10.893	1.00	44.91	A16S	ATOM	24089	O5'	CYT	229	121.786	71.773	-21.586	1.00	42.40	A16S
ATOM	24037	N7	GUA	226	113.949	71.266	-9.781	1.00	44.91	A16S	ATOM	24090	C5'	CYT	229	121.274	71.474	-22.890	1.00	42.40	A16S
ATOM	24038	C8	GUA	226	114.657	70.541	-8.957	1.00	44.91	A16S	ATOM	24091	C4'	CYT	229	120.437	72.611	-23.401	1.00	42.40	A16S
ATOM	24039	C2'	GUA	226	117.080	68.099	-9.752	1.00	40.79	A16S	ATOM	24092	O4'	CYT	229	119.267	72.783	-22.566	1.00	42.40	A16S
ATOM	24040	O2'	GUA	226	117.458	66.740	-9.780	1.00	40.79	A16S	ATOM	24093	C1'	CYT	229	118.943	74.158	-22.481	1.00	42.40	A16S
ATOM	24041	C3'	GUA	226	118.097	68.952	-9.011	1.00	40.79	A16S	ATOM	24094	N1	CYT	229	119.123	74.573	-21.085	1.00	34.91	A16S
ATOM	24042	O3'	GUA	226	119.416	68.549	-9.355	1.00	40.79	A16S	ATOM	24095	C6	CYT	229	119.696	73.726	-20.180	1.00	34.91	A16S
ATOM	24043	P	GUA	227	120.162	69.244	-10.617	1.00	42.69	A16S	ATOM	24096	C2	CYT	229	118.716	75.861	-20.694	1.00	34.91	A16S
ATOM	24044	O1P	GUA	227	121.603	68.901	-10.453	1.00	44.37	A16S	ATOM	24097	O2	CYT	229	118.165	76.601	-21.522	1.00	34.91	A16S
ATOM	24045	O2P	GUA	227	119.771	70.678	-10.749	1.00	44.37	A16S	ATOM	24098	N3	CYT	229	118.931	76.263	-19.424	1.00	34.91	A16S
ATOM	24046	O5'	GUA	227	119.559	68.488	-11.889	1.00	42.69	A16S	ATOM	24099	C4	CYT	229	119.522	75.437	-18.556	1.00	34.91	A16S
ATOM	24047	C5'	GUA	227	119.752	67.078	-12.083	1.00	42.69	A16S	ATOM	24100	N4	CYT	229	119.760	75.890	-17.318	1.00	34.91	A16S
ATOM	24048	C4'	GUA	227	119.213	66.655	-13.430	1.00	42.69	A16S	ATOM	24101	C5	CYT	229	119.910	74.110	-18.919	1.00	34.91	A16S
ATOM	24049	O4'	GUA	227	117.771	66.812	-13.462	1.00	42.69	A16S	ATOM	24102	C2'	CYT	229	119.902	74.903	-23.405	1.00	42.40	A16S
ATOM	24050	C1'	GUA	227	117.357	67.215	-14.755	1.00	42.69	A16S	ATOM	24103	O2'	CYT	229	119.331	74.988	-24.702	1.00	42.40	A16S
ATOM	24051	N9	GUA	227	116.759	68.536	-14.636	1.00	44.37	A16S	ATOM	24104	C3'	CYT	229	121.100	73.973	-23.384	1.00	42.40	A16S
ATOM	24052	C4	GUA	227	115.936	69.160	-15.539	1.00	44.37	A16S	ATOM	24105	O3'	CYT	229	121.972	74.141	-24.483	1.00	42.40	A16S
ATOM	24053	N3	GUA	227	115.515	68.651	-16.715	1.00	44.37	A16S	ATOM	24106	P	CYT	230	123.358	74.912	-24.269	1.00	43.57	A16S
ATOM	24054	C2	GUA	227	114.737	69.500	-17.371	1.00	44.37	A16S	ATOM	24107	O1P	CYT	230	124.183	74.517	-25.443	1.00	40.90	A16S
ATOM	24055	N2	GUA	227	114.235	69.160	-18.568	1.00	44.37	A16S	ATOM	24108	O2P	CYT	230	123.876	74.666	-22.880	1.00	40.90	A16S
ATOM	24056	N1	GUA	227	114.390	70.749	-16.908	1.00	44.37	A16S	ATOM	24109	O5'	CYT	230	122.932	76.447	-24.392	1.00	43.57	A16S
ATOM	24057	C6	GUA	227	114.803	71.294	-15.697	1.00	44.37	A16S	ATOM	24110	C5'	CYT	230	122.272	76.929	-25.576	1.00	43.57	A16S
ATOM	24058	O6	GUA	227	114.417	72.437	-15.359	1.00	44.37	A16S	ATOM	24111	C4'	CYT	230	121.630	78.273	-25.328	1.00	43.57	A16S
ATOM	24059	C5	GUA	227	115.653	70.389	-14.984	1.00	44.37	A16S	ATOM	24112	O4'	CYT	230	120.630	78.159	-24.292	1.00	43.57	A16S
ATOM	24060	N7	GUA	227	116.283	70.530	-13.756	1.00	44.37	A16S	ATOM	24113	C1'	CYT	230	120.572	79.359	-23.544	1.00	43.57	A16S
ATOM	24061	C8	GUA	227	116.923	69.409	-13.593	1.00	44.37	A16S	ATOM	24114	N1	CYT	230	120.949	79.074	-22.152	1.00	40.90	A16S
ATOM	24062	C2'	GUA	227	118.597	67.240	-15.643	1.00	42.69	A16S	ATOM	24115	C6	CYT	230	121.513	77.882	-21.797	1.00	40.90	A16S
ATOM	24063	O2'	GUA	227	118.728	65.995	-16.288	1.00	42.69	A16S	ATOM	24116	C2	CYT	230	120.720	80.059	-21.192	1.00	40.90	A16S
ATOM	24064	C3'	GUA	227	119.701	67.457	-14.622	1.00	42.69	A16S	ATOM	24117	O2	CYT	230	120.217	81.139	-21.550	1.00	40.90	A16S
ATOM	24065	O3'	GUA	227	120.955	67.005	-15.101	1.00	42.69	A16S	ATOM	24118	N3	CYT	230	121.051	79.819	-19.906	1.00	40.90	A16S
ATOM	24066	P	CYT	228	121.973	68.060	-15.745	1.00	41.27	A16S	ATOM	24119	C4	CYT	230	121.590	78.649	-19.567	1.00	40.90	A16S
ATOM	24067	O1P	CYT	228	123.185	67.327	-16.156	1.00	41.67	A16S	ATOM	24120	N4	CYT	230	121.891	78.449	-18.283	1.00	40.90	A16S
ATOM	24068	O2P	CYT	228	122.078	69.193	-14.795	1.00	41.67	A16S	ATOM	24121	C5	CYT	230	121.843	77.631	-20.528	1.00	40.90	A16S
ATOM	24069	O5'	CYT	228	121.240	68.544	-17.067	1.00	41.27	A16S	ATOM	24122	C2'	CYT	230	121.560	80.336	-24.164	1.00	43.57	A16S
ATOM	24070	C5'	CYT	228	120.999	67.609	-18.115	1.00	41.27	A16S	ATOM	24123	O2'	CYT	230	120.868	81.190	-25.056	1.00	43.57	A16S
ATOM	24071	C4'	CYT	228	120.108	68.209	-19.164	1.00	41.27	A16S	ATOM	24124	C3'	CYT	230	122.534	79.383	-24.836	1.00	43.57	A16S
ATOM	24072	O4'	CYT	228	118.783	68.455	-18.622	1.00	41.27	A16S	ATOM	24125	O3'	CYT	230	123.208	80.013	-25.890	1.00	43.57	A16S
ATOM	24073	C1'	CYT	228	118.229	69.619	-19.216	1.00	41.27	A16S	ATOM	24126	P	GUA	231	124.617	80.715	-25.610	1.00	44.10	A16S
ATOM	24074	N1	CYT	228	118.099	70.656	-18.173	1.00	41.67	A16S	ATOM	24127	O1P	GUA	231	125.279	80.782	-26.956	1.00	32.94	A16S
ATOM	24075	C6	CYT	228	118.661	70.485	-16.938	1.00	41.67	A16S	ATOM	24128	O2P	GUA	231	125.302	80.012	-24.496	1.00	32.94	A16S
ATOM	24076	C2	CYT	228	117.408	71.838	-18.473	1.00	41.67	A16S	ATOM	24129	O5'	GUA	231	124.223	82.169	-25.083	1.00	44.10	A16S
ATOM	24077	O2	CYT	228	116.894	71.969	-19.596	1.00	41.67	A16S	ATOM	24130	C5'	GUA	231	123.603	83.139	-25.948	1.00	44.10	A16S
ATOM	24078	N3	CYT	228	117.321	72.806	-17.536	1.00	41.67	A16S	ATOM	24131	C4'	GUA	231	123.513	84.475	-25.248	1.00	44.10	A16S
ATOM	24079	C4	CYT	228	117.889	72.633	-16.346	1.00	41.67	A16S	ATOM	24132	O4'	GUA	231	122.573	84.407	-24.146	1.00	44.10	A16S
ATOM	24080	N4	CYT	228	117.795	73.621	-15.465	1.00	41.67	A16S	ATOM	24133	C1'	GUA	231	123.051	85.165	-23.046	1.00	44.10	A16S

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ATOM  24134  N9  GUA  231     123.303  84.241 -21.941  1.00 32.94      A16S
ATOM  24135  C4  GUA  231     123.440  84.546 -20.612  1.00 32.94      A16S
ATOM  24136  N3  GUA  231     123.382  85.774 -20.070  1.00 32.94      A16S
ATOM  24137  C2  GUA  231     123.550  85.746 -18.752  1.00 32.94      A16S
ATOM  24138  N2  GUA  231     123.523  86.888 -18.043  1.00 32.94      A16S
ATOM  24139  N1  GUA  231     123.754  84.601 -18.025  1.00 32.94      A16S
ATOM  24140  C6  GUA  231     123.810  83.318 -18.556  1.00 32.94      A16S
ATOM  24141  O6  GUA  231     123.974  82.327 -17.796  1.00 32.94      A16S
ATOM  24142  C5  GUA  231     123.646  83.338 -19.979  1.00 32.94      A16S
ATOM  24143  N7  GUA  231     123.660  82.297 -20.896  1.00 32.94      A16S
ATOM  24144  C8  GUA  231     123.451  82.877 -22.040  1.00 32.94      A16S
ATOM  24145  C2' GUA  231     124.317  85.877 -23.518  1.00 44.10      A16S
ATOM  24146  O2' GUA  231     123.966  87.147 -24.032  1.00 44.10      A16S
ATOM  24147  C3' GUA  231     124.802  84.940 -24.610  1.00 44.10      A16S
ATOM  24148  O3' GUA  231     125.621  85.592 -25.552  1.00 44.10      A16S
ATOM  24149  P   CYT  232     127.207  85.375 -25.496  1.00 42.78      A16S
ATOM  24150  O1P CYT  232     127.729  86.043 -26.729  1.00 30.80      A16S
ATOM  24151  O2P CYT  232     127.462  83.930 -25.285  1.00 30.80      A16S
ATOM  24152  O5' CYT  232     127.652  86.145 -24.171  1.00 42.78      A16S
ATOM  24153  C5' CYT  232     127.456  87.555 -24.066  1.00 42.78      A16S
ATOM  24154  C4' CYT  232     127.593  88.014 -22.641  1.00 42.78      A16S
ATOM  24155  O4' CYT  232     126.544  87.440 -21.825  1.00 42.78      A16S
ATOM  24156  C1' CYT  232     127.018  87.255 -20.496  1.00 42.78      A16S
ATOM  24157  N1  CYT  232     126.974  85.822 -20.148  1.00 30.80      A16S
ATOM  24158  C6  CYT  232     126.921  84.852 -21.113  1.00 30.80      A16S
ATOM  24159  C2  CYT  232     127.012  85.470 -18.804  1.00 30.80      A16S
ATOM  24160  O2  CYT  232     127.054  86.366 -17.956  1.00 30.80      A16S
ATOM  24161  N3  CYT  232     127.012  84.167 -18.462  1.00 30.80      A16S
ATOM  24162  C4  CYT  232     126.984  83.230 -19.407  1.00 30.80      A16S
ATOM  24163  N4  CYT  232     127.019  81.965 -19.024  1.00 30.80      A16S
ATOM  24164  C5  CYT  232     126.927  83.556 -20.787  1.00 30.80      A16S
ATOM  24165  C2' CYT  232     128.457  87.751 -20.452  1.00 42.78      A16S
ATOM  24166  O2' CYT  232     128.441  89.063 -19.943  1.00 42.78      A16S
ATOM  24167  C3' CYT  232     128.862  87.623 -21.917  1.00 42.78      A16S
ATOM  24168  O3' CYT  232     129.960  88.422 -22.275  1.00 42.78      A16S
ATOM  24169  P   GUA  233     131.413  87.751 -22.356  1.00 37.61      A16S
ATOM  24170  O1P GUA  233     132.297  88.751 -22.997  1.00 34.58      A16S
ATOM  24171  O2P GUA  233     131.282  86.402 -22.958  1.00 34.58      A16S
ATOM  24172  O5' GUA  233     131.841  87.608 -20.831  1.00 37.61      A16S
ATOM  24173  C5' GUA  233     132.009  88.781 -20.033  1.00 37.61      A16S
ATOM  24174  C4' GUA  233     132.238  88.419 -18.596  1.00 37.61      A16S
ATOM  24175  O4' GUA  233     131.060  87.769 -18.057  1.00 37.61      A16S
ATOM  24176  C1' GUA  233     131.445  86.798 -17.092  1.00 37.61      A16S
ATOM  24177  N9  GUA  233     130.984  85.486 -17.548  1.00 34.58      A16S
ATOM  24178  C4  GUA  233     130.874  84.346 -16.786  1.00 34.58      A16S
ATOM  24179  N3  GUA  233     131.136  84.244 -15.467  1.00 34.58      A16S
ATOM  24180  C2  GUA  233     130.922  83.017 -15.011  1.00 34.58      A16S
ATOM  24181  N2  GUA  233     131.106  82.752 -13.711  1.00 34.58      A16S
ATOM  24182  N1  GUA  233     130.509  81.970 -15.792  1.00 34.58      A16S
ATOM  24183  C6  GUA  233     130.251  82.048 -17.157  1.00 34.58      A16S
ATOM  24184  O6  GUA  233     129.908  81.035 -17.779  1.00 34.58      A16S
ATOM  24185  C5  GUA  233     130.449  83.364 -17.655  1.00 34.58      A16S
ATOM  24186  N7  GUA  233     130.281  83.875 -18.936  1.00 34.58      A16S
ATOM  24187  C8  GUA  233     130.602  85.134 -18.824  1.00 34.58      A16S
ATOM  24188  C2' GUA  233     132.972  86.863 -16.975  1.00 37.61      A16S
ATOM  24189  O2' GUA  233     133.349  87.745 -15.933  1.00 37.61      A16S
ATOM  24190  C3' GUA  233     133.357  87.434 -18.334  1.00 37.61      A16S
ATOM  24191  O3' GUA  233     134.635  88.048 -18.332  1.00 37.61      A16S
ATOM  24192  P   URI  234     135.900  87.222 -18.879  1.00 55.87      A16S
ATOM  24193  O1P URI  234     137.097  88.109 -18.796  1.00 42.94      A16S
ATOM  24194  O2P URI  234     135.528  86.598 -20.184  1.00 42.94      A16S
ATOM  24195  O5' URI  234     136.077  86.071 -17.796  1.00 55.87      A16S
ATOM  24196  C5' URI  234     136.571  86.369 -16.484  1.00 55.87      A16S
ATOM  24197  C4' URI  234     136.760  85.096 -15.701  1.00 55.87      A16S
ATOM  24198  O4' URI  234     135.473  84.464 -15.488  1.00 55.87      A16S
ATOM  24199  C1' URI  234     135.627  83.059 -15.486  1.00 55.87      A16S
ATOM  24200  N1  URI  234     134.757  82.482 -16.521  1.00 42.94      A16S
ATOM  24201  C6  URI  234     134.663  83.033 -17.774  1.00 42.94      A16S
ATOM  24202  C2  URI  234     134.041  81.354 -16.194  1.00 42.94      A16S
ATOM  24203  O2  URI  234     134.078  80.847 -15.087  1.00 42.94      A16S
ATOM  24204  N3  URI  234     133.273  80.836 -17.207  1.00 42.94      A16S
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ATOM  24206  O4  URI  234     132.378  80.762 -19.286  1.00 42.94      A16S
ATOM  24207  C5  URI  234     133.902  82.509 -18.739  1.00 42.94      A16S
ATOM  24208  C2' URI  234     137.108  82.748 -15.705  1.00 55.87      A16S
ATOM  24209  O2' URI  234     137.720  82.544 -14.453  1.00 55.87      A16S
ATOM  24210  C3' URI  234     137.602  84.025 -16.373  1.00 55.87      A16S
ATOM  24211  O3' URI  234     138.995  84.229 -16.149  1.00 55.87      A16S
ATOM  24212  P   CYT  235     140.026  84.136 -17.386  1.00 54.99      A16S
ATOM  24213  O1P CYT  235     140.123  85.507 -17.965  1.00 36.37      A16S
ATOM  24214  O2P CYT  235     139.650  82.988 -18.261  1.00 36.37      A16S
ATOM  24215  O5' CYT  235     141.416  83.826 -16.684  1.00 54.99      A16S
ATOM  24216  C5' CYT  235     141.900  84.679 -15.643  1.00 54.99      A16S
ATOM  24217  C4' CYT  235     143.263  84.231 -15.197  1.00 54.99      A16S
ATOM  24218  O4' CYT  235     143.161  82.889 -14.672  1.00 54.99      A16S
ATOM  24219  C1' CYT  235     144.322  82.156 -15.013  1.00 54.99      A16S
ATOM  24220  N1  CYT  235     143.928  81.059 -15.905  1.00 36.37      A16S
ATOM  24221  C6  CYT  235     142.821  81.157 -16.697  1.00 36.37      A16S
ATOM  24222  C2  CYT  235     144.708  79.918 -15.931  1.00 36.37      A16S
ATOM  24223  O2  CYT  235     145.718  79.875 -15.200  1.00 36.37      A16S
ATOM  24224  N3  CYT  235     144.351  78.890 -16.752  1.00 36.37      A16S
ATOM  24225  C4  CYT  235     143.263  78.999 -17.521  1.00 36.37      A16S
ATOM  24226  N4  CYT  235     142.938  77.980 -18.317  1.00 36.37      A16S
ATOM  24227  C5  CYT  235     142.457  80.161 -17.511  1.00 36.37      A16S
ATOM  24228  C2' CYT  235     145.275  83.108 -15.720  1.00 54.99      A16S
ATOM  24229  O2' CYT  235     146.122  83.709 -14.771  1.00 54.99      A16S
ATOM  24230  C3' CYT  235     144.306  84.118 -16.290  1.00 54.99      A16S
ATOM  24231  O3' CYT  235     144.957  85.332 -16.558  1.00 54.99      A16S
ATOM  24232  P   CYT  236     145.585  85.561 -18.010  1.00 50.08      A16S
ATOM  24233  O1P CYT  236     145.967  86.989 -18.098  1.00 40.32      A16S
ATOM  24234  O2P CYT  236     144.625  84.982 -19.003  1.00 40.32      A16S
ATOM  24235  O5' CYT  236     146.910  84.674 -18.006  1.00 50.08      A16S
ATOM  24236  C5' CYT  236     147.985  84.963 -17.102  1.00 50.08      A16S
ATOM  24237  C4' CYT  236     149.097  83.957 -17.269  1.00 50.08      A16S
ATOM  24238  O4' CYT  236     148.634  82.644 -16.869  1.00 50.08      A16S
ATOM  24239  C1' CYT  236     149.214  81.655 -17.697  1.00 50.08      A16S
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ATOM  24241  C6  CYT  236     146.880  81.506 -18.470  1.00 40.32      A16S
ATOM  24242  C2  CYT  236     148.392  79.741 -19.023  1.00 40.32      A16S
ATOM  24243  O2  CYT  236     149.539  79.290 -18.985  1.00 40.32      A16S
ATOM  24244  N3  CYT  236     147.389  79.086 -19.648  1.00 40.32      A16S
ATOM  24245  C4  CYT  236     146.170  79.623 -19.689  1.00 40.32      A16S
ATOM  24246  N4  CYT  236     145.203  78.952 -20.312  1.00 40.32      A16S
ATOM  24247  C5  CYT  236     145.882  80.876 -19.093  1.00 40.32      A16S
ATOM  24248  C2' CYT  236     150.192  82.355 -18.633  1.00 50.08      A16S
ATOM  24249  O2' CYT  236     151.463  82.299 -18.026  1.00 50.08      A16S
ATOM  24250  C3' CYT  236     149.614  83.765 -18.682  1.00 50.08      A16S
ATOM  24251  O3' CYT  236     150.583  84.750 -19.013  1.00 50.08      A16S
ATOM  24252  P   CYT  237     150.672  85.294 -20.523  1.00 52.21      A16S
ATOM  24253  O1P CYT  237     151.551  86.479 -20.505  1.00 46.34      A16S
ATOM  24254  O2P CYT  237     149.310  85.405 -21.100  1.00 46.34      A16S
ATOM  24255  O5' CYT  237     151.421  84.120 -21.283  1.00 52.21      A16S
ATOM  24256  C5' CYT  237     152.731  83.734 -20.886  1.00 52.21      A16S
ATOM  24257  C4' CYT  237     153.183  82.565 -21.697  1.00 52.21      A16S
ATOM  24258  O4' CYT  237     152.471  81.381 -21.280  1.00 52.21      A16S
ATOM  24259  C1' CYT  237     152.277  80.528 -22.397  1.00 52.21      A16S
ATOM  24260  N1  CYT  237     150.835  80.271 -22.562  1.00 46.34      A16S
ATOM  24261  C6  CYT  237     149.909  81.213 -22.219  1.00 46.34      A16S
ATOM  24262  C2  CYT  237     150.428  79.049 -23.089  1.00 46.34      A16S
ATOM  24263  O2  CYT  237     151.285  78.216 -23.386  1.00 46.34      A16S
ATOM  24264  N3  CYT  237     149.109  78.808 -23.268  1.00 46.34      A16S
ATOM  24265  C4  CYT  237     148.215  79.744 -22.952  1.00 46.34      A16S
ATOM  24266  N4  CYT  237     146.931  79.490 -23.179  1.00 46.34      A16S
ATOM  24267  C5  CYT  237     148.600  80.993 -22.398  1.00 46.34      A16S
ATOM  24268  C2' CYT  237     152.893  81.214 -23.618  1.00 52.21      A16S
ATOM  24269  O2' CYT  237     154.206  80.733 -23.835  1.00 52.21      A16S
ATOM  24270  C3' CYT  237     152.895  82.669 -23.180  1.00 52.21      A16S
ATOM  24271  O3' CYT  237     153.862  83.434 -23.867  1.00 52.21.     A16S
ATOM  24272  P   ADE  238     153.415  84.288 -25.143  1.00 39.32      A16S
ATOM  24273  O1P ADE  238     154.646  84.861 -25.724  1.00 41.30      A16S
ATOM  24274  O2P ADE  238     152.292  85.176 -24.769  1.00 41.30      A16S
ATOM  24275  O5' ADE  238     152.865  83.194 -26.145  1.00 39.32      A16S
ATOM  24276  C5' ADE  238     153.726  82.160 -26.589  1.00 39.32      A16S
ATOM  24277  C4' ADE  238     153.555  81.951 -28.059  1.00 39.32      A16S
ATOM  24278  O4' ADE  238     152.249  81.382 -28.301  1.00 39.32      A16S
ATOM  24279  C1' ADE  238     151.700  81.937 -29.472  1.00 39.32      A16S
ATOM  24280  N9  ADE  238     150.245  81.857 -29.359  1.00 41.30      A16S
ATOM  24281  C4  ADE  238     149.485  80.826 -29.853  1.00 41.30      A16S
ATOM  24282  N3  ADE  238     149.920  79.734 -30.505  1.00 41.30      A16S
ATOM  24283  C2  ADE  238     148.901  78.962 -30.847  1.00 41.30      A16S
ATOM  24284  N1  ADE  238     147.598  79.142 -30.633  1.00 41.30      A16S
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ATOM  24290  C2' ADE  238     152.286  83.339 -29.645  1.00 39.32      A16S
ATOM  24291  O2' ADE  238     152.297  83.556 -31.041  1.00 39.32      A16S
ATOM  24292  C3' ADE  238     153.646  83.191 -28.934  1.00 39.32      A16S
ATOM  24293  O3' ADE  238     154.947  83.674 -29.330  1.00 39.32      A16S
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ATOM  24296  O2P URI  239     154.930  82.836 -31.765  1.00 50.06      A16S
ATOM  24297  O5' URI  239     156.081  81.531 -30.034  1.00 46.54      A16S
ATOM  24298  C5' URI  239     156.387  81.311 -28.680  1.00 46.54      A16S
ATOM  24299  C4' URI  239     156.832  79.902 -28.492  1.00 46.54      A16S
ATOM  24300  O4' URI  239     158.143  79.770 -29.083  1.00 46.54      A16S
ATOM  24301  C1' URI  239     159.071  79.394 -28.095  1.00 46.54      A16S
ATOM  24302  N1  URI  239     160.313  80.144 -28.313  1.00 50.06      A16S
ATOM  24303  C6  URI  239     160.297  81.434 -28.791  1.00 50.06      A16S
ATOM  24304  C2  URI  239     161.508  79.516 -28.007  1.00 50.06      A16S
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ATOM  24306  N3  URI  239     162.626  80.273 -28.227  1.00 50.06      A16S
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ATOM  24309  C5  URI  239     161.408  82.147 -28.977  1.00 50.06      A16S
ATOM  24310  C2' URI  239     158.441  79.733 -26.747  1.00 46.54      A16S
ATOM  24311  O2' URI  239     158.933  78.900 -25.714  1.00 46.54      A16S
ATOM  24312  C3' URI  239     156.962  79.527 -27.031  1.00 46.54      A16S
ATOM  24313  O3' URI  239     156.569  78.179 -26.854  1.00 46.54      A16S
ATOM  24314  P   CYT  240     155.034  77.849 -26.524  1.00 47.84      A16S
ATOM  24315  O1P CYT  240     154.443  79.064 -25.900  1.00 44.91      A16S
ATOM  24316  O2P CYT  240     154.978  76.543 -25.793  1.00 44.91      A16S
ATOM  24317  O5' CYT  240     154.382  77.663 -27.970  1.00 47.84      A16S
ATOM  24318  C5' CYT  240     154.774  76.565 -28.803  1.00 47.84      A16S
ATOM  24319  C4' CYT  240     153.561  75.832 -29.305  1.00 47.84.     A16S
ATOM  24320  O4' CYT  240     152.612  75.705 -28.215  1.00 47.84      A16S
ATOM  24321  C1' CYT  240     151.293  75.784 -28.722  1.00 47.84      A16S
ATOM  24322  N1  CYT  240     150.592  76.925 -28.096  1.00 44.91      A16S
ATOM  24323  C6  CYT  240     151.259  77.853 -27.347  1.00 44.91      A16S
ATOM  24324  C2  CYT  240     149.213  77.051 -28.305  1.00 44.91      A16S
ATOM  24325  O2  CYT  240     148.625  76.183 -28.972  1.00 44.91      A16S
ATOM  24326  N3  CYT  240     148.556  78.110 -27.783  1.00 44.91      A16S
ATOM  24327  C4  CYT  240     149.218  79.019 -27.074  1.00 44.91      A16S
ATOM  24328  N4  CYT  240     148.530  80.057 -26.603  1.00 44.91      A16S
ATOM  24329  C5  CYT  240     150.616  78.907 -26.822  1.00 44.91      A16S
ATOM  24330  C2' CYT  240     151.383  75.942 -30.240  1.00 47.84      A16S
ATOM  24331  O2' CYT  240     151.215  74.680 -30.837  1.00 47.84      A16S
ATOM  24332  C3' CYT  240     152.782  76.515 -30.414  1.00 47.84      A16S
ATOM  24333  O3' CYT  240     153.322  76.185 -31.684  1.00 47.84      A16S
ATOM  24334  P   ADE  241     153.275  77.258 -32.876  1.00 53.27      A16S
ATOM  24335  O1P ADE  241     154.137  76.716 -33.949  1.00 38.86      A16S
ATOM  24336  O2P ADE  241     153.519  78.621 -32.354  1.00 38.86      A16S
ATOM  24337  O5' ADE  241     151.766  77.250 -33.371  1.00 53.27      A16S
ATOM  24338  C5' ADE  241     151.142  76.040 -33.786  1.00 53.27      A16S
ATOM  24339  C4' ADE  241     150.160  76.313 -34.895  1.00 53.27      A16S
ATOM  24340  O4' ADE  241     149.004  77.027 -34.388  1.00 53.27      A16S
ATOM  24341  C1' ADE  241     148.705  78.080 -35.266  1.00 53.27      A16S
ATOM  24342  N9  ADE  241     147.994  79.128 -34.549  1.00 38.86      A16S
ATOM  24343  C4  ADE  241     146.635  79.281 -34.560  1.00 38.86      A16S
ATOM  24344  N3  ADE  241     145.741  78.505 -35.189  1.00 38.86      A16S
ATOM  24345  C2  ADE  241     144.517  78.965 -35.002  1.00 38.86      A16S
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ATOM	24346	N1	ADE	241	144.113	80.029	-34.303	1.00	38.86	A16S	ATOM	24399	P	URI	244	143.402	67.231	-35.083	1.00	58.94	A16S
ATOM	24347	C6	ADE	241	145.039	80.785	-33.679	1.00	38.86	A16S	ATOM	24400	O1P	URI	244	143.735	66.133	-34.149	1.00	43.01	A16S
ATOM	24348	N6	ADE	241	144.633	81.850	-32.981	1.00	38.86	A16S	ATOM	24401	O2P	URI	244	144.011	67.258	-36.439	1.00	43.01	A16S
ATOM	24349	C5	ADE	241	146.377	80.404	-33.807	1.00	38.86	A16S	ATOM	24402	O5'	URI	244	141.824	67.261	-35.284	1.00	58.94	A16S
ATOM	24350	N7	ADE	241	147.555	80.946	-33.315	1.00	38.86	A16S	ATOM	24403	C5'	URI	244	140.955	67.339	-34.148	1.00	58.94	A16S
ATOM	24351	C8	ADE	241	148.482	80.147	-33.777	1.00	38.86	A16S	ATOM	24404	C4'	URI	244	139.516	67.277	-34.577	1.00	58.94	A16S
ATOM	24352	C2'	ADE	241	150.035	78.481	-35.885	1.00	53.27	A16S	ATOM	24405	O4'	URI	244	139.151	68.483	-35.282	1.00	58.94	A16S
ATOM	24353	O2'	ADE	241	149.765	79.158	-37.094	1.00	53.27	A16S	ATOM	24406	C1'	URI	244	138.167	68.179	-36.252	1.00	58.94	A16S
ATOM	24354	C3'	ADE	241	150.667	77.113	-36.090	1.00	53.27	A16S	ATOM	24407	N1	URI	244	138.668	68.559	-37.579	1.00	43.01	A16S
ATOM	24355	O3'	ADE	241	150.033	76.571	-37.222	1.00	53.27	A16S	ATOM	24408	C6	URI	244	140.020	68.645	-37.857	1.00	43.01	A16S
ATOM	24356	P	GUA	242	150.903	75.997	-38.427	1.00	49.65	A16S	ATOM	24409	C2	URI	244	137.720	68.803	-38.562	1.00	43.01	A16S
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ATOM	24358	O2P	GUA	242	151.797	77.073	-38.900	1.00	43.01	A16S	ATOM	24411	N3	URI	244	138.237	69.078	-39.806	1.00	43.01	A16S
ATOM	24359	O5'	GUA	242	149.786	75.699	-39.533	1.00	49.65	A16S	ATOM	24412	C4	URI	244	139.571	69.140	-40.157	1.00	43.01	A16S
ATOM	24360	C5'	GUA	242	148.886	74.560	-39.395	1.00	49.65	A16S	ATOM	24413	O4	URI	244	139.867	69.259	-41.338	1.00	43.01	A16S
ATOM	24361	C4'	GUA	242	148.119	74.648	-38.087	1.00	49.65	A16S	ATOM	24414	C5	URI	244	140.489	68.922	-39.080	1.00	43.01	A16S
ATOM	24362	O4'	GUA	242	147.309	75.852	-38.093	1.00	49.65	A16S	ATOM	24415	C2'	URI	244	137.875	66.680	-36.177	1.00	58.94	A16S
ATOM	24363	C1'	GUA	242	146.098	75.615	-37.403	1.00	49.65	A16S	ATOM	24416	O2'	URI	244	136.712	66.473	-35.397	1.00	58.94	A16S
ATOM	24364	N9	GUA	242	144.999	75.688	-38.362	1.00	43.01	A16S	ATOM	24417	C3'	URI	244	139.150	66.155	-35.528	1.00	58.94	A16S
ATOM	24365	C4	GUA	242	143.659	75.642	-38.061	1.00	43.01	A16S	ATOM	24418	O3'	URI	244	138.959	64.935	-34.828	1.00	58.94	A16S
ATOM	24366	N3	GUA	242	143.132	75.529	-36.827	1.00	43.01	A16S	ATOM	24419	P	ADE	245	139.229	63.545	-35.577	1.00	73.34	A16S
ATOM	24367	C2	GUA	242	141.816	75.515	-36.853	1.00	43.01	A16S	ATOM	24420	O1P	ADE	245	139.492	62.526	-34.527	1.00	92.65	A16S
ATOM	24368	N2	GUA	242	141.138	75.422	-35.709	1.00	43.01	A16S	ATOM	24421	O2P	ADE	245	140.225	63.768	-36.656	1.00	92.65	A16S
ATOM	24369	N1	GUA	242	141.070	75.597	-37.998	1.00	43.01	A16S	ATOM	24422	O5'	ADE	245	137.837	63.239	-36.278	1.00	73.34	A16S
ATOM	24370	C6	GUA	242	141.584	75.718	-39.279	1.00	43.01	A16S	ATOM	24423	C5'	ADE	245	136.720	62.732	-35.527	1.00	73.34	A16S
ATOM	24371	O6	GUA	242	140.813	75.799	-40.244	1.00	43.01	A16S	ATOM	24424	C4'	ADE	245	135.853	61.890	-36.424	1.00	73.34	A16S
ATOM	24372	C5	GUA	242	143.005	75.737	-39.270	1.00	43.01	A16S	ATOM	24425	O4'	ADE	245	135.231	62.740	-37.410	1.00	73.34	A16S
ATOM	24373	N7	GUA	242	143.914	75.841	-40.314	1.00	43.01	A16S	ATOM	24426	C1'	ADE	245	135.312	62.147	-38.689	1.00	73.34	A16S
ATOM	24374	C8	GUA	242	145.082	75.806	-39.730	1.00	43.01	A16S	ATOM	24427	N9	ADE	245	135.943	63.137	-39.559	1.00	92.65	A16S
ATOM	24375	C2'	GUA	242	146.197	74.223	-36.793	1.00	49.65	A16S	ATOM	24428	C4	ADE	245	135.547	63.502	-40.826	1.00	92.65	A16S
ATOM	24376	O2'	GUA	242	146.796	74.319	-35.521	1.00	49.65	A16S	ATOM	24429	N3	ADE	245	134.569	62.951	-41.569	1.00	92.65	A16S
ATOM	24377	C3'	GUA	242	147.126	73.537	-37.776	1.00	49.65	A16S	ATOM	24430	C2	ADE	245	134.432	63.608	-42.727	1.00	92.65	A16S
ATOM	24378	O3'	GUA	242	147.722	72.390	-37.187	1.00	49.65	A16S	ATOM	24431	N1	ADE	245	135.109	64.678	-43.189	1.00	92.65	A16S
ATOM	24379	P	CYT	243	146.993	70.954	-37.320	1.00	54.23	A16S	ATOM	24432	C6	ADE	245	136.086	65.208	-42.417	1.00	92.65	A16S
ATOM	24380	O1P	CYT	243	147.860	69.973	-36.605	1.00	50.95	A16S	ATOM	24433	N6	ADE	245	136.748	66.280	-42.867	1.00	92.65	A16S
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ATOM	24382	O5'	CYT	243	145.652	71.095	-36.476	1.00	54.23	A16S	ATOM	24435	N7	ADE	245	137.256	64.869	-40.161	1.00	92.65	A16S
ATOM	24383	C5'	CYT	243	145.704	71.094	-35.050	1.00	54.23	A16S	ATOM	24436	C8	ADE	245	136.994	63.969	-39.241	1.00	92.65	A16S
ATOM	24384	C4'	CYT	243	144.321	70.995	-34.467	1.00	54.23	A16S	ATOM	24437	C2'	ADE	245	135.920	60.746	-38.552	1.00	73.34	A16S
ATOM	24385	O4'	CYT	243	143.557	72.173	-34.833	1.00	54.23	A16S	ATOM	24438	O2'	ADE	245	134.890	59.780	-38.635	1.00	73.34	A16S
ATOM	24386	C1'	CYT	243	142.189	71.831	-34.958	1.00	54.23	A16S	ATOM	24439	C3'	ADE	245	136.631	60.839	-37.197	1.00	73.34	A16S
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ATOM	24388	C6	CYT	243	142.665	72.244	-37.349	1.00	50.95	A16S	ATOM	24441	P	GUA	246	135.568	58.887	-35.680	1.00	84.17	A16S
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ATOM	24390	O2	CYT	243	139.593	71.964	-35.700	1.00	50.95	A16S	ATOM	24443	O2P	GUA	246	134.832	58.081	-36.699	1.00	64.05	A16S
ATOM	24391	N3	CYT	243	139.983	72.241	-37.906	1.00	50.95	A16S	ATOM	24444	O5'	GUA	246	134.592	60.044	-35.183	1.00	84.17	A16S
ATOM	24392	C4	CYT	243	140.878	72.399	-38.876	1.00	50.95	A16S	ATOM	24445	C5'	GUA	246	133.845	59.905	-33.967	1.00	84.17	A16S
ATOM	24393	N4	CYT	243	140.432	72.543	-40.121	1.00	50.95	A16S	ATOM	24446	C4'	GUA	246	132.764	60.954	-33.894	1.00	84.17	A16S
ATOM	24394	C5	CYT	243	142.272	72.415	-38.614	1.00	50.95	A16S	ATOM	24447	O4'	GUA	246	131.880	60.819	-35.013	1.00	84.17	A16S
ATOM	24395	C2'	CYT	243	142.062	70.355	-34.595	1.00	54.23	A16S	ATOM	24448	C1'	GUA	246	130.615	61.324	-34.655	1.00	84.17	A16S
ATOM	24396	O2'	CYT	243	141.812	70.226	-33.210	1.00	54.23	A16S	ATOM	24449	N9	GUA	246	129.634	60.726	-35.552	1.00	64.05	A16S
ATOM	24397	C3'	CYT	243	143.449	69.844	-34.933	1.00	54.23	A16S	ATOM	24450	C4	GUA	246	128.697	61.414	-36.292	1.00	64.05	A16S
ATOM	24398	O3'	CYT	243	143.716	68.603	-34.294	1.00	54.23	A16S	ATOM	24451	N3	GUA	246	128.399	62.727	-36.175	1.00	64.05	A16S

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ATOM	24568	C3'	URI	251	114.439	62.487	-41.538	1.00	62.37	A16S	ATOM	24621	C4'	GUA	254	115.597	51.952	-30.426	1.00	75.65	A16S
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ATOM	24571	O1P	GUA	252	110.840	62.122	-40.354	1.00	65.66	A16S	ATOM	24624	N9	GUA	254	116.939	55.021	-30.023	1.00	60.38	A16S
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ATOM	24573	O5'	GUA	252	112.669	60.438	-39.918	1.00	77.09	A16S	ATOM	24626	N3	GUA	254	118.709	55.900	-28.611	1.00	60.38	A16S
ATOM	24574	C5'	GUA	252	112.168	59.416	-40.816	1.00	77.09	A16S	ATOM	24627	C2	GUA	254	119.162	57.067	-28.183	1.00	60.38	A16S
ATOM	24575	C4'	GUA	252	112.806	58.072	-40.515	1.00	77.09	A16S	ATOM	24628	N2	GUA	254	120.223	57.110	-27.375	1.00	60.38	A16S
ATOM	24576	O4'	GUA	252	114.239	58.162	-40.728	1.00	77.09	A16S	ATOM	24629	N1	GUA	254	118.609	58.276	-28.513	1.00	60.38	A16S
ATOM	24577	C1'	GUA	252	114.918	57.341	-39.788	1.00	77.09	A16S	ATOM	24630	C6	GUA	254	117.503	58.446	-29.333	1.00	60.38	A16S
ATOM	24578	N9	GUA	252	115.742	58.185	-38.925	1.00	65.66	A16S	ATOM	24631	O6	GUA	254	117.076	59.586	-29.569	1.00	60.38	A16S
ATOM	24579	C4	GUA	252	116.735	57.750	-38.077	1.00	65.66	A16S	ATOM	24632	C5	GUA	254	117.004	57.201	-29.799	1.00	60.38	A16S
ATOM	24580	N3	GUA	252	117.134	56.469	-37.911	1.00	65.66	A16S	ATOM	24633	N7	GUA	254	115.927	56.921	-30.625	1.00	60.38	A16S
ATOM	24581	C2	GUA	252	118.111	56.364	-37.025	1.00	65.66	A16S	ATOM	24634	C8	GUA	254	115.925	55.622	-30.728	1.00	60.38	A16S
ATOM	24582	N2	GUA	252	118.622	55.159	-36.737	1.00	65.66	A16S	ATOM	24635	C2'	GUA	254	116.829	52.923	-28.632	1.00	75.65	A16S
ATOM	24583	N1	GUA	252	118.655	57.432	-36.355	1.00	65.66	A16S	ATOM	24636	O2'	GUA	254	117.769	51.918	-28.309	1.00	75.65	A16S
ATOM	24584	C6	GUA	252	118.255	58.756	-36.503	1.00	65.66	A16S	ATOM	24637	C3'	GUA	254	115.462	52.341	-28.965	1.00	75.65	A16S
ATOM	24585	O6	GUA	252	118.801	59.638	-35.840	1.00	65.66	A16S	ATOM	24638	O3'	GUA	254	115.175	51.208	-28.167	1.00	75.65	A16S
ATOM	24586	C5	GUA	252	117.207	58.884	-37.453	1.00	65.66	A16S	ATOM	24639	P	GUA	255	114.303	51.383	-26.834	1.00	56.72	A16S
ATOM	24587	N7	GUA	252	116.530	60.011	-37.901	1.00	65.66	A16S	ATOM	24640	O1P	GUA	255	114.178	50.040	-26.204	1.00	75.90	A16S
ATOM	24588	C8	GUA	252	115.675	59.552	-38.773	1.00	65.66	A16S	ATOM	24641	O2P	GUA	255	113.076	52.137	-27.199	1.00	75.90	A16S
ATOM	24589	C2'	GUA	252	113.863	56.618	-38.958	1.00	77.09	A16S	ATOM	24642	O5'	GUA	255	115.184	52.328	-25.896	1.00	56.72	A16S
ATOM	24590	O2'	GUA	252	113.611	55.334	-39.487	1.00	77.09	A16S	ATOM	24643	C5'	GUA	255	116.457	51.894	-25.387	1.00	56.72	A16S
ATOM	24591	C3'	GUA	252	112.678	57.561	-39.088	1.00	77.09	A16S	ATOM	24644	C4'	GUA	255	117.137	53.014	-24.630	1.00	56.72	A16S
ATOM	24592	O3'	GUA	252	111.470	56.880	-38.823	1.00	77.09	A16S	ATOM	24645	O4'	GUA	255	117.645	54.021	-25.543	1.00	56.72	A16S
ATOM	24593	P	GUA	253	110.883	56.882	-37.328	1.00	74.74	A16S	ATOM	24646	C1'	GUA	255	117.561	55.304	-24.937	1.00	56.72	A16S
ATOM	24594	O1P	GUA	253	109.674	56.024	-37.420	1.00	64.78	A16S	ATOM	24647	N9	GUA	255	116.705	56.147	-25.767	1.00	75.90	A16S
ATOM	24595	O2P	GUA	253	110.745	58.294	-36.894	1.00	64.78	A16S	ATOM	24648	C4	GUA	255	116.667	57.525	-25.794	1.00	75.90	A16S
ATOM	24596	O5'	GUA	253	112.008	56.178	-36.426	1.00	74.74	A16S	ATOM	24649	N3	GUA	255	117.440	58.360	-25.067	1.00	75.90	A16S
ATOM	24597	C5'	GUA	253	112.239	54.757	-36.534	1.00	74.74	A16S	ATOM	24650	C2	GUA	255	117.151	59.632	-25.305	1.00	75.90	A16S
ATOM	24598	C4'	GUA	253	113.434	54.292	-35.706	1.00	74.74	A16S	ATOM	24651	N2	GUA	255	117.806	60.608	-24.660	1.00	75.90	A16S
ATOM	24599	O4'	GUA	253	114.650	54.988	-36.094	1.00	74.74	A16S	ATOM	24652	N1	GUA	255	116.190	60.047	-26.189	1.00	75.90	A16S
ATOM	24600	C1'	GUA	253	115.590	54.917	-35.029	1.00	74.74	A16S	ATOM	24653	C6	GUA	255	115.382	59.207	-26.945	1.00	75.90	A16S
ATOM	24601	N9	GUA	253	115.970	56.264	-34.613	1.00	64.78	A16S	ATOM	24654	O6	GUA	255	114.534	59.687	-27.710	1.00	75.90	A16S
ATOM	24602	C4	GUA	253	117.073	56.594	-33.860	1.00	64.78	A16S	ATOM	24655	C5	GUA	255	115.676	57.844	-26.700	1.00	75.90	A16S
ATOM	24603	N3	GUA	253	118.013	55.737	-33.417	1.00	64.78	A16S	ATOM	24656	N7	GUA	255	115.114	56.698	-27.242	1.00	75.90	A16S
ATOM	24604	C2	GUA	253	118.945	56.350	-32.719	1.00	64.78	A16S	ATOM	24657	C8	GUA	255	115.755	55.719	-26.665	1.00	75.90	A16S
ATOM	24605	N2	GUA	253	119.956	55.648	-32.220	1.00	64.78	A16S	ATOM	24658	C2'	GUA	255	116.981	55.115	-23.532	1.00	56.72	A16S
ATOM	24606	N1	GUA	253	118.955	57.696	-32.465	1.00	64.78	A16S	ATOM	24659	O2'	GUA	255	117.991	55.045	-22.548	1.00	56.72	A16S
ATOM	24607	C6	GUA	253	117.998	58.600	-32.911	1.00	64.78	A16S	ATOM	24660	C3'	GUA	255	116.256	53.787	-23.669	1.00	56.72	A16S
ATOM	24608	O6	GUA	253	118.100	59.801	-32.629	1.00	64.78	A16S	ATOM	24661	O3'	GUA	255	116.133	53.154	-22.413	1.00	56.72	A16S
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ATOM  24752  O4' GUA  260     118.928  67.277 -28.295  1.00 44.54      A16S
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ATOM  24769  P   GUA  261     120.266  64.550 -32.227  1.00 58.36      A16S
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ATOM	24770	O1P	GUA	261	120.641	64.876	-33.622	1.00	78.05	A16S	ATOM	24823	O2	CYT	263	121.589	56.096	-30.319	1.00	57.30	A16S
ATOM	24771	O2P	GUA	261	119.093	63.681	-31.969	1.00	78.05	A16S	ATOM	24824	N3	CYT	263	121.392	58.261	-30.979	1.00	57.30	A16S
ATOM	24772	O5'	GUA	261	121.546	63.908	-31.544	1.00	58.36	A16S	ATOM	24825	C4	CYT	263	121.899	59.495	-30.956	1.00	57.30	A16S
ATOM	24773	C5'	GUA	261	122.732	64.693	-31.462	1.00	58.36	A16S	ATOM	24826	N4	CYT	263	121.256	60.449	-31.634	1.00	57.30	A16S
ATOM	24774	C4'	GUA	261	123.868	63.948	-30.808	1.00	58.36	A16S	ATOM	24827	C5	CYT	263	123.094	59.802	-30.240	1.00	57.30	A16S
ATOM	24775	O4'	GUA	261	124.123	62.702	-31.495	1.00	58.36	A16S	ATOM	24828	C2'	CYT	263	124.703	55.585	-29.997	1.00	57.36	A16S
ATOM	24776	C1'	GUA	261	125.384	62.740	-32.122	1.00	58.36	A16S	ATOM	24829	O2'	CYT	263	124.566	54.208	-29.722	1.00	57.36	A16S
ATOM	24777	N9	GUA	261	125.080	62.780	-33.544	1.00	78.05	A16S	ATOM	24830	C3'	CYT	263	126.106	56.132	-29.777	1.00	57.36	A16S
ATOM	24778	C4	GUA	261	125.134	61.721	-34.399	1.00	78.05	A16S	ATOM	24831	O3'	CYT	263	127.094	55.189	-30.128	1.00	57.36	A16S
ATOM	24779	N3	GUA	261	125.606	60.499	-34.106	1.00	78.05	A16S	ATOM	24832	P	CYT	264	127.620	55.132	-31.640	1.00	69.92	A16S
ATOM	24780	C2	GUA	261	125.456	59.665	-35.114	1.00	78.05	A16S	ATOM	24833	O1P	CYT	264	128.732	54.148	-31.673	1.00	56.39	A16S
ATOM	24781	N2	GUA	261	125.884	58.393	-35.004	1.00	78.05	A16S	ATOM	24834	O2P	CYT	264	127.851	56.526	-32.106	1.00	56.39	A16S
ATOM	24782	N1	GUA	261	124.877	60.012	-36.309	1.00	78.05	A16S	ATOM	24835	O5'	CYT	264	126.409	54.516	-32.467	1.00	69.92	A16S
ATOM	24783	C6	GUA	261	124.386	61.272	-36.620	1.00	78.05	A16S	ATOM	24836	C5'	CYT	264	126.103	53.122	-32.376	1.00	69.92	A16S
ATOM	24784	O6	GUA	261	123.873	61.478	-37.707	1.00	78.05	A16S	ATOM	24837	C4'	CYT	264	124.931	52.787	-33.256	1.00	69.92	A16S
ATOM	24785	C5	GUA	261	124.556	62.165	-35.566	1.00	78.05	A16S	ATOM	24838	O4'	CYT	264	123.788	53.574	-32.842	1.00	69.92	A16S
ATOM	24786	N7	GUA	261	124.215	63.502	-35.472	1.00	78.05	A16S	ATOM	24839	C1'	CYT	264	122.945	53.792	-33.956	1.00	69.92	A16S
ATOM	24787	C8	GUA	261	124.567	63.834	-34.261	1.00	78.05	A16S	ATOM	24840	N1	CYT	264	122.640	55.225	-34.089	1.00	56.39	A16S
ATOM	24788	C2'	GUA	261	126.203	63.870	-31.481	1.00	58.36	A16S	ATOM	24841	C6	CYT	264	123.380	56.182	-33.454	1.00	56.39	A16S
ATOM	24789	O2'	GUA	261	127.072	63.336	-30.505	1.00	58.36	A16S	ATOM	24842	C2	CYT	264	121.563	55.592	-34.903	1.00	56.39	A16S
ATOM	24790	C3'	GUA	261	125.102	64.805	-30.977	1.00	58.36	A16S	ATOM	24843	O2	CYT	264	120.899	54.698	-35.461	1.00	56.39	A16S
ATOM	24791	O3'	GUA	261	125.196	65.687	-29.850	1.00	58.36	A16S	ATOM	24844	N3	CYT	264	121.271	56.902	-35.065	1.00	56.39	A16S
ATOM	24792	P	CYT	262	126.097	65.338	-28.561	1.00	52.36	A16S	ATOM	24845	C4	CYT	264	122.002	57.827	-34.448	1.00	56.39	A16S
ATOM	24793	O1P	CYT	262	125.824	66.480	-27.650	1.00	61.70	A16S	ATOM	24846	N4	CYT	264	121.676	59.106	-34.644	1.00	56.39	A16S
ATOM	24794	O2P	CYT	262	127.503	65.007	-28.914	1.00	61.70	A16S	ATOM	24847	C5	CYT	264	123.099	57.481	-33.604	1.00	56.39	A16S
ATOM	24795	O5'	CYT	262	125.466	64.063	-27.843	1.00	52.36	A16S	ATOM	24848	C2'	CYT	264	123.624	53.213	-35.196	1.00	69.92	A16S
ATOM	24796	C5'	CYT	262	125.978	63.679	-26.540	1.00	52.36	A16S	ATOM	24849	O2'	CYT	264	123.028	51.971	-35.503	1.00	69.92	A16S
ATOM	24797	C4'	CYT	262	125.496	62.309	-26.123	1.00	52.36	A16S	ATOM	24850	C3'	CYT	264	125.074	53.093	-34.739	1.00	69.92	A16S
ATOM	24798	O4'	CYT	262	124.097	62.340	-25.761	1.00	52.36	A16S	ATOM	24851	O3'	CYT	264	125.752	52.053	-35.443	1.00	69.92	A16S
ATOM	24799	C1'	CYT	262	123.522	61.077	-26.032	1.00	52.36	A16S	ATOM	24852	P	ADE	265	126.511	52.386	-36.826	1.00	67.28	A16S
ATOM	24800	N1	CYT	262	122.392	61.252	-26.954	1.00	61.70	A16S	ATOM	24853	O1P	ADE	265	127.460	51.262	-37.060	1.00	69.15	A16S
ATOM	24801	C6	CYT	262	122.335	62.311	-27.815	1.00	61.70	A16S	ATOM	24854	O2P	ADE	265	127.031	53.785	-36.766	1.00	69.15	A16S
ATOM	24802	C2	CYT	262	121.375	60.304	-26.939	1.00	61.70	A16S	ATOM	24855	O5'	ADE	265	125.359	52.330	-37.929	1.00	67.28	A16S
ATOM	24803	O2	CYT	262	121.451	59.358	-26.140	1.00	61.70	A16S	ATOM	24856	C5'	ADE	265	124.819	51.071	-38.366	1.00	67.28	A16S
ATOM	24804	N3	CYT	262	120.336	60.435	-27.789	1.00	61.70	A16S	ATOM	24857	C4'	ADE	265	123.710	51.292	-39.363	1.00	67.28	A16S
ATOM	24805	C4	CYT	262	120.293	61.466	-28.628	1.00	61.70	A16S	ATOM	24858	O4'	ADE	265	122.611	51.960	-38.702	1.00	67.28	A16S
ATOM	24806	N4	CYT	262	119.256	61.550	-29.451	1.00	61.70	A16S	ATOM	24859	C1'	ADE	265	122.002	52.885	-39.589	1.00	67.28	A16S
ATOM	24807	C5	CYT	262	121.313	62.454	-28.662	1.00	61.70	A16S	ATOM	24860	N9	ADE	265	122.165	54.231	-39.027	1.00	69.15	A16S
ATOM	24808	C2'	CYT	262	124.607	60.163	-26.606	1.00	52.36	A16S	ATOM	24861	C4	ADE	265	121.374	55.327	-39.282	1.00	69.15	A16S
ATOM	24809	O2'	CYT	262	125.117	59.362	-25.564	1.00	52.36	A16S	ATOM	24862	N3	ADE	265	120.312	55.393	-40.099	1.00	69.15	A16S
ATOM	24810	C3'	CYT	262	125.633	61.167	-27.118	1.00	52.36	A16S	ATOM	24863	C2	ADE	265	119.772	56.613	-40.071	1.00	69.15	A16S
ATOM	24811	O3'	CYT	262	126.943	60.616	-27.061	1.00	52.36	A16S	ATOM	24864	N1	ADE	265	120.148	57.693	-39.375	1.00	69.15	A16S
ATOM	24812	P	CYT	263	127.648	60.063	-28.398	1.00	57.36	A16S	ATOM	24865	C6	ADE	265	121.226	57.596	-38.569	1.00	69.15	A16S
ATOM	24813	O1P	CYT	263	129.035	59.740	-27.987	1.00	57.30	A16S	ATOM	24866	N6	ADE	265	121.607	58.677	-37.881	1.00	69.15	A16S
ATOM	24814	O2P	CYT	263	127.421	60.994	-29.525	1.00	57.30	A16S	ATOM	24867	C5	ADE	265	121.887	56.352	-38.506	1.00	69.15	A16S
ATOM	24815	O5'	CYT	263	126.884	58.702	-28.711	1.00	57.36	A16S	ATOM	24868	N7	ADE	265	122.994	55.920	-37.789	1.00	69.15	A16S
ATOM	24816	C5'	CYT	263	127.090	57.537	-27.895	1.00	57.36	A16S	ATOM	24869	C8	ADE	265	123.120	54.662	-38.134	1.00	69.15	A16S
ATOM	24817	C4'	CYT	263	126.126	56.454	-28.294	1.00	57.36	A16S	ATOM	24870	C2'	ADE	265	122.681	52.729	-40.949	1.00	67.28	A16S
ATOM	24818	O4'	CYT	263	124.778	56.892	-28.003	1.00	57.36	A16S	ATOM	24871	O2'	ADE	265	121.952	51.822	-41.755	1.00	67.28	A16S
ATOM	24819	C1'	CYT	263	123.893	56.398	-28.992	1.00	57.36	A16S	ATOM	24872	C3'	ADE	265	124.045	52.190	-40.542	1.00	67.28	A16S
ATOM	24820	N1	CYT	263	123.208	57.523	-29.644	1.00	57.30	A16S	ATOM	24873	O3'	ADE	265	124.685	51.509	-41.609	1.00	67.28	A16S
ATOM	24821	C6	CYT	263	123.710	58.795	-29.604	1.00	57.30	A16S	ATOM	24874	P	CYT	266	125.734	52.306	-42.532	1.00	69.54	A16S
ATOM	24822	C2	CYT	263	122.027	57.255	-30.327	1.00	57.30	A16S	ATOM	24875	O1P	CYT	266	126.407	51.316	-43.422	1.00	75.18	A16S

ATOM	24876	O2P	CYT	266	126.556	53.156	-41.631	1.00	75.18	A16S	ATOM	24929	C5	ADE	268	127.375	63.898	-44.393	1.00	52.65	A16S
ATOM	24877	O5'	CYT	266	124.822	53.271	-43.418	1.00	69.54	A16S	ATOM	24930	N7	ADE	268	127.294	62.799	-45.238	1.00	52.65	A16S
ATOM	24878	C5'	CYT	266	123.858	52.735	-44.338	1.00	69.54	A16S	ATOM	24931	C8	ADE	268	126.611	63.240	-46.270	1.00	52.65	A16S
ATOM	24879	C4'	CYT	266	122.982	53.836	-44.878	1.00	69.54	A16S	ATOM	24932	C2'	ADE	268	126.252	66.244	-47.993	1.00	86.17	A16S
ATOM	24880	O4'	CYT	266	122.160	54.368	-43.807	1.00	69.54	A16S	ATOM	24933	O2'	ADE	268	125.504	67.408	-48.273	1.00	86.17	A16S
ATOM	24881	C1'	CYT	266	121.969	55.764	-43.995	1.00	69.54	A16S	ATOM	24934	C3'	ADE	268	126.430	65.377	-49.229	1.00	86.17	A16S
ATOM	24882	N1	CYT	266	122.575	56.483	-42.857	1.00	75.18	A16S	ATOM	24935	O3'	ADE	268	126.700	66.166	-50.371	1.00	86.17	A16S
ATOM	24883	C6	CYT	266	123.632	55.945	-42.174	1.00	75.18	A16S	ATOM	24936	P	ADE	269	128.220	66.355	-50.861	1.00	64.82	A16S
ATOM	24884	C2	CYT	266	122.072	57.748	-42.498	1.00	75.18	A16S	ATOM	24937	O1P	ADE	269	128.143	67.241	-52.056	1.00	62.51	A16S
ATOM	24885	O2	CYT	266	121.081	58.205	-43.103	1.00	75.18	A16S	ATOM	24938	O2P	ADE	269	128.896	65.035	-50.959	1.00	62.51	A16S
ATOM	24886	N3	CYT	266	122.675	58.434	-41.499	1.00	75.18	A16S	ATOM	24939	O5'	ADE	269	128.936	67.139	-49.675	1.00	64.82	A16S
ATOM	24887	C4	CYT	266	123.719	57.903	-40.858	1.00	75.18	A16S	ATOM	24940	C5'	ADE	269	128.454	68.416	-49.236	1.00	64.82	A16S
ATOM	24888	N4	CYT	266	124.290	58.617	-39.887	1.00	75.18	A16S	ATOM	24941	C4'	ADE	269	129.277	68.899	-48.073	1.00	64.82	A16S
ATOM	24889	C5	CYT	266	124.227	56.614	-41.182	1.00	75.18	A16S	ATOM	24942	O4'	ADE	269	129.167	67.942	-46.983	1.00	64.82	A16S
ATOM	24890	C2'	CYT	266	122.660	56.148	-45.302	1.00	69.54	A16S	ATOM	24943	C1'	ADE	269	130.456	67.614	-46.538	1.00	64.82	A16S
ATOM	24891	O2'	CYT	266	121.739	56.117	-46.369	1.00	69.54	A16S	ATOM	24944	N9	ADE	269	130.466	66.277	-45.952	1.00	62.51	A16S
ATOM	24892	C3'	CYT	266	123.707	55.054	-45.425	1.00	69.54	A16S	ATOM	24945	C4	ADE	269	130.792	66.015	-44.645	1.00	62.51	A16S
ATOM	24893	O3'	CYT	266	124.146	54.907	-46.761	1.00	69.54	A16S	ATOM	24946	N3	ADE	269	131.063	66.909	-43.681	1.00	62.51	A16S
ATOM	24894	P	CYT	267	125.343	55.835	-47.293	1.00	77.45	A16S	ATOM	24947	C2	ADE	269	131.373	66.291	-42.550	1.00	62.51	A16S
ATOM	24895	O1P	CYT	267	125.669	55.410	-48.684	1.00	60.61	A16S	ATOM	24948	N1	ADE	269	131.455	64.983	-42.296	1.00	62.51	A16S
ATOM	24896	O2P	CYT	267	126.405	55.808	-46.247	1.00	60.61	A16S	ATOM	24949	C6	ADE	269	131.191	64.115	-43.290	1.00	62.51	A16S
ATOM	24897	O5'	CYT	267	124.696	57.294	-47.348	1.00	77.45	A16S	ATOM	24950	N6	ADE	269	131.321	62.816	-43.049	1.00	62.51	A16S
ATOM	24898	C5'	CYT	267	123.611	57.572	-48.253	1.00	77.45	A16S	ATOM	24951	C5	ADE	269	130.814	64.639	-44.529	1.00	62.51	A16S
ATOM	24899	C4'	CYT	267	123.181	59.023	-48.169	1.00	77.45	A16S	ATOM	24952	N7	ADE	269	130.440	64.039	-45.723	1.00	62.51	A16S
ATOM	24900	O4'	CYT	267	122.606	59.303	-46.868	1.00	77.45	A16S	ATOM	24953	C8	ADE	269	130.234	65.053	-46.532	1.00	62.51	A16S
ATOM	24901	C1'	CYT	267	122.832	60.663	-46.528	1.00	77.45	A16S	ATOM	24954	C2'	ADE	269	131.364	67.801	-47.747	1.00	64.82	A16S
ATOM	24902	N1	CYT	267	123.624	60.731	-45.284	1.00	60.61	A16S	ATOM	24955	O2'	ADE	269	132.698	67.959	-47.324	1.00	64.82	A16S
ATOM	24903	C6	CYT	267	124.262	59.627	-44.786	1.00	60.61	A16S	ATOM	24956	C3'	ADE	269	130.770	69.062	-48.357	1.00	64.82	A16S
ATOM	24904	C2	CYT	267	123.733	61.970	-44.621	1.00	60.61	A16S	ATOM	24957	O3'	ADE	269	131.282	70.182	-47.628	1.00	64.82	A16S
ATOM	24905	O2	CYT	267	123.116	62.953	-45.075	1.00	60.61	A16S	ATOM	24958	P	GUA	270	130.865	71.677	-48.050	1.00	51.83	A16S
ATOM	24906	N3	CYT	267	124.502	62.060	-43.506	1.00	60.61	A16S	ATOM	24959	O1P	GUA	270	130.029	71.586	-49.279	1.00	49.57	A16S
ATOM	24907	C4	CYT	267	125.135	60.977	-43.043	1.00	60.61	A16S	ATOM	24960	O2P	GUA	270	132.081	72.540	-48.047	1.00	49.57	A16S
ATOM	24908	N4	CYT	267	125.900	61.111	-41.955	1.00	60.61	A16S	ATOM	24961	O5'	GUA	270	129.889	72.139	-46.879	1.00	51.83	A16S
ATOM	24909	C5	CYT	267	125.019	59.705	-43.680	1.00	60.61	A16S	ATOM	24962	C5'	GUA	270	130.396	72.655	-45.642	1.00	51.83	A16S
ATOM	24910	C2'	CYT	267	123.598	61.306	-47.681	1.00	77.45	A16S	ATOM	24963	C4'	GUA	270	129.726	71.969	-44.472	1.00	51.83	A16S
ATOM	24911	O2'	CYT	267	122.711	61.998	-48.536	1.00	77.45	A16S	ATOM	24964	O4'	GUA	270	130.140	70.578	-44.437	1.00	51.83	A16S
ATOM	24912	C3'	CYT	267	124.249	60.091	-48.329	1.00	77.45	A16S	ATOM	24965	C1'	GUA	270	130.474	70.204	-43.113	1.00	51.83	A16S
ATOM	24913	O3'	CYT	267	124.616	60.356	-49.672	1.00	77.45	A16S	ATOM	24966	N9	GUA	270	131.922	69.991	-43.087	1.00	49.57	A16S
ATOM	24914	P	ADE	268	126.089	60.924	-49.979	1.00	86.17	A16S	ATOM	24967	C4	GUA	270	132.715	69.720	-41.988	1.00	49.57	A16S
ATOM	24915	O1P	ADE	268	126.301	60.909	-51.454	1.00	52.65	A16S	ATOM	24968	N3	GUA	270	132.293	69.587	-40.713	1.00	49.57	A16S
ATOM	24916	O2P	ADE	268	127.030	60.174	-49.082	1.00	52.65	A16S	ATOM	24969	C2	GUA	270	133.293	69.324	-39.888	1.00	49.57	A16S
ATOM	24917	O5'	ADE	268	126.029	62.445	-49.504	1.00	86.17	A16S	ATOM	24970	N2	GUA	270	133.060	69.158	-38.580	1.00	49.57	A16S
ATOM	24918	C5'	ADE	268	125.079	63.359	-50.078	1.00	86.17	A16S	ATOM	24971	N1	GUA	270	134.601	69.203	-40.283	1.00	49.57	A16S
ATOM	24919	C4'	ADE	268	125.090	64.669	-49.327	1.00	86.17	A16S	ATOM	24972	C6	GUA	270	135.061	69.341	-41.588	1.00	49.57	A16S
ATOM	24920	O4'	ADE	268	124.711	64.439	-47.946	1.00	86.17	A16S	ATOM	24973	O6	GUA	270	136.269	69.216	-41.834	1.00	49.57	A16S
ATOM	24921	C1'	ADE	268	125.415	65.334	-47.101	1.00	86.17	A16S	ATOM	24974	C5	GUA	270	134.003	69.622	-42.484	1.00	49.57	A16S
ATOM	24922	N9	ADE	268	126.226	64.554	-46.161	1.00	52.65	A16S	ATOM	24975	N7	GUA	270	134.023	69.823	-43.857	1.00	49.57	A16S
ATOM	24923	C4	ADE	268	126.742	64.996	-44.958	1.00	52.65	A16S	ATOM	24976	C8	GUA	270	132.773	70.035	-44.172	1.00	49.57	A16S
ATOM	24924	N3	ADE	268	126.645	66.232	-44.420	1.00	52.65	A16S	ATOM	24977	C2'	GUA	270	130.016	71.342	-42.195	1.00	51.83	A16S
ATOM	24925	C2	ADE	268	127.254	66.279	-43.232	1.00	52.65	A16S	ATOM	24978	O2'	GUA	270	128.688	71.131	-41.767	1.00	51.83	A16S
ATOM	24926	N1	ADE	268	127.886	65.305	-42.563	1.00	52.65	A16S	ATOM	24979	C3'	GUA	270	130.131	72.540	-43.123	1.00	51.83	A16S
ATOM	24927	C6	ADE	268	127.956	64.076	-43.120	1.00	52.65	A16S	ATOM	24980	O3'	GUA	270	129.308	73.646	-42.754	1.00	51.83	A16S
ATOM	24928	N6	ADE	268	128.549	63.100	-42.434	1.00	52.65	A16S	ATOM	24981	P	GUA	271	129.995	74.969	-42.152	1.00	51.13	A16S

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ATOM  24982  O1P GUA  271     129.003  76.078 -41.968  1.00 44.81      A16S
ATOM  24983  O2P GUA  271     131.209  75.203 -42.983  1.00 44.81      A16S
ATOM  24984  O5' GUA  271     130.424  74.503 -40.693  1.00 51.13      A16S
ATOM  24985  C5' GUA  271     129.424  74.069 -39.760  1.00 51.13      A16S
ATOM  24986  C4' GUA  271     130.062  73.670 -38.464  1.00 51.13      A16S
ATOM  24987  O4' GUA  271     130.819  72.459 -38.666  1.00 51.13      A16S
ATOM  24988  C1' GUA  271     132.008  72.507 -37.905  1.00 51.13      A16S
ATOM  24989  N9  GUA  271     133.131  72.519 -38.835  1.00 44.81      A16S
ATOM  24990  C4  GUA  271     134.459  72.391 -38.513  1.00 44.81      A16S
ATOM  24991  N3  GUA  271     134.960  72.223 -37.277  1.00 44.81      A16S
ATOM  24992  C2  GUA  271     136.281  72.144 -37.283  1.00 44.81      A16S
ATOM  24993  N2  GUA  271     136.938  71.988 -36.134  1.00 44.81      A16S
ATOM  24994  N1  GUA  271     137.054  72.214 -38.413  1.00 44.81      A16S
ATOM  24995  C6  GUA  271     136.564  72.379 -39.702  1.00 44.81      A16S
ATOM  24996  O6  GUA  271     137.350  72.419 -40.659  1.00 44.81      A16S
ATOM  24997  C5  GUA  271     135.137  72.479 -39.711  1.00 44.81      A16S
ATOM  24998  N7  GUA  271     134.250  72.658 -40.768  1.00 44.81      A16S
ATOM  24999  C8  GUA  271     133.075  72.672 -40.203  1.00 44.81      A16S
ATOM  25000  C2' GUA  271     131.956  73.777 -37.058  1.00 51.13      A16S
ATOM  25001  O2' GUA  271     131.378  73.478 -35.802  1.00 51.13      A16S
ATOM  25002  C3' GUA  271     131.060  74.665 -37.905  1.00 51.13      A16S
ATOM  25003  O3' GUA  271     130.435  75.702 -37.152  1.00 51.13      A16S
ATOM  25004  P   CYT  272     131.070  77.177 -37.164  1.00 51.72      A16S
ATOM  25005  O1P CYT  272     130.273  78.055 -36.268  1.00 38.27      A16S
ATOM  25006  O2P CYT  272     131.247  77.554 -38.598  1.00 38.27      A16S
ATOM  25007  O5' CYT  272     132.479  76.958 -36.450  1.00 51.72      A16S
ATOM  25008  C5' CYT  272     132.517  76.444 -35.108  1.00 51.72      A16S
ATOM  25009  C4' CYT  272     133.925  76.388 -34.582  1.00 51.72      A16S
ATOM  25010  O4' CYT  272     134.638  75.260 -35.133  1.00 51.72      A16S
ATOM  25011  C1' CYT  272     136.023  75.556 -35.188  1.00 51.72      A16S
ATOM  25012  N1  CYT  272     136.472  75.506 -36.583  1.00 38.27      A16S
ATOM  25013  C6  CYT  272     135.585  75.601 -37.617  1.00 38.27      A16S
ATOM  25014  C2  CYT  272     137.840  75.379 -36.836  1.00 38.27      A16S
ATOM  25015  O2  CYT  272     138.619  75.286 -35.879  1.00 38.27      A16S
ATOM  25016  N3  CYT  272     138.279  75.367 -38.111  1.00 38.27      A16S
ATOM  25017  C4  CYT  272     137.410  75.476 -39.113  1.00 38.27      A16S
ATOM  25018  N4  CYT  272     137.889  75.477 -40.355  1.00 38.27      A16S
ATOM  25019  C5  CYT  272     136.008  75.594 -38.886  1.00 38.27      A16S
ATOM  25020  C2' CYT  272     136.211  76.970 -34.657  1.00 51.72      A16S
ATOM  25021  O2' CYT  272     136.588  76.919 -33.297  1.00 51.72      A16S
ATOM  25022  C3' CYT  272     134.830  77.556 -34.892  1.00 51.72      A16S
ATOM  25023  O3' CYT  272     134.593  78.686 -34.100  1.00 51.72      A16S
ATOM  25024  P   GUA  273     134.948  80.121 -34.698  1.00 47.07      A16S
ATOM  25025  O1P GUA  273     134.473  81.135 -33.720  1.00 48.21      A16S
ATOM  25026  O2P GUA  273     134.484  80.167 -36.106  1.00 48.21      A16S
ATOM  25027  O5' GUA  273     136.534  80.127 -34.695  1.00 47.07      A16S
ATOM  25028  C5' GUA  273     137.244  80.007 -33.462  1.00 47.07      A16S
ATOM  25029  C4' GUA  273     138.726  80.040 -33.706  1.00 47.07      A16S
ATOM  25030  O4' GUA  273     139.120  78.908 -34.521  1.00 47.07      A16S
ATOM  25031  C1' GUA  273     140.207  79.273 -35.349  1.00 47.07      A16S
ATOM  25032  N9  GUA  273     139.817  79.084 -36.741  1.00 48.21      A16S
ATOM  25033  C4  GUA  273     140.668  79.001 -37.814  1.00 48.21      A16S
ATOM  25034  N3  GUA  273     142.021  79.049 -37.763  1.00 48.21      A16S
ATOM  25035  C2  GUA  273     142.563  78.959 -38.969  1.00 48.21      A16S
ATOM  25036  N2  GUA  273     143.895  78.990 -39.110  1.00 48.21      A16S
ATOM  25037  N1  GUA  273     141.837  78.833 -40.126  1.00 48.21      A16S
ATOM  25038  C6  GUA  273     140.445  78.782 -40.198  1.00 48.21      A16S
ATOM  25039  O6  GUA  273     139.889  78.671 -41.293  1.00 48.21      A16S
ATOM  25040  C5  GUA  273     139.852  78.874 -38.917  1.00 48.21      A16S
ATOM  25041  N7  GUA  273     138.516  78.853 -38.544  1.00 48.21      A16S
ATOM  25042  C8  GUA  273     138.544  78.976 -37.245  1.00 48.21      A16S
ATOM  25043  C2' GUA  273     140.555  80.723 -35.031  1.00 47.07      A16S
ATOM  25044  O2' GUA  273     141.558  80.699 -34.044  1.00 47.07      A16S
ATOM  25045  C3' GUA  273     139.240  81.241 -34.465  1.00 47.07      A16S
ATOM  25046  O3' GUA  273     139.417  82.337 -33.591  1.00 47.07      A16S
ATOM  25047  P   ADE  274     139.291  83.827 -34.161  1.00 52.10      A16S
ATOM  25048  O1P ADE  274     138.412  84.559 -33.243  1.00 46.60      A16S
ATOM  25049  O2P ADE  274     138.906  83.714 -35.572  1.00 46.60      A16S
ATOM  25050  O5' ADE  274     140.785  84.395 -34.063  1.00 52.10      A16S
ATOM  25051  C5' ADE  274     141.196  85.271 -32.975  1.00 52.10      A16S
ATOM  25052  C4' ADE  274     142.450  86.043 -33.352  1.00 52.10      A16S
ATOM  25053  O4' ADE  274     143.547  85.108 -33.438  1.00 52.10      A16S
ATOM  25054  C1' ADE  274     144.396  85.471 -34.504  1.00 52.10      A16S
ATOM  25055  N9  ADE  274     144.586  84.301 -35.346  1.00 46.60      A16S
ATOM  25056  C4  ADE  274     145.800  83.752 -35.618  1.00 46.60      A16S
ATOM  25057  N3  ADE  274     146.988  84.210 -35.209  1.00 46.60      A16S
ATOM  25058  C2  ADE  274     147.954  83.410 -35.638  1.00 46.60      A16S
ATOM  25059  N1  ADE  274     147.864  82.282 -36.373  1.00 46.60      A16S
ATOM  25060  C6  ADE  274     146.641  81.854 -36.759  1.00 46.60      A16S
ATOM  25061  N6  ADE  274     146.549  80.733 -37.476  1.00 46.60      A16S
ATOM  25062  C5  ADE  274     145.544  82.618 -36.377  1.00 46.60      A16S
ATOM  25063  N7  ADE  274     144.187  82.473 -36.606  1.00 46.60      A16S
ATOM  25064  C8  ADE  274     143.659  83.501 -35.983  1.00 46.60      A16S
ATOM  25065  C2' ADE  274     143.829  86.701 -35.208  1.00 52.10      A16S
ATOM  25066  O2' ADE  274     144.580  87.830 -34.838  1.00 52.10      A16S
ATOM  25067  C3' ADE  274     142.385  86.738 -34.712  1.00 52.10      A16S
ATOM  25068  O3' ADE  274     141.914  88.117 -34.715  1.00 52.10      A16S
ATOM  25069  P   CYT  275     141.975  89.041 -33.382  1.00 45.34      A16S
ATOM  25070  O1P CYT  275     141.439  90.376 -33.760  1.00 68.49      A16S
ATOM  25071  O2P CYT  275     143.310  88.941 -32.754  1.00 68.49      A16S
ATOM  25072  O5' CYT  275     140.928  88.406 -32.377  1.00 45.34      A16S
ATOM  25073  C5' CYT  275     140.859  88.857 -31.015  1.00 45.34      A16S
ATOM  25074  C4' CYT  275     139.551  88.435 -30.403  1.00 45.34      A16S
ATOM  25075  O4' CYT  275     138.473  89.285 -30.879  1.00 45.34      A16S
ATOM  25076  C1' CYT  275     137.450  88.485 -31.415  1.00 45.34      A16S
ATOM  25077  N1  CYT  275     136.813  89.189 -32.538  1.00 68.49      A16S
ATOM  25078  C6  CYT  275     137.537  89.983 -33.383  1.00 68.49      A16S
ATOM  25079  C2  CYT  275     135.433  89.024 -32.732  1.00 68.49      A16S
ATOM  25080  O2  CYT  275     134.792  88.302 -31.946  1.00 68.49      A16S
ATOM  25081  N3  CYT  275     134.831  89.650 -33.766  1.00 68.49      A16S
ATOM  25082  C4  CYT  275     135.545  90.414 -34.590  1.00 68.49      A16S
ATOM  25083  N4  CYT  275     134.904  90.998 -35.603  1.00 68.49      A16S
ATOM  25084  C5  CYT  275     136.950  90.609 -34.414  1.00 68.49      A16S
ATOM  25085  C2' CYT  275     138.105  87.167 -31.809  1.00 45.34      A16S
ATOM  25086  O2' CYT  275     137.135  86.142 -31.799  1.00 45.34      A16S
ATOM  25087  C3' CYT  275     139.150  87.002 -30.713  1.00 45.34      A16S
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ATOM  25088  O3' CYT  275     138.549  86.447 -29.566  1.00 45.34      A16S
ATOM  25089  P   GUA  276     139.425  85.550 -28.579  1.00 52.63      A16S
ATOM  25090  O1P GUA  276     138.494  84.788 -27.712  1.00 48.16      A16S
ATOM  25091  O2P GUA  276     140.435  86.442 -27.955  1.00 48.16      A16S
ATOM  25092  O5' GUA  276     140.150  84.521 -29.555  1.00 52.63      A16S
ATOM  25093  C5' GUA  276     139.732  83.144 -29.641  1.00 52.63      A16S
ATOM  25094  C4' GUA  276     140.941  82.257 -29.741  1.00 52.63      A16S
ATOM  25095  O4' GUA  276     141.816  82.922 -30.675  1.00 52.63      A16S
ATOM  25096  C1' GUA  276     143.151  82.779 -30.260  1.00 52.63      A16S
ATOM  25097  N9  GUA  276     143.777  84.094 -30.206  1.00 48.16      A16S
ATOM  25098  C4  GUA  276     145.041  84.406 -30.652  1.00 48.16      A16S
ATOM  25099  N3  GUA  276     145.920  83.547 -31.221  1.00 48.16      A16S
ATOM  25100  C2  GUA  276     147.074  84.133 -31.510  1.00 48.16      A16S
ATOM  25101  N2  GUA  276     148.070  83.423 -32.057  1.00 48.16      A16S
ATOM  25102  N1  GUA  276     147.335  85.457 -31.276  1.00 48.16      A16S
ATOM  25103  C6  GUA  276     146.441  86.362 -30.708  1.00 48.16      A16S
ATOM  25104  O6  GUA  276     146.776  87.541 -30.554  1.00 48.16      A16S
ATOM  25105  C5  GUA  276     145.205  85.744 -30.379  1.00 48.16      A16S
ATOM  25106  N7  GUA  276     144.062  86.271 -29.793  1.00 48.16      A16S
ATOM  25107  C8  GUA  276     143.244  85.258 -29.710  1.00 48.16      A16S
ATOM  25108  C2' GUA  276     143.190  81.931 -28.988  1.00 52.63      A16S
ATOM  25109  O2' GUA  276     143.461  80.620 -29.406  1.00 52.63      A16S
ATOM  25110  C3' GUA  276     141.769  82.068 -28.467  1.00 52.63      A16S
ATOM  25111  O3' GUA  276     141.222  80.990 -27.634  1.00 52.63      A16S
ATOM  25112  P   ADE  277     141.909  79.502 -27.537  1.00 41.77      A16S
ATOM  25113  O1P ADE  277     141.247  78.845 -26.382  1.00 54.59      A16S
ATOM  25114  O2P ADE  277     143.391  79.521 -27.576  1.00 54.59      A16S
ATOM  25115  O5' ADE  277     141.337  78.712 -28.799  1.00 41.77      A16S
ATOM  25116  C5' ADE  277     139.922  78.391 -28.862  1.00 41.77      A16S
ATOM  25117  C4' ADE  277     139.599  77.601 -30.105  1.00 41.77      A16S
ATOM  25118  O4' ADE  277     140.204  78.288 -31.224  1.00 41.77      A16S
ATOM  25119  C1' ADE  277     140.770  77.351 -32.118  1.00 41.77      A16S
ATOM  25120  N9  ADE  277     142.229  77.525 -32.074  1.00 54.59      A16S
ATOM  25121  C4  ADE  277     143.183  76.723 -32.660  1.00 54.59      A16S
ATOM  25122  N3  ADE  277     142.982  75.630 -33.408  1.00 54.59      A16S
ATOM  25123  C2  ADE  277     144.134  75.092 -33.768  1.00 54.59      A16S
ATOM  25124  N1  ADE  277     145.372  75.491 -33.495  1.00 54.59      A16S
ATOM  25125  C6  ADE  277     145.544  76.599 -32.756  1.00 54.59      A16S
ATOM  25126  N6  ADE  277     146.784  77.004 -32.500  1.00 54.59      A16S
ATOM  25127  C5  ADE  277     144.401  77.263 -32.302  1.00 54.59      A16S
ATOM  25128  N7  ADE  277     144.227  78.399 -31.525  1.00 54.59      A16S
ATOM  25129  C8  ADE  277     142.927  78.514 -31.422  1.00 54.59      A16S
ATOM  25130  C2' ADE  277     140.299  75.969 -31.664  1.00 41.77      A16S
ATOM  25131  O2' ADE  277     139.068  75.702 -32.302  1.00 41.77      A16S
ATOM  25132  C3' ADE  277     140.137  76.178 -30.166  1.00 41.77      A16S
ATOM  25133  O3' ADE  277     139.210  75.244 -29.609  1.00 41.77      A16S
ATOM  25134  P   CYT  278     139.666  74.245 -28.422  1.00 52.27      A16S
ATOM  25135  O1P CYT  278     138.596  73.240 -28.241  1.00 53.58      A16S
ATOM  25136  O2P CYT  278     140.113  75.062 -27.257  1.00 53.58      A16S
ATOM  25137  O5' CYT  278     140.939  73.473 -28.997  1.00 52.27      A16S
ATOM  25138  C5' CYT  278     140.816  72.500 -30.050  1.00 52.27      A16S
ATOM  25139  C4' CYT  278     142.187  72.039 -30.497  1.00 52.27      A16S
ATOM  25140  O4' CYT  278     142.869  73.110 -31.199  1.00 52.27      A16S
ATOM  25141  C1' CYT  278     144.251  73.083 -30.896  1.00 52.27      A16S
ATOM  25142  N1  CYT  278     144.585  74.325 -30.174  1.00 53.58      A16S
ATOM  25143  C6  CYT  278     143.601  75.192 -29.785  1.00 53.58      A16S
ATOM  25144  C2  CYT  278     145.921  74.596 -29.859  1.00 53.58      A16S
ATOM  25145  O2  CYT  278     146.802  73.817 -30.245  1.00 53.58      A16S
ATOM  25146  N3  CYT  278     146.219  75.698 -29.139  1.00 53.58      A16S
ATOM  25147  C4  CYT  278     145.248  76.518 -28.739  1.00 53.58      A16S
ATOM  25148  N4  CYT  278     145.586  77.574 -28.003  1.00 53.58      A16S
ATOM  25149  C5  CYT  278     143.885  76.287 -29.069  1.00 53.58      A16S
ATOM  25150  C2' CYT  278     144.499  71.847 -30.031  1.00 52.27      A16S
ATOM  25151  O2' CYT  278     144.827  70.757 -30.861  1.00 52.27      A16S
ATOM  25152  C3' CYT  278     143.140  71.649 -29.383  1.00 52.27      A16S
ATOM  25153  O3' CYT  278     142.942  70.312 -28.959  1.00 52.27      A16S
ATOM  25154  P   GUA  279     143.116  69.948 -27.406  1.00 45.01      A16S
ATOM  25155  O1P GUA  279     142.815  68.509 -27.247  1.00 55.16      A16S
ATOM  25156  O2P GUA  279     142.356  70.948 -26.617  1.00 55.16      A16S
ATOM  25157  O5' GUA  279     144.673  70.177 -27.142  1.00 45.01      A16S
ATOM  25158  C5' GUA  279     145.659  69.415 -27.862  1.00 45.01      A16S
ATOM  25159  C4' GUA  279     147.058  69.929 -27.583  1.00 45.01      A16S
ATOM  25160  O4' GUA  279     147.243  71.250 -28.158  1.00 45.01      A16S
ATOM  25161  C1' GUA  279     148.139  71.996 -27.356  1.00 45.01      A16S
ATOM  25162  N9  GUA  279     147.424  73.159 -26.844  1.00 55.16      A16S
ATOM  25163  C4  GUA  279     147.964  74.237 -26.176  1.00 55.16      A16S
ATOM  25164  N3  GUA  279     149.268  74.426 -25.891  1.00 55.16      A16S
ATOM  25165  C2  GUA  279     149.473  75.552 -25.222  1.00 55.16      A16S
ATOM  25166  N2  GUA  279     150.707  75.888 -24.852  1.00 55.16      A16S
ATOM  25167  N1  GUA  279     148.483  76.428 -24.866  1.00 55.16      A16S
ATOM  25168  C6  GUA  279     147.132  76.260 -25.150  1.00 55.16      A16S
ATOM  25169  O6  GUA  279     146.312  77.117 -24.784  1.00 55.16      A16S
ATOM  25170  C5  GUA  279     146.894  75.048 -25.866  1.00 55.16      A16S
ATOM  25171  N7  GUA  279     145.709  74.500 -26.337  1.00 55.16      A16S
ATOM  25172  C8  GUA  279     146.072  73.386 -26.911  1.00 55.16      A16S
ATOM  25173  C2' GUA  279     148.611  71.084 -26.223  1.00 45.01      A16S
ATOM  25174  O2' GUA  279     149.831  70.479 -26.596  1.00 45.01      A16S
ATOM  25175  C3' GUA  279     147.465  70.083 -26.129  1.00 45.01      A16S
ATOM  25176  O3' GUA  279     147.873  68.846 -25.557  1.00 45.01      A16S
ATOM  25177  P   GUA  280     147.722  68.611 -23.973  1.00 54.70      A16S
ATOM  25178  O1P GUA  280     148.056  67.189 -23.712  1.00 51.38      A16S
ATOM  25179  O2P GUA  280     146.411  69.138 -23.532  1.00 51.38      A16S
ATOM  25180  O5' GUA  280     148.857  69.537 -23.341  1.00 54.70      A16S
ATOM  25181  C5' GUA  280     150.245  69.298 -23.625  1.00 54.70      A16S
ATOM  25182  C4' GUA  280     151.118  70.343 -22.966  1.00 54.70      A16S
ATOM  25183  O4' GUA  280     150.945  71.636 -23.606  1.00 54.70      A16S
ATOM  25184  C1' GUA  280     151.122  72.671 -22.647  1.00 54.70      A16S
ATOM  25185  N9  GUA  280     149.870  73.403 -22.520  1.00 51.38      A16S
ATOM  25186  C4  GUA  280     149.691  74.582 -21.845  1.00 51.38      A16S
ATOM  25187  N3  GUA  280     150.652  75.288 -21.223  1.00 51.38      A16S
ATOM  25188  C2  GUA  280     150.169  76.377 -20.646  1.00 51.38      A16S
ATOM  25189  N2  GUA  280     150.996  77.211 -20.003  1.00 51.38      A16S
ATOM  25190  N1  GUA  280     148.847  76.733 -20.663  1.00 51.38      A16S
ATOM  25191  C6  GUA  280     147.838  76.016 -21.291  1.00 51.38      A16S
ATOM  25192  O6  GUA  280     146.669  76.418 -21.234  1.00 51.38      A16S
ATOM  25193  C5  GUA  280     148.345  74.854 -21.934  1.00 51.38      A16S
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ATOM	25194	N7	GUA	280	147.693	73.876	-22.674	1.00	51.38	A16S	ATOM	25247	C5'	ADE	283	146.512	75.312	-8.773	1.00	49.17	A16S
ATOM	25195	C8	GUA	280	148.637	73.041	-23.006	1.00	51.38	A16S	ATOM	25248	C4'	ADE	283	145.108	75.819	-8.834	1.00	49.17	A16S
ATOM	25196	C2'	GUA	280	151.443	72.010	-21.307	1.00	54.70	A16S	ATOM	25249	O4'	ADE	283	144.787	76.130	-10.209	1.00	49.17	A16S
ATOM	25197	O2'	GUA	280	152.832	71.973	-21.076	1.00	54.70	A16S	ATOM	25250	C1'	ADE	283	143.438	75.816	-10.460	1.00	49.17	A16S
ATOM	25198	C3'	GUA	280	150.846	70.627	-21.501	1.00	54.70	A16S	ATOM	25251	N9	ADE	283	143.399	74.779	-11.485	1.00	45.45	A16S
ATOM	25199	O3'	GUA	280	151.413	69.687	-20.617	1.00	54.70	A16S	ATOM	25252	C4	ADE	283	142.324	74.508	-12.290	1.00	45.45	A16S
ATOM	25200	P	GUA	281	150.644	69.356	-19.249	1.00	44.11	A16S	ATOM	25253	N3	ADE	283	141.150	75.158	-12.318	1.00	45.45	A16S
ATOM	25201	O1P	GUA	281	151.339	68.224	-18.594	1.00	51.11	A16S	ATOM	25254	C2	ADE	283	140.330	74.594	-13.200	1.00	45.45	A16S
ATOM	25202	O2P	GUA	281	149.205	69.236	-19.599	1.00	51.11	A16S	ATOM	25255	N1	ADE	283	140.532	73.534	-13.992	1.00	45.45	A16S
ATOM	25203	O5'	GUA	281	150.861	70.655	-18.355	1.00	44.11	A16S	ATOM	25256	C6	ADE	283	141.724	72.908	-13.940	1.00	45.45	A16S
ATOM	25204	C5'	GUA	281	152.182	71.154	-18.133	1.00	44.11	A16S	ATOM	25257	N6	ADE	283	141.922	71.853	-14.731	1.00	45.45	A16S
ATOM	25205	C4'	GUA	281	152.144	72.473	-17.400	1.00	44.11	A16S	ATOM	25258	C5	ADE	283	142.687	73.410	-13.050	1.00	45.45	A16S
ATOM	25206	O4'	GUA	281	151.650	73.534	-18.257	1.00	44.11	A16S	ATOM	25259	N7	ADE	283	143.983	73.012	-12.751	1.00	45.45	A16S
ATOM	25207	C1'	GUA	281	150.966	74.496	-17.475	1.00	44.11	A16S	ATOM	25260	C8	ADE	283	144.365	73.860	-11.827	1.00	45.45	A16S
ATOM	25208	N9	GUA	281	149.570	74.526	-17.898	1.00	51.11	A16S	ATOM	25261	C2'	ADE	283	142.827	75.340	-9.141	1.00	49.17	A16S
ATOM	25209	C4	GUA	281	148.656	75.498	-17.599	1.00	51.11	A16S	ATOM	25262	O2'	ADE	283	142.287	76.453	-8.463	1.00	49.17	A16S
ATOM	25210	N3	GUA	281	148.898	76.610	-16.882	1.00	51.11	A16S	ATOM	25263	C3'	ADE	283	144.052	74.815	-8.414	1.00	49.17	A16S
ATOM	25211	C2	GUA	281	147.817	77.349	-16.744	1.00	51.11	A16S	ATOM	25264	O3'	ADE	283	143.910	74.747	-6.994	1.00	49.17	A16S
ATOM	25212	N2	GUA	281	147.890	78.493	-16.057	1.00	51.11	A16S	ATOM	25265	P	GUA	284	143.013	73.580	-6.338	1.00	46.74	A16S
ATOM	25213	N1	GUA	281	146.591	77.020	-17.270	1.00	51.11	A16S	ATOM	25266	O1P	GUA	284	143.394	73.419	-4.911	1.00	38.32	A16S
ATOM	25214	C6	GUA	281	146.326	75.879	-18.017	1.00	51.11	A16S	ATOM	25267	O2P	GUA	284	143.052	72.399	-7.244	1.00	38.32	A16S
ATOM	25215	O6	GUA	281	145.193	75.678	-18.456	1.00	51.11	A16S	ATOM	25268	O5'	GUA	284	141.556	74.225	-6.385	1.00	46.74	A16S
ATOM	25216	C5	GUA	281	147.475	75.081	-18.167	1.00	51.11	A16S	ATOM	25269	C5'	GUA	284	140.383	73.418	-6.336	1.00	46.74	A16S
ATOM	25217	N7	GUA	281	147.645	73.875	-18.825	1.00	51.11	A16S	ATOM	25270	C4'	GUA	284	139.469	73.744	-7.497	1.00	46.74	A16S
ATOM	25218	C8	GUA	281	148.904	73.586	-18.645	1.00	51.11	A16S	ATOM	25271	O4'	GUA	284	138.439	72.734	-7.498	1.00	46.74	A16S
ATOM	25219	C2'	GUA	281	151.074	74.046	-16.021	1.00	44.11	A16S	ATOM	25272	C1'	GUA	284	137.174	73.331	-7.671	1.00	46.74	A16S
ATOM	25220	O2'	GUA	281	152.224	74.609	-15.431	1.00	44.11	A16S	ATOM	25273	N9	GUA	284	136.507	73.338	-6.369	1.00	38.32	A16S
ATOM	25221	C3'	GUA	281	151.252	72.549	-16.181	1.00	44.11	A16S	ATOM	25274	C4	GUA	284	135.172	73.526	-6.155	1.00	38.32	A16S
ATOM	25222	O3'	GUA	281	151.843	71.983	-15.037	1.00	44.11	A16S	ATOM	25275	N3	GUA	284	134.252	73.767	-7.108	1.00	38.32	A16S
ATOM	25223	P	URI	282	150.897	71.425	-13.870	1.00	47.90	A16S	ATOM	25276	C2	GUA	284	133.038	73.888	-6.603	1.00	38.32	A16S
ATOM	25224	O1P	URI	282	151.765	70.859	-12.801	1.00	46.26	A16S	ATOM	25277	N2	GUA	284	132.001	74.130	-7.426	1.00	38.32	A16S
ATOM	25225	O2P	URI	282	149.849	70.575	-14.508	1.00	46.26	A16S	ATOM	25278	N1	GUA	284	132.753	73.781	-5.260	1.00	38.32	A16S
ATOM	25226	O5'	URI	282	150.192	72.731	-13.293	1.00	47.90	A16S	ATOM	25279	C6	GUA	284	133.691	73.538	-4.261	1.00	38.32	A16S
ATOM	25227	C5'	URI	282	150.949	73.746	-12.625	1.00	47.90	A16S	ATOM	25280	O6	GUA	284	133.331	73.468	-3.085	1.00	38.32	A16S
ATOM	25228	C4'	URI	282	150.036	74.855	-12.177	1.00	47.90	A16S	ATOM	25281	C5	GUA	284	134.996	73.406	-4.792	1.00	38.32	A16S
ATOM	25229	O4'	URI	282	149.519	75.555	-13.339	1.00	47.90	A16S	ATOM	25282	N7	GUA	284	136.204	73.167	-4.156	1.00	38.32	A16S
ATOM	25230	C1'	URI	282	148.187	75.972	-13.097	1.00	47.90	A16S	ATOM	25283	C8	GUA	284	137.075	73.141	-5.125	1.00	38.32	A16S
ATOM	25231	N1	URI	282	147.295	75.270	-14.032	1.00	46.26	A16S	ATOM	25284	C2'	GUA	284	137.436	74.731	-8.204	1.00	46.74	A16S
ATOM	25232	C6	URI	282	147.661	74.091	-14.618	1.00	46.26	A16S	ATOM	25285	O2'	GUA	284	137.595	74.672	-9.610	1.00	46.74	A16S
ATOM	25233	C2	URI	282	146.062	75.823	-14.275	1.00	46.26	A16S	ATOM	25286	C3'	GUA	284	138.721	75.071	-7.472	1.00	46.74	A16S
ATOM	25234	O2	URI	282	145.704	76.876	-13.797	1.00	46.26	A16S	ATOM	25287	O3'	GUA	284	139.395	76.155	-8.097	1.00	46.74	A16S
ATOM	25235	N3	URI	282	145.255	75.092	-15.097	1.00	46.26	A16S	ATOM	25288	P	CYT	285	139.092	77.663	-7.605	1.00	34.72	A16S
ATOM	25236	C4	URI	282	145.548	73.892	-15.689	1.00	46.26	A16S	ATOM	25289	O1P	CYT	285	139.958	78.600	-8.347	1.00	32.99	A16S
ATOM	25237	O4	URI	282	144.679	73.313	-16.345	1.00	46.26	A16S	ATOM	25290	O2P	CYT	285	139.134	77.648	-6.125	1.00	32.99	A16S
ATOM	25238	C5	URI	282	146.853	73.402	-15.413	1.00	46.26	A16S	ATOM	25291	O5'	CYT	285	137.588	77.951	-8.045	1.00	34.72	A16S
ATOM	25239	C2'	URI	282	147.844	75.580	-11.664	1.00	47.90	A16S	ATOM	25292	C5'	CYT	285	137.269	78.364	-9.387	1.00	34.72	A16S
ATOM	25240	O2'	URI	282	148.119	76.644	-10.780	1.00	47.90	A16S	ATOM	25293	C4'	CYT	285	135.819	78.788	-9.476	1.00	34.72	A16S
ATOM	25241	C3'	URI	282	148.784	74.412	-11.441	1.00	47.90	A16S	ATOM	25294	O4'	CYT	285	134.987	77.650	-9.140	1.00	34.72	A16S
ATOM	25242	O3'	URI	282	148.973	74.146	-10.069	1.00	47.90	A16S	ATOM	25295	C1'	CYT	285	133.848	78.081	-8.408	1.00	34.72	A16S
ATOM	25243	P	ADE	283	147.923	73.196	-9.311	1.00	49.17	A16S	ATOM	25296	N1	CYT	285	133.946	77.579	-7.018	1.00	32.99	A16S
ATOM	25244	O1P	ADE	283	148.338	73.118	-7.882	1.00	45.45	A16S	ATOM	25297	C6	CYT	285	135.157	77.278	-6.451	1.00	32.99	A16S
ATOM	25245	O2P	ADE	283	147.681	71.945	-10.080	1.00	45.45	A16S	ATOM	25298	C2	CYT	285	132.778	77.466	-6.269	1.00	32.99	A16S
ATOM	25246	O5'	ADE	283	146.586	74.034	-9.395	1.00	49.17	A16S	ATOM	25299	O2	CYT	285	131.690	77.665	-6.833	1.00	32.99	A16S

ATOM	25300	N3	CYT	285	132.860	77.138	-4.957	1.00	32.99	A16S
ATOM	25301	C4	CYT	285	134.050	76.905	-4.402	1.00	32.99	A16S
ATOM	25302	N4	CYT	285	134.094	76.652	-3.101	1.00	32.99	A16S
ATOM	25303	C5	CYT	285	135.254	76.941	-5.159	1.00	32.99	A16S
ATOM	25304	C2'	CYT	285	133.876	79.607	-8.396	1.00	34.72	A16S
ATOM	25305	O2'	CYT	285	133.157	80.114	-9.501	1.00	34.72	A16S
ATOM	25306	C3'	CYT	285	135.366	79.877	-8.511	1.00	34.72	A16S
ATOM	25307	O3'	CYT	285	135.628	81.197	-8.955	1.00	34.72	A16S
ATOM	25308	P	CYT	286	135.817	82.369	-7.877	1.00	45.63	A16S
ATOM	25309	O1P	CYT	286	136.121	83.580	-8.653	1.00	39.45	A16S
ATOM	25310	O2P	CYT	286	136.736	81.940	-6.797	1.00	39.45	A16S
ATOM	25311	O5'	CYT	286	134.365	82.557	-7.263	1.00	45.63	A16S
ATOM	25312	C5'	CYT	286	133.300	83.067	-8.078	1.00	45.63	A16S
ATOM	25313	C4'	CYT	286	131.996	83.032	-7.329	1.00	45.63	A16S
ATOM	25314	O4'	CYT	286	131.733	81.670	-6.905	1.00	45.63	A16S
ATOM	25315	C1'	CYT	286	131.034	81.689	-5.677	1.00	45.63	A16S
ATOM	25316	N1	CYT	286	131.851	81.061	-4.633	1.00	39.45	A16S
ATOM	25317	C6	CYT	286	133.199	80.884	-4.772	1.00	39.45	A16S
ATOM	25318	C2	CYT	286	131.210	80.692	-3.454	1.00	39.45	A16S
ATOM	25319	O2	CYT	286	129.975	80.803	-3.389	1.00	39.45	A16S
ATOM	25320	N3	CYT	286	131.938	80.224	-2.418	1.00	39.45	A16S
ATOM	25321	C4	CYT	286	133.254	80.104	-2.536	1.00	39.45	A16S
ATOM	25322	N4	CYT	286	133.928	79.699	-1.463	1.00	39.45	A16S
ATOM	25323	C5	CYT	286	133.935	80.415	-3.756	1.00	39.45	A16S
ATOM	25324	C2'	CYT	286	130.811	83.148	-5.287	1.00	45.63	A16S
ATOM	25325	O2'	CYT	286	129.523	83.564	-5.689	1.00	45.63	A16S
ATOM	25326	C3'	CYT	286	131.936	83.836	-6.042	1.00	45.63	A16S
ATOM	25327	O3'	CYT	286	131.662	85.209	-6.248	1.00	45.63	A16S
ATOM	25328	P	GUA	287	132.045	86.270	-5.104	1.00	40.29	A16S
ATOM	25329	O1P	GUA	287	131.824	87.610	-5.707	1.00	43.15	A16S
ATOM	25330	O2P	GUA	287	133.360	85.937	-4.523	1.00	43.15	A16S
ATOM	25331	O5'	GUA	287	130.958	86.036	-3.970	1.00	40.29	A16S
ATOM	25332	C5'	GUA	287	129.575	86.294	-4.225	1.00	40.29	A16S
ATOM	25333	C4'	GUA	287	128.780	86.140	-2.957	1.00	40.29	A16S
ATOM	25334	O4'	GUA	287	128.893	84.771	-2.500	1.00	40.29	A16S
ATOM	25335	C1'	GUA	287	128.917	84.743	-1.090	1.00	40.29	A16S
ATOM	25336	N9	GUA	287	130.182	84.164	-0.666	1.00	43.15	A16S
ATOM	25337	C4	GUA	287	130.409	83.489	0.505	1.00	43.15	A16S
ATOM	25338	N3	GUA	287	129.483	83.197	1.442	1.00	43.15	A16S
ATOM	25339	C2	GUA	287	130.009	82.586	2.474	1.00	43.15	A16S
ATOM	25340	N2	GUA	287	129.237	82.264	3.502	1.00	43.15	A16S
ATOM	25341	N1	GUA	287	131.340	82.261	2.576	1.00	43.15	A16S
ATOM	25342	C6	GUA	287	132.313	82.553	1.623	1.00	43.15	A16S
ATOM	25343	O6	GUA	287	133.492	82.237	1.818	1.00	43.15	A16S
ATOM	25344	C5	GUA	287	131.760	83.220	0.514	1.00	43.15	A16S
ATOM	25345	N7	GUA	287	132.363	83.686	-0.645	1.00	43.15	A16S
ATOM	25346	C8	GUA	287	131.388	84.225	-1.321	1.00	43.15	A16S
ATOM	25347	C2'	GUA	287	128.785	86.181	-0.581	1.00	40.29	A16S
ATOM	25348	O2'	GUA	287	127.445	86.450	-0.242	1.00	40.29	A16S
ATOM	25349	C3'	GUA	287	129.250	86.988	-1.785	1.00	40.29	A16S
ATOM	25350	O3'	GUA	287	128.659	88.288	-1.795	1.00	40.29	A16S
ATOM	25351	P	GUA	288	129.438	89.523	-1.111	1.00	42.03	A16S
ATOM	25352	O1P	GUA	288	128.479	90.655	-0.986	1.00	52.81	A16S
ATOM	25353	O2P	GUA	288	130.713	89.712	-1.862	1.00	52.81	A16S
ATOM	25354	O5'	GUA	288	129.774	89.007	0.356	1.00	42.03	A16S
ATOM	25355	C5'	GUA	288	130.981	89.391	1.006	1.00	42.03	A16S
ATOM	25356	C4'	GUA	288	131.611	88.191	1.665	1.00	42.03	A16S
ATOM	25357	O4'	GUA	288	131.823	87.149	0.676	1.00	42.03	A16S
ATOM	25358	C1'	GUA	288	133.098	86.560	0.861	1.00	42.03	A16S
ATOM	25359	N9	GUA	288	133.922	86.885	-0.306	1.00	52.81	A16S
ATOM	25360	C4	GUA	288	135.232	86.520	-0.516	1.00	52.81	A16S
ATOM	25361	N3	GUA	288	135.992	85.789	0.318	1.00	52.81	A16S
ATOM	25362	C2	GUA	288	137.202	85.599	-0.163	1.00	52.81	A16S
ATOM	25363	N2	GUA	288	138.091	84.884	0.539	1.00	52.81	A16S
ATOM	25364	N1	GUA	288	137.633	86.089	-1.365	1.00	52.81	A16S
ATOM	25365	C6	GUA	288	136.869	86.839	-2.242	1.00	52.81	A16S
ATOM	25366	O6	GUA	288	137.356	87.219	-3.308	1.00	52.81	A16S
ATOM	25367	C5	GUA	288	135.570	87.054	-1.741	1.00	52.81	A16S
ATOM	25368	N7	GUA	288	134.499	87.739	-2.294	1.00	52.81	A16S
ATOM	25369	C8	GUA	288	133.546	87.614	-1.411	1.00	52.81	A16S
ATOM	25370	C2'	GUA	288	133.677	87.120	2.163	1.00	42.03	A16S
ATOM	25371	O2'	GUA	288	133.365	86.241	3.227	1.00	42.03	A16S
ATOM	25372	C3'	GUA	288	132.980	88.474	2.250	1.00	42.03	A16S
ATOM	25373	O3'	GUA	288	132.883	89.002	3.564	1.00	42.03	A16S
ATOM	25374	P	URI	289	133.804	90.244	3.977	1.00	45.19	A16S
ATOM	25375	O1P	URI	289	133.467	90.713	5.335	1.00	46.68	A16S
ATOM	25376	O2P	URI	289	133.761	91.201	2.844	1.00	46.68	A16S
ATOM	25377	O5'	URI	289	135.244	89.590	4.079	1.00	45.19	A16S
ATOM	25378	C5'	URI	289	135.452	88.477	4.944	1.00	45.19	A16S
ATOM	25379	C4'	URI	289	136.843	87.938	4.780	1.00	45.19	A16S
ATOM	25380	O4'	URI	289	136.985	87.285	3.494	1.00	45.19	A16S
ATOM	25381	C1'	URI	289	138.299	87.487	2.998	1.00	45.19	A16S
ATOM	25382	N1	URI	289	138.195	88.188	1.710	1.00	46.68	A16S
ATOM	25383	C6	URI	289	137.017	88.775	1.324	1.00	46.68	A16S
ATOM	25384	C2	URI	289	139.311	88.228	0.892	1.00	46.68	A16S
ATOM	25385	O2	URI	289	140.391	87.747	1.206	1.00	46.68	A16S
ATOM	25386	N3	URI	289	139.117	88.861	-0.307	1.00	46.68	A16S
ATOM	25387	C4	URI	289	137.956	89.455	-0.754	1.00	46.68	A16S
ATOM	25388	O4	URI	289	137.932	89.980	-1.865	1.00	46.68	A16S
ATOM	25389	C5	URI	289	136.865	89.388	0.156	1.00	46.68	A16S
ATOM	25390	C2'	URI	289	139.070	88.276	4.055	1.00	45.19	A16S
ATOM	25391	O2'	URI	289	139.766	87.384	4.900	1.00	45.19	A16S
ATOM	25392	C3'	URI	289	137.940	88.974	4.792	1.00	45.19	A16S
ATOM	25393	O3'	URI	289	138.302	89.338	6.095	1.00	45.19	A16S
ATOM	25394	P	CYT	290	138.812	90.829	6.361	1.00	42.18	A16S
ATOM	25395	O1P	CYT	290	138.926	90.996	7.850	1.00	34.15	A16S
ATOM	25396	O2P	CYT	290	137.918	91.725	5.575	1.00	34.15	A16S
ATOM	25397	O5'	CYT	290	140.266	90.875	5.696	1.00	42.18	A16S
ATOM	25398	C5'	CYT	290	141.387	90.254	6.352	1.00	42.18	A16S
ATOM	25399	C4'	CYT	290	142.639	90.410	5.534	1.00	42.18	A16S
ATOM	25400	O4'	CYT	290	142.462	89.751	4.259	1.00	42.18	A16S
ATOM	25401	C1'	CYT	290	143.185	90.447	3.257	1.00	42.18	A16S
ATOM	25402	N1	CYT	290	142.239	90.945	2.252	1.00	34.15	A16S
ATOM	25403	C6	CYT	290	140.905	91.029	2.521	1.00	34.15	A16S
ATOM	25404	C2	CYT	290	142.727	91.338	1.017	1.00	34.15	A16S
ATOM	25405	O2	CYT	290	143.940	91.248	0.795	1.00	34.15	A16S

ATOM	25406	N3	CYT	290	141.873	91.803	0.085	1.00	34.15	A16S
ATOM	25407	C4	CYT	290	140.572	91.870	0.352	1.00	34.15	A16S
ATOM	25408	N4	CYT	290	139.766	92.309	-0.607	1.00	34.15	A16S
ATOM	25409	C5	CYT	290	140.045	91.482	1.608	1.00	34.15	A16S
ATOM	25410	C2'	CYT	290	143.905	91.601	3.938	1.00	42.18	A16S
ATOM	25411	O2'	CYT	290	145.196	91.187	4.326	1.00	42.18	A16S
ATOM	25412	C3'	CYT	290	143.023	91.821	5.145	1.00	42.18	A16S
ATOM	25413	O3'	CYT	290	143.708	92.513	6.144	1.00	42.18	A16S
ATOM	25414	P	URI	291	143.407	94.074	6.340	1.00	36.53	A16S
ATOM	25415	O1P	URI	291	143.885	94.447	7.701	1.00	41.01	A16S
ATOM	25416	O2P	URI	291	141.982	94.296	5.974	1.00	41.01	A16S
ATOM	25417	O5'	URI	291	144.275	94.783	5.212	1.00	36.53	A16S
ATOM	25418	C5'	URI	291	145.656	94.455	5.019	1.00	36.53	A16S
ATOM	25419	C4'	URI	291	146.087	94.852	3.629	1.00	36.53	A16S
ATOM	25420	O4'	URI	291	145.363	94.075	2.640	1.00	36.53	A16S
ATOM	25421	C1'	URI	291	145.195	94.839	1.465	1.00	36.53	A16S
ATOM	25422	N1	URI	291	143.769	94.931	1.131	1.00	41.01	A16S
ATOM	25423	C6	URI	291	142.774	94.720	2.054	1.00	41.01	A16S
ATOM	25424	C2	URI	291	143.464	95.255	-0.180	1.00	41.01	A16S
ATOM	25425	O2	URI	291	144.319	95.468	-1.025	1.00	41.01	A16S
ATOM	25426	N3	URI	291	142.130	95.331	-0.466	1.00	41.01	A16S
ATOM	25427	C4	URI	291	141.094	95.134	0.398	1.00	41.01	A16S
ATOM	25428	O4	URI	291	139.944	95.228	-0.026	1.00	41.01	A16S
ATOM	25429	C5	URI	291	141.481	94.812	1.742	1.00	41.01	A16S
ATOM	25430	C2'	URI	291	145.800	96.214	1.710	1.00	36.53	A16S
ATOM	25431	O2'	URI	291	147.097	96.201	1.164	1.00	36.53	A16S
ATOM	25432	C3'	URI	291	145.799	96.284	3.230	1.00	36.53	A16S
ATOM	25433	O3'	URI	291	146.778	97.170	3.714	1.00	36.53	A16S
ATOM	25434	P	GUA	292	146.376	98.685	3.991	1.00	33.99	A16S
ATOM	25435	O1P	GUA	292	147.580	99.382	4.498	1.00	38.52	A16S
ATOM	25436	O2P	GUA	292	145.132	98.700	4.784	1.00	38.52	A16S
ATOM	25437	O5'	GUA	292	145.965	99.227	2.562	1.00	33.99	A16S
ATOM	25438	C5'	GUA	292	146.943	99.602	1.613	1.00	33.99	A16S
ATOM	25439	C4'	GUA	292	146.263	100.128	0.388	1.00	33.99	A16S
ATOM	25440	O4'	GUA	292	145.479	99.063	-0.211	1.00	33.99	A16S
ATOM	25441	C1'	GUA	292	144.370	99.623	-0.893	1.00	33.99	A16S
ATOM	25442	N9	GUA	292	143.149	99.040	-0.363	1.00	38.52	A16S
ATOM	25443	C4	GUA	292	141.939	99.036	-0.987	1.00	38.52	A16S
ATOM	25444	N3	GUA	292	141.706	99.450	-2.244	1.00	38.52	A16S
ATOM	25445	C2	GUA	292	140.425	99.398	-2.546	1.00	38.52	A16S
ATOM	25446	N2	GUA	292	140.016	99.747	-3.775	1.00	38.52	A16S
ATOM	25447	N1	GUA	292	139.447	98.994	-1.665	1.00	38.52	A16S
ATOM	25448	C6	GUA	292	139.671	98.573	-0.359	1.00	38.52	A16S
ATOM	25449	O6	GUA	292	138.713	98.265	0.368	1.00	38.52	A16S
ATOM	25450	C5	GUA	292	141.043	98.586	-0.045	1.00	38.52	A16S
ATOM	25451	N7	GUA	292	141.698	98.218	1.116	1.00	38.52	A16S
ATOM	25452	C8	GUA	292	142.952	98.487	0.874	1.00	38.52	A16S
ATOM	25453	C2'	GUA	292	144.371	101.133	-0.622	1.00	33.99	A16S
ATOM	25454	O2'	GUA	292	144.969	101.832	-1.685	1.00	33.99	A16S
ATOM	25455	C3'	GUA	292	145.242	101.230	0.617	1.00	33.99	A16S
ATOM	25456	O3'	GUA	292	145.844	102.503	0.700	1.00	33.99	A16S
ATOM	25457	P	ADE	293	145.285	103.569	1.760	1.00	38.03	A16S
ATOM	25458	O1P	ADE	293	146.186	104.751	1.735	1.00	42.93	A16S
ATOM	25459	O2P	ADE	293	145.092	102.821	3.036	1.00	42.93	A16S
ATOM	25460	O5'	ADE	293	143.871	104.003	1.159	1.00	38.03	A16S
ATOM	25461	C5'	ADE	293	142.851	104.595	1.991	1.00	38.03	A16S
ATOM	25462	C4'	ADE	293	141.919	105.430	1.158	1.00	38.03	A16S
ATOM	25463	O4'	ADE	293	142.674	106.514	0.589	1.00	38.03	A16S
ATOM	25464	C1'	ADE	293	142.269	106.730	-0.748	1.00	38.03	A16S
ATOM	25465	N9	ADE	293	143.438	106.559	-1.609	1.00	42.93	A16S
ATOM	25466	C4	ADE	293	143.586	107.059	-2.879	1.00	42.93	A16S
ATOM	25467	N3	ADE	293	142.687	107.756	-3.591	1.00	42.93	A16S
ATOM	25468	C2	ADE	293	143.195	108.115	-4.769	1.00	42.93	A16S
ATOM	25469	N1	ADE	293	144.406	107.872	-5.281	1.00	42.93	A16S
ATOM	25470	C6	ADE	293	145.284	107.158	-4.546	1.00	42.93	A16S
ATOM	25471	N6	ADE	293	146.492	106.912	-5.059	1.00	42.93	A16S
ATOM	25472	C5	ADE	293	144.866	106.717	-3.271	1.00	42.93	A16S
ATOM	25473	N7	ADE	293	145.500	105.980	-2.281	1.00	42.93	A16S
ATOM	25474	C8	ADE	293	144.610	105.911	-1.323	1.00	42.93	A16S
ATOM	25475	C2'	ADE	293	141.117	105.780	-1.062	1.00	38.03	A16S
ATOM	25476	O2'	ADE	293	139.894	106.444	-0.884	1.00	38.03	A16S
ATOM	25477	C3'	ADE	293	141.326	104.689	-0.025	1.00	38.03	A16S
ATOM	25478	O3'	ADE	293	140.104	104.065	0.330	1.00	38.03	A16S
ATOM	25479	P	GUA	294	139.872	102.521	-0.030	1.00	36.04	A16S
ATOM	25480	O1P	GUA	294	138.709	102.027	0.767	1.00	48.38	A16S
ATOM	25481	O2P	GUA	294	141.209	101.884	0.130	1.00	48.38	A16S
ATOM	25482	O5'	GUA	294	139.471	102.522	-1.573	1.00	36.04	A16S
ATOM	25483	C5'	GUA	294	138.223	103.087	-2.005	1.00	36.04	A16S
ATOM	25484	C4'	GUA	294	138.385	103.728	-3.356	1.00	36.04	A16S
ATOM	25485	O4'	GUA	294	139.621	104.480	-3.332	1.00	36.04	A16S
ATOM	25486	C1'	GUA	294	140.255	104.392	-4.595	1.00	36.04	A16S
ATOM	25487	N9	GUA	294	141.610	103.880	-4.399	1.00	48.38	A16S
ATOM	25488	C4	GUA	294	142.694	104.105	-5.221	1.00	48.38	A16S
ATOM	25489	N3	GUA	294	142.684	104.808	-6.373	1.00	48.38	A16S
ATOM	25490	C2	GUA	294	143.889	104.906	-6.902	1.00	48.38	A16S
ATOM	25491	N2	GUA	294	144.062	105.592	-8.034	1.00	48.38	A16S
ATOM	25492	N1	GUA	294	145.010	104.347	-6.361	1.00	48.38	A16S
ATOM	25493	C6	GUA	294	145.048	103.605	-5.193	1.00	48.38	A16S
ATOM	25494	O6	GUA	294	146.122	103.133	-4.808	1.00	48.38	A16S
ATOM	25495	C5	GUA	294	143.760	103.502	-4.596	1.00	48.38	A16S
ATOM	25496	N7	GUA	294	143.352	102.880	-3.424	1.00	48.38	A16S
ATOM	25497	C8	GUA	294	142.072	103.121	-3.353	1.00	48.38	A16S
ATOM	25498	C2'	GUA	294	139.362	103.566	-5.523	1.00	36.04	A16S
ATOM	25499	O2'	GUA	294	138.542	104.429	-6.279	1.00	36.04	A16S
ATOM	25500	C3'	GUA	294	138.524	102.772	-4.534	1.00	36.04	A16S
ATOM	25501	O3'	GUA	294	137.254	102.505	-5.113	1.00	36.04	A16S
ATOM	25502	P	ADE	295	136.908	101.027	-5.638	1.00	45.01	A16S
ATOM	25503	O1P	ADE	295	135.459	100.972	-5.946	1.00	38.86	A16S
ATOM	25504	O2P	ADE	295	137.483	100.060	-4.673	1.00	38.86	A16S
ATOM	25505	O5'	ADE	295	137.702	100.895	-7.011	1.00	45.01	A16S
ATOM	25506	C5'	ADE	295	137.288	101.607	-8.189	1.00	45.01	A16S
ATOM	25507	C4'	ADE	295	138.390	101.585	-9.228	1.00	45.01	A16S
ATOM	25508	O4'	ADE	295	139.521	102.368	-8.760	1.00	45.01	A16S
ATOM	25509	C1'	ADE	295	140.730	101.748	-9.158	1.00	45.01	A16S
ATOM	25510	N9	ADE	295	141.392	101.258	-7.953	1.00	38.86	A16S
ATOM	25511	C4	ADE	295	142.740	101.184	-7.729	1.00	38.86	A16S

ATOM	25512	N3	ADE	295	143.723	101.527	-8.574	1.00	38.86	A16S
ATOM	25513	C2	ADE	295	144.909	101.343	-8.002	1.00	38.86	A16S
ATOM	25514	N1	ADE	295	145.201	100.897	-6.767	1.00	38.86	A16S
ATOM	25515	C6	ADE	295	144.185	100.565	-5.944	1.00	38.86	A16S
ATOM	25516	N6	ADE	295	144.475	100.144	-4.710	1.00	38.86	A16S
ATOM	25517	C5	ADE	295	142.880	100.698	-6.441	1.00	38.86	A16S
ATOM	25518	N7	ADE	295	141.645	100.446	-5.878	1.00	38.86	A16S
ATOM	25519	C8	ADE	295	140.801	100.789	-6.812	1.00	38.86	A16S
ATOM	25520	C2'	ADE	295	140.357	100.594	-10.079	1.00	45.01	A16S
ATOM	25521	O2'	ADE	295	140.242	101.060	-11.409	1.00	45.01	A16S
ATOM	25522	C3'	ADE	295	138.986	100.224	-9.555	1.00	45.01	A16S
ATOM	25523	O3'	ADE	295	138.275	99.520	-10.551	1.00	45.01	A16S
ATOM	25524	P	GUA	296	138.110	97.930	-10.418	1.00	46.31	A16S
ATOM	25525	O1P	GUA	296	137.597	97.464	-11.738	1.00	47.30	A16S
ATOM	25526	O2P	GUA	296	137.323	97.667	-9.185	1.00	47.30	A16S
ATOM	25527	O5'	GUA	296	139.579	97.365	-10.134	1.00	46.31	A16S
ATOM	25528	C5'	GUA	296	140.604	97.384	-11.147	1.00	46.31	A16S
ATOM	25529	C4'	GUA	296	141.982	97.299	-10.518	1.00	46.31	A16S
ATOM	25530	O4'	GUA	296	142.012	98.143	-9.334	1.00	46.31	A16S
ATOM	25531	C1'	GUA	296	142.915	97.603	-8.383	1.00	46.31	A16S
ATOM	25532	N9	GUA	296	142.215	97.326	-7.130	1.00	47.30	A16S
ATOM	25533	C4	GUA	296	142.818	96.977	-5.946	1.00	47.30	A16S
ATOM	25534	N3	GUA	296	144.145	96.839	-5.749	1.00	47.30	A16S
ATOM	25535	C2	GUA	296	144.421	96.488	-4.512	1.00	47.30	A16S
ATOM	25536	N2	GUA	296	145.695	96.312	-4.140	1.00	47.30	A16S
ATOM	25537	N1	GUA	296	143.471	96.283	-3.546	1.00	47.30	A16S
ATOM	25538	C6	GUA	296	142.100	96.412	-3.728	1.00	47.30	A16S
ATOM	25539	O6	GUA	296	141.327	96.186	-2.790	1.00	47.30	A16S
ATOM	25540	C5	GUA	296	141.788	96.798	-5.047	1.00	47.30	A16S
ATOM	25541	N7	GUA	296	140.559	97.035	-5.648	1.00	47.30	A16S
ATOM	25542	C8	GUA	296	140.860	97.343	-6.883	1.00	47.30	A16S
ATOM	25543	C2'	GUA	296	143.510	96.333	-8.981	1.00	46.31	A16S
ATOM	25544	O2'	GUA	296	144.750	96.675	-9.558	1.00	46.31	A16S
ATOM	25545	C3'	GUA	296	142.451	95.945	-10.006	1.00	46.31	A16S
ATOM	25546	O3'	GUA	296	143.003	95.132	-11.036	1.00	46.31	A16S
ATOM	25547	P	GUA	297	142.950	93.520	-10.905	1.00	45.49	A16S
ATOM	25548	O1P	GUA	297	143.368	92.995	-12.234	1.00	36.86	A16S
ATOM	25549	O2P	GUA	297	141.663	93.069	-10.309	1.00	36.86	A16S
ATOM	25550	O5'	GUA	297	144.083	93.169	-9.844	1.00	45.49	A16S
ATOM	25551	C5'	GUA	297	145.446	93.539	-10.076	1.00	45.49	A16S
ATOM	25552	C4'	GUA	297	146.253	93.346	-8.821	1.00	45.49	A16S
ATOM	25553	O4'	GUA	297	145.749	94.200	-7.763	1.00	45.49	A16S
ATOM	25554	C1'	GUA	297	145.875	93.546	-6.511	1.00	45.49	A16S
ATOM	25555	N9	GUA	297	144.535	93.369	-5.952	1.00	36.86	A16S
ATOM	25556	C4	GUA	297	144.215	93.030	-4.652	1.00	36.86	A16S
ATOM	25557	N3	GUA	297	145.088	92.766	-3.657	1.00	36.86	A16S
ATOM	25558	C2	GUA	297	144.465	92.505	-2.514	1.00	36.86	A16S
ATOM	25559	N2	GUA	297	145.167	92.233	-1.412	1.00	36.86	A16S
ATOM	25560	N1	GUA	297	143.104	92.499	-2.363	1.00	36.86	A16S
ATOM	25561	C6	GUA	297	142.191	92.774	-3.368	1.00	36.86	A16S
ATOM	25562	O6	GUA	297	140.988	92.772	-3.116	1.00	36.86	A16S
ATOM	25563	C5	GUA	297	142.834	93.047	-4.599	1.00	36.86	A16S
ATOM	25564	N7	GUA	297	142.297	93.356	-5.841	1.00	36.86	A16S
ATOM	25565	C8	GUA	297	143.338	93.533	-6.611	1.00	36.86	A16S
ATOM	25566	C2'	GUA	297	146.590	92.228	-6.774	1.00	45.49	A16S
ATOM	25567	O2'	GUA	297	147.987	92.435	-6.663	1.00	45.49	A16S
ATOM	25568	C3'	GUA	297	146.190	91.965	-8.213	1.00	45.49	A16S
ATOM	25569	O3'	GUA	297	147.053	91.070	-8.860	1.00	45.49	A16S
ATOM	25570	P	ADE	298	146.538	89.593	-9.169	1.00	52.70	A16S
ATOM	25571	O1P	ADE	298	147.592	89.031	-10.038	1.00	41.52	A16S
ATOM	25572	O2P	ADE	298	145.136	89.646	-9.650	1.00	41.52	A16S
ATOM	25573	O5'	ADE	298	146.538	88.874	-7.744	1.00	52.70	A16S
ATOM	25574	C5'	ADE	298	147.769	88.646	-7.043	1.00	52.70	A16S
ATOM	25575	C4'	ADE	298	147.508	88.286	-5.599	1.00	52.70	A16S
ATOM	25576	O4'	ADE	298	146.868	89.400	-4.919	1.00	52.70	A16S
ATOM	25577	C1'	ADE	298	146.064	88.909	-3.853	1.00	52.70	A16S
ATOM	25578	N9	ADE	298	144.668	89.270	-4.099	1.00	41.52	A16S
ATOM	25579	C4	ADE	298	143.657	89.241	-3.168	1.00	41.52	A16S
ATOM	25580	N3	ADE	298	143.761	88.962	-1.857	1.00	41.52	A16S
ATOM	25581	C2	ADE	298	142.562	88.984	-1.280	1.00	41.52	A16S
ATOM	25582	N1	ADE	298	141.364	89.230	-1.826	1.00	41.52	A16S
ATOM	25583	C6	ADE	298	141.301	89.506	-3.145	1.00	41.52	A16S
ATOM	25584	N6	ADE	298	140.116	89.733	-3.697	1.00	41.52	A16S
ATOM	25585	C5	ADE	298	142.498	89.527	-3.864	1.00	41.52	A16S
ATOM	25586	N7	ADE	298	142.774	89.783	-5.197	1.00	41.52	A16S
ATOM	25587	C8	ADE	298	144.074	89.633	-5.282	1.00	41.52	A16S
ATOM	25588	C2'	ADE	298	146.192	87.383	-3.852	1.00	52.70	A16S
ATOM	25589	O2'	ADE	298	147.175	86.967	-2.918	1.00	52.70	A16S
ATOM	25590	C3'	ADE	298	146.596	87.106	-5.295	1.00	52.70	A16S
ATOM	25591	O3'	ADE	298	147.234	85.844	-5.385	1.00	52.70	A16S
ATOM	25592	P	URI	299	146.371	84.551	-5.796	1.00	43.54	A16S
ATOM	25593	O1P	URI	299	147.322	83.421	-5.939	1.00	50.12	A16S
ATOM	25594	O2P	URI	299	145.493	84.931	-6.938	1.00	50.12	A16S
ATOM	25595	O5'	URI	299	145.430	84.264	-4.547	1.00	43.54	A16S
ATOM	25596	C5'	URI	299	145.957	83.784	-3.307	1.00	43.54	A16S
ATOM	25597	C4'	URI	299	144.881	83.812	-2.249	1.00	43.54	A16S
ATOM	25598	O4'	URI	299	144.330	85.153	-2.202	1.00	43.54	A16S
ATOM	25599	C1'	URI	299	142.953	85.092	-1.870	1.00	43.54	A16S
ATOM	25600	N1	URI	299	142.154	85.705	-2.950	1.00	50.12	A16S
ATOM	25601	C6	URI	299	142.694	85.991	-4.182	1.00	50.12	A16S
ATOM	25602	C2	URI	299	140.817	85.977	-2.687	1.00	50.12	A16S
ATOM	25603	O2	URI	299	140.291	85.764	-1.612	1.00	50.12	A16S
ATOM	25604	N3	URI	299	140.117	86.511	-3.734	1.00	50.12	A16S
ATOM	25605	C4	URI	299	140.593	86.801	-4.983	1.00	50.12	A16S
ATOM	25606	O4	URI	299	139.817	87.241	-5.831	1.00	50.12	A16S
ATOM	25607	C5	URI	299	141.978	86.514	-5.177	1.00	50.12	A16S
ATOM	25608	C2'	URI	299	142.602	83.624	-1.630	1.00	43.54	A16S
ATOM	25609	O2'	URI	299	142.753	83.364	-0.247	1.00	43.54	A16S
ATOM	25610	C3'	URI	299	143.662	82.912	-2.457	1.00	43.54	A16S
ATOM	25611	O3'	URI	299	143.877	81.598	-1.947	1.00	43.54	A16S
ATOM	25612	P	GUA	300	143.417	80.308	-2.794	1.00	67.71	A16S
ATOM	25613	O1P	GUA	300	144.369	79.233	-2.445	1.00	53.11	A16S
ATOM	25614	O2P	GUA	300	143.176	80.648	-4.226	1.00	53.11	A16S
ATOM	25615	O5'	GUA	300	142.035	79.886	-2.144	1.00	67.71	A16S
ATOM	25616	C5'	GUA	300	141.833	79.957	-0.733	1.00	67.71	A16S
ATOM	25617	C4'	GUA	300	140.459	80.485	-0.465	1.00	67.71	A16S

ATOM	25618	O4'	GUA	300	140.316	81.675	-1.249	1.00	67.71	A16S
ATOM	25619	C1'	GUA	300	138.955	81.876	-1.515	1.00	67.71	A16S
ATOM	25620	N9	GUA	300	138.806	82.522	-2.808	1.00	53.11	A16S
ATOM	25621	C4	GUA	300	137.680	83.156	-3.250	1.00	53.11	A16S
ATOM	25622	N3	GUA	300	136.512	83.243	-2.581	1.00	53.11	A16S
ATOM	25623	C2	GUA	300	135.617	83.920	-3.255	1.00	53.11	A16S
ATOM	25624	N2	GUA	300	134.390	84.076	-2.750	1.00	53.11	A16S
ATOM	25625	N1	GUA	300	135.856	84.489	-4.479	1.00	53.11	A16S
ATOM	25626	C6	GUA	300	137.056	84.416	-5.179	1.00	53.11	A16S
ATOM	25627	O6	GUA	300	137.173	84.974	-6.276	1.00	53.11	A16S
ATOM	25628	C5	GUA	300	138.011	83.674	-4.480	1.00	53.11	A16S
ATOM	25629	N7	GUA	300	139.317	83.350	-4.817	1.00	53.11	A16S
ATOM	25630	C8	GUA	300	139.749	82.661	-3.798	1.00	53.11	A16S
ATOM	25631	C2'	GUA	300	138.198	80.566	-1.296	1.00	67.71	A16S
ATOM	25632	O2'	GUA	300	137.246	80.766	-0.265	1.00	67.71	A16S
ATOM	25633	C3'	GUA	300	139.314	79.590	-0.919	1.00	67.71	A16S
ATOM	25634	O3'	GUA	300	138.904	78.904	0.252	1.00	67.71	A16S
ATOM	25635	P	GUA	301	138.543	77.345	0.205	1.00	71.49	A16S
ATOM	25636	O1P	GUA	301	139.497	76.675	-0.726	1.00	109.50	A16S
ATOM	25637	O2P	GUA	301	137.074	77.194	-0.013	1.00	109.50	A16S
ATOM	25638	O5'	GUA	301	138.882	76.909	1.702	1.00	71.49	A16S
ATOM	25639	C5'	GUA	301	140.181	76.387	2.047	1.00	71.49	A16S
ATOM	25640	C4'	GUA	301	140.486	76.625	3.510	1.00	71.49	A16S
ATOM	25641	O4'	GUA	301	141.171	77.888	3.692	1.00	71.49	A16S
ATOM	25642	C1'	GUA	301	140.864	78.406	4.973	1.00	71.49	A16S
ATOM	25643	N9	GUA	301	140.322	79.754	4.827	1.00	109.50	A16S
ATOM	25644	C4	GUA	301	139.979	80.596	5.858	1.00	109.50	A16S
ATOM	25645	N3	GUA	301	140.091	80.318	7.178	1.00	109.50	A16S
ATOM	25646	C2	GUA	301	139.664	81.317	7.935	1.00	109.50	A16S
ATOM	25647	N2	GUA	301	139.697	81.201	9.274	1.00	109.50	A16S
ATOM	25648	N1	GUA	301	139.170	82.500	7.435	1.00	109.50	A16S
ATOM	25649	C6	GUA	301	139.041	82.809	6.080	1.00	109.50	A16S
ATOM	25650	O6	GUA	301	138.573	83.906	5.738	1.00	109.50	A16S
ATOM	25651	C5	GUA	301	139.497	81.739	5.254	1.00	109.50	A16S
ATOM	25652	N7	GUA	301	139.544	81.624	3.869	1.00	109.50	A16S
ATOM	25653	C8	GUA	301	140.042	80.434	3.662	1.00	109.50	A16S
ATOM	25654	C2'	GUA	301	139.892	77.440	5.659	1.00	71.49	A16S
ATOM	25655	O2'	GUA	301	140.602	76.620	6.562	1.00	71.49	A16S
ATOM	25656	C3'	GUA	301	139.313	76.674	4.474	1.00	71.49	A16S
ATOM	25657	O3'	GUA	301	138.844	75.378	4.833	1.00	71.49	A16S
ATOM	25658	P	CYT	302	137.263	75.130	5.037	1.00	64.24	A16S
ATOM	25659	O1P	CYT	302	136.528	75.728	3.887	1.00	85.21	A16S
ATOM	25660	O2P	CYT	302	137.076	73.690	5.348	1.00	85.21	A16S
ATOM	25661	O5'	CYT	302	136.920	75.974	6.347	1.00	64.24	A16S
ATOM	25662	C5'	CYT	302	137.520	75.625	7.611	1.00	64.24	A16S
ATOM	25663	C4'	CYT	302	137.014	76.515	8.725	1.00	64.24	A16S
ATOM	25664	O4'	CYT	302	137.550	77.861	8.604	1.00	64.24	A16S
ATOM	25665	C1'	CYT	302	136.622	78.789	9.141	1.00	64.24	A16S
ATOM	25666	N1	CYT	302	136.274	79.783	8.108	1.00	85.21	A16S
ATOM	25667	C6	CYT	302	136.542	79.564	6.786	1.00	85.21	A16S
ATOM	25668	C2	CYT	302	135.638	80.959	8.508	1.00	85.21	A16S
ATOM	25669	O2	CYT	302	135.446	81.153	9.718	1.00	85.21	A16S
ATOM	25670	N3	CYT	302	135.252	81.857	7.574	1.00	85.21	A16S
ATOM	25671	C4	CYT	302	135.493	81.622	6.286	1.00	85.21	A16S
ATOM	25672	N4	CYT	302	135.065	82.521	5.399	1.00	85.21	A16S
ATOM	25673	C5	CYT	302	136.175	80.450	5.850	1.00	85.21	A16S
ATOM	25674	C2'	CYT	302	135.398	78.004	9.624	1.00	64.24	A16S
ATOM	25675	O2'	CYT	302	135.485	77.783	11.016	1.00	64.24	A16S
ATOM	25676	C3'	CYT	302	135.515	76.716	8.817	1.00	64.24	A16S
ATOM	25677	O3'	CYT	302	134.858	75.625	9.431	1.00	64.24	A16S
ATOM	25678	P	CYT	303	133.595	74.967	8.697	1.00	57.06	A16S
ATOM	25679	O1P	CYT	303	133.048	73.895	9.558	1.00	46.00	A16S
ATOM	25680	O2P	CYT	303	134.007	74.655	7.307	1.00	46.00	A16S
ATOM	25681	O5'	CYT	303	132.530	76.150	8.623	1.00	57.06	A16S
ATOM	25682	C5'	CYT	303	131.787	76.564	9.789	1.00	57.06	A16S
ATOM	25683	C4'	CYT	303	130.806	77.662	9.434	1.00	57.06	A16S
ATOM	25684	O4'	CYT	303	131.529	78.874	9.102	1.00	57.06	A16S
ATOM	25685	C1'	CYT	303	130.839	79.572	8.076	1.00	57.06	A16S
ATOM	25686	N1	CYT	303	131.699	79.606	6.878	1.00	46.00	A16S
ATOM	25687	C6	CYT	303	132.744	78.735	6.754	1.00	46.00	A16S
ATOM	25688	C2	CYT	303	131.423	80.537	5.850	1.00	46.00	A16S
ATOM	25689	O2	CYT	303	130.466	81.318	5.969	1.00	46.00	A16S
ATOM	25690	N3	CYT	303	132.206	80.548	4.752	1.00	46.00	A16S
ATOM	25691	C4	CYT	303	133.212	79.678	4.641	1.00	46.00	A16S
ATOM	25692	N4	CYT	303	133.945	79.708	3.531	1.00	46.00	A16S
ATOM	25693	C5	CYT	303	133.511	78.731	5.664	1.00	46.00	A16S
ATOM	25694	C2'	CYT	303	129.541	78.815	7.797	1.00	57.06	A16S
ATOM	25695	O2'	CYT	303	128.504	79.343	8.594	1.00	57.06	A16S
ATOM	25696	C3'	CYT	303	129.917	77.410	8.226	1.00	57.06	A16S
ATOM	25697	O3'	CYT	303	128.775	76.629	8.514	1.00	57.06	A16S
ATOM	25698	P	GUA	304	128.289	75.523	7.451	1.00	48.88	A16S
ATOM	25699	O1P	GUA	304	127.306	74.656	8.178	1.00	47.18	A16S
ATOM	25700	O2P	GUA	304	129.479	74.898	6.792	1.00	47.18	A16S
ATOM	25701	O5'	GUA	304	127.517	76.366	6.339	1.00	48.88	A16S
ATOM	25702	C5'	GUA	304	126.292	77.036	6.657	1.00	48.88	A16S
ATOM	25703	C4'	GUA	304	125.859	77.911	5.512	1.00	48.88	A16S
ATOM	25704	O4'	GUA	304	126.839	78.956	5.315	1.00	48.88	A16S
ATOM	25705	C1'	GUA	304	126.938	79.264	3.936	1.00	48.88	A16S
ATOM	25706	N9	GUA	304	128.311	79.014	3.509	1.00	47.18	A16S
ATOM	25707	C4	GUA	304	128.878	79.378	2.307	1.00	47.18	A16S
ATOM	25708	N3	GUA	304	128.260	80.031	1.304	1.00	47.18	A16S
ATOM	25709	C2	GUA	304	129.073	80.269	0.292	1.00	47.18	A16S
ATOM	25710	N2	GUA	304	128.615	80.917	-0.788	1.00	47.18	A16S
ATOM	25711	N1	GUA	304	130.390	79.890	0.266	1.00	47.18	A16S
ATOM	25712	C6	GUA	304	131.045	79.209	1.288	1.00	47.18	A16S
ATOM	25713	O6	GUA	304	132.235	78.910	1.168	1.00	47.18	A16S
ATOM	25714	C5	GUA	304	130.184	78.954	2.376	1.00	47.18	A16S
ATOM	25715	N7	GUA	304	130.434	78.327	3.587	1.00	47.18	A16S
ATOM	25716	C8	GUA	304	129.297	78.383	4.225	1.00	47.18	A16S
ATOM	25717	C2'	GUA	304	125.935	78.389	3.192	1.00	48.88	A16S
ATOM	25718	O2'	GUA	304	124.730	79.090	2.976	1.00	48.88	A16S
ATOM	25719	C3'	GUA	304	125.769	77.234	4.162	1.00	48.88	A16S
ATOM	25720	O3'	GUA	304	124.561	76.539	3.936	1.00	48.88	A16S
ATOM	25721	P	GUA	305	124.549	75.364	2.850	1.00	39.89	A16S
ATOM	25722	O1P	GUA	305	123.243	74.642	2.843	1.00	46.36	A16S
ATOM	25723	O2P	GUA	305	125.810	74.608	3.071	1.00	46.36	A16S

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ATOM  25724  O5' GUA 305     124.696  76.134   1.468  1.00 39.89      A16S
ATOM  25725  C5' GUA 305     123.609  76.895   0.952  1.00 39.89      A16S
ATOM  25726  C4' GUA 305     123.869  77.275  -0.476  1.00 39.89      A16S
ATOM  25727  O4' GUA 305     124.980  78.198  -0.530  1.00 39.89      A16S
ATOM  25728  C1' GUA 305     125.699  78.002  -1.740  1.00 39.89      A16S
ATOM  25729  N9  GUA 305     127.089  77.660  -1.421  1.00 46.36      A16S
ATOM  25730  C4  GUA 305     128.141  77.604  -2.313  1.00 46.36      A16S
ATOM  25731  N3  GUA 305     128.074  77.864  -3.639  1.00 46.36      A16S
ATOM  25732  C2  GUA 305     129.240  77.706  -4.241  1.00 46.36      A16S
ATOM  25733  N2  GUA 305     129.337  77.921  -5.568  1.00 46.36      A16S
ATOM  25734  N1  GUA 305     130.387  77.324  -3.590  1.00 46.36      A16S
ATOM  25735  C6  GUA 305     130.482  77.050  -2.226  1.00 46.36      A16S
ATOM  25736  O6  GUA 305     131.570  76.703  -1.738  1.00 46.36      A16S
ATOM  25737  C5  GUA 305     129.230  77.219  -1.570  1.00 46.36      A16S
ATOM  25738  N7  GUA 305     128.881  77.045  -0.237  1.00 46.36      A16S
ATOM  25739  C8  GUA 305     127.607  77.319  -0.196  1.00 46.36      A16S
ATOM  25740  C2' GUA 305     124.988  76.889  -2.516  1.00 39.89      A16S
ATOM  25741  O2' GUA 305     124.029  77.395  -3.425  1.00 39.89      A16S
ATOM  25742  C3' GUA 305     124.295  76.150  -1.395  1.00 39.89      A16S
ATOM  25743  O3' GUA 305     123.249  75.344  -1.876  1.00 39.89      A16S
ATOM  25744  P   CYT 306     123.493  73.763  -1.997  1.00 43.27      A16S
ATOM  25745  O1P CYT 306     122.148  73.102  -2.161  1.00 35.39      A16S
ATOM  25746  O2P CYT 306     124.386  73.384  -0.858  1.00 35.39      A16S
ATOM  25747  O5' CYT 306     124.308  73.605  -3.357  1.00 43.27      A16S
ATOM  25748  C5' CYT 306     123.709  74.013  -4.594  1.00 43.27      A16S
ATOM  25749  C4' CYT 306     124.750  74.256  -5.661  1.00 43.27      A16S
ATOM  25750  O4' CYT 306     125.715  75.255  -5.237  1.00 43.27      A16S
ATOM  25751  C1' CYT 306     126.963  74.994  -5.850  1.00 43.27      A16S
ATOM  25752  N1  CYT 306     127.950  74.633  -4.815  1.00 35.39      A16S
ATOM  25753  C6  CYT 306     127.582  74.399  -3.519  1.00 35.39      A16S
ATOM  25754  C2  CYT 306     129.284  74.526  -5.193  1.00 35.39      A16S
ATOM  25755  O2  CYT 306     129.581  74.731  -6.382  1.00 35.39      A16S
ATOM  25756  N3  CYT 306     130.216  74.201  -4.265  1.00 35.39      A16S
ATOM  25757  C4  CYT 306     129.849  73.991  -3.003  1.00 35.39      A16S
ATOM  25758  N4  CYT 306     130.799  73.709  -2.117  1.00 35.39      A16S
ATOM  25759  C5  CYT 306     128.490  74.075  -2.591  1.00 35.39      A16S
ATOM  25760  C2' CYT 306     126.755  73.807  -6.777  1.00 43.27      A16S
ATOM  25761  O2' CYT 306     126.333  74.284  -8.040  1.00 43.27      A16S
ATOM  25762  C3' CYT 306     125.620  73.094  -6.077  1.00 43.27      A16S
ATOM  25763  O3' CYT 306     124.967  72.216  -6.951  1.00 43.27      A16S
ATOM  25764  P   CYT 307     125.201  70.645  -6.779  1.00 43.68      A16S
ATOM  25765  O1P CYT 307     124.119  69.948  -7.544  1.00 28.81      A16S
ATOM  25766  O2P CYT 307     125.381  70.393  -5.320  1.00 28.81      A16S
ATOM  25767  O5' CYT 307     126.587  70.381  -7.500  1.00 43.68      A16S
ATOM  25768  C5' CYT 307     126.708  70.582  -8.904  1.00 43.68      A16S
ATOM  25769  C4' CYT 307     128.152  70.600  -9.294  1.00 43.68      A16S
ATOM  25770  O4' CYT 307     128.847  71.579  -8.480  1.00 43.68      A16S
ATOM  25771  C1' CYT 307     130.167  71.140  -8.234  1.00 43.68      A16S
ATOM  25772  N1  CYT 307     130.343  70.968  -6.785  1.00 28.81      A16S
ATOM  25773  C6  CYT 307     129.285  71.073  -5.927  1.00 28.81      A16S
ATOM  25774  C2  CYT 307     131.624  70.673  -6.297  1.00 28.81      A16S
ATOM  25775  O2  CYT 307     132.572  70.576  -7.102  1.00 28.81      A16S
ATOM  25776  N3  CYT 307     131.794  70.488  -4.971  1.00 28.81      A16S
ATOM  25777  C4  CYT 307     130.750  70.568  -4.150  1.00 28.81      A16S
ATOM  25778  N4  CYT 307     130.960  70.337  -2.858  1.00 28.81      A16S
ATOM  25779  C5  CYT 307     129.442  70.878  -4.619  1.00 28.81      A16S
ATOM  25780  C2' CYT 307     130.352  69.818  -8.977  1.00 43.68      A16S
ATOM  25781  O2' CYT 307     130.917  70.099 -10.250  1.00 43.68      A16S
ATOM  25782  C3' CYT 307     128.919  69.318  -9.060  1.00 43.68      A16S
ATOM  25783  O3' CYT 307     128.718  68.395 -10.113  1.00 43.68      A16S
ATOM  25784  P   ADE 308     128.672  66.826  -9.781  1.00 45.97      A16S
ATOM  25785  O1P ADE 308     128.087  66.074 -10.940  1.00 25.01      A16S
ATOM  25786  O2P ADE 308     128.058  66.698  -8.439  1.00 25.01      A16S
ATOM  25787  O5' ADE 308     130.195  66.424  -9.563  1.00 45.97      A16S
ATOM  25788  C5' ADE 308     131.177  66.647 -10.569  1.00 45.97      A16S
ATOM  25789  C4' ADE 308     132.540  66.386  -9.999  1.00 45.97      A16S
ATOM  25790  O4' ADE 308     132.858  67.407  -9.024  1.00 45.97      A16S
ATOM  25791  C1' ADE 308     133.565  66.838  -7.936  1.00 45.97      A16S
ATOM  25792  N9  ADE 308     132.741  66.989  -6.738  1.00 25.01      A16S
ATOM  25793  C4  ADE 308     133.157  66.889  -5.431  1.00 25.01      A16S
ATOM  25794  N3  ADE 308     134.405  66.667  -4.984  1.00 25.01      A16S
ATOM  25795  C2  ADE 308     134.430  66.646  -3.649  1.00 25.01      A16S
ATOM  25796  N1  ADE 308     133.420  66.793  -2.780  1.00 25.01      A16S
ATOM  25797  C6  ADE 308     132.174  66.993  -3.268  1.00 25.01      A16S
ATOM  25798  N6  ADE 308     131.158  67.099  -2.412  1.00 25.01      A16S
ATOM  25799  C5  ADE 308     132.019  67.064  -4.661  1.00 25.01      A16S
ATOM  25800  N7  ADE 308     130.908  67.288  -5.463  1.00 25.01      A16S
ATOM  25801  C8  ADE 308     131.386  67.238  -6.682  1.00 25.01      A16S
ATOM  25802  C2' ADE 308     133.802  65.371  -8.275  1.00 45.97      A16S
ATOM  25803  O2' ADE 308     135.052  65.269  -8.915  1.00 45.97      A16S
ATOM  25804  C3' ADE 308     132.649  65.089  -9.226  1.00 45.97      A16S
ATOM  25805  O3' ADE 308     132.870  63.987 -10.091  1.00 45.97      A16S
ATOM  25806  P   CYT 309     132.246  62.551  -9.714  1.00 40.62      A16S
ATOM  25807  O1P CYT 309     132.235  61.716 -10.950  1.00 34.42      A16S
ATOM  25808  O2P CYT 309     130.969  62.771  -8.964  1.00 34.42      A16S
ATOM  25809  O5' CYT 309     133.298  61.953  -8.676  1.00 40.62      A16S
ATOM  25810  C5' CYT 309     134.673  61.820  -9.023  1.00 40.62      A16S
ATOM  25811  C4' CYT 309     135.509  61.730  -7.781  1.00 40.62      A16S
ATOM  25812  O4' CYT 309     135.342  62.940  -7.007  1.00 40.62      A16S
ATOM  25813  C1' CYT 309     135.486  62.653  -5.629  1.00 40.62      A16S
ATOM  25814  N1  CYT 309     134.252  63.039  -4.923  1.00 34.42      A16S
ATOM  25815  C6  CYT 309     133.072  63.191  -5.595  1.00 34.42      A16S
ATOM  25816  C2  CYT 309     134.299  63.225  -3.534  1.00 34.42      A16S
ATOM  25817  O2  CYT 309     135.381  63.122  -2.950  1.00 34.42      A16S
ATOM  25818  N3  CYT 309     133.169  63.516  -2.866  1.00 34.42      A16S
ATOM  25819  C4  CYT 309     132.020  63.641  -3.527  1.00 34.42      A16S
ATOM  25820  N4  CYT 309     130.925  63.916  -2.820  1.00 34.42      A16S
ATOM  25821  C5  CYT 309     131.943  63.487  -4.944  1.00 34.42      A16S
ATOM  25822  C2' CYT 309     135.766  61.156  -5.502  1.00 40.62      A16S
ATOM  25823  O2' CYT 309     137.165  60.947  -5.400  1.00 40.62      A16S
ATOM  25824  C3' CYT 309     135.174  60.622  -6.799  1.00 40.62      A16S
ATOM  25825  O3' CYT 309     135.748  59.376  -7.174  1.00 40.62      A16S
ATOM  25826  P   ADE 310     135.015  58.009  -6.768  1.00 52.75      A16S
ATOM  25827  O1P ADE 310     135.656  56.930  -7.577  1.00 39.96      A16S
ATOM  25828  O2P ADE 310     133.543  58.196  -6.832  1.00 39.96      A16S
ATOM  25829  O5' ADE 310     135.407  57.815  -5.243  1.00 52.75      A16S
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ATOM  25830  C5' ADE  310     136.773  57.899  -4.824  1.00 52.75      A16S
ATOM  25831  C4' ADE  310     136.865  57.652  -3.345  1.00 52.75      A16S
ATOM  25832  O4' ADE  310     136.089  58.673  -2.665  1.00 52.75      A16S
ATOM  25833  C1' ADE  310     135.114  58.064  -1.857  1.00 52.75      A16S
ATOM  25834  N9  ADE  310     133.924  58.915  -1.828  1.00 39.96      A16S
ATOM  25835  C4  ADE  310     133.511  59.674  -0.761  1.00 39.96      A16S
ATOM  25836  N3  ADE  310     134.133  59.831   0.419  1.00 39.96      A16S
ATOM  25837  C2  ADE  310     133.412  60.606   1.226  1.00 39.96      A16S
ATOM  25838  N1  ADE  310     132.228  61.196   1.001  1.00 39.96      A16S
ATOM  25839  C6  ADE  310     131.637  61.015  -0.198  1.00 39.96      A16S
ATOM  25840  N6  ADE  310     130.456  61.582  -0.425  1.00 39.96      A16S
ATOM  25841  C5  ADE  310     132.302  60.227  -1.140  1.00 39.96      A16S
ATOM  25842  N7  ADE  310     131.979  59.864  -2.436  1.00 39.96      A16S
ATOM  25843  C8  ADE  310     132.977  59.097  -2.803  1.00 39.96      A16S
ATOM  25844  C2' ADE  310     134.898  56.665  -2.438  1.00 52.75      A16S
ATOM  25845  O2' ADE  310     134.390  55.765  -1.475  1.00 52.75      A16S
ATOM  25846  C3' ADE  310     136.308  56.306  -2.890  1.00 52.75      A16S
ATOM  25847  O3' ADE  310     137.076  55.815  -1.773  1.00 52.75      A16S
ATOM  25848  P   GUA  311     137.465  54.251  -1.673  1.00 61.67      A16S
ATOM  25849  O1P GUA  311     136.663  53.515  -2.688  1.00 55.26      A16S
ATOM  25850  O2P GUA  311     137.395  53.846  -0.248  1.00 55.26      A16S
ATOM  25851  O5' GUA  311     138.996  54.194  -2.119  1.00 61.67      A16S
ATOM  25852  C5' GUA  311     139.988  55.059  -1.523  1.00 61.67      A16S
ATOM  25853  C4' GUA  311     141.334  54.849  -2.190  1.00 61.67      A16S
ATOM  25854  O4' GUA  311     141.869  53.559  -1.801  1.00 61.67      A16S
ATOM  25855  C1' GUA  311     142.557  52.970  -2.898  1.00 61.67      A16S
ATOM  25856  N9  GUA  311     141.845  51.749  -3.274  1.00 55.26      A16S
ATOM  25857  C4  GUA  311     142.100  50.941  -4.359  1.00 55.26      A16S
ATOM  25858  N3  GUA  311     143.097  51.103  -5.252  1.00 55.26      A16S
ATOM  25859  C2  GUA  311     143.082  50.163  -6.184  1.00 55.26      A16S
ATOM  25860  N2  GUA  311     144.029  50.155  -7.134  1.00 55.26      A16S
ATOM  25861  N1  GUA  311     142.144  49.160  -6.245  1.00 55.26      A16S
ATOM  25862  C6  GUA  311     141.103  48.984  -5.337  1.00 55.26      A16S
ATOM  25863  O6  GUA  311     140.299  48.053  -5.484  1.00 55.26      A16S
ATOM  25864  C5  GUA  311     141.126  49.966  -4.326  1.00 55.26      A16S
ATOM  25865  N7  GUA  311     140.297  50.136  -3.230  1.00 55.26      A16S
ATOM  25866  C8  GUA  311     140.763  51.197  -2.632  1.00 55.26      A16S
ATOM  25867  C2' GUA  311     142.573  53.995  -4.035  1.00 61.67      A16S
ATOM  25868  O2' GUA  311     143.782  54.732  -3.982  1.00 61.67      A16S
ATOM  25869  C3' GUA  311     141.336  54.827  -3.715  1.00 61.67      A16S
ATOM  25870  O3' GUA  311     141.411  56.132  -4.268  1.00 61.67      A16S
ATOM  25871  P   GUA  312     140.487  56.523  -5.523  1.00 50.46      A16S
ATOM  25872  O1P GUA  312     140.503  58.007  -5.611  1.00 49.71      A16S
ATOM  25873  O2P GUA  312     139.189  55.809  -5.432  1.00 49.71      A16S
ATOM  25874  O5' GUA  312     141.255  55.928  -6.782  1.00 50.46      A16S
ATOM  25875  C5' GUA  312     142.438  56.560  -7.297  1.00 50.46      A16S
ATOM  25876  C4' GUA  312     142.865  55.884  -8.574  1.00 50.46      A16S
ATOM  25877  O4' GUA  312     143.322  54.533  -8.290  1.00 50.46      A16S
ATOM  25878  C1' GUA  312     142.907  53.654  -9.326  1.00 50.46      A16S
ATOM  25879  N9  GUA  312     141.980  52.678  -8.758  1.00 49.71      A16S
ATOM  25880  C4  GUA  312     141.566  51.499  -9.332  1.00 49.71      A16S
ATOM  25881  N3  GUA  312     141.971  51.007 -10.517  1.00 49.71      A16S
ATOM  25882  C2  GUA  312     141.373  49.863 -10.803  1.00 49.71      A16S
ATOM  25883  N2  GUA  312     141.643  49.231 -11.950  1.00 49.71      A16S
ATOM  25884  N1  GUA  312     140.460  49.256  -9.990  1.00 49.71      A16S
ATOM  25885  C6  GUA  312     140.023  49.753  -8.772  1.00 49.71      A16S
ATOM  25886  O6  GUA  312     139.169  49.141  -8.128  1.00 49.71      A16S
ATOM  25887  C5  GUA  312     140.654  50.966  -8.450  1.00 49.71      A16S
ATOM  25888  N7  GUA  312     140.512  51.776  -7.335  1.00 49.71      A16S
ATOM  25889  C8  GUA  312     141.320  52.774  -7.556  1.00 49.71      A16S
ATOM  25890  C2' GUA  312     142.220  54.507 -10.392  1.00 50.46      A16S
ATOM  25891  O2' GUA  312     143.157  54.891 -11.366  1.00 50.46      A16S
ATOM  25892  C3' GUA  312     141.747  55.699  -9.579  1.00 50.46      A16S
ATOM  25893  O3' GUA  312     141.564  56.842 -10.380  1.00 50.46      A16S
ATOM  25894  P   GUA  313     140.150  57.074 -11.105  1.00 54.04      A16S
ATOM  25895  O1P GUA  313     140.290  58.325 -11.913  1.00 58.88      A16S
ATOM  25896  O2P GUA  313     139.063  56.972 -10.077  1.00 58.88      A16S
ATOM  25897  O5' GUA  313     140.021  55.840 -12.109  1.00 54.04      A16S
ATOM  25898  C5' GUA  313     140.825  55.781 -13.292  1.00 54.04      A16S
ATOM  25899  C4' GUA  313     140.431  54.608 -14.143  1.00 54.04      A16S
ATOM  25900  O4' GUA  313     140.767  53.373 -13.462  1.00 54.04      A16S
ATOM  25901  C1' GUA  313     139.885  52.347 -13.887  1.00 54.04      A16S
ATOM  25902  N9  GUA  313     139.176  51.807 -12.731  1.00 58.88      A16S
ATOM  25903  C4  GUA  313     138.448  50.637 -12.708  1.00 58.88      A16S
ATOM  25904  N3  GUA  313     138.292  49.781 -13.739  1.00 58.88      A16S
ATOM  25905  C2  GUA  313     137.531  48.754 -13.419  1.00 58.88      A16S
ATOM  25906  N2  GUA  313     137.285  47.810 -14.332  1.00 58.88      A16S
ATOM  25907  N1  GUA  313     136.961  48.575 -12.185  1.00 58.88      A16S
ATOM  25908  C6  GUA  313     137.104  49.437 -11.108  1.00 58.88      A16S
ATOM  25909  O6  GUA  313     136.548  49.177 -10.037  1.00 58.88      A16S
ATOM  25910  C5  GUA  313     137.927  50.554 -11.439  1.00 58.88      A16S
ATOM  25911  N7  GUA  313     138.325  51.643 -10.673  1.00 58.88      A16S
ATOM  25912  C8  GUA  313     139.067  52.354 -11.478  1.00 58.88      A16S
ATOM  25913  C2' GUA  313     138.899  52.968 -14.874  1.00 54.04      A16S
ATOM  25914  O2' GUA  313     139.356  52.767 -16.196  1.00 54.04      A16S
ATOM  25915  C3' GUA  313     138.960  54.433 -14.478  1.00 54.04      A16S
ATOM  25916  O3' GUA  313     138.494  55.253 -15.533  1.00 54.04      A16S
ATOM  25917  P   GUA  314     136.954  55.720 -15.537  1.00 64.00      A16S
ATOM  25918  O1P GUA  314     136.776  56.710 -16.636  1.00 59.45      A16S
ATOM  25919  O2P GUA  314     136.625  56.101 -14.137  1.00 59.45      A16S
ATOM  25920  O5' GUA  314     136.124  54.412 -15.914  1.00 64.00      A16S
ATOM  25921  C5' GUA  314     136.151  53.915 -17.251  1.00 64.00      A16S
ATOM  25922  C4' GUA  314     135.510  52.553 -17.338  1.00 64.00      A16S
ATOM  25923  O4' GUA  314     136.093  51.656 -16.356  1.00 64.00      A16S
ATOM  25924  C1' GUA  314     135.152  50.651 -16.008  1.00 64.00      A16S
ATOM  25925  N9  GUA  314     134.875  50.722 -14.576  1.00 59.45      A16S
ATOM  25926  C4  GUA  314     134.204  49.776 -13.837  1.00 59.45      A16S
ATOM  25927  N3  GUA  314     133.739  48.596 -14.295  1.00 59.45      A16S
ATOM  25928  C2  GUA  314     133.124  47.908 -13.351  1.00 59.45      A16S
ATOM  25929  N2  GUA  314     132.628  46.697 -13.625  1.00 59.45      A16S
ATOM  25930  N1  GUA  314     132.957  48.352 -12.067  1.00 59.45      A16S
ATOM  25931  C6  GUA  314     133.416  49.566 -11.576  1.00 59.45      A16S
ATOM  25932  O6  GUA  314     133.195  49.877 -10.402  1.00 59.45      A16S
ATOM  25933  C5  GUA  314     134.102  50.306 -12.572  1.00 59.45      A16S
ATOM  25934  N7  GUA  314     134.724  51.544 -12.504  1.00 59.45      A16S
ATOM  25935  C8  GUA  314     135.175  51.746 -13.712  1.00 59.45      A16S
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ATOM	25936	C2'	GUA	314	133.875	50.950	-16.789	1.00	64.00	A16S	ATOM	25989	C1'	CYT	317	121.138	46.588	-10.604	1.00	47.17	A16S
ATOM	25937	O2'	GUA	314	133.856	50.179	-17.976	1.00	64.00	A16S	ATOM	25990	N1	CYT	317	121.606	47.940	-10.267	1.00	44.63	A16S
ATOM	25938	C3'	GUA	314	134.026	52.439	-17.064	1.00	64.00	A16S	ATOM	25991	C6	CYT	317	121.756	48.886	-11.242	1.00	44.63	A16S
ATOM	25939	O3'	GUA	314	133.219	52.849	-18.152	1.00	64.00	A16S	ATOM	25992	C2	CYT	317	121.904	48.251	-8.917	1.00	44.63	A16S
ATOM	25940	P	CYT	315	131.725	53.375	-17.860	1.00	53.18	A16S	ATOM	25993	O2	CYT	317	121.752	47.379	-8.036	1.00	44.63	A16S
ATOM	25941	O1P	CYT	315	131.110	53.730	-19.164	1.00	42.59	A16S	ATOM	25994	N3	CYT	317	122.342	49.496	-8.613	1.00	44.63	A16S
ATOM	25942	O2P	CYT	315	131.754	54.389	-16.745	1.00	42.59	A16S	ATOM	25995	C4	CYT	317	122.475	50.412	-9.577	1.00	44.63	A16S
ATOM	25943	O5'	CYT	315	130.974	52.073	-17.320	1.00	53.18	A16S	ATOM	25996	N4	CYT	317	122.887	51.635	-9.227	1.00	44.63	A16S
ATOM	25944	C5'	CYT	315	130.918	50.874	-18.110	1.00	53.18	A16S	ATOM	25997	C5	CYT	317	122.184	50.119	-10.946	1.00	44.63	A16S
ATOM	25945	C4'	CYT	315	130.156	49.794	-17.380	1.00	53.18	A16S	ATOM	25998	C2'	CYT	317	119.626	46.414	-10.463	1.00	47.17	A16S
ATOM	25946	O4'	CYT	315	130.849	49.418	-16.175	1.00	53.18	A16S	ATOM	25999	O2'	CYT	317	119.378	45.142	-9.916	1.00	47.17	A16S
ATOM	25947	C1'	CYT	315	129.912	48.927	-15.237	1.00	53.18	A16S	ATOM	26000	C3'	CYT	317	119.159	46.561	-11.905	1.00	47.17	A16S
ATOM	25948	N1	CYT	315	130.042	49.667	-13.982	1.00	42.59	A16S	ATOM	26001	O3'	CYT	317	117.954	45.850	-12.187	1.00	47.17	A16S
ATOM	25949	C6	CYT	315	130.438	50.972	-13.963	1.00	42.59	A16S	ATOM	26002	P	URI	318	116.556	46.637	-12.237	1.00	38.54	A16S
ATOM	25950	C2	CYT	315	129.716	49.016	-12.805	1.00	42.59	A16S	ATOM	26003	O1P	URI	318	115.518	45.662	-12.679	1.00	57.60	A16S
ATOM	25951	O2	CYT	315	129.390	47.824	-12.857	1.00	42.59	A16S	ATOM	26004	O2P	URI	318	116.756	47.894	-13.001	1.00	57.60	A16S
ATOM	25952	N3	CYT	315	129.757	49.693	-11.644	1.00	42.59	A16S	ATOM	26005	O5'	URI	318	116.326	47.022	-10.711	1.00	38.54	A16S
ATOM	25953	C4	CYT	315	130.108	50.975	-11.637	1.00	42.59	A16S	ATOM	26006	C5'	URI	318	116.306	45.991	-9.727	1.00	38.54	A16S
ATOM	25954	N4	CYT	315	130.095	51.616	-10.478	1.00	42.59	A16S	ATOM	26007	C4'	URI	318	116.284	46.573	-8.350	1.00	38.54	A16S
ATOM	25955	C5	CYT	315	130.478	51.658	-12.822	1.00	42.59	A16S	ATOM	26008	O4'	URI	318	117.579	47.107	-8.007	1.00	38.54	A16S
ATOM	25956	C2'	CYT	315	128.511	49.123	-15.806	1.00	53.18	A16S	ATOM	26009	C1'	URI	318	117.419	48.229	-7.155	1.00	38.54	A16S
ATOM	25957	O2'	CYT	315	127.996	47.904	-16.289	1.00	53.18	A16S	ATOM	26010	N1	URI	318	118.038	49.390	-7.818	1.00	57.60	A16S
ATOM	25958	C3'	CYT	315	128.763	50.145	-16.897	1.00	53.18	A16S	ATOM	26011	C6	URI	318	118.173	49.433	-9.185	1.00	57.60	A16S
ATOM	25959	O3'	CYT	315	127.806	50.003	-17.916	1.00	53.18	A16S	ATOM	26012	C2	URI	318	118.482	50.440	-7.033	1.00	57.60	A16S
ATOM	25960	P	ADE	316	126.688	51.122	-18.086	1.00	52.23	A16S	ATOM	26013	O2	URI	318	118.394	50.442	-5.825	1.00	57.60	A16S
ATOM	25961	O1P	ADE	316	126.176	51.025	-19.486	1.00	53.27	A16S	ATOM	26014	N3	URI	318	119.039	51.488	-7.722	1.00	57.60	A16S
ATOM	25962	O2P	ADE	316	127.268	52.399	-17.597	1.00	53.27	A16S	ATOM	26015	C4	URI	318	119.204	51.589	-9.084	1.00	57.60	A16S
ATOM	25963	O5'	ADE	316	125.563	50.701	-17.042	1.00	52.23	A16S	ATOM	26016	O4	URI	318	119.771	52.574	-9.561	1.00	57.60	A16S
ATOM	25964	C5'	ADE	316	124.519	49.789	-17.407	1.00	52.23	A16S	ATOM	26017	C5	URI	318	118.724	50.466	-9.823	1.00	57.60	A16S
ATOM	25965	C4'	ADE	316	124.325	48.762	-16.324	1.00	52.23	A16S	ATOM	26018	C2'	URI	318	115.915	48.394	-6.908	1.00	38.54	A16S
ATOM	25966	O4'	ADE	316	125.468	48.778	-15.430	1.00	52.23	A16S	ATOM	26019	O2'	URI	318	115.565	47.678	-5.747	1.00	38.54	A16S
ATOM	25967	C1'	ADE	316	125.056	48.407	-14.134	1.00	52.23	A16S	ATOM	26020	C3'	URI	318	115.331	47.723	-8.137	1.00	38.54	A16S
ATOM	25968	N9	ADE	316	125.484	49.425	-13.173	1.00	53.27	A16S	ATOM	26021	O3'	URI	318	114.029	47.243	-7.942	1.00	38.54	A16S
ATOM	25969	C4	ADE	316	125.474	49.261	-11.808	1.00	53.27	A16S	ATOM	26022	P	GUA	319	112.796	48.084	-8.500	1.00	40.24	A16S
ATOM	25970	N3	ADE	316	125.071	48.177	-11.123	1.00	53.27	A16S	ATOM	26023	O1P	GUA	319	111.644	47.168	-8.724	1.00	61.48	A16S
ATOM	25971	C2	ADE	316	125.200	48.371	-9.816	1.00	53.27	A16S	ATOM	26024	O2P	GUA	319	113.274	48.943	-9.611	1.00	61.48	A16S
ATOM	25972	N1	ADE	316	125.653	49.438	-9.163	1.00	53.27	A16S	ATOM	26025	O5'	GUA	319	112.459	48.988	-7.250	1.00	40.24	A16S
ATOM	25973	C6	ADE	316	126.047	50.513	-9.874	1.00	53.27	A16S	ATOM	26026	C5'	GUA	319	111.987	50.314	-7.413	1.00	40.24	A16S
ATOM	25974	N6	ADE	316	126.493	51.575	-9.208	1.00	53.27	A16S	ATOM	26027	C4'	GUA	319	112.652	51.211	-6.408	1.00	40.24	A16S
ATOM	25975	C5	ADE	316	125.959	50.438	-11.279	1.00	53.27	A16S	ATOM	26028	O4'	GUA	319	114.086	51.052	-6.501	1.00	40.24	A16S
ATOM	25976	N7	ADE	316	126.268	51.338	-12.290	1.00	53.27	A16S	ATOM	26029	C1'	GUA	319	114.704	52.324	-6.543	1.00	40.24	A16S
ATOM	25977	C8	ADE	316	125.968	50.691	-13.391	1.00	53.27	A16S	ATOM	26030	N9	GUA	319	115.176	52.530	-7.914	1.00	61.48	A16S
ATOM	25978	C2'	ADE	316	123.545	48.167	-14.169	1.00	52.23	A16S	ATOM	26031	C4	GUA	319	116.079	53.469	-8.352	1.00	61.48	A16S
ATOM	25979	O2'	ADE	316	123.345	46.777	-14.310	1.00	52.23	A16S	ATOM	26032	N3	GUA	319	116.717	54.376	-7.585	1.00	61.48	A16S
ATOM	25980	C3'	ADE	316	123.124	48.946	-15.413	1.00	52.23	A16S	ATOM	26033	C2	GUA	319	117.496	55.159	-8.299	1.00	61.48	A16S
ATOM	25981	O3'	ADE	316	121.957	48.400	-16.033	1.00	52.23	A16S	ATOM	26034	N2	GUA	319	118.199	56.121	-7.694	1.00	61.48	A16S
ATOM	25982	P	CYT	317	120.482	48.768	-15.475	1.00	47.17	A16S	ATOM	26035	N1	GUA	319	117.638	55.058	-9.657	1.00	61.48	A16S
ATOM	25983	O1P	CYT	317	119.521	48.207	-16.468	1.00	44.63	A16S	ATOM	26036	C6	GUA	319	116.991	54.125	-10.465	1.00	61.48	A16S
ATOM	25984	O2P	CYT	317	120.385	50.202	-15.117	1.00	44.63	A16S	ATOM	26037	O6	GUA	319	117.184	54.114	-11.689	1.00	61.48	A16S
ATOM	25985	O5'	CYT	317	120.377	47.948	-14.110	1.00	47.17	A16S	ATOM	26038	C5	GUA	319	116.160	53.287	-9.717	1.00	61.48	A16S
ATOM	25986	C5'	CYT	317	120.442	46.508	-14.107	1.00	47.17	A16S	ATOM	26039	N7	GUA	319	115.346	52.245	-10.129	1.00	61.48	A16S
ATOM	25987	C4'	CYT	317	120.315	45.983	-12.700	1.00	47.17	A16S	ATOM	26040	C8	GUA	319	114.784	51.824	-9.032	1.00	61.48	A16S
ATOM	25988	O4'	CYT	317	121.495	46.314	-11.943	1.00	47.17	A16S	ATOM	26041	C2'	GUA	319	113.638	53.338	-6.117	1.00	40.24	A16S

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ATOM  26042  O2' GUA 319     113.609  53.400  -4.708  1.00 40.24      A16S
ATOM  26043  C3' GUA 319     112.376  52.680  -6.644  1.00 40.24      A16S
ATOM  26044  O3' GUA 319     111.223  53.033  -5.908  1.00 40.24      A16S
ATOM  26045  P   ADE 320     109.919  53.568  -6.671  1.00 53.63      A16S
ATOM  26046  O1P ADE 320     109.726  52.816  -7.934  1.00 41.77      A16S
ATOM  26047  O2P ADE 320     108.845  53.563  -5.643  1.00 41.77      A16S
ATOM  26048  O5' ADE 320     110.303  55.075  -7.028  1.00 53.63      A16S
ATOM  26049  C5' ADE 320     109.575  55.827  -8.019  1.00 53.63      A16S
ATOM  26050  C4' ADE 320     110.069  57.254  -8.047  1.00 53.63      A16S
ATOM  26051  O4' ADE 320     109.789  57.888  -6.777  1.00 53.63      A16S
ATOM  26052  C1' ADE 320     110.832  58.786  -6.453  1.00 53.63      A16S
ATOM  26053  N9  ADE 320     111.347  58.449  -5.128  1.00 41.77      A16S
ATOM  26054  C4  ADE 320     111.996  59.312  -4.281  1.00 41.77      A16S
ATOM  26055  N3  ADE 320     112.331  60.588  -4.523  1.00 41.77      A16S
ATOM  26056  C2  ADE 320     112.909  61.135  -3.451  1.00 41.77      A16S
ATOM  26057  N1  ADE 320     113.163  60.593  -2.255  1.00 41.77      A16S
ATOM  26058  C6  ADE 320     112.809  59.307  -2.045  1.00 41.77      A16S
ATOM  26059  N6  ADE 320     113.040  58.779  -0.847  1.00 41.77      A16S
ATOM  26060  C5  ADE 320     112.204  58.610  -3.109  1.00 41.77      A16S
ATOM  26061  N7  ADE 320     111.742  57.305  -3.232  1.00 41.77      A16S
ATOM  26062  C8  ADE 320     111.253  57.259  -4.450  1.00 41.77      A16S
ATOM  26063  C2' ADE 320     111.873  58.737  -7.567  1.00 53.63      A16S
ATOM  26064  O2' ADE 320     111.666  59.813  -8.454  1.00 53.63      A16S
ATOM  26065  C3' ADE 320     111.570  57.396  -8.215  1.00 53.63      A16S
ATOM  26066  O3' ADE 320     111.938  57.389  -9.580  1.00 53.63      A16S
ATOM  26067  P   GUA 321     113.283  56.635 -10.028  1.00 51.95      A16S
ATOM  26068  O1P GUA 321     113.366  56.716 -11.524  1.00 51.42      A16S
ATOM  26069  O2P GUA 321     113.283  55.299  -9.353  1.00 51.42      A16S
ATOM  26070  O5' GUA 321     114.457  57.510  -9.397  1.00 51.95      A16S
ATOM  26071  C5' GUA 321     114.666  58.866  -9.818  1.00 51.95      A16S
ATOM  26072  C4' GUA 321     115.468  59.611  -8.789  1.00 51.95      A16S
ATOM  26073  O4' GUA 321     114.781  59.541  -7.522  1.00 51.95      A16S
ATOM  26074  C1' GUA 321     115.718  59.524  -6.468  1.00 51.95      A16S
ATOM  26075  N9  GUA 321     115.374  58.418  -5.575  1.00 51.42      A16S
ATOM  26076  C4  GUA 321     115.646  58.316  -4.229  1.00 51.42      A16S
ATOM  26077  N3  GUA 321     116.293  59.227  -3.477  1.00 51.42      A16S
ATOM  26078  C2  GUA 321     116.396  58.844  -2.213  1.00 51.42      A16S
ATOM  26079  N2  GUA 321     117.006  59.635  -1.320  1.00 51.42      A16S
ATOM  26080  N1  GUA 321     115.907  57.663  -1.731  1.00 51.42      A16S
ATOM  26081  C6  GUA 321     115.231  56.712  -2.485  1.00 51.42      A16S
ATOM  26082  O6  GUA 321     114.815  55.672  -1.943  1.00 51.42      A16S
ATOM  26083  C5  GUA 321     115.115  57.109  -3.840  1.00 51.42      A16S
ATOM  26084  N7  GUA 321     114.520  56.464  -4.911  1.00 51.42      A16S
ATOM  26085  C8  GUA 321     114.696  57.274  -5.915  1.00 51.42      A16S
ATOM  26086  C2' GUA 321     117.125  59.538  -7.086  1.00 51.95      A16S
ATOM  26087  O2' GUA 321     117.630  60.862  -7.044  1.00 51.95      A16S
ATOM  26088  C3' GUA 321     116.862  59.077  -8.520  1.00 51.95      A16S
ATOM  26089  O3' GUA 321     117.759  59.700  -9.445  1.00 51.95      A16S
ATOM  26090  P   ADE 322     118.838  58.825 -10.260  1.00 49.53      A16S
ATOM  26091  O1P ADE 322     119.576  59.800 -11.082  1.00 45.10      A16S
ATOM  26092  O2P ADE 322     118.185  57.674 -10.932  1.00 45.10      A16S
ATOM  26093  O5' ADE 322     119.825  58.290  -9.126  1.00 49.53      A16S
ATOM  26094  C5' ADE 322     120.484  59.209  -8.231  1.00 49.53      A16S
ATOM  26095  C4' ADE 322     121.809  58.644  -7.755  1.00 49.53      A16S
ATOM  26096  O4' ADE 322     121.597  57.674  -6.702  1.00 49.53      A16S
ATOM  26097  C1' ADE 322     122.266  56.478  -7.015  1.00 49.53      A16S
ATOM  26098  N9  ADE 322     121.479  55.367  -6.475  1.00 45.10      A16S
ATOM  26099  C4  ADE 322     121.442  55.003  -5.153  1.00 45.10      A16S
ATOM  26100  N3  ADE 322     122.090  55.581  -4.128  1.00 45.10      A16S
ATOM  26101  C2  ADE 322     121.825  54.948  -2.989  1.00 45.10      A16S
ATOM  26102  N1  ADE 322     121.054  53.882  -2.778  1.00 45.10      A16S
ATOM  26103  C6  ADE 322     120.422  53.328  -3.832  1.00 45.10      A16S
ATOM  26104  N6  ADE 322     119.665  52.259  -3.629  1.00 45.10      A16S
ATOM  26105  C5  ADE 322     120.608  53.909  -5.087  1.00 45.10      A16S
ATOM  26106  N7  ADE 322     120.116  53.592  -6.341  1.00 45.10      A16S
ATOM  26107  C8  ADE 322     120.659  54.485  -7.126  1.00 45.10      A16S
ATOM  26108  C2' ADE 322     122.470  56.486  -8.529  1.00 49.53      A16S
ATOM  26109  O2' ADE 322     123.576  55.686  -8.897  1.00 49.53      A16S
ATOM  26110  C3' ADE 322     122.690  57.973  -8.801  1.00 49.53      A16S
ATOM  26111  O3' ADE 322     124.062  58.335  -8.588  1.00 49.53      A16S
ATOM  26112  P   CYT 323     124.738  59.457  -9.522  1.00 50.98      A16S
ATOM  26113  O1P CYT 323     124.597  60.758  -8.842  1.00 43.29      A16S
ATOM  26114  O2P CYT 323     124.222  59.291 -10.909  1.00 43.29      A16S
ATOM  26115  O5' CYT 323     126.281  59.100  -9.524  1.00 50.98      A16S
ATOM  26116  C5' CYT 323     126.849  58.370 -10.625  1.00 50.98      A16S
ATOM  26117  C4' CYT 323     126.644  56.898 -10.409  1.00 50.98      A16S
ATOM  26118  O4' CYT 323     125.495  56.414 -11.128  1.00 50.98      A16S
ATOM  26119  C1' CYT 323     125.559  55.018 -11.060  1.00 50.98      A16S
ATOM  26120  N1  CYT 323     124.603  54.424 -12.018  1.00 43.29      A16S
ATOM  26121  C6  CYT 323     123.339  54.087 -11.618  1.00 43.29      A16S
ATOM  26122  C2  CYT 323     125.010  54.180 -13.326  1.00 43.29      A16S
ATOM  26123  O2  CYT 323     126.160  54.498 -13.664  1.00 43.29      A16S
ATOM  26124  N3  CYT 323     124.152  53.598 -14.189  1.00 43.29      A16S
ATOM  26125  C4  CYT 323     122.932  53.259 -13.790  1.00 43.29      A16S
ATOM  26126  N4  CYT 323     122.132  52.681 -14.684  1.00 43.29      A16S
ATOM  26127  C5  CYT 323     122.479  53.500 -12.460  1.00 43.29      A16S
ATOM  26128  C2' CYT 323     127.044  54.664 -11.240  1.00 50.98      A16S
ATOM  26129  O2' CYT 323     127.425  53.581 -10.435  1.00 50.98      A16S
ATOM  26130  C3' CYT 323     127.750  55.977 -10.892  1.00 50.98      A16S
ATOM  26131  O3' CYT 323     128.880  55.920  -9.988  1.00 50.98      A16S
ATOM  26132  P   ADE 324     128.723  55.450  -8.435  1.00 55.66      A16S
ATOM  26133  O1P ADE 324     129.709  56.312  -7.719  1.00 50.85      A16S
ATOM  26134  O2P ADE 324     128.814  53.973  -8.291  1.00 50.85      A16S
ATOM  26135  O5' ADE 324     127.277  55.904  -7.929  1.00 55.66      A16S
ATOM  26136  C5' ADE 324     127.126  57.024  -7.004  1.00 55.66      A16S
ATOM  26137  C4' ADE 324     126.631  56.547  -5.649  1.00 55.66      A16S
ATOM  26138  O4' ADE 324     125.373  55.884  -5.828  1.00 55.66      A16S
ATOM  26139  C1' ADE 324     125.194  54.983  -4.774  1.00 55.66      A16S
ATOM  26140  N9  ADE 324     124.480  53.820  -5.270  1.00 50.85      A16S
ATOM  26141  C4  ADE 324     123.930  52.849  -4.478  1.00 50.85      A16S
ATOM  26142  N3  ADE 324     123.953  52.788  -3.136  1.00 50.85      A16S
ATOM  26143  C2  ADE 324     123.299  51.720  -2.711  1.00 50.85      A16S
ATOM  26144  N1  ADE 324     122.680  50.772  -3.422  1.00 50.85      A16S
ATOM  26145  C6  ADE 324     122.692  50.860  -4.770  1.00 50.85      A16S
ATOM  26146  N6  ADE 324     122.096  49.904  -5.486  1.00 50.85      A16S
ATOM  26147  C5  ADE 324     123.341  51.953  -5.341  1.00 50.85      A16S
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ATOM  26148  N7  ADE  324     123.521  52.349  -6.658  1.00 50.85      A16S
ATOM  26149  C8  ADE  324     124.204  53.458  -6.559  1.00 50.85      A16S
ATOM  26150  C2' ADE  324     126.558  54.634  -4.177  1.00 55.66      A16S
ATOM  26151  O2' ADE  324     126.561  54.811  -2.777  1.00 55.66      A16S
ATOM  26152  C3' ADE  324     127.525  55.527  -4.952  1.00 55.66      A16S
ATOM  26153  O3' ADE  324     128.437  56.096  -3.994  1.00 55.66      A16S
ATOM  26154  P   CYT  325     128.237  57.606  -3.443  1.00 55.25      A16S
ATOM  26155  O1P CYT  325     126.868  57.713  -2.877  1.00 53.33      A16S
ATOM  26156  O2P CYT  325     128.690  58.585  -4.462  1.00 53.33      A16S
ATOM  26157  O5' CYT  325     129.258  57.685  -2.231  1.00 55.25      A16S
ATOM  26158  C5' CYT  325     129.176  56.733  -1.178  1.00 55.25      A16S
ATOM  26159  C4' CYT  325     130.524  56.127  -0.903  1.00 55.25      A16S
ATOM  26160  O4' CYT  325     131.421  57.163  -0.424  1.00 55.25      A16S
ATOM  26161  C1' CYT  325     132.049  56.743   0.775  1.00 55.25      A16S
ATOM  26162  N1  CYT  325     131.404  57.469   1.886  1.00 53.33      A16S
ATOM  26163  C6  CYT  325     130.223  58.134   1.691  1.00 53.33      A16S
ATOM  26164  C2  CYT  325     132.000  57.457   3.145  1.00 53.33      A16S
ATOM  26165  O2  CYT  325     133.074  56.848   3.299  1.00 53.33      A16S
ATOM  26166  N3  CYT  325     131.388  58.101   4.170  1.00 53.33      A16S
ATOM  26167  C4  CYT  325     130.221  58.721   3.968  1.00 53.33      A16S
ATOM  26168  N4  CYT  325     129.629  59.303   5.011  1.00 53.33      A16S
ATOM  26169  C5  CYT  325     129.604  58.762   2.693  1.00 53.33      A16S
ATOM  26170  C2' CYT  325     131.812  55.235   0.891  1.00 55.25      A16S
ATOM  26171  O2' CYT  325     132.833  54.488   0.249  1.00 55.25      A16S
ATOM  26172  C3' CYT  325     130.455  55.109   0.219  1.00 55.25      A16S
ATOM  26173  O3' CYT  325     130.139  53.811  -0.255  1.00 55.25      A16S
ATOM  26174  P   GUA  326     128.980  52.977   0.473  1.00 46.39      A16S
ATOM  26175  O1P GUA  326     128.966  51.614  -0.119  1.00 60.14      A16S
ATOM  26176  O2P GUA  326     127.714  53.789   0.511  1.00 60.14      A16S
ATOM  26177  O5' GUA  326     129.510  52.862   1.962  1.00 46.39      A16S
ATOM  26178  C5' GUA  326     130.715  52.163   2.261  1.00 46.39      A16S
ATOM  26179  C4' GUA  326     130.722  51.770   3.712  1.00 46.39      A16S
ATOM  26180  O4' GUA  326     131.055  52.904   4.556  1.00 46.39      A16S
ATOM  26181  C1' GUA  326     130.312  52.828   5.767  1.00 46.39      A16S
ATOM  26182  N9  GUA  326     129.427  53.990   5.851  1.00 60.14      A16S
ATOM  26183  C4  GUA  326     128.781  54.450   6.973  1.00 60.14      A16S
ATOM  26184  N3  GUA  326     128.856  53.915   8.209  1.00 60.14      A16S
ATOM  26185  C2  GUA  326     128.100  54.570   9.078  1.00 60.14      A16S
ATOM  26186  N2  GUA  326     128.046  54.174  10.353  1.00 60.14      A16S
ATOM  26187  N1  GUA  326     127.340  55.663   8.759  1.00 60.14      A16S
ATOM  26188  C6  GUA  326     127.249  56.229   7.492  1.00 60.14      A16S
ATOM  26189  O6  GUA  326     126.526  57.213   7.305  1.00 60.14      A16S
ATOM  26190  C5  GUA  326     128.050  55.536   6.552  1.00 60.14      A16S
ATOM  26191  N7  GUA  326     128.235  55.761   5.198  1.00 60.14      A16S
ATOM  26192  C8  GUA  326     129.059  54.824   4.826  1.00 60.14      A16S
ATOM  26193  C2' GUA  326     129.513  51.523   5.728  1.00 46.39      A16S
ATOM  26194  O2' GUA  326     130.266  50.513   6.364  1.00 46.39      A16S
ATOM  26195  C3' GUA  326     129.383  51.292   4.232  1.00 46.39      A16S
ATOM  26196  O3' GUA  326     129.180  49.948   3.900  1.00 46.39      A16S
ATOM  26197  P   GUA  327     127.715  49.312   4.017  1.00 40.63      A16S
ATOM  26198  O1P GUA  327     126.656  50.358   4.012  1.00 54.43      A16S
ATOM  26199  O2P GUA  327     127.789  48.352   5.147  1.00 54.43      A16S
ATOM  26200  O5' GUA  327     127.579  48.480   2.672  1.00 40.63      A16S
ATOM  26201  C5' GUA  327     127.479  49.138   1.410  1.00 40.63      A16S
ATOM  26202  C4' GUA  327     126.672  48.290   0.484  1.00 40.63      A16S
ATOM  26203  O4' GUA  327     125.734  49.121  -0.221  1.00 40.63      A16S
ATOM  26204  C1' GUA  327     125.481  48.570  -1.495  1.00 40.63      A16S
ATOM  26205  N9  GUA  327     125.927  49.535  -2.493  1.00 54.43      A16S
ATOM  26206  C4  GUA  327     125.718  49.461  -3.847  1.00 54.43      A16S
ATOM  26207  N3  GUA  327     125.034  48.493  -4.489  1.00 54.43      A16S
ATOM  26208  C2  GUA  327     125.021  48.686  -5.789  1.00 54.43      A16S
ATOM  26209  N2  GUA  327     124.376  47.827  -6.585  1.00 54.43      A16S
ATOM  26210  N1  GUA  327     125.637  49.741  -6.407  1.00 54.43      A16S
ATOM  26211  C6  GUA  327     126.348  50.746  -5.765  1.00 54.43      A16S
ATOM  26212  O6  GUA  327     126.876  51.651  -6.423  1.00 54.43      A16S
ATOM  26213  C5  GUA  327     126.360  50.558  -4.374  1.00 54.43      A16S
ATOM  26214  N7  GUA  327     126.942  51.320  -3.371  1.00 54.43      A16S
ATOM  26215  C8  GUA  327     126.658  50.679  -2.274  1.00 54.43      A16S
ATOM  26216  C2' GUA  327     126.277  47.269  -1.596  1.00 40.63      A16S
ATOM  26217  O2' GUA  327     125.479  46.177  -1.201  1.00 40.63      A16S
ATOM  26218  C3' GUA  327     127.397  47.518  -0.599  1.00 40.63      A16S
ATOM  26219  O3' GUA  327     127.977  46.292  -0.171  1.00 40.63      A16S
ATOM  26220  P   GUA  328     129.148  45.610  -1.058  1.00 40.77      A16S
ATOM  26221  O1P GUA  328     129.498  44.321  -0.398  1.00 49.01      A16S
ATOM  26222  O2P GUA  328     130.217  46.619  -1.286  1.00 49.01      A16S
ATOM  26223  O5' GUA  328     128.426  45.279  -2.443  1.00 40.77      A16S
ATOM  26224  C5' GUA  328     127.427  44.254  -2.494  1.00 40.77      A16S
ATOM  26225  C4' GUA  328     127.035  43.950  -3.918  1.00 40.77      A16S
ATOM  26226  O4' GUA  328     126.397  45.117  -4.485  1.00 40.77      A16S
ATOM  26227  C1' GUA  328     126.716  45.219  -5.864  1.00 40.77      A16S
ATOM  26228  N9  GUA  328     127.501  46.440  -6.030  1.00 49.01      A16S
ATOM  26229  C4  GUA  328     127.888  47.024  -7.208  1.00 49.01      A16S
ATOM  26230  N3  GUA  328     127.645  46.548  -8.440  1.00 49.01      A16S
ATOM  26231  C2  GUA  328     128.143  47.331  -9.372  1.00 49.01      A16S
ATOM  26232  N2  GUA  328     128.025  46.984 -10.651  1.00 49.01      A16S
ATOM  26233  N1  GUA  328     128.800  48.510  -9.112  1.00 49.01      A16S
ATOM  26234  C6  GUA  328     129.045  49.026  -7.841  1.00 49.01      A16S
ATOM  26235  O6  GUA  328     129.615  50.121  -7.703  1.00 49.01      A16S
ATOM  26236  C5  GUA  328     128.556  48.178  -6.843  1.00 49.01      A16S
ATOM  26237  N7  GUA  328     128.618  48.300  -5.464  1.00 49.01      A16S
ATOM  26238  C8  GUA  328     127.985  47.248  -5.022  1.00 49.01      A16S
ATOM  26239  C2' GUA  328     127.493  43.959  -6.240  1.00 40.77      A16S
ATOM  26240  O2' GUA  328     126.595  42.968  -6.708  1.00 40.77      A16S
ATOM  26241  C3' GUA  328     128.137  43.607  -4.906  1.00 40.77      A16S
ATOM  26242  O3' GUA  328     128.593  42.265  -4.828  1.00 40.77      A16S
ATOM  26243  P   CYT  329     130.167  41.962  -5.004  1.00 48.25      A16S
ATOM  26244  O1P CYT  329     130.417  40.598  -4.497  1.00 59.30      A16S
ATOM  26245  O2P CYT  329     130.974  43.091  -4.470  1.00 59.30      A16S
ATOM  26246  O5' CYT  329     130.336  41.940  -6.585  1.00 48.25      A16S
ATOM  26247  C5' CYT  329     129.488  41.110  -7.385  1.00 48.25      A16S
ATOM  26248  C4' CYT  329     129.757  41.339  -8.843  1.00 48.25      A16S
ATOM  26249  O4' CYT  329     129.222  42.624  -9.250  1.00 48.25      A16S
ATOM  26250  C1' CYT  329     130.057  43.191 -10.253  1.00 48.25      A16S
ATOM  26251  N1  CYT  329     130.589  44.480  -9.760  1.00 59.30      A16S
ATOM  26252  C6  CYT  329     130.788  44.694  -8.423  1.00 59.30      A16S
ATOM  26253  C2  CYT  329     130.905  45.485 -10.690  1.00 59.30      A16S
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ATOM	26254	O2	CYT	329	130.691	45.282	-11.900	1.00	59.30	A16S	ATOM	26307	C5'	CYT	332	144.917	43.866	-13.365	1.00	58.41	A16S
ATOM	26255	N3	CYT	329	131.427	46.653	-10.247	1.00	59.30	A16S	ATOM	26308	C4'	CYT	332	145.387	45.166	-12.766	1.00	58.41	A16S
ATOM	26256	C4	CYT	329	131.620	46.844	-8.943	1.00	59.30	A16S	ATOM	26309	O4'	CYT	332	144.258	46.049	-12.537	1.00	58.41	A16S
ATOM	26257	N4	CYT	329	132.132	48.003	-8.558	1.00	59.30	A16S	ATOM	26310	C1'	CYT	332	144.507	46.857	-11.392	1.00	58.41	A16S
ATOM	26258	C5	CYT	329	131.295	45.851	-7.977	1.00	59.30	A16S	ATOM	26311	N1	CYT	332	143.479	46.579	-10.366	1.00	59.14	A16S
ATOM	26259	C2'	CYT	329	131.177	42.188	-10.545	1.00	48.25	A16S	ATOM	26312	C6	CYT	332	142.703	45.454	-10.426	1.00	59.14	A16S
ATOM	26260	O2'	CYT	329	130.851	41.397	-11.681	1.00	48.25	A16S	ATOM	26313	C2	CYT	332	143.327	47.486	-9.303	1.00	59.14	A16S
ATOM	26261	C3'	CYT	329	131.221	41.403	-9.237	1.00	48.25	A16S	ATOM	26314	O2	CYT	332	144.016	48.516	-9.289	1.00	59.14	A16S
ATOM	26262	O3'	CYT	329	131.826	40.128	-9.353	1.00	48.25	A16S	ATOM	26315	N3	CYT	332	142.434	47.216	-8.324	1.00	59.14	A16S
ATOM	26263	P	CYT	330	133.397	39.972	-9.049	1.00	60.53	A16S	ATOM	26316	C4	CYT	332	141.700	46.103	-8.382	1.00	59.14	A16S
ATOM	26264	O1P	CYT	330	133.645	38.510	-9.007	1.00	43.87	A16S	ATOM	26317	N4	CYT	332	140.844	45.867	-7.386	1.00	59.14	A16S
ATOM	26265	O2P	CYT	330	133.768	40.814	-7.884	1.00	43.87	A16S	ATOM	26318	C5	CYT	332	141.812	45.179	-9.464	1.00	59.14	A16S
ATOM	26266	O5'	CYT	330	134.091	40.557	-10.358	1.00	60.53	A16S	ATOM	26319	C2'	CYT	332	145.900	46.503	-10.874	1.00	58.41	A16S
ATOM	26267	C5'	CYT	330	133.829	39.953	-11.646	1.00	60.53	A16S	ATOM	26320	O2'	CYT	332	146.834	47.430	-11.390	1.00	58.41	A16S
ATOM	26268	C4'	CYT	330	134.543	40.699	-12.741	1.00	60.53	A16S	ATOM	26321	C3'	CYT	332	146.071	45.086	-11.412	1.00	58.41	A16S
ATOM	26269	O4'	CYT	330	133.917	41.986	-12.962	1.00	60.53	A16S	ATOM	26322	O3'	CYT	332	147.419	44.676	-11.491	1.00	58.41	A16S
ATOM	26270	C1'	CYT	330	134.912	42.956	-13.243	1.00	60.53	A16S	ATOM	26323	P	ADE	333	148.017	43.737	-10.337	1.00	68.73	A16S
ATOM	26271	N1	CYT	330	134.931	43.931	-12.135	1.00	43.87	A16S	ATOM	26324	O1P	ADE	333	149.227	43.085	-10.881	1.00	67.74	A16S
ATOM	26272	C6	CYT	330	134.516	43.569	-10.884	1.00	43.87	A16S	ATOM	26325	O2P	ADE	333	146.925	42.903	-9.780	1.00	67.74	A16S
ATOM	26273	C2	CYT	330	135.399	45.231	-12.375	1.00	43.87	A16S	ATOM	26326	O5'	ADE	333	148.468	44.767	-9.214	1.00	68.73	A16S
ATOM	26274	O2	CYT	330	135.772	45.537	-13.510	1.00	43.87	A16S	ATOM	26327	C5'	ADE	333	149.449	45.776	-9.497	1.00	68.73	A16S
ATOM	26275	N3	CYT	330	135.444	46.112	-11.357	1.00	43.87	A16S	ATOM	26328	C4'	ADE	333	149.444	46.819	-8.412	1.00	68.73	A16S
ATOM	26276	C4	CYT	330	135.060	45.737	-10.135	1.00	43.87	A16S	ATOM	26329	O4'	ADE	333	148.182	47.529	-8.438	1.00	68.73	A16S
ATOM	26277	N4	CYT	330	135.161	46.627	-9.147	1.00	43.87	A16S	ATOM	26330	C1'	ADE	333	147.781	47.835	-7.114	1.00	68.73	A16S
ATOM	26278	C5	CYT	330	134.566	44.428	-9.867	1.00	43.87	A16S	ATOM	26331	N9	ADE	333	146.518	47.152	-6.848	1.00	67.74	A16S
ATOM	26279	C2'	CYT	330	136.250	42.220	-13.338	1.00	60.53	A16S	ATOM	26332	C4	ADE	333	145.692	47.397	-5.782	1.00	67.74	A16S
ATOM	26280	O2'	CYT	330	136.499	41.824	-14.672	1.00	60.53	A16S	ATOM	26333	N3	ADE	333	145.888	48.279	-4.789	1.00	67.74	A16S
ATOM	26281	C3'	CYT	330	135.993	41.020	-12.447	1.00	60.53	A16S	ATOM	26334	C2	ADE	333	144.880	48.243	-3.927	1.00	67.74	A16S
ATOM	26282	O3'	CYT	330	136.843	39.943	-12.754	1.00	60.53	A16S	ATOM	26335	N1	ADE	333	143.775	47.490	-3.949	1.00	67.74	A16S
ATOM	26283	P	CYT	331	138.283	39.867	-12.064	1.00	55.03	A16S	ATOM	26336	C6	ADE	333	143.604	46.623	-4.972	1.00	67.74	A16S
ATOM	26284	O1P	CYT	331	138.886	38.597	-12.530	1.00	64.11	A16S	ATOM	26337	N6	ADE	333	142.489	45.892	-5.014	1.00	67.74	A16S
ATOM	26285	O2P	CYT	331	138.147	40.126	-10.606	1.00	64.11	A16S	ATOM	26338	C5	ADE	333	144.615	46.551	-5.941	1.00	67.74	A16S
ATOM	26286	O5'	CYT	331	139.077	41.082	-12.716	1.00	55.03	A16S	ATOM	26339	N7	ADE	333	144.764	45.771	-7.077	1.00	67.74	A16S
ATOM	26287	C5'	CYT	331	139.436	41.059	-14.102	1.00	55.03	A16S	ATOM	26340	C8	ADE	333	145.907	46.165	-7.577	1.00	67.74	A16S
ATOM	26288	C4'	CYT	331	140.187	42.309	-14.464	1.00	55.03	A16S	ATOM	26341	C2'	ADE	333	148.881	47.360	-6.168	1.00	68.73	A16S
ATOM	26289	O4'	CYT	331	139.301	43.450	-14.348	1.00	55.03	A16S	ATOM	26342	O2'	ADE	333	149.759	48.427	-5.863	1.00	68.73	A16S
ATOM	26290	C1'	CYT	331	140.035	44.586	-13.907	1.00	55.03	A16S	ATOM	26343	C3'	ADE	333	149.540	46.273	-6.998	1.00	68.73	A16S
ATOM	26291	N1	CYT	331	139.504	45.026	-12.595	1.00	64.11	A16S	ATOM	26344	O3'	ADE	333	150.872	46.034	-6.599	1.00	68.73	A16S
ATOM	26292	C6	CYT	331	138.720	44.197	-11.836	1.00	64.11	A16S	ATOM	26345	P	CYT	334	151.221	44.686	-5.806	1.00	63.10	A16S
ATOM	26293	C2	CYT	331	139.838	46.313	-12.119	1.00	64.11	A16S	ATOM	26346	O1P	CYT	334	152.677	44.476	-6.006	1.00	62.29	A16S
ATOM	26294	O2	CYT	331	140.523	47.070	-12.839	1.00	64.11	A16S	ATOM	26347	O2P	CYT	334	150.247	43.626	-6.207	1.00	62.29	A16S
ATOM	26295	N3	CYT	331	139.402	46.695	-10.890	1.00	64.11	A16S	ATOM	26348	O5'	CYT	334	150.956	45.033	-4.276	1.00	63.10	A16S
ATOM	26296	C4	CYT	331	138.658	45.864	-10.157	1.00	64.11	A16S	ATOM	26349	C5'	CYT	334	151.535	46.196	-3.681	1.00	63.10	A16S
ATOM	26297	N4	CYT	331	138.270	46.272	-8.952	1.00	64.11	A16S	ATOM	26350	C4'	CYT	334	150.658	46.711	-2.563	1.00	63.10	A16S
ATOM	26298	C5	CYT	331	138.283	44.572	-10.626	1.00	64.11	A16S	ATOM	26351	O4'	CYT	334	149.360	47.134	-3.071	1.00	63.10	A16S
ATOM	26299	C2'	CYT	331	141.500	44.167	-13.794	1.00	55.03	A16S	ATOM	26352	C1'	CYT	334	148.372	46.946	-2.068	1.00	63.10	A16S
ATOM	26300	O2'	CYT	331	142.173	44.522	-14.989	1.00	55.03	A16S	ATOM	26353	N1	CYT	334	147.317	46.048	-2.576	1.00	62.29	A16S
ATOM	26301	C3'	CYT	331	141.368	42.662	-13.576	1.00	55.03	A16S	ATOM	26354	C6	CYT	334	147.484	45.336	-3.730	1.00	62.29	A16S
ATOM	26302	O3'	CYT	331	142.549	41.943	-13.914	1.00	55.03	A16S	ATOM	26355	C2	CYT	334	146.124	45.929	-1.839	1.00	62.29	A16S
ATOM	26303	P	CYT	332	143.651	41.640	-12.776	1.00	58.41	A16S	ATOM	26356	O2	CYT	334	145.987	46.596	-0.799	1.00	62.29	A16S
ATOM	26304	O1P	CYT	332	144.732	40.884	-13.458	1.00	59.14	A16S	ATOM	26357	N3	CYT	334	145.154	45.095	-2.277	1.00	62.29	A16S
ATOM	26305	O2P	CYT	332	142.977	41.045	-11.590	1.00	59.14	A16S	ATOM	26358	C4	CYT	334	145.333	44.403	-3.401	1.00	62.29	A16S
ATOM	26306	O5'	CYT	332	144.216	43.080	-12.391	1.00	58.41	A16S	ATOM	26359	N4	CYT	334	144.351	43.594	-3.795	1.00	62.29	A16S

ATOM	26360	C5	CYT	334	146.528	44.511	-4.175	1.00	62.29	A16S	ATOM	26413	N1	CYT	337	143.769	34.857	4.922	1.00	68.48	A16S
ATOM	26361	C2'	CYT	334	149.069	46.361	-0.841	1.00	63.10	A16S	ATOM	26414	C6	CYT	337	144.945	35.555	4.839	1.00	68.48	A16S
ATOM	26362	O2'	CYT	334	149.371	47.411	0.063	1.00	63.10	A16S	ATOM	26415	C2	CYT	337	143.141	34.393	3.758	1.00	68.48	A16S
ATOM	26363	C3'	CYT	334	150.306	45.728	-1.464	1.00	63.10	A16S	ATOM	26416	O2	CYT	337	142.079	33.763	3.854	1.00	68.48	A16S
ATOM	26364	O3'	CYT	334	151.355	45.567	-0.536	1.00	63.10	A16S	ATOM	26417	N3	CYT	337	143.710	34.636	2.560	1.00	68.48	A16S
ATOM	26365	P	URI	335	151.543	44.151	0.192	1.00	78.15	A16S	ATOM	26418	C4	CYT	337	144.861	35.307	2.491	1.00	68.48	A16S
ATOM	26366	O1P	URI	335	152.912	44.194	0.785	1.00	51.90	A16S	ATOM	26419	N4	CYT	337	145.391	35.508	1.287	1.00	68.48	A16S
ATOM	26367	O2P	URI	335	151.187	43.080	-0.766	1.00	51.90	A16S	ATOM	26420	C5	CYT	337	145.521	35.797	3.656	1.00	68.48	A16S
ATOM	26368	O5'	URI	335	150.425	44.136	1.330	1.00	78.15	A16S	ATOM	26421	C2'	CYT	337	143.593	33.198	6.734	1.00	97.87	A16S
ATOM	26369	C5'	URI	335	150.471	45.071	2.423	1.00	78.15	A16S	ATOM	26422	O2'	CYT	337	142.546	32.615	7.484	1.00	97.87	A16S
ATOM	26370	C4'	URI	335	149.270	44.899	3.326	1.00	78.15	A16S	ATOM	26423	C3'	CYT	337	144.803	33.572	7.580	1.00	97.87	A16S
ATOM	26371	O4'	URI	335	148.053	45.271	2.627	1.00	78.15	A16S	ATOM	26424	O3'	CYT	337	145.164	32.564	8.507	1.00	97.87	A16S
ATOM	26372	C1'	URI	335	146.976	44.468	3.083	1.00	78.15	A16S	ATOM	26425	P	URI	338	146.322	31.519	8.115	1.00	93.46	A16S
ATOM	26373	N1	URI	335	146.416	43.728	1.941	1.00	51.90	A16S	ATOM	26426	O1P	URI	338	147.522	32.293	7.705	1.00	90.73	A16S
ATOM	26374	C6	URI	335	147.088	43.638	0.738	1.00	51.90	A16S	ATOM	26427	O2P	URI	338	146.429	30.546	9.223	1.00	90.73	A16S
ATOM	26375	C2	URI	335	145.178	43.119	2.109	1.00	51.90	A16S	ATOM	26428	O5'	URI	338	145.745	30.764	6.831	1.00	93.46	A16S
ATOM	26376	O2	URI	335	144.547	43.157	3.157	1.00	51.90	A16S	ATOM	26429	C5'	URI	338	144.531	29.984	6.920	1.00	93.46	A16S
ATOM	26377	N3	URI	335	144.703	42.458	1.002	1.00	51.90	A16S	ATOM	26430	C4'	URI	338	144.141	29.425	5.567	1.00	93.46	A16S
ATOM	26378	C4	URI	335	145.319	42.335	-0.227	1.00	51.90	A16S	ATOM	26431	O4'	URI	338	143.810	30.505	4.655	1.00	93.46	A16S
ATOM	26379	O4	URI	335	144.756	41.704	-1.126	1.00	51.90	A16S	ATOM	26432	C1'	URI	338	144.142	30.126	3.326	1.00	93.46	A16S
ATOM	26380	C5	URI	335	146.596	42.980	-0.320	1.00	51.90	A16S	ATOM	26433	N1	URI	338	145.144	31.061	2.787	1.00	90.73	A16S
ATOM	26381	C2'	URI	335	147.516	43.542	4.171	1.00	78.15	A16S	ATOM	26434	C6	URI	338	145.920	31.848	3.611	1.00	90.73	A16S
ATOM	26382	O2'	URI	335	147.274	44.126	5.435	1.00	78.15	A16S	ATOM	26435	C2	URI	338	145.308	31.103	1.409	1.00	90.73	A16S
ATOM	26383	C3'	URI	335	148.997	43.491	3.824	1.00	78.15	A16S	ATOM	26436	O2	URI	338	144.615	30.460	0.640	1.00	90.73	A16S
ATOM	26384	O3'	URI	335	149.793	43.156	4.944	1.00	78.15	A16S	ATOM	26437	N3	URI	338	146.311	31.928	0.966	1.00	90.73	A16S
ATOM	26385	P	CYT	336	150.240	41.631	5.163	1.00	94.32	A16S	ATOM	26438	C4	URI	338	147.144	32.713	1.737	1.00	90.73	A16S
ATOM	26386	O1P	CYT	336	151.243	41.683	6.253	1.00	51.76	A16S	ATOM	26439	O4	URI	338	148.071	33.324	1.198	1.00	90.73	A16S
ATOM	26387	O2P	CYT	336	150.597	41.020	3.845	1.00	51.76	A16S	ATOM	26440	C5	URI	338	146.886	32.650	3.146	1.00	90.73	A16S
ATOM	26388	O5'	CYT	336	148.932	40.907	5.717	1.00	94.32	A16S	ATOM	26441	C2'	URI	338	144.700	28.703	3.377	1.00	93.46	A16S
ATOM	26389	C5'	CYT	336	148.459	41.174	7.045	1.00	94.32	A16S	ATOM	26442	O2'	URI	338	143.676	27.776	3.067	1.00	93.46	A16S
ATOM	26390	C4'	CYT	336	147.109	40.542	7.263	1.00	94.32	A16S	ATOM	26443	C3'	URI	338	145.188	28.612	4.819	1.00	93.46	A16S
ATOM	26391	O4'	CYT	336	146.156	41.099	6.328	1.00	94.32	A16S	ATOM	26444	O3'	URI	338	145.263	27.262	5.267	1.00	93.46	A16S
ATOM	26392	C1'	CYT	336	145.189	40.117	5.989	1.00	94.32	A16S	ATOM	26445	P	ADE	339	146.665	26.462	5.192	1.00	111.15	A16S
ATOM	26393	N1	CYT	336	145.241	39.861	4.542	1.00	51.76	A16S	ATOM	26446	O1P	ADE	339	147.555	27.112	4.193	1.00	91.67	A16S
ATOM	26394	C6	CYT	336	146.370	40.118	3.813	1.00	51.76	A16S	ATOM	26447	O2P	ADE	339	147.136	26.308	6.595	1.00	91.67	A16S
ATOM	26395	C2	CYT	336	144.109	39.328	3.924	1.00	51.76	A16S	ATOM	26448	O5'	ADE	339	146.223	25.030	4.639	1.00	111.15	A16S
ATOM	26396	O2	CYT	336	143.092	39.131	4.613	1.00	51.76	A16S	ATOM	26449	C5'	ADE	339	146.906	24.381	3.538	1.00	111.15	A16S
ATOM	26397	N3	CYT	336	144.149	39.044	2.602	1.00	51.76	A16S	ATOM	26450	C4'	ADE	339	145.960	23.424	2.845	1.00	111.15	A16S
ATOM	26398	C4	CYT	336	145.258	39.288	1.905	1.00	51.76	A16S	ATOM	26451	O4'	ADE	339	145.271	22.674	3.874	1.00	111.15	A16S
ATOM	26399	N4	CYT	336	145.263	38.990	0.610	1.00	51.76	A16S	ATOM	26452	C1'	ADE	339	143.888	22.609	3.598	1.00	111.15	A16S
ATOM	26400	C5	CYT	336	146.420	39.850	2.507	1.00	51.76	A16S	ATOM	26453	N9	ADE	339	143.208	23.231	4.730	1.00	91.67	A16S
ATOM	26401	C2'	CYT	336	145.522	38.848	6.763	1.00	94.32	A16S	ATOM	26454	C4	ADE	339	142.590	22.563	5.760	1.00	91.67	A16S
ATOM	26402	O2'	CYT	336	144.730	38.809	7.931	1.00	94.32	A16S	ATOM	26455	N3	ADE	339	142.449	21.234	5.902	1.00	91.67	A16S
ATOM	26403	C3'	CYT	336	147.006	39.043	7.040	1.00	94.32	A16S	ATOM	26456	C2	ADE	339	141.822	20.947	7.040	1.00	91.67	A16S
ATOM	26404	O3'	CYT	336	147.410	38.307	8.177	1.00	94.32	A16S	ATOM	26457	N1	ADE	339	141.348	21.775	7.983	1.00	91.67	A16S
ATOM	26405	P	CYT	337	147.804	36.760	8.014	1.00	97.87	A16S	ATOM	26458	C6	ADE	339	141.497	23.106	7.807	1.00	91.67	A16S
ATOM	26406	O1P	CYT	337	148.283	36.327	9.351	1.00	68.48	A16S	ATOM	26459	N6	ADE	339	141.010	23.930	8.740	1.00	91.67	A16S
ATOM	26407	O2P	CYT	337	148.687	36.615	6.827	1.00	68.48	A16S	ATOM	26460	C5	ADE	339	142.157	23.541	6.638	1.00	91.67	A16S
ATOM	26408	O5'	CYT	337	146.423	36.032	7.685	1.00	97.87	A16S	ATOM	26461	N7	ADE	339	142.476	24.802	6.159	1.00	91.67	A16S
ATOM	26409	C5'	CYT	337	145.450	35.794	8.719	1.00	97.87	A16S	ATOM	26462	C8	ADE	339	143.087	24.564	5.024	1.00	91.67	A16S
ATOM	26410	C4'	CYT	337	144.358	34.874	8.222	1.00	97.87	A16S	ATOM	26463	C2'	ADE	339	143.633	23.219	2.218	1.00	111.15	A16S
ATOM	26411	O4'	CYT	337	143.594	35.529	7.173	1.00	97.87	A16S	ATOM	26464	O2'	ADE	339	143.451	22.188	1.276	1.00	111.15	A16S
ATOM	26412	C1'	CYT	337	143.149	34.566	6.229	1.00	97.87	A16S	ATOM	26465	C3'	ADE	339	144.869	24.100	2.028	1.00	111.15	A16S

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ATOM  26466  O3' ADE  339     145.307  24.350   0.674  1.00111.15      A16S
ATOM  26467  P   CYT  340     145.923  23.157  -0.238  1.00102.06      A16S
ATOM  26468  O1P CYT  340     147.141  22.642   0.430  1.00 98.76      A16S
ATOM  26469  O2P CYT  340     144.861  22.210  -0.658  1.00 98.76      A16S
ATOM  26470  O5' CYT  340     146.402  23.904  -1.559  1.00102.06      A16S
ATOM  26471  C5' CYT  340     145.440  24.313  -2.546  1.00102.06      A16S
ATOM  26472  C4' CYT  340     145.851  25.616  -3.190  1.00102.06      A16S
ATOM  26473  O4' CYT  340     145.909  26.670  -2.189  1.00102.06      A16S
ATOM  26474  C1' CYT  340     147.145  27.348  -2.285  1.00102.06      A16S
ATOM  26475  N1  CYT  340     147.581  27.768  -0.936  1.00 98.76      A16S
ATOM  26476  C6  CYT  340     147.630  26.881   0.104  1.00 98.76      A16S
ATOM  26477  C2  CYT  340     147.958  29.113  -0.736  1.00 98.76      A16S
ATOM  26478  O2  CYT  340     147.892  29.910  -1.690  1.00 98.76      A16S
ATOM  26479  N3  CYT  340     148.382  29.509   0.488  1.00 98.76      A16S
ATOM  26480  C4  CYT  340     148.436  28.631   1.491  1.00 98.76      A16S
ATOM  26481  N4  CYT  340     148.873  29.065   2.677  1.00 98.76      A16S
ATOM  26482  C5  CYT  340     148.047  27.265   1.321  1.00 98.76      A16S
ATOM  26483  C2' CYT  340     148.113  26.388  -2.972  1.00102.06      A16S
ATOM  26484  O2' CYT  340     149.119  27.123  -3.638  1.00102.06      A16S
ATOM  26485  C3' CYT  340     147.188  25.627  -3.923  1.00102.06      A16S
ATOM  26486  O3' CYT  340     147.044  26.336  -5.146  1.00102.06      A16S
ATOM  26487  P   GUA  341     146.889  25.521  -6.524  1.00110.96      A16S
ATOM  26488  O1P GUA  341     147.439  26.377  -7.611  1.00 91.31      A16S
ATOM  26489  O2P GUA  341     147.420  24.145  -6.330  1.00 91.31      A16S
ATOM  26490  O5' GUA  341     145.314  25.427  -6.742  1.00110.96      A16S
ATOM  26491  C5' GUA  341     144.505  26.619  -6.791  1.00110.96      A16S
ATOM  26492  C4' GUA  341     143.045  26.259  -6.678  1.00110.96      A16S
ATOM  26493  O4' GUA  341     142.862  25.383  -5.544  1.00110.96      A16S
ATOM  26494  C1' GUA  341     141.576  25.584  -5.001  1.00110.96      A16S
ATOM  26495  N9  GUA  341     141.679  25.632  -3.545  1.00 91.31      A16S
ATOM  26496  C4  GUA  341     142.323  26.574  -2.777  1.00 91.31      A16S
ATOM  26497  N3  GUA  341     142.979  27.658  -3.232  1.00 91.31      A16S
ATOM  26498  C2  GUA  341     143.508  28.365  -2.245  1.00 91.31      A16S
ATOM  26499  N2  GUA  341     144.208  29.476  -2.516  1.00 91.31      A16S
ATOM  26500  N1  GUA  341     143.395  28.035  -0.920  1.00 91.31      A16S
ATOM  26501  C6  GUA  341     142.725  26.925  -0.428  1.00 91.31      A16S
ATOM  26502  O6  GUA  341     142.688  26.718   0.791  1.00 91.31      A16S
ATOM  26503  C5  GUA  341     142.156  26.157  -1.473  1.00 91.31      A16S
ATOM  26504  N7  GUA  341     141.416  24.985  -1.422  1.00 91.31      A16S
ATOM  26505  C8  GUA  341     141.153  24.714  -2.670  1.00 91.31      A16S
ATOM  26506  C2' GUA  341     140.920  26.772  -5.710  1.00110.96      A16S
ATOM  26507  O2' GUA  341     139.942  26.303  -6.616  1.00110.96      A16S
ATOM  26508  C3' GUA  341     142.105  27.424  -6.419  1.00110.96      A16S
ATOM  26509  O3' GUA  341     141.693  28.008  -7.648  1.00110.96      A16S
ATOM  26510  P   GUA  342     141.661  29.607  -7.803  1.00100.31      A16S
ATOM  26511  O1P GUA  342     143.041  30.106  -7.553  1.00 79.14      A16S
ATOM  26512  O2P GUA  342     140.982  29.919  -9.088  1.00 79.14      A16S
ATOM  26513  O5' GUA  342     140.728  30.113  -6.613  1.00100.31      A16S
ATOM  26514  C5' GUA  342     139.447  29.512  -6.384  1.00100.31      A16S
ATOM  26515  C4' GUA  342     138.968  29.797  -4.979  1.00100.31      A16S
ATOM  26516  O4' GUA  342     140.010  29.467  -4.014  1.00100.31      A16S
ATOM  26517  C1' GUA  342     139.894  30.313  -2.878  1.00100.31      A16S
ATOM  26518  N9  GUA  342     141.103  31.123  -2.742  1.00 79.14      A16S
ATOM  26519  C4  GUA  342     141.581  31.674  -1.571  1.00 79.14      A16S
ATOM  26520  N3  GUA  342     141.049  31.507  -0.340  1.00 79.14      A16S
ATOM  26521  C2  GUA  342     141.715  32.183   0.584  1.00 79.14      A16S
ATOM  26522  N2  GUA  342     141.330  32.121   1.866  1.00 79.14      A16S
ATOM  26523  N1  GUA  342     142.808  32.967   0.323  1.00 79.14      A16S
ATOM  26524  C6  GUA  342     143.376  33.157  -0.931  1.00 79.14      A16S
ATOM  26525  O6  GUA  342     144.363  33.893  -1.051  1.00 79.14      A16S
ATOM  26526  C5  GUA  342     142.676  32.426  -1.940  1.00 79.14      A16S
ATOM  26527  N7  GUA  342     142.906  32.326  -3.308  1.00 79.14      A16S
ATOM  26528  C8  GUA  342     141.957  31.537  -3.739  1.00 79.14      A16S
ATOM  26529  C2' GUA  342     138.700  31.232  -3.121  1.00100.31      A16S
ATOM  26530  O2' GUA  342     137.540  30.684  -2.528  1.00100.31      A16S
ATOM  26531  C3' GUA  342     138.623  31.236  -4.641  1.00100.31      A16S
ATOM  26532  O3' GUA  342     137.340  31.636  -5.098  1.00100.31      A16S
ATOM  26533  P   GUA  343     136.849  33.148  -4.837  1.00 71.97      A16S
ATOM  26534  O1P GUA  343     138.034  34.041  -4.952  1.00 67.88      A16S
ATOM  26535  O2P GUA  343     135.638  33.430  -5.662  1.00 67.88      A16S
ATOM  26536  O5' GUA  343     136.421  33.111  -3.307  1.00 71.97      A16S
ATOM  26537  C5' GUA  343     136.346  34.305  -2.549  1.00 71.97      A16S
ATOM  26538  C4' GUA  343     136.575  34.006  -1.099  1.00 71.97      A16S
ATOM  26539  O4' GUA  343     137.904  33.469  -0.915  1.00 71.97      A16S
ATOM  26540  C1' GUA  343     138.480  33.999   0.269  1.00 71.97      A16S
ATOM  26541  N9  GUA  343     139.661  34.765  -0.114  1.00 67.88      A16S
ATOM  26542  C4  GUA  343     140.394  35.588   0.700  1.00 67.88      A16S
ATOM  26543  N3  GUA  343     140.157  35.818   2.007  1.00 67.88      A16S
ATOM  26544  C2  GUA  343     141.021  36.676   2.522  1.00 67.88      A16S
ATOM  26545  N2  GUA  343     140.928  37.018   3.824  1.00 67.88      A16S
ATOM  26546  N1  GUA  343     142.039  37.261   1.798  1.00 67.88      A16S
ATOM  26547  C6  GUA  343     142.292  37.036   0.445  1.00 67.88      A16S
ATOM  26548  O6  GUA  343     143.215  37.623  -0.120  1.00 67.88      A16S
ATOM  26549  C5  GUA  343     141.382  36.116  -0.107  1.00 67.88      A16S
ATOM  26550  N7  GUA  343     141.285  35.619  -1.398  1.00 67.88      A16S
ATOM  26551  C8  GUA  343     140.253  34.822  -1.357  1.00 67.88      A16S
ATOM  26552  C2' GUA  343     137.429  34.880   0.942  1.00 71.97      A16S
ATOM  26553  O2' GUA  343     136.752  34.162   1.951  1.00 71.97      A16S
ATOM  26554  C3' GUA  343     136.557  35.251  -0.246  1.00 71.97      A16S
ATOM  26555  O3' GUA  343     135.231  35.609   0.058  1.00 71.97      A16S
ATOM  26556  P   ADE  344     134.741  37.094  -0.274  1.00 86.80      A16S
ATOM  26557  O1P ADE  344     133.257  37.123  -0.111  1.00 56.63      A16S
ATOM  26558  O2P ADE  344     135.354  37.500  -1.570  1.00 56.63      A16S
ATOM  26559  O5' ADE  344     135.408  37.927   0.899  1.00 86.80      A16S
ATOM  26560  C5' ADE  344     135.185  37.535   2.258  1.00 86.80      A16S
ATOM  26561  C4' ADE  344     135.996  38.388   3.179  1.00 86.80      A16S
ATOM  26562  O4' ADE  344     137.397  38.049   3.065  1.00 86.80      A16S
ATOM  26563  C1' ADE  344     138.185  39.217   3.199  1.00 86.80      A16S
ATOM  26564  N9  ADE  344     138.950  39.397   1.966  1.00 56.63      A16S
ATOM  26565  C4  ADE  344     140.125  40.097   1.856  1.00 56.63      A16S
ATOM  26566  N3  ADE  344     140.782  40.736   2.837  1.00 56.63      A16S
ATOM  26567  C2  ADE  344     141.889  41.301   2.365  1.00 56.63      A16S
ATOM  26568  N1  ADE  344     142.379  41.293   1.123  1.00 56.63      A16S
ATOM  26569  C6  ADE  344     141.695  40.637   0.162  1.00 56.63      A16S
ATOM  26570  N6  ADE  344     142.194  40.621  -1.073  1.00 56.63      A16S
ATOM  26571  C5  ADE  344     140.497  40.005   0.529  1.00 56.63      A16S
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ATOM  26572  N7  ADE  344     139.569  39.267  -0.192  1.00 56.63      A16S
ATOM  26573  C8  ADE  344     138.673  38.928   0.703  1.00 56.63      A16S
ATOM  26574  C2' ADE  344     137.237  40.386   3.454  1.00 86.80      A16S
ATOM  26575  O2' ADE  344     137.145  40.619   4.843  1.00 86.80      A16S
ATOM  26576  C3' ADE  344     135.948  39.858   2.840  1.00 86.80      A16S
ATOM  26577  O3' ADE  344     134.766  40.470   3.310  1.00 86.80      A16S
ATOM  26578  P   GUA  345     134.396  41.941   2.794  1.00 68.39      A16S
ATOM  26579  O1P GUA  345     134.592  41.988   1.306  1.00 50.54      A16S
ATOM  26580  O2P GUA  345     133.068  42.289   3.375  1.00 50.54      A16S
ATOM  26581  O5' GUA  345     135.517  42.814   3.507  1.00 68.39      A16S
ATOM  26582  C5' GUA  345     135.687  44.176   3.195  1.00 68.39      A16S
ATOM  26583  C4' GUA  345     136.992  44.653   3.747  1.00 68.39      A16S
ATOM  26584  O4' GUA  345     138.031  43.714   3.380  1.00 68.39      A16S
ATOM  26585  C1' GUA  345     139.208  44.420   3.029  1.00 68.39      A16S
ATOM  26586  N9  GUA  345     139.511  44.120   1.630  1.00 50.54      A16S
ATOM  26587  C4  GUA  345     140.692  44.365   0.964  1.00 50.54      A16S
ATOM  26588  N3  GUA  345     141.793  44.948   1.483  1.00 50.54      A16S
ATOM  26589  C2  GUA  345     142.771  45.038   0.596  1.00 50.54      A16S
ATOM  26590  N2  GUA  345     143.927  45.614   0.940  1.00 50.54      A16S
ATOM  26591  N1  GUA  345     142.684  44.575  -0.695  1.00 50.54      A16S
ATOM  26592  C6  GUA  345     141.561  43.970  -1.251  1.00 50.54      A16S
ATOM  26593  O6  GUA  345     141.583  43.583  -2.425  1.00 50.54      A16S
ATOM  26594  C5  GUA  345     140.497  43.884  -0.316  1.00 50.54      A16S
ATOM  26595  N7  GUA  345     139.219  43.362  -0.458  1.00 50.54      A16S
ATOM  26596  C8  GUA  345     138.672  43.523   0.716  1.00 50.54      A16S
ATOM  26597  C2' GUA  345     138.950  45.905   3.298  1.00 68.39      A16S
ATOM  26598  O2' GUA  345     139.403  46.218   4.600  1.00 68.39      A16S
ATOM  26599  C3' GUA  345     137.432  45.983   3.172  1.00 68.39      A16S
ATOM  26600  O3' GUA  345     136.842  47.059   3.892  1.00 68.39      A16S
ATOM  26601  P   GUA  346     135.507  47.770   3.328  1.00 71.72      A16S
ATOM  26602  O1P GUA  346     134.494  47.672   4.412  1.00 50.78      A16S
ATOM  26603  O2P GUA  346     135.160  47.304   1.955  1.00 50.78      A16S
ATOM  26604  O5' GUA  346     135.929  49.297   3.208  1.00 71.72      A16S
ATOM  26605  C5' GUA  346     136.689  49.941   4.250  1.00 71.72      A16S
ATOM  26606  C4' GUA  346     137.857  50.669   3.645  1.00 71.72      A16S
ATOM  26607  O4' GUA  346     138.698  49.685   3.027  1.00 71.72      A16S
ATOM  26608  C1' GUA  346     139.275  50.233   1.876  1.00 71.72      A16S
ATOM  26609  N9  GUA  346     139.235  49.238   0.816  1.00 50.78      A16S
ATOM  26610  C4  GUA  346     140.290  48.909   0.020  1.00 50.78      A16S
ATOM  26611  N3  GUA  346     141.518  49.448   0.096  1.00 50.78      A16S
ATOM  26612  C2  GUA  346     142.326  48.944  -0.800  1.00 50.78      A16S
ATOM  26613  N2  GUA  346     143.593  49.369  -0.844  1.00 50.78      A16S
ATOM  26614  N1  GUA  346     141.955  47.988  -1.718  1.00 50.78      A16S
ATOM  26615  C6  GUA  346     140.687  47.426  -1.820  1.00 50.78      A16S
ATOM  26616  O6  GUA  346     140.447  46.591  -2.700  1.00 50.78      A16S
ATOM  26617  C5  GUA  346     139.816  47.948  -0.843  1.00 50.78      A16S
ATOM  26618  N7  GUA  346     138.481  47.665  -0.582  1.00 50.78      A16S
ATOM  26619  C8  GUA  346     138.178  48.455   0.412  1.00 50.78      A16S
ATOM  26620  C2' GUA  346     138.642  51.595   1.571  1.00 71.72      A16S
ATOM  26621  O2' GUA  346     139.572  52.640   1.776  1.00 71.72      A16S
ATOM  26622  C3' GUA  346     137.461  51.639   2.535  1.00 71.72      A16S
ATOM  26623  O3' GUA  346     137.325  52.998   2.991  1.00 71.72      A16S
ATOM  26624  P   CYT  347     137.810  53.426   4.475  1.00 49.24      A16S
ATOM  26625  O1P CYT  347     136.664  53.295   5.423  1.00 66.59      A16S
ATOM  26626  O2P CYT  347     139.109  52.781   4.802  1.00 66.59      A16S
ATOM  26627  O5' CYT  347     138.094  54.978   4.339  1.00 49.24      A16S
ATOM  26628  C5' CYT  347     139.297  55.545   4.868  1.00 49.24      A16S
ATOM  26629  C4' CYT  347     138.973  56.460   6.018  1.00 49.24      A16S
ATOM  26630  O4' CYT  347     138.532  55.692   7.173  1.00 49.24      A16S
ATOM  26631  C1' CYT  347     138.983  56.326   8.360  1.00 49.24      A16S
ATOM  26632  N1  CYT  347     139.886  55.410   9.080  1.00 66.59      A16S
ATOM  26633  C6  CYT  347     140.422  54.313   8.463  1.00 66.59      A16S
ATOM  26634  C2  CYT  347     140.209  55.695  10.412  1.00 66.59      A16S
ATOM  26635  O2  CYT  347     139.698  56.678  10.955  1.00 66.59      A16S
ATOM  26636  N3  CYT  347     141.070  54.894  11.073  1.00 66.59      A16S
ATOM  26637  C4  CYT  347     141.602  53.840  10.456  1.00 66.59      A16S
ATOM  26638  N4  CYT  347     142.461  53.092  11.139  1.00 66.59      A16S
ATOM  26639  C5  CYT  347     141.279  53.511   9.105  1.00 66.59      A16S
ATOM  26640  C2' CYT  347     139.696  57.616   7.946  1.00 49.24      A16S
ATOM  26641  O2' CYT  347     138.759  58.674   7.976  1.00 49.24      A16S
ATOM  26642  C3' CYT  347     140.139  57.283   6.527  1.00 49.24      A16S
ATOM  26643  O3' CYT  347     140.270  58.433   5.714  1.00 49.24      A16S
ATOM  26644  P   ADE  348     141.720  59.078   5.435  1.00 47.15      A16S
ATOM  26645  O1P ADE  348     142.643  58.900   6.583  1.00 43.46      A16S
ATOM  26646  O2P ADE  348     142.147  58.622   4.084  1.00 43.46      A16S
ATOM  26647  O5' ADE  348     141.365  60.629   5.433  1.00 47.15      A16S
ATOM  26648  C5' ADE  348     141.117  61.323   4.220  1.00 47.15      A16S
ATOM  26649  C4' ADE  348     139.718  61.903   4.187  1.00 47.15      A16S
ATOM  26650  O4' ADE  348     139.754  62.740   3.010  1.00 47.15      A16S
ATOM  26651  C1' ADE  348     138.831  62.278   2.062  1.00 47.15      A16S
ATOM  26652  N9  ADE  348     139.546  61.413   1.129  1.00 43.46      A16S
ATOM  26653  C4  ADE  348     139.080  61.045  -0.099  1.00 43.46      A16S
ATOM  26654  N3  ADE  348     137.931  61.430  -0.672  1.00 43.46      A16S
ATOM  26655  C2  ADE  348     137.795  60.865  -1.855  1.00 43.46      A16S
ATOM  26656  N1  ADE  348     138.610  60.014  -2.481  1.00 43.46      A16S
ATOM  26657  C6  ADE  348     139.762  59.646  -1.870  1.00 43.46      A16S
ATOM  26658  N6  ADE  348     140.576  58.782  -2.487  1.00 43.46      A16S
ATOM  26659  C5  ADE  348     140.028  60.191  -0.618  1.00 43.46      A16S
ATOM  26660  N7  ADE  348     141.093  60.043   0.257  1.00 43.46      A16S
ATOM  26661  C8  ADE  348     140.764  60.791   1.273  1.00 43.46      A16S
ATOM  26662  C2' ADE  348     137.757  61.531   2.837  1.00 47.15      A16S
ATOM  26663  O2' ADE  348     136.800  62.464   3.289  1.00 47.15      A16S
ATOM  26664  C3' ADE  348     138.565  60.910   3.972  1.00 47.15      A16S
ATOM  26665  O3' ADE  348     137.713  60.834   5.123  1.00 47.15      A16S
ATOM  26666  P   GUA  349     136.451  59.817   5.146  1.00 49.43      A16S
ATOM  26667  O1P GUA  349     136.987  58.465   5.432  1.00 57.06      A16S
ATOM  26668  O2P GUA  349     135.578  60.014   3.951  1.00 57.06      A16S
ATOM  26669  O5' GUA  349     135.663  60.251   6.470  1.00 49.43      A16S
ATOM  26670  C5' GUA  349     134.948  61.504   6.544  1.00 49.43      A16S
ATOM  26671  C4' GUA  349     133.983  61.529   7.728  1.00 49.43      A16S
ATOM  26672  O4' GUA  349     133.226  60.291   7.791  1.00 49.43      A16S
ATOM  26673  C1' GUA  349     132.971  59.954   9.141  1.00 49.43      A16S
ATOM  26674  N9  GUA  349     133.582  58.654   9.411  1.00 57.06      A16S
ATOM  26675  C4  GUA  349     133.624  57.978  10.618  1.00 57.06      A16S
ATOM  26676  N3  GUA  349     133.100  58.399  11.788  1.00 57.06      A16S
ATOM  26677  C2  GUA  349     133.299  57.526  12.764  1.00 57.06      A16S
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ATOM	26678	N2	GUA	349	132.845	57.778	13.997	1.00	57.06	A16S
ATOM	26679	N1	GUA	349	133.958	56.341	12.605	1.00	57.06	A16S
ATOM	26680	C6	GUA	349	134.506	55.886	11.416	1.00	57.06	A16S
ATOM	26681	O6	GUA	349	135.084	54.796	11.387	1.00	57.06	A16S
ATOM	26682	C5	GUA	349	134.300	56.809	10.357	1.00	57.06	A16S
ATOM	26683	N7	GUA	349	134.676	56.742	9.021	1.00	57.06	A16S
ATOM	26684	C8	GUA	349	134.231	57.853	8.501	1.00	57.06	A16S
ATOM	26685	C2'	GUA	349	133.511	61.089	10.014	1.00	49.43	A16S
ATOM	26686	O2'	GUA	349	132.457	61.991	10.282	1.00	49.43	A16S
ATOM	26687	C3'	GUA	349	134.581	61.700	9.118	1.00	49.43	A16S
ATOM	26688	O3'	GUA	349	134.748	63.090	9.412	1.00	49.43	A16S
ATOM	26689	P	CYT	350	135.792	63.558	10.544	1.00	49.79	A16S
ATOM	26690	O1P	CYT	350	135.665	65.030	10.676	1.00	57.60	A16S
ATOM	26691	O2P	CYT	350	137.113	62.963	10.233	1.00	57.60	A16S
ATOM	26692	O5'	CYT	350	135.253	62.882	11.880	1.00	49.79	A16S
ATOM	26693	C5'	CYT	350	134.255	63.522	12.684	1.00	49.79	A16S
ATOM	26694	C4'	CYT	350	134.278	62.962	14.084	1.00	49.79	A16S
ATOM	26695	O4'	CYT	350	133.894	61.568	14.048	1.00	49.79	A16S
ATOM	26696	C1'	CYT	350	134.629	60.843	15.015	1.00	49.79	A16S
ATOM	26697	N1	CYT	350	135.388	59.784	14.327	1.00	57.60	A16S
ATOM	26698	C6	CYT	350	135.591	59.827	12.974	1.00	57.60	A16S
ATOM	26699	C2	CYT	350	135.885	58.723	15.075	1.00	57.60	A16S
ATOM	26700	O2	CYT	350	135.734	58.728	16.299	1.00	57.60	A16S
ATOM	26701	N3	CYT	350	136.527	57.721	14.448	1.00	57.60	A16S
ATOM	26702	C4	CYT	350	136.697	57.756	13.129	1.00	57.60	A16S
ATOM	26703	N4	CYT	350	137.315	56.726	12.556	1.00	57.60	A16S
ATOM	26704	C5	CYT	350	136.235	58.843	12.341	1.00	57.60	A16S
ATOM	26705	C2'	CYT	350	135.511	61.833	15.772	1.00	49.79	A16S
ATOM	26706	O2'	CYT	350	134.848	62.232	16.952	1.00	49.79	A16S
ATOM	26707	C3'	CYT	350	135.628	62.973	14.775	1.00	49.79	A16S
ATOM	26708	O3'	CYT	350	135.844	64.194	15.449	1.00	49.79	A16S
ATOM	26709	P	ADE	351	137.340	64.709	15.682	1.00	51.96	A16S
ATOM	26710	O1P	ADE	351	137.266	65.862	16.610	1.00	57.13	A16S
ATOM	26711	O2P	ADE	351	137.959	64.878	14.338	1.00	57.13	A16S
ATOM	26712	O5'	ADE	351	138.062	63.504	16.437	1.00	51.96	A16S
ATOM	26713	C5'	ADE	351	137.930	63.358	17.856	1.00	51.96	A16S
ATOM	26714	C4'	ADE	351	138.574	62.074	18.347	1.00	51.96	A16S
ATOM	26715	O4'	ADE	351	137.946	60.911	17.743	1.00	51.96	A16S
ATOM	26716	C1'	ADE	351	138.796	59.793	17.919	1.00	51.96	A16S
ATOM	26717	N9	ADE	351	139.001	59.102	16.649	1.00	57.13	A16S
ATOM	26718	C4	ADE	351	139.408	57.794	16.547	1.00	57.13	A16S
ATOM	26719	N3	ADE	351	139.624	56.927	17.554	1.00	57.13	A16S
ATOM	26720	C2	ADE	351	140.023	55.752	17.084	1.00	57.13	A16S
ATOM	26721	N1	ADE	351	140.225	55.371	15.818	1.00	57.13	A16S
ATOM	26722	C6	ADE	351	140.009	56.269	14.829	1.00	57.13	A16S
ATOM	26723	N6	ADE	351	140.234	55.894	13.565	1.00	57.13	A16S
ATOM	26724	C5	ADE	351	139.566	57.553	15.198	1.00	57.13	A16S
ATOM	26725	N7	ADE	351	139.237	58.681	14.460	1.00	57.13	A16S
ATOM	26726	C8	ADE	351	138.899	59.564	15.366	1.00	57.13	A16S
ATOM	26727	C2'	ADE	351	140.132	60.313	18.442	1.00	51.96	A16S
ATOM	26728	O2'	ADE	351	140.158	60.086	19.832	1.00	51.96	A16S
ATOM	26729	C3'	ADE	351	140.053	61.800	18.118	1.00	51.96	A16S
ATOM	26730	O3'	ADE	351	140.910	62.493	19.010	1.00	51.96	A16S
ATOM	26731	P	GUA	352	142.473	62.636	18.653	1.00	49.86	A16S
ATOM	26732	O1P	GUA	352	143.184	63.227	19.821	1.00	63.01	A16S
ATOM	26733	O2P	GUA	352	142.582	63.288	17.323	1.00	63.01	A16S
ATOM	26734	O5'	GUA	352	142.973	61.135	18.475	1.00	49.86	A16S
ATOM	26735	C5'	GUA	352	143.209	60.288	19.617	1.00	49.86	A16S
ATOM	26736	C4'	GUA	352	143.693	58.928	19.174	1.00	49.86	A16S
ATOM	26737	O4'	GUA	352	142.679	58.292	18.350	1.00	49.86	A16S
ATOM	26738	C1'	GUA	352	143.303	57.501	17.352	1.00	49.86	A16S
ATOM	26739	N9	GUA	352	142.940	58.025	16.040	1.00	63.01	A16S
ATOM	26740	C4	GUA	352	143.229	57.448	14.822	1.00	63.01	A16S
ATOM	26741	N3	GUA	352	143.862	56.271	14.629	1.00	63.01	A16S
ATOM	26742	C2	GUA	352	144.003	55.989	13.345	1.00	63.01	A16S
ATOM	26743	N2	GUA	352	144.598	54.846	12.978	1.00	63.01	A16S
ATOM	26744	N1	GUA	352	143.569	56.806	12.332	1.00	63.01	A16S
ATOM	26745	C6	GUA	352	142.918	58.021	12.511	1.00	63.01	A16S
ATOM	26746	O6	GUA	352	142.570	58.682	11.536	1.00	63.01	A16S
ATOM	26747	C5	GUA	352	142.750	58.327	13.880	1.00	63.01	A16S
ATOM	26748	N7	GUA	352	142.150	59.422	14.487	1.00	63.01	A16S
ATOM	26749	C8	GUA	352	142.282	59.197	15.766	1.00	63.01	A16S
ATOM	26750	C2'	GUA	352	144.813	57.596	17.568	1.00	49.86	A16S
ATOM	26751	O2'	GUA	352	145.237	56.483	18.326	1.00	49.86	A16S
ATOM	26752	C3'	GUA	352	144.937	58.917	18.311	1.00	49.86	A16S
ATOM	26753	O3'	GUA	352	146.114	58.977	19.089	1.00	49.86	A16S
ATOM	26754	P	URI	353	147.516	59.328	18.380	1.00	55.37	A16S
ATOM	26755	O1P	URI	353	148.522	59.518	19.455	1.00	53.05	A16S
ATOM	26756	O2P	URI	353	147.305	60.406	17.378	1.00	53.05	A16S
ATOM	26757	O5'	URI	353	147.875	58.001	17.573	1.00	55.37	A16S
ATOM	26758	C5'	URI	353	148.097	56.749	18.254	1.00	55.37	A16S
ATOM	26759	C4'	URI	353	148.572	55.698	17.278	1.00	55.37	A16S
ATOM	26760	O4'	URI	353	147.522	55.382	16.331	1.00	55.37	A16S
ATOM	26761	C1'	URI	353	148.097	55.104	15.062	1.00	55.37	A16S
ATOM	26762	N1	URI	353	147.536	56.029	14.062	1.00	53.05	A16S
ATOM	26763	C6	URI	353	146.976	57.238	14.425	1.00	53.05	A16S
ATOM	26764	C2	URI	353	147.600	55.649	12.728	1.00	53.05	A16S
ATOM	26765	O2	URI	353	148.062	54.582	12.359	1.00	53.05	A16S
ATOM	26766	N3	URI	353	147.097	56.564	11.840	1.00	53.05	A16S
ATOM	26767	C4	URI	353	146.538	57.786	12.132	1.00	53.05	A16S
ATOM	26768	O4	URI	353	146.150	58.506	11.210	1.00	53.05	A16S
ATOM	26769	C5	URI	353	146.487	58.102	13.531	1.00	53.05	A16S
ATOM	26770	C2'	URI	353	149.617	55.231	15.189	1.00	55.37	A16S
ATOM	26771	O2'	URI	353	150.210	53.971	15.393	1.00	55.37	A16S
ATOM	26772	C3'	URI	353	149.752	56.112	16.415	1.00	55.37	A16S
ATOM	26773	O3'	URI	353	150.980	55.880	17.066	1.00	55.37	A16S
ATOM	26774	P	URI	354	152.240	56.788	16.697	1.00	62.80	A16S
ATOM	26775	O1P	URI	354	153.357	56.363	17.583	1.00	68.64	A16S
ATOM	26776	O2P	URI	354	151.813	58.212	16.685	1.00	68.64	A16S
ATOM	26777	O5'	URI	354	152.550	56.373	15.192	1.00	62.80	A16S
ATOM	26778	C5'	URI	354	153.004	55.052	14.873	1.00	62.80	A16S
ATOM	26779	C4'	URI	354	153.164	54.899	13.381	1.00	62.80	A16S
ATOM	26780	O4'	URI	354	151.868	54.946	12.738	1.00	62.80	A16S
ATOM	26781	C1'	URI	354	151.994	55.539	11.459	1.00	62.80	A16S
ATOM	26782	N1	URI	354	151.136	56.728	11.406	1.00	68.64	A16S
ATOM	26783	C6	URI	354	150.740	57.380	12.549	1.00	68.64	A16S

ATOM	26784	C2	URI	354	150.747	57.171	10.168	1.00	68.64	A16S	ATOM	26837	C3'	GUA	356	158.323	62.901	5.739	1.00	54.60	A16S
ATOM	26785	O2	URI	354	151.079	56.617	9.136	1.00	68.64	A16S	ATOM	26838	O3'	GUA	356	159.489	63.450	5.152	1.00	54.60	A16S
ATOM	26786	N3	URI	354	149.955	58.290	10.180	1.00	68.64	A16S	ATOM	26839	P	GUA	357	160.470	64.350	6.049	1.00	55.44	A16S
ATOM	26787	C4	URI	354	149.522	58.992	11.285	1.00	68.64	A16S	ATOM	26840	O1P	GUA	357	161.611	64.778	5.195	1.00	61.07	A16S
ATOM	26788	O4	URI	354	148.795	59.978	11.136	1.00	68.64	A16S	ATOM	26841	O2P	GUA	357	160.722	63.660	7.342	1.00	61.07	A16S
ATOM	26789	C5	URI	354	149.968	58.465	12.530	1.00	68.64	A16S	ATOM	26842	O5'	GUA	357	159.608	65.638	6.381	1.00	55.44	A16S
ATOM	26790	C2'	URI	354	153.464	55.881	11.240	1.00	62.80	A16S	ATOM	26843	C5'	GUA	357	159.218	66.537	5.344	1.00	55.44	A16S
ATOM	26791	O2'	URI	354	154.039	54.842	10.477	1.00	62.80	A16S	ATOM	26844	C4'	GUA	357	158.320	67.608	5.896	1.00	55.44	A16S
ATOM	26792	C3'	URI	354	153.981	55.964	12.672	1.00	62.80	A16S	ATOM	26845	O4'	GUA	357	157.064	67.030	6.343	1.00	55.44	A16S
ATOM	26793	O3'	URI	354	155.366	55.678	12.763	1.00	62.80	A16S	ATOM	26846	C1'	GUA	357	156.555	67.785	7.427	1.00	55.44	A16S
ATOM	26794	P	ADE	355	156.435	56.841	12.489	1.00	49.36	A16S	ATOM	26847	N9	GUA	357	156.551	66.945	8.619	1.00	61.07	A16S
ATOM	26795	O1P	ADE	355	157.789	56.261	12.697	1.00	72.96	A16S	ATOM	26848	C4	GUA	357	155.633	66.966	9.644	1.00	61.07	A16S
ATOM	26796	O2P	ADE	355	156.027	58.037	13.268	1.00	72.96	A16S	ATOM	26849	N3	GUA	357	154.516	67.720	9.699	1.00	61.07	A16S
ATOM	26797	O5'	ADE	355	156.258	57.151	10.933	1.00	49.36	A16S	ATOM	26850	C2	GUA	357	153.868	67.562	10.842	1.00	61.07	A16S
ATOM	26798	C5'	ADE	355	156.594	56.161	9.941	1.00	49.36	A16S	ATOM	26851	N2	GUA	357	152.738	68.242	11.069	1.00	61.07	A16S
ATOM	26799	C4'	ADE	355	156.339	56.691	8.549	1.00	49.36	A16S	ATOM	26852	N1	GUA	357	154.276	66.729	11.848	1.00	61.07	A16S
ATOM	26800	O4'	ADE	355	154.916	56.784	8.292	1.00	49.36	A16S	ATOM	26853	C6	GUA	357	155.418	65.935	11.816	1.00	61.07	A16S
ATOM	26801	C1'	ADE	355	154.650	57.915	7.479	1.00	49.36	A16S	ATOM	26854	O6	GUA	357	155.697	65.204	12.786	1.00	61.07	A16S
ATOM	26802	N9	ADE	355	153.834	58.840	8.264	1.00	72.96	A16S	ATOM	26855	C5	GUA	357	156.128	66.097	10.594	1.00	61.07	A16S
ATOM	26803	C4	ADE	355	152.957	59.777	7.779	1.00	72.96	A16S	ATOM	26856	N7	GUA	357	157.307	65.508	10.157	1.00	61.07	A16S
ATOM	26804	N3	ADE	355	152.673	60.041	6.494	1.00	72.96	A16S	ATOM	26857	C8	GUA	357	157.507	66.027	8.977	1.00	61.07	A16S
ATOM	26805	C2	ADE	355	151.766	61.009	6.406	1.00	72.96	A16S	ATOM	26858	C2'	GUA	357	157.521	68.949	7.646	1.00	55.44	A16S
ATOM	26806	N1	ADE	355	151.155	61.688	7.382	1.00	72.96	A16S	ATOM	26859	O2'	GUA	357	157.102	70.046	6.855	1.00	55.44	A16S
ATOM	26807	C6	ADE	355	151.462	61.393	8.661	1.00	72.96	A16S	ATOM	26860	C3'	GUA	357	158.818	68.362	7.116	1.00	55.44	A16S
ATOM	26808	N6	ADE	355	150.849	62.061	9.634	1.00	72.96	A16S	ATOM	26861	O3'	GUA	357	159.795	69.348	6.807	1.00	55.44	A16S
ATOM	26809	C5	ADE	355	152.413	60.392	8.890	1.00	72.96	A16S	ATOM	26862	P	ADE	358	160.999	69.620	7.839	1.00	52.13	A16S
ATOM	26810	N7	ADE	355	152.942	59.861	10.055	1.00	72.96	A16S	ATOM	26863	O1P	ADE	358	161.011	68.487	8.809	1.00	52.72	A16S
ATOM	26811	C8	ADE	355	153.779	58.950	9.632	1.00	72.96	A16S	ATOM	26864	O2P	ADE	358	162.220	69.944	7.062	1.00	52.72	A16S
ATOM	26812	C2'	ADE	355	155.996	58.524	7.092	1.00	49.36	A16S	ATOM	26865	O5'	ADE	358	160.564	70.929	8.631	1.00	52.13	A16S
ATOM	26813	O2'	ADE	355	156.422	57.948	5.875	1.00	49.36	A16S	ATOM	26866	C5'	ADE	358	161.234	71.315	9.844	1.00	52.13	A16S
ATOM	26814	C3'	ADE	355	156.873	58.079	8.252	1.00	49.36	A16S	ATOM	26867	C4'	ADE	358	160.315	72.153	10.704	1.00	52.13	A16S
ATOM	26815	O3'	ADE	355	158.231	58.033	7.893	1.00	49.36	A16S	ATOM	26868	O4'	ADE	358	159.985	73.370	9.995	1.00	52.13	A16S
ATOM	26816	P	GUA	356	159.186	59.259	8.278	1.00	54.60	A16S	ATOM	26869	C1'	ADE	358	158.653	73.750	10.289	1.00	52.13	A16S
ATOM	26817	O1P	GUA	356	158.915	59.614	9.701	1.00	67.76	A16S	ATOM	26870	N9	ADE	358	157.903	73.755	9.038	1.00	52.72	A16S
ATOM	26818	O2P	GUA	356	160.572	58.907	7.859	1.00	67.76	A16S	ATOM	26871	C4	ADE	358	156.751	74.452	8.781	1.00	52.72	A16S
ATOM	26819	O5'	GUA	356	158.669	60.445	7.348	1.00	54.60	A16S	ATOM	26872	N3	ADE	358	156.089	75.268	9.615	1.00	52.72	A16S
ATOM	26820	C5'	GUA	356	158.794	60.364	5.922	1.00	54.60	A16S	ATOM	26873	C2	ADE	358	155.007	75.771	9.016	1.00	52.72	A16S
ATOM	26821	C4'	GUA	356	158.035	61.490	5.255	1.00	54.60	A16S	ATOM	26874	N1	ADE	358	154.552	75.566	7.772	1.00	52.72	A16S
ATOM	26822	O4'	GUA	356	156.607	61.323	5.460	1.00	54.60	A16S	ATOM	26875	C6	ADE	358	155.251	74.746	6.960	1.00	52.72	A16S
ATOM	26823	C1'	GUA	356	155.988	62.594	5.558	1.00	54.60	A16S	ATOM	26876	N6	ADE	358	154.811	74.550	5.718	1.00	52.72	A16S
ATOM	26824	N9	GUA	356	155.457	62.739	6.909	1.00	67.76	A16S	ATOM	26877	C5	ADE	358	156.413	74.148	7.476	1.00	52.72	A16S
ATOM	26825	C4	GUA	356	154.393	63.520	7.298	1.00	67.76	A16S	ATOM	26878	N7	ADE	358	157.337	73.277	6.921	1.00	52.72	A16S
ATOM	26826	N3	GUA	356	153.612	64.262	6.486	1.00	67.76	A16S	ATOM	26879	C8	ADE	358	158.196	73.076	7.885	1.00	52.72	A16S
ATOM	26827	C2	GUA	356	152.695	64.927	7.160	1.00	67.76	A16S	ATOM	26880	C2'	ADE	358	158.099	72.760	11.309	1.00	52.13	A16S
ATOM	26828	N2	GUA	356	151.837	65.719	6.515	1.00	67.76	A16S	ATOM	26881	O2'	ADE	358	158.300	73.277	12.606	1.00	52.13	A16S
ATOM	26829	N1	GUA	356	152.553	64.869	8.521	1.00	67.76	A16S	ATOM	26882	C3'	ADE	358	158.968	71.540	11.058	1.00	52.13	A16S
ATOM	26830	C6	GUA	356	153.343	64.115	9.378	1.00	67.76	A16S	ATOM	26883	O3'	ADE	358	159.057	70.748	12.229	1.00	52.13	A16S
ATOM	26831	O6	GUA	356	153.132	64.143	10.596	1.00	67.76	A16S	ATOM	26884	P	ADE	359	158.021	69.543	12.454	1.00	55.87	A16S
ATOM	26832	C5	GUA	356	154.331	63.393	8.670	1.00	67.76	A16S	ATOM	26885	O1P	ADE	359	158.356	68.945	13.775	1.00	69.43	A16S
ATOM	26833	N7	GUA	356	155.315	62.530	9.131	1.00	67.76	A16S	ATOM	26886	O2P	ADE	359	158.020	68.695	11.232	1.00	69.43	A16S
ATOM	26834	C8	GUA	356	155.950	62.160	8.054	1.00	67.76	A16S	ATOM	26887	O5'	ADE	359	156.610	70.262	12.578	1.00	55.87	A16S
ATOM	26835	C2'	GUA	356	157.068	63.646	5.309	1.00	54.60	A16S	ATOM	26888	C5'	ADE	359	156.344	71.158	13.676	1.00	55.87	A16S
ATOM	26836	O2'	GUA	356	157.095	63.975	3.934	1.00	54.60	A16S	ATOM	26889	C4'	ADE	359	154.953	71.718	13.561	1.00	55.87	A16S

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ATOM  26890  O4' ADE  359     154.873  72.524  12.369  1.00 55.87      A16S
ATOM  26891  C1' ADE  359     153.613  72.348  11.761  1.00 55.87      A16S
ATOM  26892  N9  ADE  359     153.853  71.934  10.380  1.00 69.43      A16S
ATOM  26893  C4  ADE  359     153.213  72.402   9.260  1.00 69.43      A16S
ATOM  26894  N3  ADE  359     152.218  73.301   9.202  1.00 69.43      A16S
ATOM  26895  C2  ADE  359     151.859  73.520   7.942  1.00 69.43      A16S
ATOM  26896  N1  ADE  359     152.346  72.986   6.821  1.00 69.43      A16S
ATOM  26897  C6  ADE  359     153.349  72.092   6.918  1.00 69.43      A16S
ATOM  26898  N6  ADE  359     153.846  71.571   5.799  1.00 69.43      A16S
ATOM  26899  C5  ADE  359     153.813  71.769   8.195  1.00 69.43      A16S
ATOM  26900  N7  ADE  359     154.801  70.907   8.633  1.00 69.43      A16S
ATOM  26901  C8  ADE  359     154.779  71.036   9.932  1.00 69.43      A16S
ATOM  26902  C2' ADE  359     152.781  71.404  12.640  1.00 55.87      A16S
ATOM  26903  O2' ADE  359     151.943  72.162  13.493  1.00 55.87      A16S
ATOM  26904  C3' ADE  359     153.856  70.676  13.434  1.00 55.87      A16S
ATOM  26905  O3' ADE  359     153.400  70.352  14.742  1.00 55.87      A16S
ATOM  26906  P   URI  360     152.770  68.907  15.042  1.00 51.17      A16S
ATOM  26907  O1P URI  360     153.081  68.626  16.469  1.00 61.27      A16S
ATOM  26908  O2P URI  360     153.194  67.939  13.994  1.00 61.27      A16S
ATOM  26909  O5' URI  360     151.200  69.133  14.877  1.00 51.17      A16S
ATOM  26910  C5' URI  360     150.481  70.054  15.723  1.00 51.17      A16S
ATOM  26911  C4' URI  360     149.089  70.287  15.180  1.00 51.17      A16S
ATOM  26912  O4' URI  360     149.118  71.185  14.059  1.00 51.17      A16S
ATOM  26913  C1' URI  360     147.969  70.961  13.280  1.00 51.17      A16S
ATOM  26914  N1  URI  360     148.288  71.235  11.872  1.00 61.27      A16S
ATOM  26915  C6  URI  360     147.481  72.068  11.143  1.00 61.27      A16S
ATOM  26916  C2  URI  360     149.415  70.655  11.304  1.00 61.27      A16S
ATOM  26917  O2  URI  360     150.154  69.895  11.904  1.00 61.27      A16S
ATOM  26918  N3  URI  360     149.642  71.003   9.998  1.00 61.27      A16S
ATOM  26919  C4  URI  360     148.878  71.844   9.220  1.00 61.27      A16S
ATOM  26920  O4  URI  360     149.246  72.112   8.080  1.00 61.27      A16S
ATOM  26921  C5  URI  360     147.730  72.382   9.874  1.00 61.27      A16S
ATOM  26922  C2' URI  360     147.405  69.572  13.612  1.00 51.17      A16S
ATOM  26923  O2' URI  360     146.062  69.637  14.041  1.00 51.17      A16S
ATOM  26924  C3' URI  360     148.376  69.045  14.676  1.00 51.17      A16S
ATOM  26925  O3' URI  360     147.667  68.512  15.784  1.00 51.17      A16S
ATOM  26926  P   CYT  361     147.642  66.931  16.051  1.00 50.05      A16S
ATOM  26927  O1P CYT  361     149.046  66.453  16.200  1.00 52.46      A16S
ATOM  26928  O2P CYT  361     146.741  66.303  15.047  1.00 52.46      A16S
ATOM  26929  O5' CYT  361     146.941  66.831  17.471  1.00 50.05      A16S
ATOM  26930  C5' CYT  361     147.468  67.544  18.596  1.00 50.05      A16S
ATOM  26931  C4' CYT  361     146.418  67.652  19.665  1.00 50.05      A16S
ATOM  26932  O4' CYT  361     145.472  68.706  19.367  1.00 50.05      A16S
ATOM  26933  C1' CYT  361     144.141  68.220  19.434  1.00 50.05      A16S
ATOM  26934  N1  CYT  361     143.403  68.829  18.304  1.00 52.46      A16S
ATOM  26935  C6  CYT  361     144.057  69.115  17.140  1.00 52.46      A16S
ATOM  26936  C2  CYT  361     142.023  69.117  18.427  1.00 52.46      A16S
ATOM  26937  O2  CYT  361     141.432  68.843  19.475  1.00 52.46      A16S
ATOM  26938  N3  CYT  361     141.373  69.682  17.390  1.00 52.46      A16S
ATOM  26939  C4  CYT  361     142.031  69.951  16.264  1.00 52.46      A16S
ATOM  26940  N4  CYT  361     141.354  70.495  15.262  1.00 52.46      A16S
ATOM  26941  C5  CYT  361     143.419  69.668  16.110  1.00 52.46      A16S
ATOM  26942  C2' CYT  361     144.200  66.693  19.349  1.00 50.05      A16S
ATOM  26943  O2' CYT  361     143.176  66.108  20.125  1.00 50.05      A16S
ATOM  26944  C3' CYT  361     145.606  66.393  19.863  1.00 50.05      A16S
ATOM  26945  O3' CYT  361     145.959  65.536  20.954  1.00 50.05      A16S
ATOM  26946  P   URI  362     145.935  66.081  22.466  1.00 46.01      A16S
ATOM  26947  O1P URI  362     145.703  67.555  22.474  1.00 76.47      A16S
ATOM  26948  O2P URI  362     147.161  65.529  23.102  1.00 76.47      A16S
ATOM  26949  O5' URI  362     144.660  65.365  23.093  1.00 46.01      A16S
ATOM  26950  C5' URI  362     144.305  64.031  22.711  1.00 46.01      A16S
ATOM  26951  C4' URI  362     143.189  63.546  23.584  1.00 46.01      A16S
ATOM  26952  O4' URI  362     142.127  64.522  23.539  1.00 46.01      A16S
ATOM  26953  C1' URI  362     140.925  63.895  23.165  1.00 46.01      A16S
ATOM  26954  N1  URI  362     140.131  64.858  22.381  1.00 76.47      A16S
ATOM  26955  C6  URI  362     140.430  65.154  21.068  1.00 76.47      A16S
ATOM  26956  C2  URI  362     139.059  65.472  23.018  1.00 76.47      A16S
ATOM  26957  O2  URI  362     138.753  65.247  24.178  1.00 76.47      A16S
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ATOM  26959  C4  URI  362     138.606  66.701  20.936  1.00 76.47      A16S
ATOM  26960  O4  URI  362     137.878  67.521  20.379  1.00 76.47      A16S
ATOM  26961  C5  URI  362     139.723  66.030  20.346  1.00 76.47      A16S
ATOM  26962  C2' URI  362     141.315  62.593  22.461  1.00 46.01      A16S
ATOM  26963  O2' URI  362     140.272  61.642  22.542  1.00 46.01      A16S
ATOM  26964  C3' URI  362     142.579  62.197  23.225  1.00 46.01      A16S
ATOM  26965  O3' URI  362     142.255  61.517  24.447  1.00 46.01      A16S
ATOM  26966  P   URI  363     143.172  60.290  24.962  1.00 53.49      A16S
ATOM  26967  O1P URI  363     142.753  59.993  26.357  1.00 69.59      A16S
ATOM  26968  O2P URI  363     144.602  60.550  24.665  1.00 69.59      A16S
ATOM  26969  O5' URI  363     142.701  59.073  24.058  1.00 53.49      A16S
ATOM  26970  C5' URI  363     141.353  58.591  24.130  1.00 53.49      A16S
ATOM  26971  C4' URI  363     140.865  58.242  22.756  1.00 53.49      A16S
ATOM  26972  O4' URI  363     141.747  57.276  22.149  1.00 53.49      A16S
ATOM  26973  C1' URI  363     141.014  56.516  21.216  1.00 53.49      A16S
ATOM  26974  N1  URI  363     141.384  55.101  21.346  1.00 69.59      A16S
ATOM  26975  C6  URI  363     141.153  54.385  22.506  1.00 69.59      A16S
ATOM  26976  C2  URI  363     141.962  54.503  20.244  1.00 69.59      A16S
ATOM  26977  O2  URI  363     142.220  55.116  19.215  1.00 69.59      A16S
ATOM  26978  N3  URI  363     142.234  53.163  20.392  1.00 69.59      A16S
ATOM  26979  C4  URI  363     142.006  52.384  21.509  1.00 69.59      A16S
ATOM  26980  O4  URI  363     142.246  51.179  21.461  1.00 69.59      A16S
ATOM  26981  C5  URI  363     141.439  53.084  22.620  1.00 69.59      A16S
ATOM  26982  C2' URI  363     139.520  56.820  21.388  1.00 53.49      A16S
ATOM  26983  O2' URI  363     139.039  57.568  20.287  1.00 53.49      A16S
ATOM  26984  C3' URI  363     139.493  57.603  22.697  1.00 53.49      A16S
ATOM  26985  O3' URI  363     138.540  58.642  22.619  1.00 53.49      A16S
ATOM  26986  P   CYT  364     136.995  58.327  22.852  1.00 56.76      A16S
ATOM  26987  O1P CYT  364     136.824  56.880  23.121  1.00 80.26      A16S
ATOM  26988  O2P CYT  364     136.256  58.954  21.737  1.00 80.26      A16S
ATOM  26989  O5' CYT  364     136.668  59.141  24.176  1.00 56.76      A16S
ATOM  26990  C5' CYT  364     137.557  59.102  25.310  1.00 56.76      A16S
ATOM  26991  C4' CYT  364     137.193  60.194  26.284  1.00 56.76      A16S
ATOM  26992  O4' CYT  364     137.677  61.468  25.799  1.00 56.76      A16S
ATOM  26993  C1' CYT  364     136.725  62.482  26.074  1.00 56.76      A16S
ATOM  26994  N1  CYT  364     136.300  63.076  24.791  1.00 80.26      A16S
ATOM  26995  C6  CYT  364     136.805  62.618  23.606  1.00 80.26      A16S
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ATOM	26996	C2	CYT	364	135.375	64.119	24.801	1.00	80.26	A16S	ATOM	27049	P	CYT	367	123.477	59.308	27.157	1.00	54.77	A16S
ATOM	26997	O2	CYT	364	134.921	64.503	25.885	1.00	80.26	A16S	ATOM	27050	O1P	CYT	367	122.897	58.454	28.212	1.00	73.84	A16S
ATOM	26998	N3	CYT	364	134.994	64.680	23.631	1.00	80.26	A16S	ATOM	27051	O2P	CYT	367	124.464	58.742	26.208	1.00	73.84	A16S
ATOM	26999	C4	CYT	364	135.495	64.225	22.482	1.00	80.26	A16S	ATOM	27052	O5'	CYT	367	122.292	59.939	26.323	1.00	54.77	A16S
ATOM	27000	N4	CYT	364	135.093	64.799	21.349	1.00	80.26	A16S	ATOM	27053	C5'	CYT	367	121.709	61.159	26.802	1.00	54.77	A16S
ATOM	27001	C5	CYT	364	136.434	63.157	22.442	1.00	80.26	A16S	ATOM	27054	C4'	CYT	367	121.070	61.918	25.685	1.00	54.77	A16S
ATOM	27002	C2'	CYT	364	135.582	61.846	26.870	1.00	56.76	A16S	ATOM	27055	O4'	CYT	367	121.987	62.206	24.619	1.00	54.77	A16S
ATOM	27003	O2'	CYT	364	135.794	62.055	28.249	1.00	56.76	A16S	ATOM	27056	C1'	CYT	367	121.214	62.560	23.504	1.00	54.77	A16S
ATOM	27004	C3'	CYT	364	135.699	60.384	26.465	1.00	56.76	A16S	ATOM	27057	N1	CYT	367	122.064	62.474	22.306	1.00	73.84	A16S
ATOM	27005	O3'	CYT	364	135.196	59.494	27.439	1.00	56.76	A16S	ATOM	27058	C6	CYT	367	123.234	61.766	22.322	1.00	73.84	A16S
ATOM	27006	P	CYT	365	133.741	58.851	27.249	1.00	55.01	A16S	ATOM	27059	C2	CYT	367	121.654	63.128	21.143	1.00	73.84	A16S
ATOM	27007	O1P	CYT	365	133.511	58.582	25.811	1.00	72.34	A16S	ATOM	27060	O2	CYT	367	120.598	63.790	21.163	1.00	73.84	A16S
ATOM	27008	O2P	CYT	365	133.616	57.744	28.239	1.00	72.34	A16S	ATOM	27061	N3	CYT	367	122.415	63.028	20.028	1.00	73.84	A16S
ATOM	27009	O5'	CYT	365	132.762	60.021	27.686	1.00	55.01	A16S	ATOM	27062	C4	CYT	367	123.543	62.317	20.050	1.00	73.84	A16S
ATOM	27010	C5'	CYT	365	132.827	60.555	29.012	1.00	55.01	A16S	ATOM	27063	N4	CYT	367	124.247	62.222	18.922	1.00	73.84	A16S
ATOM	27011	C4'	CYT	365	131.739	61.575	29.216	1.00	55.01	A16S	ATOM	27064	C5	CYT	367	123.996	61.664	21.228	1.00	73.84	A16S
ATOM	27012	O4'	CYT	365	132.103	62.840	28.601	1.00	55.01	A16S	ATOM	27065	C2'	CYT	367	120.014	61.604	23.533	1.00	54.77	A16S
ATOM	27013	C1'	CYT	365	130.937	63.464	28.084	1.00	55.01	A16S	ATOM	27066	O2'	CYT	367	118.843	62.112	22.926	1.00	54.77	A16S
ATOM	27014	N1	CYT	365	131.054	63.564	26.617	1.00	72.34	A16S	ATOM	27067	C3'	CYT	367	119.962	61.148	25.011	1.00	54.77	A16S
ATOM	27015	C6	CYT	365	131.998	62.853	25.929	1.00	72.34	A16S	ATOM	27068	O3'	CYT	367	118.800	61.295	25.857	1.00	54.77	A16S
ATOM	27016	C2	CYT	365	130.159	64.391	25.930	1.00	72.34	A16S	ATOM	27069	P	ADE	368	118.127	62.736	26.089	1.00	48.14	A16S
ATOM	27017	O2	CYT	365	129.323	65.040	26.580	1.00	72.34	A16S	ATOM	27070	O1P	ADE	368	116.669	62.451	26.263	1.00	76.98	A16S
ATOM	27018	N3	CYT	365	130.227	64.461	24.578	1.00	72.34	A16S	ATOM	27071	O2P	ADE	368	118.566	63.663	25.006	1.00	76.98	A16S
ATOM	27019	C4	CYT	365	131.140	63.748	23.918	1.00	72.34	A16S	ATOM	27072	O5'	ADE	368	118.730	63.321	27.449	1.00	48.14	A16S
ATOM	27020	N4	CYT	365	131.159	63.832	22.587	1.00	72.34	A16S	ATOM	27073	C5'	ADE	368	117.834	63.957	28.424	1.00	48.14	A16S
ATOM	27021	C5	CYT	365	132.074	62.913	24.594	1.00	72.34	A16S	ATOM	27074	C4'	ADE	368	117.821	65.486	28.302	1.00	48.14	A16S
ATOM	27022	C2'	CYT	365	129.740	62.594	28.468	1.00	55.01	A16S	ATOM	27075	O4'	ADE	368	119.069	66.022	28.798	1.00	48.14	A16S
ATOM	27023	O2'	CYT	365	129.202	63.074	29.687	1.00	55.01	A16S	ATOM	27076	C1'	ADE	368	119.419	67.179	28.060	1.00	48.14	A16S
ATOM	27024	C3'	CYT	365	130.393	61.223	28.604	1.00	55.01	A16S	ATOM	27077	N9	ADE	368	120.683	66.918	27.368	1.00	76.98	A16S
ATOM	27025	O3'	CYT	365	129.647	60.294	29.388	1.00	55.01	A16S	ATOM	27078	C4	ADE	368	121.437	67.813	26.648	1.00	76.98	A16S
ATOM	27026	P	GUA	366	128.616	59.288	28.663	1.00	53.08	A16S	ATOM	27079	N3	ADE	368	121.178	69.115	26.431	1.00	76.98	A16S
ATOM	27027	O1P	GUA	366	128.005	58.432	29.716	1.00	64.30	A16S	ATOM	27080	C2	ADE	368	122.133	69.665	25.686	1.00	76.98	A16S
ATOM	27028	O2P	GUA	366	129.271	58.666	27.470	1.00	64.30	A16S	ATOM	27081	N1	ADE	368	123.236	69.106	25.175	1.00	76.98	A16S
ATOM	27029	O5'	GUA	366	127.467	60.238	28.138	1.00	53.08	A16S	ATOM	27082	C6	ADE	368	123.467	67.797	25.416	1.00	76.98	A16S
ATOM	27030	C5'	GUA	366	126.930	61.229	29.005	1.00	53.08	A16S	ATOM	27083	N6	ADE	368	124.573	67.236	24.916	1.00	76.98	A16S
ATOM	27031	C4'	GUA	366	125.970	62.093	28.260	1.00	53.08	A16S	ATOM	27084	C5	ADE	368	122.525	67.101	26.188	1.00	76.98	A16S
ATOM	27032	O4'	GUA	366	126.662	63.092	27.465	1.00	53.08	A16S	ATOM	27085	N7	ADE	368	122.461	65.784	26.607	1.00	76.98	A16S
ATOM	27033	C1'	GUA	366	125.894	63.367	26.304	1.00	53.08	A16S	ATOM	27086	C8	ADE	368	121.357	65.728	27.300	1.00	76.98	A16S
ATOM	27034	N9	GUA	366	126.698	63.101	25.109	1.00	64.30	A16S	ATOM	27087	C2'	ADE	368	118.264	67.504	27.112	1.00	48.14	A16S
ATOM	27035	C4	GUA	366	126.491	63.652	23.866	1.00	64.30	A16S	ATOM	27088	O2'	ADE	368	117.408	68.422	27.744	1.00	48.14	A16S
ATOM	27036	N3	GUA	366	125.540	64.555	23.550	1.00	64.30	A16S	ATOM	27089	C3'	ADE	368	117.590	66.150	26.941	1.00	48.14	A16S
ATOM	27037	C2	GUA	366	125.586	64.900	22.277	1.00	64.30	A16S	ATOM	27090	O3'	ADE	368	116.197	66.366	26.659	1.00	48.14	A16S
ATOM	27038	N2	GUA	366	124.720	65.799	21.801	1.00	64.30	A16S	ATOM	27091	P	ADE	369	115.739	66.925	25.209	1.00	48.53	A16S
ATOM	27039	N1	GUA	366	126.485	64.392	21.377	1.00	64.30	A16S	ATOM	27092	O1P	ADE	369	114.278	67.200	25.242	1.00	62.04	A16S
ATOM	27040	C6	GUA	366	127.465	63.454	21.670	1.00	64.30	A16S	ATOM	27093	O2P	ADE	369	116.271	65.987	24.190	1.00	62.04	A16S
ATOM	27041	O6	GUA	366	128.204	63.049	20.774	1.00	64.30	A16S	ATOM	27094	O5'	ADE	369	116.539	68.296	25.032	1.00	48.53	A16S
ATOM	27042	C5	GUA	366	127.443	63.084	23.048	1.00	64.30	A16S	ATOM	27095	C5'	ADE	369	116.024	69.556	25.520	1.00	48.53	A16S
ATOM	27043	N7	GUA	366	128.248	62.208	23.764	1.00	64.30	A16S	ATOM	27096	C4'	ADE	369	116.649	70.715	24.760	1.00	48.53	A16S
ATOM	27044	C8	GUA	366	127.773	62.252	24.981	1.00	64.30	A16S	ATOM	27097	O4'	ADE	369	118.089	70.682	24.924	1.00	48.53	A16S
ATOM	27045	C2'	GUA	366	124.644	62.485	26.363	1.00	53.08	A16S	ATOM	27098	C1'	ADE	369	118.719	71.071	23.713	1.00	48.53	A16S
ATOM	27046	O2'	GUA	366	123.622	63.222	26.987	1.00	53.08	A16S	ATOM	27099	N9	ADE	369	119.552	69.958	23.243	1.00	62.04	A16S
ATOM	27047	C3'	GUA	366	125.117	61.350	27.260	1.00	53.08	A16S	ATOM	27100	C4	ADE	369	120.386	69.960	22.146	1.00	62.04	A16S
ATOM	27048	O3'	GUA	366	124.097	60.599	27.898	1.00	53.08	A16S	ATOM	27101	N3	ADE	369	120.612	70.970	21.285	1.00	62.04	A16S

ATOM	27102	C2	ADE	369	121.475	70.602	20.344	1.00	62.04	A16S	ATOM	27155	O3'	GUA	371	115.043	69.190	11.658	1.00	41.37	A16S
ATOM	27103	N1	ADE	369	122.089	69.432	20.173	1.00	62.04	A16S	ATOM	27156	P	GUA	372	113.949	68.053	11.379	1.00	38.29	A16S
ATOM	27104	C6	ADE	369	121.839	68.439	21.051	1.00	62.04	A16S	ATOM	27157	O1P	GUA	372	113.180	68.392	10.150	1.00	60.47	A16S
ATOM	27105	N6	ADE	369	122.446	67.266	20.876	1.00	62.04	A16S	ATOM	27158	O2P	GUA	372	113.238	67.817	12.665	1.00	60.47	A16S
ATOM	27106	C5	ADE	369	120.947	68.701	22.100	1.00	62.04	A16S	ATOM	27159	O5'	GUA	372	114.824	66.782	11.023	1.00	38.29	A16S
ATOM	27107	N7	ADE	369	120.485	67.919	23.147	1.00	62.04	A16S	ATOM	27160	C5'	GUA	372	115.564	66.757	9.805	1.00	38.29	A16S
ATOM	27108	C8	ADE	369	119.665	68.707	23.792	1.00	62.04	A16S	ATOM	27161	C4'	GUA	372	116.331	65.481	9.689	1.00	38.29	A16S
ATOM	27109	C2'	ADE	369	117.625	71.459	22.718	1.00	48.53	A16S	ATOM	27162	O4'	GUA	372	117.241	65.355	10.803	1.00	38.29	A16S
ATOM	27110	O2'	ADE	369	117.398	72.849	22.754	1.00	48.53	A16S	ATOM	27163	C1'	GUA	372	117.403	63.993	11.119	1.00	38.29	A16S
ATOM	27111	C3'	ADE	369	116.430	70.700	23.256	1.00	48.53	A16S	ATOM	27164	N9	GUA	372	117.038	63.796	12.517	1.00	60.47	A16S
ATOM	27112	O3'	ADE	369	115.249	71.381	22.901	1.00	48.53	A16S	ATOM	27165	C4	GUA	372	117.257	62.660	13.253	1.00	60.47	A16S
ATOM	27113	P	URI	370	114.423	70.895	21.628	1.00	49.52	A16S	ATOM	27166	N3	GUA	372	117.879	61.543	12.819	1.00	60.47	A16S
ATOM	27114	O1P	URI	370	113.167	71.659	21.587	1.00	54.47	A16S	ATOM	27167	C2	GUA	372	117.939	60.617	13.756	1.00	60.47	A16S
ATOM	27115	O2P	URI	370	114.390	69.419	21.679	1.00	54.47	A16S	ATOM	27168	N2	GUA	372	118.552	59.462	13.508	1.00	60.47	A16S
ATOM	27116	O5'	URI	370	115.310	71.340	20.387	1.00	49.52	A16S	ATOM	27169	N1	GUA	372	117.411	60.759	15.012	1.00	60.47	A16S
ATOM	27117	C5'	URI	370	115.446	72.737	20.035	1.00	49.52	A16S	ATOM	27170	C6	GUA	372	116.754	61.890	15.481	1.00	60.47	A16S
ATOM	27118	C4'	URI	370	116.302	72.902	18.793	1.00	49.52	A16S	ATOM	27171	O6	GUA	372	116.293	61.901	16.630	1.00	60.47	A16S
ATOM	27119	O4'	URI	370	117.693	72.598	19.086	1.00	49.52	A16S	ATOM	27172	C5	GUA	372	116.708	62.913	14.488	1.00	60.47	A16S
ATOM	27120	C1'	URI	370	118.282	71.947	17.971	1.00	49.52	A16S	ATOM	27173	N7	GUA	372	116.180	64.196	14.537	1.00	60.47	A16S
ATOM	27121	N1	URI	370	118.649	70.580	18.380	1.00	54.47	A16S	ATOM	27174	C8	GUA	372	116.399	64.680	13.347	1.00	60.47	A16S
ATOM	27122	C6	URI	370	118.138	70.015	19.531	1.00	54.47	A16S	ATOM	27175	C2'	GUA	372	116.525	63.185	10.158	1.00	38.29	A16S
ATOM	27123	C2	URI	370	119.523	69.867	17.572	1.00	54.47	A16S	ATOM	27176	O2'	GUA	372	117.293	62.766	9.047	1.00	38.29	A16S
ATOM	27124	O2	URI	370	120.005	70.320	16.543	1.00	54.47	A16S	ATOM	27177	C3'	GUA	372	115.505	64.216	9.724	1.00	38.29	A16S
ATOM	27125	N3	URI	370	119.809	68.598	18.014	1.00	54.47	A16S	ATOM	27178	O3'	GUA	372	115.028	63.926	8.431	1.00	38.29	A16S
ATOM	27126	C4	URI	370	119.322	67.981	19.144	1.00	54.47	A16S	ATOM	27179	P	GUA	373	113.689	63.079	8.257	1.00	40.24	A16S
ATOM	27127	O4	URI	370	119.629	66.816	19.370	1.00	54.47	A16S	ATOM	27180	O1P	GUA	373	113.259	63.229	6.839	1.00	51.79	A16S
ATOM	27128	C5	URI	370	118.438	68.776	19.927	1.00	54.47	A16S	ATOM	27181	O2P	GUA	373	112.758	63.454	9.347	1.00	51.79	A16S
ATOM	27129	C2'	URI	370	117.252	71.953	16.841	1.00	49.52	A16S	ATOM	27182	O5'	GUA	373	114.158	61.580	8.511	1.00	40.24	A16S
ATOM	27130	O2'	URI	370	117.419	73.117	16.056	1.00	49.52	A16S	ATOM	27183	C5'	GUA	373	114.900	60.851	7.503	1.00	40.24	A16S
ATOM	27131	C3'	URI	370	115.950	72.003	17.622	1.00	49.52	A16S	ATOM	27184	C4'	GUA	373	115.079	59.403	7.916	1.00	40.24	A16S
ATOM	27132	O3'	URI	370	114.893	72.522	16.849	1.00	49.52	A16S	ATOM	27185	O4'	GUA	373	115.986	59.310	9.051	1.00	40.24	A16S
ATOM	27133	P	GUA	371	113.882	71.506	16.140	1.00	41.37	A16S	ATOM	27186	C1'	GUA	373	115.539	58.298	9.938	1.00	40.24	A16S
ATOM	27134	O1P	GUA	371	112.877	72.298	15.376	1.00	70.79	A16S	ATOM	27187	N9	GUA	373	115.175	58.930	11.199	1.00	51.79	A16S
ATOM	27135	O2P	GUA	371	113.431	70.557	17.197	1.00	70.79	A16S	ATOM	27188	C4	GUA	373	115.104	58.326	12.427	1.00	51.79	A16S
ATOM	27136	O5'	GUA	371	114.789	70.709	15.091	1.00	41.37	A16S	ATOM	27189	N3	GUA	373	115.357	57.028	12.689	1.00	51.79	A16S
ATOM	27137	C5'	GUA	371	115.416	71.395	13.984	1.00	41.37	A16S	ATOM	27190	C2	GUA	373	115.218	56.750	13.970	1.00	51.79	A16S
ATOM	27138	C4'	GUA	371	116.357	70.477	13.231	1.00	41.37	A16S	ATOM	27191	N2	GUA	373	115.446	55.512	14.409	1.00	51.79	A16S
ATOM	27139	O4'	GUA	371	117.552	70.169	14.007	1.00	41.37	A16S	ATOM	27192	N1	GUA	373	114.850	57.667	14.914	1.00	51.79	A16S
ATOM	27140	C1'	GUA	371	118.032	68.879	13.642	1.00	41.37	A16S	ATOM	27193	C6	GUA	373	114.576	59.006	14.660	1.00	51.79	A16S
ATOM	27141	N9	GUA	371	117.992	68.007	14.814	1.00	70.79	A16S	ATOM	27194	O6	GUA	373	114.244	59.755	15.585	1.00	51.79	A16S
ATOM	27142	C4	GUA	371	118.634	66.801	14.968	1.00	70.79	A16S	ATOM	27195	C5	GUA	373	114.730	59.319	13.299	1.00	51.79	A16S
ATOM	27143	N3	GUA	371	119.459	66.222	14.076	1.00	70.79	A16S	ATOM	27196	N7	GUA	373	114.561	60.523	12.635	1.00	51.79	A16S
ATOM	27144	C2	GUA	371	119.919	65.063	14.512	1.00	70.79	A16S	ATOM	27197	C8	GUA	373	114.832	60.245	11.394	1.00	51.79	A16S
ATOM	27145	N2	GUA	371	120.772	64.358	13.755	1.00	70.79	A16S	ATOM	27198	C2'	GUA	373	114.346	57.607	9.288	1.00	40.24	A16S
ATOM	27146	N1	GUA	371	119.582	64.511	15.724	1.00	70.79	A16S	ATOM	27199	O2'	GUA	373	114.833	56.494	8.570	1.00	40.24	A16S
ATOM	27147	C6	GUA	371	118.728	65.092	16.655	1.00	70.79	A16S	ATOM	27200	C3'	GUA	373	113.815	58.708	8.382	1.00	40.24	A16S
ATOM	27148	O6	GUA	371	118.480	64.510	17.721	1.00	70.79	A16S	ATOM	27201	O3'	GUA	373	113.049	58.225	7.301	1.00	40.24	A16S
ATOM	27149	C5	GUA	371	118.244	66.335	16.206	1.00	70.79	A16S	ATOM	27202	P	CYT	374	111.450	58.179	7.443	1.00	46.43	A16S
ATOM	27150	N7	GUA	371	117.394	67.232	16.825	1.00	70.79	A16S	ATOM	27203	O1P	CYT	374	110.824	57.920	6.106	1.00	53.63	A16S
ATOM	27151	C8	GUA	371	117.276	68.210	15.968	1.00	70.79	A16S	ATOM	27204	O2P	CYT	374	111.032	59.374	8.231	1.00	53.63	A16S
ATOM	27152	C2'	GUA	371	117.103	68.346	12.548	1.00	41.37	A16S	ATOM	27205	O5'	CYT	374	111.215	56.914	8.372	1.00	46.43	A16S
ATOM	27153	O2'	GUA	371	117.621	68.691	11.281	1.00	41.37	A16S	ATOM	27206	C5'	CYT	374	111.568	55.599	7.928	1.00	46.43	A16S
ATOM	27154	C3'	GUA	371	115.825	69.118	12.823	1.00	41.37	A16S	ATOM	27207	C4'	CYT	374	111.391	54.625	9.056	1.00	46.43	A16S

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ATOM  27208  O4' CYT  374     112.302  54.979  10.129  1.00 46.43      A16S
ATOM  27209  C1' CYT  374     111.718  54.662  11.377  1.00 46.43      A16S
ATOM  27210  N1  CYT  374     111.660  55.883  12.206  1.00 53.63      A16S
ATOM  27211  C6  CYT  374     111.311  57.091  11.661  1.00 53.63      A16S
ATOM  27212  C2  CYT  374     111.946  55.786  13.583  1.00 53.63      A16S
ATOM  27213  O2  CYT  374     112.315  54.695  14.050  1.00 53.63      A16S
ATOM  27214  N3  CYT  374     111.824  56.888  14.364  1.00 53.63      A16S
ATOM  27215  C4  CYT  374     111.457  58.054  13.824  1.00 53.63      A16S
ATOM  27216  N4  CYT  374     111.331  59.102  14.633  1.00 53.63      A16S
ATOM  27217  C5  CYT  374     111.199  58.192  12.427  1.00 53.63      A16S
ATOM  27218  C2' CYT  374     110.338  54.061  11.102  1.00 46.43      A16S
ATOM  27219  O2' CYT  374     110.446  52.650  11.091  1.00 46.43      A16S
ATOM  27220  C3' CYT  374     110.026  54.629   9.724  1.00 46.43      A16S
ATOM  27221  O3' CYT  374     109.046  53.885   9.002  1.00 46.43      A16S
ATOM  27222  P   GUA  375     107.515  54.373   9.034  1.00 48.89      A16S
ATOM  27223  O1P GUA  375     106.703  53.467   8.169  1.00 64.97      A16S
ATOM  27224  O2P GUA  375     107.495  55.829   8.786  1.00 64.97      A16S
ATOM  27225  O5' GUA  375     107.120  54.166  10.564  1.00 48.89      A16S
ATOM  27226  C5' GUA  375     107.299  52.882  11.196  1.00 48.89      A16S
ATOM  27227  C4' GUA  375     106.924  52.931  12.661  1.00 48.89      A16S
ATOM  27228  O4' GUA  375     107.965  53.560  13.452  1.00 48.89      A16S
ATOM  27229  C1' GUA  375     107.386  54.165  14.598  1.00 48.89      A16S
ATOM  27230  N9  GUA  375     107.661  55.602  14.582  1.00 64.97      A16S
ATOM  27231  C4  GUA  375     107.711  56.434  15.678  1.00 64.97      A16S
ATOM  27232  N3  GUA  375     107.611  56.054  16.967  1.00 64.97      A16S
ATOM  27233  C2  GUA  375     107.617  57.091  17.793  1.00 64.97      A16S
ATOM  27234  N2  GUA  375     107.527  56.899  19.111  1.00 64.97      A16S
ATOM  27235  N1  GUA  375     107.710  58.396  17.390  1.00 64.97      A16S
ATOM  27236  C6  GUA  375     107.814  58.819  16.071  1.00 64.97      A16S
ATOM  27237  O6  GUA  375     107.869  60.037  15.816  1.00 64.97      A16S
ATOM  27238  C5  GUA  375     107.824  57.708  15.165  1.00 64.97      A16S
ATOM  27239  N7  GUA  375     107.913  57.674  13.780  1.00 64.97      A16S
ATOM  27240  C8  GUA  375     107.832  56.406  13.480  1.00 64.97      A16S
ATOM  27241  C2' GUA  375     105.874  53.922  14.527  1.00 48.89      A16S
ATOM  27242  O2' GUA  375     105.527  52.790  15.298  1.00 48.89      A16S
ATOM  27243  C3' GUA  375     105.659  53.676  13.041  1.00 48.89      A16S
ATOM  27244  O3' GUA  375     104.490  52.907  12.811  1.00 48.89      A16S
ATOM  27245  P   CYT  376     103.215  53.597  12.127  1.00 54.58      A16S
ATOM  27246  O1P CYT  376     103.661  54.093  10.804  1.00 82.10      A16S
ATOM  27247  O2P CYT  376     102.072  52.650  12.202  1.00 82.10      A16S
ATOM  27248  O5' CYT  376     102.900  54.831  13.086  1.00 54.58      A16S
ATOM  27249  C5' CYT  376     101.983  55.868  12.683  1.00 54.58      A16S
ATOM  27250  C4' CYT  376     101.192  56.389  13.870  1.00 54.58      A16S
ATOM  27251  O4' CYT  376     100.250  55.382  14.338  1.00 54.58      A16S
ATOM  27252  C1' CYT  376     100.089  55.493  15.753  1.00 54.58      A16S
ATOM  27253  N1  CYT  376     100.550  54.240  16.405  1.00 82.10      A16S
ATOM  27254  C6  CYT  376     100.971  53.168  15.669  1.00 82.10      A16S
ATOM  27255  C2  CYT  376     100.567  54.176  17.807  1.00 82.10      A16S
ATOM  27256  O2  CYT  376     100.167  55.147  18.454  1.00 82.10      A16S
ATOM  27257  N3  CYT  376     101.022  53.061  18.418  1.00 82.10      A16S
ATOM  27258  C4  CYT  376     101.446  52.030  17.691  1.00 82.10      A16S
ATOM  27259  N4  CYT  376     101.903  50.954  18.339  1.00 82.10      A16S
ATOM  27260  C5  CYT  376     101.425  52.055  16.265  1.00 82.10      A16S
ATOM  27261  C2' CYT  376     100.932  56.683  16.208  1.00 54.58      A16S
ATOM  27262  O2' CYT  376     100.148  57.856  16.271  1.00 54.58      A16S
ATOM  27263  C3' CYT  376     101.983  56.753  15.114  1.00 54.58      A16S
ATOM  27264  O3' CYT  376     102.572  58.029  15.084  1.00 54.58      A16S
ATOM  27265  P   ADE  377     103.873  58.303  15.986  1.00 55.82      A16S
ATOM  27266  O1P ADE  377     104.121  59.771  16.015  1.00 82.39      A16S
ATOM  27267  O2P ADE  377     104.929  57.390  15.483  1.00 82.39      A16S
ATOM  27268  O5' ADE  377     103.466  57.836  17.457  1.00 55.82      A16S
ATOM  27269  C5' ADE  377     102.660  58.666  18.319  1.00 55.82      A16S
ATOM  27270  C4' ADE  377     102.567  58.049  19.697  1.00 55.82      A16S
ATOM  27271  O4' ADE  377     102.081  56.693  19.542  1.00 55.82      A16S
ATOM  27272  C1' ADE  377     102.776  55.826  20.422  1.00 55.82      A16S
ATOM  27273  N9  ADE  377     103.496  54.835  19.612  1.00 82.39      A16S
ATOM  27274  C4  ADE  377     103.935  53.598  20.020  1.00 82.39      A16S
ATOM  27275  N3  ADE  377     103.809  53.047  21.237  1.00 82.39      A16S
ATOM  27276  C2  ADE  377     104.345  51.829  21.258  1.00 82.39      A16S
ATOM  27277  N1  ADE  377     104.947  51.151  20.277  1.00 82.39      A16S
ATOM  27278  C6  ADE  377     105.056  51.732  19.068  1.00 82.39      A16S
ATOM  27279  N6  ADE  377     105.652  51.054  18.091  1.00 82.39      A16S
ATOM  27280  C5  ADE  377     104.530  53.025  18.913  1.00 82.39      A16S
ATOM  27281  N7  ADE  377     104.481  53.886  17.828  1.00 82.39      A16S
ATOM  27282  C8  ADE  377     103.864  54.941  18.292  1.00 82.39      A16S
ATOM  27283  C2' ADE  377     103.681  56.685  21.310  1.00 55.82      A16S
ATOM  27284  O2' ADE  377     103.032  56.985  22.529  1.00 55.82      A16S
ATOM  27285  C3' ADE  377     103.888  57.918  20.443  1.00 55.82      A16S
ATOM  27286  O3' ADE  377     104.138  59.055  21.254  1.00 55.82      A16S
ATOM  27287  P   ADE  378     105.613  59.303  21.841  1.00 63.25      A16S
ATOM  27288  O1P ADE  378     105.594  60.541  22.662  1.00 84.34      A16S
ATOM  27289  O2P ADE  378     106.559  59.197  20.697  1.00 84.34      A16S
ATOM  27290  O5' ADE  378     105.858  58.082  22.836  1.00 63.25      A16S
ATOM  27291  C5' ADE  378     105.247  58.050  24.141  1.00 63.25      A16S
ATOM  27292  C4' ADE  378     105.559  56.748  24.830  1.00 63.25      A16S
ATOM  27293  O4' ADE  378     105.082  55.656  24.003  1.00 63.25      A16S
ATOM  27294  C1' ADE  378     105.986  54.564  24.078  1.00 63.25      A16S
ATOM  27295  N9  ADE  378     106.510  54.299  22.737  1.00 84.34      A16S
ATOM  27296  C4  ADE  378     107.048  53.115  22.292  1.00 84.34      A16S
ATOM  27297  N3  ADE  378     107.196  51.974  22.983  1.00 84.34      A16S
ATOM  27298  C2  ADE  378     107.744  51.032  22.217  1.00 84.34      A16S
ATOM  27299  N1  ADE  378     108.135  51.096  20.938  1.00 84.34      A16S
ATOM  27300  C6  ADE  378     107.981  52.261  20.278  1.00 84.34      A16S
ATOM  27301  N6  ADE  378     108.382  52.336  19.010  1.00 84.34      A16S
ATOM  27302  C5  ADE  378     107.405  53.336  20.974  1.00 84.34      A16S
ATOM  27303  N7  ADE  378     107.101  54.632  20.594  1.00 84.34      A16S
ATOM  27304  C8  ADE  378     106.577  55.161  21.671  1.00 84.34      A16S
ATOM  27305  C2' ADE  378     107.090  54.944  25.064  1.00 63.25      A16S
ATOM  27306  O2' ADE  378     106.800  54.419  26.346  1.00 63.25      A16S
ATOM  27307  C3' ADE  378     107.039  56.465  25.017  1.00 63.25      A16S
ATOM  27308  O3' ADE  378     107.536  57.030  26.218  1.00 63.25      A16S
ATOM  27309  P   GUA  379     108.929  57.832  26.207  1.00 65.52      A16S
ATOM  27310  O1P GUA  379     109.494  57.795  27.584  1.00 60.79      A16S
ATOM  27311  O2P GUA  379     108.677  59.140  25.545  1.00 60.79      A16S
ATOM  27312  O5' GUA  379     109.889  56.967  25.271  1.00 65.52      A16S
ATOM  27313  C5' GUA  379     110.266  55.628  25.643  1.00 65.52      A16S
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ATOM  27314  C4' GUA  379     110.696  54.820  24.430  1.00 65.52      A16S
ATOM  27315  O4' GUA  379     109.846  55.106  23.283  1.00 65.52      A16S
ATOM  27316  C1' GUA  379     110.563  54.835  22.093  1.00 65.52      A16S
ATOM  27317  N9  GUA  379     110.533  56.000  21.211  1.00 60.79      A16S
ATOM  27318  C4  GUA  379     110.729  55.987  19.844  1.00 60.79      A16S
ATOM  27319  N3  GUA  379     110.976  54.895  19.084  1.00 60.79      A16S
ATOM  27320  C2  GUA  379     111.102  55.201  17.800  1.00 60.79      A16S
ATOM  27321  N2  GUA  379     111.337  54.239  16.906  1.00 60.79      A16S
ATOM  27322  N1  GUA  379     111.001  56.470  17.300  1.00 60.79      A16S
ATOM  27323  C6  GUA  379     110.751  57.608  18.056  1.00 60.79      A16S
ATOM  27324  O6  GUA  379     110.674  58.706  17.497  1.00 60.79      A16S
ATOM  27325  C5  GUA  379     110.609  57.298  19.444  1.00 60.79      A16S
ATOM  27326  N7  GUA  379     110.348  58.122  20.531  1.00 60.79      A16S
ATOM  27327  C8  GUA  379     110.313  57.310  21.555  1.00 60.79      A16S
ATOM  27328  C2' GUA  379     111.980  54.423  22.490  1.00 65.52      A16S
ATOM  27329  O2' GUA  379     112.025  53.012  22.516  1.00 65.52      A16S
ATOM  27330  C3' GUA  379     112.104  55.006  23.891  1.00 65.52      A16S
ATOM  27331  O3' GUA  379     113.056  54.266  24.648  1.00 65.52      A16S
ATOM  27332  P   CYT  380     114.629  54.596  24.498  1.00 52.68      A16S
ATOM  27333  O1P CYT  380     115.389  53.788  25.489  1.00 68.93      A16S
ATOM  27334  O2P CYT  380     114.798  56.074  24.479  1.00 68.93      A16S
ATOM  27335  O5' CYT  380     114.998  54.030  23.057  1.00 52.68      A16S
ATOM  27336  C5' CYT  380     114.989  52.613  22.810  1.00 52.68      A16S
ATOM  27337  C4' CYT  380     115.414  52.320  21.394  1.00 52.68      A16S
ATOM  27338  O4' CYT  380     114.390  52.758  20.465  1.00 52.68      A16S
ATOM  27339  C1' CYT  380     114.996  53.225  19.276  1.00 52.68      A16S
ATOM  27340  N1  CYT  380     114.681  54.656  19.108  1.00 68.93      A16S
ATOM  27341  C6  CYT  380     114.484  55.472  20.190  1.00 68.93      A16S
ATOM  27342  C2  CYT  380     114.606  55.176  17.814  1.00 68.93      A16S
ATOM  27343  O2  CYT  380     114.783  54.417  16.855  1.00 68.93      A16S
ATOM  27344  N3  CYT  380     114.349  56.494  17.641  1.00 68.93      A16S
ATOM  27345  C4  CYT  380     114.173  57.282  18.701  1.00 68.93      A16S
ATOM  27346  N4  CYT  380     113.943  58.574  18.484  1.00 68.93      A16S
ATOM  27347  C5  CYT  380     114.233  56.777  20.034  1.00 68.93      A16S
ATOM  27348  C2' CYT  380     116.502  53.012  19.418  1.00 52.68      A16S
ATOM  27349  O2' CYT  380     116.836  51.774  18.839  1.00 52.68      A16S
ATOM  27350  C3' CYT  380     116.673  53.018  20.927  1.00 52.68      A16S
ATOM  27351  O3' CYT  380     117.850  52.364  21.348  1.00 52.68      A16S
ATOM  27352  P   CYT  381     119.192  53.224  21.542  1.00 51.85      A16S
ATOM  27353  O1P CYT  381     120.275  52.348  22.061  1.00 70.96      A16S
ATOM  27354  O2P CYT  381     118.824  54.450  22.290  1.00 70.96      A16S
ATOM  27355  O5' CYT  381     119.577  53.647  20.055  1.00 51.85      A16S
ATOM  27356  C5' CYT  381     119.873  52.646  19.061  1.00 51.85      A16S
ATOM  27357  C4' CYT  381     120.134  53.285  17.718  1.00 51.85      A16S
ATOM  27358  O4' CYT  381     118.898  53.773  17.141  1.00 51.85      A16S
ATOM  27359  C1' CYT  381     119.167  54.917  16.351  1.00 51.85      A16S
ATOM  27360  N1  CYT  381     118.438  56.069  16.904  1.00 70.96      A16S
ATOM  27361  C6  CYT  381     118.296  56.238  18.254  1.00 70.96      A16S
ATOM  27362  C2  CYT  381     117.931  57.018  16.022  1.00 70.96      A16S
ATOM  27363  O2  CYT  381     118.025  56.811  14.808  1.00 70.96      A16S
ATOM  27364  N3  CYT  381     117.351  58.134  16.512  1.00 70.96      A16S
ATOM  27365  C4  CYT  381     117.257  58.311  17.828  1.00 70.96      A16S
ATOM  27366  N4  CYT  381     116.712  59.446  18.267  1.00 70.96      A16S
ATOM  27367  C5  CYT  381     117.723  57.337  18.753  1.00 70.96      A16S
ATOM  27368  C2' CYT  381     120.670  55.191  16.416  1.00 51.85      A16S
ATOM  27369  O2' CYT  381     121.329  54.670  15.283  1.00 51.85      A16S
ATOM  27370  C3' CYT  381     121.048  54.495  17.711  1.00 51.85      A16S
ATOM  27371  O3' CYT  381     122.417  54.163  17.756  1.00 51.85      A16S
ATOM  27372  P   URI  382     123.423  55.142  18.522  1.00 45.37      A16S
ATOM  27373  O1P URI  382     124.795  54.579  18.380  1.00 76.91      A16S
ATOM  27374  O2P URI  382     122.871  55.396  19.874  1.00 76.91      A16S
ATOM  27375  O5' URI  382     123.308  56.482  17.666  1.00 45.37      A16S
ATOM  27376  C5' URI  382     123.509  56.450  16.237  1.00 45.37      A16S
ATOM  27377  C4' URI  382     123.453  57.839  15.633  1.00 45.37      A16S
ATOM  27378  O4' URI  382     122.090  58.314  15.496  1.00 45.37      A16S
ATOM  27379  C1' URI  382     122.085  59.731  15.513  1.00 45.37      A16S
ATOM  27380  N1  URI  382     121.251  60.196  16.629  1.00 76.91      A16S
ATOM  27381  C6  URI  382     121.322  59.609  17.874  1.00 76.91      A16S
ATOM  27382  C2  URI  382     120.407  61.261  16.397  1.00 76.91      A16S
ATOM  27383  O2  URI  382     120.290  61.785  15.308  1.00 76.91      A16S
ATOM  27384  N3  URI  382     119.701  61.690  17.493  1.00 76.91      A16S
ATOM  27385  C4  URI  382     119.744  61.164  18.770  1.00 76.91      A16S
ATOM  27386  O4  URI  382     119.097  61.703  19.672  1.00 76.91      A16S
ATOM  27387  C5  URI  382     120.618  60.045  18.921  1.00 76.91      A16S
ATOM  27388  C2' URI  382     123.532  60.188  15.673  1.00 45.37      A16S
ATOM  27389  O2' URI  382     124.059  60.407  14.381  1.00 45.37      A16S
ATOM  27390  C3' URI  382     124.172  58.973  16.331  1.00 45.37      A16S
ATOM  27391  O3' URI  382     125.557  58.935  16.079  1.00 45.37      A16S
ATOM  27392  P   GUA  383     126.590  59.220  17.275  1.00 53.57      A16S
ATOM  27393  O1P GUA  383     127.196  57.917  17.632  1.00 49.15      A16S
ATOM  27394  O2P GUA  383     125.921  60.035  18.328  1.00 49.15      A16S
ATOM  27395  O5' GUA  383     127.738  60.078  16.578  1.00 53.57      A16S
ATOM  27396  C5' GUA  383     127.700  61.515  16.559  1.00 53.57      A16S
ATOM  27397  C4' GUA  383     129.070  62.050  16.236  1.00 53.57      A16S
ATOM  27398  O4' GUA  383     130.018  61.488  17.181  1.00 53.57      A16S
ATOM  27399  C1' GUA  383     130.997  60.734  16.499  1.00 53.57      A16S
ATOM  27400  N9  GUA  383     131.269  59.543  17.298  1.00 49.15      A16S
ATOM  27401  C4  GUA  383     132.376  59.309  18.074  1.00 49.15      A16S
ATOM  27402  N3  GUA  383     133.410  60.150  18.254  1.00 49.15      A16S
ATOM  27403  C2  GUA  383     134.327  59.639  19.064  1.00 49.15      A16S
ATOM  27404  N2  GUA  383     135.420  60.342  19.361  1.00 49.15      A16S
ATOM  27405  N1  GUA  383     134.241  58.400  19.642  1.00 49.15      A16S
ATOM  27406  C6  GUA  383     133.189  57.508  19.464  1.00 49.15      A16S
ATOM  27407  O6  GUA  383     133.217  56.395  20.020  1.00 49.15      A16S
ATOM  27408  C5  GUA  383     132.189  58.049  18.608  1.00 49.15      A16S
ATOM  27409  N7  GUA  383     130.985  57.509  18.185  1.00 49.15      A16S
ATOM  27410  C8  GUA  383     130.472  58.428  17.416  1.00 49.15      A16S
ATOM  27411  C2' GUA  383     130.403  60.422  15.122  1.00 53.57      A16S
ATOM  27412  O2' GUA  383     131.401  60.205  14.148  1.00 53.57      A16S
ATOM  27413  C3' GUA  383     129.578  61.671  14.855  1.00 53.57      A16S
ATOM  27414  O3' GUA  383     130.453  62.705  14.426  1.00 53.57      A16S
ATOM  27415  P   ADE  384     130.257  63.378  12.993  1.00 54.04      A16S
ATOM  27416  O1P ADE  384     130.242  62.294  11.968  1.00 58.00      A16S
ATOM  27417  O2P ADE  384     131.266  64.458  12.906  1.00 58.00      A16S
ATOM  27418  O5' ADE  384     128.807  64.041  13.061  1.00 54.04      A16S
ATOM  27419  C5' ADE  384     128.115  64.311  11.845  1.00 54.04      A16S
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ATOM	27420	C4'	ADE	384	126.957	65.270	12.032	1.00	54.04	A16S
ATOM	27421	O4'	ADE	384	125.756	64.592	12.462	1.00	54.04	A16S
ATOM	27422	C1'	ADE	384	124.833	65.561	12.908	1.00	54.04	A16S
ATOM	27423	N9	ADE	384	124.314	65.182	14.222	1.00	58.00	A16S
ATOM	27424	C4	ADE	384	123.363	65.883	14.924	1.00	58.00	A16S
ATOM	27425	N3	ADE	384	122.745	67.015	14.548	1.00	58.00	A16S
ATOM	27426	C2	ADE	384	121.891	67.413	15.480	1.00	58.00	A16S
ATOM	27427	N1	ADE	384	121.601	66.851	16.655	1.00	58.00	A16S
ATOM	27428	C6	ADE	384	122.240	65.717	17.003	1.00	58.00	A16S
ATOM	27429	N6	ADE	384	121.952	65.160	18.181	1.00	58.00	A16S
ATOM	27430	C5	ADE	384	123.176	65.192	16.099	1.00	58.00	A16S
ATOM	27431	N7	ADE	384	123.993	64.073	16.142	1.00	58.00	A16S
ATOM	27432	C8	ADE	384	124.642	64.112	15.006	1.00	58.00	A16S
ATOM	27433	C2'	ADE	384	125.552	66.913	12.926	1.00	54.04	A16S
ATOM	27434	O2'	ADE	384	125.203	67.597	11.736	1.00	54.04	A16S
ATOM	27435	C3'	ADE	384	127.024	66.509	12.906	1.00	54.04	A16S
ATOM	27436	O3'	ADE	384	127.747	67.574	12.299	1.00	54.04	A16S
ATOM	27437	P	CYT	385	128.317	68.784	13.201	1.00	48.19	A16S
ATOM	27438	O1P	CYT	385	128.361	69.984	12.333	1.00	49.90	A16S
ATOM	27439	O2P	CYT	385	129.551	68.330	13.885	1.00	49.90	A16S
ATOM	27440	O5'	CYT	385	127.237	69.022	14.349	1.00	48.19	A16S
ATOM	27441	C5'	CYT	385	126.042	69.805	14.130	1.00	48.19	A16S
ATOM	27442	C4'	CYT	385	125.154	69.755	15.360	1.00	48.19	A16S
ATOM	27443	O4'	CYT	385	124.908	68.362	15.686	1.00	48.19	A16S
ATOM	27444	C1'	CYT	385	124.907	68.189	17.090	1.00	48.19	A16S
ATOM	27445	N1	CYT	385	126.017	67.279	17.446	1.00	49.90	A16S
ATOM	27446	C6	CYT	385	127.193	67.307	16.751	1.00	49.90	A16S
ATOM	27447	C2	CYT	385	125.858	66.394	18.513	1.00	49.90	A16S
ATOM	27448	O2	CYT	385	124.770	66.350	19.101	1.00	49.90	A16S
ATOM	27449	N3	CYT	385	126.893	65.597	18.872	1.00	49.90	A16S
ATOM	27450	C4	CYT	385	128.036	65.641	18.188	1.00	49.90	A16S
ATOM	27451	N4	CYT	385	129.027	64.833	18.564	1.00	49.90	A16S
ATOM	27452	C5	CYT	385	128.215	66.512	17.083	1.00	49.90	A16S
ATOM	27453	C2'	CYT	385	125.016	69.578	17.727	1.00	48.19	A16S
ATOM	27454	O2'	CYT	385	123.713	70.081	17.942	1.00	48.19	A16S
ATOM	27455	C3'	CYT	385	125.730	70.366	16.637	1.00	48.19	A16S
ATOM	27456	O3'	CYT	385	125.429	71.767	16.709	1.00	48.19	A16S
ATOM	27457	P	GUA	386	126.335	72.755	17.611	1.00	49.56	A16S
ATOM	27458	O1P	GUA	386	125.822	74.119	17.337	1.00	58.33	A16S
ATOM	27459	O2P	GUA	386	127.792	72.471	17.468	1.00	58.33	A16S
ATOM	27460	O5'	GUA	386	125.926	72.396	19.100	1.00	49.56	A16S
ATOM	27461	C5'	GUA	386	124.600	72.666	19.586	1.00	49.56	A16S
ATOM	27462	C4'	GUA	386	124.476	72.201	21.016	1.00	49.56	A16S
ATOM	27463	O4'	GUA	386	124.459	70.747	21.077	1.00	49.56	A16S
ATOM	27464	C1'	GUA	386	125.206	70.310	22.197	1.00	49.56	A16S
ATOM	27465	N9	GUA	386	126.290	69.460	21.711	1.00	58.33	A16S
ATOM	27466	C4	GUA	386	127.001	68.539	22.442	1.00	58.33	A16S
ATOM	27467	N3	GUA	386	126.828	68.258	23.747	1.00	58.33	A16S
ATOM	27468	C2	GUA	386	127.659	67.321	24.168	1.00	58.33	A16S
ATOM	27469	N2	GUA	386	127.615	66.915	25.441	1.00	58.33	A16S
ATOM	27470	N1	GUA	386	128.592	66.712	23.372	1.00	58.33	A16S
ATOM	27471	C6	GUA	386	128.787	66.981	22.026	1.00	58.33	A16S
ATOM	27472	O6	GUA	386	129.656	66.372	21.404	1.00	58.33	A16S
ATOM	27473	C5	GUA	386	127.897	67.983	21.558	1.00	58.33	A16S
ATOM	27474	N7	GUA	386	127.755	68.542	20.296	1.00	58.33	A16S
ATOM	27475	C8	GUA	386	126.793	69.412	20.436	1.00	58.33	A16S
ATOM	27476	C2'	GUA	386	125.668	71.552	22.969	1.00	49.56	A16S
ATOM	27477	O2'	GUA	386	124.744	71.846	24.003	1.00	49.56	A16S
ATOM	27478	C3'	GUA	386	125.650	72.615	21.879	1.00	49.56	A16S
ATOM	27479	O3'	GUA	386	125.471	73.925	22.372	1.00	49.56	A16S
ATOM	27480	P	GUA	387	126.742	74.733	22.897	1.00	51.95	A16S
ATOM	27481	O1P	GUA	387	126.308	76.075	23.366	1.00	71.46	A16S
ATOM	27482	O2P	GUA	387	127.778	74.612	21.844	1.00	71.46	A16S
ATOM	27483	O5'	GUA	387	127.228	73.886	24.150	1.00	51.95	A16S
ATOM	27484	C5'	GUA	387	128.623	73.739	24.448	1.00	51.95	A16S
ATOM	27485	C4'	GUA	387	128.812	72.633	25.451	1.00	51.95	A16S
ATOM	27486	O4'	GUA	387	128.430	71.356	24.863	1.00	51.95	A16S
ATOM	27487	C1'	GUA	387	129.244	70.323	25.405	1.00	51.95	A16S
ATOM	27488	N9	GUA	387	130.020	69.700	24.334	1.00	71.46	A16S
ATOM	27489	C4	GUA	387	130.899	68.653	24.493	1.00	71.46	A16S
ATOM	27490	N3	GUA	387	131.152	68.003	25.648	1.00	71.46	A16S
ATOM	27491	C2	GUA	387	132.081	67.080	25.500	1.00	71.46	A16S
ATOM	27492	N2	GUA	387	132.459	66.348	26.553	1.00	71.46	A16S
ATOM	27493	N1	GUA	387	132.707	66.810	24.313	1.00	71.46	A16S
ATOM	27494	C6	GUA	387	132.458	67.460	23.115	1.00	71.46	A16S
ATOM	27495	O6	GUA	387	133.080	67.138	22.108	1.00	71.46	A16S
ATOM	27496	C5	GUA	387	131.466	68.458	23.257	1.00	71.46	A16S
ATOM	27497	N7	GUA	387	130.930	69.336	22.326	1.00	71.46	A16S
ATOM	27498	C8	GUA	387	130.071	70.045	23.006	1.00	71.46	A16S
ATOM	27499	C2'	GUA	387	130.190	70.968	26.420	1.00	51.95	A16S
ATOM	27500	O2'	GUA	387	129.652	70.814	27.716	1.00	51.95	A16S
ATOM	27501	C3'	GUA	387	130.233	72.412	25.930	1.00	51.95	A16S
ATOM	27502	O3'	GUA	387	130.590	73.334	26.944	1.00	51.95	A16S
ATOM	27503	P	ADE	388	132.010	74.076	26.869	1.00	47.56	A16S
ATOM	27504	O1P	ADE	388	131.907	75.351	27.629	1.00	71.11	A16S
ATOM	27505	O2P	ADE	388	132.468	74.095	25.458	1.00	71.11	A16S
ATOM	27506	O5'	ADE	388	133.001	73.112	27.646	1.00	47.56	A16S
ATOM	27507	C5'	ADE	388	132.826	72.843	29.035	1.00	47.56	A16S
ATOM	27508	C4'	ADE	388	133.538	71.570	29.395	1.00	47.56	A16S
ATOM	27509	O4'	ADE	388	132.948	70.485	28.636	1.00	47.56	A16S
ATOM	27510	C1'	ADE	388	133.952	69.557	28.264	1.00	47.56	A16S
ATOM	27511	N9	ADE	388	134.057	69.547	26.807	1.00	71.11	A16S
ATOM	27512	C4	ADE	388	134.965	68.815	26.087	1.00	71.11	A16S
ATOM	27513	N3	ADE	388	135.886	67.970	26.570	1.00	71.11	A16S
ATOM	27514	C2	ADE	388	136.602	67.455	25.582	1.00	71.11	A16S
ATOM	27515	N1	ADE	388	136.513	67.680	24.265	1.00	71.11	A16S
ATOM	27516	C6	ADE	388	135.579	68.541	23.820	1.00	71.11	A16S
ATOM	27517	N6	ADE	388	135.501	68.778	22.516	1.00	71.11	A16S
ATOM	27518	C5	ADE	388	134.750	69.142	24.765	1.00	71.11	A16S
ATOM	27519	N7	ADE	388	133.709	70.049	24.648	1.00	71.11	A16S
ATOM	27520	C8	ADE	388	133.332	70.254	25.884	1.00	71.11	A16S
ATOM	27521	C2'	ADE	388	135.266	70.035	28.874	1.00	47.56	A16S
ATOM	27522	O2'	ADE	388	135.492	69.378	30.105	1.00	47.56	A16S
ATOM	27523	C3'	ADE	388	135.008	71.525	29.021	1.00	47.56	A16S
ATOM	27524	O3'	ADE	388	135.850	72.110	29.995	1.00	47.56	A16S
ATOM	27525	P	GUA	389	137.328	72.575	29.570	1.00	57.65	A16S

ATOM	27526	O1P	GUA	389	138.098	72.893	30.803	1.00	64.50	A16S	ATOM	27579	C2	GUA	391	144.696	75.767	19.035	1.00	60.47	A16S
ATOM	27527	O2P	GUA	389	137.199	73.595	28.495	1.00	64.50	A16S	ATOM	27580	N2	GUA	391	144.961	76.179	17.775	1.00	60.47	A16S
ATOM	27528	O5'	GUA	389	137.956	71.262	28.924	1.00	57.65	A16S	ATOM	27581	N1	GUA	391	143.382	75.822	19.427	1.00	60.47	A16S
ATOM	27529	C5'	GUA	389	138.244	70.111	29.734	1.00	57.65	A16S	ATOM	27582	C6	GUA	391	142.905	75.451	20.674	1.00	60.47	A16S
ATOM	27530	C4'	GUA	389	139.293	69.259	29.074	1.00	57.65	A16S	ATOM	27583	O6	GUA	391	141.705	75.532	20.917	1.00	60.47	A16S
ATOM	27531	O4'	GUA	389	138.746	68.573	27.918	1.00	57.65	A16S	ATOM	27584	C5	GUA	391	143.938	75.008	21.513	1.00	60.47	A16S
ATOM	27532	C1'	GUA	389	139.751	68.451	26.924	1.00	57.65	A16S	ATOM	27585	N7	GUA	391	143.897	74.563	22.823	1.00	60.47	A16S
ATOM	27533	N9	GUA	389	139.293	69.137	25.721	1.00	64.50	A16S	ATOM	27586	C8	GUA	391	145.137	74.270	23.103	1.00	60.47	A16S
ATOM	27534	C4	GUA	389	139.829	69.017	24.466	1.00	64.50	A16S	ATOM	27587	C2'	GUA	391	148.242	75.504	22.311	1.00	54.10	A16S
ATOM	27535	N3	GUA	389	140.888	68.256	24.131	1.00	64.50	A16S	ATOM	27588	O2'	GUA	391	149.360	75.481	21.457	1.00	54.10	A16S
ATOM	27536	C2	GUA	389	141.175	68.347	22.845	1.00	64.50	A16S	ATOM	27589	C3'	GUA	391	148.633	75.271	23.760	1.00	54.10	A16S
ATOM	27537	N2	GUA	389	142.214	67.664	22.338	1.00	64.50	A16S	ATOM	27590	O3'	GUA	391	149.821	75.946	24.119	1.00	54.10	A16S
ATOM	27538	N1	GUA	389	140.471	69.116	21.958	1.00	64.50	A16S	ATOM	27591	P	ADE	392	149.808	76.950	25.373	1.00	57.50	A16S
ATOM	27539	C6	GUA	389	139.380	69.911	22.276	1.00	64.50	A16S	ATOM	27592	O1P	ADE	392	151.236	77.206	25.720	1.00	52.36	A16S
ATOM	27540	O6	GUA	389	138.820	70.580	21.384	1.00	64.50	A16S	ATOM	27593	O2P	ADE	392	148.861	76.435	26.412	1.00	52.36	A16S
ATOM	27541	C5	GUA	389	139.065	69.828	23.662	1.00	64.50	A16S	ATOM	27594	O5'	ADE	392	149.164	78.287	24.806	1.00	57.50	A16S
ATOM	27542	N7	GUA	389	138.074	70.455	24.400	1.00	64.50	A16S	ATOM	27595	C5'	ADE	392	149.853	79.044	23.827	1.00	57.50	A16S
ATOM	27543	C8	GUA	389	138.251	70.020	25.614	1.00	64.50	A16S	ATOM	27596	C4'	ADE	392	148.978	80.139	23.307	1.00	57.50	A16S
ATOM	27544	C2'	GUA	389	141.035	69.072	27.477	1.00	57.65	A16S	ATOM	27597	O4'	ADE	392	148.712	81.076	24.373	1.00	57.50	A16S
ATOM	27545	O2'	GUA	389	141.866	68.069	28.022	1.00	57.65	A16S	ATOM	27598	C1'	ADE	392	148.768	82.395	23.870	1.00	57.50	A16S
ATOM	27546	C3'	GUA	389	140.481	70.020	28.527	1.00	57.65	A16S	ATOM	27599	N9	ADE	392	149.803	83.117	24.616	1.00	52.36	A16S
ATOM	27547	O3'	GUA	389	141.410	70.357	29.527	1.00	57.65	A16S	ATOM	27600	C4	ADE	392	151.141	82.819	24.742	1.00	52.36	A16S
ATOM	27548	P	CYT	390	142.219	71.731	29.398	1.00	52.81	A16S	ATOM	27601	N3	ADE	392	151.816	81.816	24.163	1.00	52.36	A16S
ATOM	27549	O1P	CYT	390	142.982	71.939	30.648	1.00	56.19	A16S	ATOM	27602	C2	ADE	392	153.093	81.825	24.544	1.00	52.36	A16S
ATOM	27550	O2P	CYT	390	141.301	72.790	28.917	1.00	56.19	A16S	ATOM	27603	N1	ADE	392	153.721	82.653	25.384	1.00	52.36	A16S
ATOM	27551	O5'	CYT	390	143.271	71.396	28.259	1.00	52.81	A16S	ATOM	27604	C6	ADE	392	153.011	83.648	25.955	1.00	52.36	A16S
ATOM	27552	C5'	CYT	390	144.252	70.372	28.476	1.00	52.81	A16S	ATOM	27605	N6	ADE	392	153.625	84.462	26.817	1.00	52.36	A16S
ATOM	27553	C4'	CYT	390	145.044	70.133	27.223	1.00	52.81	A16S	ATOM	27606	C5	ADE	392	151.654	83.758	25.616	1.00	52.36	A16S
ATOM	27554	O4'	CYT	390	144.175	69.615	26.188	1.00	52.81	A16S	ATOM	27607	N7	ADE	392	150.674	84.655	25.999	1.00	52.36	A16S
ATOM	27555	C1'	CYT	390	144.632	70.066	24.928	1.00	52.81	A16S	ATOM	27608	C8	ADE	392	149.602	84.236	25.378	1.00	52.36	A16S
ATOM	27556	N1	CYT	390	143.557	70.831	24.277	1.00	56.19	A16S	ATOM	27609	C2'	ADE	392	148.978	82.309	22.359	1.00	57.50	A16S
ATOM	27557	C6	CYT	390	142.497	71.315	24.992	1.00	56.19	A16S	ATOM	27610	O2'	ADE	392	147.710	82.322	21.731	1.00	57.50	A16S
ATOM	27558	C2	CYT	390	143.643	71.061	22.899	1.00	56.19	A16S	ATOM	27611	C3'	ADE	392	149.661	80.957	22.233	1.00	57.50	A16S
ATOM	27559	O2	CYT	390	144.620	70.616	22.271	1.00	56.19	A16S	ATOM	27612	O3'	ADE	392	149.494	80.331	20.974	1.00	57.50	A16S
ATOM	27560	N3	CYT	390	142.665	71.761	22.285	1.00	56.19	A16S	ATOM	27613	P	CYT	393	150.391	79.049	20.606	1.00	49.95	A16S
ATOM	27561	C4	CYT	390	141.633	72.224	22.988	1.00	56.19	A16S	ATOM	27614	O1P	CYT	393	149.736	77.892	21.221	1.00	45.82	A16S
ATOM	27562	N4	CYT	390	140.686	72.899	22.331	1.00	56.19	A16S	ATOM	27615	O2P	CYT	393	151.825	79.323	20.892	1.00	45.82	A16S
ATOM	27563	C5	CYT	390	141.523	72.011	24.394	1.00	56.19	A16S	ATOM	27616	O5'	CYT	393	150.192	78.892	19.044	1.00	49.95	A16S
ATOM	27564	C2'	CYT	390	145.885	70.910	25.159	1.00	52.81	A16S	ATOM	27617	C5'	CYT	393	150.491	79.974	18.176	1.00	49.95	A16S
ATOM	27565	O2'	CYT	390	147.027	70.089	25.024	1.00	52.81	A16S	ATOM	27618	C4'	CYT	393	149.277	80.349	17.373	1.00	49.95	A16S
ATOM	27566	C3'	CYT	390	145.690	71.354	26.596	1.00	52.81	A16S	ATOM	27619	O4'	CYT	393	148.294	79.277	17.394	1.00	49.95	A16S
ATOM	27567	O3'	CYT	390	146.922	71.668	27.209	1.00	52.81	A16S	ATOM	27620	C1'	CYT	393	146.996	79.828	17.274	1.00	49.95	A16S
ATOM	27568	P	GUA	391	147.363	73.206	27.343	1.00	54.10	A16S	ATOM	27621	N1	CYT	393	146.201	79.471	18.461	1.00	45.82	A16S
ATOM	27569	O1P	GUA	391	148.671	73.257	28.058	1.00	60.47	A16S	ATOM	27622	C6	CYT	393	146.796	79.174	19.658	1.00	45.82	A16S
ATOM	27570	O2P	GUA	391	146.212	74.005	27.847	1.00	60.47	A16S	ATOM	27623	C2	CYT	393	144.792	79.452	18.342	1.00	45.82	A16S
ATOM	27571	O5'	GUA	391	147.621	73.640	25.843	1.00	54.10	A16S	ATOM	27624	O2	CYT	393	144.271	79.700	17.238	1.00	45.82	A16S
ATOM	27572	C5'	GUA	391	148.753	73.142	25.144	1.00	54.10	A16S	ATOM	27625	N3	CYT	393	144.040	79.156	19.430	1.00	45.82	A16S
ATOM	27573	C4'	GUA	391	148.829	73.772	23.792	1.00	54.10	A16S	ATOM	27626	C4	CYT	393	144.633	78.867	20.591	1.00	45.82	A16S
ATOM	27574	O4'	GUA	391	147.765	73.271	22.955	1.00	54.10	A16S	ATOM	27627	N4	CYT	393	143.848	78.571	21.624	1.00	45.82	A16S
ATOM	27575	C1'	GUA	391	147.422	74.256	22.005	1.00	54.10	A16S	ATOM	27628	C5	CYT	393	146.060	78.868	20.738	1.00	45.82	A16S
ATOM	27576	N9	GUA	391	145.988	74.492	22.054	1.00	60.47	A16S	ATOM	27629	C2'	CYT	393	147.151	81.340	17.164	1.00	49.95	A16S
ATOM	27577	C4	GUA	391	145.223	74.981	21.029	1.00	60.47	A16S	ATOM	27630	O2'	CYT	393	147.174	81.685	15.786	1.00	49.95	A16S
ATOM	27578	N3	GUA	391	145.674	75.342	19.813	1.00	60.47	A16S	ATOM	27631	C3'	CYT	393	148.493	81.549	17.853	1.00	49.95	A16S

ATOM	27632	O3'	CYT	393	149.110	82.757	17.472	1.00	49.95	A16S	ATOM	27685	C6	CYT	396	140.916	90.058	23.426	1.00	54.84	A16S
ATOM	27633	P	GUA	394	148.788	84.091	18.294	1.00	47.30	A16S	ATOM	27686	C2	CYT	396	139.535	88.672	24.820	1.00	54.84	A16S
ATOM	27634	O1P	GUA	394	149.764	85.105	17.826	1.00	42.56	A16S	ATOM	27687	O2	CYT	396	138.398	88.386	25.241	1.00	54.84	A16S
ATOM	27635	O2P	GUA	394	148.695	83.782	19.741	1.00	42.56	A16S	ATOM	27688	N3	CYT	396	140.634	87.972	25.197	1.00	54.84	A16S
ATOM	27636	O5'	GUA	394	147.345	84.506	17.774	1.00	47.30	A16S	ATOM	27689	C4	CYT	396	141.835	88.315	24.726	1.00	54.84	A16S
ATOM	27637	C5'	GUA	394	147.175	84.933	16.421	1.00	47.30	A16S	ATOM	27690	N4	CYT	396	142.895	87.642	25.160	1.00	54.84	A16S
ATOM	27638	C4'	GUA	394	145.765	85.379	16.185	1.00	47.30	A16S	ATOM	27691	C5	CYT	396	142.006	89.375	23.797	1.00	54.84	A16S
ATOM	27639	O4'	GUA	394	144.883	84.245	16.329	1.00	47.30	A16S	ATOM	27692	C2'	CYT	396	138.503	91.832	24.462	1.00	46.36	A16S
ATOM	27640	C1'	GUA	394	143.662	84.661	16.905	1.00	47.30	A16S	ATOM	27693	O2'	CYT	396	137.185	92.285	24.659	1.00	46.36	A16S
ATOM	27641	N9	GUA	394	143.506	83.973	18.182	1.00	42.56	A16S	ATOM	27694	C3'	CYT	396	139.258	92.796	23.576	1.00	46.36	A16S
ATOM	27642	C4	GUA	394	142.329	83.760	18.851	1.00	42.56	A16S	ATOM	27695	O3'	CYT	396	139.029	94.125	23.969	1.00	46.36	A16S
ATOM	27643	N3	GUA	394	141.110	84.159	18.444	1.00	42.56	A16S	ATOM	27696	P	GUA	397	139.955	94.760	25.117	1.00	48.17	A16S
ATOM	27644	C2	GUA	394	140.161	83.809	19.292	1.00	42.56	A16S	ATOM	27697	O1P	GUA	397	139.601	96.203	25.202	1.00	54.62	A16S
ATOM	27645	N2	GUA	394	138.893	84.146	19.035	1.00	42.56	A16S	ATOM	27698	O2P	GUA	397	141.372	94.365	24.878	1.00	54.62	A16S
ATOM	27646	N1	GUA	394	140.387	83.106	20.450	1.00	42.56	A16S	ATOM	27699	O5'	GUA	397	139.465	94.021	26.441	1.00	48.17	A16S
ATOM	27647	C6	GUA	394	141.636	82.677	20.891	1.00	42.56	A16S	ATOM	27700	C5'	GUA	397	138.122	94.199	26.918	1.00	48.17	A16S
ATOM	27648	O6	GUA	394	141.732	82.031	21.948	1.00	42.56	A16S	ATOM	27701	C4'	GUA	397	137.888	93.376	28.153	1.00	48.17	A16S
ATOM	27649	C5	GUA	394	142.671	83.068	19.986	1.00	42.56	A16S	ATOM	27702	O4'	GUA	397	137.935	91.966	27.818	1.00	48.17	A16S
ATOM	27650	N7	GUA	394	144.045	82.863	20.042	1.00	42.56	A16S	ATOM	27703	C1'	GUA	397	138.451	91.230	28.917	1.00	48.17	A16S
ATOM	27651	C8	GUA	394	144.497	83.414	18.951	1.00	42.56	A16S	ATOM	27704	N9	GUA	397	139.695	90.579	28.521	1.00	54.62	A16S
ATOM	27652	C2'	GUA	394	143.723	86.180	17.061	1.00	47.30	A16S	ATOM	27705	C4	GUA	397	140.329	89.573	29.208	1.00	54.62	A16S
ATOM	27653	O2'	GUA	394	143.150	86.758	15.908	1.00	47.30	A16S	ATOM	27706	N3	GUA	397	139.874	88.969	30.328	1.00	54.62	A16S
ATOM	27654	C3'	GUA	394	145.225	86.415	17.152	1.00	47.30	A16S	ATOM	27707	C2	GUA	397	140.734	88.080	30.795	1.00	54.62	A16S
ATOM	27655	O3'	GUA	394	145.617	87.733	16.774	1.00	47.30	A16S	ATOM	27708	N2	GUA	397	140.450	87.410	31.911	1.00	54.62	A16S
ATOM	27656	P	CYT	395	145.685	88.900	17.882	1.00	42.32	A16S	ATOM	27709	N1	GUA	397	141.939	87.789	30.201	1.00	54.62	A16S
ATOM	27657	O1P	CYT	395	146.219	90.101	17.181	1.00	48.50	A16S	ATOM	27710	C6	GUA	397	142.424	88.387	29.043	1.00	54.62	A16S
ATOM	27658	O2P	CYT	395	146.378	88.404	19.094	1.00	48.50	A16S	ATOM	27711	O6	GUA	397	143.525	88.045	28.587	1.00	54.62	A16S
ATOM	27659	O5'	CYT	395	144.148	89.136	18.230	1.00	42.32	A16S	ATOM	27712	C5	GUA	397	141.513	89.361	28.537	1.00	54.62	A16S
ATOM	27660	C5'	CYT	395	143.253	89.626	17.226	1.00	42.32	A16S	ATOM	27713	N7	GUA	397	141.603	90.188	27.427	1.00	54.62	A16S
ATOM	27661	C4'	CYT	395	141.847	89.704	17.755	1.00	42.32	A16S	ATOM	27714	C8	GUA	397	140.496	90.879	27.448	1.00	54.62	A16S
ATOM	27662	O4'	CYT	395	141.341	88.368	17.972	1.00	42.32	A16S	ATOM	27715	C2'	GUA	397	138.748	92.229	30.035	1.00	48.17	A16S
ATOM	27663	C1'	CYT	395	140.447	88.369	19.070	1.00	42.32	A16S	ATOM	27716	O2'	GUA	397	137.664	92.263	30.938	1.00	48.17	A16S
ATOM	27664	N1	CYT	395	140.994	87.494	20.123	1.00	48.50	A16S	ATOM	27717	C3'	GUA	397	138.918	93.522	29.254	1.00	48.17	A16S
ATOM	27665	C6	CYT	395	142.344	87.323	20.255	1.00	48.50	A16S	ATOM	27718	O3'	GUA	397	138.708	94.658	30.057	1.00	48.17	A16S
ATOM	27666	C2	CYT	395	140.111	86.856	21.009	1.00	48.50	A16S	ATOM	27719	P	CYT	398	139.976	95.397	30.713	1.00	52.51	A16S
ATOM	27667	O2	CYT	395	138.887	87.001	20.858	1.00	48.50	A16S	ATOM	27720	O1P	CYT	398	139.463	96.602	31.417	1.00	71.21	A16S
ATOM	27668	N3	CYT	395	140.615	86.098	22.005	1.00	48.50	A16S	ATOM	27721	O2P	CYT	398	141.050	95.544	29.695	1.00	71.21	A16S
ATOM	27669	C4	CYT	395	141.934	85.953	22.130	1.00	48.50	A16S	ATOM	27722	O5'	CYT	398	140.496	94.357	31.798	1.00	52.51	A16S
ATOM	27670	N4	CYT	395	142.387	85.201	23.129	1.00	48.50	A16S	ATOM	27723	C5'	CYT	398	139.622	93.904	32.832	1.00	52.51	A16S
ATOM	27671	C5	CYT	395	142.850	86.574	21.235	1.00	48.50	A16S	ATOM	27724	C4'	CYT	398	140.328	92.932	33.735	1.00	52.51	A16S
ATOM	27672	C2'	CYT	395	140.328	89.811	19.560	1.00	42.32	A16S	ATOM	27725	O4'	CYT	398	140.471	91.634	33.094	1.00	52.51	A16S
ATOM	27673	O2'	CYT	395	139.213	90.410	18.939	1.00	42.32	A16S	ATOM	27726	C1'	CYT	398	141.595	90.965	33.654	1.00	52.51	A16S
ATOM	27674	C3'	CYT	395	141.642	90.409	19.084	1.00	42.32	A16S	ATOM	27727	N1	CYT	398	142.554	90.578	32.598	1.00	71.21	A16S
ATOM	27675	O3'	CYT	395	141.558	91.819	18.945	1.00	42.32	A16S	ATOM	27728	C6	CYT	398	142.660	91.279	31.430	1.00	71.21	A16S
ATOM	27676	P	CYT	396	142.048	92.767	20.153	1.00	46.36	A16S	ATOM	27729	C2	CYT	398	143.402	89.493	32.845	1.00	71.21	A16S
ATOM	27677	O1P	CYT	396	141.892	94.175	19.706	1.00	54.84	A16S	ATOM	27730	O2	CYT	398	143.245	88.832	33.881	1.00	71.21	A16S
ATOM	27678	O2P	CYT	396	143.372	92.293	20.644	1.00	54.84	A16S	ATOM	27731	N3	CYT	398	144.365	89.188	31.952	1.00	71.21	A16S
ATOM	27679	O5'	CYT	396	140.955	92.500	21.277	1.00	46.36	A16S	ATOM	27732	C4	CYT	398	144.490	89.904	30.840	1.00	71.21	A16S
ATOM	27680	C5'	CYT	396	139.578	92.841	21.037	1.00	46.36	A16S	ATOM	27733	N4	CYT	398	145.478	89.586	30.005	1.00	71.21	A16S
ATOM	27681	C4'	CYT	396	138.722	92.445	22.208	1.00	46.36	A16S	ATOM	27734	C5	CYT	398	143.610	90.982	30.535	1.00	71.21	A16S
ATOM	27682	O4'	CYT	396	138.593	91.004	22.254	1.00	46.36	A16S	ATOM	27735	C2'	CYT	398	142.281	91.936	34.622	1.00	52.51	A16S
ATOM	27683	C1'	CYT	396	138.500	90.575	23.601	1.00	46.36	A16S	ATOM	27736	O2'	CYT	398	141.929	91.637	35.955	1.00	52.51	A16S
ATOM	27684	N1	CYT	396	139.683	89.753	23.933	1.00	54.84	A16S	ATOM	27737	C3'	CYT	398	141.744	93.283	34.155	1.00	52.51	A16S

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ATOM  27738  O3' CYT  398     141.837  94.252  35.179  1.00 52.51      A16S
ATOM  27739  P   URI  399     143.272  94.879  35.534  1.00 64.62      A16S
ATOM  27740  O1P URI  399     143.055  96.002  36.475  1.00 65.57      A16S
ATOM  27741  O2P URI  399     144.017  95.120  34.276  1.00 65.57      A16S
ATOM  27742  O5' URI  399     144.007  93.713  36.332  1.00 64.62      A16S
ATOM  27743  C5' URI  399     143.456  93.210  37.568  1.00 64.62      A16S
ATOM  27744  C4' URI  399     144.398  92.218  38.210  1.00 64.62      A16S
ATOM  27745  O4' URI  399     144.530  91.041  37.376  1.00 64.62      A16S
ATOM  27746  C1' URI  399     145.853  90.537  37.464  1.00 64.62      A16S
ATOM  27747  N1  URI  399     146.466  90.560  36.124  1.00 65.57      A16S
ATOM  27748  C6  URI  399     145.852  91.174  35.054  1.00 65.57      A16S
ATOM  27749  C2  URI  399     147.700  89.956  35.974  1.00 65.57      A16S
ATOM  27750  O2  URI  399     148.269  89.373  36.881  1.00 65.57      A16S
ATOM  27751  N3  URI  399     148.247  90.058  34.721  1.00 65.57      A16S
ATOM  27752  C4  URI  399     147.702  90.677  33.621  1.00 65.57      A16S
ATOM  27753  O4  URI  399     148.371  90.775  32.592  1.00 65.57      A16S
ATOM  27754  C5  URI  399     146.412  91.248  33.841  1.00 65.57      A16S
ATOM  27755  C2' URI  399     146.616  91.409  38.462  1.00 64.62      A16S
ATOM  27756  O2' URI  399     146.589  90.783  39.724  1.00 64.62      A16S
ATOM  27757  C3' URI  399     145.819  92.705  38.410  1.00 64.62      A16S
ATOM  27758  O3' URI  399     145.934  93.477  39.590  1.00 64.62      A16S
ATOM  27759  P   URI  400     147.032  94.644  39.667  1.00 59.05      A16S
ATOM  27760  O1P URI  400     146.789  95.398  40.931  1.00 75.84      A16S
ATOM  27761  O2P URI  400     147.046  95.365  38.367  1.00 75.84      A16S
ATOM  27762  O5' URI  400     148.389  93.839  39.842  1.00 59.05      A16S
ATOM  27763  C5' URI  400     148.532  92.933  40.927  1.00 59.05      A16S
ATOM  27764  C4' URI  400     149.776  92.111  40.765  1.00 59.05      A16S
ATOM  27765  O4' URI  400     149.664  91.259  39.605  1.00 59.05      A16S
ATOM  27766  C1' URI  400     150.947  91.053  39.051  1.00 59.05      A16S
ATOM  27767  N1  URI  400     150.904  91.402  37.619  1.00 75.84      A16S
ATOM  27768  C6  URI  400     150.005  92.326  37.124  1.00 75.84      A16S
ATOM  27769  C2  URI  400     151.794  90.766  36.777  1.00 75.84      A16S
ATOM  27770  O2  URI  400     152.609  89.955  37.168  1.00 75.84      A16S
ATOM  27771  N3  URI  400     151.695  91.118  35.456  1.00 75.84      A16S
ATOM  27772  C4  URI  400     150.820  92.023  34.897  1.00 75.84      A16S
ATOM  27773  O4  URI  400     150.833  92.204  33.678  1.00 75.84      A16S
ATOM  27774  C5  URI  400     149.937  92.648  35.828  1.00 75.84      A16S
ATOM  27775  C2' URI  400     151.964  91.832  39.898  1.00 59.05      A16S
ATOM  27776  O2' URI  400     152.559  90.930  40.815  1.00 59.05      A16S
ATOM  27777  C3' URI  400     151.080  92.868  40.594  1.00 59.05      A16S
ATOM  27778  O3' URI  400     151.555  93.199  41.899  1.00 59.05      A16S
ATOM  27779  P   GUA  401     152.738  94.271  42.099  1.00 66.68      A16S
ATOM  27780  O1P GUA  401     153.597  94.265  40.885  1.00 65.03      A16S
ATOM  27781  O2P GUA  401     153.339  93.961  43.432  1.00 65.03      A16S
ATOM  27782  O5' GUA  401     151.989  95.675  42.218  1.00 66.68      A16S
ATOM  27783  C5' GUA  401     151.188  96.161  41.138  1.00 66.68      A16S
ATOM  27784  C4' GUA  401     149.798  96.533  41.615  1.00 66.68      A16S
ATOM  27785  O4' GUA  401     149.349  95.606  42.637  1.00 66.68      A16S
ATOM  27786  C1' GUA  401     148.492  96.280  43.547  1.00 66.68      A16S
ATOM  27787  N9  GUA  401     149.085  96.216  44.884  1.00 65.03      A16S
ATOM  27788  C4  GUA  401     148.526  96.674  46.061  1.00 65.03      A16S
ATOM  27789  N3  GUA  401     147.316  97.252  46.194  1.00 65.03      A16S
ATOM  27790  C2  GUA  401     147.062  97.581  47.444  1.00 65.03      A16S
ATOM  27791  N2  GUA  401     145.897  98.162  47.757  1.00 65.03      A16S
ATOM  27792  N1  GUA  401     147.928  97.366  48.481  1.00 65.03      A16S
ATOM  27793  C6  GUA  401     149.182  96.781  48.367  1.00 65.03      A16S
ATOM  27794  O6  GUA  401     149.894  96.643  49.370  1.00 65.03      A16S
ATOM  27795  C5  GUA  401     149.463  96.416  47.034  1.00 65.03      A16S
ATOM  27796  N7  GUA  401     150.584  95.806  46.491  1.00 65.03      A16S
ATOM  27797  C8  GUA  401     150.315  95.704  45.219  1.00 65.03      A16S
ATOM  27798  C2' GUA  401     148.336  97.717  43.048  1.00 66.68      A16S
ATOM  27799  O2' GUA  401     147.179  97.800  42.233  1.00 66.68      A16S
ATOM  27800  C3' GUA  401     149.615  97.902  42.244  1.00 66.68      A16S
ATOM  27801  O3' GUA  401     149.447  98.892  41.243  1.00 66.68      A16S
ATOM  27802  P   GUA  402     149.965 100.387  41.510  1.00 68.02      A16S
ATOM  27803  O1P GUA  402     149.816 101.114  40.225  1.00 67.21      A16S
ATOM  27804  O2P GUA  402     151.299 100.328  42.174  1.00 67.21      A16S
ATOM  27805  O5' GUA  402     148.903 100.970  42.543  1.00 68.02      A16S
ATOM  27806  C5' GUA  402     147.544 101.228  42.138  1.00 68.02      A16S
ATOM  27807  C4' GUA  402     146.772 101.853  43.274  1.00 68.02      A16S
ATOM  27808  O4' GUA  402     146.573 100.867  44.319  1.00 68.02      A16S
ATOM  27809  C1' GUA  402     146.688 101.485  45.585  1.00 68.02      A16S
ATOM  27810  N9  GUA  402     147.831 100.887  46.268  1.00 67.21      A16S
ATOM  27811  C4  GUA  402     148.139 100.994  47.604  1.00 67.21      A16S
ATOM  27812  N3  GUA  402     147.452 101.704  48.520  1.00 67.21      A16S
ATOM  27813  C2  GUA  402     147.980 101.591  49.729  1.00 67.21      A16S
ATOM  27814  N2  GUA  402     147.422 102.241  50.765  1.00 67.21      A16S
ATOM  27815  N1  GUA  402     149.089 100.834  50.013  1.00 67.21      A16S
ATOM  27816  C6  GUA  402     149.810 100.094  49.085  1.00 67.21      A16S
ATOM  27817  O6  GUA  402     150.790  99.431  49.450  1.00 67.21      A16S
ATOM  27818  C5  GUA  402     149.263 100.217  47.784  1.00 67.21      A16S
ATOM  27819  N7  GUA  402     149.676  99.661  46.581  1.00 67.21      A16S
ATOM  27820  C8  GUA  402     148.802 100.089  45.711  1.00 67.21      A16S
ATOM  27821  C2' GUA  402     146.852 102.985  45.354  1.00 68.02      A16S
ATOM  27822  O2' GUA  402     145.581 103.606  45.377  1.00 68.02      A16S
ATOM  27823  C3' GUA  402     147.471 103.010  43.965  1.00 68.02      A16S
ATOM  27824  O3' GUA  402     147.267 104.247  43.302  1.00 68.02      A16S
ATOM  27825  P   ADE  403     148.397 105.383  43.399  1.00 72.65      A16S
ATOM  27826  O1P ADE  403     148.005 106.468  42.474  1.00 81.55      A16S
ATOM  27827  O2P ADE  403     149.739 104.755  43.274  1.00 81.55      A16S
ATOM  27828  O5' ADE  403     148.272 105.924  44.888  1.00 72.65      A16S
ATOM  27829  C5' ADE  403     147.157 106.742  45.297  1.00 72.65      A16S
ATOM  27830  C4' ADE  403     147.298 107.125  46.751  1.00 72.65      A16S
ATOM  27831  O4' ADE  403     147.109 105.946  47.582  1.00 72.65      A16S
ATOM  27832  C1' ADE  403     147.969 106.015  48.713  1.00 72.65      A16S
ATOM  27833  N9  ADE  403     148.941 104.921  48.636  1.00 81.55      A16S
ATOM  27834  C4  ADE  403     149.773 104.511  49.653  1.00 81.55      A16S
ATOM  27835  N3  ADE  403     149.815 104.977  50.914  1.00 81.55      A16S
ATOM  27836  C2  ADE  403     150.769 104.366  51.612  1.00 81.55      A16S
ATOM  27837  N1  ADE  403     151.627 103.419  51.223  1.00 81.55      A16S
ATOM  27838  C6  ADE  403     151.566 102.977  49.949  1.00 81.55      A16S
ATOM  27839  N6  ADE  403     152.437 102.049  49.558  1.00 81.55      A16S
ATOM  27840  C5  ADE  403     150.585 103.536  49.107  1.00 81.55      A16S
ATOM  27841  N7  ADE  403     150.247 103.304  47.782  1.00 81.55      A16S
ATOM  27842  C8  ADE  403     149.262 104.139  47.556  1.00 81.55      A16S
ATOM  27843  C2' ADE  403     148.707 107.353  48.646  1.00 72.65      A16S
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ATOM  27950  N1  GUA  408     164.209 111.723  44.324  1.00 92.81      A16S
ATOM  27951  C6  GUA  408     164.385 113.060  44.637  1.00 92.81      A16S
ATOM  27952  O6  GUA  408     163.849 113.927  43.940  1.00 92.81      A16S
ATOM  27953  C5  GUA  408     165.202 113.223  45.794  1.00 92.81      A16S
ATOM  27954  N7  GUA  408     165.625 114.375  46.438  1.00 92.81      A16S
ATOM  27955  C8  GUA  408     166.329 113.942  47.448  1.00 92.81      A16S
ATOM  27956  C2' GUA  408     167.857 110.565  48.216  1.00105.92      A16S
ATOM  27957  O2' GUA  408     167.465 109.517  49.070  1.00105.92      A16S
ATOM  27958  C3' GUA  408     169.277 111.036  48.529  1.00105.92      A16S
ATOM  27959  O3' GUA  408     170.123 110.021  49.082  1.00105.92      A16S
ATOM  27960  P   ADE  409     170.435 108.656  48.285  1.00 80.80      A16S
ATOM  27961  O1P ADE  409     171.883 108.681  47.953  1.00109.30      A16S
ATOM  27962  O2P ADE  409     169.453 108.429  47.207  1.00109.30      A16S
ATOM  27963  O5' ADE  409     170.228 107.545  49.414  1.00 80.80      A16S
ATOM  27964  C5' ADE  409     170.438 107.876  50.812  1.00 80.80      A16S
ATOM  27965  C4' ADE  409     170.570 106.628  51.656  1.00 80.80      A16S
ATOM  27966  O4' ADE  409     169.298 105.943  51.742  1.00 80.80      A16S
ATOM  27967  C1' ADE  409     169.516 104.544  51.824  1.00 80.80      A16S
ATOM  27968  N9  ADE  409     168.769 103.888  50.748  1.00109.30      A16S
ATOM  27969  C4  ADE  409     168.748 102.541  50.478  1.00109.30      A16S
ATOM  27970  N3  ADE  409     169.410 101.568  51.125  1.00109.30      A16S
ATOM  27971  C2  ADE  409     169.137 100.377  50.592  1.00109.30      A16S
ATOM  27972  N1  ADE  409     168.335 100.072  49.563  1.00109.30      A16S
ATOM  27973  C6  ADE  409     167.683 101.074  48.935  1.00109.30      A16S
ATOM  27974  N6  ADE  409     166.874 100.772  47.915  1.00109.30      A16S
ATOM  27975  C5  ADE  409     167.894 102.386  49.402  1.00109.30      A16S
ATOM  27976  N7  ADE  409     167.394 103.613  48.991  1.00109.30      A16S
ATOM  27977  C8  ADE  409     167.944 104.468  49.816  1.00109.30      A16S
ATOM  27978  C2' ADE  409     171.026 104.293  51.788  1.00 80.80      A16S
ATOM  27979  O2' ADE  409     171.496 104.066  53.100  1.00 80.80      A16S
ATOM  27980  C3' ADE  409     171.551 105.582  51.159  1.00 80.80      A16S
ATOM  27981  O3' ADE  409     172.876 105.883  51.574  1.00 80.80      A16S
ATOM  27982  P   ADE  410     174.096 105.682  50.546  1.00 73.48      A16S
ATOM  27983  O1P ADE  410     175.343 106.123  51.222  1.00106.41      A16S
ATOM  27984  O2P ADE  410     173.711 106.289  49.245  1.00106.41      A16S
ATOM  27985  O5' ADE  410     174.181 104.104  50.359  1.00 73.48      A16S
ATOM  27986  C5' ADE  410     174.440 103.248  51.478  1.00 73.48      A16S
ATOM  27987  C4' ADE  410     174.189 101.807  51.108  1.00 73.48      A16S
ATOM  27988  O4' ADE  410     172.774 101.593  50.854  1.00 73.48      A16S
ATOM  27989  C1' ADE  410     172.617 100.582  49.869  1.00 73.48      A16S
ATOM  27990  N9  ADE  410     171.871 101.120  48.725  1.00106.41      A16S
ATOM  27991  C4  ADE  410     171.119 100.375  47.845  1.00106.41      A16S
ATOM  27992  N3  ADE  410     170.899  99.049  47.878  1.00106.41      A16S
ATOM  27993  C2  ADE  410     170.131  98.674  46.858  1.00106.41      A16S
ATOM  27994  N1  ADE  410     169.601  99.414  45.879  1.00106.41      A16S
ATOM  27995  C6  ADE  410     169.844 100.742  45.870  1.00106.41      A16S
ATOM  27996  N6  ADE  410     169.325 101.477  44.886  1.00106.41      A16S
ATOM  27997  C5  ADE  410     170.639 101.270  46.906  1.00106.41      A16S
ATOM  27998  N7  ADE  410     171.066 102.560  47.193  1.00106.41      A16S
ATOM  27999  C8  ADE  410     171.787 102.419  48.280  1.00106.41      A16S
ATOM  28000  C2' ADE  410     174.014 100.108  49.464  1.00 73.48      A16S
ATOM  28001  O2' ADE  410     174.317  98.942  50.200  1.00 73.48      A16S
ATOM  28002  C3' ADE  410     174.876 101.306  49.850  1.00 73.48      A16S
ATOM  28003  O3' ADE  410     176.235 100.958  50.081  1.00 73.48      A16S
ATOM  28004  P   GUA  411     177.316 101.162  48.907  1.00 87.76      A16S
ATOM  28005  O1P GUA  411     178.642 100.753  49.431  1.00 95.77      A16S
ATOM  28006  O2P GUA  411     177.149 102.524  48.341  1.00 95.77      A16S
ATOM  28007  O5' GUA  411     176.876 100.091  47.812  1.00 87.76      A16S
ATOM  28008  C5' GUA  411     176.928  98.676  48.103  1.00 87.76      A16S
ATOM  28009  C4' GUA  411     176.238  97.879  47.015  1.00 87.76      A16S
ATOM  28010  O4' GUA  411     174.821  98.188  46.997  1.00 87.76      A16S
ATOM  28011  C1' GUA  411     174.351  98.207  45.661  1.00 87.76      A16S
ATOM  28012  N9  GUA  411     173.906  99.568  45.363  1.00 95.77      A16S
ATOM  28013  C4  GUA  411     173.096  99.966  44.322  1.00 95.77      A16S
ATOM  28014  N3  GUA  411     172.558  99.162  43.382  1.00 95.77      A16S
ATOM  28015  C2  GUA  411     171.823  99.837  42.518  1.00 95.77      A16S
ATOM  28016  N2  GUA  411     171.204  99.188  41.519  1.00 95.77      A16S
ATOM  28017  N1  GUA  411     171.638 101.197  42.569  1.00 95.77      A16S
ATOM  28018  C6  GUA  411     172.191 102.043  43.524  1.00 95.77      A16S
ATOM  28019  O6  GUA  411     171.975 103.258  43.472  1.00 95.77      A16S
ATOM  28020  C5  GUA  411     172.969 101.332  44.459  1.00 95.77      A16S
ATOM  28021  N7  GUA  411     173.681 101.787  45.560  1.00 95.77      A16S
ATOM  28022  C8  GUA  411     174.218 100.711  46.065  1.00 95.77      A16S
ATOM  28023  C2' GUA  411     175.504  97.751  44.765  1.00 87.76      A16S
ATOM  28024  O2' GUA  411     175.424  96.351  44.581  1.00 87.76      A16S
ATOM  28025  C3' GUA  411     176.714  98.146  45.598  1.00 87.76      A16S
ATOM  28026  O3' GUA  411     177.861  97.372  45.287  1.00 87.76      A16S
ATOM  28027  P   CYT  412     178.953  97.953  44.265  1.00 94.42      A16S
ATOM  28028  O1P CYT  412     179.960  96.884  44.060  1.00 77.15      A16S
ATOM  28029  O2P CYT  412     179.391  99.294  44.716  1.00 77.15      A16S
ATOM  28030  O5' CYT  412     178.135  98.151  42.914  1.00 94.42      A16S
ATOM  28031  C5' CYT  412     177.711  97.017  42.126  1.00 94.42      A16S
ATOM  28032  C4' CYT  412     176.951  97.483  40.908  1.00 94.42      A16S
ATOM  28033  O4' CYT  412     175.697  98.073  41.328  1.00 94.42      A16S
ATOM  28034  C1' CYT  412     175.400  99.191  40.509  1.00 94.42      A16S
ATOM  28035  N1  CYT  412     175.382 100.401  41.352  1.00 77.15      A16S
ATOM  28036  C6  CYT  412     176.089 100.460  42.523  1.00 77.15      A16S
ATOM  28037  C2  CYT  412     174.634 101.507  40.926  1.00 77.15      A16S
ATOM  28038  O2  CYT  412     174.004 101.433  39.853  1.00 77.15      A16S
ATOM  28039  N3  CYT  412     174.621 102.628  41.688  1.00 77.15      A16S
ATOM  28040  C4  CYT  412     175.319 102.671  42.822  1.00 77.15      A16S
ATOM  28041  N4  CYT  412     175.278 103.792  43.534  1.00 77.15      A16S
ATOM  28042  C5  CYT  412     176.089 101.565  43.277  1.00 77.15      A16S
ATOM  28043  C2' CYT  412     176.477  99.277  39.428  1.00 94.42      A16S
ATOM  28044  O2' CYT  412     176.047  98.605  38.263  1.00 94.42      A16S
ATOM  28045  C3' CYT  412     177.640  98.572  40.101  1.00 94.42      A16S
ATOM  28046  O3' CYT  412     178.555  98.053  39.156  1.00 94.42      A16S
ATOM  28047  P   CYT  413     179.762  98.974  38.639  1.00 78.33      A16S
ATOM  28048  O1P CYT  413     180.364  99.648  39.812  1.00 92.29      A16S
ATOM  28049  O2P CYT  413     180.611  98.134  37.761  1.00 92.29      A16S
ATOM  28050  O5' CYT  413     179.054 100.099  37.762  1.00 78.33      A16S
ATOM  28051  C5' CYT  413     178.476  99.773  36.488  1.00 78.33      A16S
ATOM  28052  C4' CYT  413     177.932 101.010  35.812  1.00 78.33      A16S
ATOM  28053  O4' CYT  413     176.795 101.518  36.552  1.00 78.33      A16S
ATOM  28054  C1' CYT  413     176.737 102.926  36.421  1.00 78.33      A16S
ATOM  28055  N1  CYT  413     176.778 103.532  37.762  1.00 92.29      A16S
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ATOM	28056	C6	CYT	413	177.142	102.800	38.856	1.00	92.29	A16S	ATOM	28109	O2P	URI	416	186.662	111.856	35.684	1.00	76.38	A16S
ATOM	28057	C2	CYT	413	176.435	104.883	37.902	1.00	92.29	A16S	ATOM	28110	O5'	URI	416	186.956	114.243	34.951	1.00	102.86	A16S
ATOM	28058	O2	CYT	413	176.115	105.532	36.896	1.00	92.29	A16S	ATOM	28111	C5'	URI	416	186.522	114.949	36.126	1.00	102.86	A16S
ATOM	28059	N3	CYT	413	176.463	105.450	39.125	1.00	92.29	A16S	ATOM	28112	C4'	URI	416	186.560	116.437	35.881	1.00	102.86	A16S
ATOM	28060	C4	CYT	413	176.821	104.729	40.184	1.00	92.29	A16S	ATOM	28113	O4'	URI	416	186.056	116.656	34.550	1.00	102.86	A16S
ATOM	28061	N4	CYT	413	176.834	105.334	41.372	1.00	92.29	A16S	ATOM	28114	C1'	URI	416	185.305	117.844	34.522	1.00	102.86	A16S
ATOM	28062	C5	CYT	413	177.180	103.354	40.074	1.00	92.29	A16S	ATOM	28115	N1	URI	416	184.107	117.629	33.696	1.00	76.38	A16S
ATOM	28063	C2'	CYT	413	177.897	103.365	35.526	1.00	78.33	A16S	ATOM	28116	C6	URI	416	183.579	116.369	33.527	1.00	76.38	A16S
ATOM	28064	O2'	CYT	413	177.416	103.518	34.202	1.00	78.33	A16S	ATOM	28117	C2	URI	416	183.544	118.733	33.046	1.00	76.38	A16S
ATOM	28065	C3'	CYT	413	178.869	102.201	35.681	1.00	78.33	A16S	ATOM	28118	O2	URI	416	183.937	119.883	33.201	1.00	76.38	A16S
ATOM	28066	O3'	CYT	413	179.735	102.072	34.557	1.00	78.33	A16S	ATOM	28119	N3	URI	416	182.501	118.438	32.205	1.00	76.38	A16S
ATOM	28067	P	CYT	414	181.215	102.709	34.607	1.00	72.29	A16S	ATOM	28120	C4	URI	416	181.960	117.196	31.960	1.00	76.38	A16S
ATOM	28068	O1P	CYT	414	181.940	102.229	33.394	1.00	81.97	A16S	ATOM	28121	O4	URI	416	181.087	117.080	31.099	1.00	76.38	A16S
ATOM	28069	O2P	CYT	414	181.782	102.443	35.956	1.00	81.97	A16S	ATOM	28122	C5	URI	416	182.557	116.122	32.703	1.00	76.38	A16S
ATOM	28070	O5'	CYT	414	180.977	104.279	34.454	1.00	72.29	A16S	ATOM	28123	C2'	URI	416	185.158	118.398	35.944	1.00	102.86	A16S
ATOM	28071	C5'	CYT	414	180.478	104.808	33.220	1.00	72.29	A16S	ATOM	28124	O2'	URI	416	185.934	119.579	36.060	1.00	102.86	A16S
ATOM	28072	C4'	CYT	414	179.959	106.214	33.398	1.00	72.29	A16S	ATOM	28125	C3'	URI	416	185.664	117.245	36.821	1.00	102.86	A16S
ATOM	28073	O4'	CYT	414	178.907	106.245	34.396	1.00	72.29	A16S	ATOM	28126	O3'	URI	416	186.353	117.846	37.955	1.00	102.86	A16S
ATOM	28074	C1'	CYT	414	178.891	107.517	35.027	1.00	72.29	A16S	ATOM	28127	P	CYT	417	187.654	117.145	38.630	1.00	130.60	A16S
ATOM	28075	N1	CYT	414	179.140	107.351	36.473	1.00	81.97	A16S	ATOM	28128	O1P	CYT	417	188.836	117.904	38.150	1.00	119.02	A16S
ATOM	28076	C6	CYT	414	179.564	106.160	36.994	1.00	81.97	A16S	ATOM	28129	O2P	CYT	417	187.629	115.670	38.493	1.00	119.02	A16S
ATOM	28077	C2	CYT	414	178.954	108.457	37.310	1.00	81.97	A16S	ATOM	28130	O5'	CYT	417	187.508	117.459	40.185	1.00	130.60	A16S
ATOM	28078	O2	CYT	414	178.535	109.516	36.820	1.00	81.97	A16S	ATOM	28131	C5'	CYT	417	186.224	117.749	40.753	1.00	130.60	A16S
ATOM	28079	N3	CYT	414	179.231	108.346	38.627	1.00	81.97	A16S	ATOM	28132	C4'	CYT	417	185.686	116.545	41.493	1.00	130.60	A16S
ATOM	28080	C4	CYT	414	179.659	107.186	39.122	1.00	81.97	A16S	ATOM	28133	O4'	CYT	417	185.649	115.390	40.642	1.00	130.60	A16S
ATOM	28081	N4	CYT	414	179.928	107.127	40.427	1.00	81.97	A16S	ATOM	28134	C1'	CYT	417	185.397	114.285	41.466	1.00	130.60	A16S
ATOM	28082	C5	CYT	414	179.833	106.034	38.300	1.00	81.97	A16S	ATOM	28135	N1	CYT	417	185.737	113.036	40.755	1.00	119.02	A16S
ATOM	28083	C2'	CYT	414	179.996	108.359	34.389	1.00	72.29	A16S	ATOM	28136	C6	CYT	417	186.440	113.057	39.582	1.00	119.02	A16S
ATOM	28084	O2'	CYT	414	179.446	109.181	33.373	1.00	72.29	A16S	ATOM	28137	C2	CYT	417	185.298	111.811	41.293	1.00	119.02	A16S
ATOM	28085	C3'	CYT	414	180.933	107.281	33.862	1.00	72.29	A16S	ATOM	28138	O2	CYT	417	184.676	111.809	42.365	1.00	119.02	A16S
ATOM	28086	O3'	CYT	414	181.756	107.771	32.819	1.00	72.29	A16S	ATOM	28139	N3	CYT	417	185.563	110.665	40.629	1.00	119.02	A16S
ATOM	28087	P	URI	415	183.269	108.189	33.147	1.00	92.35	A16S	ATOM	28140	C4	CYT	417	186.233	110.701	39.476	1.00	119.02	A16S
ATOM	28088	O1P	URI	415	183.918	108.574	31.867	1.00	66.67	A16S	ATOM	28141	N4	CYT	417	186.457	109.544	38.849	1.00	119.02	A16S
ATOM	28089	O2P	URI	415	183.862	107.103	33.978	1.00	66.67	A16S	ATOM	28142	C5	CYT	417	186.703	111.926	38.913	1.00	119.02	A16S
ATOM	28090	O5'	URI	415	183.118	109.504	34.036	1.00	92.35	A16S	ATOM	28143	C2'	CYT	417	186.083	114.562	42.810	1.00	130.60	A16S
ATOM	28091	C5'	URI	415	182.648	110.739	33.454	1.00	92.35	A16S	ATOM	28144	O2'	CYT	417	185.184	114.247	43.851	1.00	130.60	A16S
ATOM	28092	C4'	URI	415	182.606	111.840	34.495	1.00	92.35	A16S	ATOM	28145	C3'	CYT	417	186.439	116.062	42.725	1.00	130.60	A16S
ATOM	28093	O4'	URI	415	181.674	111.468	35.545	1.00	92.35	A16S	ATOM	28146	O3'	CYT	417	185.879	116.829	43.793	1.00	130.60	A16S
ATOM	28094	C1'	URI	415	182.149	111.934	36.797	1.00	92.35	A16S	ATOM	28147	P	GUA	418	186.418	116.685	45.306	1.00	90.97	A16S
ATOM	28095	N1	URI	415	182.386	110.771	37.672	1.00	66.67	A16S	ATOM	28148	O1P	GUA	418	187.539	117.652	45.456	1.00	86.53	A16S
ATOM	28096	C6	URI	415	182.625	109.519	37.151	1.00	66.67	A16S	ATOM	28149	O2P	GUA	418	186.628	115.251	45.682	1.00	86.53	A16S
ATOM	28097	C2	URI	415	182.364	110.972	39.040	1.00	66.67	A16S	ATOM	28150	O5'	GUA	418	185.175	117.244	46.139	1.00	90.97	A16S
ATOM	28098	O2	URI	415	182.157	112.059	39.549	1.00	66.67	A16S	ATOM	28151	C5'	GUA	418	183.820	116.787	45.866	1.00	90.97	A16S
ATOM	28099	N3	URI	415	182.594	109.850	39.795	1.00	66.67	A16S	ATOM	28152	C4'	GUA	418	182.931	117.954	45.477	1.00	90.97	A16S
ATOM	28100	C4	URI	415	182.837	108.573	39.337	1.00	66.67	A16S	ATOM	28153	O4'	GUA	418	183.406	118.540	44.239	1.00	90.97	A16S
ATOM	28101	O4	URI	415	183.015	107.660	40.146	1.00	66.67	A16S	ATOM	28154	C1'	GUA	418	182.310	119.074	43.516	1.00	90.97	A16S
ATOM	28102	C5	URI	415	182.844	108.445	37.916	1.00	66.67	A16S	ATOM	28155	N9	GUA	418	182.369	118.613	42.128	1.00	86.53	A16S
ATOM	28103	C2'	URI	415	183.419	112.745	36.535	1.00	92.35	A16S	ATOM	28156	C4	GUA	418	182.346	117.310	41.663	1.00	86.53	A16S
ATOM	28104	O2'	URI	415	183.087	114.115	36.399	1.00	92.35	A16S	ATOM	28157	N3	GUA	418	182.271	116.192	42.420	1.00	86.53	A16S
ATOM	28105	C3'	URI	415	183.908	112.137	35.227	1.00	92.35	A16S	ATOM	28158	C2	GUA	418	182.264	115.090	41.680	1.00	86.53	A16S
ATOM	28106	O3'	URI	415	184.770	113.032	34.521	1.00	92.35	A16S	ATOM	28159	N2	GUA	418	182.195	113.886	42.270	1.00	86.53	A16S
ATOM	28107	P	URI	416	186.363	112.810	34.580	1.00	102.86	A16S	ATOM	28160	N1	GUA	418	182.326	115.086	40.307	1.00	86.53	A16S
ATOM	28108	O1P	URI	416	186.816	112.500	33.206	1.00	76.38	A16S	ATOM	28161	C6	GUA	418	182.405	116.220	39.506	1.00	86.53	A16S

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ATOM  28162  O6  GUA  418     182.461 116.102  38.275  1.00 86.53      A16S
ATOM  28163  C5  GUA  418     182.412 117.413  40.287  1.00 86.53      A16S
ATOM  28164  N7  GUA  418     182.476 118.743  39.895  1.00 86.53      A16S
ATOM  28165  C8  GUA  418     182.450 119.415  41.014  1.00 86.53      A16S
ATOM  28166  C2' GUA  418     181.020 118.732  44.264  1.00 90.97      A16S
ATOM  28167  O2' GUA  418     180.543 119.869  44.952  1.00 90.97      A16S
ATOM  28168  C3' GUA  418     181.473 117.612  45.196  1.00 90.97      A16S
ATOM  28169  O3' GUA  418     180.704 117.642  46.392  1.00 90.97      A16S
ATOM  28170  P   GUA  419     179.678 116.449  46.721  1.00102.00      A16S
ATOM  28171  O1P GUA  419     178.756 116.950  47.779  1.00 84.08      A16S
ATOM  28172  O2P GUA  419     180.469 115.209  46.960  1.00 84.08      A16S
ATOM  28173  O5' GUA  419     178.819 116.278  45.387  1.00102.00      A16S
ATOM  28174  C5' GUA  419     178.097 117.394  44.822  1.00102.00      A16S
ATOM  28175  C4' GUA  419     177.842 117.170  43.346  1.00102.00      A16S
ATOM  28176  O4' GUA  419     179.040 116.582  42.771  1.00102.00      A16S
ATOM  28177  C1' GUA  419     178.686 115.686  41.734  1.00102.00      A16S
ATOM  28178  N9  GUA  419     179.067 114.333  42.124  1.00 84.08      A16S
ATOM  28179  C4  GUA  419     179.128 113.255  41.283  1.00 84.08      A16S
ATOM  28180  N3  GUA  419     178.910 113.282  39.953  1.00 84.08      A16S
ATOM  28181  C2  GUA  419     179.011 112.086  39.413  1.00 84.08      A16S
ATOM  28182  N2  GUA  419     178.844 111.943  38.093  1.00 84.08      A16S
ATOM  28183  N1  GUA  419     179.288 110.946  40.124  1.00 84.08      A16S
ATOM  28184  C6  GUA  419     179.508 110.892  41.496  1.00 84.08      A16S
ATOM  28185  O6  GUA  419     179.732 109.808  42.040  1.00 84.08      A16S
ATOM  28186  C5  GUA  419     179.422 112.177  42.087  1.00 84.08      A16S
ATOM  28187  N7  GUA  419     179.586 112.578  43.406  1.00 84.08      A16S
ATOM  28188  C8  GUA  419     179.376 113.865  43.379  1.00 84.08      A16S
ATOM  28189  C2' GUA  419     177.171 115.750  41.569  1.00102.00      A16S
ATOM  28190  O2' GUA  419     176.845 116.683  40.559  1.00102.00      A16S
ATOM  28191  C3' GUA  419     176.733 116.199  42.955  1.00102.00      A16S
ATOM  28192  O3' GUA  419     175.441 116.799  42.906  1.00102.00      A16S
ATOM  28193  P   GUA  420     174.137 115.865  42.740  1.00 79.47      A16S
ATOM  28194  O1P GUA  420     172.919 116.713  42.784  1.00 81.46      A16S
ATOM  28195  O2P GUA  420     174.259 114.707  43.657  1.00 81.46      A16S
ATOM  28196  O5' GUA  420     174.271 115.275  41.271  1.00 79.47      A16S
ATOM  28197  C5' GUA  420     173.965 116.069  40.115  1.00 79.47      A16S
ATOM  28198  C4' GUA  420     173.864 115.180  38.905  1.00 79.47      A16S
ATOM  28199  O4' GUA  420     175.134 114.500  38.715  1.00 79.47      A16S
ATOM  28200  C1' GUA  420     174.907 113.192  38.223  1.00 79.47      A16S
ATOM  28201  N9  GUA  420     175.415 112.221  39.188  1.00 81.46      A16S
ATOM  28202  C4  GUA  420     175.640 110.884  38.943  1.00 81.46      A16S
ATOM  28203  N3  GUA  420     175.455 110.248  37.760  1.00 81.46      A16S
ATOM  28204  C2  GUA  420     175.755 108.961  37.835  1.00 81.46      A16S
ATOM  28205  N2  GUA  420     175.651 108.188  36.749  1.00 81.46      A16S
ATOM  28206  N1  GUA  420     176.186 108.341  38.980  1.00 81.46      A16S
ATOM  28207  C6  GUA  420     176.380 108.969  40.209  1.00 81.46      A16S
ATOM  28208  O6  GUA  420     176.769 108.308  41.182  1.00 81.46      A16S
ATOM  28209  C5  GUA  420     176.074 110.361  40.141  1.00 81.46      A16S
ATOM  28210  N7  GUA  420     176.136 111.348  41.117  1.00 81.46      A16S
ATOM  28211  C8  GUA  420     175.739 112.433  40.507  1.00 81.46      A16S
ATOM  28212  C2' GUA  420     173.402 113.024  38.039  1.00 79.47      A16S
ATOM  28213  O2' GUA  420     173.049 113.330  36.707  1.00 79.47      A16S
ATOM  28214  C3' GUA  420     172.863 114.044  39.025  1.00 79.47      A16S
ATOM  28215  O3' GUA  420     171.532 114.430  38.727  1.00 79.47      A16S
ATOM  28216  P   GUA  421     170.311 113.576  39.336  1.00 65.25      A16S
ATOM  28217  O1P GUA  421     169.051 114.205  38.863  1.00 90.53      A16S
ATOM  28218  O2P GUA  421     170.530 113.385  40.795  1.00 90.53      A16S
ATOM  28219  O5' GUA  421     170.471 112.150  38.641  1.00 65.25      A16S
ATOM  28220  C5' GUA  421     170.423 112.023  37.204  1.00 65.25      A16S
ATOM  28221  C4' GUA  421     170.582 110.579  36.780  1.00 65.25      A16S
ATOM  28222  O4' GUA  421     171.899 110.085  37.136  1.00 65.25      A16S
ATOM  28223  C1' GUA  421     171.828 108.686  37.366  1.00 65.25      A16S
ATOM  28224  N9  GUA  421     172.362 108.389  38.692  1.00 90.53      A16S
ATOM  28225  C4  GUA  421     172.760 107.153  39.137  1.00 90.53      A16S
ATOM  28226  N3  GUA  421     172.736 106.010  38.422  1.00 90.53      A16S
ATOM  28227  C2  GUA  421     173.186 104.982  39.120  1.00 90.53      A16S
ATOM  28228  N2  GUA  421     173.243 103.769  38.555  1.00 90.53      A16S
ATOM  28229  N1  GUA  421     173.616 105.068  40.420  1.00 90.53      A16S
ATOM  28230  C6  GUA  421     173.647 106.233  41.177  1.00 90.53      A16S
ATOM  28231  O6  GUA  421     174.056 106.198  42.340  1.00 90.53      A16S
ATOM  28232  C5  GUA  421     173.172 107.347  40.437  1.00 90.53      A16S
ATOM  28233  N7  GUA  421     173.040 108.680  40.802  1.00 90.53      A16S
ATOM  28234  C8  GUA  421     172.559 109.261  39.737  1.00 90.53      A16S
ATOM  28235  C2' GUA  421     170.369 108.249  37.212  1.00 65.25      A16S
ATOM  28236  O2' GUA  421     170.190 107.646  35.943  1.00 65.25      A16S
ATOM  28237  C3' GUA  421     169.625 109.571  37.391  1.00 65.25      A16S
ATOM  28238  O3' GUA  421     168.378 109.579  36.725  1.00 65.25      A16S
ATOM  28239  P   URI  422     167.055 109.128  37.513  1.00 63.74      A16S
ATOM  28240  O1P URI  422     165.930 109.355  36.579  1.00 94.27      A16S
ATOM  28241  O2P URI  422     167.032 109.758  38.858  1.00 94.27      A16S
ATOM  28242  O5' URI  422     167.227 107.551  37.687  1.00 63.74      A16S
ATOM  28243  C5' URI  422     167.194 106.683  36.541  1.00 63.74      A16S
ATOM  28244  C4' URI  422     167.470 105.255  36.944  1.00 63.74      A16S
ATOM  28245  O4' URI  422     168.803 105.147  37.499  1.00 63.74      A16S
ATOM  28246  C1' URI  422     168.817 104.159  38.515  1.00 63.74      A16S
ATOM  28247  N1  URI  422     169.290 104.783  39.765  1.00 94.27      A16S
ATOM  28248  C6  URI  422     169.057 106.119  40.027  1.00 94.27      A16S
ATOM  28249  C2  URI  422     169.988 103.992  40.673  1.00 94.27      A16S
ATOM  28250  O2  URI  422     170.203 102.801  40.507  1.00 94.27      A16S
ATOM  28251  N3  URI  422     170.419 104.652  41.794  1.00 94.27      A16S
ATOM  28252  C4  URI  422     170.223 105.978  42.108  1.00 94.27      A16S
ATOM  28253  O4  URI  422     170.640 106.408  43.185  1.00 94.27      A16S
ATOM  28254  C5  URI  422     169.488 106.723  41.135  1.00 94.27      A16S
ATOM  28255  C2' URI  422     167.414 103.547  38.595  1.00 63.74      A16S
ATOM  28256  O2' URI  422     167.392 102.362  37.824  1.00 63.74      A16S
ATOM  28257  C3' URI  422     166.553 104.653  37.992  1.00 63.74      A16S
ATOM  28258  O3' URI  422     165.403 104.122  37.360  1.00 63.74      A16S
ATOM  28259  P   GUA  423     164.014 104.058  38.152  1.00 64.68      A16S
ATOM  28260  O1P GUA  423     164.191 103.132  39.291  1.00 73.39      A16S
ATOM  28261  O2P GUA  423     162.935 103.815  37.160  1.00 73.39      A16S
ATOM  28262  O5' GUA  423     163.842 105.528  38.727  1.00 64.68      A16S
ATOM  28263  C5' GUA  423     162.610 105.954  39.339  1.00 64.68      A16S
ATOM  28264  C4' GUA  423     162.916 106.861  40.494  1.00 64.68      A16S
ATOM  28265  O4' GUA  423     163.534 106.083  41.535  1.00 64.68      A16S
ATOM  28266  C1' GUA  423     164.489 106.873  42.202  1.00 64.68      A16S
ATOM  28267  N9  GUA  423     165.633 106.041  42.557  1.00 73.39      A16S
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ATOM  28268  C4  GUA  423     166.419 106.211  43.659  1.00 73.39      A16S
ATOM  28269  N3  GUA  423     166.275 107.179  44.579  1.00 73.39      A16S
ATOM  28270  C2  GUA  423     167.166 107.084  45.542  1.00 73.39      A16S
ATOM  28271  N2  GUA  423     167.134 107.955  46.552  1.00 73.39      A16S
ATOM  28272  N1  GUA  423     168.146 106.124  45.593  1.00 73.39      A16S
ATOM  28273  C6  GUA  423     168.322 105.115  44.654  1.00 73.39      A16S
ATOM  28274  O6  GUA  423     169.249 104.304  44.794  1.00 73.39      A16S
ATOM  28275  C5  GUA  423     167.345 105.195  43.616  1.00 73.39      A16S
ATOM  28276  N7  GUA  423     167.143 104.397  42.501  1.00 73.39      A16S
ATOM  28277  C8  GUA  423     166.121 104.941  41.899  1.00 73.39      A16S
ATOM  28278  C2' GUA  423     164.747 108.158  41.405  1.00 64.68      A16S
ATOM  28279  O2' GUA  423     164.363 109.303  42.125  1.00 64.68      A16S
ATOM  28280  C3' GUA  423     163.929 107.934  40.139  1.00 64.68      A16S
ATOM  28281  O3' GUA  423     163.277 109.087  39.582  1.00 64.68      A16S
ATOM  28282  P   URI  424     162.196 109.948  40.443  1.00 70.58      A16S
ATOM  28283  O1P URI  424     161.022 110.126  39.556  1.00 95.05      A16S
ATOM  28284  O2P URI  424     162.859 111.146  41.025  1.00 95.05      A16S
ATOM  28285  O5' URI  424     161.680 109.010  41.625  1.00 70.58      A16S
ATOM  28286  C5' URI  424     160.501 109.385  42.365  1.00 70.58      A16S
ATOM  28287  C4' URI  424     159.732 108.167  42.820  1.00 70.58      A16S
ATOM  28288  O4' URI  424     160.341 107.621  44.023  1.00 70.58      A16S
ATOM  28289  C1' URI  424     159.364 107.530  45.037  1.00 70.58      A16S
ATOM  28290  N1  URI  424     160.002 107.645  46.355  1.00 95.05      A16S
ATOM  28291  C6  URI  424     160.141 108.852  46.996  1.00 95.05      A16S
ATOM  28292  C2  URI  424     160.453 106.475  46.939  1.00 95.05      A16S
ATOM  28293  O2  URI  424     160.352 105.385  46.408  1.00 95.05      A16S
ATOM  28294  N3  URI  424     161.025 106.625  48.172  1.00 95.05      A16S
ATOM  28295  C4  URI  424     161.188 107.795  48.870  1.00 95.05      A16S
ATOM  28296  O4  URI  424     161.775 107.772  49.953  1.00 95.05      A16S
ATOM  28297  C5  URI  424     160.697 108.964  48.201  1.00 95.05      A16S
ATOM  28298  C2' URI  424     158.327 108.592  44.702  1.00 70.58      A16S
ATOM  28299  O2' URI  424     157.118 108.295  45.362  1.00 70.58      A16S
ATOM  28300  C3' URI  424     158.276 108.470  43.183  1.00 70.58      A16S
ATOM  28301  O3' URI  424     157.423 107.357  42.875  1.00 70.58      A16S
ATOM  28302  P   ADE  425     157.441 106.686  41.409  1.00 64.98      A16S
ATOM  28303  O1P ADE  425     157.943 107.678  40.407  1.00 76.97      A16S
ATOM  28304  O2P ADE  425     156.130 106.018  41.192  1.00 76.97      A16S
ATOM  28305  O5' ADE  425     158.563 105.571  41.542  1.00 64.98      A16S
ATOM  28306  C5' ADE  425     158.638 104.751  42.707  1.00 64.98      A16S
ATOM  28307  C4' ADE  425     159.529 103.575  42.441  1.00 64.98      A16S
ATOM  28308  O4' ADE  425     160.870 104.045  42.159  1.00 64.98      A16S
ATOM  28309  C1' ADE  425     161.819 103.139  42.698  1.00 64.98      A16S
ATOM  28310  N9  ADE  425     162.631 103.847  43.686  1.00 76.97      A16S
ATOM  28311  C4  ADE  425     163.749 103.347  44.307  1.00 76.97      A16S
ATOM  28312  N3  ADE  425     164.320 102.147  44.112  1.00 76.97      A16S
ATOM  28313  C2  ADE  425     165.373 101.994  44.912  1.00 76.97      A16S
ATOM  28314  N1  ADE  425     165.880 102.838  45.816  1.00 76.97      A16S
ATOM  28315  C6  ADE  425     165.280 104.034  45.988  1.00 76.97      A16S
ATOM  28316  N6  ADE  425     165.777 104.873  46.897  1.00 76.97      A16S
ATOM  28317  C5  ADE  425     164.155 104.322  45.196  1.00 76.97      A16S
ATOM  28318  N7  ADE  425     163.322 105.431  45.123  1.00 76.97      A16S
ATOM  28319  C8  ADE  425     162.442 105.103  44.210  1.00 76.97      A16S
ATOM  28320  C2' ADE  425     161.044 101.987  43.341  1.00 64.98      A16S
ATOM  28321  O2' ADE  425     160.954 100.894  42.450  1.00 64.98      A16S
ATOM  28322  C3' ADE  425     159.699 102.641  43.618  1.00 64.98      A16S
ATOM  28323  O3' ADE  425     158.635 101.713  43.709  1.00 64.98      A16S
ATOM  28324  P   ADE  426     158.069 101.322  45.154  1.00 74.78      A16S
ATOM  28325  O1P ADE  426     157.152 100.176  44.967  1.00 81.71      A16S
ATOM  28326  O2P ADE  426     157.567 102.561  45.791  1.00 81.71      A16S
ATOM  28327  O5' ADE  426     159.371 100.820  45.923  1.00 74.78      A16S
ATOM  28328  C5' ADE  426     160.167  99.757  45.371  1.00 74.78      A16S
ATOM  28329  C4' ADE  426     161.417  99.512  46.195  1.00 74.78      A16S
ATOM  28330  O4' ADE  426     162.310 100.656  46.153  1.00 74.78      A16S
ATOM  28331  C1' ADE  426     163.105 100.679  47.331  1.00 74.78      A16S
ATOM  28332  N9  ADE  426     162.948 101.974  47.995  1.00 81.71      A16S
ATOM  28333  C4  ADE  426     163.636 102.377  49.113  1.00 81.71      A16S
ATOM  28334  N3  ADE  426     164.557 101.676  49.797  1.00 81.71      A16S
ATOM  28335  C2  ADE  426     165.008 102.382  50.826  1.00 81.71      A16S
ATOM  28336  N1  ADE  426     164.673 103.619  51.218  1.00 81.71      A16S
ATOM  28337  C6  ADE  426     163.743 104.295  50.505  1.00 81.71      A16S
ATOM  28338  N6  ADE  426     163.407 105.529  50.891  1.00 81.71      A16S
ATOM  28339  C5  ADE  426     163.183 103.654  49.394  1.00 81.71      A16S
ATOM  28340  N7  ADE  426     162.223 104.050  48.474  1.00 81.71      A16S
ATOM  28341  C8  ADE  426     162.118 103.022  47.667  1.00 81.71      A16S
ATOM  28342  C2' ADE  426     162.661  99.518  48.219  1.00 74.78      A16S
ATOM  28343  O2' ADE  426     163.567  98.451  48.044  1.00 74.78      A16S
ATOM  28344  C3' ADE  426     161.263  99.225  47.678  1.00 74.78      A16S
ATOM  28345  O3' ADE  426     160.870  97.883  47.922  1.00 74.78      A16S
ATOM  28346  P   ADE  427     159.870  97.566  49.139  1.00 90.45      A16S
ATOM  28347  O1P ADE  427     159.661  96.096  49.138  1.00 83.29      A16S
ATOM  28348  O2P ADE  427     158.697  98.482  49.040  1.00 83.29      A16S
ATOM  28349  O5' ADE  427     160.716  97.962  50.431  1.00 90.45      A16S
ATOM  28350  C5' ADE  427     161.951  97.280  50.745  1.00 90.45      A16S
ATOM  28351  C4' ADE  427     162.625  97.930  51.931  1.00 90.45      A16S
ATOM  28352  O4' ADE  427     163.080  99.255  51.561  1.00 90.45      A16S
ATOM  28353  C1' ADE  427     162.923 100.138  52.659  1.00 90.45      A16S
ATOM  28354  N9  ADE  427     161.985 101.190  52.271  1.00 83.29      A16S
ATOM  28355  C4  ADE  427     161.943 102.467  52.773  1.00 83.29      A16S
ATOM  28356  N3  ADE  427     162.768 103.012  53.684  1.00 83.29      A16S
ATOM  28357  C2  ADE  427     162.419 104.274  53.935  1.00 83.29      A16S
ATOM  28358  N1  ADE  427     161.410 104.993  53.426  1.00 83.29      A16S
ATOM  28359  C6  ADE  427     160.595 104.411  52.521  1.00 83.29      A16S
ATOM  28360  N6  ADE  427     159.576 105.120  52.034  1.00 83.29      A16S
ATOM  28361  C5  ADE  427     160.869 103.082  52.155  1.00 83.29      A16S
ATOM  28362  N7  ADE  427     160.258 102.216  51.260  1.00 83.29      A16S
ATOM  28363  C8  ADE  427     160.958 101.112  51.363  1.00 83.29      A16S
ATOM  28364  C2' ADE  427     162.397  99.326  53.845  1.00 90.45      A16S
ATOM  28365  O2' ADE  427     163.475  98.945  54.672  1.00 90.45      A16S
ATOM  28366  C3' ADE  427     161.734  98.147  53.145  1.00 90.45      A16S
ATOM  28367  O3' ADE  427     161.673  96.987  53.967  1.00 90.45      A16S
ATOM  28368  P   CYT  428     160.247  96.467  54.508  1.00 89.31      A16S
ATOM  28369  O1P CYT  428     160.565  95.369  55.456  1.00 91.07      A16S
ATOM  28370  O2P CYT  428     159.307  96.214  53.386  1.00 91.07      A16S
ATOM  28371  O5' CYT  428     159.669  97.711  55.316  1.00 89.31      A16S
ATOM  28372  C5' CYT  428     160.312  98.171  56.512  1.00 89.31      A16S
ATOM  28373  C4' CYT  428     159.729  99.491  56.938  1.00 89.31      A16S
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ATOM	28374	O4'	CYT	428	160.057	100.499	55.952	1.00	89.31	A16S	ATOM	28427	O3'	CYT	430	146.014	100.846	58.262	1.00	76.68	A16S
ATOM	28375	C1'	CYT	428	158.971	101.395	55.807	1.00	89.31	A16S	ATOM	28428	P	CYT	431	145.121	99.577	57.829	1.00	89.13	A16S
ATOM	28376	N1	CYT	428	158.499	101.324	54.411	1.00	91.07	A16S	ATOM	28429	O1P	CYT	431	143.929	99.505	58.719	1.00	73.75	A16S
ATOM	28377	C6	CYT	428	158.628	100.169	53.687	1.00	91.07	A16S	ATOM	28430	O2P	CYT	431	146.022	98.393	57.704	1.00	73.75	A16S
ATOM	28378	C2	CYT	428	157.903	102.456	53.833	1.00	91.07	A16S	ATOM	28431	O5'	CYT	431	144.587	99.956	56.375	1.00	89.13	A16S
ATOM	28379	O2	CYT	428	157.804	103.496	54.502	1.00	91.07	A16S	ATOM	28432	C5'	CYT	431	143.688	101.064	56.182	1.00	89.13	A16S
ATOM	28380	N3	CYT	428	157.452	102.385	52.562	1.00	91.07	A16S	ATOM	28433	C4'	CYT	431	143.342	101.221	54.713	1.00	89.13	A16S
ATOM	28381	C4	CYT	428	157.580	101.251	51.869	1.00	91.07	A16S	ATOM	28434	O4'	CYT	431	144.519	101.604	53.951	1.00	89.13	A16S
ATOM	28382	N4	CYT	428	157.125	101.230	50.617	1.00	91.07	A16S	ATOM	28435	C1'	CYT	431	144.440	101.053	52.643	1.00	89.13	A16S
ATOM	28383	C5	CYT	428	158.185	100.089	52.428	1.00	91.07	A16S	ATOM	28436	N1	CYT	431	145.598	100.158	52.429	1.00	73.75	A16S
ATOM	28384	C2'	CYT	428	157.892	100.990	56.815	1.00	89.31	A16S	ATOM	28437	C6	CYT	431	146.470	99.876	53.446	1.00	73.75	A16S
ATOM	28385	O2'	CYT	428	158.014	101.773	57.988	1.00	89.31	A16S	ATOM	28438	C2	CYT	431	145.788	99.581	51.156	1.00	73.75	A16S
ATOM	28386	C3'	CYT	428	158.216	99.520	57.041	1.00	89.31	A16S	ATOM	28439	O2	CYT	431	145.004	99.880	50.225	1.00	73.75	A16S
ATOM	28387	O3'	CYT	428	157.782	99.050	58.307	1.00	89.31	A16S	ATOM	28440	N3	CYT	431	146.822	98.719	50.974	1.00	73.75	A16S
ATOM	28388	P	URI	429	156.293	98.469	58.471	1.00	88.90	A16S	ATOM	28441	C4	CYT	431	147.650	98.442	51.985	1.00	73.75	A16S
ATOM	28389	O1P	URI	429	156.174	98.007	59.878	1.00	95.15	A16S	ATOM	28442	N4	CYT	431	148.640	97.574	51.763	1.00	73.75	A16S
ATOM	28390	O2P	URI	429	156.005	97.521	57.363	1.00	95.15	A16S	ATOM	28443	C5	CYT	431	147.498	99.036	53.269	1.00	73.75	A16S
ATOM	28391	O5'	URI	429	155.368	99.752	58.288	1.00	88.90	A16S	ATOM	28444	C2'	CYT	431	143.111	100.302	52.537	1.00	89.13	A16S
ATOM	28392	C5'	URI	429	155.390	100.811	59.262	1.00	88.90	A16S	ATOM	28445	O2'	CYT	431	142.138	101.150	51.963	1.00	89.13	A16S
ATOM	28393	C4'	URI	429	154.339	101.843	58.940	1.00	88.90	A16S	ATOM	28446	C3'	CYT	431	142.815	99.990	53.996	1.00	89.13	A16S
ATOM	28394	O4'	URI	429	154.748	102.628	57.790	1.00	88.90	A16S	ATOM	28447	O3'	CYT	431	141.430	99.797	54.211	1.00	89.13	A16S
ATOM	28395	C1'	URI	429	153.604	102.972	57.020	1.00	88.90	A16S	ATOM	28448	P	URI	432	140.847	98.307	54.244	1.00	74.35	A16S
ATOM	28396	N1	URI	429	153.772	102.433	55.660	1.00	95.15	A16S	ATOM	28449	O1P	URI	432	139.448	98.355	54.716	1.00	69.56	A16S
ATOM	28397	C6	URI	429	154.519	101.296	55.429	1.00	95.15	A16S	ATOM	28450	O2P	URI	432	141.842	97.444	54.946	1.00	69.56	A16S
ATOM	28398	C2	URI	429	153.145	103.093	54.615	1.00	95.15	A16S	ATOM	28451	O5'	URI	432	140.783	97.882	52.712	1.00	74.35	A16S
ATOM	28399	O2	URI	429	152.490	104.113	54.764	1.00	95.15	A16S	ATOM	28452	C5'	URI	432	139.781	98.428	51.828	1.00	74.35	A16S
ATOM	28400	N3	URI	429	153.315	102.513	53.384	1.00	95.15	A16S	ATOM	28453	C4'	URI	432	140.061	98.009	50.404	1.00	74.35	A16S
ATOM	28401	C4	URI	429	154.037	101.375	53.093	1.00	95.15	A16S	ATOM	28454	O4'	URI	432	141.432	98.363	50.091	1.00	74.35	A16S
ATOM	28402	O4	URI	429	154.071	100.962	51.935	1.00	95.15	A16S	ATOM	28455	C1'	URI	432	141.993	97.390	49.234	1.00	74.35	A16S
ATOM	28403	C5	URI	429	154.667	100.762	54.215	1.00	95.15	A16S	ATOM	28456	N1	URI	432	143.182	96.816	49.886	1.00	69.56	A16S
ATOM	28404	C2'	URI	429	152.368	102.405	57.730	1.00	88.90	A16S	ATOM	28457	C6	URI	432	143.468	97.060	51.212	1.00	69.56	A16S
ATOM	28405	O2'	URI	429	151.728	103.403	58.502	1.00	88.90	A16S	ATOM	28458	C2	URI	432	144.019	96.020	49.114	1.00	69.56	A16S
ATOM	28406	C3'	URI	429	152.975	101.287	58.571	1.00	88.90	A16S	ATOM	28459	O2	URI	432	143.801	95.771	47.932	1.00	69.56	A16S
ATOM	28407	O3'	URI	429	152.193	100.977	59.716	1.00	88.90	A16S	ATOM	28460	N3	URI	432	145.122	95.527	49.776	1.00	69.56	A16S
ATOM	28408	P	CYT	430	151.126	99.778	59.646	1.00	76.68	A16S	ATOM	28461	C4	URI	432	145.467	95.743	51.095	1.00	69.56	A16S
ATOM	28409	O1P	CYT	430	150.673	99.505	61.037	1.00	111.93	A16S	ATOM	28462	O4	URI	432	146.518	95.272	51.530	1.00	69.56	A16S
ATOM	28410	O2P	CYT	430	151.726	98.677	58.845	1.00	111.93	A16S	ATOM	28463	C5	URI	432	144.551	96.565	51.823	1.00	69.56	A16S
ATOM	28411	O5'	CYT	430	149.901	100.404	58.831	1.00	76.68	A16S	ATOM	28464	C2'	URI	432	140.905	96.369	48.905	1.00	74.35	A16S
ATOM	28412	C5'	CYT	430	149.034	101.390	59.434	1.00	76.68	A16S	ATOM	28465	O2'	URI	432	140.293	96.769	47.699	1.00	74.35	A16S
ATOM	28413	C4'	CYT	430	148.146	102.034	58.392	1.00	76.68	A16S	ATOM	28466	C3'	URI	432	139.962	96.519	50.092	1.00	74.35	A16S
ATOM	28414	O4'	CYT	430	148.977	102.688	57.399	1.00	76.68	A16S	ATOM	28467	O3'	URI	432	138.625	96.168	49.726	1.00	74.35	A16S
ATOM	28415	C1'	CYT	430	148.361	102.599	56.124	1.00	76.68	A16S	ATOM	28468	P	GUA	433	138.119	94.645	49.872	1.00	83.54	A16S
ATOM	28416	N1	CYT	430	149.255	101.863	55.206	1.00	111.93	A16S	ATOM	28469	O1P	GUA	433	136.862	94.499	49.092	1.00	81.61	A16S
ATOM	28417	C6	CYT	430	150.274	101.085	55.682	1.00	111.93	A16S	ATOM	28470	O2P	GUA	433	138.129	94.291	51.312	1.00	81.61	A16S
ATOM	28418	C2	CYT	430	149.034	101.964	53.828	1.00	111.93	A16S	ATOM	28471	O5'	GUA	433	139.259	93.775	49.179	1.00	83.54	A16S
ATOM	28419	O2	CYT	430	148.110	102.682	53.419	1.00	111.93	A16S	ATOM	28472	C5'	GUA	433	139.272	93.525	47.758	1.00	83.54	A16S
ATOM	28420	N3	CYT	430	149.829	101.274	52.978	1.00	111.93	A16S	ATOM	28473	C4'	GUA	433	140.361	92.532	47.433	1.00	83.54	A16S
ATOM	28421	C4	CYT	430	150.811	100.509	53.457	1.00	111.93	A16S	ATOM	28474	O4'	GUA	433	141.576	93.041	48.025	1.00	83.54	A16S
ATOM	28422	N4	CYT	430	151.559	99.833	52.584	1.00	111.93	A16S	ATOM	28475	C1'	GUA	433	142.351	91.968	48.506	1.00	83.54	A16S
ATOM	28423	C5	CYT	430	151.068	100.399	54.851	1.00	111.93	A16S	ATOM	28476	N9	GUA	433	142.841	92.289	49.841	1.00	81.61	A16S
ATOM	28424	C2'	CYT	430	147.017	101.894	56.304	1.00	76.68	A16S	ATOM	28477	C4	GUA	433	144.050	91.901	50.369	1.00	81.61	A16S
ATOM	28425	O2'	CYT	430	145.999	102.865	56.406	1.00	76.68	A16S	ATOM	28478	N3	GUA	433	144.971	91.128	49.757	1.00	81.61	A16S
ATOM	28426	C3'	CYT	430	147.242	101.108	57.591	1.00	76.68	A16S	ATOM	28479	C2	GUA	433	146.040	90.945	50.509	1.00	81.61	A16S

ATOM	28480	N2	GUA	433	147.058	90.212	50.051	1.00	81.61	A16S	ATOM	28533	C3'	ADE	435	143.275	81.560	43.166	1.00	63.48	A16S
ATOM	28481	N1	GUA	433	146.192	91.468	51.764	1.00	81.61	A16S	ATOM	28534	O3'	ADE	435	143.312	80.342	42.446	1.00	63.48	A16S
ATOM	28482	C6	GUA	433	145.258	92.263	52.417	1.00	81.61	A16S	ATOM	28535	P	CYT	436	142.070	79.328	42.552	1.00	98.12	A16S
ATOM	28483	O6	GUA	433	145.500	92.683	53.552	1.00	81.61	A16S	ATOM	28536	O1P	CYT	436	142.462	78.113	41.800	1.00	81.41	A16S
ATOM	28484	C5	GUA	433	144.104	92.475	51.618	1.00	81.61	A16S	ATOM	28537	O2P	CYT	436	140.800	80.024	42.209	1.00	81.41	A16S
ATOM	28485	N7	GUA	433	142.946	93.197	51.879	1.00	81.61	A16S	ATOM	28538	O5'	CYT	436	142.027	78.971	44.100	1.00	98.12	A16S
ATOM	28486	C8	GUA	433	142.223	93.052	50.802	1.00	81.61	A16S	ATOM	28539	C5'	CYT	436	143.197	78.472	44.764	1.00	98.12	A16S
ATOM	28487	C2'	GUA	433	141.569	90.667	48.339	1.00	83.54	A16S	ATOM	28540	C4'	CYT	436	143.072	78.660	46.251	1.00	98.12	A16S
ATOM	28488	O2'	GUA	433	142.091	89.969	47.234	1.00	83.54	A16S	ATOM	28541	O4'	CYT	436	143.143	80.072	46.581	1.00	98.12	A16S
ATOM	28489	C3'	GUA	433	140.151	91.159	48.067	1.00	83.54	A16S	ATOM	28542	C1'	CYT	436	142.302	80.345	47.692	1.00	98.12	A16S
ATOM	28490	O3'	GUA	433	139.518	90.160	47.229	1.00	83.54	A16S	ATOM	28543	N1	CYT	436	141.261	81.310	47.281	1.00	81.41	A16S
ATOM	28491	P	ADE	434	139.026	90.498	45.719	1.00	63.22	A16S	ATOM	28544	C6	CYT	436	140.759	81.306	46.007	1.00	81.41	A16S
ATOM	28492	O1P	ADE	434	138.781	91.949	45.566	1.00	75.95	A16S	ATOM	28545	C2	CYT	436	140.767	82.218	48.230	1.00	81.41	A16S
ATOM	28493	O2P	ADE	434	137.921	89.541	45.418	1.00	75.95	A16S	ATOM	28546	O2	CYT	436	141.264	82.234	49.369	1.00	81.41	A16S
ATOM	28494	O5'	ADE	434	140.266	90.082	44.800	1.00	63.22	A16S	ATOM	28547	N3	CYT	436	139.763	83.054	47.880	1.00	81.41	A16S
ATOM	28495	C5'	ADE	434	140.550	88.687	44.561	1.00	63.22	A16S	ATOM	28548	C4	CYT	436	139.262	83.018	46.643	1.00	81.41	A16S
ATOM	28496	C4'	ADE	434	141.160	88.475	43.188	1.00	63.22	A16S	ATOM	28549	N4	CYT	436	138.251	83.840	46.352	1.00	81.41	A16S
ATOM	28497	O4'	ADE	434	142.512	89.008	43.171	1.00	63.22	A16S	ATOM	28550	C5	CYT	436	139.769	82.132	45.651	1.00	81.41	A16S
ATOM	28498	C1'	ADE	434	143.372	88.129	42.457	1.00	63.22	A16S	ATOM	28551	C2'	CYT	436	141.681	79.018	48.137	1.00	98.12	A16S
ATOM	28499	N9	ADE	434	144.375	87.618	43.392	1.00	75.95	A16S	ATOM	28552	O2'	CYT	436	142.440	78.456	49.188	1.00	98.12	A16S
ATOM	28500	C4	ADE	434	145.531	86.953	43.071	1.00	75.95	A16S	ATOM	28553	C3'	CYT	436	141.758	78.201	46.855	1.00	98.12	A16S
ATOM	28501	N3	ADE	434	145.980	86.650	41.845	1.00	75.95	A16S	ATOM	28554	O3'	CYT	436	141.723	76.805	47.084	1.00	98.12	A16S
ATOM	28502	C2	ADE	434	147.142	86.008	41.924	1.00	75.95	A16S	ATOM	28555	P	CYT	437	140.305	76.052	47.112	1.00	88.16	A16S
ATOM	28503	N1	ADE	434	147.850	85.663	43.007	1.00	75.95	A16S	ATOM	28556	O1P	CYT	437	140.590	74.596	47.189	1.00	101.96	A16S
ATOM	28504	C6	ADE	434	147.365	85.984	44.224	1.00	75.95	A16S	ATOM	28557	O2P	CYT	437	139.458	76.571	46.010	1.00	101.96	A16S
ATOM	28505	N6	ADE	434	148.064	85.643	45.305	1.00	75.95	A16S	ATOM	28558	O5'	CYT	437	139.669	76.527	48.493	1.00	88.16	A16S
ATOM	28506	C5	ADE	434	146.147	86.662	44.277	1.00	75.95	A16S	ATOM	28559	C5'	CYT	437	140.309	76.203	49.742	1.00	88.16	A16S
ATOM	28507	N7	ADE	434	145.396	87.135	45.341	1.00	75.95	A16S	ATOM	28560	C4'	CYT	437	139.496	76.713	50.907	1.00	88.16	A16S
ATOM	28508	C8	ADE	434	144.358	87.690	44.767	1.00	75.95	A16S	ATOM	28561	O4'	CYT	437	139.574	78.160	50.982	1.00	88.16	A16S
ATOM	28509	C2'	ADE	434	142.517	87.005	41.876	1.00	63.22	A16S	ATOM	28562	C1'	CYT	437	138.367	78.670	51.523	1.00	88.16	A16S
ATOM	28510	O2'	ADE	434	142.173	87.286	40.537	1.00	63.22	A16S	ATOM	28563	N1	CYT	437	137.763	79.608	50.558	1.00	101.96	A16S
ATOM	28511	C3'	ADE	434	141.326	87.004	42.824	1.00	63.22	A16S	ATOM	28564	C6	CYT	437	138.001	79.491	49.217	1.00	101.96	A16S
ATOM	28512	O3'	ADE	434	140.148	86.461	42.227	1.00	63.22	A16S	ATOM	28565	C2	CYT	437	136.925	80.628	51.039	1.00	101.96	A16S
ATOM	28513	P	ADE	435	139.817	84.893	42.397	1.00	63.48	A16S	ATOM	28566	O2	CYT	437	136.726	80.721	52.258	1.00	101.96	A16S
ATOM	28514	O1P	ADE	435	138.613	84.590	41.575	1.00	92.04	A16S	ATOM	28567	N3	CYT	437	136.356	81.485	50.164	1.00	101.96	A16S
ATOM	28515	O2P	ADE	435	139.815	84.565	43.845	1.00	92.04	A16S	ATOM	28568	C4	CYT	437	136.601	81.365	48.859	1.00	101.96	A16S
ATOM	28516	O5'	ADE	435	141.071	84.178	41.724	1.00	63.48	A16S	ATOM	28569	N4	CYT	437	136.030	82.246	48.032	1.00	101.96	A16S
ATOM	28517	C5'	ADE	435	141.421	82.843	42.085	1.00	63.48	A16S	ATOM	28570	C5	CYT	437	137.447	80.339	48.341	1.00	101.96	A16S
ATOM	28518	C4'	ADE	435	142.914	82.711	42.248	1.00	63.48	A16S	ATOM	28571	C2'	CYT	437	137.451	77.482	51.825	1.00	88.16	A16S
ATOM	28519	O4'	ADE	435	143.452	83.895	42.887	1.00	63.48	A16S	ATOM	28572	O2'	CYT	437	137.577	77.122	53.187	1.00	88.16	A16S
ATOM	28520	C1'	ADE	435	144.368	83.521	43.904	1.00	63.48	A16S	ATOM	28573	C3'	CYT	437	138.006	76.416	50.891	1.00	88.16	A16S
ATOM	28521	N9	ADE	435	143.775	83.903	45.189	1.00	92.04	A16S	ATOM	28574	O3'	CYT	437	137.701	75.112	51.355	1.00	88.16	A16S
ATOM	28522	C4	ADE	435	144.337	83.759	46.435	1.00	92.04	A16S	ATOM	28575	P	CYT	438	136.262	74.476	51.032	1.00	83.72	A16S
ATOM	28523	N3	ADE	435	145.542	83.241	46.733	1.00	92.04	A16S	ATOM	28576	O1P	CYT	438	136.248	73.124	51.636	1.00	95.59	A16S
ATOM	28524	C2	ADE	435	145.744	83.257	48.047	1.00	92.04	A16S	ATOM	28577	O2P	CYT	438	135.978	74.630	49.587	1.00	95.59	A16S
ATOM	28525	N1	ADE	435	144.942	83.704	49.021	1.00	92.04	A16S	ATOM	28578	O5'	CYT	438	135.238	75.401	51.834	1.00	83.72	A16S
ATOM	28526	C6	ADE	435	143.742	84.221	48.684	1.00	92.04	A16S	ATOM	28579	C5'	CYT	438	135.086	75.277	53.266	1.00	83.72	A16S
ATOM	28527	N6	ADE	435	142.950	84.680	49.649	1.00	92.04	A16S	ATOM	28580	C4'	CYT	438	133.923	76.116	53.752	1.00	83.72	A16S
ATOM	28528	C5	ADE	435	143.404	84.251	47.327	1.00	92.04	A16S	ATOM	28581	O4'	CYT	438	134.230	77.521	53.560	1.00	83.72	A16S
ATOM	28529	N7	ADE	435	142.272	84.693	46.661	1.00	92.04	A16S	ATOM	28582	C1'	CYT	438	133.053	78.223	53.185	1.00	83.72	A16S
ATOM	28530	C8	ADE	435	142.541	84.470	45.402	1.00	92.04	A16S	ATOM	28583	N1	CYT	438	133.236	78.756	51.817	1.00	95.59	A16S
ATOM	28531	C2'	ADE	435	144.589	82.010	43.795	1.00	63.48	A16S	ATOM	28584	C6	CYT	438	134.299	78.372	51.045	1.00	95.59	A16S
ATOM	28532	O2'	ADE	435	145.745	81.760	43.025	1.00	63.48	A16S	ATOM	28585	C2	CYT	438	132.283	79.653	51.306	1.00	95.59	A16S

ATOM	28586	O2	CYT	438	131.341	80.016	52.034	1.00	95.59	A16S
ATOM	28587	N3	CYT	438	132.412	80.100	50.038	1.00	95.59	A16S
ATOM	28588	C4	CYT	438	133.440	79.700	49.293	1.00	95.59	A16S
ATOM	28589	N4	CYT	438	133.511	80.151	48.045	1.00	95.59	A16S
ATOM	28590	C5	CYT	438	134.437	78.816	49.792	1.00	95.59	A16S
ATOM	28591	C2'	CYT	438	131.885	77.235	53.237	1.00	83.72	A16S
ATOM	28592	O2'	CYT	438	131.215	77.323	54.478	1.00	83.72	A16S
ATOM	28593	C3'	CYT	438	132.602	75.910	53.021	1.00	83.72	A16S
ATOM	28594	O3'	CYT	438	131.852	74.804	53.499	1.00	83.72	A16S
ATOM	28595	P	GUA	439	130.834	74.053	52.505	1.00	91.22	A16S
ATOM	28596	O1P	GUA	439	130.375	72.824	53.206	1.00	86.25	A16S
ATOM	28597	O2P	GUA	439	131.467	73.937	51.165	1.00	86.25	A16S
ATOM	28598	O5'	GUA	439	129.609	75.064	52.376	1.00	91.22	A16S
ATOM	28599	C5'	GUA	439	128.759	75.324	53.504	1.00	91.22	A16S
ATOM	28600	C4'	GUA	439	127.720	76.362	53.161	1.00	91.22	A16S
ATOM	28601	O4'	GUA	439	128.366	77.630	52.877	1.00	91.22	A16S
ATOM	28602	C1'	GUA	439	127.589	78.355	51.934	1.00	91.22	A16S
ATOM	28603	N9	GUA	439	128.394	78.626	50.745	1.00	86.25	A16S
ATOM	28604	C4	GUA	439	128.064	79.498	49.734	1.00	86.25	A16S
ATOM	28605	N3	GUA	439	126.961	80.280	49.688	1.00	86.25	A16S
ATOM	28606	C2	GUA	439	126.908	81.001	48.582	1.00	86.25	A16S
ATOM	28607	N2	GUA	439	125.883	81.840	48.381	1.00	86.25	A16S
ATOM	28608	N1	GUA	439	127.856	80.952	47.594	1.00	86.25	A16S
ATOM	28609	C6	GUA	439	128.996	80.153	47.616	1.00	86.25	A16S
ATOM	28610	O6	GUA	439	129.784	80.180	46.666	1.00	86.25	A16S
ATOM	28611	C5	GUA	439	129.073	79.382	48.806	1.00	86.25	A16S
ATOM	28612	N7	GUA	439	130.033	78.473	49.233	1.00	86.25	A16S
ATOM	28613	C8	GUA	439	129.592	78.054	50.387	1.00	86.25	A16S
ATOM	28614	C2'	GUA	439	126.373	77.500	51.574	1.00	91.22	A16S
ATOM	28615	O2'	GUA	439	125.248	77.910	52.323	1.00	91.22	A16S
ATOM	28616	C3'	GUA	439	126.858	76.101	51.935	1.00	91.22	A16S
ATOM	28617	O3'	GUA	439	125.770	75.221	52.183	1.00	91.22	A16S
ATOM	28618	P	GUA	440	125.089	74.432	50.952	1.00	80.28	A16S
ATOM	28619	O1P	GUA	440	124.078	73.499	51.524	1.00	95.19	A16S
ATOM	28620	O2P	GUA	440	126.172	73.897	50.077	1.00	95.19	A16S
ATOM	28621	O5'	GUA	440	124.295	75.556	50.148	1.00	80.28	A16S
ATOM	28622	C5'	GUA	440	123.218	76.271	50.768	1.00	80.28	A16S
ATOM	28623	C4'	GUA	440	122.739	77.391	49.876	1.00	80.28	A16S
ATOM	28624	O4'	GUA	440	123.806	78.353	49.670	1.00	80.28	A16S
ATOM	28625	C1'	GUA	440	123.703	78.908	48.369	1.00	80.28	A16S
ATOM	28626	N9	GUA	440	124.919	78.583	47.628	1.00	95.19	A16S
ATOM	28627	C4	GUA	440	125.293	79.110	46.418	1.00	95.19	A16S
ATOM	28628	N3	GUA	440	124.607	80.032	45.710	1.00	95.19	A16S
ATOM	28629	C2	GUA	440	125.220	80.345	44.584	1.00	95.19	A16S
ATOM	28630	N2	GUA	440	124.675	81.256	43.761	1.00	95.19	A16S
ATOM	28631	N1	GUA	440	126.414	79.791	44.184	1.00	95.19	A16S
ATOM	28632	C6	GUA	440	127.136	78.838	44.900	1.00	95.19	A16S
ATOM	28633	O6	GUA	440	128.202	78.401	44.451	1.00	95.19	A16S
ATOM	28634	C5	GUA	440	126.489	78.498	46.108	1.00	95.19	A16S
ATOM	28635	N7	GUA	440	126.861	77.609	47.103	1.00	95.19	A16S
ATOM	28636	C8	GUA	440	125.903	77.692	47.984	1.00	95.19	A16S
ATOM	28637	C2'	GUA	440	122.469	78.302	47.703	1.00	80.28	A16S
ATOM	28638	O2'	GUA	440	121.367	79.172	47.865	1.00	80.28	A16S
ATOM	28639	C3'	GUA	440	122.313	76.997	48.475	1.00	80.28	A16S
ATOM	28640	O3'	GUA	440	120.983	76.516	48.434	1.00	80.28	A16S
ATOM	28641	P	GUA	441	120.575	75.443	47.317	1.00	87.40	A16S
ATOM	28642	O1P	GUA	441	119.091	75.424	47.177	1.00	93.41	A16S
ATOM	28643	O2P	GUA	441	121.313	74.184	47.601	1.00	93.41	A16S
ATOM	28644	O5'	GUA	441	121.169	76.066	45.983	1.00	87.40	A16S
ATOM	28645	C5'	GUA	441	120.542	77.196	45.352	1.00	87.40	A16S
ATOM	28646	C4'	GUA	441	121.132	77.407	43.982	1.00	87.40	A16S
ATOM	28647	O4'	GUA	441	122.501	77.871	44.108	1.00	87.40	A16S
ATOM	28648	C1'	GUA	441	123.296	77.284	43.100	1.00	87.40	A16S
ATOM	28649	N9	GUA	441	124.306	76.457	43.753	1.00	93.41	A16S
ATOM	28650	C4	GUA	441	125.589	76.233	43.316	1.00	93.41	A16S
ATOM	28651	N3	GUA	441	126.148	76.750	42.202	1.00	93.41	A16S
ATOM	28652	C2	GUA	441	127.402	76.362	42.054	1.00	93.41	A16S
ATOM	28653	N2	GUA	441	128.111	76.792	41.002	1.00	93.41	A16S
ATOM	28654	N1	GUA	441	128.053	75.525	42.927	1.00	93.41	A16S
ATOM	28655	C6	GUA	441	127.497	74.974	44.076	1.00	93.41	A16S
ATOM	28656	O6	GUA	441	128.173	74.224	44.790	1.00	93.41	A16S
ATOM	28657	C5	GUA	441	126.153	75.391	44.252	1.00	93.41	A16S
ATOM	28658	N7	GUA	441	125.245	75.094	45.258	1.00	93.41	A16S
ATOM	28659	C8	GUA	441	124.166	75.746	44.921	1.00	93.41	A16S
ATOM	28660	C2'	GUA	441	122.373	76.474	42.188	1.00	87.40	A16S
ATOM	28661	O2'	GUA	441	122.001	77.289	41.098	1.00	87.40	A16S
ATOM	28662	C3'	GUA	441	121.220	76.148	43.133	1.00	87.40	A16S
ATOM	28663	O3'	GUA	441	119.952	75.860	42.535	1.00	87.40	A16S
ATOM	28664	P	ADE	442	119.839	74.803	41.325	1.00	80.38	A16S
ATOM	28665	O1P	ADE	442	118.450	74.263	41.311	1.00	65.31	A16S
ATOM	28666	O2P	ADE	442	120.980	73.877	41.389	1.00	65.31	A16S
ATOM	28667	O5'	ADE	442	119.954	75.764	40.068	1.00	80.38	A16S
ATOM	28668	C5'	ADE	442	119.292	77.037	40.148	1.00	80.38	A16S
ATOM	28669	C4'	ADE	442	119.445	77.829	38.887	1.00	80.38	A16S
ATOM	28670	O4'	ADE	442	120.787	78.339	38.730	1.00	80.38	A16S
ATOM	28671	C1'	ADE	442	120.964	78.688	37.378	1.00	80.38	A16S
ATOM	28672	N9	ADE	442	122.283	78.267	36.919	1.00	65.31	A16S
ATOM	28673	C4	ADE	442	122.920	78.824	35.840	1.00	65.31	A16S
ATOM	28674	N3	ADE	442	122.462	79.808	35.046	1.00	65.31	A16S
ATOM	28675	C2	ADE	442	123.349	80.104	34.107	1.00	65.31	A16S
ATOM	28676	N1	ADE	442	124.552	79.572	33.886	1.00	65.31	A16S
ATOM	28677	C6	ADE	442	124.984	78.589	34.704	1.00	65.31	A16S
ATOM	28678	N6	ADE	442	126.192	78.069	34.491	1.00	65.31	A16S
ATOM	28679	C5	ADE	442	124.131	78.176	35.740	1.00	65.31	A16S
ATOM	28680	N7	ADE	442	124.255	77.213	36.734	1.00	65.31	A16S
ATOM	28681	C8	ADE	442	123.133	77.307	37.405	1.00	65.31	A16S
ATOM	28682	C2'	ADE	442	119.799	78.098	36.579	1.00	80.38	A16S
ATOM	28683	O2'	ADE	442	118.949	79.180	36.279	1.00	80.38	A16S
ATOM	28684	C3'	ADE	442	119.173	77.128	37.580	1.00	80.38	A16S
ATOM	28685	O3'	ADE	442	117.775	77.001	37.398	1.00	80.38	A16S
ATOM	28686	P	CYT	443	117.208	76.101	36.199	1.00	59.08	A16S
ATOM	28687	O1P	CYT	443	115.794	75.764	36.516	1.00	75.46	A16S
ATOM	28688	O2P	CYT	443	118.183	75.007	35.924	1.00	75.46	A16S
ATOM	28689	O5'	CYT	443	117.209	77.095	34.953	1.00	59.08	A16S
ATOM	28690	C5'	CYT	443	116.567	78.371	35.044	1.00	59.08	A16S
ATOM	28691	C4'	CYT	443	117.019	79.279	33.928	1.00	59.08	A16S

ATOM	28692	O4'	CYT	443	118.427	79.604	34.053	1.00	59.08	A16S	ATOM	28745	N7	ADE	445	115.484	70.134	28.952	1.00	73.22	A16S
ATOM	28693	C1'	CYT	443	118.960	79.884	32.773	1.00	59.08	A16S	ATOM	28746	C8	ADE	445	114.676	71.077	28.551	1.00	73.22	A16S
ATOM	28694	N1	CYT	443	120.189	79.088	32.567	1.00	75.46	A16S	ATOM	28747	C2'	ADE	445	113.362	73.993	29.742	1.00	64.33	A16S
ATOM	28695	C6	CYT	443	120.498	78.036	33.383	1.00	75.46	A16S	ATOM	28748	O2'	ADE	445	113.158	74.285	31.107	1.00	64.33	A16S
ATOM	28696	C2	CYT	443	121.052	79.440	31.516	1.00	75.46	A16S	ATOM	28749	C3'	ADE	445	112.545	74.885	28.808	1.00	64.33	A16S
ATOM	28697	O2	CYT	443	120.746	80.387	30.772	1.00	75.46	A16S	ATOM	28750	O3'	ADE	445	111.263	75.178	29.365	1.00	64.33	A16S
ATOM	28698	N3	CYT	443	122.194	78.741	31.336	1.00	75.46	A16S	ATOM	28751	P	ADE	446	110.780	76.701	29.508	1.00	78.86	A16S
ATOM	28699	C4	CYT	443	122.491	77.727	32.149	1.00	75.46	A16S	ATOM	28752	O1P	ADE	446	111.668	77.549	28.678	1.00	70.63	A16S
ATOM	28700	N4	CYT	443	123.638	77.083	31.943	1.00	75.46	A16S	ATOM	28753	O2P	ADE	446	110.647	76.989	30.958	1.00	70.63	A16S
ATOM	28701	C5	CYT	443	121.628	77.336	33.212	1.00	75.46	A16S	ATOM	28754	O5'	ADE	446	109.345	76.712	28.810	1.00	78.86	A16S
ATOM	28702	C2'	CYT	443	117.853	79.653	31.743	1.00	59.08	A16S	ATOM	28755	C5'	ADE	446	108.308	75.771	29.178	1.00	78.86	A16S
ATOM	28703	O2'	CYT	443	117.278	80.905	31.420	1.00	59.08	A16S	ATOM	28756	C4'	ADE	446	108.028	74.841	28.022	1.00	78.86	A16S
ATOM	28704	C3'	CYT	443	116.888	78.755	32.513	1.00	59.08	A16S	ATOM	28757	O4'	ADE	446	109.193	74.015	27.840	1.00	78.86	A16S
ATOM	28705	O3'	CYT	443	115.546	78.859	32.054	1.00	59.08	A16S	ATOM	28758	C1'	ADE	446	108.816	72.873	27.111	1.00	78.86	A16S
ATOM	28706	P	GUA	444	114.751	77.522	31.648	1.00	66.97	A16S	ATOM	28759	N9	ADE	446	109.625	71.731	27.510	1.00	70.63	A16S
ATOM	28707	O1P	GUA	444	113.343	77.901	31.326	1.00	69.20	A16S	ATOM	28760	C4	ADE	446	110.339	70.993	26.605	1.00	70.63	A16S
ATOM	28708	O2P	GUA	444	115.017	76.502	32.699	1.00	69.20	A16S	ATOM	28761	N3	ADE	446	110.349	71.144	25.266	1.00	70.63	A16S
ATOM	28709	O5'	GUA	444	115.485	77.040	30.316	1.00	66.97	A16S	ATOM	28762	C2	ADE	446	111.194	70.285	24.710	1.00	70.63	A16S
ATOM	28710	C5'	GUA	444	115.560	77.903	29.160	1.00	66.97	A16S	ATOM	28763	N1	ADE	446	111.981	69.373	25.298	1.00	70.63	A16S
ATOM	28711	C4'	GUA	444	116.790	77.594	28.333	1.00	66.97	A16S	ATOM	28764	C6	ADE	446	111.956	69.265	26.643	1.00	70.63	A16S
ATOM	28712	O4'	GUA	444	117.990	77.838	29.116	1.00	66.97	A16S	ATOM	28765	N6	ADE	446	112.776	68.397	27.224	1.00	70.63	A16S
ATOM	28713	C1'	GUA	444	119.014	76.944	28.714	1.00	66.97	A16S	ATOM	28766	C5	ADE	446	111.077	70.095	27.349	1.00	70.63	A16S
ATOM	28714	N9	GUA	444	119.362	76.101	29.853	1.00	69.20	A16S	ATOM	28767	N7	ADE	446	110.787	70.225	28.701	1.00	70.63	A16S
ATOM	28715	C4	GUA	444	120.556	75.441	30.073	1.00	69.20	A16S	ATOM	28768	C8	ADE	446	109.907	71.198	28.742	1.00	70.63	A16S
ATOM	28716	N3	GUA	444	121.660	75.505	29.298	1.00	69.20	A16S	ATOM	28769	C2'	ADE	446	107.299	72.737	27.133	1.00	78.86	A16S
ATOM	28717	C2	GUA	444	122.638	74.738	29.764	1.00	69.20	A16S	ATOM	28770	O2'	ADE	446	106.886	73.047	25.822	1.00	78.86	A16S
ATOM	28718	N2	GUA	444	123.820	74.694	29.132	1.00	69.20	A16S	ATOM	28771	C3'	ADE	446	106.882	73.827	28.121	1.00	78.86	A16S
ATOM	28719	N1	GUA	444	122.533	73.961	30.885	1.00	69.20	A16S	ATOM	28772	O3'	ADE	446	105.655	74.421	27.659	1.00	78.86	A16S
ATOM	28720	C6	GUA	444	121.410	73.877	31.697	1.00	69.20	A16S	ATOM	28773	P	ADE	447	104.331	73.514	27.433	1.00	59.68	A16S
ATOM	28721	O6	GUA	444	121.421	73.135	32.688	1.00	69.20	A16S	ATOM	28774	O1P	ADE	447	103.180	74.458	27.389	1.00	69.21	A16S
ATOM	28722	C5	GUA	444	120.359	74.709	31.223	1.00	69.20	A16S	ATOM	28775	O2P	ADE	447	104.341	72.389	28.420	1.00	69.21	A16S
ATOM	28723	N7	GUA	444	119.089	74.933	31.739	1.00	69.20	A16S	ATOM	28776	O5'	ADE	447	104.458	72.918	25.958	1.00	59.68	A16S
ATOM	28724	C8	GUA	444	118.539	75.766	30.901	1.00	69.20	A16S	ATOM	28777	C5'	ADE	447	103.953	71.599	25.624	1.00	59.68	A16S
ATOM	28725	C2'	GUA	444	118.452	76.095	27.570	1.00	66.97	A16S	ATOM	28778	C4'	ADE	447	104.774	71.002	24.499	1.00	59.68	A16S
ATOM	28726	O2'	GUA	444	118.779	76.665	26.317	1.00	66.97	A16S	ATOM	28779	O4'	ADE	447	106.166	70.996	24.882	1.00	59.68	A16S
ATOM	28727	C3'	GUA	444	116.957	76.169	27.830	1.00	66.97	A16S	ATOM	28780	C1'	ADE	447	106.816	69.883	24.323	1.00	59.68	A16S
ATOM	28728	O3'	GUA	444	116.245	75.917	26.631	1.00	66.97	A16S	ATOM	28781	N9	ADE	447	107.445	69.149	25.414	1.00	69.21	A16S
ATOM	28729	P	ADE	445	115.983	74.404	26.172	1.00	64.33	A16S	ATOM	28782	C4	ADE	447	108.408	68.184	25.283	1.00	69.21	A16S
ATOM	28730	O1P	ADE	445	117.106	73.573	26.670	1.00	73.22	A16S	ATOM	28783	N3	ADE	447	108.944	67.722	24.143	1.00	69.21	A16S
ATOM	28731	O2P	ADE	445	115.645	74.402	24.729	1.00	73.22	A16S	ATOM	28784	C2	ADE	447	109.864	66.794	24.401	1.00	69.21	A16S
ATOM	28732	O5'	ADE	445	114.686	73.966	26.976	1.00	64.33	A16S	ATOM	28785	N1	ADE	447	110.270	66.303	25.581	1.00	69.21	A16S
ATOM	28733	C5'	ADE	445	113.365	74.231	26.472	1.00	64.33	A16S	ATOM	28786	C6	ADE	447	109.700	66.780	26.707	1.00	69.21	A16S
ATOM	28734	C4'	ADE	445	112.352	74.011	27.574	1.00	64.33	A16S	ATOM	28787	N6	ADE	447	110.083	66.268	27.877	1.00	69.21	A16S
ATOM	28735	O4'	ADE	445	112.470	72.639	28.029	1.00	64.33	A16S	ATOM	28788	C5	ADE	447	108.720	67.786	26.570	1.00	69.21	A16S
ATOM	28736	C1'	ADE	445	112.841	72.601	29.389	1.00	64.33	A16S	ATOM	28789	N7	ADE	447	107.964	68.491	27.498	1.00	69.21	A16S
ATOM	28737	N9	ADE	445	113.847	71.552	29.532	1.00	73.22	A16S	ATOM	28790	C8	ADE	447	107.224	69.280	26.764	1.00	69.21	A16S
ATOM	28738	C4	ADE	445	114.158	70.838	30.661	1.00	73.22	A16S	ATOM	28791	C2'	ADE	447	105.799	69.104	23.491	1.00	59.68	A16S
ATOM	28739	N3	ADE	445	113.600	70.947	31.877	1.00	73.22	A16S	ATOM	28792	O2'	ADE	447	105.956	69.509	22.147	1.00	59.68	A16S
ATOM	28740	C2	ADE	445	114.159	70.093	32.727	1.00	73.22	A16S	ATOM	28793	C3'	ADE	447	104.471	69.570	24.089	1.00	59.68	A16S
ATOM	28741	N1	ADE	445	115.143	69.210	32.517	1.00	73.22	A16S	ATOM	28794	O3'	ADE	447	103.435	69.570	23.106	1.00	59.68	A16S
ATOM	28742	C6	ADE	445	115.682	69.125	31.282	1.00	73.22	A16S	ATOM	28795	P	CYT	448	102.244	68.496	23.195	1.00	66.70	A16S
ATOM	28743	N6	ADE	445	116.670	68.245	31.069	1.00	73.22	A16S	ATOM	28796	O1P	CYT	448	101.308	68.767	22.070	1.00	59.41	A16S
ATOM	28744	C5	ADE	445	115.170	69.975	30.291	1.00	73.22	A16S	ATOM	28797	O2P	CYT	448	101.730	68.499	24.594	1.00	59.41	A16S

ATOM	28798	O5'	CYT	448	102.969	67.103	22.918	1.00	66.70	A16S	ATOM	28851	C2'	CYT	450	97.181	61.636	30.916	1.00	85.77	A16S
ATOM	28799	C5'	CYT	448	103.534	66.825	21.627	1.00	66.70	A16S	ATOM	28852	O2'	CYT	450	97.087	61.032	32.194	1.00	85.77	A16S
ATOM	28800	C4'	CYT	448	104.445	65.619	21.676	1.00	66.70	A16S	ATOM	28853	C3'	CYT	450	97.056	60.641	29.769	1.00	85.77	A16S
ATOM	28801	O4'	CYT	448	105.663	65.903	22.410	1.00	66.70	A16S	ATOM	28854	O3'	CYT	450	96.071	59.647	29.986	1.00	85.77	A16S
ATOM	28802	C1'	CYT	448	106.178	64.701	22.942	1.00	66.70	A16S	ATOM	28855	P	CYT	451	94.607	59.850	29.366	1.00	91.83	A16S
ATOM	28803	N1	CYT	448	106.386	64.856	24.388	1.00	59.41	A16S	ATOM	28856	O1P	CYT	451	93.842	58.610	29.650	1.00	118.64	A16S
ATOM	28804	C6	CYT	448	105.499	65.556	25.156	1.00	59.41	A16S	ATOM	28857	O2P	CYT	451	94.743	60.321	27.961	1.00	118.64	A16S
ATOM	28805	C2	CYT	448	107.513	64.257	24.979	1.00	59.41	A16S	ATOM	28858	O5'	CYT	451	94.008	61.043	30.234	1.00	91.83	A16S
ATOM	28806	O2	CYT	448	108.308	63.613	24.267	1.00	59.41	A16S	ATOM	28859	C5'	CYT	451	93.777	60.885	31.649	1.00	91.83	A16S
ATOM	28807	N3	CYT	448	107.705	64.386	26.312	1.00	59.41	A16S	ATOM	28860	C4'	CYT	451	93.145	62.133	32.222	1.00	91.83	A16S
ATOM	28808	C4	CYT	448	106.827	65.068	27.051	1.00	59.41	A16S	ATOM	28861	O4'	CYT	451	94.136	63.191	32.305	1.00	91.83	A16S
ATOM	28809	N4	CYT	448	107.059	65.165	28.364	1.00	59.41	A16S	ATOM	28862	C1'	CYT	451	93.529	64.439	32.003	1.00	91.83	A16S
ATOM	28810	C5	CYT	448	105.676	65.681	26.477	1.00	59.41	A16S	ATOM	28863	N1	CYT	451	94.160	64.984	30.783	1.00	118.64	A16S
ATOM	28811	C2'	CYT	448	105.193	63.581	22.606	1.00	66.70	A16S	ATOM	28864	C6	CYT	451	94.624	64.152	29.797	1.00	118.64	A16S
ATOM	28812	O2'	CYT	448	105.672	62.907	21.460	1.00	66.70	A16S	ATOM	28865	C2	CYT	451	94.263	66.374	30.636	1.00	118.64	A16S
ATOM	28813	C3'	CYT	448	103.910	64.357	22.322	1.00	66.70	A16S	ATOM	28866	O2	CYT	451	93.856	67.107	31.551	1.00	118.64	A16S
ATOM	28814	O3'	CYT	448	103.054	63.642	21.435	1.00	66.70	A16S	ATOM	28867	N3	CYT	451	94.803	66.880	29.502	1.00	118.64	A16S
ATOM	28815	P	CYT	449	101.555	63.278	21.894	1.00	69.91	A16S	ATOM	28868	C4	CYT	451	95.237	66.057	28.543	1.00	118.64	A16S
ATOM	28816	O1P	CYT	449	101.075	62.248	20.939	1.00	88.07	A16S	ATOM	28869	N4	CYT	451	95.748	66.599	27.437	1.00	118.64	A16S
ATOM	28817	O2P	CYT	449	100.791	64.536	22.059	1.00	88.07	A16S	ATOM	28870	C5	CYT	451	95.162	64.640	28.674	1.00	118.64	A16S
ATOM	28818	O5'	CYT	449	101.723	62.613	23.337	1.00	69.91	A16S	ATOM	28871	C2'	CYT	451	92.031	64.195	31.794	1.00	91.83	A16S
ATOM	28819	C5'	CYT	449	102.262	61.279	23.487	1.00	69.91	A16S	ATOM	28872	O2'	CYT	451	91.307	64.487	32.975	1.00	91.83	A16S
ATOM	28820	C4'	CYT	449	102.386	60.917	24.953	1.00	69.91	A16S	ATOM	28873	C3'	CYT	451	92.013	62.723	31.395	1.00	91.83	A16S
ATOM	28821	O4'	CYT	449	103.321	61.826	25.586	1.00	69.91	A16S	ATOM	28874	O3'	CYT	451	90.762	62.086	31.626	1.00	91.83	A16S
ATOM	28822	C1'	CYT	449	102.882	62.137	26.898	1.00	69.91	A16S	ATOM	28875	P	CYT	452	89.609	62.176	30.507	1.00	93.21	A16S
ATOM	28823	N1	CYT	449	102.584	63.584	26.946	1.00	88.07	A16S	ATOM	28876	O1P	CYT	452	88.483	61.334	30.983	1.00	132.63	A16S
ATOM	28824	C6	CYT	449	102.092	64.235	25.846	1.00	88.07	A16S	ATOM	28877	O2P	CYT	452	90.188	61.924	29.161	1.00	132.63	A16S
ATOM	28825	C2	CYT	449	102.817	64.290	28.133	1.00	88.07	A16S	ATOM	28878	O5'	CYT	452	89.164	63.704	30.563	1.00	93.21	A16S
ATOM	28826	O2	CYT	449	103.237	63.680	29.125	1.00	88.07	A16S	ATOM	28879	C5'	CYT	452	88.530	64.247	31.735	1.00	93.21	A16S
ATOM	28827	N3	CYT	449	102.572	65.621	28.169	1.00	88.07	A16S	ATOM	28880	C4'	CYT	452	88.127	65.677	31.487	1.00	93.21	A16S
ATOM	28828	C4	CYT	449	102.107	66.243	27.085	1.00	88.07	A16S	ATOM	28881	O4'	CYT	452	89.309	66.515	31.456	1.00	93.21	A16S
ATOM	28829	N4	CYT	449	101.896	67.557	27.161	1.00	88.07	A16S	ATOM	28882	C1'	CYT	452	89.149	67.529	30.473	1.00	93.21	A16S
ATOM	28830	C5	CYT	449	101.841	65.548	25.872	1.00	88.07	A16S	ATOM	28883	N1	CYT	452	90.237	67.403	29.472	1.00	132.63	A16S
ATOM	28831	C2'	CYT	449	101.657	61.271	27.192	1.00	69.91	A16S	ATOM	28884	C6	CYT	452	90.938	66.233	29.339	1.00	132.63	A16S
ATOM	28832	O2'	CYT	449	102.063	60.086	27.852	1.00	69.91	A16S	ATOM	28885	C2	CYT	452	90.538	68.504	28.644	1.00	132.63	A16S
ATOM	28833	C3'	CYT	449	101.116	61.031	25.786	1.00	69.91	A16S	ATOM	28886	O2	CYT	452	89.896	69.561	28.778	1.00	132.63	A16S
ATOM	28834	O3'	CYT	449	100.291	59.874	25.695	1.00	69.91	A16S	ATOM	28887	N3	CYT	452	91.518	68.381	27.717	1.00	132.63	A16S
ATOM	28835	P	CYT	450	98.693	60.035	25.767	1.00	85.77	A16S	ATOM	28888	C4	CYT	452	92.184	67.229	27.593	1.00	132.63	A16S
ATOM	28836	O1P	CYT	450	98.108	58.702	25.492	1.00	111.60	A16S	ATOM	28889	N4	CYT	452	93.127	67.151	26.655	1.00	132.63	A16S
ATOM	28837	O2P	CYT	450	98.275	61.195	24.951	1.00	111.60	A16S	ATOM	28890	C5	CYT	452	91.907	66.105	28.423	1.00	132.63	A16S
ATOM	28838	O5'	CYT	450	98.438	60.408	27.289	1.00	85.77	A16S	ATOM	28891	C2'	CYT	452	87.754	67.374	29.859	1.00	93.21	A16S
ATOM	28839	C5'	CYT	450	98.829	59.502	28.331	1.00	85.77	A16S	ATOM	28892	O2'	CYT	452	86.843	68.269	30.462	1.00	93.21	A16S
ATOM	28840	C4'	CYT	450	98.453	60.059	29.680	1.00	85.77	A16S	ATOM	28893	C3'	CYT	452	87.443	65.914	30.152	1.00	93.21	A16S
ATOM	28841	O4'	CYT	450	99.334	61.160	30.023	1.00	85.77	A16S	ATOM	28894	O3'	CYT	452	86.051	65.661	30.216	1.00	93.21	A16S
ATOM	28842	C1'	CYT	450	98.601	62.168	30.702	1.00	85.77	A16S	ATOM	28895	P	GUA	453	85.315	64.977	28.965	1.00	77.79	A16S
ATOM	28843	N1	CYT	450	98.618	63.387	29.867	1.00	111.60	A16S	ATOM	28896	O1P	GUA	453	83.905	64.722	29.348	1.00	101.71	A16S
ATOM	28844	C6	CYT	450	98.955	63.320	28.541	1.00	111.60	A16S	ATOM	28897	O2P	GUA	453	86.170	63.844	28.509	1.00	101.71	A16S
ATOM	28845	C2	CYT	450	98.276	64.621	30.447	1.00	111.60	A16S	ATOM	28898	O5'	GUA	453	85.316	66.108	27.841	1.00	77.79	A16S
ATOM	28846	O2	CYT	450	97.974	64.662	31.653	1.00	111.60	A16S	ATOM	28899	C5'	GUA	453	84.864	67.449	28.129	1.00	77.79	A16S
ATOM	28847	N3	CYT	450	98.283	65.734	29.677	1.00	111.60	A16S	ATOM	28900	C4'	GUA	453	85.393	68.422	27.094	1.00	77.79	A16S
ATOM	28848	C4	CYT	450	98.614	65.651	28.384	1.00	111.60	A16S	ATOM	28901	O4'	GUA	453	86.812	68.669	27.296	1.00	77.79	A16S
ATOM	28849	N4	CYT	450	98.607	66.772	27.662	1.00	111.60	A16S	ATOM	28902	C1'	GUA	453	87.446	68.848	26.038	1.00	77.79	A16S
ATOM	28850	C5	CYT	450	98.966	64.414	27.772	1.00	111.60	A16S	ATOM	28903	N9	GUA	453	88.460	67.808	25.868	1.00	101.71	A16S

ATOM	28904	C4	GUA	453	89.356	67.700	24.824	1.00101.71	A16S	ATOM	28957	O2'	CYT	455	93.601	63.876	17.546	1.00105.92	A16S
ATOM	28905	N3	GUA	453	89.455	68.538	23.771	1.00101.71	A16S	ATOM	28958	C3'	CYT	455	92.493	64.941	19.456	1.00105.92	A16S
ATOM	28906	C2	GUA	453	90.416	68.180	22.943	1.00101.71	A16S	ATOM	28959	O3'	CYT	455	93.825	65.297	19.788	1.00105.92	A16S
ATOM	28907	N2	GUA	453	90.656	68.905	21.849	1.00101.71	A16S	ATOM	28960	P	GUA	456	94.206	66.841	19.994	1.00 80.44	A16S
ATOM	28908	N1	GUA	453	91.215	67.085	23.127	1.00101.71	A16S	ATOM	28961	O1P	GUA	456	95.638	66.980	19.623	1.00 83.41	A16S
ATOM	28909	C6	GUA	453	91.131	66.205	24.199	1.00101.71	A16S	ATOM	28962	O2P	GUA	456	93.766	67.236	21.360	1.00 83.41	A16S
ATOM	28910	O6	GUA	453	91.906	65.245	24.269	1.00101.71	A16S	ATOM	28963	O5'	GUA	456	93.309	67.611	18.916	1.00 80.44	A16S
ATOM	28911	C5	GUA	453	90.104	66.578	25.099	1.00101.71	A16S	ATOM	28964	C5'	GUA	456	93.703	67.674	17.528	1.00 80.44	A16S
ATOM	28912	N7	GUA	453	89.685	65.984	26.282	1.00101.71	A16S	ATOM	28965	C4'	GUA	456	93.046	68.851	16.826	1.00 80.44	A16S
ATOM	28913	C8	GUA	453	88.712	66.745	26.701	1.00101.71	A16S	ATOM	28966	O4'	GUA	456	91.619	68.621	16.721	1.00 80.44	A16S
ATOM	28914	C2'	GUA	453	86.370	68.766	24.951	1.00 77.79	A16S	ATOM	28967	C1'	GUA	456	90.925	69.861	16.804	1.00 80.44	A16S
ATOM	28915	O2'	GUA	453	85.944	70.059	24.560	1.00 77.79	A16S	ATOM	28968	N9	GUA	456	90.025	69.809	17.961	1.00 83.41	A16S
ATOM	28916	C3'	GUA	453	85.283	67.962	25.649	1.00 77.79	A16S	ATOM	28969	C4	GUA	456	89.269	70.844	18.478	1.00 83.41	A16S
ATOM	28917	O3'	GUA	453	84.010	68.216	25.087	1.00 77.79	A16S	ATOM	28970	N3	GUA	456	89.200	72.103	17.992	1.00 83.41	A16S
ATOM	28918	P	ADE	454	83.252	67.046	24.304	1.00103.68	A16S	ATOM	28971	C2	GUA	456	88.395	72.868	18.712	1.00 83.41	A16S
ATOM	28919	O1P	ADE	454	81.929	67.564	23.884	1.00 91.41	A16S	ATOM	28972	N2	GUA	456	88.210	74.150	18.374	1.00 83.41	A16S
ATOM	28920	O2P	ADE	454	83.339	65.829	25.162	1.00 91.41	A16S	ATOM	28973	N1	GUA	456	87.713	72.434	19.819	1.00 83.41	A16S
ATOM	28921	O5'	ADE	454	84.083	66.850	22.961	1.00103.68	A16S	ATOM	28974	C6	GUA	456	87.766	71.144	20.336	1.00 83.41	A16S
ATOM	28922	C5'	ADE	454	85.237	65.988	22.887	1.00103.68	A16S	ATOM	28975	O6	GUA	456	87.105	70.854	21.342	1.00 83.41	A16S
ATOM	28923	C4'	ADE	454	85.353	65.427	21.491	1.00103.68	A16S	ATOM	28976	C5	GUA	456	88.625	70.312	19.575	1.00 83.41	A16S
ATOM	28924	O4'	ADE	454	84.800	66.396	20.579	1.00103.68	A16S	ATOM	28977	N7	GUA	456	88.948	68.973	19.735	1.00 83.41	A16S
ATOM	28925	C1'	ADE	454	85.517	66.372	19.369	1.00103.68	A16S	ATOM	28978	C8	GUA	456	89.774	68.718	18.759	1.00 83.41	A16S
ATOM	28926	N9	ADE	454	85.739	67.758	18.923	1.00 91.41	A16S	ATOM	28979	C2'	GUA	456	91.974	70.977	16.896	1.00 80.44	A16S
ATOM	28927	C4	ADE	454	86.347	68.200	17.765	1.00 91.41	A16S	ATOM	28980	O2'	GUA	456	92.221	71.522	15.611	1.00 80.44	A16S
ATOM	28928	N3	ADE	454	86.945	67.459	16.815	1.00 91.41	A16S	ATOM	28981	C3'	GUA	456	93.178	70.232	17.467	1.00 80.44	A16S
ATOM	28929	C2	ADE	454	87.394	68.232	15.823	1.00 91.41	A16S	ATOM	28982	O3'	GUA	456	94.398	70.894	17.131	1.00 80.44	A16S
ATOM	28930	N1	ADE	454	87.321	69.558	15.681	1.00 91.41	A16S	ATOM	28983	P	ADE	457	95.071	71.913	18.180	1.00 64.30	A16S
ATOM	28931	C6	ADE	454	86.718	70.278	16.649	1.00 91.41	A16S	ATOM	28984	O1P	ADE	457	96.213	72.548	17.491	1.00 84.19	A16S
ATOM	28932	N6	ADE	454	86.648	71.604	16.502	1.00 91.41	A16S	ATOM	28985	O2P	ADE	457	95.290	71.218	19.477	1.00 84.19	A16S
ATOM	28933	C5	ADE	454	86.197	69.577	17.761	1.00 91.41	A16S	ATOM	28986	O5'	ADE	457	93.962	73.036	18.398	1.00 64.30	A16S
ATOM	28934	N7	ADE	454	85.540	70.002	18.908	1.00 91.41	A16S	ATOM	28987	C5'	ADE	457	93.860	74.180	17.518	1.00 64.30	A16S
ATOM	28935	C8	ADE	454	85.305	68.896	19.567	1.00 91.41	A16S	ATOM	28988	C4'	ADE	457	92.963	75.239	18.132	1.00 64.30	A16S
ATOM	28936	C2'	ADE	454	86.665	65.354	19.488	1.00103.68	A16S	ATOM	28989	O4'	ADE	457	91.618	74.709	18.270	1.00 64.30	A16S
ATOM	28937	O2'	ADE	454	86.282	64.180	18.794	1.00103.68	A16S	ATOM	28990	C1'	ADE	457	91.016	75.226	19.447	1.00 64.30	A16S
ATOM	28938	C3'	ADE	454	86.761	65.112	21.002	1.00103.68	A16S	ATOM	28991	N9	ADE	457	90.687	74.124	20.349	1.00 84.19	A16S
ATOM	28939	O3'	ADE	454	87.011	63.718	21.254	1.00103.68	A16S	ATOM	28992	C4	ADE	457	89.812	74.215	21.402	1.00 84.19	A16S
ATOM	28940	P	CYT	455	88.422	63.223	21.857	1.00105.92	A16S	ATOM	28993	N3	ADE	457	89.096	75.290	21.770	1.00 84.19	A16S
ATOM	28941	O1P	CYT	455	88.347	61.749	21.924	1.00103.22	A16S	ATOM	28994	C2	ADE	457	88.356	75.012	22.839	1.00 84.19	A16S
ATOM	28942	O2P	CYT	455	88.744	63.989	23.087	1.00103.22	A16S	ATOM	28995	N1	ADE	457	88.259	73.868	23.530	1.00 84.19	A16S
ATOM	28943	O5'	CYT	455	89.494	63.567	20.732	1.00105.92	A16S	ATOM	28996	C6	ADE	457	88.997	72.808	23.132	1.00 84.19	A16S
ATOM	28944	C5'	CYT	455	90.353	64.717	20.854	1.00105.92	A16S	ATOM	28997	N6	ADE	457	88.906	71.670	23.823	1.00 84.19	A16S
ATOM	28945	C4'	CYT	455	91.805	64.326	20.670	1.00105.92	A16S	ATOM	28998	C5	ADE	457	89.821	72.973	22.009	1.00 84.19	A16S
ATOM	28946	O4'	CYT	455	91.943	62.884	20.543	1.00105.92	A16S	ATOM	28999	N7	ADE	457	90.680	72.109	21.345	1.00 84.19	A16S
ATOM	28947	C1'	CYT	455	92.674	62.583	19.373	1.00105.92	A16S	ATOM	29000	C8	ADE	457	91.165	72.836	20.370	1.00 84.19	A16S
ATOM	28948	N1	CYT	455	92.163	61.323	18.800	1.00103.22	A16S	ATOM	29001	C2'	ADE	457	92.012	76.165	20.118	1.00 64.30	A16S
ATOM	28949	C6	CYT	455	90.937	61.272	18.189	1.00103.22	A16S	ATOM	29002	O2'	ADE	457	91.678	77.502	19.823	1.00 64.30	A16S
ATOM	28950	C2	CYT	455	92.964	60.168	18.875	1.00103.22	A16S	ATOM	29003	C3'	ADE	457	93.336	75.682	19.538	1.00 64.30	A16S
ATOM	28951	O2	CYT	455	94.062	60.224	19.455	1.00103.22	A16S	ATOM	29004	O3'	ADE	457	94.314	76.698	19.562	1.00 64.30	A16S
ATOM	28952	N3	CYT	455	92.516	59.020	18.315	1.00103.22	A16S	ATOM	29005	P	GUA	458	95.358	76.749	20.779	1.00 71.35	A16S
ATOM	28953	C4	CYT	455	91.325	58.989	17.708	1.00103.22	A16S	ATOM	29006	O1P	GUA	458	96.157	77.994	20.640	1.00108.82	A16S
ATOM	28954	N4	CYT	455	90.931	57.837	17.159	1.00103.22	A16S	ATOM	29007	O2P	GUA	458	96.048	75.436	20.823	1.00108.82	A16S
ATOM	28955	C5	CYT	455	90.486	60.139	17.634	1.00103.22	A16S	ATOM	29008	O5'	GUA	458	94.453	76.861	22.087	1.00 71.35	A16S
ATOM	28956	C2'	CYT	455	92.522	63.794	18.454	1.00105.92	A16S	ATOM	29009	C5'	GUA	458	93.602	78.002	22.318	1.00 71.35	A16S

ATOM	29010	C4'	GUA	458	92.741	77.768	23.534	1.00 71.35	A16S
ATOM	29011	O4'	GUA	458	91.776	76.715	23.260	1.00 71.35	A16S
ATOM	29012	C1'	GUA	458	91.562	75.944	24.441	1.00 71.35	A16S
ATOM	29013	N9	GUA	458	91.952	74.556	24.189	1.00108.82	A16S
ATOM	29014	C4	GUA	458	91.676	73.473	24.996	1.00108.82	A16S
ATOM	29015	N3	GUA	458	90.959	73.495	26.141	1.00108.82	A16S
ATOM	29016	C2	GUA	458	90.883	72.300	26.700	1.00108.82	A16S
ATOM	29017	N2	GUA	458	90.198	72.136	27.838	1.00108.82	A16S
ATOM	29018	N1	GUA	458	91.471	71.174	26.184	1.00108.82	A16S
ATOM	29019	C6	GUA	458	92.218	71.125	25.012	1.00108.82	A16S
ATOM	29020	O6	GUA	458	92.716	70.053	24.641	1.00108.82	A16S
ATOM	29021	C5	GUA	458	92.298	72.401	24.393	1.00108.82	A16S
ATOM	29022	N7	GUA	458	92.929	72.793	23.221	1.00108.82	A16S
ATOM	29023	C8	GUA	458	92.693	74.073	23.137	1.00108.82	A16S
ATOM	29024	C2'	GUA	458	92.421	76.541	25.557	1.00 71.35	A16S
ATOM	29025	O2'	GUA	458	91.643	77.365	26.400	1.00 71.35	A16S
ATOM	29026	C3'	GUA	458	93.491	77.277	24.761	1.00 71.35	A16S
ATOM	29027	O3'	GUA	458	94.077	78.325	25.501	1.00 71.35	A16S
ATOM	29028	P	GUA	459	95.282	77.996	26.508	1.00 81.43	A16S
ATOM	29029	O1P	GUA	459	95.794	79.289	27.032	1.00141.00	A16S
ATOM	29030	O2P	GUA	459	96.210	77.059	25.824	1.00141.00	A16S
ATOM	29031	O5'	GUA	459	94.585	77.212	27.704	1.00 81.43	A16S
ATOM	29032	C5'	GUA	459	93.673	77.875	28.591	1.00 81.43	A16S
ATOM	29033	C4'	GUA	459	93.203	76.920	29.656	1.00 81.43	A16S
ATOM	29034	O4'	GUA	459	92.444	75.847	29.040	1.00 81.43	A16S
ATOM	29035	C1'	GUA	459	92.695	74.627	29.728	1.00 81.43	A16S
ATOM	29036	N9	GUA	459	93.286	73.677	28.789	1.00141.00	A16S
ATOM	29037	C4	GUA	459	93.448	72.330	28.994	1.00141.00	A16S
ATOM	29038	N3	GUA	459	93.063	71.647	30.090	1.00141.00	A16S
ATOM	29039	C2	GUA	459	93.357	70.362	29.999	1.00141.00	A16S
ATOM	29040	N2	GUA	459	93.028	69.533	30.999	1.00141.00	A16S
ATOM	29041	N1	GUA	459	93.991	69.795	28.920	1.00141.00	A16S
ATOM	29042	C6	GUA	459	94.399	70.481	27.782	1.00141.00	A16S
ATOM	29043	O6	GUA	459	94.965	69.873	26.865	1.00141.00	A16S
ATOM	29044	C5	GUA	459	94.079	71.859	27.864	1.00141.00	A16S
ATOM	29045	N7	GUA	459	94.295	72.886	26.958	1.00141.00	A16S
ATOM	29046	C8	GUA	459	93.808	73.943	27.546	1.00141.00	A16S
ATOM	29047	C2'	GUA	459	93.639	74.928	30.897	1.00 81.43	A16S
ATOM	29048	O2'	GUA	459	92.918	75.067	32.104	1.00 81.43	A16S
ATOM	29049	C3'	GUA	459	94.309	76.217	30.429	1.00 81.43	A16S
ATOM	29050	O3'	GUA	459	94.802	77.003	31.504	1.00 81.43	A16S
ATOM	29051	P	GUA	460	96.326	76.827	31.985	1.00102.39	A16S
ATOM	29052	O1P	GUA	460	96.649	77.976	32.872	1.00123.73	A16S
ATOM	29053	O2P	GUA	460	97.165	76.571	30.783	1.00123.73	A16S
ATOM	29054	O5'	GUA	460	96.299	75.514	32.884	1.00102.39	A16S
ATOM	29055	C5'	GUA	460	95.478	75.455	34.055	1.00102.39	A16S
ATOM	29056	C4'	GUA	460	95.404	74.043	34.574	1.00102.39	A16S
ATOM	29057	O4'	GUA	460	94.723	73.195	33.616	1.00102.39	A16S
ATOM	29058	C1'	GUA	460	95.262	71.884	33.680	1.00102.39	A16S
ATOM	29059	N9	GUA	460	95.768	71.511	32.362	1.00123.73	A16S
ATOM	29060	C4	GUA	460	96.251	70.276	32.009	1.00123.73	A16S
ATOM	29061	N3	GUA	460	96.331	69.197	32.817	1.00123.73	A16S
ATOM	29062	C2	GUA	460	96.841	68.151	32.194	1.00123.73	A16S
ATOM	29063	N2	GUA	460	96.989	66.993	32.848	1.00123.73	A16S
ATOM	29064	N1	GUA	460	97.243	68.162	30.883	1.00123.73	A16S
ATOM	29065	C6	GUA	460	97.171	69.262	30.033	1.00123.73	A16S
ATOM	29066	O6	GUA	460	97.562	69.164	28.865	1.00123.73	A16S
ATOM	29067	C5	GUA	460	96.623	70.392	30.688	1.00123.73	A16S
ATOM	29068	N7	GUA	460	96.375	71.674	30.217	1.00123.73	A16S
ATOM	29069	C8	GUA	460	95.869	72.302	31.242	1.00123.73	A16S
ATOM	29070	C2'	GUA	460	96.362	71.874	34.744	1.00102.39	A16S
ATOM	29071	O2'	GUA	460	95.841	71.353	35.951	1.00102.39	A16S
ATOM	29072	C3'	GUA	460	96.733	73.351	34.822	1.00102.39	A16S
ATOM	29073	O3'	GUA	460	97.272	73.706	36.087	1.00102.39	A16S
ATOM	29074	P	GUA	461	98.851	73.562	36.348	1.00106.09	A16S
ATOM	29075	O1P	GUA	461	99.110	73.979	37.750	1.00147.21	A16S
ATOM	29076	O2P	GUA	461	99.579	74.233	35.234	1.00147.21	A16S
ATOM	29077	O5'	GUA	461	99.101	71.995	36.258	1.00106.09	A16S
ATOM	29078	C5'	GUA	461	98.475	71.108	37.190	1.00106.09	A16S
ATOM	29079	C4'	GUA	461	98.881	69.691	36.905	1.00106.09	A16S
ATOM	29080	O4'	GUA	461	98.286	69.244	35.661	1.00106.09	A16S
ATOM	29081	C1'	GUA	461	99.176	68.358	35.001	1.00106.09	A16S
ATOM	29082	N9	GUA	461	99.468	68.891	33.673	1.00147.21	A16S
ATOM	29083	C4	GUA	461	100.039	68.206	32.624	1.00147.21	A16S
ATOM	29084	N3	GUA	461	100.427	66.913	32.635	1.00147.21	A16S
ATOM	29085	C2	GUA	461	100.948	66.542	31.477	1.00147.21	A16S
ATOM	29086	N2	GUA	461	101.392	65.286	31.314	1.00147.21	A16S
ATOM	29087	N1	GUA	461	101.076	67.375	30.393	1.00147.21	A16S
ATOM	29088	C6	GUA	461	100.683	68.709	30.358	1.00147.21	A16S
ATOM	29089	O6	GUA	461	100.845	69.374	29.327	1.00147.21	A16S
ATOM	29090	C5	GUA	461	100.123	69.120	31.595	1.00147.21	A16S
ATOM	29091	N7	GUA	461	99.612	70.350	31.984	1.00147.21	A16S
ATOM	29092	C8	GUA	461	99.238	70.169	33.221	1.00147.21	A16S
ATOM	29093	C2'	GUA	461	100.423	68.208	35.876	1.00106.09	A16S
ATOM	29094	O2'	GUA	461	100.305	67.032	36.649	1.00106.09	A16S
ATOM	29095	C3'	GUA	461	100.371	69.479	36.718	1.00106.09	A16S
ATOM	29096	O3'	GUA	461	101.033	69.358	37.972	1.00106.09	A16S
ATOM	29097	P	ADE	462	102.612	69.640	38.073	1.00109.25	A16S
ATOM	29098	O1P	ADE	462	102.944	69.734	39.517	1.00126.32	A16S
ATOM	29099	O2P	ADE	462	102.956	70.767	37.169	1.00126.32	A16S
ATOM	29100	O5'	ADE	462	103.263	68.301	37.501	1.00109.25	A16S
ATOM	29101	C5'	ADE	462	102.997	67.036	38.143	1.00109.25	A16S
ATOM	29102	C4'	ADE	462	103.505	65.881	37.307	1.00109.25	A16S
ATOM	29103	O4'	ADE	462	102.757	65.780	36.070	1.00109.25	A16S
ATOM	29104	C1'	ADE	462	103.597	65.275	35.043	1.00109.25	A16S
ATOM	29105	N9	ADE	462	103.655	66.259	33.961	1.00126.32	A16S
ATOM	29106	C4	ADE	462	104.243	66.080	32.730	1.00126.32	A16S
ATOM	29107	N3	ADE	462	104.880	64.985	32.281	1.00126.32	A16S
ATOM	29108	C2	ADE	462	105.324	65.177	31.042	1.00126.32	A16S
ATOM	29109	N1	ADE	462	105.213	66.257	30.259	1.00126.32	A16S
ATOM	29110	C6	ADE	462	104.567	67.340	30.740	1.00126.32	A16S
ATOM	29111	N6	ADE	462	104.453	68.419	29.958	1.00126.32	A16S
ATOM	29112	C5	ADE	462	104.049	67.265	32.044	1.00126.32	A16S
ATOM	29113	N7	ADE	462	103.353	68.176	32.826	1.00126.32	A16S
ATOM	29114	C8	ADE	462	103.145	67.534	33.949	1.00126.32	A16S
ATOM	29115	C2'	ADE	462	104.967	64.994	35.661	1.00109.25	A16S

ATOM	29116	O2'	ADE	462	105.032	63.623	36.007	1.00109.25	A16S	ATOM	29169	N3	GUA	465	119.002	69.751	30.077	1.00 97.92	A16S
ATOM	29117	C3'	ADE	462	104.958	65.926	36.869	1.00109.25	A16S	ATOM	29170	C2	GUA	465	118.455	70.866	29.606	1.00 97.92	A16S
ATOM	29118	O3'	ADE	462	105.826	65.487	37.900	1.00109.25	A16S	ATOM	29171	N2	GUA	465	118.299	71.035	28.289	1.00 97.92	A16S
ATOM	29119	P	CYT	463	107.355	65.968	37.901	1.00 98.29	A16S	ATOM	29172	N1	GUA	465	118.033	71.903	30.390	1.00 97.92	A16S
ATOM	29120	O1P	CYT	463	107.994	65.480	39.144	1.00 90.48	A16S	ATOM	29173	C6	GUA	465	118.143	71.952	31.772	1.00 97.92	A16S
ATOM	29121	O2P	CYT	463	107.382	67.422	37.577	1.00 90.48	A16S	ATOM	29174	O6	GUA	465	117.690	72.925	32.388	1.00 97.92	A16S
ATOM	29122	O5'	CYT	463	107.989	65.140	36.703	1.00 98.29	A16S	ATOM	29175	C5	GUA	465	118.781	70.788	32.290	1.00 97.92	A16S
ATOM	29123	C5'	CYT	463	107.866	63.709	36.671	1.00 98.29	A16S	ATOM	29176	N7	GUA	465	119.119	70.453	33.594	1.00 97.92	A16S
ATOM	29124	C4'	CYT	463	108.568	63.148	35.460	1.00 98.29	A16S	ATOM	29177	C8	GUA	465	119.639	69.259	33.504	1.00 97.92	A16S
ATOM	29125	O4'	CYT	463	107.817	63.408	34.243	1.00 98.29	A16S	ATOM	29178	C2'	GUA	465	121.495	67.059	32.126	1.00 81.22	A16S
ATOM	29126	C1'	CYT	463	108.717	63.605	33.163	1.00 98.29	A16S	ATOM	29179	O2'	GUA	465	121.940	66.142	31.149	1.00 81.22	A16S
ATOM	29127	N1	CYT	463	108.489	64.943	32.588	1.00 90.48	A16S	ATOM	29180	C3'	GUA	465	121.350	66.321	33.444	1.00 81.22	A16S
ATOM	29128	C6	CYT	463	107.999	65.964	33.355	1.00 90.48	A16S	ATOM	29181	O3'	GUA	465	122.317	65.310	33.619	1.00 81.22	A16S
ATOM	29129	C2	CYT	463	108.790	65.157	31.234	1.00 90.48	A16S	ATOM	29182	P	ADE	466	123.836	65.711	33.822	1.00 64.20	A16S
ATOM	29130	O2	CYT	463	109.246	64.219	30.556	1.00 90.48	A16S	ATOM	29183	O1P	ADE	466	124.467	64.676	34.680	1.00 83.84	A16S
ATOM	29131	N3	CYT	463	108.581	66.381	30.700	1.00 90.48	A16S	ATOM	29184	O2P	ADE	466	123.845	67.132	34.272	1.00 83.84	A16S
ATOM	29132	C4	CYT	463	108.102	67.368	31.459	1.00 90.48	A16S	ATOM	29185	O5'	ADE	466	124.407	65.619	32.334	1.00 64.20	A16S
ATOM	29133	N4	CYT	463	107.915	68.560	30.889	1.00 90.48	A16S	ATOM	29186	C5'	ADE	466	125.068	64.430	31.842	1.00 64.20	A16S
ATOM	29134	C5	CYT	463	107.794	67.178	32.837	1.00 90.48	A16S	ATOM	29187	C4'	ADE	466	126.074	64.808	30.781	1.00 64.20	A16S
ATOM	29135	C2'	CYT	463	110.137	63.447	33.704	1.00 98.29	A16S	ATOM	29188	O4'	ADE	466	125.380	65.162	29.563	1.00 64.20	A16S
ATOM	29136	O2'	CYT	463	110.582	62.137	33.425	1.00 98.29	A16S	ATOM	29189	C1'	ADE	466	125.985	66.300	28.977	1.00 64.20	A16S
ATOM	29137	C3'	CYT	463	109.938	63.732	35.190	1.00 98.29	A16S	ATOM	29190	N9	ADE	466	124.990	67.373	28.953	1.00 83.84	A16S
ATOM	29138	O3'	CYT	463	110.919	63.157	36.034	1.00 98.29	A16S	ATOM	29191	C4	ADE	466	125.138	68.638	28.440	1.00 83.84	A16S
ATOM	29139	P	URI	464	112.183	64.037	36.476	1.00 84.37	A16S	ATOM	29192	N3	ADE	466	126.226	69.157	27.849	1.00 83.84	A16S
ATOM	29140	O1P	URI	464	113.043	63.188	37.347	1.00 88.86	A16S	ATOM	29193	C2	ADE	466	126.001	70.414	27.480	1.00 83.84	A16S
ATOM	29141	O2P	URI	464	111.693	65.353	36.977	1.00 88.86	A16S	ATOM	29194	N1	ADE	466	124.894	71.157	27.627	1.00 83.84	A16S
ATOM	29142	O5'	URI	464	112.931	64.271	35.087	1.00 84.37	A16S	ATOM	29195	C6	ADE	466	123.820	70.603	28.229	1.00 83.84	A16S
ATOM	29143	C5'	URI	464	113.233	63.147	34.224	1.00 84.37	A16S	ATOM	29196	N6	ADE	466	122.714	71.341	28.382	1.00 83.84	A16S
ATOM	29144	C4'	URI	464	113.741	63.614	32.879	1.00 84.37	A16S	ATOM	29197	C5	ADE	466	123.932	69.275	28.661	1.00 83.84	A16S
ATOM	29145	O4'	URI	464	112.670	64.119	32.041	1.00 84.37	A16S	ATOM	29198	N7	ADE	466	123.040	68.428	29.293	1.00 83.84	A16S
ATOM	29146	C1'	URI	464	113.181	65.132	31.191	1.00 84.37	A16S	ATOM	29199	C8	ADE	466	123.713	67.319	29.441	1.00 83.84	A16S
ATOM	29147	N1	URI	464	112.470	66.389	31.458	1.00 88.86	A16S	ATOM	29200	C2'	ADE	466	127.228	66.648	29.797	1.00 64.20	A16S
ATOM	29148	C6	URI	464	111.995	66.713	32.710	1.00 88.86	A16S	ATOM	29201	O2'	ADE	466	128.380	66.090	29.203	1.00 64.20	A16S
ATOM	29149	C2	URI	464	112.313	67.251	30.396	1.00 88.86	A16S	ATOM	29202	C3'	ADE	466	126.895	66.031	31.145	1.00 64.20	A16S
ATOM	29150	O2	URI	464	112.723	66.995	29.280	1.00 88.86	A16S	ATOM	29203	O3'	ADE	466	128.058	65.665	31.860	1.00 64.20	A16S
ATOM	29151	N3	URI	464	111.666	68.424	30.688	1.00 88.86	A16S	ATOM	29204	P	CYT	467	128.579	66.601	33.052	1.00 61.05	A16S
ATOM	29152	C4	URI	464	111.170	68.814	31.910	1.00 88.86	A16S	ATOM	29205	O1P	CYT	467	129.902	66.086	33.504	1.00 71.59	A16S
ATOM	29153	O4	URI	464	110.599	69.900	32.010	1.00 88.86	A16S	ATOM	29206	O2P	CYT	467	127.467	66.736	34.035	1.00 71.59	A16S
ATOM	29154	C5	URI	464	111.370	67.866	32.966	1.00 88.86	A16S	ATOM	29207	O5'	CYT	467	128.796	68.022	32.361	1.00 61.05	A16S
ATOM	29155	C2'	URI	464	114.664	65.297	31.502	1.00 84.37	A16S	ATOM	29208	C5'	CYT	467	129.731	68.203	31.280	1.00 61.05	A16S
ATOM	29156	O2'	URI	464	115.445	64.531	30.613	1.00 84.37	A16S	ATOM	29209	C4'	CYT	467	129.595	69.594	30.709	1.00 61.05	A16S
ATOM	29157	C3'	URI	464	114.731	64.752	32.910	1.00 84.37	A16S	ATOM	29210	O4'	CYT	467	128.272	69.750	30.138	1.00 61.05	A16S
ATOM	29158	O3'	URI	464	116.014	64.333	33.239	1.00 84.37	A16S	ATOM	29211	C1'	CYT	467	127.801	71.069	30.368	1.00 61.05	A16S
ATOM	29159	P	GUA	465	116.860	65.227	34.245	1.00 81.22	A16S	ATOM	29212	N1	CYT	467	126.547	70.987	31.138	1.00 71.59	A16S
ATOM	29160	O1P	GUA	465	116.218	65.168	35.575	1.00 97.92	A16S	ATOM	29213	C6	CYT	467	126.384	70.040	32.113	1.00 71.59	A16S
ATOM	29161	O2P	GUA	465	117.066	66.540	33.592	1.00 97.92	A16S	ATOM	29214	C2	CYT	467	125.522	71.898	30.861	1.00 71.59	A16S
ATOM	29162	O5'	GUA	465	118.247	64.482	34.348	1.00 81.22	A16S	ATOM	29215	O2	CYT	467	125.692	72.749	29.976	1.00 71.59	A16S
ATOM	29163	C5'	GUA	465	119.411	65.233	34.583	1.00 81.22	A16S	ATOM	29216	N3	CYT	467	124.372	71.829	31.571	1.00 71.59	A16S
ATOM	29164	C4'	GUA	465	120.042	65.603	33.272	1.00 81.22	A16S	ATOM	29217	C4	CYT	467	124.229	70.907	32.527	1.00 71.59	A16S
ATOM	29165	O4'	GUA	465	119.218	66.507	32.490	1.00 81.22	A16S	ATOM	29218	N4	CYT	467	123.085	70.887	33.213	1.00 71.59	A16S
ATOM	29166	C1'	GUA	465	120.045	67.431	31.808	1.00 81.22	A16S	ATOM	29219	C5	CYT	467	125.255	69.967	32.826	1.00 71.59	A16S
ATOM	29167	N9	GUA	465	119.646	68.772	32.223	1.00 97.92	A16S	ATOM	29220	C2'	CYT	467	128.901	71.844	31.095	1.00 61.05	A16S
ATOM	29168	C4	GUA	465	119.138	69.783	31.422	1.00 97.92	A16S	ATOM	29221	O2'	CYT	467	129.638	72.607	30.167	1.00 61.05	A16S

ATOM	29222	C3'	CYT	467	129.714	70.719	31.722	1.00	61.05	A16S
ATOM	29223	O3'	CYT	467	131.065	71.086	31.908	1.00	61.05	A16S
ATOM	29224	P	GUA	468	131.522	71.748	33.292	1.00	78.91	A16S
ATOM	29225	O1P	GUA	468	131.226	73.197	33.173	1.00	68.42	A16S
ATOM	29226	O2P	GUA	468	132.905	71.303	33.571	1.00	68.42	A16S
ATOM	29227	O5'	GUA	468	130.542	71.095	34.362	1.00	78.91	A16S
ATOM	29228	C5'	GUA	468	130.993	70.668	35.667	1.00	78.91	A16S
ATOM	29229	C4'	GUA	468	129.792	70.347	36.513	1.00	78.91	A16S
ATOM	29230	O4'	GUA	468	128.991	71.545	36.497	1.00	78.91	A16S
ATOM	29231	C1'	GUA	468	127.628	71.208	36.409	1.00	78.91	A16S
ATOM	29232	N9	GUA	468	126.976	72.127	35.479	1.00	68.42	A16S
ATOM	29233	C4	GUA	468	125.652	72.516	35.512	1.00	68.42	A16S
ATOM	29234	N3	GUA	468	124.722	72.098	36.392	1.00	68.42	A16S
ATOM	29235	C2	GUA	468	123.546	72.643	36.164	1.00	68.42	A16S
ATOM	29236	N2	GUA	468	122.509	72.333	36.942	1.00	68.42	A16S
ATOM	29237	N1	GUA	468	123.297	73.530	35.162	1.00	68.42	A16S
ATOM	29238	C6	GUA	468	124.235	73.982	34.250	1.00	68.42	A16S
ATOM	29239	O6	GUA	468	123.903	74.793	33.390	1.00	68.42	A16S
ATOM	29240	C5	GUA	468	125.507	73.403	34.473	1.00	68.42	A16S
ATOM	29241	N7	GUA	468	126.709	73.568	33.792	1.00	68.42	A16S
ATOM	29242	C8	GUA	468	127.549	72.790	34.421	1.00	68.42	A16S
ATOM	29243	C2'	GUA	468	127.479	69.701	36.170	1.00	78.91	A16S
ATOM	29244	O2'	GUA	468	126.886	69.052	37.282	1.00	78.91	A16S
ATOM	29245	C3'	GUA	468	128.916	69.250	35.906	1.00	78.91	A16S
ATOM	29246	O3'	GUA	468	129.054	67.920	36.478	1.00	78.91	A16S
ATOM	29247	P	GUA	469	129.755	67.659	37.935	1.00	99.20	A16S
ATOM	29248	O1P	GUA	469	131.076	67.034	37.674	1.00	78.84	A16S
ATOM	29249	O2P	GUA	469	128.764	66.950	38.793	1.00	78.84	A16S
ATOM	29250	O5'	GUA	469	130.030	69.074	38.611	1.00	99.20	A16S
ATOM	29251	C5'	GUA	469	130.102	69.222	40.047	1.00	99.20	A16S
ATOM	29252	C4'	GUA	469	129.454	70.523	40.443	1.00	99.20	A16S
ATOM	29253	O4'	GUA	469	128.281	70.306	41.242	1.00	99.20	A16S
ATOM	29254	C1'	GUA	469	127.890	71.568	41.693	1.00	99.20	A16S
ATOM	29255	N9	GUA	469	126.915	71.460	42.767	1.00	78.84	A16S
ATOM	29256	C4	GUA	469	125.644	71.955	42.688	1.00	78.84	A16S
ATOM	29257	N3	GUA	469	125.134	72.618	41.635	1.00	78.84	A16S
ATOM	29258	C2	GUA	469	123.881	72.963	41.826	1.00	78.84	A16S
ATOM	29259	N2	GUA	469	123.241	73.630	40.860	1.00	78.84	A16S
ATOM	29260	N1	GUA	469	123.171	72.681	42.970	1.00	78.84	A16S
ATOM	29261	C6	GUA	469	123.675	71.997	44.074	1.00	78.84	A16S
ATOM	29262	O6	GUA	469	122.946	71.791	45.056	1.00	78.84	A16S
ATOM	29263	C5	GUA	469	125.040	71.620	43.876	1.00	78.84	A16S
ATOM	29264	N7	GUA	469	125.928	70.941	44.702	1.00	78.84	A16S
ATOM	29265	C8	GUA	469	127.032	70.873	44.002	1.00	78.84	A16S
ATOM	29266	C2'	GUA	469	129.151	72.402	41.913	1.00	99.20	A16S
ATOM	29267	O2'	GUA	469	128.945	73.624	41.235	1.00	99.20	A16S
ATOM	29268	C3'	GUA	469	130.245	71.547	41.249	1.00	99.20	A16S
ATOM	29269	O3'	GUA	469	131.015	72.332	40.334	1.00	99.20	A16S
ATOM	29270	P	URI	470	131.876	73.596	40.853	1.00	91.97	A16S
ATOM	29271	O1P	URI	470	133.273	73.108	41.023	1.00	72.88	A16S
ATOM	29272	O2P	URI	470	131.207	74.295	41.985	1.00	72.88	A16S
ATOM	29273	O5'	URI	470	131.852	74.588	39.604	1.00	91.97	A16S
ATOM	29274	C5'	URI	470	132.818	74.457	38.550	1.00	91.97	A16S
ATOM	29275	C4'	URI	470	132.287	75.051	37.275	1.00	91.97	A16S
ATOM	29276	O4'	URI	470	131.153	74.282	36.813	1.00	91.97	A16S
ATOM	29277	C1'	URI	470	130.248	75.133	36.139	1.00	91.97	A16S
ATOM	29278	N1	URI	470	128.939	75.066	36.797	1.00	72.88	A16S
ATOM	29279	C6	URI	470	128.770	74.509	38.043	1.00	72.88	A16S
ATOM	29280	C2	URI	470	127.870	75.608	36.115	1.00	72.88	A16S
ATOM	29281	O2	URI	470	127.977	76.097	35.012	1.00	72.88	A16S
ATOM	29282	N3	URI	470	126.672	75.560	36.774	1.00	72.88	A16S
ATOM	29283	C4	URI	470	126.437	75.040	38.017	1.00	72.88	A16S
ATOM	29284	O4	URI	470	125.315	75.139	38.501	1.00	72.88	A16S
ATOM	29285	C5	URI	470	127.587	74.480	38.660	1.00	72.88	A16S
ATOM	29286	C2'	URI	470	130.814	76.551	36.180	1.00	91.97	A16S
ATOM	29287	O2'	URI	470	131.455	76.818	34.950	1.00	91.97	A16S
ATOM	29288	C3'	URI	470	131.761	76.471	37.370	1.00	91.97	A16S
ATOM	29289	O3'	URI	470	132.807	77.432	37.308	1.00	91.97	A16S
ATOM	29290	P	ADE	471	132.633	78.839	38.070	1.00	75.63	A16S
ATOM	29291	O1P	ADE	471	133.896	79.617	37.907	1.00	73.00	A16S
ATOM	29292	O2P	ADE	471	132.116	78.556	39.438	1.00	73.00	A16S
ATOM	29293	O5'	ADE	471	131.488	79.571	37.241	1.00	75.63	A16S
ATOM	29294	C5'	ADE	471	131.692	79.906	35.864	1.00	75.63	A16S
ATOM	29295	C4'	ADE	471	130.505	80.655	35.331	1.00	75.63	A16S
ATOM	29296	O4'	ADE	471	129.345	79.789	35.347	1.00	75.63	A16S
ATOM	29297	C1'	ADE	471	128.189	80.546	35.664	1.00	75.63	A16S
ATOM	29298	N9	ADE	471	127.612	79.995	36.892	1.00	73.00	A16S
ATOM	29299	C4	ADE	471	126.342	80.224	37.360	1.00	73.00	A16S
ATOM	29300	N3	ADE	471	125.400	81.005	36.810	1.00	73.00	A16S
ATOM	29301	C2	ADE	471	124.286	80.969	37.531	1.00	73.00	A16S
ATOM	29302	N1	ADE	471	124.021	80.286	38.646	1.00	73.00	A16S
ATOM	29303	C6	ADE	471	124.989	79.509	39.171	1.00	73.00	A16S
ATOM	29304	N6	ADE	471	124.722	78.817	40.277	1.00	73.00	A16S
ATOM	29305	C5	ADE	471	126.224	79.470	38.513	1.00	73.00	A16S
ATOM	29306	N7	ADE	471	127.408	78.797	38.786	1.00	73.00	A16S
ATOM	29307	C8	ADE	471	128.199	79.142	37.801	1.00	73.00	A16S
ATOM	29308	C2'	ADE	471	128.613	82.009	35.800	1.00	75.63	A16S
ATOM	29309	O2'	ADE	471	128.415	82.685	34.573	1.00	75.63	A16S
ATOM	29310	C3'	ADE	471	130.088	81.866	36.142	1.00	75.63	A16S
ATOM	29311	O3'	ADE	471	130.820	83.012	35.771	1.00	75.63	A16S
ATOM	29312	P	CYT	472	131.248	84.066	36.896	1.00	67.50	A16S
ATOM	29313	O1P	CYT	472	131.689	85.295	36.173	1.00	64.54	A16S
ATOM	29314	O2P	CYT	472	132.185	83.382	37.837	1.00	64.54	A16S
ATOM	29315	O5'	CYT	472	129.876	84.388	37.643	1.00	67.50	A16S
ATOM	29316	C5'	CYT	472	128.844	85.147	36.985	1.00	67.50	A16S
ATOM	29317	C4'	CYT	472	127.577	85.156	37.810	1.00	67.50	A16S
ATOM	29318	O4'	CYT	472	127.033	83.814	37.863	1.00	67.50	A16S
ATOM	29319	C1'	CYT	472	126.479	83.574	39.144	1.00	67.50	A16S
ATOM	29320	N1	CYT	472	127.313	82.559	39.812	1.00	64.54	A16S
ATOM	29321	C6	CYT	472	128.604	82.347	39.414	1.00	64.54	A16S
ATOM	29322	C2	CYT	472	126.775	81.828	40.870	1.00	64.54	A16S
ATOM	29323	O2	CYT	472	125.595	82.034	41.203	1.00	64.54	A16S
ATOM	29324	N3	CYT	472	127.553	80.917	41.504	1.00	64.54	A16S
ATOM	29325	C4	CYT	472	128.817	80.730	41.112	1.00	64.54	A16S
ATOM	29326	N4	CYT	472	129.556	79.838	41.766	1.00	64.54	A16S
ATOM	29327	C5	CYT	472	129.382	81.454	40.031	1.00	64.54	A16S

ATOM	29328	C2'	CYT	472	126.523	84.894	39.913	1.00	67.50	A16S	ATOM	29381	O4'	GUA	475	129.331	86.258	53.610	1.00	72.40	A16S
ATOM	29329	O2'	CYT	472	125.339	85.638	39.704	1.00	67.50	A16S	ATOM	29382	C1'	GUA	475	130.489	85.439	53.699	1.00	72.40	A16S
ATOM	29330	C3'	CYT	472	127.716	85.571	39.267	1.00	67.50	A16S	ATOM	29383	N9	GUA	475	130.951	85.121	52.352	1.00	115.08	A16S
ATOM	29331	O3'	CYT	472	127.672	86.972	39.467	1.00	67.50	A16S	ATOM	29384	C4	GUA	475	131.960	84.244	52.024	1.00	115.08	A16S
ATOM	29332	P	CYT	473	128.265	87.589	40.825	1.00	76.59	A16S	ATOM	29385	N3	GUA	475	132.681	83.506	52.891	1.00	115.08	A16S
ATOM	29333	O1P	CYT	473	128.224	89.067	40.673	1.00	57.52	A16S	ATOM	29386	C2	GUA	475	133.588	82.770	52.274	1.00	115.08	A16S
ATOM	29334	O2P	CYT	473	129.555	86.921	41.153	1.00	57.52	A16S	ATOM	29387	N2	GUA	475	134.393	81.974	52.982	1.00	115.08	A16S
ATOM	29335	O5'	CYT	473	127.189	87.161	41.918	1.00	76.59	A16S	ATOM	29388	N1	GUA	475	133.774	82.761	50.916	1.00	115.08	A16S
ATOM	29336	C5'	CYT	473	125.864	87.732	41.914	1.00	76.59	A16S	ATOM	29389	C6	GUA	475	133.043	83.511	50.004	1.00	115.08	A16S
ATOM	29337	C4'	CYT	473	125.129	87.364	43.180	1.00	76.59	A16S	ATOM	29390	O6	GUA	475	133.290	83.426	48.794	1.00	115.08	A16S
ATOM	29338	O4'	CYT	473	124.816	85.947	43.157	1.00	76.59	A16S	ATOM	29391	C5	GUA	475	132.066	84.305	50.652	1.00	115.08	A16S
ATOM	29339	C1'	CYT	473	124.980	85.399	44.456	1.00	76.59	A16S	ATOM	29392	N7	GUA	475	131.134	85.187	50.124	1.00	115.08	A16S
ATOM	29340	N1	CYT	473	126.108	84.446	44.417	1.00	57.52	A16S	ATOM	29393	C8	GUA	475	130.494	85.644	51.166	1.00	115.08	A16S
ATOM	29341	C6	CYT	473	127.054	84.524	43.433	1.00	57.52	A16S	ATOM	29394	C2'	GUA	475	131.556	86.214	54.472	1.00	72.40	A16S
ATOM	29342	C2	CYT	473	126.209	83.459	45.413	1.00	57.52	A16S	ATOM	29395	O2'	GUA	475	131.548	85.783	55.816	1.00	72.40	A16S
ATOM	29343	O2	CYT	473	125.324	83.386	46.292	1.00	57.52	A16S	ATOM	29396	C3'	GUA	475	131.101	87.658	54.275	1.00	72.40	A16S
ATOM	29344	N3	CYT	473	127.263	82.607	45.390	1.00	57.52	A16S	ATOM	29397	O3'	GUA	475	131.559	88.507	55.318	1.00	72.40	A16S
ATOM	29345	C4	CYT	473	128.180	82.706	44.425	1.00	57.52	A16S	ATOM	29398	P	GUA	476	133.027	89.164	55.224	1.00	77.61	A16S
ATOM	29346	N4	CYT	473	129.199	81.855	44.442	1.00	57.52	A16S	ATOM	29399	O1P	GUA	476	133.230	90.004	56.435	1.00	116.65	A16S
ATOM	29347	C5	CYT	473	128.092	83.683	43.401	1.00	57.52	A16S	ATOM	29400	O2P	GUA	476	133.203	89.767	53.876	1.00	116.65	A16S
ATOM	29348	C2'	CYT	473	125.276	86.559	45.409	1.00	76.59	A16S	ATOM	29401	O5'	GUA	476	134.021	87.926	55.335	1.00	77.61	A16S
ATOM	29349	O2'	CYT	473	124.080	87.021	46.015	1.00	76.59	A16S	ATOM	29402	C5'	GUA	476	134.107	87.163	56.545	1.00	77.61	A16S
ATOM	29350	C3'	CYT	473	125.919	87.565	44.463	1.00	76.59	A16S	ATOM	29403	C4'	GUA	476	135.151	86.093	56.408	1.00	77.61	A16S
ATOM	29351	O3'	CYT	473	125.886	88.897	44.949	1.00	76.59	A16S	ATOM	29404	O4'	GUA	476	134.754	85.163	55.372	1.00	77.61	A16S
ATOM	29352	P	GUA	474	127.094	89.434	45.869	1.00	87.69	A16S	ATOM	29405	C1'	GUA	476	135.904	84.697	54.690	1.00	77.61	A16S
ATOM	29353	O1P	GUA	474	126.821	90.872	46.095	1.00	92.78	A16S	ATOM	29406	N9	GUA	476	135.757	84.978	53.263	1.00	116.65	A16S
ATOM	29354	O2P	GUA	474	128.408	89.011	45.325	1.00	92.78	A16S	ATOM	29407	C4	GUA	476	136.623	84.593	52.264	1.00	116.65	A16S
ATOM	29355	O5'	GUA	474	126.903	88.664	47.246	1.00	87.69	A16S	ATOM	29408	N3	GUA	476	137.765	83.896	52.432	1.00	116.65	A16S
ATOM	29356	C5'	GUA	474	125.726	88.859	48.047	1.00	87.69	A16S	ATOM	29409	C2	GUA	476	138.383	83.680	51.287	1.00	116.65	A16S
ATOM	29357	C4'	GUA	474	125.768	87.953	49.248	1.00	87.69	A16S	ATOM	29410	N2	GUA	476	139.530	82.994	51.270	1.00	116.65	A16S
ATOM	29358	O4'	GUA	474	125.660	86.573	48.809	1.00	87.69	A16S	ATOM	29411	N1	GUA	476	137.922	84.119	50.071	1.00	116.65	A16S
ATOM	29359	C1'	GUA	474	126.504	85.751	49.603	1.00	87.69	A16S	ATOM	29412	C6	GUA	476	136.752	84.841	49.873	1.00	116.65	A16S
ATOM	29360	N9	GUA	474	127.528	85.170	48.740	1.00	92.78	A16S	ATOM	29413	O6	GUA	476	136.431	85.194	48.731	1.00	116.65	A16S
ATOM	29361	C4	GUA	474	128.380	84.146	49.073	1.00	92.78	A16S	ATOM	29414	C5	GUA	476	136.072	85.075	51.097	1.00	116.65	A16S
ATOM	29362	N3	GUA	474	128.377	83.461	50.235	1.00	92.78	A16S	ATOM	29415	N7	GUA	476	134.886	85.747	51.353	1.00	116.65	A16S
ATOM	29363	C2	GUA	474	129.338	82.558	50.279	1.00	92.78	A16S	ATOM	29416	C8	GUA	476	134.741	85.669	52.648	1.00	116.65	A16S
ATOM	29364	N2	GUA	474	129.468	81.780	51.359	1.00	92.78	A16S	ATOM	29417	C2'	GUA	476	137.132	85.358	55.324	1.00	77.61	A16S
ATOM	29365	N1	GUA	474	130.241	82.350	49.266	1.00	92.78	A16S	ATOM	29418	O2'	GUA	476	137.711	84.465	56.253	1.00	77.61	A16S
ATOM	29366	C6	GUA	474	130.268	83.046	48.061	1.00	92.78	A16S	ATOM	29419	C3'	GUA	476	136.521	86.587	55.985	1.00	77.61	A16S
ATOM	29367	O6	GUA	474	131.141	82.791	47.218	1.00	92.78	A16S	ATOM	29420	O3'	GUA	476	137.266	87.003	57.114	1.00	77.61	A16S
ATOM	29368	C5	GUA	474	129.226	84.008	47.993	1.00	92.78	A16S	ATOM	29421	P	GUA	477	138.324	88.204	56.975	1.00	75.10	A16S
ATOM	29369	N7	GUA	474	128.884	84.897	46.982	1.00	92.78	A16S	ATOM	29422	O1P	GUA	477	139.033	88.335	58.278	1.00	88.91	A16S
ATOM	29370	C8	GUA	474	127.868	85.559	47.466	1.00	92.78	A16S	ATOM	29423	O2P	GUA	477	137.599	89.373	56.414	1.00	88.91	A16S
ATOM	29371	C2'	GUA	474	127.149	86.637	50.676	1.00	87.69	A16S	ATOM	29424	O5'	GUA	477	139.379	87.669	55.903	1.00	75.10	A16S
ATOM	29372	O2'	GUA	474	126.446	86.555	51.901	1.00	87.69	A16S	ATOM	29425	C5'	GUA	477	140.318	86.619	56.234	1.00	75.10	A16S
ATOM	29373	C3'	GUA	474	127.076	88.008	50.020	1.00	87.69	A16S	ATOM	29426	C4'	GUA	477	141.094	86.190	55.005	1.00	75.10	A16S
ATOM	29374	O3'	GUA	474	127.111	89.071	50.955	1.00	87.69	A16S	ATOM	29427	O4'	GUA	477	140.197	85.582	54.036	1.00	75.10	A16S
ATOM	29375	P	GUA	475	128.502	89.821	51.241	1.00	72.40	A16S	ATOM	29428	C1'	GUA	477	140.617	85.906	52.720	1.00	75.10	A16S
ATOM	29376	O1P	GUA	475	128.161	91.072	51.970	1.00	115.08	A16S	ATOM	29429	N9	GUA	477	139.551	86.669	52.079	1.00	88.91	A16S
ATOM	29377	O2P	GUA	475	129.267	89.898	49.969	1.00	115.08	A16S	ATOM	29430	C4	GUA	477	139.426	86.946	50.740	1.00	88.91	A16S
ATOM	29378	O5'	GUA	475	129.280	88.839	52.232	1.00	72.40	A16S	ATOM	29431	N3	GUA	477	140.265	86.548	49.765	1.00	88.91	A16S
ATOM	29379	C5'	GUA	475	128.807	88.630	53.579	1.00	72.40	A16S	ATOM	29432	C2	GUA	477	139.879	86.981	48.577	1.00	88.91	A16S
ATOM	29380	C4'	GUA	475	129.586	87.529	54.263	1.00	72.40	A16S	ATOM	29433	N2	GUA	477	140.596	86.687	47.493	1.00	88.91	A16S

ATOM	29434	N1	GUA	477	138.761	87.738	48.361	1.00	88.91	A16S
ATOM	29435	C6	GUA	477	137.882	88.160	49.347	1.00	88.91	A16S
ATOM	29436	O6	GUA	477	136.900	88.841	49.042	1.00	88.91	A16S
ATOM	29437	C5	GUA	477	138.283	87.708	50.629	1.00	88.91	A16S
ATOM	29438	N7	GUA	477	137.696	87.900	51.871	1.00	88.91	A16S
ATOM	29439	C8	GUA	477	138.480	87.266	52.698	1.00	88.91	A16S
ATOM	29440	C2'	GUA	477	141.912	86.712	52.835	1.00	75.10	A16S
ATOM	29441	O2'	GUA	477	143.022	85.849	52.717	1.00	75.10	A16S
ATOM	29442	C3'	GUA	477	141.789	87.299	54.235	1.00	75.10	A16S
ATOM	29443	O3'	GUA	477	143.060	87.616	54.782	1.00	75.10	A16S
ATOM	29444	P	URI	478	143.673	89.088	54.560	1.00	79.43	A16S
ATOM	29445	O1P	URI	478	143.909	89.709	55.897	1.00	87.73	A16S
ATOM	29446	O2P	URI	478	142.810	89.787	53.567	1.00	87.73	A16S
ATOM	29447	O5'	URI	478	145.102	88.822	53.901	1.00	79.43	A16S
ATOM	29448	C5'	URI	478	146.085	88.025	54.579	1.00	79.43	A16S
ATOM	29449	C4'	URI	478	146.989	87.343	53.582	1.00	79.43	A16S
ATOM	29450	O4'	URI	478	146.206	86.502	52.699	1.00	79.43	A16S
ATOM	29451	C1'	URI	478	146.818	86.459	51.423	1.00	79.43	A16S
ATOM	29452	N1	URI	478	145.852	86.910	50.411	1.00	87.73	A16S
ATOM	29453	C6	URI	478	144.707	87.590	50.749	1.00	87.73	A16S
ATOM	29454	C2	URI	478	146.140	86.629	49.093	1.00	87.73	A16S
ATOM	29455	O2	URI	478	147.143	86.031	48.745	1.00	87.73	A16S
ATOM	29456	N3	URI	478	145.213	87.073	48.192	1.00	87.73	A16S
ATOM	29457	C4	URI	478	144.060	87.752	48.464	1.00	87.73	A16S
ATOM	29458	O4	URI	478	143.317	88.047	47.543	1.00	87.73	A16S
ATOM	29459	C5	URI	478	143.827	88.011	49.843	1.00	87.73	A16S
ATOM	29460	C2'	URI	478	148.076	87.328	51.466	1.00	79.43	A16S
ATOM	29461	O2'	URI	478	149.206	86.502	51.660	1.00	79.43	A16S
ATOM	29462	C3'	URI	478	147.783	88.243	52.650	1.00	79.43	A16S
ATOM	29463	O3'	URI	478	148.983	88.647	53.278	1.00	79.43	A16S
ATOM	29464	P	ADE	479	149.536	90.134	53.068	1.00	84.94	A16S
ATOM	29465	O1P	ADE	479	150.672	90.252	54.013	1.00	78.25	A16S
ATOM	29466	O2P	ADE	479	148.406	91.098	53.143	1.00	78.25	A16S
ATOM	29467	O5'	ADE	479	150.127	90.134	51.588	1.00	84.94	A16S
ATOM	29468	C5'	ADE	479	151.200	91.024	51.222	1.00	84.94	A16S
ATOM	29469	C4'	ADE	479	151.241	91.208	49.727	1.00	84.94	A16S
ATOM	29470	O4'	ADE	479	149.944	91.587	49.235	1.00	84.94	A16S
ATOM	29471	C1'	ADE	479	150.138	92.216	48.004	1.00	84.94	A16S
ATOM	29472	N9	ADE	479	148.928	92.954	47.641	1.00	78.25	A16S
ATOM	29473	C4	ADE	479	148.413	93.015	46.369	1.00	78.25	A16S
ATOM	29474	N3	ADE	479	148.912	92.436	45.264	1.00	78.25	A16S
ATOM	29475	C2	ADE	479	148.148	92.700	44.209	1.00	78.25	A16S
ATOM	29476	N1	ADE	479	147.023	93.420	44.131	1.00	78.25	A16S
ATOM	29477	C6	ADE	479	146.543	93.989	45.256	1.00	78.25	A16S
ATOM	29478	N6	ADE	479	145.415	94.697	45.170	1.00	78.25	A16S
ATOM	29479	C5	ADE	479	147.273	93.789	46.456	1.00	78.25	A16S
ATOM	29480	N7	ADE	479	147.077	94.222	47.763	1.00	78.25	A16S
ATOM	29481	C8	ADE	479	148.083	93.699	48.424	1.00	78.25	A16S
ATOM	29482	C2'	ADE	479	151.372	93.090	48.209	1.00	84.94	A16S
ATOM	29483	O2'	ADE	479	152.023	93.265	46.962	1.00	84.94	A16S
ATOM	29484	C3'	ADE	479	152.208	92.280	49.216	1.00	84.94	A16S
ATOM	29485	O3'	ADE	479	153.391	91.796	48.553	1.00	84.94	A16S
ATOM	29486	P	ADE	480	153.883	90.271	48.724	1.00	102.72	A16S
ATOM	29487	O1P	ADE	480	153.526	89.769	50.074	1.00	79.04	A16S
ATOM	29488	O2P	ADE	480	155.299	90.224	48.283	1.00	79.04	A16S
ATOM	29489	O5'	ADE	480	153.003	89.486	47.649	1.00	102.72	A16S
ATOM	29490	C5'	ADE	480	153.383	88.174	47.199	1.00	102.72	A16S
ATOM	29491	C4'	ADE	480	152.530	87.748	46.024	1.00	102.72	A16S
ATOM	29492	O4'	ADE	480	151.143	87.688	46.434	1.00	102.72	A16S
ATOM	29493	C1'	ADE	480	150.312	87.916	45.313	1.00	102.72	A16S
ATOM	29494	N9	ADE	480	149.156	88.721	45.716	1.00	79.04	A16S
ATOM	29495	C4	ADE	480	148.156	89.194	44.895	1.00	79.04	A16S
ATOM	29496	N3	ADE	480	148.064	89.070	43.561	1.00	79.04	A16S
ATOM	29497	C2	ADE	480	146.945	89.640	43.111	1.00	79.04	A16S
ATOM	29498	N1	ADE	480	145.978	90.262	43.789	1.00	79.04	A16S
ATOM	29499	C6	ADE	480	146.097	90.365	45.128	1.00	79.04	A16S
ATOM	29500	N6	ADE	480	145.124	90.972	45.803	1.00	79.04	A16S
ATOM	29501	C5	ADE	480	147.244	89.815	45.729	1.00	79.04	A16S
ATOM	29502	N7	ADE	480	147.674	89.766	47.046	1.00	79.04	A16S
ATOM	29503	C8	ADE	480	148.813	89.118	46.983	1.00	79.04	A16S
ATOM	29504	C2'	ADE	480	151.165	88.425	44.148	1.00	102.72	A16S
ATOM	29505	O2'	ADE	480	151.144	87.470	43.108	1.00	102.72	A16S
ATOM	29506	C3'	ADE	480	152.524	88.670	44.813	1.00	102.72	A16S
ATOM	29507	O3'	ADE	480	153.697	88.524	43.971	1.00	102.72	A16S
ATOM	29508	P	URI	481	154.116	87.085	43.327	1.00	70.57	A16S
ATOM	29509	O1P	URI	481	152.993	86.097	43.312	1.00	66.25	A16S
ATOM	29510	O2P	URI	481	155.409	86.704	43.966	1.00	66.25	A16S
ATOM	29511	O5'	URI	481	154.480	87.446	41.814	1.00	70.57	A16S
ATOM	29512	C5'	URI	481	153.606	87.089	40.723	1.00	70.57	A16S
ATOM	29513	C4'	URI	481	154.417	86.629	39.535	1.00	70.57	A16S
ATOM	29514	O4'	URI	481	153.529	85.975	38.603	1.00	70.57	A16S
ATOM	29515	C1'	URI	481	154.002	86.166	37.284	1.00	70.57	A16S
ATOM	29516	N1	URI	481	152.920	86.733	36.462	1.00	66.25	A16S
ATOM	29517	C6	URI	481	151.704	87.079	37.008	1.00	66.25	A16S
ATOM	29518	C2	URI	481	153.157	86.900	35.104	1.00	66.25	A16S
ATOM	29519	O2	URI	481	154.220	86.630	34.570	1.00	66.25	A16S
ATOM	29520	N3	URI	481	152.101	87.400	34.392	1.00	66.25	A16S
ATOM	29521	C4	URI	481	150.866	87.752	34.876	1.00	66.25	A16S
ATOM	29522	O4	URI	481	150.018	88.170	34.096	1.00	66.25	A16S
ATOM	29523	C5	URI	481	150.698	87.569	36.280	1.00	66.25	A16S
ATOM	29524	C2'	URI	481	155.268	87.020	37.352	1.00	70.57	A16S
ATOM	29525	O2'	URI	481	156.391	86.172	37.283	1.00	70.57	A16S
ATOM	29526	C3'	URI	481	155.136	87.689	38.712	1.00	70.57	A16S
ATOM	29527	O3'	URI	481	156.431	88.004	39.214	1.00	70.57	A16S
ATOM	29528	P	ADE	482	157.166	89.358	38.732	1.00	57.63	A16S
ATOM	29529	O1P	ADE	482	158.536	89.425	39.325	1.00	55.35	A16S
ATOM	29530	O2P	ADE	482	156.208	90.469	38.977	1.00	55.35	A16S
ATOM	29531	O5'	ADE	482	157.330	89.203	37.149	1.00	57.63	A16S
ATOM	29532	C5'	ADE	482	158.398	88.417	36.569	1.00	57.63	A16S
ATOM	29533	C4'	ADE	482	158.667	88.858	35.146	1.00	57.63	A16S
ATOM	29534	O4'	ADE	482	157.459	88.709	34.360	1.00	57.63	A16S
ATOM	29535	C1'	ADE	482	157.197	89.918	33.690	1.00	57.63	A16S
ATOM	29536	N9	ADE	482	155.768	90.021	33.419	1.00	55.35	A16S
ATOM	29537	C4	ADE	482	155.217	90.313	32.195	1.00	55.35	A16S
ATOM	29538	N3	ADE	482	155.867	90.571	31.046	1.00	55.35	A16S
ATOM	29539	C2	ADE	482	155.008	90.784	30.063	1.00	55.35	A16S

ATOM	29540	N1	ADE	482	153.674	90.770	30.093	1.00	55.35	A16S	ATOM	29593	P	GUA	485	165.042	89.332	23.246	1.00	40.70	A16S
ATOM	29541	C6	ADE	482	153.055	90.512	31.266	1.00	55.35	A16S	ATOM	29594	O1P	GUA	485	165.939	88.411	22.531	1.00	53.34	A16S
ATOM	29542	N6	ADE	482	151.724	90.501	31.302	1.00	55.35	A16S	ATOM	29595	O2P	GUA	485	165.498	89.953	24.504	1.00	53.34	A16S
ATOM	29543	C5	ADE	482	153.853	90.270	32.379	1.00	55.35	A16S	ATOM	29596	O5'	GUA	485	164.602	90.516	22.275	1.00	40.70	A16S
ATOM	29544	N7	ADE	482	153.545	89.967	33.693	1.00	55.35	A16S	ATOM	29597	C5'	GUA	485	164.122	90.249	20.945	1.00	40.70	A16S
ATOM	29545	C8	ADE	482	154.714	89.835	34.267	1.00	55.35	A16S	ATOM	29598	C4'	GUA	485	163.717	91.535	20.258	1.00	40.70	A16S
ATOM	29546	C2'	ADE	482	157.824	91.002	34.554	1.00	57.63	A16S	ATOM	29599	O4'	GUA	485	162.610	92.149	20.970	1.00	40.70	A16S
ATOM	29547	O2'	ADE	482	158.058	92.166	33.795	1.00	57.63	A16S	ATOM	29600	C1'	GUA	485	162.732	93.568	20.928	1.00	40.70	A16S
ATOM	29548	C3'	ADE	482	159.113	90.309	34.968	1.00	57.63	A16S	ATOM	29601	N9	GUA	485	162.933	94.058	22.294	1.00	53.34	A16S
ATOM	29549	O3'	ADE	482	159.969	90.412	33.830	1.00	57.63	A16S	ATOM	29602	C4	GUA	485	162.879	95.367	22.730	1.00	53.34	A16S
ATOM	29550	P	GUA	483	161.478	89.872	33.889	1.00	55.14	A16S	ATOM	29603	N3	GUA	485	162.592	96.448	21.976	1.00	53.34	A16S
ATOM	29551	O1P	GUA	483	161.594	88.898	35.009	1.00	55.89	A16S	ATOM	29604	C2	GUA	485	162.661	97.565	22.677	1.00	53.34	A16S
ATOM	29552	O2P	GUA	483	162.395	91.036	33.829	1.00	55.89	A16S	ATOM	29605	N2	GUA	485	162.416	98.735	22.099	1.00	53.34	A16S
ATOM	29553	O5'	GUA	483	161.628	89.071	32.522	1.00	55.14	A16S	ATOM	29606	N1	GUA	485	162.982	97.619	24.001	1.00	53.34	A16S
ATOM	29554	C5'	GUA	483	160.933	87.830	32.317	1.00	55.14	A16S	ATOM	29607	C6	GUA	485	163.287	96.521	24.796	1.00	53.34	A16S
ATOM	29555	C4'	GUA	483	160.168	87.861	31.015	1.00	55.14	A16S	ATOM	29608	O6	GUA	485	163.591	96.684	25.987	1.00	53.34	A16S
ATOM	29556	O4'	GUA	483	159.096	88.836	31.093	1.00	55.14	A16S	ATOM	29609	C5	GUA	485	163.210	95.318	24.067	1.00	53.34	A16S
ATOM	29557	C1'	GUA	483	158.882	89.419	29.814	1.00	55.14	A16S	ATOM	29610	N7	GUA	485	163.433	94.013	24.474	1.00	53.34	A16S
ATOM	29558	N9	GUA	483	159.072	90.865	29.920	1.00	55.89	A16S	ATOM	29611	C8	GUA	485	163.253	93.301	23.397	1.00	53.34	A16S
ATOM	29559	C4	GUA	483	158.580	91.825	29.060	1.00	55.89	A16S	ATOM	29612	C2'	GUA	485	163.932	93.885	20.037	1.00	40.70	A16S
ATOM	29560	N3	GUA	483	157.834	91.602	27.955	1.00	55.89	A16S	ATOM	29613	O2'	GUA	485	163.482	94.059	18.707	1.00	40.70	A16S
ATOM	29561	C2	GUA	483	157.495	92.731	27.353	1.00	55.89	A16S	ATOM	29614	C3'	GUA	485	164.768	92.626	20.201	1.00	40.70	A16S
ATOM	29562	N2	GUA	483	156.734	92.702	26.259	1.00	55.89	A16S	ATOM	29615	O3'	GUA	485	165.674	92.443	19.137	1.00	40.70	A16S
ATOM	29563	N1	GUA	483	157.869	93.972	27.787	1.00	55.89	A16S	ATOM	29616	P	CYT	486	167.202	92.887	19.330	1.00	46.53	A16S
ATOM	29564	C6	GUA	483	158.636	94.227	28.918	1.00	55.89	A16S	ATOM	29617	O1P	CYT	486	167.969	92.352	18.178	1.00	53.21	A16S
ATOM	29565	O6	GUA	483	158.906	95.395	29.230	1.00	55.89	A16S	ATOM	29618	O2P	CYT	486	167.607	92.523	20.716	1.00	53.21	A16S
ATOM	29566	C5	GUA	483	159.003	93.029	29.580	1.00	55.89	A16S	ATOM	29619	O5'	CYT	486	167.163	94.474	19.213	1.00	46.53	A16S
ATOM	29567	N7	GUA	483	159.755	92.834	30.728	1.00	55.89	A16S	ATOM	29620	C5'	CYT	486	166.715	95.091	18.002	1.00	46.53	A16S
ATOM	29568	C8	GUA	483	159.770	91.540	30.890	1.00	55.89	A16S	ATOM	29621	C4'	CYT	486	166.262	96.502	18.266	1.00	46.53	A16S
ATOM	29569	C2'	GUA	483	159.860	88.766	28.837	1.00	55.14	A16S	ATOM	29622	O4'	CYT	486	165.268	96.510	19.322	1.00	46.53	A16S
ATOM	29570	O2'	GUA	483	159.201	87.726	28.136	1.00	55.14	A16S	ATOM	29623	C1'	CYT	486	165.406	97.688	20.098	1.00	46.53	A16S
ATOM	29571	C3'	GUA	483	160.952	88.275	29.781	1.00	55.14	A16S	ATOM	29624	N1	CYT	486	165.772	97.303	21.474	1.00	53.21	A16S
ATOM	29572	O3'	GUA	483	161.733	87.222	29.240	1.00	55.14	A16S	ATOM	29625	C6	CYT	486	166.011	95.996	21.799	1.00	53.21	A16S
ATOM	29573	P	CYT	484	163.147	87.566	28.564	1.00	48.58	A16S	ATOM	29626	C2	CYT	486	165.898	98.304	22.444	1.00	53.21	A16S
ATOM	29574	O1P	CYT	484	163.861	86.291	28.373	1.00	54.08	A16S	ATOM	29627	O2	CYT	486	165.652	99.472	22.135	1.00	53.21	A16S
ATOM	29575	O2P	CYT	484	163.805	88.657	29.311	1.00	54.08	A16S	ATOM	29628	N3	CYT	486	166.287	97.966	23.692	1.00	53.21	A16S
ATOM	29576	O5'	CYT	484	162.739	88.178	27.154	1.00	48.58	A16S	ATOM	29629	C4	CYT	486	166.534	96.689	23.991	1.00	53.21	A16S
ATOM	29577	C5'	CYT	484	162.061	87.384	26.158	1.00	48.58	A16S	ATOM	29630	N4	CYT	486	166.924	96.404	25.225	1.00	53.21	A16S
ATOM	29578	C4'	CYT	484	161.678	88.246	24.973	1.00	48.58	A16S	ATOM	29631	C5	CYT	486	166.391	95.651	23.034	1.00	53.21	A16S
ATOM	29579	O4'	CYT	484	160.606	89.157	25.344	1.00	48.58	A16S	ATOM	29632	C2'	CYT	486	166.514	98.525	19.458	1.00	46.53	A16S
ATOM	29580	C1'	CYT	484	160.772	90.394	24.658	1.00	48.58	A16S	ATOM	29633	O2'	CYT	486	165.929	99.429	18.553	1.00	46.53	A16S
ATOM	29581	N1	CYT	484	161.015	91.483	25.629	1.00	54.08	A16S	ATOM	29634	C3'	CYT	486	167.333	97.462	18.745	1.00	46.53	A16S
ATOM	29582	C6	CYT	484	161.737	91.267	26.770	1.00	54.08	A16S	ATOM	29635	O3'	CYT	486	168.042	98.000	17.646	1.00	46.53	A16S
ATOM	29583	C2	CYT	484	160.513	92.768	25.343	1.00	54.08	A16S	ATOM	29636	P	CYT	487	169.541	98.520	17.846	1.00	51.60	A16S
ATOM	29584	O2	CYT	484	159.833	92.937	24.318	1.00	54.08	A16S	ATOM	29637	O1P	CYT	487	170.031	98.841	16.482	1.00	45.37	A16S
ATOM	29585	N3	CYT	484	160.781	93.787	26.189	1.00	54.08	A16S	ATOM	29638	O2P	CYT	487	170.308	97.595	18.705	1.00	45.37	A16S
ATOM	29586	C4	CYT	484	161.505	93.568	27.288	1.00	54.08	A16S	ATOM	29639	O5'	CYT	487	169.365	99.870	18.656	1.00	51.60	A16S
ATOM	29587	N4	CYT	484	161.764	94.611	28.087	1.00	54.08	A16S	ATOM	29640	C5'	CYT	487	168.801	101.031	18.031	1.00	51.60	A16S
ATOM	29588	C5	CYT	484	162.004	92.268	27.619	1.00	54.08	A16S	ATOM	29641	C4'	CYT	487	169.015	102.230	18.905	1.00	51.60	A16S
ATOM	29589	C2'	CYT	484	161.977	90.245	23.739	1.00	48.58	A16S	ATOM	29642	O4'	CYT	487	168.224	102.084	20.106	1.00	51.60	A16S
ATOM	29590	O2'	CYT	484	161.543	89.810	22.470	1.00	48.58	A16S	ATOM	29643	C1'	CYT	487	168.946	102.573	21.217	1.00	51.60	A16S
ATOM	29591	C3'	CYT	484	162.768	89.169	24.452	1.00	48.58	A16S	ATOM	29644	N1	CYT	487	169.150	101.457	22.157	1.00	45.37	A16S
ATOM	29592	O3'	CYT	484	163.680	88.567	23.570	1.00	48.58	A16S	ATOM	29645	C6	CYT	487	169.140	100.164	21.721	1.00	45.37	A16S

ATOM	29646	C2	CYT	487	169.344	101.738	23.506	1.00	45.37	A16S	ATOM	29699	O2'	GUA	489	169.560	108.395	8.420	1.00	48.08	A16S
ATOM	29647	O2	CYT	487	169.353	102.917	23.880	1.00	45.37	A16S	ATOM	29700	C3'	GUA	489	169.199	108.074	10.836	1.00	48.08	A16S
ATOM	29648	N3	CYT	487	169.511	100.719	24.376	1.00	45.37	A16S	ATOM	29701	O3'	GUA	489	168.308	109.183	10.841	1.00	48.08	A16S
ATOM	29649	C4	CYT	487	169.479	99.462	23.943	1.00	45.37	A16S	ATOM	29702	P	CYT	490	166.877	109.036	11.558	1.00	51.36	A16S
ATOM	29650	N4	CYT	487	169.623	98.485	24.842	1.00	45.37	A16S	ATOM	29703	O1P	CYT	490	166.275	110.390	11.606	1.00	55.16	A16S
ATOM	29651	C5	CYT	487	169.294	99.146	22.572	1.00	45.37	A16S	ATOM	29704	O2P	CYT	490	167.047	108.263	12.817	1.00	55.16	A16S
ATOM	29652	C2'	CYT	487	170.249	103.168	20.686	1.00	51.60	A16S	ATOM	29705	O5'	CYT	490	166.034	108.165	10.529	1.00	51.36	A16S
ATOM	29653	O2'	CYT	487	170.054	104.544	20.426	1.00	51.60	A16S	ATOM	29706	C5'	CYT	490	165.709	108.702	9.238	1.00	51.36	A16S
ATOM	29654	C3'	CYT	487	170.436	102.389	19.400	1.00	51.60	A16S	ATOM	29707	C4'	CYT	490	165.237	107.616	8.314	1.00	51.36	A16S
ATOM	29655	O3'	CYT	487	171.219	103.098	18.469	1.00	51.60	A16S	ATOM	29708	O4'	CYT	490	166.317	106.685	8.068	1.00	51.36	A16S
ATOM	29656	P	GUA	488	172.752	102.680	18.253	1.00	65.33	A16S	ATOM	29709	C1'	CYT	490	165.789	105.389	7.860	1.00	51.36	A16S
ATOM	29657	O1P	GUA	488	173.494	103.186	19.443	1.00	47.96	A16S	ATOM	29710	N1	CYT	490	166.374	104.459	8.846	1.00	55.16	A16S
ATOM	29658	O2P	GUA	488	172.791	101.226	17.919	1.00	47.96	A16S	ATOM	29711	C6	CYT	490	166.780	104.898	10.075	1.00	55.16	A16S
ATOM	29659	O5'	GUA	488	173.188	103.485	16.946	1.00	65.33	A16S	ATOM	29712	C2	CYT	490	166.487	103.102	8.512	1.00	55.16	A16S
ATOM	29660	C5'	GUA	488	173.783	104.783	17.042	1.00	65.33	A16S	ATOM	29713	O2	CYT	490	166.167	102.733	7.379	1.00	55.16	A16S
ATOM	29661	C4'	GUA	488	173.991	105.372	15.668	1.00	65.33	A16S	ATOM	29714	N3	CYT	490	166.951	102.229	9.433	1.00	55.16	A16S
ATOM	29662	O4'	GUA	488	174.821	104.486	14.877	1.00	65.33	A16S	ATOM	29715	C4	CYT	490	167.318	102.663	10.636	1.00	55.16	A16S
ATOM	29663	C1'	GUA	488	174.508	104.650	13.506	1.00	65.33	A16S	ATOM	29716	N4	CYT	490	167.749	101.762	11.521	1.00	55.16	A16S
ATOM	29664	N9	GUA	488	174.210	103.348	12.910	1.00	47.96	A16S	ATOM	29717	C5	CYT	490	167.255	104.042	10.990	1.00	55.16	A16S
ATOM	29665	C4	GUA	488	174.011	103.094	11.569	1.00	47.96	A16S	ATOM	29718	C2'	CYT	490	164.266	105.487	7.969	1.00	51.36	A16S
ATOM	29666	N3	GUA	488	174.089	103.999	10.566	1.00	47.96	A16S	ATOM	29719	O2'	CYT	490	163.755	105.600	6.655	1.00	51.36	A16S
ATOM	29667	C2	GUA	488	173.810	103.462	9.383	1.00	47.96	A16S	ATOM	29720	C3'	CYT	490	164.087	106.754	8.802	1.00	51.36	A16S
ATOM	29668	N2	GUA	488	173.829	104.228	8.281	1.00	47.96	A16S	ATOM	29721	O3'	CYT	490	162.833	107.397	8.570	1.00	51.36	A16S
ATOM	29669	N1	GUA	488	173.488	102.139	9.200	1.00	47.96	A16S	ATOM	29722	P	CYT	491	161.646	107.277	9.662	1.00	55.05	A16S
ATOM	29670	C6	GUA	488	173.406	101.186	10.215	1.00	47.96	A16S	ATOM	29723	O1P	CYT	491	161.171	105.867	9.676	1.00	50.35	A16S
ATOM	29671	O6	GUA	488	173.102	100.016	9.940	1.00	47.96	A16S	ATOM	29724	O2P	CYT	491	160.674	108.374	9.423	1.00	50.35	A16S
ATOM	29672	C5	GUA	488	173.702	101.753	11.492	1.00	47.96	A16S	ATOM	29725	O5'	CYT	491	162.374	107.546	11.049	1.00	55.05	A16S
ATOM	29673	N7	GUA	488	173.740	101.166	12.751	1.00	47.96	A16S	ATOM	29726	C5'	CYT	491	161.625	107.712	12.258	1.00	55.05	A16S
ATOM	29674	C8	GUA	488	174.049	102.145	13.558	1.00	47.96	A16S	ATOM	29727	C4'	CYT	491	162.415	107.182	13.423	1.00	55.05	A16S
ATOM	29675	C2'	GUA	488	173.354	105.651	13.399	1.00	65.33	A16S	ATOM	29728	O4'	CYT	491	162.355	105.736	13.435	1.00	55.05	A16S
ATOM	29676	O2'	GUA	488	173.898	106.911	13.069	1.00	65.33	A16S	ATOM	29729	C1'	CYT	491	163.660	105.209	13.484	1.00	55.05	A16S
ATOM	29677	C3'	GUA	488	172.757	105.614	14.806	1.00	65.33	A16S	ATOM	29730	N1	CYT	491	163.698	103.970	12.691	1.00	50.35	A16S
ATOM	29678	O3'	GUA	488	172.134	106.863	15.147	1.00	65.33	A16S	ATOM	29731	C6	CYT	491	163.274	103.944	11.391	1.00	50.35	A16S
ATOM	29679	P	GUA	489	170.548	107.082	14.914	1.00	48.08	A16S	ATOM	29732	C2	CYT	491	164.177	102.808	13.295	1.00	50.35	A16S
ATOM	29680	O1P	GUA	489	170.195	108.389	15.542	1.00	49.94	A16S	ATOM	29733	O2	CYT	491	164.569	102.861	14.469	1.00	50.35	A16S
ATOM	29681	O2P	GUA	489	169.818	105.853	15.320	1.00	49.94	A16S	ATOM	29734	N3	CYT	491	164.209	101.656	12.589	1.00	50.35	A16S
ATOM	29682	O5'	GUA	489	170.406	107.288	13.346	1.00	48.08	A16S	ATOM	29735	C4	CYT	491	163.800	101.641	11.324	1.00	50.35	A16S
ATOM	29683	C5'	GUA	489	170.809	108.524	12.747	1.00	48.08	A16S	ATOM	29736	N4	CYT	491	163.865	100.483	10.661	1.00	50.35	A16S
ATOM	29684	C4'	GUA	489	170.599	108.468	11.263	1.00	48.08	A16S	ATOM	29737	C5	CYT	491	163.310	102.812	10.677	1.00	50.35	A16S
ATOM	29685	O4'	GUA	489	171.456	107.438	10.712	1.00	48.08	A16S	ATOM	29738	C2'	CYT	491	164.594	106.295	12.968	1.00	55.05	A16S
ATOM	29686	C1'	GUA	489	170.783	106.756	9.670	1.00	48.08	A16S	ATOM	29739	O2'	CYT	491	165.870	106.099	13.539	1.00	55.05	A16S
ATOM	29687	N9	GUA	489	170.690	105.341	10.036	1.00	49.94	A16S	ATOM	29740	C3'	CYT	491	163.893	107.566	13.442	1.00	55.05	A16S
ATOM	29688	C4	GUA	489	170.386	104.300	9.195	1.00	49.94	A16S	ATOM	29741	O3'	CYT	491	164.283	107.872	14.771	1.00	55.05	A16S
ATOM	29689	N3	GUA	489	170.089	104.406	7.887	1.00	49.94	A16S	ATOM	29742	P	ADE	492	163.844	109.272	15.428	1.00	42.38	A16S
ATOM	29690	C2	GUA	489	169.854	103.232	7.340	1.00	49.94	A16S	ATOM	29743	O1P	ADE	492	163.407	110.205	14.359	1.00	50.94	A16S
ATOM	29691	N2	GUA	489	169.528	103.160	6.049	1.00	49.94	A16S	ATOM	29744	O2P	ADE	492	164.956	109.666	16.326	1.00	50.94	A16S
ATOM	29692	N1	GUA	489	169.920	102.043	8.019	1.00	49.94	A16S	ATOM	29745	O5'	ADE	492	162.550	108.873	16.276	1.00	42.38	A16S
ATOM	29693	C6	GUA	489	170.234	101.908	9.366	1.00	49.94	A16S	ATOM	29746	C5'	ADE	492	162.016	109.750	17.283	1.00	42.38	A16S
ATOM	29694	O6	GUA	489	170.292	100.781	9.878	1.00	49.94	A16S	ATOM	29747	C4'	ADE	492	162.163	109.130	18.659	1.00	42.38	A16S
ATOM	29695	C5	GUA	489	170.467	103.165	9.971	1.00	49.94	A16S	ATOM	29748	O4'	ADE	492	161.207	108.043	18.835	1.00	42.38	A16S
ATOM	29696	N7	GUA	489	170.792	103.483	11.280	1.00	49.94	A16S	ATOM	29749	C1'	ADE	492	161.797	106.980	19.570	1.00	42.38	A16S
ATOM	29697	C8	GUA	489	170.909	104.782	11.275	1.00	49.94	A16S	ATOM	29750	N9	ADE	492	161.992	105.852	18.650	1.00	50.94	A16S
ATOM	29698	C2'	GUA	489	169.433	107.447	9.464	1.00	48.08	A16S	ATOM	29751	C4	ADE	492	161.994	104.503	18.935	1.00	50.94	A16S

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ATOM  29752  N3  ADE  492     161.769 103.908  20.118  1.00 50.94      A16S
ATOM  29753  C2  ADE  492     161.883 102.586  20.012  1.00 50.94      A16S
ATOM  29754  N1  ADE  492     162.179 101.850  18.943  1.00 50.94      A16S
ATOM  29755  C6  ADE  492     162.402 102.478  17.775  1.00 50.94      A16S
ATOM  29756  N6  ADE  492     162.712 101.749  16.713  1.00 50.94      A16S
ATOM  29757  C5  ADE  492     162.302 103.869  17.749  1.00 50.94      A16S
ATOM  29758  N7  ADE  492     162.458 104.789  16.727  1.00 50.94      A16S
ATOM  29759  C8  ADE  492     162.257 105.944  17.308  1.00 50.94      A16S
ATOM  29760  C2' ADE  492     163.148 107.493  20.064  1.00 42.38      A16S
ATOM  29761  O2' ADE  492     162.981 108.038  21.351  1.00 42.38      A16S
ATOM  29762  C3' ADE  492     163.502 108.489  18.962  1.00 42.38      A16S
ATOM  29763  O3' ADE  492     164.596 109.421  19.049  1.00 42.38      A16S
ATOM  29764  P   ADE  493     165.012 110.112  20.426  1.00 47.11      A16S
ATOM  29765  O1P ADE  493     163.764 110.612  21.042  1.00 68.56      A16S
ATOM  29766  O2P ADE  493     166.094 111.063  20.094  1.00 68.56      A16S
ATOM  29767  O5' ADE  493     165.647 108.961  21.316  1.00 47.11      A16S
ATOM  29768  C5' ADE  493     165.612 109.060  22.749  1.00 47.11      A16S
ATOM  29769  C4' ADE  493     166.099 107.780  23.361  1.00 47.11      A16S
ATOM  29770  O4' ADE  493     165.355 106.683  22.781  1.00 47.11      A16S
ATOM  29771  C1' ADE  493     166.214 105.582  22.588  1.00 47.11      A16S
ATOM  29772  N9  ADE  493     166.218 105.258  21.167  1.00 68.56      A16S
ATOM  29773  C4  ADE  493     165.826 104.058  20.639  1.00 68.56      A16S
ATOM  29774  N3  ADE  493     165.368 102.992  21.312  1.00 68.56      A16S
ATOM  29775  C2  ADE  493     165.092 102.002  20.481  1.00 68.56      A16S
ATOM  29776  N1  ADE  493     165.214 101.953  19.154  1.00 68.56      A16S
ATOM  29777  C6  ADE  493     165.681 103.037  18.504  1.00 68.56      A16S
ATOM  29778  N6  ADE  493     165.817 102.972  17.176  1.00 68.56      A16S
ATOM  29779  C5  ADE  493     166.005 104.167  19.275  1.00 68.56      A16S
ATOM  29780  N7  ADE  493     166.494 105.426  18.943  1.00 68.56      A16S
ATOM  29781  C8  ADE  493     166.600 106.033  20.098  1.00 68.56      A16S
ATOM  29782  C2' ADE  493     167.596 105.949  23.130  1.00 47.11      A16S
ATOM  29783  O2' ADE  493     167.707 105.479  24.455  1.00 47.11      A16S
ATOM  29784  C3' ADE  493     167.557 107.467  23.068  1.00 47.11      A16S
ATOM  29785  O3' ADE  493     168.387 108.033  24.070  1.00 47.11      A16S
ATOM  29786  P   CYT  494     168.986 109.512  23.875  1.00 50.88      A16S
ATOM  29787  O1P CYT  494     168.228 110.434  24.773  1.00 49.14      A16S
ATOM  29788  O2P CYT  494     169.103 109.828  22.420  1.00 49.14      A16S
ATOM  29789  O5' CYT  494     170.441 109.375  24.488  1.00 50.88      A16S
ATOM  29790  C5' CYT  494     171.605 109.463  23.669  1.00 50.88      A16S
ATOM  29791  C4' CYT  494     172.797 109.141  24.503  1.00 50.88      A16S
ATOM  29792  O4' CYT  494     172.666 107.784  24.987  1.00 50.88      A16S
ATOM  29793  C1' CYT  494     173.878 107.110  24.775  1.00 50.88      A16S
ATOM  29794  N1  CYT  494     173.619 105.672  24.705  1.00 49.14      A16S
ATOM  29795  C6  CYT  494     173.284 105.057  23.536  1.00 49.14      A16S
ATOM  29796  C2  CYT  494     173.715 104.938  25.885  1.00 49.14      A16S
ATOM  29797  O2  CYT  494     174.037 105.528  26.935  1.00 49.14      A16S
ATOM  29798  N3  CYT  494     173.462 103.613  25.862  1.00 49.14      A16S
ATOM  29799  C4  CYT  494     173.129 103.021  24.723  1.00 49.14      A16S
ATOM  29800  N4  CYT  494     172.889 101.715  24.751  1.00 49.14      A16S
ATOM  29801  C5  CYT  494     173.030 103.743  23.502  1.00 49.14      A16S
ATOM  29802  C2' CYT  494     174.528 107.791  23.580  1.00 50.88      A16S
ATOM  29803  O2' CYT  494     175.913 107.520  23.606  1.00 50.88      A16S
ATOM  29804  C3' CYT  494     174.173 109.249  23.865  1.00 50.88      A16S
ATOM  29805  O3' CYT  494     175.005 109.730  24.912  1.00 50.88      A16S
ATOM  29806  P   URI  495     176.254 110.676  24.592  1.00 60.51      A16S
ATOM  29807  O1P URI  495     175.781 112.081  24.758  1.00 61.56      A16S
ATOM  29808  O2P URI  495     176.906 110.261  23.320  1.00 61.56      A16S
ATOM  29809  O5' URI  495     177.248 110.336  25.790  1.00 60.51      A16S
ATOM  29810  C5' URI  495     178.144 109.201  25.734  1.00 60.51      A16S
ATOM  29811  C4' URI  495     178.259 108.558  27.100  1.00 60.51      A16S
ATOM  29812  O4' URI  495     177.084 107.737  27.340  1.00 60.51      A16S
ATOM  29813  C1' URI  495     177.450 106.574  28.065  1.00 60.51      A16S
ATOM  29814  N1  URI  495     177.144 105.385  27.251  1.00 61.56      A16S
ATOM  29815  C6  URI  495     176.992 105.461  25.882  1.00 61.56      A16S
ATOM  29816  C2  URI  495     177.022 104.170  27.905  1.00 61.56      A16S
ATOM  29817  O2  URI  495     177.143 104.051  29.112  1.00 61.56      A16S
ATOM  29818  N3  URI  495     176.751 103.096  27.094  1.00 61.56      A16S
ATOM  29819  C4  URI  495     176.579 103.106  25.727  1.00 61.56      A16S
ATOM  29820  O4  URI  495     176.237 102.074  25.158  1.00 61.56      A16S
ATOM  29821  C5  URI  495     176.723 104.392  25.119  1.00 61.56      A16S
ATOM  29822  C2' URI  495     178.940 106.680  28.388  1.00 60.51      A16S
ATOM  29823  O2' URI  495     179.108 107.254  29.667  1.00 60.51      A16S
ATOM  29824  C3' URI  495     179.430 107.600  27.279  1.00 60.51      A16S
ATOM  29825  O3' URI  495     180.634 108.283  27.645  1.00 60.51      A16S
ATOM  29826  P   CYT  496     182.056 107.744  27.110  1.00 63.41      A16S
ATOM  29827  O1P CYT  496     183.048 108.822  27.369  1.00 86.44      A16S
ATOM  29828  O2P CYT  496     181.877 107.232  25.723  1.00 86.44      A16S
ATOM  29829  O5' CYT  496     182.384 106.508  28.065  1.00 63.41      A16S
ATOM  29830  C5' CYT  496     182.796 106.722  29.429  1.00 63.41      A16S
ATOM  29831  C4' CYT  496     182.991 105.402  30.147  1.00 63.41      A16S
ATOM  29832  O4' CYT  496     181.725 104.700  30.237  1.00 63.41      A16S
ATOM  29833  C1' CYT  496     181.952 103.299  30.186  1.00 63.41      A16S
ATOM  29834  N1  CYT  496     181.204 102.731  29.043  1.00 86.44      A16S
ATOM  29835  C6  CYT  496     180.840 103.513  27.981  1.00 86.44      A16S
ATOM  29836  C2  CYT  496     180.867 101.364  29.063  1.00 86.44      A16S
ATOM  29837  O2  CYT  496     181.206 100.668  30.032  1.00 86.44      A16S
ATOM  29838  N3  CYT  496     180.181 100.841  28.028  1.00 86.44      A16S
ATOM  29839  C4  CYT  496     179.826 101.616  27.004  1.00 86.44      A16S
ATOM  29840  N4  CYT  496     179.141 101.054  26.010  1.00 86.44      A16S
ATOM  29841  C5  CYT  496     180.157 103.003  26.953  1.00 86.44      A16S
ATOM  29842  C2' CYT  496     183.461 103.071  30.090  1.00 63.41      A16S
ATOM  29843  O2' CYT  496     183.983 102.834  31.381  1.00 63.41      A16S
ATOM  29844  C3' CYT  496     183.940 104.397  29.514  1.00 63.41      A16S
ATOM  29845  O3' CYT  496     185.290 104.635  29.863  1.00 63.41      A16S
ATOM  29846  P   CYT  497     186.459 103.929  29.015  1.00 75.90      A16S
ATOM  29847  O1P CYT  497     187.743 104.302  29.667  1.00 75.90      A16S
ATOM  29848  O2P CYT  497     186.256 104.239  27.576  1.00 75.90      A16S
ATOM  29849  O5' CYT  497     186.198 102.369  29.228  1.00 75.90      A16S
ATOM  29850  C5' CYT  497     186.444 101.749  30.504  1.00 75.90      A16S
ATOM  29851  C4' CYT  497     186.085 100.279  30.472  1.00 75.90      A16S
ATOM  29852  O4' CYT  497     184.661 100.121  30.246  1.00 75.90      A16S
ATOM  29853  C1' CYT  497     184.427  98.947  29.481  1.00 75.90      A16S
ATOM  29854  N1  CYT  497     183.818  99.333  28.193  1.00 75.90      A16S
ATOM  29855  C6  CYT  497     183.951 100.602  27.703  1.00 75.90      A16S
ATOM  29856  C2  CYT  497     183.113  98.369  27.465  1.00 75.90      A16S
ATOM  29857  O2  CYT  497     182.997  97.229  27.933  1.00 75.90      A16S
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ATOM	29858	N3	CYT	497	182.580	98.705	26.271	1.00	75.90	A16S	ATOM	29911	O2P	GUA	500	192.772	92.515	21.417	1.00	72.92	A16S
ATOM	29859	C4	CYT	497	182.731	99.942	25.797	1.00	75.90	A16S	ATOM	29912	O5'	GUA	500	192.040	92.573	19.048	1.00	77.44	A16S
ATOM	29860	N4	CYT	497	182.206	100.226	24.603	1.00	75.90	A16S	ATOM	29913	C5'	GUA	500	191.402	92.072	17.863	1.00	77.44	A16S
ATOM	29861	C5	CYT	497	183.431	100.944	26.522	1.00	75.90	A16S	ATOM	29914	C4'	GUA	500	191.203	93.191	16.876	1.00	77.44	A16S
ATOM	29862	C2'	CYT	497	185.777	98.266	29.258	1.00	75.90	A16S	ATOM	29915	O4'	GUA	500	190.626	94.319	17.584	1.00	77.44	A16S
ATOM	29863	O2'	CYT	497	185.982	97.282	30.248	1.00	75.90	A16S	ATOM	29916	C1'	GUA	500	191.436	95.458	17.411	1.00	77.44	A16S
ATOM	29864	C3'	CYT	497	186.732	99.442	29.383	1.00	75.90	A16S	ATOM	29917	N9	GUA	500	191.410	96.222	18.651	1.00	72.92	A16S
ATOM	29865	O3'	CYT	497	188.039	99.024	29.717	1.00	75.90	A16S	ATOM	29918	C4	GUA	500	190.855	97.464	18.819	1.00	72.92	A16S
ATOM	29866	P	GUA	498	189.109	98.777	28.544	1.00	67.61	A16S	ATOM	29919	N3	GUA	500	190.257	98.195	17.859	1.00	72.92	A16S
ATOM	29867	O1P	GUA	498	190.433	98.597	29.199	1.00	82.41	A16S	ATOM	29920	C2	GUA	500	189.813	99.347	18.322	1.00	72.92	A16S
ATOM	29868	O2P	GUA	498	188.944	99.840	27.508	1.00	82.41	A16S	ATOM	29921	N2	GUA	500	189.207	100.201	17.489	1.00	72.92	A16S
ATOM	29869	O5'	GUA	498	188.658	97.379	27.920	1.00	67.61	A16S	ATOM	29922	N1	GUA	500	189.933	99.746	19.634	1.00	72.92	A16S
ATOM	29870	C5'	GUA	498	188.679	96.178	28.708	1.00	67.61	A16S	ATOM	29923	C6	GUA	500	190.539	99.004	20.644	1.00	72.92	A16S
ATOM	29871	C4'	GUA	498	188.024	95.046	27.956	1.00	67.61	A16S	ATOM	29924	O6	GUA	500	190.582	99.448	21.801	1.00	72.92	A16S
ATOM	29872	O4'	GUA	498	186.632	95.376	27.726	1.00	67.61	A16S	ATOM	29925	C5	GUA	500	191.037	97.770	20.151	1.00	72.92	A16S
ATOM	29873	C1'	GUA	498	186.212	94.841	26.483	1.00	67.61	A16S	ATOM	29926	N7	GUA	500	191.706	96.746	20.804	1.00	72.92	A16S
ATOM	29874	N9	GUA	498	185.853	95.939	25.594	1.00	82.41	A16S	ATOM	29927	C8	GUA	500	191.909	95.850	19.876	1.00	72.92	A16S
ATOM	29875	C4	GUA	498	185.160	95.819	24.420	1.00	82.41	A16S	ATOM	29928	C2'	GUA	500	192.817	94.951	17.005	1.00	77.44	A16S
ATOM	29876	N3	GUA	498	184.668	94.673	23.912	1.00	82.41	A16S	ATOM	29929	O2'	GUA	500	193.488	95.933	16.242	1.00	77.44	A16S
ATOM	29877	C2	GUA	498	184.070	94.867	22.756	1.00	82.41	A16S	ATOM	29930	C3'	GUA	500	192.458	93.714	16.188	1.00	77.44	A16S
ATOM	29878	N2	GUA	498	183.531	93.827	22.113	1.00	82.41	A16S	ATOM	29931	O3'	GUA	500	192.080	94.127	14.881	1.00	77.44	A16S
ATOM	29879	N1	GUA	498	183.960	96.093	22.146	1.00	82.41	A16S	ATOM	29932	P	CYT	501	192.906	93.626	13.601	1.00	73.88	A16S
ATOM	29880	C6	GUA	498	184.464	97.288	22.650	1.00	82.41	A16S	ATOM	29933	O1P	CYT	501	193.944	92.667	14.054	1.00	98.02	A16S
ATOM	29881	O6	GUA	498	184.322	98.344	22.013	1.00	82.41	A16S	ATOM	29934	O2P	CYT	501	193.305	94.831	12.835	1.00	98.02	A16S
ATOM	29882	C5	GUA	498	185.108	97.091	23.892	1.00	82.41	A16S	ATOM	29935	O5'	CYT	501	191.824	92.821	12.750	1.00	73.88	A16S
ATOM	29883	N7	GUA	498	185.743	97.998	24.728	1.00	82.41	A16S	ATOM	29936	C5'	CYT	501	190.603	93.450	12.325	1.00	73.88	A16S
ATOM	29884	C8	GUA	498	186.161	97.273	25.728	1.00	82.41	A16S	ATOM	29937	C4'	CYT	501	190.230	93.001	10.932	1.00	73.88	A16S
ATOM	29885	C2'	GUA	498	187.388	94.073	25.886	1.00	67.61	A16S	ATOM	29938	O4'	CYT	501	189.142	93.846	10.501	1.00	73.88	A16S
ATOM	29886	O2'	GUA	498	187.256	92.702	26.186	1.00	67.61	A16S	ATOM	29939	C1'	CYT	501	189.244	94.089	9.110	1.00	73.88	A16S
ATOM	29887	C3'	GUA	498	188.573	94.744	26.568	1.00	67.61	A16S	ATOM	29940	N1	CYT	501	188.861	95.491	8.830	1.00	98.02	A16S
ATOM	29888	O3'	GUA	498	189.714	93.895	26.588	1.00	67.61	A16S	ATOM	29941	C6	CYT	501	188.977	96.456	9.793	1.00	98.02	A16S
ATOM	29889	P	URI	499	190.918	94.163	25.554	1.00	78.60	A16S	ATOM	29942	C2	CYT	501	188.360	95.821	7.555	1.00	98.02	A16S
ATOM	29890	O1P	URI	499	192.046	93.272	25.910	1.00	79.35	A16S	ATOM	29943	O2	CYT	501	188.259	94.934	6.690	1.00	98.02	A16S
ATOM	29891	O2P	URI	499	191.135	95.632	25.475	1.00	79.35	A16S	ATOM	29944	N3	CYT	501	187.999	97.098	7.302	1.00	98.02	A16S
ATOM	29892	O5'	URI	499	190.354	93.695	24.140	1.00	78.60	A16S	ATOM	29945	C4	CYT	501	188.119	98.028	8.253	1.00	98.02	A16S
ATOM	29893	C5'	URI	499	189.806	92.377	23.936	1.00	78.60	A16S	ATOM	29946	N4	CYT	501	187.756	99.277	7.955	1.00	98.02	A16S
ATOM	29894	C4'	URI	499	189.049	92.338	22.628	1.00	78.60	A16S	ATOM	29947	C5	CYT	501	188.618	97.722	9.551	1.00	98.02	A16S
ATOM	29895	O4'	URI	499	187.956	93.290	22.683	1.00	78.60	A16S	ATOM	29948	C2'	CYT	501	190.621	93.633	8.610	1.00	73.88	A16S
ATOM	29896	C1'	URI	499	187.739	93.843	21.398	1.00	78.60	A16S	ATOM	29949	O2'	CYT	501	190.527	92.657	7.598	1.00	73.88	A16S
ATOM	29897	N1	URI	499	187.672	95.313	21.494	1.00	79.35	A16S	ATOM	29950	C3'	CYT	501	191.330	93.198	9.893	1.00	73.88	A16S
ATOM	29898	C6	URI	499	188.139	95.992	22.599	1.00	79.35	A16S	ATOM	29951	O3'	CYT	501	192.186	92.034	9.762	1.00	73.88	A16S
ATOM	29899	C2	URI	499	187.099	96.004	20.431	1.00	79.35	A16S	ATOM	29952	P	CYT	502	191.558	90.556	9.481	1.00	54.05	A16S
ATOM	29900	O2	URI	499	186.705	95.456	19.411	1.00	79.35	A16S	ATOM	29953	O1P	CYT	502	192.619	89.739	8.846	1.00	69.23	A16S
ATOM	29901	N3	URI	499	187.012	97.366	20.602	1.00	79.35	A16S	ATOM	29954	O2P	CYT	502	190.240	90.652	8.826	1.00	69.23	A16S
ATOM	29902	C4	URI	499	187.438	98.099	21.688	1.00	79.35	A16S	ATOM	29955	O5'	CYT	502	191.313	89.955	10.941	1.00	54.05	A16S
ATOM	29903	O4	URI	499	187.220	99.312	21.721	1.00	79.35	A16S	ATOM	29956	C5'	CYT	502	190.157	89.135	11.239	1.00	54.05	A16S
ATOM	29904	C5	URI	499	188.046	97.324	22.727	1.00	79.35	A16S	ATOM	29957	C4'	CYT	502	190.125	88.816	12.713	1.00	54.05	A16S
ATOM	29905	C2'	URI	499	188.783	93.264	20.440	1.00	78.60	A16S	ATOM	29958	O4'	CYT	502	190.126	90.049	13.460	1.00	54.05	A16S
ATOM	29906	O2'	URI	499	188.189	92.219	19.698	1.00	78.60	A16S	ATOM	29959	C1'	CYT	502	189.663	89.780	14.764	1.00	54.05	A16S
ATOM	29907	C3'	URI	499	189.850	92.746	21.399	1.00	78.60	A16S	ATOM	29960	N1	CYT	502	188.915	90.937	15.303	1.00	69.23	A16S
ATOM	29908	O3'	URI	499	190.509	91.616	20.843	1.00	78.60	A16S	ATOM	29961	C6	CYT	502	188.608	92.019	14.524	1.00	69.23	A16S
ATOM	29909	P	GUA	500	192.046	91.724	20.395	1.00	77.44	A16S	ATOM	29962	C2	CYT	502	188.543	90.918	16.657	1.00	69.23	A16S
ATOM	29910	O1P	GUA	500	192.486	90.340	20.071	1.00	72.92	A16S	ATOM	29963	O2	CYT	502	188.808	89.912	17.342	1.00	69.23	A16S

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ATOM  29964  N3  CYT  502     187.907  91.991  17.186  1.00 69.23      A16S
ATOM  29965  C4  CYT  502     187.634  93.049  16.423  1.00 69.23      A16S
ATOM  29966  N4  CYT  502     187.025  94.091  16.997  1.00 69.23      A16S
ATOM  29967  C5  CYT  502     187.978  93.088  15.039  1.00 69.23      A16S
ATOM  29968  C2' CYT  502     188.962  88.419  14.760  1.00 54.05      A16S
ATOM  29969  O2' CYT  502     189.774  87.540  15.507  1.00 54.05      A16S
ATOM  29970  C3' CYT  502     188.925  88.061  13.271  1.00 54.05      A16S
ATOM  29971  O3' CYT  502     189.117  86.651  13.121  1.00 54.05      A16S
ATOM  29972  P   ADE  503     187.849  85.668  12.934  1.00 51.61      A16S
ATOM  29973  O1P ADE  503     188.324  84.249  12.972  1.00 66.20      A16S
ATOM  29974  O2P ADE  503     187.063  86.149  11.765  1.00 66.20      A16S
ATOM  29975  O5' ADE  503     186.961  85.916  14.230  1.00 51.61      A16S
ATOM  29976  C5' ADE  503     187.265  85.271  15.468  1.00 51.61      A16S
ATOM  29977  C4' ADE  503     186.410  85.840  16.563  1.00 51.61      A16S
ATOM  29978  O4' ADE  503     186.753  87.232  16.787  1.00 51.61      A16S
ATOM  29979  C1' ADE  503     185.600  87.950  17.193  1.00 51.61      A16S
ATOM  29980  N9  ADE  503     185.415  89.105  16.310  1.00 66.20      A16S
ATOM  29981  C4  ADE  503     184.969  90.351  16.689  1.00 66.20      A16S
ATOM  29982  N3  ADE  503     184.627  90.756  17.926  1.00 66.20      A16S
ATOM  29983  C2  ADE  503     184.238  92.033  17.914  1.00 66.20      A16S
ATOM  29984  N1  ADE  503     184.156  92.885  16.884  1.00 66.20      A16S
ATOM  29985  C6  ADE  503     184.504  92.445  15.653  1.00 66.20      A16S
ATOM  29986  N6  ADE  503     184.417  93.293  14.625  1.00 66.20      A16S
ATOM  29987  C5  ADE  503     184.940  91.111  15.533  1.00 66.20      A16S
ATOM  29988  N7  ADE  503     185.366  90.364  14.445  1.00 66.20      A16S
ATOM  29989  C8  ADE  503     185.636  89.187  14.957  1.00 66.20      A16S
ATOM  29990  C2' ADE  503     184.429  86.969  17.202  1.00 51.61      A16S
ATOM  29991  O2' ADE  503     184.266  86.497  18.523  1.00 51.61      A16S
ATOM  29992  C3' ADE  503     184.928  85.873  16.267  1.00 51.61      A16S
ATOM  29993  O3' ADE  503     184.326  84.610  16.507  1.00 51.61      A16S
ATOM  29994  P   GUA  504     183.087  84.148  15.598  1.00 63.04      A16S
ATOM  29995  O1P GUA  504     182.610  82.839  16.076  1.00 51.74      A16S
ATOM  29996  O2P GUA  504     183.480  84.321  14.172  1.00 51.74      A16S
ATOM  29997  O5' GUA  504     181.959  85.209  15.949  1.00 63.04      A16S
ATOM  29998  C5' GUA  504     181.228  85.882  14.921  1.00 63.04      A16S
ATOM  29999  C4' GUA  504     180.746  87.209  15.435  1.00 63.04      A16S
ATOM  30000  O4' GUA  504     181.828  88.177  15.393  1.00 63.04      A16S
ATOM  30001  C1' GUA  504     181.304  89.469  15.122  1.00 63.04      A16S
ATOM  30002  N9  GUA  504     181.851  89.952  13.856  1.00 51.74      A16S
ATOM  30003  C4  GUA  504     181.674  91.210  13.332  1.00 51.74      A16S
ATOM  30004  N3  GUA  504     181.002  92.221  13.918  1.00 51.74      A16S
ATOM  30005  C2  GUA  504     180.978  93.302  13.162  1.00 51.74      A16S
ATOM  30006  N2  GUA  504     180.357  94.409  13.598  1.00 51.74      A16S
ATOM  30007  N1  GUA  504     181.561  93.384  11.927  1.00 51.74      A16S
ATOM  30008  C6  GUA  504     182.258  92.361  11.302  1.00 51.74      A16S
ATOM  30009  O6  GUA  504     182.742  92.550  10.179  1.00 51.74      A16S
ATOM  30010  C5  GUA  504     182.299  91.190  12.108  1.00 51.74      A16S
ATOM  30011  N7  GUA  504     182.884  89.954  11.876  1.00 51.74      A16S
ATOM  30012  C8  GUA  504     182.597  89.254  12.939  1.00 51.74      A16S
ATOM  30013  C2' GUA  504     179.788  89.329  15.016  1.00 63.04      A16S
ATOM  30014  O2' GUA  504     179.204  89.633  16.266  1.00 63.04      A16S
ATOM  30015  C3' GUA  504     179.650  87.864  14.622  1.00 63.04      A16S
ATOM  30016  O3' GUA  504     178.381  87.310  14.929  1.00 63.04      A16S
ATOM  30017  P   CYT  505     177.215  87.372  13.834  1.00 54.59      A16S
ATOM  30018  O1P CYT  505     176.013  86.666  14.376  1.00 61.95      A16S
ATOM  30019  O2P CYT  505     177.782  86.956  12.534  1.00 61.95      A16S
ATOM  30020  O5' CYT  505     176.917  88.934  13.735  1.00 54.59      A16S
ATOM  30021  C5' CYT  505     176.509  89.682  14.899  1.00 54.59      A16S
ATOM  30022  C4' CYT  505     176.077  91.075  14.508  1.00 54.59      A16S
ATOM  30023  O4' CYT  505     177.222  91.846  14.069  1.00 54.59      A16S
ATOM  30024  C1' CYT  505     176.816  92.765  13.074  1.00 54.59      A16S
ATOM  30025  N1  CYT  505     177.613  92.548  11.856  1.00 61.95      A16S
ATOM  30026  C6  CYT  505     178.040  91.301  11.489  1.00 61.95      A16S
ATOM  30027  C2  CYT  505     177.925  93.659  11.068  1.00 61.95      A16S
ATOM  30028  O2  CYT  505     177.532  94.785  11.436  1.00 61.95      A16S
ATOM  30029  N3  CYT  505     178.648  93.486   9.933  1.00 61.95      A16S
ATOM  30030  C4  CYT  505     179.064  92.269   9.589  1.00 61.95      A16S
ATOM  30031  N4  CYT  505     179.784  92.153   8.477  1.00 61.95      A16S
ATOM  30032  C5  CYT  505     178.763  91.119  10.374  1.00 61.95      A16S
ATOM  30033  C2' CYT  505     175.319  92.580  12.836  1.00 54.59      A16S
ATOM  30034  O2' CYT  505     174.617  93.568  13.561  1.00 54.59      A16S
ATOM  30035  C3' CYT  505     175.092  91.166  13.356  1.00 54.59      A16S
ATOM  30036  O3' CYT  505     173.756  90.955  13.786  1.00 54.59      A16S
ATOM  30037  P   ADE  506     172.716  90.230  12.802  1.00 50.37      A16S
ATOM  30038  O1P ADE  506     171.379  90.277  13.440  1.00 62.20      A16S
ATOM  30039  O2P ADE  506     173.284  88.922  12.394  1.00 62.20      A16S
ATOM  30040  O5' ADE  506     172.687  91.189  11.537  1.00 50.37      A16S
ATOM  30041  C5' ADE  506     172.274  92.560  11.665  1.00 50.37      A16S
ATOM  30042  C4' ADE  506     172.393  93.265  10.336  1.00 50.37      A16S
ATOM  30043  O4' ADE  506     173.784  93.533  10.036  1.00 50.37      A16S
ATOM  30044  C1' ADE  506     174.018  93.343   8.653  1.00 50.37      A16S
ATOM  30045  N9  ADE  506     174.959  92.232   8.506  1.00 62.20      A16S
ATOM  30046  C4  ADE  506     175.880  92.072   7.502  1.00 62.20      A16S
ATOM  30047  N3  ADE  506     176.113  92.903   6.472  1.00 62.20      A16S
ATOM  30048  C2  ADE  506     177.078  92.423   5.694  1.00 62.20      A16S
ATOM  30049  N1  ADE  506     177.782  91.288   5.813  1.00 62.20      A16S
ATOM  30050  C6  ADE  506     177.519  90.469   6.853  1.00 62.20      A16S
ATOM  30051  N6  ADE  506     178.207  89.328   6.955  1.00 62.20      A16S
ATOM  30052  C5  ADE  506     176.521  90.873   7.764  1.00 62.20      A16S
ATOM  30053  N7  ADE  506     176.022  90.294   8.923  1.00 62.20      A16S
ATOM  30054  C8  ADE  506     175.102  91.135   9.323  1.00 62.20      A16S
ATOM  30055  C2' ADE  506     172.670  93.053   7.991  1.00 50.37      A16S
ATOM  30056  O2' ADE  506     172.131  94.266   7.510  1.00 50.37      A16S
ATOM  30057  C3' ADE  506     171.885  92.464   9.153  1.00 50.37      A16S
ATOM  30058  O3' ADE  506     170.483  92.594   9.036  1.00 50.37      A16S
ATOM  30059  P   GUA  507     169.632  91.454   8.291  1.00 52.62      A16S
ATOM  30060  O1P GUA  507     168.342  91.310   9.024  1.00 41.76      A16S
ATOM  30061  O2P GUA  507     170.468  90.254   8.055  1.00 41.76      A16S
ATOM  30062  O5' GUA  507     169.384  92.125   6.875  1.00 52.62      A16S
ATOM  30063  C5' GUA  507     168.401  91.628   5.979  1.00 52.62      A16S
ATOM  30064  C4' GUA  507     167.788  92.778   5.249  1.00 52.62      A16S
ATOM  30065  O4' GUA  507     166.920  93.491   6.155  1.00 52.62      A16S
ATOM  30066  C1' GUA  507     166.995  94.880   5.889  1.00 52.62      A16S
ATOM  30067  N9  GUA  507     167.339  95.587   7.124  1.00 41.76      A16S
ATOM  30068  C4  GUA  507     167.249  96.948   7.344  1.00 41.76      A16S
ATOM  30069  N3  GUA  507     166.868  97.874   6.443  1.00 41.76      A16S
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ATOM	30070	C2	GUA	507	166.848	99.084	6.957	1.00	41.76	A16S
ATOM	30071	N2	GUA	507	166.499	100.115	6.196	1.00	41.76	A16S
ATOM	30072	N1	GUA	507	167.166	99.370	8.252	1.00	41.76	A16S
ATOM	30073	C6	GUA	507	167.552	98.435	9.206	1.00	41.76	A16S
ATOM	30074	O6	GUA	507	167.784	98.796	10.370	1.00	41.76	A16S
ATOM	30075	C5	GUA	507	167.600	97.129	8.661	1.00	41.76	A16S
ATOM	30076	N7	GUA	507	167.943	95.920	9.252	1.00	41.76	A16S
ATOM	30077	C8	GUA	507	167.778	95.037	8.304	1.00	41.76	A16S
ATOM	30078	C2'	GUA	507	167.958	95.090	4.719	1.00	52.62	A16S
ATOM	30079	O2'	GUA	507	167.180	95.207	3.544	1.00	52.62	A16S
ATOM	30080	C3'	GUA	507	168.793	93.814	4.769	1.00	52.62	A16S
ATOM	30081	O3'	GUA	507	169.334	93.436	3.504	1.00	52.62	A16S
ATOM	30082	P	CYT	508	170.849	93.835	3.115	1.00	52.14	A16S
ATOM	30083	O1P	CYT	508	171.222	93.000	1.940	1.00	45.71	A16S
ATOM	30084	O2P	CYT	508	171.724	93.838	4.322	1.00	45.71	A16S
ATOM	30085	O5'	CYT	508	170.716	95.323	2.589	1.00	52.14	A16S
ATOM	30086	C5'	CYT	508	169.979	95.610	1.403	1.00	52.14	A16S
ATOM	30087	C4'	CYT	508	169.849	97.091	1.249	1.00	52.14	A16S
ATOM	30088	O4'	CYT	508	169.043	97.593	2.338	1.00	52.14	A16S
ATOM	30089	C1'	CYT	508	169.580	98.818	2.807	1.00	52.14	A16S
ATOM	30090	N1	CYT	508	169.924	98.674	4.239	1.00	45.71	A16S
ATOM	30091	C6	CYT	508	170.178	97.449	4.784	1.00	45.71	A16S
ATOM	30092	C2	CYT	508	169.976	99.819	5.035	1.00	45.71	A16S
ATOM	30093	O2	CYT	508	169.748	100.921	4.518	1.00	45.71	A16S
ATOM	30094	N3	CYT	508	170.272	99.700	6.345	1.00	45.71	A16S
ATOM	30095	C4	CYT	508	170.516	98.501	6.866	1.00	45.71	A16S
ATOM	30096	N4	CYT	508	170.811	98.432	8.164	1.00	45.71	A16S
ATOM	30097	C5	CYT	508	170.472	97.318	6.081	1.00	45.71	A16S
ATOM	30098	C2'	CYT	508	170.766	99.180	1.913	1.00	52.14	A16S
ATOM	30099	O2'	CYT	508	170.328	100.036	0.879	1.00	52.14	A16S
ATOM	30100	C3'	CYT	508	171.175	97.816	1.387	1.00	52.14	A16S
ATOM	30101	O3'	CYT	508	171.871	97.877	0.153	1.00	52.14	A16S
ATOM	30102	P	CYT	509	173.474	97.935	0.156	1.00	50.73	A16S
ATOM	30103	O1P	CYT	509	173.893	97.871	-1.258	1.00	46.24	A16S
ATOM	30104	O2P	CYT	509	173.989	96.929	1.112	1.00	46.24	A16S
ATOM	30105	O5'	CYT	509	173.801	99.375	0.760	1.00	50.73	A16S
ATOM	30106	C5'	CYT	509	173.497	100.581	0.029	1.00	50.73	A16S
ATOM	30107	C4'	CYT	509	173.761	101.800	0.888	1.00	50.73	A16S
ATOM	30108	O4'	CYT	509	172.872	101.789	2.030	1.00	50.73	A16S
ATOM	30109	C1'	CYT	509	173.528	102.342	3.152	1.00	50.73	A16S
ATOM	30110	N1	CYT	509	173.552	101.346	4.226	1.00	46.24	A16S
ATOM	30111	C6	CYT	509	173.609	100.009	3.952	1.00	46.24	A16S
ATOM	30112	C2	CYT	509	173.536	101.792	5.550	1.00	46.24	A16S
ATOM	30113	O2	CYT	509	173.438	103.005	5.773	1.00	46.24	A16S
ATOM	30114	N3	CYT	509	173.617	100.896	6.556	1.00	46.24	A16S
ATOM	30115	C4	CYT	509	173.688	99.596	6.281	1.00	46.24	A16S
ATOM	30116	N4	CYT	509	173.770	98.752	7.307	1.00	46.24	A16S
ATOM	30117	C5	CYT	509	173.677	99.106	4.941	1.00	46.24	A16S
ATOM	30118	C2'	CYT	509	174.936	102.743	2.729	1.00	50.73	A16S
ATOM	30119	O2'	CYT	509	174.975	104.121	2.441	1.00	50.73	A16S
ATOM	30120	C3'	CYT	509	175.147	101.880	1.499	1.00	50.73	A16S
ATOM	30121	O3'	CYT	509	176.092	102.469	0.621	1.00	50.73	A16S
ATOM	30122	P	GUA	510	177.611	101.954	0.644	1.00	52.08	A16S
ATOM	30123	O1P	GUA	510	178.488	103.155	0.554	1.00	51.36	A16S
ATOM	30124	O2P	GUA	510	177.728	100.870	-0.370	1.00	51.36	A16S
ATOM	30125	O5'	GUA	510	177.768	101.295	2.081	1.00	52.08	A16S
ATOM	30126	C5'	GUA	510	178.728	101.777	3.034	1.00	52.08	A16S
ATOM	30127	C4'	GUA	510	178.128	101.721	4.410	1.00	52.08	A16S
ATOM	30128	O4'	GUA	510	177.223	100.592	4.466	1.00	52.08	A16S
ATOM	30129	C1'	GUA	510	177.255	100.019	5.752	1.00	52.08	A16S
ATOM	30130	N9	GUA	510	177.783	98.660	5.639	1.00	51.36	A16S
ATOM	30131	C4	GUA	510	177.815	97.729	6.644	1.00	51.36	A16S
ATOM	30132	N3	GUA	510	177.377	97.919	7.904	1.00	51.36	A16S
ATOM	30133	C2	GUA	510	177.547	96.851	8.651	1.00	51.36	A16S
ATOM	30134	N2	GUA	510	177.189	96.881	9.936	1.00	51.36	A16S
ATOM	30135	N1	GUA	510	178.087	95.681	8.194	1.00	51.36	A16S
ATOM	30136	C6	GUA	510	178.544	95.460	6.899	1.00	51.36	A16S
ATOM	30137	O6	GUA	510	179.014	94.360	6.594	1.00	51.36	A16S
ATOM	30138	C5	GUA	510	178.385	96.608	6.090	1.00	51.36	A16S
ATOM	30139	N7	GUA	510	178.720	96.829	4.763	1.00	51.36	A16S
ATOM	30140	C8	GUA	510	178.342	98.057	4.536	1.00	51.36	A16S
ATOM	30141	C2'	GUA	510	178.143	100.908	6.616	1.00	52.08	A16S
ATOM	30142	O2'	GUA	510	177.338	101.917	7.180	1.00	52.08	A16S
ATOM	30143	C3'	GUA	510	179.075	101.504	5.577	1.00	52.08	A16S
ATOM	30144	O3'	GUA	510	179.683	102.699	6.051	1.00	52.08	A16S
ATOM	30145	P	CYT	511	181.166	102.639	6.688	1.00	58.33	A16S
ATOM	30146	O1P	CYT	511	181.473	104.032	7.127	1.00	40.35	A16S
ATOM	30147	O2P	CYT	511	182.089	101.945	5.744	1.00	40.35	A16S
ATOM	30148	O5'	CYT	511	181.005	101.717	7.979	1.00	58.33	A16S
ATOM	30149	C5'	CYT	511	180.321	102.216	9.121	1.00	58.33	A16S
ATOM	30150	C4'	CYT	511	180.441	101.268	10.283	1.00	58.33	A16S
ATOM	30151	O4'	CYT	511	179.756	100.026	9.996	1.00	58.33	A16S
ATOM	30152	C1'	CYT	511	180.220	99.032	10.892	1.00	58.33	A16S
ATOM	30153	N1	CYT	511	180.632	97.832	10.152	1.00	40.35	A16S
ATOM	30154	C6	CYT	511	181.058	97.898	8.854	1.00	40.35	A16S
ATOM	30155	C2	CYT	511	180.625	96.605	10.829	1.00	40.35	A16S
ATOM	30156	O2	CYT	511	180.164	96.557	11.986	1.00	40.35	A16S
ATOM	30157	N3	CYT	511	181.109	95.503	10.207	1.00	40.35	A16S
ATOM	30158	C4	CYT	511	181.559	95.586	8.954	1.00	40.35	A16S
ATOM	30159	N4	CYT	511	182.049	94.486	8.400	1.00	40.35	A16S
ATOM	30160	C5	CYT	511	181.529	96.808	8.222	1.00	40.35	A16S
ATOM	30161	C2'	CYT	511	181.429	99.611	11.623	1.00	58.33	A16S
ATOM	30162	O2'	CYT	511	181.058	100.044	12.919	1.00	58.33	A16S
ATOM	30163	C3'	CYT	511	181.807	100.775	10.721	1.00	58.33	A16S
ATOM	30164	O3'	CYT	511	182.600	101.697	11.444	1.00	58.33	A16S
ATOM	30165	P	GUA	512	184.203	101.550	11.386	1.00	50.12	A16S
ATOM	30166	O1P	GUA	512	184.778	102.627	12.232	1.00	59.36	A16S
ATOM	30167	O2P	GUA	512	184.604	101.449	9.957	1.00	59.36	A16S
ATOM	30168	O5'	GUA	512	184.495	100.139	12.067	1.00	50.12	A16S
ATOM	30169	C5'	GUA	512	184.399	99.984	13.490	1.00	50.12	A16S
ATOM	30170	C4'	GUA	512	185.095	98.721	13.944	1.00	50.12	A16S
ATOM	30171	O4'	GUA	512	184.345	97.561	13.508	1.00	50.12	A16S
ATOM	30172	C1'	GUA	512	185.231	96.489	13.244	1.00	50.12	A16S
ATOM	30173	N9	GUA	512	185.119	96.157	11.829	1.00	59.36	A16S
ATOM	30174	C4	GUA	512	185.278	94.921	11.233	1.00	59.36	A16S
ATOM	30175	N3	GUA	512	185.502	93.747	11.865	1.00	59.36	A16S

ATOM	30176	C2	GUA	512	185.638	92.742	11.009	1.00	59.36	A16S	ATOM	30229	C3'	URI	514	193.754	102.654	18.039	1.00	84.01	A16S
ATOM	30177	N2	GUA	512	185.824	91.491	11.465	1.00	59.36	A16S	ATOM	30230	O3'	URI	514	193.290	103.767	18.790	1.00	84.01	A16S
ATOM	30178	N1	GUA	512	185.592	92.889	9.644	1.00	59.36	A16S	ATOM	30231	P	ADE	515	192.873	105.135	18.047	1.00	93.81	A16S
ATOM	30179	C6	GUA	512	185.379	94.092	8.977	1.00	59.36	A16S	ATOM	30232	O1P	ADE	515	192.207	104.794	16.765	1.00	155.40	A16S
ATOM	30180	O6	GUA	512	185.395	94.132	7.735	1.00	59.36	A16S	ATOM	30233	O2P	ADE	515	194.044	106.049	18.044	1.00	155.40	A16S
ATOM	30181	C5	GUA	512	185.189	95.161	9.881	1.00	59.36	A16S	ATOM	30234	O5'	ADE	515	191.766	105.718	19.038	1.00	93.81	A16S
ATOM	30182	N7	GUA	512	184.927	96.500	9.633	1.00	59.36	A16S	ATOM	30235	C5'	ADE	515	191.701	105.233	20.404	1.00	93.81	A16S
ATOM	30183	C8	GUA	512	184.885	97.047	10.814	1.00	59.36	A16S	ATOM	30236	C4'	ADE	515	190.319	105.412	20.998	1.00	93.81	A16S
ATOM	30184	C2'	GUA	512	186.645	96.970	13.588	1.00	50.12	A16S	ATOM	30237	O4'	ADE	515	190.108	106.783	21.397	1.00	93.81	A16S
ATOM	30185	O2'	GUA	512	186.963	96.583	14.910	1.00	50.12	A16S	ATOM	30238	C1'	ADE	515	188.719	107.045	21.430	1.00	93.81	A16S
ATOM	30186	C3'	GUA	512	186.511	98.482	13.444	1.00	50.12	A16S	ATOM	30239	N9	ADE	515	188.453	108.344	20.801	1.00	155.40	A16S
ATOM	30187	O3'	GUA	512	187.475	99.184	14.226	1.00	50.12	A16S	ATOM	30240	C4	ADE	515	187.224	108.955	20.687	1.00	155.40	A16S
ATOM	30188	P	GUA	513	188.576	100.111	13.504	1.00	77.68	A16S	ATOM	30241	N3	ADE	515	186.034	108.488	21.111	1.00	155.40	A16S
ATOM	30189	O1P	GUA	513	189.242	100.887	14.576	1.00	79.47	A16S	ATOM	30242	C2	ADE	515	185.059	109.351	20.825	1.00	155.40	A16S
ATOM	30190	O2P	GUA	513	187.947	100.832	12.360	1.00	79.47	A16S	ATOM	30243	N1	ADE	515	185.130	110.540	20.208	1.00	155.40	A16S
ATOM	30191	O5'	GUA	513	189.637	99.074	12.920	1.00	77.68	A16S	ATOM	30244	C6	ADE	515	186.338	110.983	19.793	1.00	155.40	A16S
ATOM	30192	C5'	GUA	513	190.210	98.045	13.755	1.00	77.68	A16S	ATOM	30245	N6	ADE	515	186.406	112.166	19.171	1.00	155.40	A16S
ATOM	30193	C4'	GUA	513	191.559	97.612	13.220	1.00	77.68	A16S	ATOM	30246	C5	ADE	515	187.459	110.159	20.041	1.00	155.40	A16S
ATOM	30194	O4'	GUA	513	191.409	97.005	11.918	1.00	77.68	A16S	ATOM	30247	N7	ADE	515	188.811	110.306	19.757	1.00	155.40	A16S
ATOM	30195	C1'	GUA	513	192.601	97.192	11.181	1.00	77.68	A16S	ATOM	30248	C8	ADE	515	189.355	109.208	20.223	1.00	155.40	A16S
ATOM	30196	N9	GUA	513	192.258	97.551	9.807	1.00	79.47	A16S	ATOM	30249	C2'	ADE	515	187.975	105.823	20.871	1.00	93.81	A16S
ATOM	30197	C4	GUA	513	191.785	98.755	9.358	1.00	79.47	A16S	ATOM	30250	O2'	ADE	515	187.407	105.124	21.960	1.00	93.81	A16S
ATOM	30198	N3	GUA	513	191.572	99.850	10.114	1.00	79.47	A16S	ATOM	30251	C3'	ADE	515	189.094	105.040	20.174	1.00	93.81	A16S
ATOM	30199	C2	GUA	513	191.089	100.853	9.396	1.00	79.47	A16S	ATOM	30252	O3'	ADE	515	188.923	103.621	20.248	1.00	93.81	A16S
ATOM	30200	N2	GUA	513	190.810	102.028	9.991	1.00	79.47	A16S	ATOM	30253	P	ADE	516	187.557	102.918	19.762	1.00	70.43	A16S
ATOM	30201	N1	GUA	513	190.842	100.780	8.042	1.00	79.47	A16S	ATOM	30254	O1P	ADE	516	186.578	102.987	20.871	1.00	65.39	A16S
ATOM	30202	C6	GUA	513	191.055	99.657	7.249	1.00	79.47	A16S	ATOM	30255	O2P	ADE	516	187.968	101.602	19.257	1.00	65.39	A16S
ATOM	30203	O6	GUA	513	190.791	99.692	6.044	1.00	79.47	A16S	ATOM	30256	O5'	ADE	516	187.025	103.776	18.526	1.00	70.43	A16S
ATOM	30204	C5	GUA	513	191.570	98.582	8.002	1.00	79.47	A16S	ATOM	30257	C5'	ADE	516	185.922	104.703	18.676	1.00	70.43	A16S
ATOM	30205	N7	GUA	513	191.917	97.299	7.605	1.00	79.47	A16S	ATOM	30258	C4'	ADE	516	184.630	104.124	18.114	1.00	70.43	A16S
ATOM	30206	C8	GUA	513	192.326	96.725	8.703	1.00	79.47	A16S	ATOM	30259	O4'	ADE	516	184.872	102.825	17.522	1.00	70.43	A16S
ATOM	30207	C2'	GUA	513	193.533	98.129	11.962	1.00	77.68	A16S	ATOM	30260	C1'	ADE	516	183.705	102.037	17.626	1.00	70.43	A16S
ATOM	30208	O2'	GUA	513	194.586	97.365	12.525	1.00	77.68	A16S	ATOM	30261	N9	ADE	516	184.072	100.648	17.910	1.00	65.39	A16S
ATOM	30209	C3'	GUA	513	192.601	98.708	13.028	1.00	77.68	A16S	ATOM	30262	C4	ADE	516	183.627	99.537	17.222	1.00	65.39	A16S
ATOM	30210	O3'	GUA	513	193.289	98.888	14.269	1.00	77.68	A16S	ATOM	30263	N3	ADE	516	182.759	99.500	16.199	1.00	65.39	A16S
ATOM	30211	P	URI	514	194.173	100.206	14.527	1.00	84.01	A16S	ATOM	30264	C2	ADE	516	182.567	98.248	15.785	1.00	65.39	A16S
ATOM	30212	O1P	URI	514	193.676	101.299	13.643	1.00	78.67	A16S	ATOM	30265	N1	ADE	516	183.102	97.113	16.233	1.00	65.39	A16S
ATOM	30213	O2P	URI	514	195.600	99.803	14.471	1.00	78.67	A16S	ATOM	30266	C6	ADE	516	183.968	97.175	17.256	1.00	65.39	A16S
ATOM	30214	O5'	URI	514	193.854	100.576	16.041	1.00	84.01	A16S	ATOM	30267	N6	ADE	516	184.496	96.035	17.696	1.00	65.39	A16S
ATOM	30215	C5'	URI	514	192.552	101.050	16.419	1.00	84.01	A16S	ATOM	30268	C5	ADE	516	184.259	98.452	17.797	1.00	65.39	A16S
ATOM	30216	C4'	URI	514	192.597	101.690	17.786	1.00	84.01	A16S	ATOM	30269	N7	ADE	516	185.079	98.864	18.841	1.00	65.39	A16S
ATOM	30217	O4'	URI	514	192.661	100.666	18.811	1.00	84.01	A16S	ATOM	30270	C8	ADE	516	184.926	100.171	18.870	1.00	65.39	A16S
ATOM	30218	C1'	URI	514	193.728	100.947	19.688	1.00	84.01	A16S	ATOM	30271	C2'	ADE	516	182.704	102.730	18.557	1.00	70.43	A16S
ATOM	30219	N1	URI	514	194.274	99.678	20.198	1.00	78.67	A16S	ATOM	30272	O2'	ADE	516	181.595	103.134	17.793	1.00	70.43	A16S
ATOM	30220	C6	URI	514	194.963	98.800	19.387	1.00	78.67	A16S	ATOM	30273	C3'	ADE	516	183.525	103.882	19.137	1.00	70.43	A16S
ATOM	30221	C2	URI	514	194.066	99.388	21.546	1.00	78.67	A16S	ATOM	30274	O3'	ADE	516	182.836	105.113	19.531	1.00	70.43	A16S
ATOM	30222	O2	URI	514	193.451	100.128	22.309	1.00	78.67	A16S	ATOM	30275	P	URI	517	181.652	105.781	18.626	1.00	72.52	A16S
ATOM	30223	N3	URI	514	194.596	98.196	21.971	1.00	78.67	A16S	ATOM	30276	O1P	URI	517	181.888	105.547	17.175	1.00	77.19	A16S
ATOM	30224	C4	URI	514	195.286	97.276	21.216	1.00	78.67	A16S	ATOM	30277	O2P	URI	517	181.498	107.174	19.112	1.00	77.19	A16S
ATOM	30225	O4	URI	514	195.645	96.216	21.742	1.00	78.67	A16S	ATOM	30278	O5'	URI	517	180.319	105.017	19.052	1.00	72.52	A16S
ATOM	30226	C5	URI	514	195.462	97.642	19.837	1.00	78.67	A16S	ATOM	30279	C5'	URI	517	180.071	104.682	20.431	1.00	72.52	A16S
ATOM	30227	C2'	URI	514	194.705	101.824	18.905	1.00	84.01	A16S	ATOM	30280	C4'	URI	517	178.586	104.629	20.710	1.00	72.52	A16S
ATOM	30228	O2'	URI	514	195.487	102.600	19.794	1.00	84.01	A16S	ATOM	30281	O4'	URI	517	178.014	105.958	20.662	1.00	72.52	A16S

ATOM	30282	C1'	URI	517	176.675	105.880	20.216	1.00	72.52	A16S	ATOM	30335	C3'	CYT	519	178.546	93.000	17.911	1.00	60.22	A16S
ATOM	30283	N1	URI	517	176.509	106.758	19.048	1.00	77.19	A16S	ATOM	30336	O3'	CYT	519	177.787	91.816	18.007	1.00	60.22	A16S
ATOM	30284	C6	URI	517	177.569	107.082	18.233	1.00	77.19	A16S	ATOM	30337	P	GUA	520	176.749	91.641	19.210	1.00	61.62	A16S
ATOM	30285	C2	URI	517	175.244	107.253	18.794	1.00	77.19	A16S	ATOM	30338	O1P	GUA	520	176.004	90.394	18.932	1.00	60.59	A16S
ATOM	30286	O2	URI	517	174.274	106.990	19.488	1.00	77.19	A16S	ATOM	30339	O2P	GUA	520	176.006	92.910	19.404	1.00	60.59	A16S
ATOM	30287	N3	URI	517	175.152	108.068	17.694	1.00	77.19	A16S	ATOM	30340	O5'	GUA	520	177.680	91.408	20.477	1.00	61.62	A16S
ATOM	30288	C4	URI	517	176.170	108.431	16.841	1.00	77.19	A16S	ATOM	30341	C5'	GUA	520	178.182	90.097	20.792	1.00	61.62	A16S
ATOM	30289	O4	URI	517	175.924	109.160	15.881	1.00	77.19	A16S	ATOM	30342	C4'	GUA	520	178.892	90.109	22.126	1.00	61.62	A16S
ATOM	30290	C5	URI	517	177.447	107.880	17.169	1.00	77.19	A16S	ATOM	30343	O4'	GUA	520	180.113	90.877	22.007	1.00	61.62	A16S
ATOM	30291	C2'	URI	517	176.353	104.411	19.938	1.00	72.52	A16S	ATOM	30344	C1'	GUA	520	180.363	91.565	23.217	1.00	61.62	A16S
ATOM	30292	O2'	URI	517	175.682	103.867	21.060	1.00	72.52	A16S	ATOM	30345	N9	GUA	520	180.296	92.994	22.939	1.00	60.59	A16S
ATOM	30293	C3'	URI	517	177.742	103.811	19.750	1.00	72.52	A16S	ATOM	30346	C4	GUA	520	180.805	94.003	23.717	1.00	60.59	A16S
ATOM	30294	O3'	URI	517	177.759	102.441	20.124	1.00	72.52	A16S	ATOM	30347	N3	GUA	520	181.458	93.847	24.889	1.00	60.59	A16S
ATOM	30295	P	ADE	518	178.595	101.386	19.249	1.00	50.42	A16S	ATOM	30348	C2	GUA	520	181.841	95.007	25.396	1.00	60.59	A16S
ATOM	30296	O1P	ADE	518	178.393	100.059	19.909	1.00	47.69	A16S	ATOM	30349	N2	GUA	520	182.511	95.032	26.555	1.00	60.59	A16S
ATOM	30297	O2P	ADE	518	179.964	101.912	19.086	1.00	47.69	A16S	ATOM	30350	N1	GUA	520	181.600	96.226	24.803	1.00	60.59	A16S
ATOM	30298	O5'	ADE	518	177.859	101.365	17.836	1.00	50.42	A16S	ATOM	30351	C6	GUA	520	180.932	96.410	23.597	1.00	60.59	A16S
ATOM	30299	C5'	ADE	518	176.526	100.841	17.740	1.00	50.42	A16S	ATOM	30352	O6	GUA	520	180.779	97.551	23.142	1.00	60.59	A16S
ATOM	30300	C4'	ADE	518	176.385	99.906	16.560	1.00	50.42	A16S	ATOM	30353	C5	GUA	520	180.512	95.171	23.042	1.00	60.59	A16S
ATOM	30301	O4'	ADE	518	176.190	100.644	15.333	1.00	50.42	A16S	ATOM	30354	N7	GUA	520	179.821	94.899	21.869	1.00	60.59	A16S
ATOM	30302	C1'	ADE	518	177.033	100.127	14.335	1.00	50.42	A16S	ATOM	30355	C8	GUA	520	179.715	93.599	21.852	1.00	60.59	A16S
ATOM	30303	N9	ADE	518	177.376	101.212	13.418	1.00	47.69	A16S	ATOM	30356	C2'	GUA	520	179.291	91.143	24.217	1.00	61.62	A16S
ATOM	30304	C4	ADE	518	177.134	101.197	12.068	1.00	47.69	A16S	ATOM	30357	O2'	GUA	520	179.750	90.042	24.981	1.00	61.62	A16S
ATOM	30305	N3	ADE	518	176.621	100.187	11.347	1.00	47.69	A16S	ATOM	30358	C3'	GUA	520	178.154	90.757	23.289	1.00	61.62	A16S
ATOM	30306	C2	ADE	518	176.505	100.537	10.074	1.00	47.69	A16S	ATOM	30359	O3'	GUA	520	177.224	89.897	23.934	1.00	61.62	A16S
ATOM	30307	N1	ADE	518	176.807	101.696	9.489	1.00	47.69	A16S	ATOM	30360	P	GUA	521	175.926	90.533	24.632	1.00	66.62	A16S
ATOM	30308	C6	ADE	518	177.311	102.693	10.240	1.00	47.69	A16S	ATOM	30361	O1P	GUA	521	174.935	89.457	24.893	1.00	65.62	A16S
ATOM	30309	N6	ADE	518	177.586	103.854	9.648	1.00	47.69	A16S	ATOM	30362	O2P	GUA	521	175.554	91.694	23.790	1.00	65.62	A16S
ATOM	30310	C5	ADE	518	177.504	102.444	11.603	1.00	47.69	A16S	ATOM	30363	O5'	GUA	521	176.462	91.080	26.026	1.00	66.62	A16S
ATOM	30311	N7	ADE	518	178.015	103.219	12.633	1.00	47.69	A16S	ATOM	30364	C5'	GUA	521	176.967	90.173	27.023	1.00	66.62	A16S
ATOM	30312	C8	ADE	518	177.926	102.439	13.686	1.00	47.69	A16S	ATOM	30365	C4'	GUA	521	177.603	90.934	28.165	1.00	66.62	A16S
ATOM	30313	C2'	ADE	518	178.185	99.441	15.057	1.00	50.42	A16S	ATOM	30366	O4'	GUA	521	178.741	91.686	27.670	1.00	66.62	A16S
ATOM	30314	O2'	ADE	518	178.716	98.446	14.200	1.00	50.42	A16S	ATOM	30367	C1'	GUA	521	178.864	92.895	28.396	1.00	66.62	A16S
ATOM	30315	C3'	ADE	518	177.475	98.880	16.295	1.00	50.42	A16S	ATOM	30368	N9	GUA	521	178.698	94.000	27.464	1.00	65.62	A16S
ATOM	30316	O3'	ADE	518	176.813	97.668	15.969	1.00	50.42	A16S	ATOM	30369	C4	GUA	521	179.074	95.303	27.675	1.00	65.62	A16S
ATOM	30317	P	CYT	519	176.354	96.671	17.143	1.00	60.22	A16S	ATOM	30370	N3	GUA	521	179.663	95.788	28.791	1.00	65.62	A16S
ATOM	30318	O1P	CYT	519	175.061	96.057	16.733	1.00	65.96	A16S	ATOM	30371	C2	GUA	521	179.920	97.083	28.690	1.00	65.62	A16S
ATOM	30319	O2P	CYT	519	176.448	97.389	18.449	1.00	65.96	A16S	ATOM	30372	N2	GUA	521	180.516	97.730	29.701	1.00	65.62	A16S
ATOM	30320	O5'	CYT	519	177.467	95.534	17.138	1.00	60.22	A16S	ATOM	30373	N1	GUA	521	179.616	97.843	27.585	1.00	65.62	A16S
ATOM	30321	C5'	CYT	519	177.442	94.453	16.182	1.00	60.22	A16S	ATOM	30374	C6	GUA	521	179.006	97.368	26.429	1.00	65.62	A16S
ATOM	30322	C4'	CYT	519	178.569	93.499	16.479	1.00	60.22	A16S	ATOM	30375	O6	GUA	521	178.775	98.143	25.493	1.00	65.62	A16S
ATOM	30323	O4'	CYT	519	179.814	94.226	16.350	1.00	60.22	A16S	ATOM	30376	C5	GUA	521	178.729	95.975	26.520	1.00	65.62	A16S
ATOM	30324	C1'	CYT	519	180.683	93.891	17.415	1.00	60.22	A16S	ATOM	30377	N7	GUA	521	178.137	95.112	25.606	1.00	65.62	A16S
ATOM	30325	N1	CYT	519	180.982	95.128	18.171	1.00	65.96	A16S	ATOM	30378	C8	GUA	521	178.137	93.954	26.208	1.00	65.62	A16S
ATOM	30326	C6	CYT	519	180.452	96.329	17.788	1.00	65.96	A16S	ATOM	30379	C2'	GUA	521	177.781	92.907	29.470	1.00	66.62	A16S
ATOM	30327	C2	CYT	519	181.825	95.054	19.286	1.00	65.96	A16S	ATOM	30380	O2'	GUA	521	178.319	92.399	30.676	1.00	66.62	A16S
ATOM	30328	O2	CYT	519	182.288	93.951	19.620	1.00	65.96	A16S	ATOM	30381	C3'	GUA	521	176.742	91.975	28.866	1.00	66.62	A16S
ATOM	30329	N3	CYT	519	182.112	96.184	19.970	1.00	65.96	A16S	ATOM	30382	O3'	GUA	521	175.905	91.414	29.866	1.00	66.62	A16S
ATOM	30330	C4	CYT	519	181.599	97.351	19.578	1.00	65.96	A16S	ATOM	30383	P	ADE	522	174.599	92.218	30.336	1.00	77.97	A16S
ATOM	30331	N4	CYT	519	181.929	98.446	20.272	1.00	65.96	A16S	ATOM	30384	O1P	ADE	522	173.800	91.343	31.231	1.00	67.47	A16S
ATOM	30332	C5	CYT	519	180.730	97.452	18.456	1.00	65.96	A16S	ATOM	30385	O2P	ADE	522	173.973	92.784	29.122	1.00	67.47	A16S
ATOM	30333	C2'	CYT	519	180.015	92.789	18.245	1.00	60.22	A16S	ATOM	30386	O5'	ADE	522	175.179	93.448	31.166	1.00	77.97	A16S
ATOM	30334	O2'	CYT	519	180.514	91.518	17.880	1.00	60.22	A16S	ATOM	30387	C5'	ADE	522	176.050	93.249	32.296	1.00	77.97	A16S

ATOM	30388	C4'	ADE	522	176.631	94.572	32.748	1.00	77.97	A16S	ATOM	30441	N1	GUA	524	170.097	101.878	27.094	1.00	57.27	A16S
ATOM	30389	O4'	ADE	522	177.503	95.113	31.719	1.00	77.97	A16S	ATOM	30442	C6	GUA	524	170.238	100.820	27.990	1.00	57.27	A16S
ATOM	30390	C1'	ADE	522	177.391	96.529	31.690	1.00	77.97	A16S	ATOM	30443	O6	GUA	524	170.099	99.662	27.600	1.00	57.27	A16S
ATOM	30391	N9	ADE	522	176.928	96.935	30.361	1.00	67.47	A16S	ATOM	30444	C5	GUA	524	170.541	101.274	29.287	1.00	57.27	A16S
ATOM	30392	C4	ADE	522	176.982	98.208	29.841	1.00	67.47	A16S	ATOM	30445	N7	GUA	524	170.761	100.569	30.463	1.00	57.27	A16S
ATOM	30393	N3	ADE	522	177.473	99.312	30.430	1.00	67.47	A16S	ATOM	30446	C8	GUA	524	170.999	101.497	31.353	1.00	57.27	A16S
ATOM	30394	C2	ADE	522	177.357	100.368	29.624	1.00	67.47	A16S	ATOM	30447	C2'	GUA	524	169.778	104.763	31.556	1.00	62.17	A16S
ATOM	30395	N1	ADE	522	176.846	100.440	28.392	1.00	67.47	A16S	ATOM	30448	O2'	GUA	524	169.958	106.160	31.462	1.00	62.17	A16S
ATOM	30396	C6	ADE	522	176.364	99.314	27.828	1.00	67.47	A16S	ATOM	30449	C3'	GUA	524	169.258	104.297	32.904	1.00	62.17	A16S
ATOM	30397	N6	ADE	522	175.861	99.387	26.597	1.00	67.47	A16S	ATOM	30450	O3'	GUA	524	168.197	105.095	33.370	1.00	62.17	A16S
ATOM	30398	C5	ADE	522	176.425	98.124	28.579	1.00	67.47	A16S	ATOM	30451	P	GUA	525	166.696	104.618	33.076	1.00	53.43	A16S
ATOM	30399	N7	ADE	522	176.030	96.822	28.304	1.00	67.47	A16S	ATOM	30452	O1P	GUA	525	165.779	105.558	33.760	1.00	47.16	A16S
ATOM	30400	C8	ADE	522	176.351	96.158	29.387	1.00	67.47	A16S	ATOM	30453	O2P	GUA	525	166.602	103.154	33.352	1.00	47.16	A16S
ATOM	30401	C2'	ADE	522	176.417	96.948	32.793	1.00	77.97	A16S	ATOM	30454	O5'	GUA	525	166.518	104.870	31.518	1.00	53.43	A16S
ATOM	30402	O2'	ADE	522	177.129	97.357	33.946	1.00	77.97	A16S	ATOM	30455	C5'	GUA	525	166.695	106.188	30.985	1.00	53.43	A16S
ATOM	30403	C3'	ADE	522	175.610	95.670	32.995	1.00	77.97	A16S	ATOM	30456	C4'	GUA	525	166.558	106.173	29.486	1.00	53.43	A16S
ATOM	30404	O3'	ADE	522	175.045	95.583	34.288	1.00	77.97	A16S	ATOM	30457	O4'	GUA	525	167.555	105.283	28.920	1.00	53.43	A16S
ATOM	30405	P	GUA	523	173.531	96.050	34.515	1.00	65.23	A16S	ATOM	30458	C1'	GUA	525	167.051	104.697	27.739	1.00	53.43	A16S
ATOM	30406	O1P	GUA	523	173.147	95.610	35.885	1.00	71.25	A16S	ATOM	30459	N9	GUA	525	167.063	103.246	27.892	1.00	47.16	A16S
ATOM	30407	O2P	GUA	523	172.726	95.599	33.350	1.00	71.25	A16S	ATOM	30460	C4	GUA	525	166.840	102.328	26.892	1.00	47.16	A16S
ATOM	30408	O5'	GUA	523	173.607	97.643	34.463	1.00	65.23	A16S	ATOM	30461	N3	GUA	525	166.604	102.612	25.592	1.00	47.16	A16S
ATOM	30409	C5'	GUA	523	174.150	98.392	35.564	1.00	65.23	A16S	ATOM	30462	C2	GUA	525	166.393	101.517	24.878	1.00	47.16	A16S
ATOM	30410	C4'	GUA	523	174.167	99.868	35.247	1.00	65.23	A16S	ATOM	30463	N2	GUA	525	166.145	101.621	23.569	1.00	47.16	A16S
ATOM	30411	O4'	GUA	523	175.040	100.103	34.115	1.00	65.23	A16S	ATOM	30464	N1	GUA	525	166.409	100.245	25.397	1.00	47.16	A16S
ATOM	30412	C1'	GUA	523	174.536	101.175	33.331	1.00	65.23	A16S	ATOM	30465	C6	GUA	525	166.647	99.929	26.727	1.00	47.16	A16S
ATOM	30413	N9	GUA	523	174.256	100.685	31.982	1.00	71.25	A16S	ATOM	30466	O6	GUA	525	166.624	98.752	27.087	1.00	47.16	A16S
ATOM	30414	C4	GUA	523	174.148	101.455	30.849	1.00	71.25	A16S	ATOM	30467	C5	GUA	525	166.886	101.095	27.509	1.00	47.16	A16S
ATOM	30415	N3	GUA	523	174.318	102.791	30.780	1.00	71.25	A16S	ATOM	30468	N7	GUA	525	167.168	101.233	28.860	1.00	47.16	A16S
ATOM	30416	C2	GUA	523	174.111	103.252	29.563	1.00	71.25	A16S	ATOM	30469	C8	GUA	525	167.267	102.523	29.042	1.00	47.16	A16S
ATOM	30417	N2	GUA	523	174.241	104.556	29.317	1.00	71.25	A16S	ATOM	30470	C2'	GUA	525	165.641	105.249	27.511	1.00	53.43	A16S
ATOM	30418	N1	GUA	523	173.761	102.467	28.498	1.00	71.25	A16S	ATOM	30471	O2'	GUA	525	165.718	106.340	26.614	1.00	53.43	A16S
ATOM	30419	C6	GUA	523	173.579	101.088	28.541	1.00	71.25	A16S	ATOM	30472	C3'	GUA	525	165.239	105.681	28.918	1.00	53.43	A16S
ATOM	30420	O6	GUA	523	173.249	100.474	27.517	1.00	71.25	A16S	ATOM	30473	O3'	GUA	525	164.251	106.712	28.905	1.00	53.43	A16S
ATOM	30421	C5	GUA	523	173.806	100.577	29.842	1.00	71.25	A16S	ATOM	30474	P	CYT	526	162.691	106.322	28.803	1.00	51.16	A16S
ATOM	30422	N7	GUA	523	173.731	99.276	30.323	1.00	71.25	A16S	ATOM	30475	O1P	CYT	526	161.895	107.561	28.957	1.00	50.80	A16S
ATOM	30423	C8	GUA	523	174.012	99.386	31.592	1.00	71.25	A16S	ATOM	30476	O2P	CYT	526	162.397	105.157	29.666	1.00	50.80	A16S
ATOM	30424	C2'	GUA	523	173.271	101.693	34.017	1.00	65.23	A16S	ATOM	30477	O5'	CYT	526	162.529	105.820	27.307	1.00	51.16	A16S
ATOM	30425	O2'	GUA	523	173.584	102.827	34.797	1.00	65.23	A16S	ATOM	30478	C5'	CYT	526	162.720	106.717	26.220	1.00	51.16	A16S
ATOM	30426	C3'	GUA	523	172.844	100.481	34.835	1.00	65.23	A16S	ATOM	30479	C4'	CYT	526	162.472	106.006	24.920	1.00	51.16	A16S
ATOM	30427	O3'	GUA	523	172.053	100.845	35.946	1.00	65.23	A16S	ATOM	30480	O4'	CYT	526	163.531	105.046	24.659	1.00	51.16	A16S
ATOM	30428	P	GUA	524	170.461	100.940	35.778	1.00	62.17	A16S	ATOM	30481	C1'	CYT	526	162.994	103.922	23.971	1.00	51.16	A16S
ATOM	30429	O1P	GUA	524	169.898	101.474	37.043	1.00	57.27	A16S	ATOM	30482	N1	CYT	526	163.125	102.723	24.829	1.00	50.80	A16S
ATOM	30430	O2P	GUA	524	169.975	99.640	35.255	1.00	57.27	A16S	ATOM	30483	C6	CYT	526	163.467	102.828	26.151	1.00	50.80	A16S
ATOM	30431	O5'	GUA	524	170.275	102.068	34.673	1.00	62.17	A16S	ATOM	30484	C2	CYT	526	162.882	101.465	24.265	1.00	50.80	A16S
ATOM	30432	C5'	GUA	524	170.515	103.444	35.004	1.00	62.17	A16S	ATOM	30485	O2	CYT	526	162.559	101.397	23.068	1.00	50.80	A16S
ATOM	30433	C4'	GUA	524	170.515	104.303	33.761	1.00	62.17	A16S	ATOM	30486	N3	CYT	526	162.997	100.357	25.038	1.00	50.80	A16S
ATOM	30434	O4'	GUA	524	171.537	103.822	32.847	1.00	62.17	A16S	ATOM	30487	C4	CYT	526	163.338	100.471	26.323	1.00	50.80	A16S
ATOM	30435	C1'	GUA	524	171.125	104.052	31.507	1.00	62.17	A16S	ATOM	30488	N4	CYT	526	163.455	99.354	27.041	1.00	50.80	A16S
ATOM	30436	N9	GUA	524	170.946	102.770	30.828	1.00	57.27	A16S	ATOM	30489	C5	CYT	526	163.581	101.739	26.927	1.00	50.80	A16S
ATOM	30437	C4	GUA	524	170.658	102.630	29.498	1.00	57.27	A16S	ATOM	30490	C2'	CYT	526	161.519	104.223	23.709	1.00	51.16	A16S
ATOM	30438	N3	GUA	524	170.516	103.644	28.615	1.00	57.27	A16S	ATOM	30491	O2'	CYT	526	161.363	104.893	22.474	1.00	51.16	A16S
ATOM	30439	C2	GUA	524	170.234	103.210	27.409	1.00	57.27	A16S	ATOM	30492	C3'	CYT	526	161.208	105.170	24.847	1.00	51.16	A16S
ATOM	30440	N2	GUA	524	170.068	104.096	26.415	1.00	57.27	A16S	ATOM	30493	O3'	CYT	526	160.048	105.898	24.565	1.00	51.16	A16S

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ATOM  30494  P   GUA  527     158.642 105.286  25.001  1.00 51.07      A16S
ATOM  30495  O1P GUA  527     157.595 106.287  24.670  1.00 51.71      A16S
ATOM  30496  O2P GUA  527     158.779 104.793  26.399  1.00 51.71      A16S
ATOM  30497  O5' GUA  527     158.469 104.009  24.065  1.00 51.07      A16S
ATOM  30498  C5' GUA  527     158.341 104.153  22.641  1.00 51.07      A16S
ATOM  30499  C4' GUA  527     158.135 102.807  21.989  1.00 51.07      A16S
ATOM  30500  O4' GUA  527     159.274 101.958  22.266  1.00 51.07      A16S
ATOM  30501  C1' GUA  527     158.852 100.611  22.349  1.00 51.07      A16S
ATOM  30502  N9  GUA  527     159.302 100.056  23.620  1.00 51.71      A16S
ATOM  30503  C4  GUA  527     159.481  98.724  23.897  1.00 51.71      A16S
ATOM  30504  N3  GUA  527     159.268  97.708  23.043  1.00 51.71      A16S
ATOM  30505  C2  GUA  527     159.530  96.542  23.595  1.00 51.71      A16S
ATOM  30506  N2  GUA  527     159.385  95.423  22.878  1.00 51.71      A16S
ATOM  30507  N1  GUA  527     159.958  96.385  24.884  1.00 51.71      A16S
ATOM  30508  C6  GUA  527     160.182  97.416  25.780  1.00 51.71      A16S
ATOM  30509  O6  GUA  527     160.570  97.162  26.917  1.00 51.71      A16S
ATOM  30510  C5  GUA  527     159.913  98.674  25.202  1.00 51.71      A16S
ATOM  30511  N7  GUA  527     160.007  99.950  25.740  1.00 51.71      A16S
ATOM  30512  C8  GUA  527     159.632 100.738  24.767  1.00 51.71      A16S
ATOM  30513  C2' GUA  527     157.333 100.569  22.156  1.00 51.07      A16S
ATOM  30514  O2' GUA  527     157.025 100.197  20.826  1.00 51.07      A16S
ATOM  30515  C3' GUA  527     156.937 102.006  22.469  1.00 51.07      A16S
ATOM  30516  O3' GUA  527     155.756 102.374  21.778  1.00 51.07      A16S
ATOM  30517  P   CYT  528     154.342 102.250  22.520  1.00 55.24      A16S
ATOM  30518  O1P CYT  528     153.314 102.655  21.523  1.00 60.52      A16S
ATOM  30519  O2P CYT  528     154.413 102.949  23.833  1.00 60.52      A16S
ATOM  30520  O5' CYT  528     154.209 100.695  22.839  1.00 55.24      A16S
ATOM  30521  C5' CYT  528     153.683  99.798  21.862  1.00 55.24      A16S
ATOM  30522  C4' CYT  528     153.929  98.359  22.259  1.00 55.24      A16S
ATOM  30523  O4' CYT  528     155.328  98.179  22.606  1.00 55.24      A16S
ATOM  30524  C1' CYT  528     155.458  97.039  23.436  1.00 55.24      A16S
ATOM  30525  N1  CYT  528     156.114  97.404  24.698  1.00 60.52      A16S
ATOM  30526  C6  CYT  528     156.143  98.693  25.145  1.00 60.52      A16S
ATOM  30527  C2  CYT  528     156.683  96.381  25.463  1.00 60.52      A16S
ATOM  30528  O2  CYT  528     156.672  95.227  25.023  1.00 60.52      A16S
ATOM  30529  N3  CYT  528     157.227  96.670  26.658  1.00 60.52      A16S
ATOM  30530  C4  CYT  528     157.229  97.922  27.100  1.00 60.52      A16S
ATOM  30531  N4  CYT  528     157.767  98.153  28.302  1.00 60.52      A16S
ATOM  30532  C5  CYT  528     156.680  98.993  26.332  1.00 60.52      A16S
ATOM  30533  C2' CYT  528     154.053  96.527  23.728  1.00 55.24      A16S
ATOM  30534  O2' CYT  528     153.773  95.492  22.815  1.00 55.24      A16S
ATOM  30535  C3' CYT  528     153.211  97.765  23.464  1.00 55.24      A16S
ATOM  30536  O3' CYT  528     151.863  97.392  23.216  1.00 55.24      A16S
ATOM  30537  P   GUA  529     150.825  97.302  24.450  1.00 48.67      A16S
ATOM  30538  O1P GUA  529     149.489  96.940  23.880  1.00 58.48      A16S
ATOM  30539  O2P GUA  529     150.962  98.526  25.293  1.00 58.48      A16S
ATOM  30540  O5' GUA  529     151.367  96.080  25.317  1.00 48.67      A16S
ATOM  30541  C5' GUA  529     151.326  94.745  24.799  1.00 48.67      A16S
ATOM  30542  C4' GUA  529     151.961  93.782  25.768  1.00 48.67      A16S
ATOM  30543  O4' GUA  529     153.313  94.217  26.071  1.00 48.67      A16S
ATOM  30544  C1' GUA  529     153.654  93.834  27.393  1.00 48.67      A16S
ATOM  30545  N9  GUA  529     154.037  95.028  28.147  1.00 58.48      A16S
ATOM  30546  C4  GUA  529     154.744  95.051  29.327  1.00 58.48      A16S
ATOM  30547  N3  GUA  529     155.215  93.974  29.986  1.00 58.48      A16S
ATOM  30548  C2  GUA  529     155.837  94.309  31.102  1.00 58.48      A16S
ATOM  30549  N2  GUA  529     156.354  93.357  31.888  1.00 58.48      A16S
ATOM  30550  N1  GUA  529     155.995  95.600  31.533  1.00 58.48      A16S
ATOM  30551  C6  GUA  529     155.524  96.729  30.872  1.00 58.48      A16S
ATOM  30552  O6  GUA  529     155.725  97.856  31.355  1.00 58.48      A16S
ATOM  30553  C5  GUA  529     154.845  96.382  29.670  1.00 58.48      A16S
ATOM  30554  N7  GUA  529     154.227  97.184  28.722  1.00 58.48      A16S
ATOM  30555  C8  GUA  529     153.763  96.341  27.839  1.00 58.48      A16S
ATOM  30556  C2' GUA  529     152.447  93.099  27.985  1.00 48.67      A16S
ATOM  30557  O2' GUA  529     152.625  91.705  27.820  1.00 48.67      A16S
ATOM  30558  C3' GUA  529     151.304  93.634  27.129  1.00 48.67      A16S
ATOM  30559  O3' GUA  529     150.197  92.737  27.071  1.00 48.67      A16S
ATOM  30560  P   ADE  530     149.225  92.571  28.348  1.00 51.69      A16S
ATOM  30561  O1P ADE  530     147.838  92.243  27.845  1.00 57.89      A16S
ATOM  30562  O2P ADE  530     149.411  93.733  29.262  1.00 57.89      A16S
ATOM  30563  O5' ADE  530     149.835  91.288  29.076  1.00 51.69      A16S
ATOM  30564  C5' ADE  530     149.193  90.006  28.981  1.00 51.69      A16S
ATOM  30565  C4' ADE  530     149.946  89.124  28.029  1.00 51.69      A16S
ATOM  30566  O4' ADE  530     151.291  88.930  28.526  1.00 51.69      A16S
ATOM  30567  C1' ADE  530     151.562  87.553  28.637  1.00 51.69      A16S
ATOM  30568  N9  ADE  530     152.464  87.370  29.766  1.00 57.89      A16S
ATOM  30569  C4  ADE  530     153.822  87.207  29.677  1.00 57.89      A16S
ATOM  30570  N3  ADE  530     154.562  87.138  28.562  1.00 57.89      A16S
ATOM  30571  C2  ADE  530     155.853  87.005  28.860  1.00 57.89      A16S
ATOM  30572  N1  ADE  530     156.441  86.946  30.053  1.00 57.89      A16S
ATOM  30573  C6  ADE  530     155.668  87.025  31.154  1.00 57.89      A16S
ATOM  30574  N6  ADE  530     156.259  86.992  32.349  1.00 57.89      A16S
ATOM  30575  C5  ADE  530     154.281  87.151  30.973  1.00 57.89      A16S
ATOM  30576  N7  ADE  530     153.227  87.240  31.868  1.00 57.89      A16S
ATOM  30577  C8  ADE  530     152.173  87.361  31.101  1.00 57.89      A16S
ATOM  30578  C2' ADE  530     150.200  86.874  28.754  1.00 51.69      A16S
ATOM  30579  O2' ADE  530     150.278  85.507  28.411  1.00 51.69      A16S
ATOM  30580  C3' ADE  530     149.350  87.740  27.824  1.00 51.69      A16S
ATOM  30581  O3' ADE  530     149.519  87.360  26.452  1.00 51.69      A16S
ATOM  30582  P   GUA  531     148.622  88.061  25.301  1.00 44.72      A16S
ATOM  30583  O1P GUA  531     147.262  88.386  25.851  1.00 56.68      A16S
ATOM  30584  O2P GUA  531     148.733  87.267  24.044  1.00 56.68      A16S
ATOM  30585  O5' GUA  531     149.343  89.456  25.054  1.00 44.72      A16S
ATOM  30586  C5' GUA  531     150.364  89.596  24.065  1.00 44.72      A16S
ATOM  30587  C4' GUA  531     151.670  89.861  24.738  1.00 44.72      A16S
ATOM  30588  O4' GUA  531     152.102  88.653  25.405  1.00 44.72      A16S
ATOM  30589  C1' GUA  531     153.512  88.552  25.340  1.00 44.72      A16S
ATOM  30590  N9  GUA  531     153.856  87.330  24.619  1.00 56.68      A16S
ATOM  30591  C4  GUA  531     155.111  86.793  24.483  1.00 56.68      A16S
ATOM  30592  N3  GUA  531     156.246  87.304  24.990  1.00 56.68      A16S
ATOM  30593  C2  GUA  531     157.296  86.565  24.693  1.00 56.68      A16S
ATOM  30594  N2  GUA  531     158.511  86.946  25.110  1.00 56.68      A16S
ATOM  30595  N1  GUA  531     157.238  85.403  23.964  1.00 56.68      A16S
ATOM  30596  C6  GUA  531     156.076  84.853  23.432  1.00 56.68      A16S
ATOM  30597  O6  GUA  531     156.127  83.790  22.784  1.00 56.68      A16S
ATOM  30598  C5  GUA  531     154.940  85.649  23.736  1.00 56.68      A16S
ATOM  30599  N7  GUA  531     153.605  85.473  23.402  1.00 56.68      A16S
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ATOM	30600	C8	GUA	531	153.001	86.491	23.947	1.00	56.68	A16S	ATOM	30653	C4'	URI	534	163.493	87.884	13.544	1.00	49.55	A16S
ATOM	30601	C2'	GUA	531	154.028	89.810	24.642	1.00	44.72	A16S	ATOM	30654	O4'	URI	534	162.664	87.082	14.414	1.00	49.55	A16S
ATOM	30602	O2'	GUA	531	154.361	90.750	25.644	1.00	44.72	A16S	ATOM	30655	C1'	URI	534	162.187	85.954	13.711	1.00	49.55	A16S
ATOM	30603	C3'	GUA	531	152.815	90.224	23.821	1.00	44.72	A16S	ATOM	30656	N1	URI	534	160.721	85.959	13.756	1.00	42.87	A16S
ATOM	30604	O3'	GUA	531	152.788	91.618	23.547	1.00	44.72	A16S	ATOM	30657	C6	URI	534	160.009	87.093	14.053	1.00	42.87	A16S
ATOM	30605	P	CYT	532	152.989	92.136	22.038	1.00	46.73	A16S	ATOM	30658	C2	URI	534	160.084	84.772	13.485	1.00	42.87	A16S
ATOM	30606	O1P	CYT	532	152.605	93.567	21.995	1.00	44.01	A16S	ATOM	30659	O2	URI	534	160.681	83.750	13.205	1.00	42.87	A16S
ATOM	30607	O2P	CYT	532	152.327	91.171	21.095	1.00	44.01	A16S	ATOM	30660	N3	URI	534	158.720	84.822	13.544	1.00	42.87	A16S
ATOM	30608	O5'	CYT	532	154.569	92.039	21.845	1.00	46.73	A16S	ATOM	30661	C4	URI	534	157.948	85.915	13.831	1.00	42.87	A16S
ATOM	30609	C5'	CYT	532	155.470	92.733	22.719	1.00	46.73	A16S	ATOM	30662	O4	URI	534	156.728	85.801	13.822	1.00	42.87	A16S
ATOM	30610	C4'	CYT	532	156.867	92.176	22.571	1.00	46.73	A16S	ATOM	30663	C5	URI	534	158.679	87.112	14.098	1.00	42.87	A16S
ATOM	30611	O4'	CYT	532	156.899	90.812	23.042	1.00	46.73	A16S	ATOM	30664	C2'	URI	534	162.726	86.023	12.287	1.00	49.55	A16S
ATOM	30612	C1'	CYT	532	157.856	90.076	22.305	1.00	46.73	A16S	ATOM	30665	O2'	URI	534	163.866	85.192	12.200	1.00	49.55	A16S
ATOM	30613	N1	CYT	532	157.194	88.927	21.676	1.00	44.01	A16S	ATOM	30666	C3'	URI	534	163.028	87.510	12.153	1.00	49.55	A16S
ATOM	30614	C6	CYT	532	155.844	88.916	21.454	1.00	44.01	A16S	ATOM	30667	O3'	URI	534	164.033	87.772	11.200	1.00	49.55	A16S
ATOM	30615	C2	CYT	532	157.973	87.839	21.304	1.00	44.01	A16S	ATOM	30668	P	URI	535	163.617	88.043	9.681	1.00	39.33	A16S
ATOM	30616	O2	CYT	532	159.191	87.882	21.510	1.00	44.01	A16S	ATOM	30669	O1P	URI	535	164.850	88.457	8.954	1.00	44.88	A16S
ATOM	30617	N3	CYT	532	157.389	86.770	20.725	1.00	44.01	A16S	ATOM	30670	O2P	URI	535	162.438	88.941	9.699	1.00	44.88	A16S
ATOM	30618	C4	CYT	532	156.075	86.768	20.505	1.00	44.01	A16S	ATOM	30671	O5'	URI	535	163.114	86.618	9.170	1.00	39.33	A16S
ATOM	30619	N4	CYT	532	155.545	85.701	19.916	1.00	44.01	A16S	ATOM	30672	C5'	URI	535	164.020	85.509	9.043	1.00	39.33	A16S
ATOM	30620	C5	CYT	532	155.248	87.864	20.876	1.00	44.01	A16S	ATOM	30673	C4'	URI	535	163.264	84.265	8.650	1.00	39.33	A16S
ATOM	30621	C2'	CYT	532	158.483	91.011	21.278	1.00	46.73	A16S	ATOM	30674	O4'	URI	535	162.408	83.833	9.741	1.00	39.33	A16S
ATOM	30622	O2'	CYT	532	159.693	91.522	21.792	1.00	46.73	A16S	ATOM	30675	C1'	URI	535	161.217	83.260	9.220	1.00	39.33	A16S
ATOM	30623	C3'	CYT	532	157.428	92.097	21.160	1.00	46.73	A16S	ATOM	30676	N1	URI	535	160.059	84.039	9.696	1.00	44.88	A16S
ATOM	30624	O3'	CYT	532	158.055	93.312	20.812	1.00	46.73	A16S	ATOM	30677	C6	URI	535	160.203	85.293	10.239	1.00	44.88	A16S
ATOM	30625	P	GUA	533	158.261	93.694	19.270	1.00	55.97	A16S	ATOM	30678	C2	URI	535	158.805	83.471	9.553	1.00	44.88	A16S
ATOM	30626	O1P	GUA	533	159.074	94.938	19.358	1.00	42.82	A16S	ATOM	30679	O2	URI	535	158.641	82.351	9.109	1.00	44.88	A16S
ATOM	30627	O2P	GUA	533	156.934	93.714	18.587	1.00	42.82	A16S	ATOM	30680	N3	URI	535	157.751	84.262	9.949	1.00	44.88	A16S
ATOM	30628	O5'	GUA	533	159.135	92.503	18.655	1.00	55.97	A16S	ATOM	30681	C4	URI	535	157.822	85.535	10.475	1.00	44.88	A16S
ATOM	30629	C5'	GUA	533	160.557	92.651	18.487	1.00	55.97	A16S	ATOM	30682	O4	URI	535	156.778	86.167	10.703	1.00	44.88	A16S
ATOM	30630	C4'	GUA	533	161.208	91.348	18.068	1.00	55.97	A16S	ATOM	30683	C5	URI	535	159.161	86.038	10.623	1.00	44.88	A16S
ATOM	30631	O4'	GUA	533	160.650	90.251	18.838	1.00	55.97	A16S	ATOM	30684	C2'	URI	535	161.326	83.285	7.694	1.00	39.33	A16S
ATOM	30632	C1'	GUA	533	160.908	89.032	18.165	1.00	55.97	A16S	ATOM	30685	O2'	URI	535	161.816	82.043	7.242	1.00	39.33	A16S
ATOM	30633	N9	GUA	533	159.677	88.270	17.992	1.00	42.82	A16S	ATOM	30686	C3'	URI	535	162.317	84.416	7.475	1.00	39.33	A16S
ATOM	30634	C4	GUA	533	159.623	86.963	17.583	1.00	42.82	A16S	ATOM	30687	O3'	URI	535	162.982	84.318	6.235	1.00	39.33	A16S
ATOM	30635	N3	GUA	533	160.690	86.178	17.311	1.00	42.82	A16S	ATOM	30688	P	ADE	536	162.447	85.181	4.996	1.00	46.47	A16S
ATOM	30636	C2	GUA	533	160.329	84.971	16.911	1.00	42.82	A16S	ATOM	30689	O1P	ADE	536	163.410	85.074	3.862	1.00	40.00	A16S
ATOM	30637	N2	GUA	533	161.270	84.074	16.588	1.00	42.82	A16S	ATOM	30690	O2P	ADE	536	162.109	86.527	5.539	1.00	40.00	A16S
ATOM	30638	N1	GUA	533	159.020	84.559	16.797	1.00	42.82	A16S	ATOM	30691	O5'	ADE	536	161.129	84.395	4.579	1.00	46.47	A16S
ATOM	30639	C6	GUA	533	157.905	85.347	17.069	1.00	42.82	A16S	ATOM	30692	C5'	ADE	536	161.229	83.034	4.147	1.00	46.47	A16S
ATOM	30640	O6	GUA	533	156.770	84.875	16.925	1.00	42.82	A16S	ATOM	30693	C4'	ADE	536	159.868	82.423	4.000	1.00	46.47	A16S
ATOM	30641	C5	GUA	533	158.282	86.658	17.494	1.00	42.82	A16S	ATOM	30694	O4'	ADE	536	159.218	82.311	5.291	1.00	46.47	A16S
ATOM	30642	N7	GUA	533	157.506	87.752	17.853	1.00	42.82	A16S	ATOM	30695	C1'	ADE	536	157.823	82.496	5.134	1.00	46.47	A16S
ATOM	30643	C8	GUA	533	158.376	88.682	18.151	1.00	42.82	A16S	ATOM	30696	N9	ADE	536	157.423	83.671	5.911	1.00	40.00	A16S
ATOM	30644	C2'	GUA	533	161.479	89.380	16.797	1.00	55.97	A16S	ATOM	30697	C4	ADE	536	156.186	83.910	6.464	1.00	40.00	A16S
ATOM	30645	O2'	GUA	533	162.877	89.204	16.861	1.00	55.97	A16S	ATOM	30698	N3	ADE	536	155.108	83.113	6.429	1.00	40.00	A16S
ATOM	30646	C3'	GUA	533	161.071	90.840	16.640	1.00	55.97	A16S	ATOM	30699	C2	ADE	536	154.078	83.691	7.050	1.00	40.00	A16S
ATOM	30647	O3'	GUA	533	161.938	91.470	15.700	1.00	55.97	A16S	ATOM	30700	N1	ADE	536	154.011	84.880	7.659	1.00	40.00	A16S
ATOM	30648	P	URI	534	161.647	91.304	14.119	1.00	49.55	A16S	ATOM	30701	C6	ADE	536	155.115	85.646	7.685	1.00	40.00	A16S
ATOM	30649	O1P	URI	534	162.603	92.165	13.380	1.00	42.87	A16S	ATOM	30702	N6	ADE	536	155.058	86.820	8.307	1.00	40.00	A16S
ATOM	30650	O2P	URI	534	160.185	91.447	13.866	1.00	42.87	A16S	ATOM	30703	C5	ADE	536	156.271	85.154	7.055	1.00	40.00	A16S
ATOM	30651	O5'	URI	534	162.023	89.787	13.805	1.00	49.55	A16S	ATOM	30704	N7	ADE	536	157.540	85.688	6.893	1.00	40.00	A16S
ATOM	30652	C5'	URI	534	163.380	89.337	13.925	1.00	49.55	A16S	ATOM	30705	C8	ADE	536	158.185	84.769	6.218	1.00	40.00	A16S

ATOM	30706	C2'	ADE	536	157.553	82.683	3.639	1.00	46.47	A16S	ATOM	30759	C6	CYT	539	150.592	92.611	-0.171	1.00	32.75	A16S
ATOM	30707	O2'	ADE	536	157.262	81.430	3.068	1.00	46.47	A16S	ATOM	30760	C2	CYT	539	149.970	94.160	1.552	1.00	32.75	A16S
ATOM	30708	C3'	ADE	536	158.893	83.205	3.149	1.00	46.47	A16S	ATOM	30761	O2	CYT	539	149.113	94.906	2.047	1.00	32.75	A16S
ATOM	30709	O3'	ADE	536	159.115	82.972	1.769	1.00	46.47	A16S	ATOM	30762	N3	CYT	539	151.168	93.952	2.149	1.00	32.75	A16S
ATOM	30710	P	CYT	537	158.982	84.195	0.733	1.00	46.20	A16S	ATOM	30763	C4	CYT	539	152.054	93.110	1.602	1.00	32.75	A16S
ATOM	30711	O1P	CYT	537	159.544	83.773	-0.593	1.00	38.58	A16S	ATOM	30764	N4	CYT	539	153.239	92.971	2.190	1.00	32.75	A16S
ATOM	30712	O2P	CYT	537	159.504	85.437	1.394	1.00	38.58	A16S	ATOM	30765	C5	CYT	539	151.767	92.386	0.420	1.00	32.75	A16S
ATOM	30713	O5'	CYT	537	157.408	84.357	0.587	1.00	46.20	A16S	ATOM	30766	C2'	CYT	539	148.638	95.020	-1.281	1.00	38.17	A16S
ATOM	30714	C5'	CYT	537	156.615	83.288	0.080	1.00	46.20	A16S	ATOM	30767	O2'	CYT	539	147.403	95.687	-1.415	1.00	38.17	A16S
ATOM	30715	C4'	CYT	537	155.153	83.550	0.336	1.00	46.20	A16S	ATOM	30768	C3'	CYT	539	149.047	94.350	-2.578	1.00	38.17	A16S
ATOM	30716	O4'	CYT	537	154.882	83.493	1.761	1.00	46.20	A16S	ATOM	30769	O3'	CYT	539	148.846	95.175	-3.709	1.00	38.17	A16S
ATOM	30717	C1'	CYT	537	153.819	84.376	2.073	1.00	46.20	A16S	ATOM	30770	P	GUA	540	150.033	96.150	-4.190	1.00	36.99	A16S
ATOM	30718	N1	CYT	537	154.297	85.377	3.037	1.00	38.58	A16S	ATOM	30771	O1P	GUA	540	149.501	96.867	-5.374	1.00	52.26	A16S
ATOM	30719	C6	CYT	537	155.561	85.881	2.962	1.00	38.58	A16S	ATOM	30772	O2P	GUA	540	151.301	95.371	-4.308	1.00	52.26	A16S
ATOM	30720	C2	CYT	537	153.426	85.819	4.024	1.00	38.58	A16S	ATOM	30773	O5'	GUA	540	150.193	97.185	-2.992	1.00	36.99	A16S
ATOM	30721	O2	CYT	537	152.298	85.322	4.089	1.00	38.58	A16S	ATOM	30774	C5'	GUA	540	149.031	97.858	-2.480	1.00	36.99	A16S
ATOM	30722	N3	CYT	537	153.832	86.772	4.889	1.00	38.58	A16S	ATOM	30775	C4'	GUA	540	149.390	98.725	-1.311	1.00	36.99	A16S
ATOM	30723	C4	CYT	537	155.063	87.267	4.800	1.00	38.58	A16S	ATOM	30776	O4'	GUA	540	149.823	97.921	-0.196	1.00	36.99	A16S
ATOM	30724	N4	CYT	537	155.425	88.209	5.673	1.00	38.58	A16S	ATOM	30777	C1'	GUA	540	150.842	98.607	0.502	1.00	36.99	A16S
ATOM	30725	C5	CYT	537	155.980	86.819	3.814	1.00	38.58	A16S	ATOM	30778	N9	GUA	540	151.997	97.723	0.575	1.00	52.26	A16S
ATOM	30726	C2'	CYT	537	153.365	85.036	0.770	1.00	46.20	A16S	ATOM	30779	C4	GUA	540	153.034	97.821	1.459	1.00	52.26	A16S
ATOM	30727	O2'	CYT	537	152.271	84.324	0.229	1.00	46.20	A16S	ATOM	30780	N3	GUA	540	153.180	98.772	2.396	1.00	52.26	A16S
ATOM	30728	C3'	CYT	537	154.610	84.904	-0.092	1.00	46.20	A16S	ATOM	30781	C2	GUA	540	154.277	98.598	3.106	1.00	52.26	A16S
ATOM	30729	O3'	CYT	537	154.298	84.974	-1.475	1.00	46.20	A16S	ATOM	30782	N2	GUA	540	154.590	99.467	4.081	1.00	52.26	A16S
ATOM	30730	P	CYT	538	154.244	86.412	-2.202	1.00	41.28	A16S	ATOM	30783	N1	GUA	540	155.153	97.567	2.918	1.00	52.26	A16S
ATOM	30731	O1P	CYT	538	154.205	86.157	-3.674	1.00	40.11	A16S	ATOM	30784	C6	GUA	540	155.017	96.573	1.962	1.00	52.26	A16S
ATOM	30732	O2P	CYT	538	155.283	87.312	-1.625	1.00	40.11	A16S	ATOM	30785	O6	GUA	540	155.869	95.683	1.877	1.00	52.26	A16S
ATOM	30733	O5'	CYT	538	152.840	87.020	-1.774	1.00	41.28	A16S	ATOM	30786	C5	GUA	540	153.849	96.752	1.187	1.00	52.26	A16S
ATOM	30734	C5'	CYT	538	151.619	86.499	-2.299	1.00	41.28	A16S	ATOM	30787	N7	GUA	540	153.341	95.998	0.140	1.00	52.26	A16S
ATOM	30735	C4'	CYT	538	150.466	87.323	-1.805	1.00	41.28	A16S	ATOM	30788	C8	GUA	540	152.247	96.616	-0.198	1.00	52.26	A16S
ATOM	30736	O4'	CYT	538	150.337	87.183	-0.365	1.00	41.28	A16S	ATOM	30789	C2'	GUA	540	151.093	99.947	-0.200	1.00	36.99	A16S
ATOM	30737	C1'	CYT	538	149.859	88.393	0.196	1.00	41.28	A16S	ATOM	30790	O2'	GUA	540	150.379	100.989	0.435	1.00	36.99	A16S
ATOM	30738	N1	CYT	538	150.826	88.872	1.207	1.00	40.11	A16S	ATOM	30791	C3'	GUA	540	150.528	99.679	-1.581	1.00	36.99	A16S
ATOM	30739	C6	CYT	538	152.134	88.491	1.157	1.00	40.11	A16S	ATOM	30792	O3'	GUA	540	149.987	100.840	-2.143	1.00	36.99	A16S
ATOM	30740	C2	CYT	538	150.384	89.742	2.226	1.00	40.11	A16S	ATOM	30793	P	GUA	541	150.680	101.473	-3.420	1.00	30.86	A16S
ATOM	30741	O2	CYT	538	149.191	90.049	2.287	1.00	40.11	A16S	ATOM	30794	O1P	GUA	541	149.777	102.516	-3.985	1.00	48.17	A16S
ATOM	30742	N3	CYT	538	151.269	90.215	3.125	1.00	40.11	A16S	ATOM	30795	O2P	GUA	541	151.105	100.326	-4.272	1.00	48.17	A16S
ATOM	30743	C4	CYT	538	152.541	89.837	3.061	1.00	40.11	A16S	ATOM	30796	O5'	GUA	541	151.940	102.205	-2.782	1.00	30.86	A16S
ATOM	30744	N4	CYT	538	153.376	90.315	3.975	1.00	40.11	A16S	ATOM	30797	C5'	GUA	541	151.756	103.261	-1.842	1.00	30.86	A16S
ATOM	30745	C5	CYT	538	153.015	88.943	2.056	1.00	40.11	A16S	ATOM	30798	C4'	GUA	541	153.018	103.482	-1.048	1.00	30.86	A16S
ATOM	30746	C2'	CYT	538	149.654	89.373	-0.959	1.00	41.28	A16S	ATOM	30799	O4'	GUA	541	153.293	102.340	-0.201	1.00	30.86	A16S
ATOM	30747	O2'	CYT	538	148.306	89.312	-1.394	1.00	41.28	A16S	ATOM	30800	C1'	GUA	541	154.685	102.151	-0.093	1.00	30.86	A16S
ATOM	30748	C3'	CYT	538	150.600	88.815	-2.011	1.00	41.28	A16S	ATOM	30801	N9	GUA	541	154.969	100.841	-0.659	1.00	48.17	A16S
ATOM	30749	O3'	CYT	538	150.230	89.206	-3.317	1.00	41.28	A16S	ATOM	30802	C4	GUA	541	155.842	99.888	-0.185	1.00	48.17	A16S
ATOM	30750	P	CYT	539	150.828	90.564	-3.925	1.00	38.17	A16S	ATOM	30803	N3	GUA	541	156.630	99.997	0.904	1.00	48.17	A16S
ATOM	30751	O1P	CYT	539	150.417	90.654	-5.352	1.00	32.75	A16S	ATOM	30804	C2	GUA	541	157.343	98.901	1.111	1.00	48.17	A16S
ATOM	30752	O2P	CYT	539	152.268	90.615	-3.557	1.00	32.75	A16S	ATOM	30805	N2	GUA	541	158.174	98.833	2.148	1.00	48.17	A16S
ATOM	30753	O5'	CYT	539	150.060	91.714	-3.141	1.00	38.17	A16S	ATOM	30806	N1	GUA	541	157.292	97.787	0.317	1.00	48.17	A16S
ATOM	30754	C5'	CYT	539	148.673	91.962	-3.411	1.00	38.17	A16S	ATOM	30807	C6	GUA	541	156.485	97.643	-0.807	1.00	48.17	A16S
ATOM	30755	C4'	CYT	539	148.173	93.113	-2.586	1.00	38.17	A16S	ATOM	30808	O6	GUA	541	156.492	96.570	-1.453	1.00	48.17	A16S
ATOM	30756	O4'	CYT	539	148.121	92.710	-1.203	1.00	38.17	A16S	ATOM	30809	C5	GUA	541	155.717	98.821	-1.047	1.00	48.17	A16S
ATOM	30757	C1'	CYT	539	148.446	93.811	-0.372	1.00	38.17	A16S	ATOM	30810	N7	GUA	541	154.801	99.106	-2.052	1.00	48.17	A16S
ATOM	30758	N1	CYT	539	149.695	93.502	0.347	1.00	32.75	A16S	ATOM	30811	C8	GUA	541	154.387	100.310	-1.782	1.00	48.17	A16S

ATOM	30812	C2'	GUA	541	155.368	103.295	-0.850	1.00	30.86	A16S	ATOM	30865	C1'	URI	544	157.827	100.578	-10.765	1.00	34.49	A16S
ATOM	30813	O2'	GUA	541	155.678	104.316	0.065	1.00	30.86	A16S	ATOM	30866	N1	URI	544	158.917	100.736	-9.796	1.00	52.52	A16S
ATOM	30814	C3'	GUA	541	154.289	103.711	-1.846	1.00	30.86	A16S	ATOM	30867	C6	URI	544	159.194	101.950	-9.236	1.00	52.52	A16S
ATOM	30815	O3'	GUA	541	154.373	105.092	-2.176	1.00	30.86	A16S	ATOM	30868	C2	URI	544	159.640	99.605	-9.454	1.00	52.52	A16S
ATOM	30816	P	ADE	542	155.099	105.569	-3.523	1.00	40.84	A16S	ATOM	30869	O2	URI	544	159.440	98.503	-9.950	1.00	52.52	A16S
ATOM	30817	O1P	ADE	542	156.481	105.948	-3.152	1.00	45.92	A16S	ATOM	30870	N3	URI	544	160.602	99.809	-8.506	1.00	52.52	A16S
ATOM	30818	O2P	ADE	542	154.219	106.555	-4.180	1.00	45.92	A16S	ATOM	30871	C4	URI	544	160.903	100.999	-7.878	1.00	52.52	A16S
ATOM	30819	O5'	ADE	542	155.166	104.280	-4.446	1.00	40.84	A16S	ATOM	30872	O4	URI	544	161.695	101.002	-6.935	1.00	52.52	A16S
ATOM	30820	C5'	ADE	542	155.184	104.420	-5.883	1.00	40.84	A16S	ATOM	30873	C5	URI	544	160.132	102.116	-8.316	1.00	52.52	A16S
ATOM	30821	C4'	ADE	542	154.764	103.131	-6.529	1.00	40.84	A16S	ATOM	30874	C2'	URI	544	156.456	100.550	-10.110	1.00	34.49	A16S
ATOM	30822	O4'	ADE	542	155.867	102.216	-6.505	1.00	40.84	A16S	ATOM	30875	O2'	URI	544	156.205	99.247	-9.608	1.00	34.49	A16S
ATOM	30823	C1'	ADE	542	155.381	100.911	-6.378	1.00	40.84	A16S	ATOM	30876	C3'	URI	544	155.568	100.981	-11.274	1.00	34.49	A16S
ATOM	30824	N9	ADE	542	156.419	100.113	-5.718	1.00	45.92	A16S	ATOM	30877	O3'	URI	544	155.303	99.847	-12.081	1.00	34.49	A16S
ATOM	30825	C4	ADE	542	157.089	100.382	-4.547	1.00	45.92	A16S	ATOM	30878	P	CYT	545	154.010	98.953	-11.789	1.00	35.85	A16S
ATOM	30826	N3	ADE	542	156.938	101.447	-3.745	1.00	45.92	A16S	ATOM	30879	O1P	CYT	545	153.604	99.148	-10.372	1.00	39.30	A16S
ATOM	30827	C2	ADE	542	157.740	101.346	-2.681	1.00	45.92	A16S	ATOM	30880	O2P	CYT	545	154.257	97.582	-12.297	1.00	39.30	A16S
ATOM	30828	N1	ADE	542	158.614	100.381	-2.362	1.00	45.92	A16S	ATOM	30881	O5'	CYT	545	152.890	99.608	-12.702	1.00	35.85	A16S
ATOM	30829	C6	ADE	542	158.752	99.337	-3.204	1.00	45.92	A16S	ATOM	30882	C5'	CYT	545	153.112	99.793	-14.091	1.00	35.85	A16S
ATOM	30830	N6	ADE	542	159.642	98.390	-2.908	1.00	45.92	A16S	ATOM	30883	C4'	CYT	545	151.969	99.230	-14.884	1.00	35.85	A16S
ATOM	30831	C5	ADE	542	157.951	99.317	-4.352	1.00	45.92	A16S	ATOM	30884	O4'	CYT	545	152.569	98.767	-16.107	1.00	35.85	A16S
ATOM	30832	N7	ADE	542	157.837	98.404	-5.381	1.00	45.92	A16S	ATOM	30885	C1'	CYT	545	152.398	97.379	-16.238	1.00	35.85	A16S
ATOM	30833	C8	ADE	542	156.925	98.923	-6.165	1.00	45.92	A16S	ATOM	30886	N1	CYT	545	153.658	96.830	-16.753	1.00	39.30	A16S
ATOM	30834	C2'	ADE	542	154.000	100.968	-5.708	1.00	40.84	A16S	ATOM	30887	C6	CYT	545	154.819	96.917	-16.028	1.00	39.30	A16S
ATOM	30835	O2'	ADE	542	153.100	100.103	-6.352	1.00	40.84	A16S	ATOM	30888	C2	CYT	545	153.654	96.228	-17.994	1.00	39.30	A16S
ATOM	30836	C3'	ADE	542	153.647	102.461	-5.768	1.00	40.84	A16S	ATOM	30889	O2	CYT	545	152.593	96.169	-18.621	1.00	39.30	A16S
ATOM	30837	O3'	ADE	542	152.341	102.983	-6.108	1.00	40.84	A16S	ATOM	30890	N3	CYT	545	154.809	95.728	-18.489	1.00	39.30	A16S
ATOM	30838	P	URI	543	151.620	102.612	-7.497	1.00	39.19	A16S	ATOM	30891	C4	CYT	545	155.939	95.827	-17.782	1.00	39.30	A16S
ATOM	30839	O1P	URI	543	150.165	102.781	-7.260	1.00	57.85	A16S	ATOM	30892	N4	CYT	545	157.060	95.340	-18.319	1.00	39.30	A16S
ATOM	30840	O2P	URI	543	152.113	101.335	-8.033	1.00	57.85	A16S	ATOM	30893	C5	CYT	545	155.970	96.434	-16.500	1.00	39.30	A16S
ATOM	30841	O5'	URI	543	152.088	103.745	-8.495	1.00	39.19	A16S	ATOM	30894	C2'	CYT	545	152.010	96.848	-14.863	1.00	35.85	A16S
ATOM	30842	C5'	URI	543	152.900	103.408	-9.619	1.00	39.19	A16S	ATOM	30895	O2'	CYT	545	151.226	95.685	-15.016	1.00	35.85	A16S
ATOM	30843	C4'	URI	543	153.292	104.643	-10.369	1.00	39.19	A16S	ATOM	30896	C3'	CYT	545	151.249	98.028	-14.272	1.00	35.85	A16S
ATOM	30844	O4'	URI	543	152.100	105.211	-10.968	1.00	39.19	A16S	ATOM	30897	O3'	CYT	545	149.891	97.953	-14.754	1.00	35.85	A16S
ATOM	30845	C1'	URI	543	152.134	106.623	-10.875	1.00	39.19	A16S	ATOM	30898	P	ADE	546	148.712	98.802	-14.048	1.00	32.76	A16S
ATOM	30846	N1	URI	543	151.019	107.052	-10.012	1.00	57.85	A16S	ATOM	30899	O1P	ADE	546	148.800	98.670	-12.568	1.00	35.45	A16S
ATOM	30847	C6	URI	543	150.646	106.309	-8.918	1.00	57.85	A16S	ATOM	30900	O2P	ADE	546	147.448	98.475	-14.743	1.00	35.45	A16S
ATOM	30848	C2	URI	543	150.354	108.228	-10.327	1.00	57.85	A16S	ATOM	30901	O5'	ADE	546	149.079	100.306	-14.398	1.00	32.76	A16S
ATOM	30849	O2	URI	543	150.653	108.928	-11.278	1.00	57.85	A16S	ATOM	30902	C5'	ADE	546	148.250	101.377	-13.956	1.00	32.76	A16S
ATOM	30850	N3	URI	543	149.326	108.558	-9.476	1.00	57.85	A16S	ATOM	30903	C4'	ADE	546	148.651	102.655	-14.639	1.00	32.76	A16S
ATOM	30851	C4	URI	543	148.907	107.852	-8.366	1.00	57.85	A16S	ATOM	30904	O4'	ADE	546	149.971	103.046	-14.229	1.00	32.76	A16S
ATOM	30852	O4	URI	543	147.970	108.278	-7.687	1.00	57.85	A16S	ATOM	30905	C1'	ADE	546	150.477	103.941	-15.186	1.00	32.76	A16S
ATOM	30853	C5	URI	543	149.644	106.661	-8.110	1.00	57.85	A16S	ATOM	30906	N9	ADE	546	151.923	103.795	-15.221	1.00	35.45	A16S
ATOM	30854	C2'	URI	543	153.506	107.009	-10.313	1.00	39.19	A16S	ATOM	30907	C4	ADE	546	152.690	102.966	-16.001	1.00	35.45	A16S
ATOM	30855	O2'	URI	543	154.384	107.296	-11.392	1.00	39.19	A16S	ATOM	30908	N3	ADE	546	152.272	102.097	-16.936	1.00	35.45	A16S
ATOM	30856	C3'	URI	543	153.860	105.759	-9.512	1.00	39.19	A16S	ATOM	30909	C2	ADE	546	153.306	101.472	-17.487	1.00	35.45	A16S
ATOM	30857	O3'	URI	543	155.213	105.557	-9.039	1.00	39.19	A16S	ATOM	30910	N1	ADE	546	154.604	101.605	-17.227	1.00	35.45	A16S
ATOM	30858	P	URI	544	156.437	105.317	-10.057	1.00	34.49	A16S	ATOM	30911	C6	ADE	546	154.981	102.483	-16.273	1.00	35.45	A16S
ATOM	30859	O1P	URI	544	157.632	105.435	-9.182	1.00	52.52	A16S	ATOM	30912	N6	ADE	546	156.272	102.621	-15.995	1.00	35.45	A16S
ATOM	30860	O2P	URI	544	156.342	106.151	-11.285	1.00	52.52	A16S	ATOM	30913	C5	ADE	546	153.993	103.204	-15.625	1.00	35.45	A16S
ATOM	30861	O5'	URI	544	156.304	103.787	-10.481	1.00	34.49	A16S	ATOM	30914	N7	ADE	546	154.051	104.167	-14.633	1.00	35.45	A16S
ATOM	30862	C5'	URI	544	156.186	103.422	-11.866	1.00	34.49	A16S	ATOM	30915	C8	ADE	546	152.800	104.484	-14.431	1.00	35.45	A16S
ATOM	30863	C4'	URI	544	156.452	101.952	-12.053	1.00	34.49	A16S	ATOM	30916	C2'	ADE	546	149.688	103.759	-16.490	1.00	32.76	A16S
ATOM	30864	O4'	URI	544	157.812	101.676	-11.652	1.00	34.49	A16S	ATOM	30917	O2'	ADE	546	149.026	104.963	-16.839	1.00	32.76	A16S

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ATOM  30918  C3' ADE  546     148.732 102.610 -16.152  1.00 32.76      A16S
ATOM  30919  O3' ADE  546     147.425 102.892 -16.591  1.00 32.76      A16S
ATOM  30920  P   CYT  547     146.978 102.551 -18.082  1.00 30.53      A16S
ATOM  30921  O1P CYT  547     147.464 101.187 -18.364  1.00 54.04      A16S
ATOM  30922  O2P CYT  547     147.364 103.690 -18.973  1.00 54.04      A16S
ATOM  30923  O5' CYT  547     145.392 102.509 -17.945  1.00 30.53      A16S
ATOM  30924  C5' CYT  547     144.517 102.996 -18.987  1.00 30.53      A16S
ATOM  30925  C4' CYT  547     143.209 103.444 -18.380  1.00 30.53      A16S
ATOM  30926  O4' CYT  547     142.569 102.316 -17.735  1.00 30.53      A16S
ATOM  30927  C1' CYT  547     141.959 102.740 -16.531  1.00 30.53      A16S
ATOM  30928  N1  CYT  547     142.527 101.992 -15.404  1.00 54.04      A16S
ATOM  30929  C6  CYT  547     143.669 101.259 -15.537  1.00 54.04      A16S
ATOM  30930  C2  CYT  547     141.880 102.062 -14.176  1.00 54.04      A16S
ATOM  30931  O2  CYT  547     140.845 102.744 -14.082  1.00 54.04      A16S
ATOM  30932  N3  CYT  547     142.391 101.399 -13.118  1.00 54.04      A16S
ATOM  30933  C4  CYT  547     143.506 100.692 -13.252  1.00 54.04      A16S
ATOM  30934  N4  CYT  547     143.971 100.054 -12.178  1.00 54.04      A16S
ATOM  30935  C5  CYT  547     144.193 100.604 -14.493  1.00 54.04      A16S
ATOM  30936  C2' CYT  547     142.204 104.241 -16.365  1.00 30.53      A16S
ATOM  30937  O2' CYT  547     141.083 104.985 -16.770  1.00 30.53      A16S
ATOM  30938  C3' CYT  547     143.394 104.473 -17.274  1.00 30.53      A16S
ATOM  30939  O3' CYT  547     143.333 105.784 -17.797  1.00 30.53      A16S
ATOM  30940  P   URI  548     144.278 106.920 -17.199  1.00 36.32      A16S
ATOM  30941  O1P URI  548     143.940 108.131 -17.980  1.00 55.32      A16S
ATOM  30942  O2P URI  548     145.688 106.440 -17.153  1.00 55.32      A16S
ATOM  30943  O5' URI  548     143.734 107.132 -15.725  1.00 36.32      A16S
ATOM  30944  C5' URI  548     142.500 107.828 -15.523  1.00 36.32      A16S
ATOM  30945  C4' URI  548     142.096 107.785 -14.081  1.00 36.32      A16S
ATOM  30946  O4' URI  548     141.834 106.415 -13.701  1.00 36.32      A16S
ATOM  30947  C1' URI  548     142.137 106.244 -12.333  1.00 36.32      A16S
ATOM  30948  N1  URI  548     143.130 105.167 -12.185  1.00 55.32      A16S
ATOM  30949  C6  URI  548     144.205 105.059 -13.029  1.00 55.32      A16S
ATOM  30950  C2  URI  548     142.962 104.277 -11.134  1.00 55.32      A16S
ATOM  30951  O2  URI  548     141.991 104.286 -10.396  1.00 55.32      A16S
ATOM  30952  N3  URI  548     143.971 103.365 -10.981  1.00 55.32      A16S
ATOM  30953  C4  URI  548     145.089 103.232 -11.760  1.00 55.32      A16S
ATOM  30954  O4  URI  548     145.964 102.439 -11.418  1.00 55.32      A16S
ATOM  30955  C5  URI  548     145.163 104.145 -12.859  1.00 55.32      A16S
ATOM  30956  C2' URI  548     142.629 107.590 -11.793  1.00 36.32      A16S
ATOM  30957  O2' URI  548     141.540 108.263 -11.180  1.00 36.32      A16S
ATOM  30958  C3' URI  548     143.107 108.281 -13.065  1.00 36.32      A16S
ATOM  30959  O3' URI  548     143.076 109.700 -12.940  1.00 36.32      A16S
ATOM  30960  P   GUA  549     144.428 110.501 -12.585  1.00 40.57      A16S
ATOM  30961  O1P GUA  549     144.178 111.969 -12.707  1.00 44.46      A16S
ATOM  30962  O2P GUA  549     144.969 109.965 -11.313  1.00 44.46      A16S
ATOM  30963  O5' GUA  549     145.417 110.060 -13.754  1.00 40.57      A16S
ATOM  30964  C5' GUA  549     146.743 110.596 -13.838  1.00 40.57      A16S
ATOM  30965  C4' GUA  549     147.737 109.488 -14.071  1.00 40.57      A16S
ATOM  30966  O4' GUA  549     147.979 108.750 -12.839  1.00 40.57      A16S
ATOM  30967  C1' GUA  549     147.842 107.372 -13.092  1.00 40.57      A16S
ATOM  30968  N9  GUA  549     147.409 106.709 -11.871  1.00 44.46      A16S
ATOM  30969  C4  GUA  549     147.933 105.555 -11.333  1.00 44.46      A16S
ATOM  30970  N3  GUA  549     148.951 104.826 -11.841  1.00 44.46      A16S
ATOM  30971  C2  GUA  549     149.221 103.765 -11.095  1.00 44.46      A16S
ATOM  30972  N2  GUA  549     150.192 102.925 -11.442  1.00 44.46      A16S
ATOM  30973  N1  GUA  549     148.556 103.451  -9.947  1.00 44.46      A16S
ATOM  30974  C6  GUA  549     147.521 104.191  -9.396  1.00 44.46      A16S
ATOM  30975  O6  GUA  549     147.017 103.834  -8.331  1.00 44.46      A16S
ATOM  30976  C5  GUA  549     147.205 105.323 -10.189  1.00 44.46      A16S
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ATOM  30978  C8  GUA  549     146.403 107.106 -11.028  1.00 44.46      A16S
ATOM  30979  C2' GUA  549     146.873 107.285 -14.265  1.00 40.57      A16S
ATOM  30980  O2' GUA  549     147.035 106.041 -14.886  1.00 40.57      A16S
ATOM  30981  C3' GUA  549     147.340 108.460 -15.118  1.00 40.57      A16S
ATOM  30982  O3' GUA  549     148.529 108.045 -15.765  1.00 40.57      A16S
ATOM  30983  P   GUA  550     149.082 108.836 -17.048  1.00 42.98      A16S
ATOM  30984  O1P GUA  550     148.983 110.301 -16.810  1.00 32.31      A16S
ATOM  30985  O2P GUA  550     148.485 108.230 -18.293  1.00 32.31      A16S
ATOM  30986  O5' GUA  550     150.622 108.469 -16.989  1.00 42.98      A16S
ATOM  30987  C5' GUA  550     151.384 108.761 -15.816  1.00 42.98      A16S
ATOM  30988  C4' GUA  550     152.832 108.453 -16.059  1.00 42.98      A16S
ATOM  30989  O4' GUA  550     153.054 107.022 -16.047  1.00 42.98      A16S
ATOM  30990  C1' GUA  550     154.089 106.699 -16.958  1.00 42.98      A16S
ATOM  30991  N9  GUA  550     153.590 105.723 -17.932  1.00 32.31      A16S
ATOM  30992  C4  GUA  550     154.356 104.835 -18.669  1.00 32.31      A16S
ATOM  30993  N3  GUA  550     155.701 104.674 -18.586  1.00 32.31      A16S
ATOM  30994  C2  GUA  550     156.144 103.746 -19.422  1.00 32.31      A16S
ATOM  30995  N2  GUA  550     157.443 103.430 -19.443  1.00 32.31      A16S
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ATOM  30997  C6  GUA  550     153.965 103.205 -20.403  1.00 32.31      A16S
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ATOM  30999  C5  GUA  550     153.467 104.182 -19.490  1.00 32.31      A16S
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ATOM  31001  C8  GUA  550     152.293 105.527 -18.325  1.00 32.31      A16S
ATOM  31002  C2' GUA  550     154.562 108.008 -17.602  1.00 42.98      A16S
ATOM  31003  O2' GUA  550     155.669 108.524 -16.900  1.00 42.98      A16S
ATOM  31004  C3' GUA  550     153.358 108.908 -17.403  1.00 42.98      A16S
ATOM  31005  O3' GUA  550     153.714 110.276 -17.359  1.00 42.98      A16S
ATOM  31006  P   GUA  551     154.019 111.064 -18.722  1.00 39.12      A16S
ATOM  31007  O1P GUA  551     154.176 112.480 -18.325  1.00 38.72      A16S
ATOM  31008  O2P GUA  551     153.054 110.702 -19.789  1.00 38.72      A16S
ATOM  31009  O5' GUA  551     155.449 110.499 -19.117  1.00 39.12      A16S
ATOM  31010  C5' GUA  551     155.810 110.246 -20.480  1.00 39.12      A16S
ATOM  31011  C4' GUA  551     156.823 109.139 -20.529  1.00 39.12      A16S
ATOM  31012  O4' GUA  551     156.166 107.869 -20.285  1.00 39.12      A16S
ATOM  31013  C1' GUA  551     156.813 106.849 -21.021  1.00 39.12      A16S
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ATOM  31018  N2  GUA  551     158.233 103.112 -24.524  1.00 38.72      A16S
ATOM  31019  N1  GUA  551     155.955 103.329 -24.622  1.00 38.72      A16S
ATOM  31020  C6  GUA  551     154.710 103.850 -24.304  1.00 38.72      A16S
ATOM  31021  O6  GUA  551     153.706 103.434 -24.889  1.00 38.72      A16S
ATOM  31022  C5  GUA  551     154.805 104.850 -23.297  1.00 38.72      A16S
ATOM  31023  N7  GUA  551     153.816 105.612 -22.697  1.00 38.72      A16S
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ATOM	31024	C8	GUA	551	154.460	106.378	-21.855	1.00	38.72	A16S	ATOM	31077	C4'	URI	554	170.854	110.147	-27.229	1.00	29.73	A16S
ATOM	31025	C2'	GUA	551	157.975	107.505	-21.776	1.00	39.12	A16S	ATOM	31078	O4'	URI	554	170.359	111.510	-27.273	1.00	29.73	A16S
ATOM	31026	O2'	GUA	551	159.137	107.428	-20.982	1.00	39.12	A16S	ATOM	31079	C1'	URI	554	170.604	112.142	-26.024	1.00	29.73	A16S
ATOM	31027	C3'	GUA	551	157.531	108.956	-21.852	1.00	39.12	A16S	ATOM	31080	N1	URI	554	169.316	112.541	-25.436	1.00	41.94	A16S
ATOM	31028	O3'	GUA	551	158.641	109.847	-21.941	1.00	39.12	A16S	ATOM	31081	C6	URI	554	168.121	112.046	-25.910	1.00	41.94	A16S
ATOM	31029	P	CYT	552	158.953	110.588	-23.336	1.00	38.14	A16S	ATOM	31082	C2	URI	554	169.345	113.442	-24.393	1.00	41.94	A16S
ATOM	31030	O1P	CYT	552	159.999	111.620	-23.121	1.00	35.00	A16S	ATOM	31083	O2	URI	554	170.384	113.893	-23.934	1.00	41.94	A16S
ATOM	31031	O2P	CYT	552	157.656	110.977	-23.958	1.00	35.00	A16S	ATOM	31084	N3	URI	554	168.113	113.800	-23.906	1.00	41.94	A16S
ATOM	31032	O5'	CYT	552	159.567	109.425	-24.231	1.00	38.14	A16S	ATOM	31085	C4	URI	554	166.886	113.360	-24.347	1.00	41.94	A16S
ATOM	31033	C5'	CYT	552	160.908	108.957	-24.037	1.00	38.14	A16S	ATOM	31086	O4	URI	554	165.863	113.843	-23.865	1.00	41.94	A16S
ATOM	31034	C4'	CYT	552	161.254	107.980	-25.120	1.00	38.14	A16S	ATOM	31087	C5	URI	554	166.942	112.414	-25.416	1.00	41.94	A16S
ATOM	31035	O4'	CYT	552	160.382	106.832	-25.014	1.00	38.14	A16S	ATOM	31088	C2'	URI	554	171.355	111.150	-25.136	1.00	29.73	A16S
ATOM	31036	C1'	CYT	552	160.104	106.324	-26.300	1.00	38.14	A16S	ATOM	31089	O2'	URI	554	172.744	111.386	-25.231	1.00	29.73	A16S
ATOM	31037	N1	CYT	552	158.648	106.185	-26.464	1.00	35.00	A16S	ATOM	31090	C3'	URI	554	170.936	109.820	-25.744	1.00	29.73	A16S
ATOM	31038	C6	CYT	552	157.781	106.970	-25.764	1.00	35.00	A16S	ATOM	31091	O3'	URI	554	171.836	108.771	-25.455	1.00	29.73	A16S
ATOM	31039	C2	CYT	552	158.160	105.222	-27.361	1.00	35.00	A16S	ATOM	31092	P	ADE	555	171.252	107.307	-25.161	1.00	42.91	A16S
ATOM	31040	O2	CYT	552	158.965	104.521	-27.998	1.00	35.00	A16S	ATOM	31093	O1P	ADE	555	172.343	106.333	-25.413	1.00	52.18	A16S
ATOM	31041	N3	CYT	552	156.828	105.080	-27.517	1.00	35.00	A16S	ATOM	31094	O2P	ADE	555	169.949	107.160	-25.869	1.00	52.18	A16S
ATOM	31042	C4	CYT	552	155.994	105.849	-26.825	1.00	35.00	A16S	ATOM	31095	O5'	ADE	555	170.981	107.266	-23.598	1.00	42.91	A16S
ATOM	31043	N4	CYT	552	154.696	105.670	-27.010	1.00	35.00	A16S	ATOM	31096	C5'	ADE	555	169.930	108.021	-22.994	1.00	42.91	A16S
ATOM	31044	C5	CYT	552	156.458	106.835	-25.911	1.00	35.00	A16S	ATOM	31097	C4'	ADE	555	169.761	107.577	-21.569	1.00	42.91	A16S
ATOM	31045	C2'	CYT	552	160.769	107.236	-27.329	1.00	38.14	A16S	ATOM	31098	O4'	ADE	555	169.069	108.574	-20.813	1.00	42.91	A16S
ATOM	31046	O2'	CYT	552	161.939	106.598	-27.793	1.00	38.14	A16S	ATOM	31099	C1'	ADE	555	168.481	107.969	-19.687	1.00	42.91	A16S
ATOM	31047	C3'	CYT	552	161.026	108.504	-26.522	1.00	38.14	A16S	ATOM	31100	N9	ADE	555	167.196	108.622	-19.459	1.00	52.18	A16S
ATOM	31048	O3'	CYT	552	162.191	109.167	-26.966	1.00	38.14	A16S	ATOM	31101	C4	ADE	555	167.015	109.762	-18.707	1.00	52.18	A16S
ATOM	31049	P	GUA	553	162.105	110.686	-27.457	1.00	35.37	A16S	ATOM	31102	N3	ADE	555	167.940	110.439	-18.012	1.00	52.18	A16S
ATOM	31050	O1P	GUA	553	161.959	111.517	-26.233	1.00	40.10	A16S	ATOM	31103	C2	ADE	555	167.408	111.511	-17.455	1.00	52.18	A16S
ATOM	31051	O2P	GUA	553	161.086	110.778	-28.547	1.00	40.10	A16S	ATOM	31104	N1	ADE	555	166.161	111.954	-17.504	1.00	52.18	A16S
ATOM	31052	O5'	GUA	553	163.541	110.979	-28.098	1.00	35.37	A16S	ATOM	31105	C6	ADE	555	165.259	111.253	-18.203	1.00	52.18	A16S
ATOM	31053	C5'	GUA	553	163.901	110.474	-29.414	1.00	35.37	A16S	ATOM	31106	N6	ADE	555	164.010	111.699	-18.254	1.00	52.18	A16S
ATOM	31054	C4'	GUA	553	165.157	111.155	-29.916	1.00	35.37	A16S	ATOM	31107	C5	ADE	555	165.689	110.092	-18.841	1.00	52.18	A16S
ATOM	31055	O4'	GUA	553	164.880	112.564	-30.023	1.00	35.37	A16S	ATOM	31108	N7	ADE	555	165.028	109.159	-19.626	1.00	52.18	A16S
ATOM	31056	C1'	GUA	553	165.982	113.315	-29.562	1.00	35.37	A16S	ATOM	31109	C8	ADE	555	165.964	108.304	-19.958	1.00	52.18	A16S
ATOM	31057	N9	GUA	553	165.513	114.170	-28.470	1.00	40.10	A16S	ATOM	31110	C2'	ADE	555	168.501	106.449	-19.887	1.00	42.91	A16S
ATOM	31058	C4	GUA	553	166.265	114.895	-27.569	1.00	40.10	A16S	ATOM	31111	O2'	ADE	555	169.382	105.883	-18.940	1.00	42.91	A16S
ATOM	31059	N3	GUA	553	167.608	114.929	-27.494	1.00	40.10	A16S	ATOM	31112	C3'	ADE	555	168.975	106.306	-21.338	1.00	42.91	A16S
ATOM	31060	C2	GUA	553	168.030	115.752	-26.547	1.00	40.10	A16S	ATOM	31113	O3'	ADE	555	169.860	105.204	-21.472	1.00	42.91	A16S
ATOM	31061	N2	GUA	553	169.337	115.924	-26.338	1.00	40.10	A16S	ATOM	31114	P	ADE	556	169.639	104.131	-22.640	1.00	36.68	A16S
ATOM	31062	N1	GUA	553	167.204	116.470	-25.738	1.00	40.10	A16S	ATOM	31115	O1P	ADE	556	170.930	103.404	-22.758	1.00	40.32	A16S
ATOM	31063	C6	GUA	553	165.823	116.449	-25.793	1.00	40.10	A16S	ATOM	31116	O2P	ADE	556	169.079	104.814	-23.831	1.00	40.32	A16S
ATOM	31064	O6	GUA	553	165.174	117.143	-25.016	1.00	40.10	A16S	ATOM	31117	O5'	ADE	556	168.554	103.155	-22.013	1.00	36.68	A16S
ATOM	31065	C5	GUA	553	165.352	115.582	-26.799	1.00	40.10	A16S	ATOM	31118	C5'	ADE	556	168.752	101.738	-21.983	1.00	36.68	A16S
ATOM	31066	N7	GUA	553	164.054	115.286	-27.188	1.00	40.10	A16S	ATOM	31119	C4'	ADE	556	167.436	101.050	-22.197	1.00	36.68	A16S
ATOM	31067	C8	GUA	553	164.197	114.440	-28.169	1.00	40.10	A16S	ATOM	31120	O4'	ADE	556	166.594	101.251	-21.035	1.00	36.68	A16S
ATOM	31068	C2'	GUA	553	167.122	112.341	-29.266	1.00	35.37	A16S	ATOM	31121	C1'	ADE	556	165.266	101.545	-21.447	1.00	36.68	A16S
ATOM	31069	O2'	GUA	553	167.939	112.277	-30.417	1.00	35.37	A16S	ATOM	31122	N9	ADE	556	164.879	102.838	-20.856	1.00	40.32	A16S
ATOM	31070	C3'	GUA	553	166.373	111.040	-29.006	1.00	35.37	A16S	ATOM	31123	C4	ADE	556	163.641	103.207	-20.377	1.00	40.32	A16S
ATOM	31071	O3'	GUA	553	167.164	109.901	-29.364	1.00	35.37	A16S	ATOM	31124	N3	ADE	556	162.496	102.513	-20.433	1.00	40.32	A16S
ATOM	31072	P	URI	554	167.392	108.714	-28.301	1.00	29.73	A16S	ATOM	31125	C2	ADE	556	161.518	103.163	-19.813	1.00	40.32	A16S
ATOM	31073	O1P	URI	554	167.790	107.495	-29.025	1.00	41.94	A16S	ATOM	31126	N1	ADE	556	161.549	104.331	-19.181	1.00	40.32	A16S
ATOM	31074	O2P	URI	554	166.230	108.669	-27.377	1.00	41.94	A16S	ATOM	31127	C6	ADE	556	162.714	105.003	-19.134	1.00	40.32	A16S
ATOM	31075	O5'	URI	554	168.655	109.186	-27.456	1.00	29.73	A16S	ATOM	31128	N6	ADE	556	162.759	106.158	-18.470	1.00	40.32	A16S
ATOM	31076	C5'	URI	554	169.954	109.272	-28.055	1.00	29.73	A16S	ATOM	31129	C5	ADE	556	163.822	104.436	-19.776	1.00	40.32	A16S

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ATOM  31130  N7  ADE  556     165.126 104.871 -19.932  1.00 40.32      A16S
ATOM  31131  C8  ADE  556     165.705 103.900 -20.590  1.00 40.32      A16S
ATOM  31132  C2' ADE  556     165.207 101.404 -22.975  1.00 36.68      A16S
ATOM  31133  O2' ADE  556     164.778 100.090 -23.278  1.00 36.68      A16S
ATOM  31134  C3' ADE  556     166.664 101.631 -23.369  1.00 36.68      A16S
ATOM  31135  O3' ADE  556     167.054 100.971 -24.573  1.00 36.68      A16S
ATOM  31136  P   ADE  557     167.104 101.790 -25.958  1.00 34.61      A16S
ATOM  31137  O1P ADE  557     167.817 100.960 -26.964  1.00 42.02      A16S
ATOM  31138  O2P ADE  557     167.557 103.184 -25.698  1.00 42.02      A16S
ATOM  31139  O5' ADE  557     165.583 101.841 -26.399  1.00 34.61      A16S
ATOM  31140  C5' ADE  557     164.823 100.635 -26.509  1.00 34.61      A16S
ATOM  31141  C4' ADE  557     163.375 100.966 -26.623  1.00 34.61      A16S
ATOM  31142  O4' ADE  557     162.915 101.526 -25.375  1.00 34.61      A16S
ATOM  31143  C1' ADE  557     162.003 102.573 -25.636  1.00 34.61      A16S
ATOM  31144  N9  ADE  557     162.479 103.762 -24.929  1.00 42.02      A16S
ATOM  31145  C4  ADE  557     161.851 104.348 -23.861  1.00 42.02      A16S
ATOM  31146  N3  ADE  557     160.674 103.999 -23.315  1.00 42.02      A16S
ATOM  31147  C2  ADE  557     160.402 104.765 -22.273  1.00 42.02      A16S
ATOM  31148  N1  ADE  557     161.119 105.758 -21.752  1.00 42.02      A16S
ATOM  31149  C6  ADE  557     162.292 106.081 -22.325  1.00 42.02      A16S
ATOM  31150  N6  ADE  557     163.006 107.064 -21.800  1.00 42.02      A16S
ATOM  31151  C5  ADE  557     162.690 105.357 -23.439  1.00 42.02      A16S
ATOM  31152  N7  ADE  557     163.808 105.440 -24.251  1.00 42.02      A16S
ATOM  31153  C8  ADE  557     163.628 104.482 -25.126  1.00 42.02      A16S
ATOM  31154  C2' ADE  557     161.837 102.697 -27.153  1.00 34.61      A16S
ATOM  31155  O2' ADE  557     160.689 101.977 -27.550  1.00 34.61      A16S
ATOM  31156  C3' ADE  557     163.105 102.028 -27.665  1.00 34.61      A16S
ATOM  31157  O3' ADE  557     162.927 101.404 -28.931  1.00 34.61      A16S
ATOM  31158  P   GUA  558     163.826 101.867 -30.173  1.00 39.07      A16S
ATOM  31159  O1P GUA  558     163.468 101.021 -31.339  1.00 38.64      A16S
ATOM  31160  O2P GUA  558     165.241 101.947 -29.725  1.00 38.64      A16S
ATOM  31161  O5' GUA  558     163.322 103.345 -30.474  1.00 39.07      A16S
ATOM  31162  C5' GUA  558     161.943 103.593 -30.800  1.00 39.07      A16S
ATOM  31163  C4' GUA  558     161.717 103.381 -32.272  1.00 39.07      A16S
ATOM  31164  O4' GUA  558     160.308 103.443 -32.563  1.00 39.07      A16S
ATOM  31165  C1' GUA  558     160.005 104.545 -33.398  1.00 39.07      A16S
ATOM  31166  N9  GUA  558     158.882 105.224 -32.752  1.00 38.64      A16S
ATOM  31167  C4  GUA  558     157.550 105.033 -33.028  1.00 38.64      A16S
ATOM  31168  N3  GUA  558     157.051 104.274 -34.020  1.00 38.64      A16S
ATOM  31169  C2  GUA  558     155.732 104.241 -34.001  1.00 38.64      A16S
ATOM  31170  N2  GUA  558     155.071 103.547 -34.930  1.00 38.64      A16S
ATOM  31171  N1  GUA  558     154.960 104.884 -33.075  1.00 38.64      A16S
ATOM  31172  C6  GUA  558     155.440 105.663 -32.039  1.00 38.64      A16S
ATOM  31173  O6  GUA  558     154.638 106.183 -31.246  1.00 38.64      A16S
ATOM  31174  C5  GUA  558     156.869 105.730 -32.057  1.00 38.64      A16S
ATOM  31175  N7  GUA  558     157.753 106.403 -31.227  1.00 38.64      A16S
ATOM  31176  C8  GUA  558     158.931 106.091 -31.690  1.00 38.64      A16S
ATOM  31177  C2' GUA  558     161.279 105.367 -33.586  1.00 39.07      A16S
ATOM  31178  O2' GUA  558     161.388 105.829 -34.913  1.00 39.07      A16S
ATOM  31179  C3' GUA  558     162.380 104.388 -33.174  1.00 39.07      A16S
ATOM  31180  O3' GUA  558     163.415 103.836 -34.026  1.00 39.07      A16S
ATOM  31181  P   GUA  559     163.091 102.879 -35.290  1.00 38.49      A16S
ATOM  31182  O1P GUA  559     164.286 102.015 -35.304  1.00 40.70      A16S
ATOM  31183  O2P GUA  559     162.738 103.674 -36.508  1.00 40.70      A16S
ATOM  31184  O5' GUA  559     161.870 101.942 -34.886  1.00 38.49      A16S
ATOM  31185  C5' GUA  559     162.092 100.615 -34.384  1.00 38.49      A16S
ATOM  31186  C4' GUA  559     161.625  99.572 -35.381  1.00 38.49      A16S
ATOM  31187  O4' GUA  559     160.200  99.328 -35.301  1.00 38.49      A16S
ATOM  31188  C1' GUA  559     159.658  99.249 -36.603  1.00 38.49      A16S
ATOM  31189  N9  GUA  559     158.317  99.823 -36.576  1.00 40.70      A16S
ATOM  31190  C4  GUA  559     157.137  99.248 -37.017  1.00 40.70      A16S
ATOM  31191  N3  GUA  559     156.986  98.008 -37.526  1.00 40.70      A16S
ATOM  31192  C2  GUA  559     155.722  97.762 -37.863  1.00 40.70      A16S
ATOM  31193  N2  GUA  559     155.371  96.573 -38.352  1.00 40.70      A16S
ATOM  31194  N1  GUA  559     154.704  98.664 -37.737  1.00 40.70      A16S
ATOM  31195  C6  GUA  559     154.840  99.945 -37.226  1.00 40.70      A16S
ATOM  31196  O6  GUA  559     153.859 100.692 -37.174  1.00 40.70      A16S
ATOM  31197  C5  GUA  559     156.176 100.214 -36.832  1.00 40.70      A16S
ATOM  31198  N7  GUA  559     156.724 101.353 -36.262  1.00 40.70      A16S
ATOM  31199  C8  GUA  559     157.987 101.074 -36.122  1.00 40.70      A16S
ATOM  31200  C2' GUA  559     160.611 100.046 -37.493  1.00 38.49      A16S
ATOM  31201  O2' GUA  559     160.551  99.539 -38.813  1.00 38.49      A16S
ATOM  31202  C3' GUA  559     161.961  99.758 -36.851  1.00 38.49      A16S
ATOM  31203  O3' GUA  559     162.362  98.510 -37.358  1.00 38.49      A16S
ATOM  31204  P   GUA  560     163.891  98.252 -37.722  1.00 40.56      A16S
ATOM  31205  O1P GUA  560     163.903  96.844 -38.206  1.00 28.96      A16S
ATOM  31206  O2P GUA  560     164.712  98.640 -36.556  1.00 28.96      A16S
ATOM  31207  O5' GUA  560     164.180  99.221 -38.944  1.00 40.56      A16S
ATOM  31208  C5' GUA  560     164.929 100.427 -38.772  1.00 40.56      A16S
ATOM  31209  C4' GUA  560     165.162 101.065 -40.115  1.00 40.56      A16S
ATOM  31210  O4' GUA  560     165.781 100.069 -40.963  1.00 40.56      A16S
ATOM  31211  C1' GUA  560     165.281 100.181 -42.275  1.00 40.56      A16S
ATOM  31212  N9  GUA  560     164.647  98.923 -42.652  1.00 28.96      A16S
ATOM  31213  C4  GUA  560     164.138  98.647 -43.891  1.00 28.96      A16S
ATOM  31214  N3  GUA  560     164.125  99.494 -44.932  1.00 28.96      A16S
ATOM  31215  C2  GUA  560     163.583  98.961 -45.991  1.00 28.96      A16S
ATOM  31216  N2  GUA  560     163.470  99.687 -47.108  1.00 28.96      A16S
ATOM  31217  N1  GUA  560     163.108  97.689 -46.038  1.00 28.96      A16S
ATOM  31218  C6  GUA  560     163.122  96.791 -44.984  1.00 28.96      A16S
ATOM  31219  O6  GUA  560     162.690  95.641 -45.150  1.00 28.96      A16S
ATOM  31220  C5  GUA  560     163.680  97.364 -43.824  1.00 28.96      A16S
ATOM  31221  N7  GUA  560     163.876  96.834 -42.552  1.00 28.96      A16S
ATOM  31222  C8  GUA  560     164.452  97.800 -41.889  1.00 28.96      A16S
ATOM  31223  C2' GUA  560     164.301 101.344 -42.316  1.00 40.56      A16S
ATOM  31224  O2' GUA  560     164.966 102.488 -42.783  1.00 40.56      A16S
ATOM  31225  C3' GUA  560     163.891 101.439 -40.859  1.00 40.56      A16S
ATOM  31226  O3' GUA  560     163.413 102.730 -40.517  1.00 40.56      A16S
ATOM  31227  P   CYT  561     161.832 103.031 -40.588  1.00 38.16      A16S
ATOM  31228  O1P CYT  561     161.732 104.415 -40.059  1.00 23.15      A16S
ATOM  31229  O2P CYT  561     161.054 101.922 -39.961  1.00 23.15      A16S
ATOM  31230  O5' CYT  561     161.486 103.077 -42.142  1.00 38.16      A16S
ATOM  31231  C5' CYT  561     161.883 104.203 -42.926  1.00 38.16      A16S
ATOM  31232  C4' CYT  561     161.532 103.991 -44.373  1.00 38.16      A16S
ATOM  31233  O4' CYT  561     162.129 102.761 -44.862  1.00 38.16      A16S
ATOM  31234  C1' CYT  561     161.309 102.212 -45.877  1.00 38.16      A16S
ATOM  31235  N1  CYT  561     160.848 100.880 -45.458  1.00 23.15      A16S
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ATOM	31236	C6	CYT	561	160.919	100.490	-44.157	1.00	23.15	A16S	ATOM	31289	O3'	URI	563	149.503	101.352	-51.647	1.00	37.91	A16S
ATOM	31237	C2	CYT	561	160.332	100.000	-46.434	1.00	23.15	A16S	ATOM	31290	P	GUA	564	148.202	102.037	-51.011	1.00	46.29	A16S
ATOM	31238	O2	CYT	561	160.242	100.383	-47.608	1.00	23.15	A16S	ATOM	31291	O1P	GUA	564	147.290	102.394	-52.132	1.00	35.25	A16S
ATOM	31239	N3	CYT	561	159.940	98.768	-46.071	1.00	23.15	A16S	ATOM	31292	O2P	GUA	564	148.683	103.099	-50.083	1.00	35.25	A16S
ATOM	31240	C4	CYT	561	160.030	98.396	-44.800	1.00	23.15	A16S	ATOM	31293	O5'	GUA	564	147.532	100.883	-50.140	1.00	46.29	A16S
ATOM	31241	N4	CYT	561	159.644	97.164	-44.484	1.00	23.15	A16S	ATOM	31294	C5'	GUA	564	146.707	99.886	-50.763	1.00	46.29	A16S
ATOM	31242	C5	CYT	561	160.526	99.269	-43.788	1.00	23.15	A16S	ATOM	31295	C4'	GUA	564	146.817	98.577	-50.023	1.00	46.29	A16S
ATOM	31243	C2'	CYT	561	160.132	103.155	-46.069	1.00	38.16	A16S	ATOM	31296	O4'	GUA	564	148.175	98.470	-49.535	1.00	46.29	A16S
ATOM	31244	O2'	CYT	561	160.452	104.078	-47.090	1.00	38.16	A16S	ATOM	31297	C1'	GUA	564	148.196	97.778	-48.304	1.00	46.29	A16S
ATOM	31245	C3'	CYT	561	160.065	103.826	-44.709	1.00	38.16	A16S	ATOM	31298	N9	GUA	564	148.745	98.668	-47.284	1.00	35.25	A16S
ATOM	31246	O3'	CYT	561	159.377	105.053	-44.791	1.00	38.16	A16S	ATOM	31299	C4	GUA	564	149.155	98.300	-46.032	1.00	35.25	A16S
ATOM	31247	P	GUA	562	157.795	105.080	-44.540	1.00	39.84	A16S	ATOM	31300	N3	GUA	564	149.132	97.055	-45.533	1.00	35.25	A16S
ATOM	31248	O1P	GUA	562	157.389	106.511	-44.601	1.00	38.53	A16S	ATOM	31301	C2	GUA	564	149.547	97.020	-44.280	1.00	35.25	A16S
ATOM	31249	O2P	GUA	562	157.510	104.274	-43.312	1.00	38.53	A16S	ATOM	31302	N2	GUA	564	149.575	95.853	-43.617	1.00	35.25	A16S
ATOM	31250	O5'	GUA	562	157.162	104.318	-45.794	1.00	39.84	A16S	ATOM	31303	N1	GUA	564	149.960	98.118	-43.579	1.00	35.25	A16S
ATOM	31251	C5'	GUA	562	157.003	104.989	-47.049	1.00	39.84	A16S	ATOM	31304	C6	GUA	564	150.004	99.405	-44.075	1.00	35.25	A16S
ATOM	31252	C4'	GUA	562	156.819	103.991	-48.167	1.00	39.84	A16S	ATOM	31305	O6	GUA	564	150.400	100.314	-43.357	1.00	35.25	A16S
ATOM	31253	O4'	GUA	562	157.543	102.778	-47.848	1.00	39.84	A16S	ATOM	31306	C5	GUA	564	149.552	99.465	-45.416	1.00	35.25	A16S
ATOM	31254	C1'	GUA	562	156.944	101.684	-48.505	1.00	39.84	A16S	ATOM	31307	N7	GUA	564	149.410	100.549	-46.272	1.00	35.25	A16S
ATOM	31255	N9	GUA	562	156.718	100.614	-47.542	1.00	38.53	A16S	ATOM	31308	C8	GUA	564	148.935	100.029	-47.371	1.00	35.25	A16S
ATOM	31256	C4	GUA	562	156.269	99.355	-47.830	1.00	38.53	A16S	ATOM	31309	C2'	GUA	564	146.764	97.346	-48.006	1.00	46.29	A16S
ATOM	31257	N3	GUA	562	155.939	98.897	-49.049	1.00	38.53	A16S	ATOM	31310	O2'	GUA	564	146.592	96.046	-48.530	1.00	46.29	A16S
ATOM	31258	C2	GUA	562	155.531	97.640	-49.013	1.00	38.53	A16S	ATOM	31311	C3'	GUA	564	145.962	98.384	-48.780	1.00	46.29	A16S
ATOM	31259	N2	GUA	562	155.149	97.030	-50.146	1.00	38.53	A16S	ATOM	31312	O3'	GUA	564	144.652	97.915	-49.102	1.00	46.29	A16S
ATOM	31260	N1	GUA	562	155.462	96.887	-47.869	1.00	38.53	A16S	ATOM	31313	P	URI	565	143.445	98.083	-48.034	1.00	45.31	A16S
ATOM	31261	C6	GUA	562	155.805	97.337	-46.601	1.00	38.53	A16S	ATOM	31314	O1P	URI	565	142.184	98.266	-48.798	1.00	43.35	A16S
ATOM	31262	O6	GUA	562	155.719	96.572	-45.634	1.00	38.53	A16S	ATOM	31315	O2P	URI	565	143.831	99.098	-47.020	1.00	43.35	A16S
ATOM	31263	C5	GUA	562	156.234	98.693	-46.626	1.00	38.53	A16S	ATOM	31316	O5'	URI	565	143.380	96.656	-47.328	1.00	45.31	A16S
ATOM	31264	N7	GUA	562	156.645	99.524	-45.597	1.00	38.53	A16S	ATOM	31317	C5'	URI	565	143.282	95.463	-48.117	1.00	45.31	A16S
ATOM	31265	C8	GUA	562	156.920	100.653	-46.188	1.00	38.53	A16S	ATOM	31318	C4'	URI	565	143.184	94.248	-47.232	1.00	45.31	A16S
ATOM	31266	C2'	GUA	562	155.682	102.186	-49.202	1.00	39.84	A16S	ATOM	31319	O4'	URI	565	144.492	93.839	-46.766	1.00	45.31	A16S
ATOM	31267	O2'	GUA	562	155.980	102.398	-50.570	1.00	39.84	A16S	ATOM	31320	C1'	URI	565	144.380	93.274	-45.469	1.00	45.31	A16S
ATOM	31268	C3'	GUA	562	155.416	103.494	-48.466	1.00	39.84	A16S	ATOM	31321	N1	URI	565	145.161	94.089	-44.520	1.00	43.35	A16S
ATOM	31269	O3'	GUA	562	154.719	104.403	-49.313	1.00	39.84	A16S	ATOM	31322	C6	URI	565	145.544	95.377	-44.816	1.00	43.35	A16S
ATOM	31270	P	URI	563	153.108	104.484	-49.247	1.00	37.91	A16S	ATOM	31323	C2	URI	565	145.482	93.516	-43.294	1.00	43.35	A16S
ATOM	31271	O1P	URI	563	152.721	105.561	-50.200	1.00	49.47	A16S	ATOM	31324	O2	URI	565	145.197	92.373	-43.000	1.00	43.35	A16S
ATOM	31272	O2P	URI	563	152.687	104.577	-47.819	1.00	49.47	A16S	ATOM	31325	N3	URI	565	146.154	94.333	-42.429	1.00	43.35	A16S
ATOM	31273	O5'	URI	563	152.593	103.072	-49.792	1.00	37.91	A16S	ATOM	31326	C4	URI	565	146.548	95.629	-42.652	1.00	43.35	A16S
ATOM	31274	C5'	URI	563	152.413	102.823	-51.196	1.00	37.91	A16S	ATOM	31327	O4	URI	565	147.145	96.240	-41.759	1.00	43.35	A16S
ATOM	31275	C4'	URI	563	151.941	101.404	-51.408	1.00	37.91	A16S	ATOM	31328	C5	URI	565	146.204	96.144	-43.952	1.00	43.35	A16S
ATOM	31276	O4'	URI	563	152.870	100.502	-50.754	1.00	37.91	A16S	ATOM	31329	C2'	URI	565	142.896	93.269	-45.104	1.00	45.31	A16S
ATOM	31277	C1'	URI	563	152.183	99.374	-50.245	1.00	37.91	A16S	ATOM	31330	O2'	URI	565	142.334	92.014	-45.440	1.00	45.31	A16S
ATOM	31278	N1	URI	563	152.394	99.304	-48.787	1.00	49.47	A16S	ATOM	31331	C3'	URI	565	142.375	94.406	-45.966	1.00	45.31	A16S
ATOM	31279	C6	URI	563	152.848	100.396	-48.074	1.00	49.47	A16S	ATOM	31332	O3'	URI	565	140.995	94.324	-46.196	1.00	45.31	A16S
ATOM	31280	C2	URI	563	152.128	98.097	-48.139	1.00	49.47	A16S	ATOM	31333	P	ADE	566	139.999	95.146	-45.249	1.00	43.40	A16S
ATOM	31281	O2	URI	563	151.708	97.106	-48.716	1.00	49.47	A16S	ATOM	31334	O1P	ADE	566	138.626	94.948	-45.774	1.00	39.62	A16S
ATOM	31282	N3	URI	563	152.372	98.098	-46.786	1.00	49.47	A16S	ATOM	31335	O2P	ADE	566	140.532	96.532	-45.082	1.00	39.62	A16S
ATOM	31283	C4	URI	563	152.840	99.147	-46.026	1.00	49.47	A16S	ATOM	31336	O5'	ADE	566	140.105	94.374	-43.862	1.00	43.40	A16S
ATOM	31284	O4	URI	563	153.080	98.968	-44.834	1.00	49.47	A16S	ATOM	31337	C5'	ADE	566	139.676	93.007	-43.759	1.00	43.40	A16S
ATOM	31285	C5	URI	563	153.072	100.356	-46.754	1.00	49.47	A16S	ATOM	31338	C4'	ADE	566	139.999	92.475	-42.399	1.00	43.40	A16S
ATOM	31286	C2'	URI	563	150.718	99.525	-50.635	1.00	37.91	A16S	ATOM	31339	O4'	ADE	566	141.431	92.471	-42.222	1.00	43.40	A16S
ATOM	31287	O2'	URI	563	150.480	98.829	-51.843	1.00	37.91	A16S	ATOM	31340	C1'	ADE	566	141.754	92.829	-40.892	1.00	43.40	A16S
ATOM	31288	C3'	URI	563	150.597	101.031	-50.805	1.00	37.91	A16S	ATOM	31341	N9	ADE	566	142.521	94.069	-40.932	1.00	39.62	A16S

ATOM	31342	C4	ADE	566	143.321	94.565	-39.930	1.00	39.62	A16S	ATOM	31395	N7	GUA	568	139.556	100.619	-38.021	1.00	32.79	A16S
ATOM	31343	N3	ADE	566	143.569	94.009	-38.730	1.00	39.62	A16S	ATOM	31396	C8	GUA	568	139.623	100.281	-36.765	1.00	32.79	A16S
ATOM	31344	C2	ADE	566	144.385	94.784	-38.020	1.00	39.62	A16S	ATOM	31397	C2'	GUA	568	139.766	102.037	-33.829	1.00	39.15	A16S
ATOM	31345	N1	ADE	566	144.938	95.960	-38.352	1.00	39.62	A16S	ATOM	31398	O2'	GUA	568	140.390	102.445	-32.628	1.00	39.15	A16S
ATOM	31346	C6	ADE	566	144.663	96.482	-39.571	1.00	39.62	A16S	ATOM	31399	C3'	GUA	568	138.531	101.193	-33.575	1.00	39.15	A16S
ATOM	31347	N6	ADE	566	145.209	97.642	-39.914	1.00	39.62	A16S	ATOM	31400	O3'	GUA	568	137.768	101.705	-32.502	1.00	39.15	A16S
ATOM	31348	C5	ADE	566	143.816	95.766	-40.408	1.00	39.62	A16S	ATOM	31401	P	CYT	569	136.377	102.445	-32.813	1.00	37.09	A16S
ATOM	31349	N7	ADE	566	143.346	96.020	-41.686	1.00	39.62	A16S	ATOM	31402	O1P	CYT	569	135.738	102.718	-31.483	1.00	33.99	A16S
ATOM	31350	C8	ADE	566	142.586	94.986	-41.953	1.00	39.62	A16S	ATOM	31403	O2P	CYT	569	135.662	101.626	-33.842	1.00	33.99	A16S
ATOM	31351	C2'	ADE	566	140.444	93.014	-40.134	1.00	43.40	A16S	ATOM	31404	O5'	CYT	569	136.808	103.817	-33.494	1.00	37.09	A16S
ATOM	31352	O2'	ADE	566	140.139	91.817	-39.448	1.00	43.40	A16S	ATOM	31405	C5'	CYT	569	137.553	104.764	-32.744	1.00	37.09	A16S
ATOM	31353	C3'	ADE	566	139.485	93.336	-41.269	1.00	43.40	A16S	ATOM	31406	C4'	CYT	569	138.156	105.808	-33.636	1.00	37.09	A16S
ATOM	31354	O3'	ADE	566	138.147	93.015	-40.973	1.00	43.40	A16S	ATOM	31407	O4'	CYT	569	139.044	105.190	-34.600	1.00	37.09	A16S
ATOM	31355	P	GUA	567	137.130	94.181	-40.557	1.00	44.62	A16S	ATOM	31408	C1'	CYT	569	139.158	106.036	-35.731	1.00	37.09	A16S
ATOM	31356	O1P	GUA	567	135.911	93.461	-40.089	1.00	40.57	A16S	ATOM	31409	N1	CYT	569	138.747	105.314	-36.931	1.00	33.99	A16S
ATOM	31357	O2P	GUA	567	137.020	95.203	-41.652	1.00	40.57	A16S	ATOM	31410	C6	CYT	569	138.119	104.106	-36.860	1.00	33.99	A16S
ATOM	31358	O5'	GUA	567	137.814	94.854	-39.287	1.00	44.62	A16S	ATOM	31411	C2	CYT	569	138.973	105.922	-38.169	1.00	33.99	A16S
ATOM	31359	C5'	GUA	567	137.965	94.119	-38.073	1.00	44.62	A16S	ATOM	31412	O2	CYT	569	139.593	106.998	-38.201	1.00	33.99	A16S
ATOM	31360	C4'	GUA	567	138.907	94.832	-37.139	1.00	44.62	A16S	ATOM	31413	N3	CYT	569	138.511	105.331	-39.293	1.00	33.99	A16S
ATOM	31361	O4'	GUA	567	140.185	95.011	-37.800	1.00	44.62	A16S	ATOM	31414	C4	CYT	569	137.854	104.172	-39.209	1.00	33.99	A16S
ATOM	31362	C1'	GUA	567	140.809	96.185	-37.318	1.00	44.62	A16S	ATOM	31415	N4	CYT	569	137.370	103.645	-40.336	1.00	33.99	A16S
ATOM	31363	N9	GUA	567	141.030	97.107	-38.428	1.00	40.57	A16S	ATOM	31416	C5	CYT	569	137.655	103.506	-37.962	1.00	33.99	A16S
ATOM	31364	C4	GUA	567	141.854	98.204	-38.402	1.00	40.57	A16S	ATOM	31417	C2'	CYT	569	138.198	107.208	-35.532	1.00	37.09	A16S
ATOM	31365	N3	GUA	567	142.607	98.595	-37.357	1.00	40.57	A16S	ATOM	31418	O2'	CYT	569	138.927	108.346	-35.108	1.00	37.09	A16S
ATOM	31366	C2	GUA	567	143.288	99.681	-37.621	1.00	40.57	A16S	ATOM	31419	C3'	CYT	569	137.229	106.638	-34.500	1.00	37.09	A16S
ATOM	31367	N2	GUA	567	144.094	100.191	-36.683	1.00	40.57	A16S	ATOM	31420	O3'	CYT	569	136.535	107.650	-33.790	1.00	37.09	A16S
ATOM	31368	N1	GUA	567	143.228	100.347	-38.820	1.00	40.57	A16S	ATOM	31421	P	GUA	570	135.075	108.094	-34.289	1.00	51.20	A16S
ATOM	31369	C6	GUA	567	142.447	99.966	-39.909	1.00	40.57	A16S	ATOM	31422	O1P	GUA	570	134.530	109.047	-33.303	1.00	34.42	A16S
ATOM	31370	O6	GUA	567	142.435	100.654	-40.939	1.00	40.57	A16S	ATOM	31423	O2P	GUA	570	134.291	106.898	-34.652	1.00	34.42	A16S
ATOM	31371	C5	GUA	567	141.728	98.787	-39.639	1.00	40.57	A16S	ATOM	31424	O5'	GUA	570	135.372	108.888	-35.631	1.00	51.20	A16S
ATOM	31372	N7	GUA	567	140.853	98.066	-40.437	1.00	40.57	A16S	ATOM	31425	C5'	GUA	570	136.158	110.096	-35.621	1.00	51.20	A16S
ATOM	31373	C8	GUA	567	140.464	97.078	-39.678	1.00	40.57	A16S	ATOM	31426	C4'	GUA	570	136.160	110.693	-36.995	1.00	51.20	A16S
ATOM	31374	C2'	GUA	567	139.879	96.808	-36.286	1.00	44.62	A16S	ATOM	31427	O4'	GUA	570	136.560	109.632	-37.880	1.00	51.20	A16S
ATOM	31375	O2'	GUA	567	140.275	96.368	-35.008	1.00	44.62	A16S	ATOM	31428	C1'	GUA	570	135.895	109.773	-39.107	1.00	51.20	A16S
ATOM	31376	C3'	GUA	567	138.534	96.238	-36.702	1.00	44.62	A16S	ATOM	31429	N9	GUA	570	135.532	108.453	-39.590	1.00	34.42	A16S
ATOM	31377	O3'	GUA	567	137.599	96.290	-35.635	1.00	44.62	A16S	ATOM	31430	C4	GUA	570	135.348	108.110	-40.895	1.00	34.42	A16S
ATOM	31378	P	GUA	568	136.690	97.605	-35.457	1.00	39.15	A16S	ATOM	31431	N3	GUA	570	135.435	108.946	-41.939	1.00	34.42	A16S
ATOM	31379	O1P	GUA	568	135.703	97.335	-34.394	1.00	32.79	A16S	ATOM	31432	C2	GUA	570	135.213	108.332	-43.078	1.00	34.42	A16S
ATOM	31380	O2P	GUA	568	136.216	98.027	-36.797	1.00	32.79	A16S	ATOM	31433	N2	GUA	570	135.234	109.030	-44.225	1.00	34.42	A16S
ATOM	31381	O5'	GUA	568	137.706	98.709	-34.919	1.00	39.15	A16S	ATOM	31434	N1	GUA	570	134.944	106.993	-43.180	1.00	34.42	A16S
ATOM	31382	C5'	GUA	568	138.226	98.638	-33.579	1.00	39.15	A16S	ATOM	31435	C6	GUA	570	134.851	106.112	-42.109	1.00	34.42	A16S
ATOM	31383	C4'	GUA	568	139.121	99.819	-33.297	1.00	39.15	A16S	ATOM	31436	O6	GUA	570	134.603	104.915	-42.310	1.00	34.42	A16S
ATOM	31384	O4'	GUA	568	140.271	99.745	-34.168	1.00	39.15	A16S	ATOM	31437	C5	GUA	570	135.073	106.765	-40.887	1.00	34.42	A16S
ATOM	31385	C1'	GUA	568	140.647	101.046	-34.586	1.00	39.15	A16S	ATOM	31438	N7	GUA	570	135.068	106.270	-39.593	1.00	34.42	A16S
ATOM	31386	N9	GUA	568	140.397	101.131	-36.019	1.00	32.79	A16S	ATOM	31439	C8	GUA	570	135.338	107.313	-38.854	1.00	34.42	A16S
ATOM	31387	C4	GUA	568	140.870	102.090	-36.887	1.00	32.79	A16S	ATOM	31440	C2'	GUA	570	134.757	110.789	-38.973	1.00	51.20	A16S
ATOM	31388	N3	GUA	568	141.680	103.123	-36.571	1.00	32.79	A16S	ATOM	31441	O2'	GUA	570	134.948	111.875	-39.862	1.00	51.20	A16S
ATOM	31389	C2	GUA	568	141.959	103.874	-37.625	1.00	32.79	A16S	ATOM	31442	C3'	GUA	570	134.779	111.135	-37.477	1.00	51.20	A16S
ATOM	31390	N2	GUA	568	142.748	104.961	-37.490	1.00	32.79	A16S	ATOM	31443	O3'	GUA	570	134.646	112.550	-37.243	1.00	51.20	A16S
ATOM	31391	N1	GUA	568	141.488	103.621	-38.889	1.00	32.79	A16S	ATOM	31444	P	GUA	571	133.282	113.310	-37.625	1.00	48.09	A16S
ATOM	31392	C6	GUA	568	140.668	102.561	-39.236	1.00	32.79	A16S	ATOM	31445	O1P	GUA	571	132.961	114.200	-36.479	1.00	51.37	A16S
ATOM	31393	O6	GUA	568	140.331	102.413	-40.402	1.00	32.79	A16S	ATOM	31446	O2P	GUA	571	132.288	112.290	-38.085	1.00	51.37	A16S
ATOM	31394	C5	GUA	568	140.344	101.760	-38.114	1.00	32.79	A16S	ATOM	31447	O5'	GUA	571	133.656	114.255	-38.854	1.00	48.09	A16S

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ATOM  31448  C5' GUA  571     134.657 115.267 -38.704  1.00 48.09      A16S
ATOM  31449  C4' GUA  571     134.449 116.406 -39.685  1.00 48.09      A16S
ATOM  31450  O4' GUA  571     134.605 115.931 -41.041  1.00 48.09      A16S
ATOM  31451  C1' GUA  571     133.949 116.817 -41.927  1.00 48.09      A16S
ATOM  31452  N9  GUA  571     133.086 116.047 -42.815  1.00 51.37      A16S
ATOM  31453  C4  GUA  571     132.264 116.554 -43.795  1.00 51.37      A16S
ATOM  31454  N3  GUA  571     132.083 117.863 -44.081  1.00 51.37      A16S
ATOM  31455  C2  GUA  571     131.223 118.038 -45.070  1.00 51.37      A16S
ATOM  31456  N2  GUA  571     130.908 119.279 -45.462  1.00 51.37      A16S
ATOM  31457  N1  GUA  571     130.607 117.007 -45.740  1.00 51.37      A16S
ATOM  31458  C6  GUA  571     130.785 115.652 -45.465  1.00 51.37      A16S
ATOM  31459  O6  GUA  571     130.186 114.798 -46.134  1.00 51.37      A16S
ATOM  31460  C5  GUA  571     131.687 115.454 -44.392  1.00 51.37      A16S
ATOM  31461  N7  GUA  571     132.121 114.282 -43.789  1.00 51.37      A16S
ATOM  31462  C8  GUA  571     132.944 114.682 -42.859  1.00 51.37      A16S
ATOM  31463  C2' GUA  571     133.217 117.857 -41.083  1.00 48.09      A16S
ATOM  31464  O2' GUA  571     134.016 119.025 -41.017  1.00 48.09      A16S
ATOM  31465  C3' GUA  571     133.128 117.161 -39.731  1.00 48.09      A16S
ATOM  31466  O3' GUA  571     133.000 118.130 -38.694  1.00 48.09      A16S
ATOM  31467  P   CYT  572     131.589 118.295 -37.942  1.00 51.74      A16S
ATOM  31468  O1P CYT  572     131.858 119.163 -36.754  1.00 39.63      A16S
ATOM  31469  O2P CYT  572     130.990 116.945 -37.756  1.00 39.63      A16S
ATOM  31470  O5' CYT  572     130.664 119.049 -38.999  1.00 51.74      A16S
ATOM  31471  C5' CYT  572     130.788 120.469 -39.218  1.00 51.74      A16S
ATOM  31472  C4' CYT  572     129.821 120.926 -40.285  1.00 51.74      A16S
ATOM  31473  O4' CYT  572     130.154 120.301 -41.551  1.00 51.74      A16S
ATOM  31474  C1' CYT  572     128.980 120.135 -42.320  1.00 51.74      A16S
ATOM  31475  N1  CYT  572     128.811 118.719 -42.647  1.00 39.63      A16S
ATOM  31476  C6  CYT  572     129.376 117.740 -41.888  1.00 39.63      A16S
ATOM  31477  C2  CYT  572     128.025 118.388 -43.752  1.00 39.63      A16S
ATOM  31478  O2  CYT  572     127.565 119.308 -44.455  1.00 39.63      A16S
ATOM  31479  N3  CYT  572     127.786 117.090 -44.034  1.00 39.63      A16S
ATOM  31480  C4  CYT  572     128.314 116.143 -43.271  1.00 39.63      A16S
ATOM  31481  N4  CYT  572     128.030 114.876 -43.564  1.00 39.63      A16S
ATOM  31482  C5  CYT  572     129.156 116.450 -42.162  1.00 39.63      A16S
ATOM  31483  C2' CYT  572     127.796 120.630 -41.497  1.00 51.74      A16S
ATOM  31484  O2' CYT  572     127.445 121.924 -41.939  1.00 51.74      A16S
ATOM  31485  C3' CYT  572     128.360 120.566 -40.084  1.00 51.74      A16S
ATOM  31486  O3' CYT  572     127.701 121.456 -39.203  1.00 51.74      A16S
ATOM  31487  P   CYT  573     126.399 120.955 -38.412  1.00 46.04      A16S
ATOM  31488  O1P CYT  573     126.043 122.040 -37.462  1.00 54.90      A16S
ATOM  31489  O2P CYT  573     126.646 119.583 -37.898  1.00 54.90      A16S
ATOM  31490  O5' CYT  573     125.300 120.844 -39.560  1.00 46.04      A16S
ATOM  31491  C5' CYT  573     124.812 122.020 -40.217  1.00 46.04      A16S
ATOM  31492  C4' CYT  573     123.655 121.684 -41.129  1.00 46.04      A16S
ATOM  31493  O4' CYT  573     124.129 120.990 -42.311  1.00 46.04      A16S
ATOM  31494  C1' CYT  573     123.129 120.090 -42.758  1.00 46.04      A16S
ATOM  31495  N1  CYT  573     123.663 118.716 -42.749  1.00 54.90      A16S
ATOM  31496  C6  CYT  573     124.659 118.342 -41.888  1.00 54.90      A16S
ATOM  31497  C2  CYT  573     123.109 117.784 -43.632  1.00 54.90      A16S
ATOM  31498  O2  CYT  573     122.235 118.160 -44.421  1.00 54.90      A16S
ATOM  31499  N3  CYT  573     123.542 116.504 -43.606  1.00 54.90      A16S
ATOM  31500  C4  CYT  573     124.500 116.142 -42.751  1.00 54.90      A16S
ATOM  31501  N4  CYT  573     124.887 114.863 -42.749  1.00 54.90      A16S
ATOM  31502  C5  CYT  573     125.104 117.077 -41.855  1.00 54.90      A16S
ATOM  31503  C2' CYT  573     121.927 120.210 -41.820  1.00 46.04      A16S
ATOM  31504  O2' CYT  573     120.970 121.071 -42.404  1.00 46.04      A16S
ATOM  31505  C3' CYT  573     122.574 120.778 -40.561  1.00 46.04      A16S
ATOM  31506  O3' CYT  573     121.645 121.481 -39.754  1.00 46.04      A16S
ATOM  31507  P   URI  574     120.789 120.682 -38.655  1.00 51.74      A16S
ATOM  31508  O1P URI  574     120.047 121.717 -37.883  1.00 63.34      A16S
ATOM  31509  O2P URI  574     121.678 119.741 -37.941  1.00 63.34      A16S
ATOM  31510  O5' URI  574     119.747 119.827 -39.513  1.00 51.74      A16S
ATOM  31511  C5' URI  574     118.727 120.490 -40.286  1.00 51.74      A16S
ATOM  31512  C4' URI  574     117.921 119.505 -41.112  1.00 51.74      A16S
ATOM  31513  O4' URI  574     118.745 118.893 -42.137  1.00 51.74      A16S
ATOM  31514  C1' URI  574     118.227 117.611 -42.458  1.00 51.74      A16S
ATOM  31515  N1  URI  574     119.246 116.585 -42.191  1.00 63.34      A16S
ATOM  31516  C6  URI  574     120.283 116.798 -41.303  1.00 63.34      A16S
ATOM  31517  C2  URI  574     119.109 115.366 -42.847  1.00 63.34      A16S
ATOM  31518  O2  URI  574     118.227 115.143 -43.665  1.00 63.34      A16S
ATOM  31519  N3  URI  574     120.041 114.421 -42.510  1.00 63.34      A16S
ATOM  31520  C4  URI  574     121.080 114.563 -41.618  1.00 63.34      A16S
ATOM  31521  O4  URI  574     121.825 113.609 -41.412  1.00 63.34      A16S
ATOM  31522  C5  URI  574     121.175 115.854 -41.002  1.00 63.34      A16S
ATOM  31523  C2' URI  574     117.011 117.372 -41.569  1.00 51.74      A16S
ATOM  31524  O2' URI  574     115.853 117.711 -42.287  1.00 51.74      A16S
ATOM  31525  C3' URI  574     117.278 118.322 -40.412  1.00 51.74      A16S
ATOM  31526  O3' URI  574     116.074 118.648 -39.746  1.00 51.74      A16S
ATOM  31527  P   GUA  575     115.615 117.772 -38.476  1.00 61.54      A16S
ATOM  31528  O1P GUA  575     114.535 118.558 -37.807  1.00 56.55      A16S
ATOM  31529  O2P GUA  575     116.832 117.368 -37.696  1.00 56.55      A16S
ATOM  31530  O5' GUA  575     114.964 116.462 -39.114  1.00 61.54      A16S
ATOM  31531  C5' GUA  575     113.726 116.538 -39.829  1.00 61.54      A16S
ATOM  31532  C4' GUA  575     113.436 115.232 -40.517  1.00 61.54      A16S
ATOM  31533  O4' GUA  575     114.500 114.940 -41.461  1.00 61.54      A16S
ATOM  31534  C1' GUA  575     114.701 113.534 -41.541  1.00 61.54      A16S
ATOM  31535  N9  GUA  575     116.047 113.211 -41.069  1.00 56.55      A16S
ATOM  31536  C4  GUA  575     116.682 112.007 -41.231  1.00 56.55      A16S
ATOM  31537  N3  GUA  575     116.197 110.947 -41.904  1.00 56.55      A16S
ATOM  31538  C2  GUA  575     117.027 109.923 -41.883  1.00 56.55      A16S
ATOM  31539  N2  GUA  575     116.703 108.798 -42.531  1.00 56.55      A16S
ATOM  31540  N1  GUA  575     118.233 109.927 -41.232  1.00 56.55      A16S
ATOM  31541  C6  GUA  575     118.752 111.003 -40.518  1.00 56.55      A16S
ATOM  31542  O6  GUA  575     119.849 110.893 -39.945  1.00 56.55      A16S
ATOM  31543  C5  GUA  575     117.874 112.126 -40.557  1.00 56.55      A16S
ATOM  31544  N7  GUA  575     118.005 113.395 -40.006  1.00 56.55      A16S
ATOM  31545  C8  GUA  575     116.903 114.006 -40.342  1.00 56.55      A16S
ATOM  31546  C2' GUA  575     113.677 112.880 -40.617  1.00 61.54      A16S
ATOM  31547  O2' GUA  575     112.530 112.490 -41.342  1.00 61.54      A16S
ATOM  31548  C3' GUA  575     113.408 114.004 -39.631  1.00 61.54      A16S
ATOM  31549  O3' GUA  575     112.201 113.815 -38.938  1.00 61.54      A16S
ATOM  31550  P   GUA  576     112.216 112.975 -37.569  1.00 54.38      A16S
ATOM  31551  O1P GUA  576     110.905 113.215 -36.916  1.00 53.78      A16S
ATOM  31552  O2P GUA  576     113.470 113.301 -36.845  1.00 53.78      A16S
ATOM  31553  O5' GUA  576     112.284 111.450 -38.028  1.00 54.38      A16S
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ATOM  31554  C5' GUA  576     111.256 110.896 -38.863  1.00 54.38      A16S
ATOM  31555  C4' GUA  576     111.561 109.460 -39.212  1.00 54.38      A16S
ATOM  31556  O4' GUA  576     112.725 109.380 -40.078  1.00 54.38      A16S
ATOM  31557  C1' GUA  576     113.430 108.175 -39.821  1.00 54.38      A16S
ATOM  31558  N9  GUA  576     114.779 108.499 -39.354  1.00 53.78      A16S
ATOM  31559  C4  GUA  576     115.810 107.605 -39.189  1.00 53.78      A16S
ATOM  31560  N3  GUA  576     115.778 106.294 -39.501  1.00 53.78      A16S
ATOM  31561  C2  GUA  576     116.908 105.686 -39.195  1.00 53.78      A16S
ATOM  31562  N2  GUA  576     117.061 104.380 -39.463  1.00 53.78      A16S
ATOM  31563  N1  GUA  576     117.976 106.312 -38.609  1.00 53.78      A16S
ATOM  31564  C6  GUA  576     118.031 107.656 -38.272  1.00 53.78      A16S
ATOM  31565  O6  GUA  576     119.042 108.110 -37.731  1.00 53.78      A16S
ATOM  31566  C5  GUA  576     116.834 108.329 -38.617  1.00 53.78      A16S
ATOM  31567  N7  GUA  576     116.476 109.663 -38.471  1.00 53.78      A16S
ATOM  31568  C8  GUA  576     115.257 109.721 -38.933  1.00 53.78      A16S
ATOM  31569  C2' GUA  576     112.656 107.416 -38.737  1.00 54.38      A16S
ATOM  31570  O2' GUA  576     111.808 106.460 -39.338  1.00 54.38      A16S
ATOM  31571  C3' GUA  576     111.887 108.540 -38.053  1.00 54.38      A16S
ATOM  31572  O3' GUA  576     110.719 108.075 -37.395  1.00 54.38      A16S
ATOM  31573  P   GUA  577     110.784 107.718 -35.829  1.00 56.68      A16S
ATOM  31574  O1P GUA  577     109.436 107.233 -35.455  1.00 58.39      A16S
ATOM  31575  O2P GUA  577     111.408 108.826 -35.052  1.00 58.39      A16S
ATOM  31576  O5' GUA  577     111.775 106.479 -35.775  1.00 56.68      A16S
ATOM  31577  C5' GUA  577     111.457 105.253 -36.452  1.00 56.68      A16S
ATOM  31578  C4' GUA  577     112.578 104.250 -36.284  1.00 56.68      A16S
ATOM  31579  O4' GUA  577     113.765 104.711 -36.984  1.00 56.68      A16S
ATOM  31580  C1' GUA  577     114.923 104.274 -36.291  1.00 56.68      A16S
ATOM  31581  N9  GUA  577     115.690 105.446 -35.872  1.00 58.39      A16S
ATOM  31582  C4  GUA  577     117.025 105.470 -35.536  1.00 58.39      A16S
ATOM  31583  N3  GUA  577     117.874 104.425 -35.595  1.00 58.39      A16S
ATOM  31584  C2  GUA  577     119.088 104.755 -35.195  1.00 58.39      A16S
ATOM  31585  N2  GUA  577     120.069 103.845 -35.224  1.00 58.39      A16S
ATOM  31586  N1  GUA  577     119.436 106.004 -34.742  1.00 58.39      A16S
ATOM  31587  C6  GUA  577     118.577 107.090 -34.651  1.00 58.39      A16S
ATOM  31588  O6  GUA  577     118.986 108.159 -34.186  1.00 58.39      A16S
ATOM  31589  C5  GUA  577     117.276 106.763 -35.119  1.00 58.39      A16S
ATOM  31590  N7  GUA  577     116.135 107.549 -35.235  1.00 58.39      A16S
ATOM  31591  C8  GUA  577     115.224 106.731 -35.690  1.00 58.39      A16S
ATOM  31592  C2' GUA  577     114.456 103.438 -35.095  1.00 56.68      A16S
ATOM  31593  O2' GUA  577     114.411 102.076 -35.465  1.00 56.68      A16S
ATOM  31594  C3' GUA  577     113.054 103.979 -34.864  1.00 56.68      A16S
ATOM  31595  O3' GUA  577     112.242 103.032 -34.194  1.00 56.68      A16S
ATOM  31596  P   GUA  578     112.048 103.138 -32.601  1.00 55.50      A16S
ATOM  31597  O1P GUA  578     111.374 101.902 -32.129  1.00 59.35      A16S
ATOM  31598  O2P GUA  578     111.468 104.462 -32.280  1.00 59.35      A16S
ATOM  31599  O5' GUA  578     113.526 103.099 -32.008  1.00 55.50      A16S
ATOM  31600  C5' GUA  578     114.355 101.918 -32.123  1.00 55.50      A16S
ATOM  31601  C4' GUA  578     115.631 102.121 -31.352  1.00 55.50      A16S
ATOM  31602  O4' GUA  578     116.180 103.392 -31.776  1.00 55.50      A16S
ATOM  31603  C1' GUA  578     116.287 104.268 -30.678  1.00 55.50      A16S
ATOM  31604  N9  GUA  578     115.862 105.587 -31.131  1.00 59.35      A16S
ATOM  31605  C4  GUA  578     116.621 106.727 -31.183  1.00 59.35      A16S
ATOM  31606  N3  GUA  578     117.915 106.836 -30.826  1.00 59.35      A16S
ATOM  31607  C2  GUA  578     118.366 108.064 -30.993  1.00 59.35      A16S
ATOM  31608  N2  GUA  578     119.635 108.353 -30.687  1.00 59.35      A16S
ATOM  31609  N1  GUA  578     117.603 109.100 -31.471  1.00 59.35      A16S
ATOM  31610  C6  GUA  578     116.268 109.004 -31.842  1.00 59.35      A16S
ATOM  31611  O6  GUA  578     115.668 110.000 -32.262  1.00 59.35      A16S
ATOM  31612  C5  GUA  578     115.780 107.701 -31.671  1.00 59.35      A16S
ATOM  31613  N7  GUA  578     114.526 107.184 -31.928  1.00 59.35      A16S
ATOM  31614  C8  GUA  578     114.621 105.929 -31.594  1.00 59.35      A16S
ATOM  31615  C2' GUA  578     115.402 103.702 -29.572  1.00 55.50      A16S
ATOM  31616  O2' GUA  578     115.917 104.040 -28.301  1.00 55.50      A16S
ATOM  31617  C3' GUA  578     115.466 102.204 -29.841  1.00 55.50      A16S
ATOM  31618  O3' GUA  578     116.625 101.680 -29.216  1.00 55.50      A16S
ATOM  31619  P   CYT  579     116.709 100.119 -28.858  1.00 56.70      A16S
ATOM  31620  O1P CYT  579     115.500  99.440 -29.400  1.00 55.97      A16S
ATOM  31621  O2P CYT  579     117.038  99.992 -27.416  1.00 55.97      A16S
ATOM  31622  O5' CYT  579     117.969  99.626 -29.701  1.00 56.70      A16S
ATOM  31623  C5' CYT  579     118.455  98.273 -29.611  1.00 56.70      A16S
ATOM  31624  C4' CYT  579     119.962  98.257 -29.731  1.00 56.70      A16S
ATOM  31625  O4' CYT  579     120.350  98.731 -31.049  1.00 56.70      A16S
ATOM  31626  C1' CYT  579     121.491  99.572 -30.946  1.00 56.70      A16S
ATOM  31627  N1  CYT  579     121.099 100.941 -31.355  1.00 55.97      A16S
ATOM  31628  C6  CYT  579     119.831 101.213 -31.794  1.00 55.97      A16S
ATOM  31629  C2  CYT  579     122.037 101.970 -31.246  1.00 55.97      A16S
ATOM  31630  O2  CYT  579     123.193 101.689 -30.910  1.00 55.97      A16S
ATOM  31631  N3  CYT  579     121.657 103.241 -31.509  1.00 55.97      A16S
ATOM  31632  C4  CYT  579     120.403 103.499 -31.884  1.00 55.97      A16S
ATOM  31633  N4  CYT  579     120.058 104.770 -32.075  1.00 55.97      A16S
ATOM  31634  C5  CYT  579     119.445 102.466 -32.062  1.00 55.97      A16S
ATOM  31635  C2' CYT  579     121.952  99.534 -29.484  1.00 56.70      A16S
ATOM  31636  O2' CYT  579     122.956  98.561 -29.312  1.00 56.70      A16S
ATOM  31637  C3' CYT  579     120.662  99.191 -28.761  1.00 56.70      A16S
ATOM  31638  O3' CYT  579     120.880  98.574 -27.512  1.00 56.70      A16S
ATOM  31639  P   GUA  580     120.800  99.459 -26.176  1.00 47.33      A16S
ATOM  31640  O1P GUA  580     120.615  98.557 -25.009  1.00 55.11      A16S
ATOM  31641  O2P GUA  580     119.802 100.534 -26.425  1.00 55.11      A16S
ATOM  31642  O5' GUA  580     122.257 100.103 -26.067  1.00 47.33      A16S
ATOM  31643  C5' GUA  580     123.435  99.279 -26.163  1.00 47.33      A16S
ATOM  31644  C4' GUA  580     124.654 100.130 -26.394  1.00 47.33      A16S
ATOM  31645  O4' GUA  580     124.490 100.875 -27.627  1.00 47.33      A16S
ATOM  31646  C1' GUA  580     125.042 102.179 -27.482  1.00 47.33      A16S
ATOM  31647  N9  GUA  580     123.971 103.170 -27.642  1.00 55.11      A16S
ATOM  31648  C4  GUA  580     124.109 104.547 -27.604  1.00 55.11      A16S
ATOM  31649  N3  GUA  580     125.268 105.232 -27.483  1.00 55.11      A16S
ATOM  31650  C2  GUA  580     125.074 106.538 -27.453  1.00 55.11      A16S
ATOM  31651  N2  GUA  580     126.121 107.365 -27.363  1.00 55.11      A16S
ATOM  31652  N1  GUA  580     123.843 107.129 -27.514  1.00 55.11      A16S
ATOM  31653  C6  GUA  580     122.637 106.456 -27.633  1.00 55.11      A16S
ATOM  31654  O6  GUA  580     121.582 107.094 -27.657  1.00 55.11      A16S
ATOM  31655  C5  GUA  580     122.829 105.045 -27.698  1.00 55.11      A16S
ATOM  31656  N7  GUA  580     121.908 104.013 -27.845  1.00 55.11      A16S
ATOM  31657  C8  GUA  580     122.629 102.925 -27.815  1.00 55.11      A16S
ATOM  31658  C2' GUA  580     125.677 102.245 -26.091  1.00 47.33      A16S
ATOM  31659  O2' GUA  580     127.044 101.911 -26.157  1.00 47.33      A16S
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ATOM	31660	C3'	GUA	580	124.890	101.189	-25.342	1.00	47.33	A16S	ATOM	31713	O2	CYT	583	113.864	107.478	-18.097	1.00	42.54	A16S
ATOM	31661	O3'	GUA	580	125.629	100.698	-24.255	1.00	47.33	A16S	ATOM	31714	N3	CYT	583	114.915	105.613	-18.818	1.00	42.54	A16S
ATOM	31662	P	URI	581	125.279	101.213	-22.782	1.00	48.26	A16S	ATOM	31715	C4	CYT	583	116.031	104.888	-18.843	1.00	42.54	A16S
ATOM	31663	O1P	URI	581	123.918	100.697	-22.461	1.00	47.81	A16S	ATOM	31716	N4	CYT	583	116.015	103.744	-19.529	1.00	42.54	A16S
ATOM	31664	O2P	URI	581	126.424	100.926	-21.863	1.00	47.81	A16S	ATOM	31717	C5	CYT	583	117.216	105.306	-18.166	1.00	42.54	A16S
ATOM	31665	O5'	URI	581	125.105	102.785	-22.949	1.00	48.26	A16S	ATOM	31718	C2'	CYT	583	115.533	108.332	-15.288	1.00	49.17	A16S
ATOM	31666	C5'	URI	581	126.237	103.655	-23.000	1.00	48.26	A16S	ATOM	31719	O2'	CYT	583	114.675	109.405	-14.960	1.00	49.17	A16S
ATOM	31667	C4'	URI	581	125.781	105.082	-22.912	1.00	48.26	A16S	ATOM	31720	C3'	CYT	583	116.858	108.393	-14.545	1.00	49.17	A16S
ATOM	31668	O4'	URI	581	125.079	105.454	-24.125	1.00	48.26	A16S	ATOM	31721	O3'	CYT	583	116.698	108.842	-13.208	1.00	49.17	A16S
ATOM	31669	C1'	URI	581	124.018	106.332	-23.817	1.00	48.26	A16S	ATOM	31722	P	CYT	584	116.427	107.765	-12.046	1.00	50.44	A16S
ATOM	31670	N1	URI	581	122.752	105.705	-24.231	1.00	47.81	A16S	ATOM	31723	O1P	CYT	584	116.481	108.498	-10.755	1.00	56.04	A16S
ATOM	31671	C6	URI	581	122.676	104.362	-24.506	1.00	47.81	A16S	ATOM	31724	O2P	CYT	584	117.312	106.592	-12.250	1.00	56.04	A16S
ATOM	31672	C2	URI	581	121.623	106.509	-24.312	1.00	47.81	A16S	ATOM	31725	O5'	CYT	584	114.928	107.298	-12.328	1.00	50.44	A16S
ATOM	31673	O2	URI	581	121.645	107.715	-24.098	1.00	47.81	A16S	ATOM	31726	C5'	CYT	584	113.851	108.251	-12.261	1.00	50.44	A16S
ATOM	31674	N3	URI	581	120.466	105.850	-24.651	1.00	47.81	A16S	ATOM	31727	C4'	CYT	584	112.526	107.603	-12.582	1.00	50.44	A16S
ATOM	31675	C4	URI	581	120.322	104.508	-24.915	1.00	47.81	A16S	ATOM	31728	O4'	CYT	584	112.454	107.257	-13.989	1.00	50.44	A16S
ATOM	31676	O4	URI	581	119.208	104.054	-25.164	1.00	47.81	A16S	ATOM	31729	C1'	CYT	584	111.658	106.095	-14.150	1.00	50.44	A16S
ATOM	31677	C5	URI	581	121.530	103.755	-24.833	1.00	47.81	A16S	ATOM	31730	N1	CYT	584	112.477	105.061	-14.804	1.00	56.04	A16S
ATOM	31678	C2'	URI	581	124.066	106.586	-22.311	1.00	48.26	A16S	ATOM	31731	C6	CYT	584	113.835	105.041	-14.648	1.00	56.04	A16S
ATOM	31679	O2'	URI	581	124.815	107.756	-22.075	1.00	48.26	A16S	ATOM	31732	C2	CYT	584	111.842	104.087	-15.591	1.00	56.04	A16S
ATOM	31680	C3'	URI	581	124.781	105.344	-21.810	1.00	48.26	A16S	ATOM	31733	O2	CYT	584	110.610	104.119	-15.709	1.00	56.04	A16S
ATOM	31681	O3'	URI	581	125.420	105.529	-20.564	1.00	48.26	A16S	ATOM	31734	N3	CYT	584	112.589	103.135	-16.198	1.00	56.04	A16S
ATOM	31682	P	CYT	582	124.631	105.169	-19.213	1.00	59.78	A16S	ATOM	31735	C4	CYT	584	113.915	103.124	-16.034	1.00	56.04	A16S
ATOM	31683	O1P	CYT	582	123.886	103.895	-19.448	1.00	46.42	A16S	ATOM	31736	N4	CYT	584	114.616	102.158	-16.638	1.00	56.04	A16S
ATOM	31684	O2P	CYT	582	125.557	105.275	-18.045	1.00	46.42	A16S	ATOM	31737	C5	CYT	584	114.585	104.102	-15.238	1.00	56.04	A16S
ATOM	31685	O5'	CYT	582	123.552	106.337	-19.115	1.00	59.78	A16S	ATOM	31738	C2'	CYT	584	111.163	105.672	-12.764	1.00	50.44	A16S
ATOM	31686	C5'	CYT	582	123.943	107.692	-18.846	1.00	59.78	A16S	ATOM	31739	O2'	CYT	584	109.859	106.170	-12.542	1.00	50.44	A16S
ATOM	31687	C4'	CYT	582	122.722	108.571	-18.775	1.00	59.78	A16S	ATOM	31740	C3'	CYT	584	112.200	106.315	-11.854	1.00	50.44	A16S
ATOM	31688	O4'	CYT	582	122.080	108.609	-20.076	1.00	59.78	A16S	ATOM	31741	O3'	CYT	584	111.710	106.547	-10.547	1.00	50.44	A16S
ATOM	31689	C1'	CYT	582	120.673	108.698	-19.917	1.00	59.78	A16S	ATOM	31742	P	ADE	585	111.948	105.432	-9.413	1.00	58.32	A16S
ATOM	31690	N1	CYT	582	120.053	107.509	-20.525	1.00	46.42	A16S	ATOM	31743	O1P	ADE	585	111.552	106.030	-8.113	1.00	64.04	A16S
ATOM	31691	C6	CYT	582	120.786	106.379	-20.759	1.00	46.42	A16S	ATOM	31744	O2P	ADE	585	113.311	104.875	-9.568	1.00	64.04	A16S
ATOM	31692	C2	CYT	582	118.692	107.545	-20.847	1.00	46.42	A16S	ATOM	31745	O5'	ADE	585	110.926	104.278	-9.822	1.00	58.32	A16S
ATOM	31693	O2	CYT	582	118.056	108.597	-20.659	1.00	46.42	A16S	ATOM	31746	C5'	ADE	585	109.517	104.544	-9.896	1.00	58.32	A16S
ATOM	31694	N3	CYT	582	118.108	106.437	-21.360	1.00	46.42	A16S	ATOM	31747	C4'	ADE	585	108.783	103.376	-10.513	1.00	58.32	A16S
ATOM	31695	C4	CYT	582	118.835	105.335	-21.572	1.00	46.42	A16S	ATOM	31748	O4'	ADE	585	109.125	103.264	-11.917	1.00	58.32	A16S
ATOM	31696	N4	CYT	582	118.226	104.262	-22.078	1.00	46.42	A16S	ATOM	31749	C1'	ADE	585	109.069	101.906	-12.316	1.00	58.32	A16S
ATOM	31697	C5	CYT	582	120.222	105.282	-21.276	1.00	46.42	A16S	ATOM	31750	N9	ADE	585	110.394	101.501	-12.785	1.00	64.04	A16S
ATOM	31698	C2'	CYT	582	120.385	108.758	-18.421	1.00	59.78	A16S	ATOM	31751	C4	ADE	585	110.670	100.442	-13.619	1.00	64.04	A16S
ATOM	31699	O2'	CYT	582	120.257	110.109	-18.028	1.00	59.78	A16S	ATOM	31752	N3	ADE	585	109.791	99.606	-14.196	1.00	64.04	A16S
ATOM	31700	C3'	CYT	582	121.622	108.092	-17.850	1.00	59.78	A16S	ATOM	31753	C2	ADE	585	110.425	98.678	-14.910	1.00	64.04	A16S
ATOM	31701	O3'	CYT	582	121.841	108.445	-16.510	1.00	59.78	A16S	ATOM	31754	N1	ADE	585	111.738	98.503	-15.097	1.00	64.04	A16S
ATOM	31702	P	CYT	583	121.150	107.571	-15.362	1.00	49.17	A16S	ATOM	31755	C6	ADE	585	112.594	99.358	-14.498	1.00	64.04	A16S
ATOM	31703	O1P	CYT	583	121.287	106.145	-15.755	1.00	42.54	A16S	ATOM	31756	N6	ADE	585	113.903	99.171	-14.665	1.00	64.04	A16S
ATOM	31704	O2P	CYT	583	121.648	108.018	-14.027	1.00	42.54	A16S	ATOM	31757	C5	ADE	585	112.048	100.393	-13.721	1.00	64.04	A16S
ATOM	31705	O5'	CYT	583	119.611	107.939	-15.517	1.00	49.17	A16S	ATOM	31758	N7	ADE	585	112.631	101.419	-12.992	1.00	64.04	A16S
ATOM	31706	C5'	CYT	583	119.164	109.277	-15.280	1.00	49.17	A16S	ATOM	31759	C8	ADE	585	111.611	102.051	-12.465	1.00	64.04	A16S
ATOM	31707	C4'	CYT	583	117.663	109.363	-15.389	1.00	49.17	A16S	ATOM	31760	C2'	ADE	585	108.643	101.086	-11.098	1.00	58.32	A16S
ATOM	31708	O4'	CYT	583	117.263	109.069	-16.745	1.00	49.17	A16S	ATOM	31761	O2'	ADE	585	107.253	100.873	-11.157	1.00	58.32	A16S
ATOM	31709	C1'	CYT	583	115.981	108.485	-16.741	1.00	49.17	A16S	ATOM	31762	C3'	ADE	585	109.062	101.994	-9.949	1.00	58.32	A16S
ATOM	31710	N1	CYT	583	116.035	107.214	-17.470	1.00	42.54	A16S	ATOM	31763	O3'	ADE	585	108.354	101.721	-8.745	1.00	58.32	A16S
ATOM	31711	C6	CYT	583	117.174	106.464	-17.498	1.00	42.54	A16S	ATOM	31764	P	URI	586	109.013	100.739	-7.651	1.00	53.91	A16S
ATOM	31712	C2	CYT	583	114.887	106.779	-18.141	1.00	42.54	A16S	ATOM	31765	O1P	URI	586	108.117	100.638	-6.471	1.00	63.72	A16S

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ATOM  31778  O4  URI   586     114.809  98.242 -11.386  1.00 63.72      A16S
ATOM  31779  C5  URI   586     112.640  98.699 -10.520  1.00 63.72      A16S
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ATOM  31781  O2' URI   586     108.471  94.749 -10.797  1.00 53.91      A16S
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ATOM  31785  O1P GUA   587     108.325  94.524  -5.863  1.00 59.65      A16S
ATOM  31786  O2P GUA   587     110.251  96.060  -6.561  1.00 59.65      A16S
ATOM  31787  O5' GUA   587     109.950  93.785  -7.569  1.00 55.69      A16S
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ATOM  31789  C4' GUA   587     110.052  91.812  -8.952  1.00 55.69      A16S
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ATOM  31796  N2  GUA   587     116.348  91.062 -12.968  1.00 59.65      A16S
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ATOM  31808  O1P URI   588     111.365  89.005  -5.231  1.00 65.68      A16S
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ATOM  31827  P   GUA   589     117.080  87.671  -4.651  1.00 58.66      A16S
ATOM  31828  O1P GUA   589     117.439  86.309  -4.170  1.00 70.83      A16S
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ATOM  31830  O5' GUA   589     118.436  88.437  -4.974  1.00 58.66      A16S
ATOM  31831  C5' GUA   589     119.493  87.778  -5.705  1.00 58.66      A16S
ATOM  31832  C4' GUA   589     120.701  88.678  -5.825  1.00 58.66      A16S
ATOM  31833  O4' GUA   589     120.371  89.809  -6.669  1.00 58.66      A16S
ATOM  31834  C1' GUA   589     120.967  90.983  -6.149  1.00 58.66      A16S
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ATOM  31846  C2' GUA   589     121.854  90.571  -4.969  1.00 58.66      A16S
ATOM  31847  O2' GUA   589     123.170  90.377  -5.446  1.00 58.66      A16S
ATOM  31848  C3' GUA   589     121.193  89.273  -4.519  1.00 58.66      A16S
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ATOM  31850  P   ADE   590     122.209  88.366  -2.275  1.00 69.96      A16S
ATOM  31851  O1P ADE   590     121.704  89.656  -1.721  1.00 75.41      A16S
ATOM  31852  O2P ADE   590     123.578  87.907  -1.920  1.00 75.41      A16S
ATOM  31853  O5' ADE   590     121.198  87.213  -1.850  1.00 69.96      A16S
ATOM  31854  C5' ADE   590     119.781  87.436  -1.818  1.00 69.96      A16S
ATOM  31855  C4' ADE   590     119.123  86.422  -0.914  1.00 69.96      A16S
ATOM  31856  O4' ADE   590     119.429  85.090  -1.399  1.00 69.96      A16S
ATOM  31857  C1' ADE   590     119.586  84.208  -0.300  1.00 69.96      A16S
ATOM  31858  N9  ADE   590     120.928  83.626  -0.362  1.00 75.41      A16S
ATOM  31859  C4  ADE   590     121.430  82.686   0.505  1.00 75.41      A16S
ATOM  31860  N3  ADE   590     120.805  82.143   1.561  1.00 75.41      A16S
ATOM  31861  C2  ADE   590     121.594  81.266   2.168  1.00 75.41      A16S
ATOM  31862  N1  ADE   590     122.842  80.894   1.862  1.00 75.41      A16S
ATOM  31863  C6  ADE   590     123.441  81.455   0.794  1.00 75.41      A16S
ATOM  31864  N6  ADE   590     124.682  81.070   0.485  1.00 75.41      A16S
ATOM  31865  C5  ADE   590     122.712  82.411   0.066  1.00 75.41      A16S
ATOM  31866  N7  ADE   590     123.022  83.173  -1.054  1.00 75.41      A16S
ATOM  31867  C8  ADE   590     121.934  83.875  -1.268  1.00 75.41      A16S
ATOM  31868  C2' ADE   590     119.331  84.998   0.985  1.00 69.96      A16S
ATOM  31869  O2' ADE   590     117.995  84.842   1.410  1.00 69.96      A16S
ATOM  31870  C3' ADE   590     119.603  86.420   0.529  1.00 69.96      A16S
ATOM  31871  O3' ADE   590     118.865  87.315   1.324  1.00 69.96      A16S
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ATOM	31872	P	ADE	591	119.608	88.138	2.473	1.00	47.81	A16S	ATOM	31925	C4	GUA	593	128.376	90.652	4.754	1.00	66.66	A16S
ATOM	31873	O1P	ADE	591	118.595	89.020	3.095	1.00	45.56	A16S	ATOM	31926	N3	GUA	593	129.434	91.201	4.116	1.00	66.66	A16S
ATOM	31874	O2P	ADE	591	120.833	88.730	1.865	1.00	45.56	A16S	ATOM	31927	C2	GUA	593	129.059	92.020	3.142	1.00	66.66	A16S
ATOM	31875	O5'	ADE	591	120.057	87.050	3.549	1.00	47.81	A16S	ATOM	31928	N2	GUA	593	129.980	92.668	2.423	1.00	66.66	A16S
ATOM	31876	C5'	ADE	591	119.102	86.388	4.381	1.00	47.81	A16S	ATOM	31929	N1	GUA	593	127.752	92.266	2.805	1.00	66.66	A16S
ATOM	31877	C4'	ADE	591	119.755	85.256	5.131	1.00	47.81	A16S	ATOM	31930	C6	GUA	593	126.644	91.703	3.435	1.00	66.66	A16S
ATOM	31878	O4'	ADE	591	120.236	84.267	4.187	1.00	47.81	A16S	ATOM	31931	O6	GUA	593	125.500	91.970	3.028	1.00	66.66	A16S
ATOM	31879	C1'	ADE	591	121.420	83.662	4.693	1.00	47.81	A16S	ATOM	31932	C5	GUA	593	127.033	90.838	4.509	1.00	66.66	A16S
ATOM	31880	N9	ADE	591	122.533	83.933	3.777	1.00	45.56	A16S	ATOM	31933	N7	GUA	593	126.262	90.102	5.402	1.00	66.66	A16S
ATOM	31881	C4	ADE	591	123.814	83.462	3.934	1.00	45.56	A16S	ATOM	31934	C8	GUA	593	127.134	89.483	6.151	1.00	66.66	A16S
ATOM	31882	N3	ADE	591	124.270	82.661	4.908	1.00	45.56	A16S	ATOM	31935	C2'	GUA	593	130.442	90.262	7.188	1.00	60.12	A16S
ATOM	31883	C2	ADE	591	125.570	82.432	4.754	1.00	45.56	A16S	ATOM	31936	O2'	GUA	593	131.825	90.002	7.081	1.00	60.12	A16S
ATOM	31884	N1	ADE	591	126.403	82.885	3.815	1.00	45.56	A16S	ATOM	31937	C3'	GUA	593	129.948	90.024	8.605	1.00	60.12	A16S
ATOM	31885	C6	ADE	591	125.915	83.698	2.858	1.00	45.56	A16S	ATOM	31938	O3'	GUA	593	130.878	90.493	9.561	1.00	60.12	A16S
ATOM	31886	N6	ADE	591	126.755	84.173	1.940	1.00	45.56	A16S	ATOM	31939	P	ADE	594	130.708	91.970	10.154	1.00	55.34	A16S
ATOM	31887	C5	ADE	591	124.546	84.005	2.898	1.00	45.56	A16S	ATOM	31940	O1P	ADE	594	131.875	92.197	11.040	1.00	63.53	A16S
ATOM	31888	N7	ADE	591	123.738	84.784	2.086	1.00	45.56	A16S	ATOM	31941	O2P	ADE	594	129.335	92.107	10.700	1.00	63.53	A16S
ATOM	31889	C8	ADE	591	122.557	84.704	2.646	1.00	45.56	A16S	ATOM	31942	O5'	ADE	594	130.828	92.913	8.875	1.00	55.34	A16S
ATOM	31890	C2'	ADE	591	121.705	84.279	6.061	1.00	47.81	A16S	ATOM	31943	C5'	ADE	594	132.110	93.185	8.278	1.00	55.34	A16S
ATOM	31891	O2'	ADE	591	121.192	83.461	7.094	1.00	47.81	A16S	ATOM	31944	C4'	ADE	594	131.981	94.235	7.200	1.00	55.34	A16S
ATOM	31892	C3'	ADE	591	120.985	85.610	5.946	1.00	47.81	A16S	ATOM	31945	O4'	ADE	594	131.158	93.718	6.124	1.00	55.34	A16S
ATOM	31893	O3'	ADE	591	120.680	86.116	7.221	1.00	47.81	A16S	ATOM	31946	C1'	ADE	594	130.315	94.739	5.626	1.00	55.34	A16S
ATOM	31894	P	ADE	592	121.534	87.346	7.806	1.00	45.14	A16S	ATOM	31947	N9	ADE	594	128.935	94.357	5.927	1.00	63.53	A16S
ATOM	31895	O1P	ADE	592	121.065	87.596	9.190	1.00	54.54	A16S	ATOM	31948	C4	ADE	594	127.803	94.861	5.342	1.00	63.53	A16S
ATOM	31896	O2P	ADE	592	121.464	88.436	6.793	1.00	54.54	A16S	ATOM	31949	N3	ADE	594	127.731	95.773	4.362	1.00	63.53	A16S
ATOM	31897	O5'	ADE	592	123.024	86.795	7.919	1.00	45.14	A16S	ATOM	31950	C2	ADE	594	126.464	96.047	4.067	1.00	63.53	A16S
ATOM	31898	C5'	ADE	592	123.328	85.742	8.831	1.00	45.14	A16S	ATOM	31951	N1	ADE	594	125.347	95.552	4.602	1.00	63.53	A16S
ATOM	31899	C4'	ADE	592	124.744	85.277	8.646	1.00	45.14	A16S	ATOM	31952	C6	ADE	594	125.457	94.632	5.586	1.00	63.53	A16S
ATOM	31900	O4'	ADE	592	124.914	84.695	7.330	1.00	45.14	A16S	ATOM	31953	N6	ADE	594	124.343	94.135	6.130	1.00	63.53	A16S
ATOM	31901	C1'	ADE	592	126.225	84.960	6.858	1.00	45.14	A16S	ATOM	31954	C5	ADE	594	126.746	94.252	5.984	1.00	63.53	A16S
ATOM	31902	N9	ADE	592	126.121	85.769	5.645	1.00	54.54	A16S	ATOM	31955	N7	ADE	594	127.200	93.355	6.939	1.00	63.53	A16S
ATOM	31903	C4	ADE	592	127.159	86.155	4.830	1.00	54.54	A16S	ATOM	31956	C8	ADE	594	128.500	93.450	6.864	1.00	63.53	A16S
ATOM	31904	N3	ADE	592	128.457	85.836	4.953	1.00	54.54	A16S	ATOM	31957	C2'	ADE	594	130.705	96.039	6.330	1.00	55.34	A16S
ATOM	31905	C2	ADE	592	129.174	86.411	3.992	1.00	54.54	A16S	ATOM	31958	O2'	ADE	594	131.643	96.742	5.545	1.00	55.34	A16S
ATOM	31906	N1	ADE	592	128.777	87.212	3.002	1.00	54.54	A16S	ATOM	31959	C3'	ADE	594	131.290	95.513	7.633	1.00	55.34	A16S
ATOM	31907	C6	ADE	592	127.470	87.523	2.912	1.00	54.54	A16S	ATOM	31960	O3'	ADE	594	132.192	96.408	8.267	1.00	55.34	A16S
ATOM	31908	N6	ADE	592	127.073	88.350	1.939	1.00	54.54	A16S	ATOM	31961	P	CYT	595	131.780	97.071	9.676	1.00	61.82	A16S
ATOM	31909	C5	ADE	592	126.598	86.964	3.864	1.00	54.54	A16S	ATOM	31962	O1P	CYT	595	132.982	97.740	10.247	1.00	70.58	A16S
ATOM	31910	N7	ADE	592	125.225	87.066	4.047	1.00	54.54	A16S	ATOM	31963	O2P	CYT	595	131.058	96.045	10.477	1.00	70.58	A16S
ATOM	31911	C8	ADE	592	124.995	86.334	5.107	1.00	54.54	A16S	ATOM	31964	O5'	CYT	595	130.729	98.186	9.252	1.00	61.82	A16S
ATOM	31912	C2'	ADE	592	126.958	85.724	7.962	1.00	45.14	A16S	ATOM	31965	C5'	CYT	595	131.111	99.214	8.343	1.00	61.82	A16S
ATOM	31913	O2'	ADE	592	127.700	84.825	8.760	1.00	45.14	A16S	ATOM	31966	C4'	CYT	595	129.925	100.065	7.980	1.00	61.82	A16S
ATOM	31914	C3'	ADE	592	125.800	86.357	8.715	1.00	45.14	A16S	ATOM	31967	O4'	CYT	595	129.028	99.346	7.103	1.00	61.82	A16S
ATOM	31915	O3'	ADE	592	126.130	86.671	10.048	1.00	45.14	A16S	ATOM	31968	C1'	CYT	595	127.704	99.799	7.314	1.00	61.82	A16S
ATOM	31916	P	GUA	593	126.286	88.210	10.479	1.00	60.12	A16S	ATOM	31969	N1	CYT	595	126.860	98.642	7.669	1.00	70.58	A16S
ATOM	31917	O1P	GUA	593	126.609	88.221	11.934	1.00	66.66	A16S	ATOM	31970	C6	CYT	595	127.393	97.558	8.310	1.00	70.58	A16S
ATOM	31918	O2P	GUA	593	125.113	88.975	9.972	1.00	66.66	A16S	ATOM	31971	C2	CYT	595	125.492	98.676	7.356	1.00	70.58	A16S
ATOM	31919	O5'	GUA	593	127.555	88.702	9.651	1.00	60.12	A16S	ATOM	31972	O2	CYT	595	125.033	99.656	6.752	1.00	70.58	A16S
ATOM	31920	C5'	GUA	593	128.803	87.981	9.692	1.00	60.12	A16S	ATOM	31973	N3	CYT	595	124.708	97.639	7.721	1.00	70.58	A16S
ATOM	31921	C4'	GUA	593	129.755	88.515	8.643	1.00	60.12	A16S	ATOM	31974	C4	CYT	595	125.238	96.598	8.369	1.00	70.58	A16S
ATOM	31922	O4'	GUA	593	129.270	88.192	7.313	1.00	60.12	A16S	ATOM	31975	N4	CYT	595	124.424	95.608	8.734	1.00	70.58	A16S
ATOM	31923	C1'	GUA	593	129.646	89.214	6.408	1.00	60.12	A16S	ATOM	31976	C5	CYT	595	126.626	96.527	8.678	1.00	70.58	A16S
ATOM	31924	N9	GUA	593	128.435	89.761	5.804	1.00	66.66	A16S	ATOM	31977	C2'	CYT	595	127.748	100.870	8.409	1.00	61.82	A16S

ATOM	31978	O2'	CYT	595	127.804	102.144	7.806	1.00	61.82	A16S	ATOM	32031	N1	CYT	598	120.077	99.051	19.057	1.00	82.89	A16S
ATOM	31979	C3'	CYT	595	129.049	100.535	9.122	1.00	61.82	A16S	ATOM	32032	C6	CYT	598	121.175	99.846	18.871	1.00	82.89	A16S
ATOM	31980	O3'	CYT	595	129.616	101.662	9.769	1.00	61.82	A16S	ATOM	32033	C2	CYT	598	120.159	97.669	18.805	1.00	82.89	A16S
ATOM	31981	P	CYT	596	129.482	101.812	11.361	1.00	56.20	A16S	ATOM	32034	O2	CYT	598	119.146	96.962	18.951	1.00	82.89	A16S
ATOM	31982	O1P	CYT	596	130.396	102.914	11.784	1.00	66.69	A16S	ATOM	32035	N3	CYT	598	121.343	97.141	18.409	1.00	82.89	A16S
ATOM	31983	O2P	CYT	596	129.633	100.465	11.971	1.00	66.69	A16S	ATOM	32036	C4	CYT	598	122.408	97.928	18.250	1.00	82.89	A16S
ATOM	31984	O5'	CYT	596	127.967	102.280	11.543	1.00	56.20	A16S	ATOM	32037	N4	CYT	598	123.555	97.362	17.873	1.00	82.89	A16S
ATOM	31985	C5'	CYT	596	127.520	103.537	11.008	1.00	56.20	A16S	ATOM	32038	C5	CYT	598	122.346	99.331	18.474	1.00	82.89	A16S
ATOM	31986	C4'	CYT	596	126.039	103.728	11.248	1.00	56.20	A16S	ATOM	32039	C2'	CYT	598	118.733	99.516	21.075	1.00	62.93	A16S
ATOM	31987	O4'	CYT	596	125.265	102.919	10.327	1.00	56.20	A16S	ATOM	32040	O2'	CYT	598	117.383	99.452	21.491	1.00	62.93	A16S
ATOM	31988	C1'	CYT	596	124.056	102.512	10.954	1.00	56.20	A16S	ATOM	32041	C3'	CYT	598	119.369	100.826	21.494	1.00	62.93	A16S
ATOM	31989	N1	CYT	596	124.047	101.036	11.065	1.00	66.69	A16S	ATOM	32042	O3'	CYT	598	119.007	101.146	22.822	1.00	62.93	A16S
ATOM	31990	C6	CYT	596	125.212	100.343	11.244	1.00	66.69	A16S	ATOM	32043	P	GUA	599	119.898	100.576	24.038	1.00	73.91	A16S
ATOM	31991	C2	CYT	596	122.822	100.351	11.010	1.00	66.69	A16S	ATOM	32044	O1P	GUA	599	119.312	101.111	25.297	1.00	89.58	A16S
ATOM	31992	O2	CYT	596	121.775	100.993	10.827	1.00	66.69	A16S	ATOM	32045	O2P	GUA	599	121.333	100.827	23.735	1.00	89.58	A16S
ATOM	31993	N3	CYT	596	122.814	99.009	11.160	1.00	66.69	A16S	ATOM	32046	O5'	GUA	599	119.673	98.992	23.995	1.00	73.91	A16S
ATOM	31994	C4	CYT	596	123.959	98.351	11.352	1.00	66.69	A16S	ATOM	32047	C5'	GUA	599	118.374	98.415	24.256	1.00	73.91	A16S
ATOM	31995	N4	CYT	596	123.905	97.028	11.511	1.00	66.69	A16S	ATOM	32048	C4'	GUA	599	118.389	96.912	24.042	1.00	73.91	A16S
ATOM	31996	C5	CYT	596	125.212	99.017	11.394	1.00	66.69	A16S	ATOM	32049	O4'	GUA	599	118.786	96.615	22.676	1.00	73.91	A16S
ATOM	31997	C2'	CYT	596	124.018	103.167	12.337	1.00	56.20	A16S	ATOM	32050	C1'	GUA	599	119.507	95.389	22.641	1.00	73.91	A16S
ATOM	31998	O2'	CYT	596	123.348	104.404	12.255	1.00	56.20	A16S	ATOM	32051	N9	GUA	599	120.875	95.653	22.195	1.00	89.58	A16S
ATOM	31999	C3'	CYT	596	125.494	103.374	12.625	1.00	56.20	A16S	ATOM	32052	C4	GUA	599	121.799	94.711	21.797	1.00	89.58	A16S
ATOM	32000	O3'	CYT	596	125.677	104.412	13.577	1.00	56.20	A16S	ATOM	32053	N3	GUA	599	121.591	93.380	21.715	1.00	89.58	A16S
ATOM	32001	P	ADE	597	125.717	104.060	15.146	1.00	76.54	A16S	ATOM	32054	C2	GUA	599	122.678	92.736	21.341	1.00	89.58	A16S
ATOM	32002	O1P	ADE	597	126.078	105.322	15.847	1.00	71.28	A16S	ATOM	32055	N2	GUA	599	122.657	91.406	21.233	1.00	89.58	A16S
ATOM	32003	O2P	ADE	597	126.546	102.840	15.362	1.00	71.28	A16S	ATOM	32056	N1	GUA	599	123.870	93.346	21.053	1.00	89.58	A16S
ATOM	32004	O5'	ADE	597	124.196	103.720	15.482	1.00	76.54	A16S	ATOM	32057	C6	GUA	599	124.107	94.714	21.128	1.00	89.58	A16S
ATOM	32005	C5'	ADE	597	123.168	104.682	15.212	1.00	76.54	A16S	ATOM	32058	O6	GUA	599	125.229	95.166	20.855	1.00	89.58	A16S
ATOM	32006	C4'	ADE	597	121.800	104.060	15.350	1.00	76.54	A16S	ATOM	32059	C5	GUA	599	122.952	95.418	21.537	1.00	89.58	A16S
ATOM	32007	O4'	ADE	597	121.568	103.093	14.294	1.00	76.54	A16S	ATOM	32060	N7	GUA	599	122.756	96.776	21.745	1.00	89.58	A16S
ATOM	32008	C1'	ADE	597	120.743	102.048	14.779	1.00	76.54	A16S	ATOM	32061	C8	GUA	599	121.512	96.870	22.124	1.00	89.58	A16S
ATOM	32009	N9	ADE	597	121.509	100.800	14.758	1.00	71.28	A16S	ATOM	32062	C2'	GUA	599	119.517	94.822	24.060	1.00	73.91	A16S
ATOM	32010	C4	ADE	597	120.983	99.543	14.929	1.00	71.28	A16S	ATOM	32063	O2'	GUA	599	118.467	93.890	24.204	1.00	73.91	A16S
ATOM	32011	N3	ADE	597	119.693	99.219	15.111	1.00	71.28	A16S	ATOM	32064	C3'	GUA	599	119.338	96.083	24.894	1.00	73.91	A16S
ATOM	32012	C2	ADE	597	119.558	97.911	15.267	1.00	71.28	A16S	ATOM	32065	O3'	GUA	599	118.815	95.773	26.172	1.00	73.91	A16S
ATOM	32013	N1	ADE	597	120.488	96.961	15.261	1.00	71.28	A16S	ATOM	32066	P	GUA	600	119.822	95.406	27.370	1.00	60.58	A16S
ATOM	32014	C6	ADE	597	121.775	97.318	15.079	1.00	71.28	A16S	ATOM	32067	O1P	GUA	600	119.030	95.392	28.624	1.00	67.06	A16S
ATOM	32015	N6	ADE	597	122.705	96.366	15.083	1.00	71.28	A16S	ATOM	32068	O2P	GUA	600	121.002	96.305	27.257	1.00	67.06	A16S
ATOM	32016	C5	ADE	597	122.056	98.678	14.900	1.00	71.28	A16S	ATOM	32069	O5'	GUA	600	120.279	93.906	27.061	1.00	60.58	A16S
ATOM	32017	N7	ADE	597	123.242	99.370	14.696	1.00	71.28	A16S	ATOM	32070	C5'	GUA	600	119.326	92.812	27.078	1.00	60.58	A16S
ATOM	32018	C8	ADE	597	122.863	100.621	14.610	1.00	71.28	A16S	ATOM	32071	C4'	GUA	600	120.018	91.478	26.856	1.00	60.58	A16S
ATOM	32019	C2'	ADE	597	120.368	102.399	16.219	1.00	76.54	A16S	ATOM	32072	O4'	GUA	600	120.515	91.364	25.496	1.00	60.58	A16S
ATOM	32020	O2'	ADE	597	119.124	103.072	16.241	1.00	76.54	A16S	ATOM	32073	C1'	GUA	600	121.715	90.601	25.482	1.00	60.58	A16S
ATOM	32021	C3'	ADE	597	121.531	103.289	16.626	1.00	76.54	A16S	ATOM	32074	N9	GUA	600	122.797	91.428	24.948	1.00	67.06	A16S
ATOM	32022	O3'	ADE	597	121.217	104.132	17.715	1.00	76.54	A16S	ATOM	32075	C4	GUA	600	124.031	90.998	24.503	1.00	67.06	A16S
ATOM	32023	P	CYT	598	121.897	103.853	19.140	1.00	62.93	A16S	ATOM	32076	N3	GUA	600	124.467	89.721	24.468	1.00	67.06	A16S
ATOM	32024	O1P	CYT	598	121.729	105.094	19.935	1.00	82.89	A16S	ATOM	32077	C2	GUA	600	125.697	89.633	23.987	1.00	67.06	A16S
ATOM	32025	O2P	CYT	598	123.265	103.301	18.923	1.00	82.89	A16S	ATOM	32078	N2	GUA	600	126.288	88.439	23.868	1.00	67.06	A16S
ATOM	32026	O5'	CYT	598	120.968	102.732	19.788	1.00	62.93	A16S	ATOM	32079	N1	GUA	600	126.440	90.707	23.584	1.00	67.06	A16S
ATOM	32027	C5'	CYT	598	119.619	103.048	20.194	1.00	62.93	A16S	ATOM	32080	C6	GUA	600	126.018	92.028	23.616	1.00	67.06	A16S
ATOM	32028	C4'	CYT	598	118.821	101.789	20.452	1.00	62.93	A16S	ATOM	32081	O6	GUA	600	126.777	92.927	23.234	1.00	67.06	A16S
ATOM	32029	O4'	CYT	598	118.763	101.002	19.231	1.00	62.93	A16S	ATOM	32082	C5	GUA	600	124.698	92.141	24.118	1.00	67.06	A16S
ATOM	32030	C1'	CYT	598	118.802	99.620	19.552	1.00	62.93	A16S	ATOM	32083	N7	GUA	600	123.906	93.265	24.308	1.00	67.06	A16S

ATOM	32084	C8	GUA	600	122.792	92.795	24.799	1.00	67.06	A16S	ATOM	32137	N1	CYT	603	132.990	94.233	29.648	1.00	46.00	A16S
ATOM	32085	C2'	GUA	600	121.981	90.144	26.915	1.00	60.58	A16S	ATOM	32138	C6	CYT	603	132.270	93.088	29.848	1.00	46.00	A16S
ATOM	32086	O2'	GUA	600	121.460	88.838	27.080	1.00	60.58	A16S	ATOM	32139	C2	CYT	603	134.388	94.201	29.684	1.00	46.00	A16S
ATOM	32087	C3'	GUA	600	121.225	91.192	27.723	1.00	60.58	A16S	ATOM	32140	O2	CYT	603	135.023	95.242	29.459	1.00	46.00	A16S
ATOM	32088	O3'	GUA	600	120.832	90.697	28.985	1.00	60.58	A16S	ATOM	32141	N3	CYT	603	135.014	93.041	29.962	1.00	46.00	A16S
ATOM	32089	P	CYT	601	121.686	91.088	30.287	1.00	66.06	A16S	ATOM	32142	C4	CYT	603	134.305	91.937	30.186	1.00	46.00	A16S
ATOM	32090	O1P	CYT	601	121.000	90.432	31.435	1.00	69.35	A16S	ATOM	32143	N4	CYT	603	134.973	90.827	30.478	1.00	46.00	A16S
ATOM	32091	O2P	CYT	601	121.877	92.562	30.283	1.00	69.35	A16S	ATOM	32144	C5	CYT	603	132.882	91.928	30.123	1.00	46.00	A16S
ATOM	32092	O5'	CYT	601	123.112	90.394	30.077	1.00	66.06	A16S	ATOM	32145	C2'	CYT	603	132.004	95.872	27.965	1.00	53.98	A16S
ATOM	32093	C5'	CYT	601	123.260	88.991	30.322	1.00	66.06	A16S	ATOM	32146	O2'	CYT	603	132.337	97.233	27.769	1.00	53.98	A16S
ATOM	32094	C4'	CYT	601	124.661	88.496	30.013	1.00	66.06	A16S	ATOM	32147	C3'	CYT	603	130.500	95.653	27.918	1.00	53.98	A16S
ATOM	32095	O4'	CYT	601	125.015	88.708	28.626	1.00	66.06	A16S	ATOM	32148	O3'	CYT	603	129.897	96.480	26.947	1.00	53.98	A16S
ATOM	32096	C1'	CYT	601	126.384	88.413	28.490	1.00	66.06	A16S	ATOM	32149	P	ADE	604	129.456	95.855	25.542	1.00	50.64	A16S
ATOM	32097	N1	CYT	601	127.052	89.347	27.580	1.00	69.35	A16S	ATOM	32150	O1P	ADE	604	128.914	96.960	24.721	1.00	75.62	A16S
ATOM	32098	C6	CYT	601	126.904	90.699	27.694	1.00	69.35	A16S	ATOM	32151	O2P	ADE	604	128.607	94.679	25.812	1.00	75.62	A16S
ATOM	32099	C2	CYT	601	127.892	88.812	26.609	1.00	69.35	A16S	ATOM	32152	O5'	ADE	604	130.841	95.393	24.904	1.00	50.64	A16S
ATOM	32100	O2	CYT	601	127.961	87.580	26.491	1.00	69.35	A16S	ATOM	32153	C5'	ADE	604	131.867	96.369	24.623	1.00	50.64	A16S
ATOM	32101	N3	CYT	601	128.603	89.640	25.820	1.00	69.35	A16S	ATOM	32154	C4'	ADE	604	133.204	95.701	24.406	1.00	50.64	A16S
ATOM	32102	C4	CYT	601	128.485	90.954	25.960	1.00	69.35	A16S	ATOM	32155	O4'	ADE	604	133.629	95.039	25.622	1.00	50.64	A16S
ATOM	32103	N4	CYT	601	129.224	91.723	25.170	1.00	69.35	A16S	ATOM	32156	C1'	ADE	604	134.314	93.841	25.303	1.00	50.64	A16S
ATOM	32104	C5	CYT	601	127.603	91.532	26.915	1.00	69.35	A16S	ATOM	32157	N9	ADE	604	133.605	92.720	25.933	1.00	75.62	A16S
ATOM	32105	C2'	CYT	601	127.012	88.430	29.881	1.00	66.06	A16S	ATOM	32158	C4	ADE	604	134.134	91.494	26.267	1.00	75.62	A16S
ATOM	32106	O2'	CYT	601	127.312	87.085	30.192	1.00	66.06	A16S	ATOM	32159	N3	ADE	604	135.396	91.073	26.089	1.00	75.62	A16S
ATOM	32107	C3'	CYT	601	125.893	89.003	30.752	1.00	66.06	A16S	ATOM	32160	C2	ADE	604	135.546	89.831	26.540	1.00	75.62	A16S
ATOM	32108	O3'	CYT	601	125.998	88.442	32.066	1.00	66.06	A16S	ATOM	32161	N1	ADE	604	134.648	89.023	27.112	1.00	75.62	A16S
ATOM	32109	P	URI	602	127.346	88.651	32.948	1.00	59.94	A16S	ATOM	32162	C6	ADE	604	133.391	89.477	27.282	1.00	75.62	A16S
ATOM	32110	O1P	URI	602	128.532	88.097	32.236	1.00	57.15	A16S	ATOM	32163	N6	ADE	604	132.501	88.673	27.860	1.00	75.62	A16S
ATOM	32111	O2P	URI	602	127.072	88.211	34.348	1.00	57.15	A16S	ATOM	32164	C5	ADE	604	133.099	90.778	26.838	1.00	75.62	A16S
ATOM	32112	O5'	URI	602	127.567	90.225	32.974	1.00	59.94	A16S	ATOM	32165	N7	ADE	604	131.936	91.531	26.861	1.00	75.62	A16S
ATOM	32113	C5'	URI	602	126.544	91.116	33.422	1.00	59.94	A16S	ATOM	32166	C8	ADE	604	132.286	92.669	26.315	1.00	75.62	A16S
ATOM	32114	C4'	URI	602	127.152	92.450	33.740	1.00	59.94	A16S	ATOM	32167	C2'	ADE	604	134.403	93.753	23.776	1.00	50.64	A16S
ATOM	32115	O4'	URI	602	128.031	92.321	34.882	1.00	59.94	A16S	ATOM	32168	O2'	ADE	604	135.644	94.274	23.345	1.00	50.64	A16S
ATOM	32116	C1'	URI	602	129.123	93.201	34.737	1.00	59.94	A16S	ATOM	32169	C3'	ADE	604	133.232	94.623	23.342	1.00	50.64	A16S
ATOM	32117	N1	URI	602	130.368	92.435	34.859	1.00	57.15	A16S	ATOM	32170	O3'	ADE	604	133.420	95.177	22.050	1.00	50.64	A16S
ATOM	32118	C6	URI	602	130.536	91.228	34.225	1.00	57.15	A16S	ATOM	32171	P	ADE	605	132.666	94.519	20.805	1.00	54.42	A16S
ATOM	32119	C2	URI	602	131.385	92.983	35.621	1.00	57.15	A16S	ATOM	32172	O1P	ADE	605	132.901	95.376	19.622	1.00	59.68	A16S
ATOM	32120	O2	URI	602	131.276	94.041	36.224	1.00	57.15	A16S	ATOM	32173	O2P	ADE	605	131.274	94.234	21.231	1.00	59.68	A16S
ATOM	32121	N3	URI	602	132.542	92.251	35.653	1.00	57.15	A16S	ATOM	32174	O5'	ADE	605	133.445	93.139	20.610	1.00	54.42	A16S
ATOM	32122	C4	URI	602	132.784	91.059	35.026	1.00	57.15	A16S	ATOM	32175	C5'	ADE	605	134.844	93.135	20.232	1.00	54.42	A16S
ATOM	32123	O4	URI	602	133.904	90.558	35.105	1.00	57.15	A16S	ATOM	32176	C4'	ADE	605	135.485	91.775	20.468	1.00	54.42	A16S
ATOM	32124	C5	URI	602	131.679	90.541	34.279	1.00	57.15	A16S	ATOM	32177	O4'	ADE	605	135.593	91.498	21.887	1.00	54.42	A16S
ATOM	32125	C2'	URI	602	128.987	93.920	33.393	1.00	59.94	A16S	ATOM	32178	C1'	ADE	605	135.428	90.109	22.116	1.00	54.42	A16S
ATOM	32126	O2'	URI	602	128.468	95.216	33.599	1.00	59.94	A16S	ATOM	32179	N9	ADE	605	134.161	89.913	22.823	1.00	59.68	A16S
ATOM	32127	C3'	URI	602	128.037	93.000	32.641	1.00	59.94	A16S	ATOM	32180	C4	ADE	605	133.737	88.756	23.426	1.00	59.68	A16S
ATOM	32128	O3'	URI	602	127.259	93.668	31.664	1.00	59.94	A16S	ATOM	32181	N3	ADE	605	134.413	87.603	23.540	1.00	59.68	A16S
ATOM	32129	P	CYT	603	127.472	93.317	30.113	1.00	53.98	A16S	ATOM	32182	C2	ADE	605	133.675	86.693	24.162	1.00	59.68	A16S
ATOM	32130	O1P	CYT	603	126.323	93.842	29.293	1.00	46.00	A16S	ATOM	32183	N1	ADE	605	132.429	86.795	24.636	1.00	59.68	A16S
ATOM	32131	O2P	CYT	603	127.829	91.878	30.044	1.00	46.00	A16S	ATOM	32184	C6	ADE	605	131.781	87.968	24.493	1.00	59.68	A16S
ATOM	32132	O5'	CYT	603	128.777	94.134	29.737	1.00	53.98	A16S	ATOM	32185	N6	ADE	605	130.535	88.070	24.941	1.00	59.68	A16S
ATOM	32133	C5'	CYT	603	128.768	95.543	29.794	1.00	53.98	A16S	ATOM	32186	C5	ADE	605	132.457	89.013	23.871	1.00	59.68	A16S
ATOM	32134	C4'	CYT	603	130.074	96.074	29.311	1.00	53.98	A16S	ATOM	32187	N7	ADE	605	132.090	90.316	23.593	1.00	59.68	A16S
ATOM	32135	O4'	CYT	603	131.127	95.575	30.160	1.00	53.98	A16S	ATOM	32188	C8	ADE	605	133.135	90.810	22.982	1.00	59.68	A16S
ATOM	32136	C1'	CYT	603	132.327	95.527	29.418	1.00	53.98	A16S	ATOM	32189	C2'	ADE	605	135.360	89.435	20.747	1.00	54.42	A16S

ATOM	32190	O2'	ADE	605	136.664	89.084	20.340	1.00	54.42	A16S	ATOM	32243	N3	GUA	608	119.933	92.104	18.950	1.00	71.29	A16S
ATOM	32191	C3'	ADE	605	134.793	90.552	19.891	1.00	54.42	A16S	ATOM	32244	C2	GUA	608	120.061	93.417	18.897	1.00	71.29	A16S
ATOM	32192	O3'	ADE	605	135.093	90.351	18.526	1.00	54.42	A16S	ATOM	32245	N2	GUA	608	119.021	94.199	19.200	1.00	71.29	A16S
ATOM	32193	P	CYT	606	133.894	90.245	17.477	1.00	53.74	A16S	ATOM	32246	N1	GUA	608	121.213	94.059	18.538	1.00	71.29	A16S
ATOM	32194	O1P	CYT	606	134.442	89.743	16.204	1.00	54.21	A16S	ATOM	32247	C6	GUA	608	122.394	93.434	18.165	1.00	71.29	A16S
ATOM	32195	O2P	CYT	606	133.175	91.539	17.497	1.00	54.21	A16S	ATOM	32248	O6	GUA	608	123.376	94.114	17.863	1.00	71.29	A16S
ATOM	32196	O5'	CYT	606	132.941	89.128	18.100	1.00	53.74	A16S	ATOM	32249	C5	GUA	608	122.271	92.024	18.200	1.00	71.29	A16S
ATOM	32197	C5'	CYT	606	133.363	87.745	18.177	1.00	53.74	A16S	ATOM	32250	N7	GUA	608	123.197	91.032	17.900	1.00	71.29	A16S
ATOM	32198	C4'	CYT	606	132.305	86.889	18.851	1.00	53.74	A16S	ATOM	32251	C8	GUA	608	122.559	89.914	18.118	1.00	71.29	A16S
ATOM	32199	O4'	CYT	606	132.198	87.254	20.251	1.00	53.74	A16S	ATOM	32252	C2'	GUA	608	119.145	88.938	17.873	1.00	45.44	A16S
ATOM	32200	C1'	CYT	606	130.839	87.217	20.654	1.00	53.74	A16S	ATOM	32253	O2'	GUA	608	117.921	88.694	18.544	1.00	45.44	A16S
ATOM	32201	N1	CYT	606	130.425	88.594	20.972	1.00	54.21	A16S	ATOM	32254	C3'	GUA	608	119.610	87.759	17.020	1.00	45.44	A16S
ATOM	32202	C6	CYT	606	131.196	89.658	20.595	1.00	54.21	A16S	ATOM	32255	O3'	GUA	608	118.520	87.070	16.399	1.00	45.44	A16S
ATOM	32203	C2	CYT	606	129.229	88.801	21.662	1.00	54.21	A16S	ATOM	32256	P	URI	609	117.987	87.558	14.966	1.00	64.04	A16S
ATOM	32204	O2	CYT	606	128.534	87.826	21.975	1.00	54.21	A16S	ATOM	32257	O1P	URI	609	116.924	86.642	14.505	1.00	64.95	A16S
ATOM	32205	N3	CYT	606	128.857	90.059	21.963	1.00	54.21	A16S	ATOM	32258	O2P	URI	609	119.170	87.788	14.106	1.00	64.95	A16S
ATOM	32206	C4	CYT	606	129.620	91.088	21.593	1.00	54.21	A16S	ATOM	32259	O5'	URI	609	117.318	88.964	15.293	1.00	64.04	A16S
ATOM	32207	N4	CYT	606	129.213	92.314	21.916	1.00	54.21	A16S	ATOM	32260	C5'	URI	609	116.157	89.050	16.142	1.00	64.04	A16S
ATOM	32208	C5	CYT	606	130.832	90.906	20.878	1.00	54.21	A16S	ATOM	32261	C4'	URI	609	115.677	90.482	16.234	1.00	64.04	A16S
ATOM	32209	C2'	CYT	606	130.028	86.650	19.492	1.00	53.74	A16S	ATOM	32262	O4'	URI	609	116.608	91.264	17.022	1.00	64.04	A16S
ATOM	32210	O2'	CYT	606	129.887	85.258	19.655	1.00	53.74	A16S	ATOM	32263	C1'	URI	609	116.712	92.571	16.484	1.00	64.04	A16S
ATOM	32211	C3'	CYT	606	130.896	87.027	18.301	1.00	53.74	A16S	ATOM	32264	N1	URI	609	118.114	92.807	16.100	1.00	64.95	A16S
ATOM	32212	O3'	CYT	606	130.663	86.185	17.188	1.00	53.74	A16S	ATOM	32265	C6	URI	609	118.990	91.764	15.904	1.00	64.95	A16S
ATOM	32213	P	CYT	607	129.526	86.584	16.126	1.00	46.52	A16S	ATOM	32266	C2	URI	609	118.530	94.118	15.935	1.00	64.95	A16S
ATOM	32214	O1P	CYT	607	129.451	85.527	15.072	1.00	66.18	A16S	ATOM	32267	O2	URI	609	117.790	95.076	16.087	1.00	64.95	A16S
ATOM	32215	O2P	CYT	607	129.765	87.996	15.727	1.00	66.18	A16S	ATOM	32268	N3	URI	609	119.845	94.268	15.574	1.00	64.95	A16S
ATOM	32216	O5'	CYT	607	128.189	86.552	16.990	1.00	46.52	A16S	ATOM	32269	C4	URI	609	120.764	93.272	15.356	1.00	64.95	A16S
ATOM	32217	C5'	CYT	607	127.713	85.327	17.567	1.00	46.52	A16S	ATOM	32270	O4	URI	609	121.897	93.569	14.987	1.00	64.95	A16S
ATOM	32218	C4'	CYT	607	126.442	85.574	18.337	1.00	46.52	A16S	ATOM	32271	C5	URI	609	120.264	91.947	15.546	1.00	64.95	A16S
ATOM	32219	O4'	CYT	607	126.741	86.380	19.498	1.00	46.52	A16S	ATOM	32272	C2'	URI	609	115.738	92.674	15.306	1.00	64.04	A16S
ATOM	32220	C1'	CYT	607	125.651	87.243	19.763	1.00	46.52	A16S	ATOM	32273	O2'	URI	609	114.525	93.255	15.730	1.00	64.04	A16S
ATOM	32221	N1	CYT	607	126.119	88.632	19.711	1.00	66.18	A16S	ATOM	32274	C3'	URI	609	115.577	91.215	14.909	1.00	64.04	A16S
ATOM	32222	C6	CYT	607	127.202	88.978	18.956	1.00	66.18	A16S	ATOM	32275	O3'	URI	609	114.341	90.971	14.267	1.00	64.04	A16S
ATOM	32223	C2	CYT	607	125.428	89.602	20.443	1.00	66.18	A16S	ATOM	32276	P	GUA	610	114.239	91.136	12.675	1.00	65.64	A16S
ATOM	32224	O2	CYT	607	124.448	89.260	21.129	1.00	66.18	A16S	ATOM	32277	O1P	GUA	610	112.876	90.688	12.255	1.00	72.08	A16S
ATOM	32225	N3	CYT	607	125.842	90.884	20.385	1.00	66.18	A16S	ATOM	32278	O2P	GUA	610	115.438	90.504	12.073	1.00	72.08	A16S
ATOM	32226	C4	CYT	607	126.900	91.210	19.638	1.00	66.18	A16S	ATOM	32279	O5'	GUA	610	114.349	92.708	12.454	1.00	65.64	A16S
ATOM	32227	N4	CYT	607	127.275	92.491	19.606	1.00	66.18	A16S	ATOM	32280	C5'	GUA	610	113.309	93.577	12.915	1.00	65.64	A16S
ATOM	32228	C5	CYT	607	127.622	90.240	18.892	1.00	66.18	A16S	ATOM	32281	C4'	GUA	610	113.702	95.014	12.727	1.00	65.64	A16S
ATOM	32229	C2'	CYT	607	124.557	86.970	18.731	1.00	46.52	A16S	ATOM	32282	O4'	GUA	610	114.815	95.341	13.590	1.00	65.64	A16S
ATOM	32230	O2'	CYT	607	123.611	86.094	19.305	1.00	46.52	A16S	ATOM	32283	C1'	GUA	610	115.596	96.351	12.980	1.00	65.64	A16S
ATOM	32231	C3'	CYT	607	125.347	86.331	17.598	1.00	46.52	A16S	ATOM	32284	N9	GUA	610	116.966	95.875	12.821	1.00	72.08	A16S
ATOM	32232	O3'	CYT	607	124.532	85.451	16.838	1.00	46.52	A16S	ATOM	32285	C4	GUA	610	118.060	96.662	12.543	1.00	72.08	A16S
ATOM	32233	P	GUA	608	123.476	86.052	15.792	1.00	45.44	A16S	ATOM	32286	N3	GUA	610	118.058	98.008	12.411	1.00	72.08	A16S
ATOM	32234	O1P	GUA	608	122.781	84.945	15.085	1.00	71.29	A16S	ATOM	32287	C2	GUA	610	119.257	98.479	12.124	1.00	72.08	A16S
ATOM	32235	O2P	GUA	608	124.186	87.095	15.005	1.00	71.29	A16S	ATOM	32288	N2	GUA	610	119.439	99.796	11.960	1.00	72.08	A16S
ATOM	32236	O5'	GUA	608	122.379	86.756	16.704	1.00	45.44	A16S	ATOM	32289	N1	GUA	610	120.365	97.692	11.976	1.00	72.08	A16S
ATOM	32237	C5'	GUA	608	121.416	85.982	17.443	1.00	45.44	A16S	ATOM	32290	C6	GUA	610	120.388	96.307	12.103	1.00	72.08	A16S
ATOM	32238	C4'	GUA	608	120.352	86.886	18.025	1.00	45.44	A16S	ATOM	32291	O6	GUA	610	121.442	95.694	11.937	1.00	72.08	A16S
ATOM	32239	O4'	GUA	608	120.957	87.820	18.960	1.00	45.44	A16S	ATOM	32292	C5	GUA	610	119.113	95.790	12.417	1.00	72.08	A16S
ATOM	32240	C1'	GUA	608	120.287	89.068	18.888	1.00	45.44	A16S	ATOM	32293	N7	GUA	610	118.701	94.483	12.636	1.00	72.08	A16S
ATOM	32241	N9	GUA	608	121.264	90.103	18.544	1.00	71.29	A16S	ATOM	32294	C8	GUA	610	117.423	94.583	12.878	1.00	72.08	A16S
ATOM	32242	C4	GUA	608	121.071	91.471	18.591	1.00	71.29	A16S	ATOM	32295	C2'	GUA	610	114.973	96.671	11.623	1.00	65.64	A16S

ATOM	32296	O2'	GUA	610	114.142	97.809	11.731	1.00	65.64	A16S	ATOM	32349	C5'	GUA	613	120.251	103.141	0.248	1.00	110.58	A16S
ATOM	32297	C3'	GUA	610	114.179	95.408	11.345	1.00	65.64	A16S	ATOM	32350	C4'	GUA	613	121.688	102.708	0.038	1.00	110.58	A16S
ATOM	32298	O3'	GUA	610	113.103	95.676	10.469	1.00	65.64	A16S	ATOM	32351	O4'	GUA	613	122.121	101.853	1.132	1.00	110.58	A16S
ATOM	32299	P	GUA	611	113.351	95.634	8.882	1.00	79.29	A16S	ATOM	32352	C1'	GUA	613	123.043	100.888	0.650	1.00	110.58	A16S
ATOM	32300	O1P	GUA	611	112.026	95.686	8.195	1.00	79.91	A16S	ATOM	32353	N9	GUA	613	122.482	99.554	0.866	1.00	98.80	A16S
ATOM	32301	O2P	GUA	611	114.273	94.497	8.617	1.00	79.91	A16S	ATOM	32354	C4	GUA	613	123.185	98.371	0.918	1.00	98.80	A16S
ATOM	32302	O5'	GUA	611	114.137	96.986	8.576	1.00	79.29	A16S	ATOM	32355	N3	GUA	613	124.526	98.239	0.811	1.00	98.80	A16S
ATOM	32303	C5'	GUA	611	113.590	98.260	8.944	1.00	79.29	A16S	ATOM	32356	C2	GUA	613	124.906	96.975	0.886	1.00	98.80	A16S
ATOM	32304	C4'	GUA	611	114.627	99.337	8.767	1.00	79.29	A16S	ATOM	32357	N2	GUA	613	126.212	96.664	0.811	1.00	98.80	A16S
ATOM	32305	O4'	GUA	611	115.742	99.096	9.666	1.00	79.29	A16S	ATOM	32358	N1	GUA	613	124.037	95.924	1.045	1.00	98.80	A16S
ATOM	32306	C1'	GUA	611	116.949	99.546	9.062	1.00	79.29	A16S	ATOM	32359	C6	GUA	613	122.656	96.038	1.158	1.00	98.80	A16S
ATOM	32307	N9	GUA	611	117.905	98.437	8.992	1.00	79.91	A16S	ATOM	32360	O6	GUA	613	121.969	95.029	1.298	1.00	98.80	A16S
ATOM	32308	C4	GUA	611	119.256	98.536	8.710	1.00	79.91	A16S	ATOM	32361	C5	GUA	613	122.235	97.387	1.086	1.00	98.80	A16S
ATOM	32309	N3	GUA	611	119.944	99.679	8.484	1.00	79.91	A16S	ATOM	32362	N7	GUA	613	120.963	97.936	1.154	1.00	98.80	A16S
ATOM	32310	C2	GUA	611	121.219	99.446	8.202	1.00	79.91	A16S	ATOM	32363	C8	GUA	613	121.156	99.220	1.026	1.00	98.80	A16S
ATOM	32311	N2	GUA	611	122.043	100.468	7.946	1.00	79.91	A16S	ATOM	32364	C2'	GUA	613	123.265	101.168	-0.838	1.00	110.58	A16S
ATOM	32312	N1	GUA	611	121.779	98.196	8.149	1.00	79.91	A16S	ATOM	32365	O2'	GUA	613	124.423	101.963	-1.015	1.00	110.58	A16S
ATOM	32313	C6	GUA	611	121.099	97.007	8.376	1.00	79.91	A16S	ATOM	32366	C3'	GUA	613	121.978	101.894	-1.211	1.00	110.58	A16S
ATOM	32314	O6	GUA	611	121.702	95.934	8.285	1.00	79.91	A16S	ATOM	32367	O3'	GUA	613	122.109	102.693	-2.378	1.00	110.58	A16S
ATOM	32315	C5	GUA	611	119.721	97.238	8.687	1.00	79.91	A16S	ATOM	32368	P	GUA	614	121.586	102.118	-3.785	1.00	103.88	A16S
ATOM	32316	N7	GUA	611	118.699	96.344	8.980	1.00	79.91	A16S	ATOM	32369	O1P	GUA	614	120.219	101.580	-3.558	1.00	126.80	A16S
ATOM	32317	C8	GUA	611	117.646	97.097	9.157	1.00	79.91	A16S	ATOM	32370	O2P	GUA	614	121.797	103.158	-4.823	1.00	126.80	A16S
ATOM	32318	C2'	GUA	611	116.595	100.104	7.681	1.00	79.29	A16S	ATOM	32371	O5'	GUA	614	122.559	100.884	-4.078	1.00	103.88	A16S
ATOM	32319	O2'	GUA	611	116.482	101.512	7.752	1.00	79.29	A16S	ATOM	32372	C5'	GUA	614	124.001	101.058	-4.096	1.00	103.88	A16S
ATOM	32320	C3'	GUA	611	115.268	99.411	7.393	1.00	79.29	A16S	ATOM	32373	C4'	GUA	614	124.712	99.726	-4.281	1.00	103.88	A16S
ATOM	32321	O3'	GUA	611	114.468	100.124	6.464	1.00	79.29	A16S	ATOM	32374	O4'	GUA	614	124.601	98.914	-3.083	1.00	103.88	A16S
ATOM	32322	P	GUA	612	114.663	99.865	4.889	1.00	81.52	A16S	ATOM	32375	C1'	GUA	614	124.476	97.545	-3.438	1.00	103.88	A16S
ATOM	32323	O1P	GUA	612	113.598	100.610	4.173	1.00	96.16	A16S	ATOM	32376	N9	GUA	614	123.197	97.061	-2.915	1.00	126.80	A16S
ATOM	32324	O2P	GUA	612	114.821	98.408	4.650	1.00	96.16	A16S	ATOM	32377	C4	GUA	614	122.800	95.747	-2.760	1.00	126.80	A16S
ATOM	32325	O5'	GUA	612	116.053	100.568	4.571	1.00	81.52	A16S	ATOM	32378	N3	GUA	614	123.525	94.651	-3.073	1.00	126.80	A16S
ATOM	32326	C5'	GUA	612	116.215	101.981	4.777	1.00	81.52	A16S	ATOM	32379	C2	GUA	614	122.868	93.531	-2.808	1.00	126.80	A16S
ATOM	32327	C4'	GUA	612	117.640	102.393	4.508	1.00	81.52	A16S	ATOM	32380	N2	GUA	614	123.439	92.348	-3.055	1.00	126.80	A16S
ATOM	32328	O4'	GUA	612	118.513	101.804	5.508	1.00	81.52	A16S	ATOM	32381	N1	GUA	614	121.602	93.489	-2.281	1.00	126.80	A16S
ATOM	32329	C1'	GUA	612	119.754	101.454	4.914	1.00	81.52	A16S	ATOM	32382	C6	GUA	614	120.835	94.602	-1.951	1.00	126.80	A16S
ATOM	32330	N9	GUA	612	119.912	100.000	4.977	1.00	96.16	A16S	ATOM	32383	O6	GUA	614	119.698	94.453	-1.481	1.00	126.80	A16S
ATOM	32331	C4	GUA	612	121.069	99.289	4.738	1.00	96.16	A16S	ATOM	32384	C5	GUA	614	121.526	95.812	-2.227	1.00	126.80	A16S
ATOM	32332	N3	GUA	612	122.269	99.813	4.416	1.00	96.16	A16S	ATOM	32385	N7	GUA	614	121.130	97.131	-2.052	1.00	126.80	A16S
ATOM	32333	C2	GUA	612	123.182	98.876	4.225	1.00	96.16	A16S	ATOM	32386	C8	GUA	614	122.146	97.834	-2.473	1.00	126.80	A16S
ATOM	32334	N2	GUA	612	124.430	99.224	3.888	1.00	96.16	A16S	ATOM	32387	C2'	GUA	614	124.611	97.444	-4.962	1.00	103.88	A16S
ATOM	32335	N1	GUA	612	122.941	97.529	4.349	1.00	96.16	A16S	ATOM	32388	O2'	GUA	614	125.946	97.106	-5.296	1.00	103.88	A16S
ATOM	32336	C6	GUA	612	121.717	96.964	4.684	1.00	96.16	A16S	ATOM	32389	C3'	GUA	614	124.200	98.849	-5.410	1.00	103.88	A16S
ATOM	32337	O6	GUA	612	121.610	95.734	4.775	1.00	96.16	A16S	ATOM	32390	O3'	GUA	614	124.786	99.228	-6.651	1.00	103.88	A16S
ATOM	32338	C5	GUA	612	120.721	97.962	4.884	1.00	96.16	A16S	ATOM	32391	P	ADE	615	123.859	99.832	-7.824	1.00	67.36	A16S
ATOM	32339	N7	GUA	612	119.377	97.838	5.215	1.00	96.16	A16S	ATOM	32392	O1P	ADE	615	123.805	101.310	-7.659	1.00	92.41	A16S
ATOM	32340	C8	GUA	612	118.940	99.068	5.263	1.00	96.16	A16S	ATOM	32393	O2P	ADE	615	122.585	99.065	-7.893	1.00	92.41	A16S
ATOM	32341	C2'	GUA	612	119.715	101.945	3.466	1.00	81.52	A16S	ATOM	32394	O5'	ADE	615	124.693	99.515	-9.146	1.00	67.36	A16S
ATOM	32342	O2'	GUA	612	120.267	103.247	3.400	1.00	81.52	A16S	ATOM	32395	C5'	ADE	615	125.984	100.099	-9.366	1.00	67.36	A16S
ATOM	32343	C3'	GUA	612	118.220	101.935	3.181	1.00	81.52	A16S	ATOM	32396	C4'	ADE	615	126.969	99.043	-9.808	1.00	67.36	A16S
ATOM	32344	O3'	GUA	612	117.864	102.780	2.095	1.00	81.52	A16S	ATOM	32397	O4'	ADE	615	127.192	98.105	-8.723	1.00	67.36	A16S
ATOM	32345	P	GUA	613	117.821	102.176	0.600	1.00	110.58	A16S	ATOM	32398	C1'	ADE	615	127.375	96.799	-9.248	1.00	67.36	A16S
ATOM	32346	O1P	GUA	613	117.226	103.222	-0.275	1.00	98.80	A16S	ATOM	32399	N9	ADE	615	126.288	95.945	-8.754	1.00	92.41	A16S
ATOM	32347	O2P	GUA	613	117.213	100.818	0.639	1.00	98.80	A16S	ATOM	32400	C4	ADE	615	126.277	94.570	-8.723	1.00	92.41	A16S
ATOM	32348	O5'	GUA	613	119.357	102.009	0.206	1.00	110.58	A16S	ATOM	32401	N3	ADE	615	127.258	93.735	-9.107	1.00	92.41	A16S

ATOM	32402	C2	ADE	615	126.887	92.466	-8.946	1.00	92.41	A16S
ATOM	32403	N1	ADE	615	125.734	91.972	-8.480	1.00	92.41	A16S
ATOM	32404	C6	ADE	615	124.769	92.837	-8.099	1.00	92.41	A16S
ATOM	32405	N6	ADE	615	123.622	92.344	-7.630	1.00	92.41	A16S
ATOM	32406	C5	ADE	615	125.037	94.213	-8.222	1.00	92.41	A16S
ATOM	32407	N7	ADE	615	124.282	95.339	-7.931	1.00	92.41	A16S
ATOM	32408	C8	ADE	615	125.067	96.336	-8.256	1.00	92.41	A16S
ATOM	32409	C2'	ADE	615	127.352	96.913	-10.773	1.00	67.36	A16S
ATOM	32410	O2'	ADE	615	128.664	97.040	-11.269	1.00	67.36	A16S
ATOM	32411	C3'	ADE	615	126.534	98.179	-10.978	1.00	67.36	A16S
ATOM	32412	O3'	ADE	615	126.790	98.784	-12.235	1.00	67.36	A16S
ATOM	32413	P	GUA	616	125.711	98.631	-13.419	1.00	55.69	A16S
ATOM	32414	O1P	GUA	616	126.246	99.274	-14.650	1.00	71.23	A16S
ATOM	32415	O2P	GUA	616	124.391	99.048	-12.888	1.00	71.23	A16S
ATOM	32416	O5'	GUA	616	125.637	97.063	-13.689	1.00	55.69	A16S
ATOM	32417	C5'	GUA	616	126.831	96.283	-13.912	1.00	55.69	A16S
ATOM	32418	C4'	GUA	616	126.502	94.807	-13.880	1.00	55.69	A16S
ATOM	32419	O4'	GUA	616	126.232	94.370	-12.524	1.00	55.69	A16S
ATOM	32420	C1'	GUA	616	125.178	93.423	-12.529	1.00	55.69	A16S
ATOM	32421	N9	GUA	616	124.050	93.998	-11.800	1.00	71.23	A16S
ATOM	32422	C4	GUA	616	123.000	93.305	-11.240	1.00	71.23	A16S
ATOM	32423	N3	GUA	616	122.846	91.960	-11.230	1.00	71.23	A16S
ATOM	32424	C2	GUA	616	121.731	91.598	-10.624	1.00	71.23	A16S
ATOM	32425	N2	GUA	616	121.425	90.303	-10.503	1.00	71.23	A16S
ATOM	32426	N1	GUA	616	120.835	92.482	-10.086	1.00	71.23	A16S
ATOM	32427	C6	GUA	616	120.967	93.866	-10.093	1.00	71.23	A16S
ATOM	32428	O6	GUA	616	120.086	94.570	-9.594	1.00	71.23	A16S
ATOM	32429	C5	GUA	616	122.165	94.270	-10.720	1.00	71.23	A16S
ATOM	32430	N7	GUA	616	122.685	95.538	-10.927	1.00	71.23	A16S
ATOM	32431	C8	GUA	616	123.803	95.329	-11.565	1.00	71.23	A16S
ATOM	32432	C2'	GUA	616	124.795	93.164	-13.988	1.00	55.69	A16S
ATOM	32433	O2'	GUA	616	125.451	92.029	-14.509	1.00	55.69	A16S
ATOM	32434	C3'	GUA	616	125.249	94.448	-14.646	1.00	55.69	A16S
ATOM	32435	O3'	GUA	616	125.486	94.308	-16.018	1.00	55.69	A16S
ATOM	32436	P	CYT	617	124.430	94.921	-17.039	1.00	42.52	A16S
ATOM	32437	O1P	CYT	617	125.024	94.948	-18.405	1.00	50.57	A16S
ATOM	32438	O2P	CYT	617	123.934	96.183	-16.408	1.00	50.57	A16S
ATOM	32439	O5'	CYT	617	123.269	93.837	-17.072	1.00	42.52	A16S
ATOM	32440	C5'	CYT	617	123.506	92.556	-17.673	1.00	42.52	A16S
ATOM	32441	C4'	CYT	617	122.477	91.555	-17.217	1.00	42.52	A16S
ATOM	32442	O4'	CYT	617	122.488	91.481	-15.768	1.00	42.52	A16S
ATOM	32443	C1'	CYT	617	121.172	91.261	-15.299	1.00	42.52	A16S
ATOM	32444	N1	CYT	617	120.752	92.424	-14.488	1.00	50.57	A16S
ATOM	32445	C6	CYT	617	121.379	93.634	-14.598	1.00	50.57	A16S
ATOM	32446	C2	CYT	617	119.671	92.278	-13.621	1.00	50.57	A16S
ATOM	32447	O2	CYT	617	119.157	91.161	-13.494	1.00	50.57	A16S
ATOM	32448	N3	CYT	617	119.214	93.351	-12.936	1.00	50.57	A16S
ATOM	32449	C4	CYT	617	119.808	94.530	-13.077	1.00	50.57	A16S
ATOM	32450	N4	CYT	617	119.303	95.562	-12.407	1.00	50.57	A16S
ATOM	32451	C5	CYT	617	120.943	94.704	-13.916	1.00	50.57	A16S
ATOM	32452	C2'	CYT	617	120.268	91.077	-16.522	1.00	42.52	A16S
ATOM	32453	O2'	CYT	617	120.152	89.697	-16.820	1.00	42.52	A16S
ATOM	32454	C3'	CYT	617	121.033	91.855	-17.588	1.00	42.52	A16S
ATOM	32455	O3'	CYT	617	120.727	91.429	-18.919	1.00	42.52	A16S
ATOM	32456	P	GUA	618	119.471	92.073	-19.702	1.00	49.66	A16S
ATOM	32457	O1P	GUA	618	119.477	91.571	-21.112	1.00	51.45	A16S
ATOM	32458	O2P	GUA	618	119.462	93.531	-19.437	1.00	51.45	A16S
ATOM	32459	O5'	GUA	618	118.197	91.461	-18.969	1.00	49.66	A16S
ATOM	32460	C5'	GUA	618	117.882	90.064	-19.084	1.00	49.66	A16S
ATOM	32461	C4'	GUA	618	116.517	89.777	-18.502	1.00	49.66	A16S
ATOM	32462	O4'	GUA	618	116.542	89.952	-17.065	1.00	49.66	A16S
ATOM	32463	C1'	GUA	618	115.282	90.418	-16.623	1.00	49.66	A16S
ATOM	32464	N9	GUA	618	115.468	91.716	-15.990	1.00	51.45	A16S
ATOM	32465	C4	GUA	618	114.534	92.394	-15.253	1.00	51.45	A16S
ATOM	32466	N3	GUA	618	113.300	91.955	-14.948	1.00	51.45	A16S
ATOM	32467	C2	GUA	618	112.634	92.831	-14.232	1.00	51.45	A16S
ATOM	32468	N2	GUA	618	111.400	92.547	-13.813	1.00	51.45	A16S
ATOM	32469	N1	GUA	618	113.126	94.050	-13.863	1.00	51.45	A16S
ATOM	32470	C6	GUA	618	114.388	94.531	-14.178	1.00	51.45	A16S
ATOM	32471	O6	GUA	618	114.726	95.665	-13.815	1.00	51.45	A16S
ATOM	32472	C5	GUA	618	115.126	93.589	-14.922	1.00	51.45	A16S
ATOM	32473	N7	GUA	618	116.421	93.649	-15.414	1.00	51.45	A16S
ATOM	32474	C8	GUA	618	116.581	92.513	-16.036	1.00	51.45	A16S
ATOM	32475	C2'	GUA	618	114.369	90.531	-17.843	1.00	49.66	A16S
ATOM	32476	O2'	GUA	618	113.600	89.356	-17.933	1.00	49.66	A16S
ATOM	32477	C3'	GUA	618	115.379	90.666	-18.972	1.00	49.66	A16S
ATOM	32478	O3'	GUA	618	114.856	90.223	-20.215	1.00	49.66	A16S
ATOM	32479	P	URI	619	114.283	91.299	-21.256	1.00	49.36	A16S
ATOM	32480	O1P	URI	619	113.873	90.574	-22.490	1.00	52.59	A16S
ATOM	32481	O2P	URI	619	115.239	92.423	-21.341	1.00	52.59	A16S
ATOM	32482	O5'	URI	619	112.988	91.850	-20.522	1.00	49.36	A16S
ATOM	32483	C5'	URI	619	111.914	90.961	-20.181	1.00	49.36	A16S
ATOM	32484	C4'	URI	619	110.820	91.710	-19.475	1.00	49.36	A16S
ATOM	32485	O4'	URI	619	111.227	92.055	-18.128	1.00	49.36	A16S
ATOM	32486	C1'	URI	619	110.637	93.284	-17.758	1.00	49.36	A16S
ATOM	32487	N1	URI	619	111.709	94.241	-17.447	1.00	52.59	A16S
ATOM	32488	C6	URI	619	112.945	94.138	-18.031	1.00	52.59	A16S
ATOM	32489	C2	URI	619	111.430	95.269	-16.557	1.00	52.59	A16S
ATOM	32490	O2	URI	619	110.359	95.395	-16.000	1.00	52.59	A16S
ATOM	32491	N3	URI	619	112.457	96.152	-16.347	1.00	52.59	A16S
ATOM	32492	C4	URI	619	113.702	96.119	-16.920	1.00	52.59	A16S
ATOM	32493	O4	URI	619	114.488	97.038	-16.703	1.00	52.59	A16S
ATOM	32494	C5	URI	619	113.924	95.018	-17.806	1.00	52.59	A16S
ATOM	32495	C2'	URI	619	109.760	93.736	-18.927	1.00	49.36	A16S
ATOM	32496	O2'	URI	619	108.450	93.231	-18.739	1.00	49.36	A16S
ATOM	32497	C3'	URI	619	110.425	93.033	-20.094	1.00	49.36	A16S
ATOM	32498	O3'	URI	619	109.557	92.857	-21.201	1.00	49.36	A16S
ATOM	32499	P	GUA	620	109.501	93.990	-22.339	1.00	53.57	A16S
ATOM	32500	O1P	GUA	620	108.712	93.466	-23.488	1.00	60.00	A16S
ATOM	32501	O2P	GUA	620	110.889	94.479	-22.566	1.00	60.00	A16S
ATOM	32502	O5'	GUA	620	108.665	95.152	-21.637	1.00	53.57	A16S
ATOM	32503	C5'	GUA	620	107.293	94.940	-21.265	1.00	53.57	A16S
ATOM	32504	C4'	GUA	620	106.742	96.151	-20.559	1.00	53.57	A16S
ATOM	32505	O4'	GUA	620	107.362	96.292	-19.258	1.00	53.57	A16S
ATOM	32506	C1'	GUA	620	107.522	97.666	-18.947	1.00	53.57	A16S
ATOM	32507	N9	GUA	620	108.951	97.949	-18.855	1.00	60.00	A16S

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ATOM  32508  C4  GUA  620     109.537  99.005 -18.203  1.00 60.00      A16S
ATOM  32509  N3  GUA  620     108.891  99.957 -17.500  1.00 60.00      A16S
ATOM  32510  C2  GUA  620     109.726 100.842 -16.990  1.00 60.00      A16S
ATOM  32511  N2  GUA  620     109.257 101.850 -16.249  1.00 60.00      A16S
ATOM  32512  N1  GUA  620     111.089 100.801 -17.165  1.00 60.00      A16S
ATOM  32513  C6  GUA  620     111.773  99.834 -17.893  1.00 60.00      A16S
ATOM  32514  O6  GUA  620     113.005  99.895 -18.001  1.00 60.00      A16S
ATOM  32515  C5  GUA  620     110.889  98.873 -18.434  1.00 60.00      A16S
ATOM  32516  N7  GUA  620     111.151  97.750 -19.202  1.00 60.00      A16S
ATOM  32517  C8  GUA  620     109.976  97.230 -19.425  1.00 60.00      A16S
ATOM  32518  C2' GUA  620     106.889  98.467 -20.082  1.00 53.57      A16S
ATOM  32519  O2' GUA  620     105.561  98.792 -19.733  1.00 53.57      A16S
ATOM  32520  C3' GUA  620     106.995  97.481 -21.239  1.00 53.57      A16S
ATOM  32521  O3' GUA  620     106.079  97.734 -22.287  1.00 53.57      A16S
ATOM  32522  P   GUA  621     106.516  98.692 -23.497  1.00 52.05      A16S
ATOM  32523  O1P GUA  621     107.851  98.236 -23.959  1.00 61.12      A16S
ATOM  32524  O2P GUA  621     105.379  98.724 -24.462  1.00 61.12      A16S
ATOM  32525  O5' GUA  621     106.664 100.118 -22.787  1.00 52.05      A16S
ATOM  32526  C5' GUA  621     105.522 100.714 -22.142  1.00 52.05      A16S
ATOM  32527  C4' GUA  621     105.883 102.005 -21.438  1.00 52.05      A16S
ATOM  32528  O4' GUA  621     106.703 101.748 -20.271  1.00 52.05      A16S
ATOM  32529  C1' GUA  621     107.539 102.877 -20.020  1.00 52.05      A16S
ATOM  32530  N9  GUA  621     108.945 102.486 -20.159  1.00 61.12      A16S
ATOM  32531  C4  GUA  621     110.040 103.203 -19.719  1.00 61.12      A16S
ATOM  32532  N3  GUA  621     110.007 104.358 -19.023  1.00 61.12      A16S
ATOM  32533  C2  GUA  621     111.218 104.823 -18.787  1.00 61.12      A16S
ATOM  32534  N2  GUA  621     111.376 105.958 -18.114  1.00 61.12      A16S
ATOM  32535  N1  GUA  621     112.368 104.210 -19.195  1.00 61.12      A16S
ATOM  32536  C6  GUA  621     112.429 103.023 -19.913  1.00 61.12      A16S
ATOM  32537  O6  GUA  621     113.526 102.560 -20.245  1.00 61.12      A16S
ATOM  32538  C5  GUA  621     111.138 102.506 -20.174  1.00 61.12      A16S
ATOM  32539  N7  GUA  621     110.751 101.357 -20.849  1.00 61.12      A16S
ATOM  32540  C8  GUA  621     109.447 101.378 -20.804  1.00 61.12      A16S
ATOM  32541  C2' GUA  621     107.208 103.925 -21.082  1.00 52.05      A16S
ATOM  32542  O2' GUA  621     106.246 104.834 -20.598  1.00 52.05      A16S
ATOM  32543  C3' GUA  621     106.663 103.059 -22.203  1.00 52.05      A16S
ATOM  32544  O3' GUA  621     105.884 103.829 -23.089  1.00 52.05      A16S
ATOM  32545  P   GUA  622     106.561 104.392 -24.430  1.00 62.22      A16S
ATOM  32546  O1P GUA  622     107.401 103.320 -25.031  1.00 56.51      A16S
ATOM  32547  O2P GUA  622     105.460 104.986 -25.227  1.00 56.51      A16S
ATOM  32548  O5' GUA  622     107.531 105.547 -23.904  1.00 62.22      A16S
ATOM  32549  C5' GUA  622     106.995 106.654 -23.160  1.00 62.22      A16S
ATOM  32550  C4' GUA  622     108.094 107.529 -22.589  1.00 62.22      A16S
ATOM  32551  O4' GUA  622     108.896 106.796 -21.631  1.00 62.22      A16S
ATOM  32552  C1' GUA  622     110.189 107.376 -21.559  1.00 62.22      A16S
ATOM  32553  N9  GUA  622     111.195 106.383 -21.929  1.00 56.51      A16S
ATOM  32554  C4  GUA  622     112.556 106.538 -21.801  1.00 56.51      A16S
ATOM  32555  N3  GUA  622     113.187 107.615 -21.286  1.00 56.51      A16S
ATOM  32556  C2  GUA  622     114.497 107.471 -21.301  1.00 56.51      A16S
ATOM  32557  N2  GUA  622     115.282 108.432 -20.811  1.00 56.51      A16S
ATOM  32558  N1  GUA  622     115.136 106.369 -21.793  1.00 56.51      A16S
ATOM  32559  C6  GUA  622     114.509 105.253 -22.332  1.00 56.51      A16S
ATOM  32560  O6  GUA  622     115.186 104.313 -22.755  1.00 56.51      A16S
ATOM  32561  C5  GUA  622     113.103 105.385 -22.311  1.00 56.51      A16S
ATOM  32562  N7  GUA  622     112.111 104.513 -22.736  1.00 56.51      A16S
ATOM  32563  C8  GUA  622     110.998 105.144 -22.489  1.00 56.51      A16S
ATOM  32564  C2' GUA  622     110.224 108.542 -22.541  1.00 62.22      A16S
ATOM  32565  O2' GUA  622     109.927 109.729 -21.837  1.00 62.22      A16S
ATOM  32566  C3' GUA  622     109.123 108.155 -23.517  1.00 62.22      A16S
ATOM  32567  O3' GUA  622     108.636 109.307 -24.177  1.00 62.22      A16S
ATOM  32568  P   ADE  623     109.394 109.850 -25.484  1.00 53.34      A16S
ATOM  32569  O1P ADE  623     108.598 111.018 -25.947  1.00 53.79      A16S
ATOM  32570  O2P ADE  623     109.643 108.711 -26.415  1.00 53.79      A16S
ATOM  32571  O5' ADE  623     110.788 110.378 -24.926  1.00 53.34      A16S
ATOM  32572  C5' ADE  623     110.841 111.485 -24.015  1.00 53.34      A16S
ATOM  32573  C4' ADE  623     112.267 111.953 -23.836  1.00 53.34      A16S
ATOM  32574  O4' ADE  623     113.036 110.966 -23.107  1.00 53.34      A16S
ATOM  32575  C1' ADE  623     114.364 110.933 -23.596  1.00 53.34      A16S
ATOM  32576  N9  ADE  623     114.638 109.584 -24.106  1.00 53.79      A16S
ATOM  32577  C4  ADE  623     115.867 108.969 -24.204  1.00 53.79      A16S
ATOM  32578  N3  ADE  623     117.070 109.481 -23.886  1.00 53.79      A16S
ATOM  32579  C2  ADE  623     118.022 108.583 -24.082  1.00 53.79      A16S
ATOM  32580  N1  ADE  623     117.919 107.330 -24.518  1.00 53.79      A16S
ATOM  32581  C6  ADE  623     116.696 106.847 -24.819  1.00 53.79      A16S
ATOM  32582  N6  ADE  623     116.580 105.585 -25.229  1.00 53.79      A16S
ATOM  32583  C5  ADE  623     115.612 107.695 -24.672  1.00 53.79      A16S
ATOM  32584  N7  ADE  623     114.259 107.511 -24.898  1.00 53.79      A16S
ATOM  32585  C8  ADE  623     113.727 108.658 -24.556  1.00 53.79      A16S
ATOM  32586  C2' ADE  623     114.491 112.036 -24.644  1.00 53.34      A16S
ATOM  32587  O2' ADE  623     114.949 113.202 -23.985  1.00 53.34      A16S
ATOM  32588  C3' ADE  623     113.051 112.185 -25.115  1.00 53.34      A16S
ATOM  32589  O3' ADE  623     112.789 113.480 -25.632  1.00 53.34      A16S
ATOM  32590  P   URI  624     112.793 113.719 -27.218  1.00 48.80      A16S
ATOM  32591  O1P URI  624     112.481 115.160 -27.409  1.00 65.23      A16S
ATOM  32592  O2P URI  624     111.976 112.676 -27.910  1.00 65.23      A16S
ATOM  32593  O5' URI  624     114.314 113.497 -27.609  1.00 48.80      A16S
ATOM  32594  C5' URI  624     115.343 114.200 -26.902  1.00 48.80      A16S
ATOM  32595  C4' URI  624     116.681 113.833 -27.457  1.00 48.80      A16S
ATOM  32596  O4' URI  624     116.939 112.440 -27.147  1.00 48.80      A16S
ATOM  32597  C1' URI  624     117.227 111.742 -28.333  1.00 48.80      A16S
ATOM  32598  N1  URI  624     116.702 110.370 -28.215  1.00 65.23      A16S
ATOM  32599  C6  URI  624     115.390 110.069 -28.496  1.00 65.23      A16S
ATOM  32600  C2  URI  624     117.586 109.376 -27.830  1.00 65.23      A16S
ATOM  32601  O2  URI  624     118.745 109.599 -27.536  1.00 65.23      A16S
ATOM  32602  N3  URI  624     117.060 108.109 -27.802  1.00 65.23      A16S
ATOM  32603  C4  URI  624     115.765 107.741 -28.107  1.00 65.23      A16S
ATOM  32604  O4  URI  624     115.468 106.549 -28.145  1.00 65.23      A16S
ATOM  32605  C5  URI  624     114.908 108.825 -28.458  1.00 65.23      A16S
ATOM  32606  C2' URI  624     116.639 112.566 -29.480  1.00 48.80      A16S
ATOM  32607  O2' URI  624     117.402 112.376 -30.650  1.00 48.80      A16S
ATOM  32608  C3' URI  624     116.792 113.989 -28.967  1.00 48.80      A16S
ATOM  32609  O3' URI  624     118.076 114.472 -29.311  1.00 48.80      A16S
ATOM  32610  P   ADE  625     118.220 115.818 -30.177  1.00 48.56      A16S
ATOM  32611  O1P ADE  625     117.496 116.894 -29.445  1.00 44.94      A16S
ATOM  32612  O2P ADE  625     117.880 115.522 -31.595  1.00 44.94      A16S
ATOM  32613  O5' ADE  625     119.778 116.133 -30.103  1.00 48.56      A16S
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ATOM	32614	C5'	ADE	625	120.249	117.409	-29.672	1.00	48.56	A16S	ATOM	32667	O6	GUA	627	122.159	106.941	-31.199	1.00	64.42	A16S
ATOM	32615	C4'	ADE	625	121.487	117.248	-28.835	1.00	48.56	A16S	ATOM	32668	C5	GUA	627	124.490	107.417	-30.878	1.00	64.42	A16S
ATOM	32616	O4'	ADE	625	121.139	116.680	-27.552	1.00	48.56	A16S	ATOM	32669	N7	GUA	627	124.643	108.798	-30.939	1.00	64.42	A16S
ATOM	32617	C1'	ADE	625	122.204	115.869	-27.085	1.00	48.56	A16S	ATOM	32670	C8	GUA	627	125.930	108.984	-30.807	1.00	64.42	A16S
ATOM	32618	N9	ADE	625	121.704	114.500	-26.963	1.00	44.94	A16S	ATOM	32671	C2'	GUA	627	128.522	106.998	-31.961	1.00	42.61	A16S
ATOM	32619	C4	ADE	625	122.277	113.480	-26.246	1.00	44.94	A16S	ATOM	32672	O2'	GUA	627	129.547	106.055	-31.753	1.00	42.61	A16S
ATOM	32620	N3	ADE	625	123.404	113.530	-25.518	1.00	44.94	A16S	ATOM	32673	C3'	GUA	627	128.968	108.241	-32.712	1.00	42.61	A16S
ATOM	32621	C2	ADE	625	123.642	112.350	-24.953	1.00	44.94	A16S	ATOM	32674	O3'	GUA	627	129.860	107.937	-33.765	1.00	42.61	A16S
ATOM	32622	N1	ADE	625	122.937	111.206	-25.033	1.00	44.94	A16S	ATOM	32675	P	CYT	628	129.289	107.785	-35.256	1.00	43.26	A16S
ATOM	32623	C6	ADE	625	121.818	111.192	-25.791	1.00	44.94	A16S	ATOM	32676	O1P	CYT	628	130.429	107.465	-36.151	1.00	62.65	A16S
ATOM	32624	N6	ADE	625	121.133	110.057	-25.904	1.00	44.94	A16S	ATOM	32677	O2P	CYT	628	128.437	108.969	-35.538	1.00	62.65	A16S
ATOM	32625	C5	ADE	625	121.451	112.383	-26.429	1.00	44.94	A16S	ATOM	32678	O5'	CYT	628	128.352	106.501	-35.170	1.00	43.26	A16S
ATOM	32626	N7	ADE	625	120.384	112.701	-27.252	1.00	44.94	A16S	ATOM	32679	C5'	CYT	628	128.863	105.239	-34.696	1.00	43.26	A16S
ATOM	32627	C8	ADE	625	120.578	113.964	-27.540	1.00	44.94	A16S	ATOM	32680	C4'	CYT	628	127.803	104.156	-34.801	1.00	43.26	A16S
ATOM	32628	C2'	ADE	625	123.334	115.964	-28.111	1.00	48.56	A16S	ATOM	32681	O4'	CYT	628	126.778	104.338	-33.788	1.00	43.26	A16S
ATOM	32629	O2'	ADE	625	124.233	117.001	-27.759	1.00	48.56	A16S	ATOM	32682	C1'	CYT	628	125.523	103.913	-34.301	1.00	43.26	A16S
ATOM	32630	C3'	ADE	625	122.560	116.315	-29.369	1.00	48.56	A16S	ATOM	32683	N1	CYT	628	124.597	105.062	-34.303	1.00	62.65	A16S
ATOM	32631	O3'	ADE	625	123.390	116.907	-30.345	1.00	48.56	A16S	ATOM	32684	C6	CYT	628	125.031	106.317	-33.984	1.00	62.65	A16S
ATOM	32632	P	CYT	626	123.862	116.028	-31.598	1.00	45.43	A16S	ATOM	32685	C2	CYT	628	123.260	104.850	-34.655	1.00	62.65	A16S
ATOM	32633	O1P	CYT	626	122.705	115.205	-32.063	1.00	50.84	A16S	ATOM	32686	O2	CYT	628	122.884	103.698	-34.940	1.00	62.65	A16S
ATOM	32634	O2P	CYT	626	124.546	116.927	-32.548	1.00	50.84	A16S	ATOM	32687	N3	CYT	628	122.412	105.900	-34.682	1.00	62.65	A16S
ATOM	32635	O5'	CYT	626	124.964	115.063	-30.974	1.00	45.43	A16S	ATOM	32688	C4	CYT	628	122.852	107.119	-34.381	1.00	62.65	A16S
ATOM	32636	C5'	CYT	626	126.152	115.599	-30.351	1.00	45.43	A16S	ATOM	32689	N4	CYT	628	121.983	108.126	-34.432	1.00	62.65	A16S
ATOM	32637	C4'	CYT	626	126.936	114.492	-29.677	1.00	45.43	A16S	ATOM	32690	C5	CYT	628	124.201	107.362	-34.016	1.00	62.65	A16S
ATOM	32638	O4'	CYT	626	126.219	114.007	-28.511	1.00	45.43	A16S	ATOM	32691	C2'	CYT	628	125.753	103.380	-35.718	1.00	43.26	A16S
ATOM	32639	C1'	CYT	626	126.417	112.605	-28.373	1.00	45.43	A16S	ATOM	32692	O2'	CYT	628	125.876	101.974	-35.693	1.00	43.26	A16S
ATOM	32640	N1	CYT	626	125.112	111.924	-28.497	1.00	50.84	A16S	ATOM	32693	C3'	CYT	628	127.043	104.081	-36.115	1.00	43.26	A16S
ATOM	32641	C6	CYT	626	124.108	112.472	-29.247	1.00	50.84	A16S	ATOM	32694	O3'	CYT	628	127.743	103.337	-37.085	1.00	43.26	A16S
ATOM	32642	C2	CYT	626	124.919	110.695	-27.853	1.00	50.84	A16S	ATOM	32695	P	URI	629	127.481	103.622	-38.638	1.00	60.88	A16S
ATOM	32643	O2	CYT	626	125.835	110.224	-27.153	1.00	50.84	A16S	ATOM	32696	O1P	URI	629	128.377	102.718	-39.403	1.00	63.34	A16S
ATOM	32644	N3	CYT	626	123.737	110.053	-28.007	1.00	50.84	A16S	ATOM	32697	O2P	URI	629	127.519	105.082	-38.896	1.00	63.34	A16S
ATOM	32645	C4	CYT	626	122.772	110.598	-28.752	1.00	50.84	A16S	ATOM	32698	O5'	URI	629	125.988	103.129	-38.854	1.00	60.88	A16S
ATOM	32646	N4	CYT	626	121.621	109.937	-28.872	1.00	50.84	A16S	ATOM	32699	C5'	URI	629	125.627	101.758	-38.638	1.00	60.88	A16S
ATOM	32647	C5	CYT	626	122.939	111.847	-29.402	1.00	50.84	A16S	ATOM	32700	C4'	URI	629	124.148	101.578	-38.856	1.00	60.88	A16S
ATOM	32648	C2'	CYT	626	127.372	112.164	-29.480	1.00	45.43	A16S	ATOM	32701	O4'	URI	629	123.418	102.254	-37.800	1.00	60.88	A16S
ATOM	32649	O2'	CYT	626	128.690	112.160	-28.985	1.00	45.43	A16S	ATOM	32702	C1'	URI	629	122.253	102.853	-38.340	1.00	60.88	A16S
ATOM	32650	C3'	CYT	626	127.152	113.248	-30.519	1.00	45.43	A16S	ATOM	32703	N1	URI	629	122.354	104.310	-38.163	1.00	63.34	A16S
ATOM	32651	O3'	CYT	626	128.251	113.366	-31.383	1.00	45.43	A16S	ATOM	32704	C6	URI	629	123.568	104.938	-38.047	1.00	63.34	A16S
ATOM	32652	P	GUA	627	128.227	112.578	-32.764	1.00	42.61	A16S	ATOM	32705	C2	URI	629	121.185	105.029	-38.123	1.00	63.34	A16S
ATOM	32653	O1P	GUA	627	129.419	113.006	-33.541	1.00	64.42	A16S	ATOM	32706	O2	URI	629	120.090	104.516	-38.218	1.00	63.34	A16S
ATOM	32654	O2P	GUA	627	126.870	112.730	-33.349	1.00	64.42	A16S	ATOM	32707	N3	URI	629	121.340	106.378	-37.968	1.00	63.34	A16S
ATOM	32655	O5'	GUA	627	128.388	111.060	-32.313	1.00	42.61	A16S	ATOM	32708	C4	URI	629	122.519	107.065	-37.849	1.00	63.34	A16S
ATOM	32656	C5'	GUA	627	129.657	110.563	-31.871	1.00	42.61	A16S	ATOM	32709	O4	URI	629	122.491	108.283	-37.702	1.00	63.34	A16S
ATOM	32657	C4'	GUA	627	129.586	109.083	-31.611	1.00	42.61	A16S	ATOM	32710	C5	URI	629	123.687	106.254	-37.895	1.00	63.34	A16S
ATOM	32658	O4'	GUA	627	128.741	108.832	-30.458	1.00	42.61	A16S	ATOM	32711	C2'	URI	629	122.160	102.457	-39.815	1.00	60.88	A16S
ATOM	32659	C1'	GUA	627	128.074	107.591	-30.625	1.00	42.61	A16S	ATOM	32712	O2'	URI	629	121.344	101.308	-39.950	1.00	60.88	A16S
ATOM	32660	N9	GUA	627	126.630	107.805	-30.685	1.00	64.42	A16S	ATOM	32713	C3'	URI	629	123.620	102.184	-40.149	1.00	60.88	A16S
ATOM	32661	C4	GUA	627	125.704	106.802	-30.692	1.00	64.42	A16S	ATOM	32714	O3'	URI	629	123.782	101.313	-41.265	1.00	60.88	A16S
ATOM	32662	N3	GUA	627	125.978	105.490	-30.575	1.00	64.42	A16S	ATOM	32715	P	CYT	630	123.835	101.927	-42.749	1.00	63.93	A16S
ATOM	32663	C2	GUA	627	124.895	104.749	-30.659	1.00	64.42	A16S	ATOM	32716	O1P	CYT	630	124.038	100.787	-43.686	1.00	47.79	A16S
ATOM	32664	N2	GUA	627	125.000	103.420	-30.543	1.00	64.42	A16S	ATOM	32717	O2P	CYT	630	124.779	103.070	-42.766	1.00	47.79	A16S
ATOM	32665	N1	GUA	627	123.634	105.252	-30.859	1.00	64.42	A16S	ATOM	32718	O5'	CYT	630	122.366	102.494	-42.983	1.00	63.93	A16S
ATOM	32666	C6	GUA	627	123.325	106.600	-30.993	1.00	64.42	A16S	ATOM	32719	C5'	CYT	630	121.242	101.602	-43.093	1.00	63.93	A16S

ATOM	32720	C4'	CYT	630	119.981	102.380	-43.376	1.00	63.93	A16S	ATOM	32773	C5	GUA	632	121.571	112.906	-46.052	1.00	62.70	A16S
ATOM	32721	O4'	CYT	630	119.604	103.160	-42.212	1.00	63.93	A16S	ATOM	32774	N7	GUA	632	121.679	111.600	-46.505	1.00	62.70	A16S
ATOM	32722	C1'	CYT	630	119.017	104.383	-42.627	1.00	63.93	A16S	ATOM	32775	C8	GUA	632	120.652	111.452	-47.300	1.00	62.70	A16S
ATOM	32723	N1	CYT	630	119.833	105.500	-42.120	1.00	47.79	A16S	ATOM	32776	C2'	GUA	632	119.087	113.574	-49.493	1.00	73.70	A16S
ATOM	32724	C6	CYT	630	121.190	105.392	-42.026	1.00	47.79	A16S	ATOM	32777	O2'	GUA	632	118.106	114.547	-49.777	1.00	73.70	A16S
ATOM	32725	C2	CYT	630	119.192	106.685	-41.746	1.00	47.79	A16S	ATOM	32778	C3'	GUA	632	119.087	112.457	-50.522	1.00	73.70	A16S
ATOM	32726	O2	CYT	630	117.955	106.760	-41.846	1.00	47.79	A16S	ATOM	32779	O3'	GUA	632	118.905	112.991	-51.819	1.00	73.70	A16S
ATOM	32727	N3	CYT	630	119.935	107.720	-41.292	1.00	47.79	A16S	ATOM	32780	P	GUA	633	120.201	113.304	-52.721	1.00	69.88	A16S
ATOM	32728	C4	CYT	630	121.258	107.601	-41.211	1.00	47.79	A16S	ATOM	32781	O1P	GUA	633	119.709	113.596	-54.093	1.00	58.02	A16S
ATOM	32729	N4	CYT	630	121.954	108.643	-40.759	1.00	47.79	A16S	ATOM	32782	O2P	GUA	633	121.191	112.210	-52.515	1.00	58.02	A16S
ATOM	32730	C5	CYT	630	121.931	106.408	-41.587	1.00	47.79	A16S	ATOM	32783	O5'	GUA	633	120.830	114.620	-52.075	1.00	69.88	A16S
ATOM	32731	C2'	CYT	630	118.982	104.386	-44.154	1.00	63.93	A16S	ATOM	32784	C5'	GUA	633	120.068	115.821	-52.018	1.00	69.88	A16S
ATOM	32732	O2'	CYT	630	117.728	103.946	-44.631	1.00	63.93	A16S	ATOM	32785	C4'	GUA	633	120.681	116.813	-51.058	1.00	69.88	A16S
ATOM	32733	C3'	CYT	630	120.093	103.407	-44.482	1.00	63.93	A16S	ATOM	32786	O4'	GUA	633	120.765	116.266	-49.714	1.00	69.88	A16S
ATOM	32734	O3'	CYT	630	119.930	102.865	-45.766	1.00	63.93	A16S	ATOM	32787	C1'	GUA	633	121.754	116.973	-48.986	1.00	69.88	A16S
ATOM	32735	P	ADE	631	120.564	103.637	-47.015	1.00	72.46	A16S	ATOM	32788	N9	GUA	633	122.739	116.049	-48.430	1.00	58.02	A16S
ATOM	32736	O1P	ADE	631	120.444	102.729	-48.193	1.00	60.73	A16S	ATOM	32789	C4	GUA	633	123.734	116.402	-47.554	1.00	58.02	A16S
ATOM	32737	O2P	ADE	631	121.901	104.123	-46.591	1.00	60.73	A16S	ATOM	32790	N3	GUA	633	123.940	117.637	-47.061	1.00	58.02	A16S
ATOM	32738	O5'	ADE	631	119.640	104.927	-47.195	1.00	72.46	A16S	ATOM	32791	C2	GUA	633	124.976	117.683	-46.251	1.00	58.02	A16S
ATOM	32739	C5'	ADE	631	118.265	104.810	-47.610	1.00	72.46	A16S	ATOM	32792	N2	GUA	633	125.303	118.844	-45.675	1.00	58.02	A16S
ATOM	32740	C4'	ADE	631	117.589	106.157	-47.569	1.00	72.46	A16S	ATOM	32793	N1	GUA	633	125.758	116.598	-45.944	1.00	58.02	A16S
ATOM	32741	O4'	ADE	631	117.517	106.632	-46.199	1.00	72.46	A16S	ATOM	32794	C6	GUA	633	125.565	115.309	-46.433	1.00	58.02	A16S
ATOM	32742	C1'	ADE	631	117.609	108.050	-46.174	1.00	72.46	A16S	ATOM	32795	O6	GUA	633	126.323	114.397	-46.083	1.00	58.02	A16S
ATOM	32743	N9	ADE	631	118.705	108.448	-45.283	1.00	60.73	A16S	ATOM	32796	C5	GUA	633	124.445	115.247	-47.315	1.00	58.02	A16S
ATOM	32744	C4	ADE	631	118.931	109.715	-44.794	1.00	60.73	A16S	ATOM	32797	N7	GUA	633	123.902	114.178	-48.022	1.00	58.02	A16S
ATOM	32745	N3	ADE	631	118.201	110.817	-45.016	1.00	60.73	A16S	ATOM	32798	C8	GUA	633	122.890	114.700	-48.667	1.00	58.02	A16S
ATOM	32746	C2	ADE	631	118.728	111.867	-44.386	1.00	60.73	A16S	ATOM	32799	C2'	GUA	633	122.428	117.932	-49.958	1.00	69.88	A16S
ATOM	32747	N1	ADE	631	119.822	111.938	-43.624	1.00	60.73	A16S	ATOM	32800	O2'	GUA	633	121.816	119.187	-49.779	1.00	69.88	A16S
ATOM	32748	C6	ADE	631	120.537	110.814	-43.425	1.00	60.73	A16S	ATOM	32801	C3'	GUA	633	122.089	117.308	-51.307	1.00	69.88	A16S
ATOM	32749	N6	ADE	631	121.636	110.888	-42.677	1.00	60.73	A16S	ATOM	32802	O3'	GUA	633	122.158	118.270	-52.345	1.00	69.88	A16S
ATOM	32750	C5	ADE	631	120.078	109.627	-44.029	1.00	60.73	A16S	ATOM	32803	P	CYT	634	123.563	118.516	-53.094	1.00	55.14	A16S
ATOM	32751	N7	ADE	631	120.563	108.327	-44.022	1.00	60.73	A16S	ATOM	32804	O1P	CYT	634	123.358	119.541	-54.156	1.00	58.17	A16S
ATOM	32752	C8	ADE	631	119.715	107.669	-44.775	1.00	60.73	A16S	ATOM	32805	O2P	CYT	634	124.136	117.183	-53.451	1.00	58.17	A16S
ATOM	32753	C2'	ADE	631	117.795	108.530	-47.613	1.00	72.46	A16S	ATOM	32806	O5'	CYT	634	124.474	119.181	-51.971	1.00	55.14	A16S
ATOM	32754	O2'	ADE	631	116.557	108.972	-48.125	1.00	72.46	A16S	ATOM	32807	C5'	CYT	634	124.001	120.332	-51.263	1.00	55.14	A16S
ATOM	32755	C3'	ADE	631	118.310	107.269	-48.299	1.00	72.46	A16S	ATOM	32808	C4'	CYT	634	125.077	120.894	-50.384	1.00	55.14	A16S
ATOM	32756	O3'	ADE	631	118.039	107.258	-49.685	1.00	72.46	A16S	ATOM	32809	O4'	CYT	634	125.286	120.078	-49.215	1.00	55.14	A16S
ATOM	32757	P	GUA	632	119.105	107.908	-50.696	1.00	73.70	A16S	ATOM	32810	C1'	CYT	634	126.637	120.141	-48.829	1.00	55.14	A16S
ATOM	32758	O1P	GUA	632	118.567	107.674	-52.061	1.00	62.70	A16S	ATOM	32811	N1	CYT	634	127.162	118.773	-48.762	1.00	58.17	A16S
ATOM	32759	O2P	GUA	632	120.476	107.435	-50.355	1.00	62.70	A16S	ATOM	32812	C6	CYT	634	126.612	117.767	-49.506	1.00	58.17	A16S
ATOM	32760	O5'	GUA	632	119.043	109.464	-50.353	1.00	73.70	A16S	ATOM	32813	C2	CYT	634	128.243	118.512	-47.914	1.00	58.17	A16S
ATOM	32761	C5'	GUA	632	117.828	110.186	-50.557	1.00	73.70	A16S	ATOM	32814	O2	CYT	634	128.733	119.450	-47.259	1.00	58.17	A16S
ATOM	32762	C4'	GUA	632	117.939	111.596	-50.040	1.00	73.70	A16S	ATOM	32815	N3	CYT	634	128.732	117.251	-47.833	1.00	58.17	A16S
ATOM	32763	O4'	GUA	632	118.119	111.598	-48.604	1.00	73.70	A16S	ATOM	32816	C4	CYT	634	128.189	116.277	-48.565	1.00	58.17	A16S
ATOM	32764	C1'	GUA	632	118.702	112.827	-48.219	1.00	73.70	A16S	ATOM	32817	N4	CYT	634	128.707	115.055	-48.462	1.00	58.17	A16S
ATOM	32765	N9	GUA	632	119.886	112.589	-47.402	1.00	62.70	A16S	ATOM	32818	C5	CYT	634	127.091	116.517	-49.441	1.00	58.17	A16S
ATOM	32766	C4	GUA	632	120.469	113.521	-46.593	1.00	62.70	A16S	ATOM	32819	C2'	CYT	634	127.364	121.040	-49.826	1.00	55.14	A16S
ATOM	32767	N3	GUA	632	120.025	114.772	-46.405	1.00	62.70	A16S	ATOM	32820	O2'	CYT	634	127.449	122.315	-49.246	1.00	55.14	A16S
ATOM	32768	C2	GUA	632	120.789	115.444	-45.581	1.00	62.70	A16S	ATOM	32821	C3'	CYT	634	126.430	120.997	-51.030	1.00	55.14	A16S
ATOM	32769	N2	GUA	632	120.473	116.707	-45.277	1.00	62.70	A16S	ATOM	32822	O3'	CYT	634	126.441	122.155	-51.844	1.00	55.14	A16S
ATOM	32770	N1	GUA	632	121.911	114.931	-44.990	1.00	62.70	A16S	ATOM	32823	P	URI	635	127.710	122.458	-52.767	1.00	51.44	A16S
ATOM	32771	C6	GUA	632	122.389	113.642	-45.169	1.00	62.70	A16S	ATOM	32824	O1P	URI	635	127.397	123.542	-53.741	1.00	46.49	A16S
ATOM	32772	O6	GUA	632	123.413	113.281	-44.586	1.00	62.70	A16S	ATOM	32825	O2P	URI	635	128.243	121.165	-53.268	1.00	46.49	A16S

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ATOM  32826  O5' URI  635     128.703 123.065 -51.697  1.00 51.44      A16S
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ATOM  32829  O4' URI  635     130.657 122.120 -50.249  1.00 51.44      A16S
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ATOM  32844  O1P ADE  636     133.747 126.217 -51.049  1.00 51.29      A16S
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ATOM  32846  O5' ADE  636     135.474 124.705 -50.098  1.00 54.30      A16S
ATOM  32847  C5' ADE  636     135.782 123.420 -49.530  1.00 54.30      A16S
ATOM  32848  C4' ADE  636     136.531 123.585 -48.234  1.00 54.30      A16S
ATOM  32849  O4' ADE  636     135.697 124.260 -47.248  1.00 54.30      A16S
ATOM  32850  C1' ADE  636     135.648 123.486 -46.063  1.00 54.30      A16S
ATOM  32851  N9  ADE  636     134.340 123.655 -45.416  1.00 51.29      A16S
ATOM  32852  C4  ADE  636     133.119 123.193 -45.846  1.00 51.29      A16S
ATOM  32853  N3  ADE  636     132.856 122.504 -46.972  1.00 51.29      A16S
ATOM  32854  C2  ADE  636     131.557 122.214 -47.051  1.00 51.29      A16S
ATOM  32855  N1  ADE  636     130.565 122.507 -46.192  1.00 51.29      A16S
ATOM  32856  C6  ADE  636     130.870 123.196 -45.068  1.00 51.29      A16S
ATOM  32857  N6  ADE  636     129.891 123.476 -44.206  1.00 51.29      A16S
ATOM  32858  C5  ADE  636     132.209 123.572 -44.874  1.00 51.29      A16S
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ATOM  32861  C2' ADE  636     135.972 122.050 -46.482  1.00 54.30      A16S
ATOM  32862  O2' ADE  636     136.477 121.302 -45.392  1.00 54.30      A16S
ATOM  32863  C3' ADE  636     136.989 122.277 -47.598  1.00 54.30      A16S
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ATOM  32865  P   GUA  637     139.575 121.973 -47.914  1.00 54.52      A16S
ATOM  32866  O1P GUA  637     140.738 122.747 -47.422  1.00 40.87      A16S
ATOM  32867  O2P GUA  637     139.258 121.965 -49.391  1.00 40.87      A16S
ATOM  32868  O5' GUA  637     139.758 120.462 -47.446  1.00 54.52      A16S
ATOM  32869  C5' GUA  637     140.273 120.155 -46.145  1.00 54.52      A16S
ATOM  32870  C4' GUA  637     140.255 118.669 -45.916  1.00 54.52      A16S
ATOM  32871  O4' GUA  637     138.890 118.206 -45.795  1.00 54.52      A16S
ATOM  32872  C1' GUA  637     138.771 116.914 -46.355  1.00 54.52      A16S
ATOM  32873  N9  GUA  637     137.844 116.984 -47.479  1.00 40.87      A16S
ATOM  32874  C4  GUA  637     137.262 115.923 -48.127  1.00 40.87      A16S
ATOM  32875  N3  GUA  637     137.436 114.625 -47.831  1.00 40.87      A16S
ATOM  32876  C2  GUA  637     136.765 113.843 -48.647  1.00 40.87      A16S
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ATOM  32881  C5  GUA  637     136.502 116.476 -49.122  1.00 40.87      A16S
ATOM  32882  N7  GUA  637     136.589 117.858 -49.099  1.00 40.87      A16S
ATOM  32883  C8  GUA  637     137.393 118.113 -48.107  1.00 40.87      A16S
ATOM  32884  C2' GUA  637     140.164 116.485 -46.803  1.00 54.52      A16S
ATOM  32885  O2' GUA  637     140.772 115.765 -45.751  1.00 54.52      A16S
ATOM  32886  C3' GUA  637     140.835 117.827 -47.032  1.00 54.52      A16S
ATOM  32887  O3' GUA  637     142.240 117.736 -46.947  1.00 54.52      A16S
ATOM  32888  P   ADE  638     143.110 117.714 -48.298  1.00 40.42      A16S
ATOM  32889  O1P ADE  638     144.531 117.578 -47.872  1.00 40.50      A16S
ATOM  32890  O2P ADE  638     142.708 118.879 -49.142  1.00 40.50      A16S
ATOM  32891  O5' ADE  638     142.660 116.368 -49.032  1.00 40.42      A16S
ATOM  32892  C5' ADE  638     142.937 115.083 -48.451  1.00 40.42      A16S
ATOM  32893  C4' ADE  638     142.233 113.998 -49.221  1.00 40.42      A16S
ATOM  32894  O4' ADE  638     140.800 114.164 -49.078  1.00 40.42      A16S
ATOM  32895  C1' ADE  638     140.149 113.808 -50.286  1.00 40.42      A16S
ATOM  32896  N9  ADE  638     139.533 115.011 -50.850  1.00 40.50      A16S
ATOM  32897  C4  ADE  638     138.560 115.039 -51.825  1.00 40.50      A16S
ATOM  32898  N3  ADE  638     137.961 113.989 -52.417  1.00 40.50      A16S
ATOM  32899  C2  ADE  638     137.083 114.396 -53.321  1.00 40.50      A16S
ATOM  32900  N1  ADE  638     136.760 115.633 -53.683  1.00 40.50      A16S
ATOM  32901  C6  ADE  638     137.384 116.668 -53.085  1.00 40.50      A16S
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ATOM  32903  C5  ADE  638     138.332 116.374 -52.091  1.00 40.50      A16S
ATOM  32904  N7  ADE  638     139.131 117.181 -51.287  1.00 40.50      A16S
ATOM  32905  C8  ADE  638     139.815 116.328 -50.565  1.00 40.50      A16S
ATOM  32906  C2' ADE  638     141.217 113.275 -51.238  1.00 40.42      A16S
ATOM  32907  O2' ADE  638     141.271 111.857 -51.171  1.00 40.42      A16S
ATOM  32908  C3' ADE  638     142.459 113.994 -50.722  1.00 40.42      A16S
ATOM  32909  O3' ADE  638     143.667 113.355 -51.092  1.00 40.42      A16S
ATOM  32910  P   CYT  639     144.523 113.924 -52.327  1.00 55.77      A16S
ATOM  32911  O1P CYT  639     145.831 113.235 -52.245  1.00 46.65      A16S
ATOM  32912  O2P CYT  639     144.479 115.405 -52.330  1.00 46.65      A16S
ATOM  32913  O5' CYT  639     143.746 113.385 -53.608  1.00 55.77      A16S
ATOM  32914  C5' CYT  639     143.549 111.973 -53.796  1.00 55.77      A16S
ATOM  32915  C4' CYT  639     142.495 111.715 -54.845  1.00 55.77      A16S
ATOM  32916  O4' CYT  639     141.199 112.170 -54.369  1.00 55.77      A16S
ATOM  32917  C1' CYT  639     140.434 112.658 -55.464  1.00 55.77      A16S
ATOM  32918  N1  CYT  639     140.241 114.105 -55.307  1.00 46.65      A16S
ATOM  32919  C6  CYT  639     141.105 114.852 -54.560  1.00 46.65      A16S
ATOM  32920  C2  CYT  639     139.180 114.723 -55.989  1.00 46.65      A16S
ATOM  32921  O2  CYT  639     138.366 114.016 -56.607  1.00 46.65      A16S
ATOM  32922  N3  CYT  639     139.067 116.072 -55.954  1.00 46.65      A16S
ATOM  32923  C4  CYT  639     139.947 116.791 -55.261  1.00 46.65      A16S
ATOM  32924  N4  CYT  639     139.824 118.108 -55.282  1.00 46.65      A16S
ATOM  32925  C5  CYT  639     141.001 116.184 -54.516  1.00 46.65      A16S
ATOM  32926  C2' CYT  639     141.254 112.440 -56.731  1.00 55.77      A16S
ATOM  32927  O2' CYT  639     140.900 111.216 -57.336  1.00 55.77      A16S
ATOM  32928  C3' CYT  639     142.671 112.441 -56.171  1.00 55.77      A16S
ATOM  32929  O3' CYT  639     143.609 111.836 -57.050  1.00 55.77      A16S
ATOM  32930  P   GUA  640     144.426 112.760 -58.080  1.00 55.47      A16S
ATOM  32931  O1P GUA  640     145.490 111.892 -58.638  1.00 51.42      A16S
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ATOM  32932  O2P GUA  640     144.774 114.049 -57.431  1.00 51.42      A16S
ATOM  32933  O5' GUA  640     143.378 113.100 -59.226  1.00 55.47      A16S
ATOM  32934  C5' GUA  640     142.715 112.051 -59.949  1.00 55.47      A16S
ATOM  32935  C4' GUA  640     141.613 112.621 -60.806  1.00 55.47      A16S
ATOM  32936  O4' GUA  640     140.638 113.282 -59.954  1.00 55.47      A16S
ATOM  32937  C1' GUA  640     140.079 114.385 -60.645  1.00 55.47      A16S
ATOM  32938  N9  GUA  640     140.408 115.619 -59.941  1.00 51.42      A16S
ATOM  32939  C4  GUA  640     140.005 116.873 -60.320  1.00 51.42      A16S
ATOM  32940  N3  GUA  640     139.212 117.156 -61.369  1.00 51.42      A16S
ATOM  32941  C2  GUA  640     139.006 118.449 -61.503  1.00 51.42      A16S
ATOM  32942  N2  GUA  640     138.225 118.885 -62.501  1.00 51.42      A16S
ATOM  32943  N1  GUA  640     139.547 119.403 -60.672  1.00 51.42      A16S
ATOM  32944  C6  GUA  640     140.377 119.137 -59.584  1.00 51.42      A16S
ATOM  32945  O6  GUA  640     140.833 120.078 -58.902  1.00 51.42      A16S
ATOM  32946  C5  GUA  640     140.592 117.735 -59.425  1.00 51.42      A16S
ATOM  32947  N7  GUA  640     141.329 117.034 -58.480  1.00 51.42      A16S
ATOM  32948  C8  GUA  640     141.187 115.782 -58.823  1.00 51.42      A16S
ATOM  32949  C2' GUA  640     140.704 114.426 -62.036  1.00 55.47      A16S
ATOM  32950  O2' GUA  640     139.852 113.777 -62.952  1.00 55.47      A16S
ATOM  32951  C3' GUA  640     142.017 113.697 -61.803  1.00 55.47      A16S
ATOM  32952  O3' GUA  640     142.569 113.192 -63.013  1.00 55.47      A16S
ATOM  32953  P   GUA  641     143.553 114.127 -63.885  1.00 57.68      A16S
ATOM  32954  O1P GUA  641     144.153 113.293 -64.965  1.00 53.24      A16S
ATOM  32955  O2P GUA  641     144.445 114.860 -62.955  1.00 53.24      A16S
ATOM  32956  O5' GUA  641     142.581 115.220 -64.520  1.00 57.68      A16S
ATOM  32957  C5' GUA  641     141.463 114.845 -65.357  1.00 57.68      A16S
ATOM  32958  C4' GUA  641     140.809 116.082 -65.930  1.00 57.68      A16S
ATOM  32959  O4' GUA  641     140.221 116.856 -64.856  1.00 57.68      A16S
ATOM  32960  C1' GUA  641     140.429 118.239 -65.090  1.00 57.68      A16S
ATOM  32961  N9  GUA  641     141.230 118.777 -63.994  1.00 53.24      A16S
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ATOM  32971  C8  GUA  641     141.962 118.068 -63.069  1.00 53.24      A16S
ATOM  32972  C2' GUA  641     141.103 118.392 -66.449  1.00 57.68      A16S
ATOM  32973  O2' GUA  641     140.114 118.643 -67.423  1.00 57.68      A16S
ATOM  32974  C3' GUA  641     141.779 117.037 -66.602  1.00 57.68      A16S
ATOM  32975  O3' GUA  641     142.025 116.683 -67.950  1.00 57.68      A16S
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ATOM  32999  O5' GUA  643     146.910 122.233 -70.614  1.00 63.00      A16S
ATOM  33000  C5' GUA  643     146.502 123.539 -71.027  1.00 63.00      A16S
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ATOM  33015  C2' GUA  643     148.644 125.378 -68.533  1.00 63.00      A16S
ATOM  33016  O2' GUA  643     148.660 126.783 -68.711  1.00 63.00      A16S
ATOM  33017  C3' GUA  643     148.543 124.557 -69.819  1.00 63.00      A16S
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ATOM  33021  O2P GUA  644     151.201 123.479 -70.413  1.00 53.98      A16S
ATOM  33022  O5' GUA  644     151.410 125.860 -69.760  1.00 73.41      A16S
ATOM  33023  C5' GUA  644     152.703 125.724 -69.227  1.00 73.41      A16S
ATOM  33024  C4' GUA  644     152.940 126.729 -68.141  1.00 73.41      A16S
ATOM  33025  O4' GUA  644     151.934 126.611 -67.105  1.00 73.41      A16S
ATOM  33026  C1' GUA  644     152.560 126.428 -65.838  1.00 73.41      A16S
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ATOM  33032  N1  GUA  644     153.158 122.844 -62.250  1.00 53.98      A16S
ATOM  33033  C6  GUA  644     152.597 122.196 -63.342  1.00 53.98      A16S
ATOM  33034  O6  GUA  644     152.341 120.989 -63.279  1.00 53.98      A16S
ATOM  33035  C5  GUA  644     152.391 123.086 -64.425  1.00 53.98      A16S
ATOM  33036  N7  GUA  644     151.862 122.852 -65.686  1.00 53.98      A16S
ATOM  33037  C8  GUA  644     151.889 124.017 -66.272  1.00 53.98      A16S
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ATOM	33038	C2'	GUA	644	154.030	126.811	-66.021	1.00	73.41	A16S	ATOM	33091	C5'	GUA	647	166.621	120.999	-61.127	1.00	50.90	A16S
ATOM	33039	O2'	GUA	644	154.246	128.184	-65.764	1.00	73.41	A16S	ATOM	33092	C4'	GUA	647	166.410	119.736	-60.349	1.00	50.90	A16S
ATOM	33040	C3'	GUA	644	154.242	126.385	-67.465	1.00	73.41	A16S	ATOM	33093	O4'	GUA	647	165.002	119.479	-60.156	1.00	50.90	A16S
ATOM	33041	O3'	GUA	644	155.338	126.888	-68.186	1.00	73.41	A16S	ATOM	33094	C1'	GUA	647	164.791	118.085	-60.071	1.00	50.90	A16S
ATOM	33042	P	GUA	645	156.451	125.856	-68.706	1.00	82.65	A16S	ATOM	33095	N9	GUA	647	163.786	117.697	-61.051	1.00	48.01	A16S
ATOM	33043	O1P	GUA	645	157.436	126.701	-69.441	1.00	45.66	A16S	ATOM	33096	C4	GUA	647	162.944	116.611	-60.964	1.00	48.01	A16S
ATOM	33044	O2P	GUA	645	155.802	124.692	-69.397	1.00	45.66	A16S	ATOM	33097	N3	GUA	647	162.864	115.747	-59.928	1.00	48.01	A16S
ATOM	33045	O5'	GUA	645	157.099	125.370	-67.333	1.00	82.65	A16S	ATOM	33098	C2	GUA	647	162.001	114.774	-60.161	1.00	48.01	A16S
ATOM	33046	C5'	GUA	645	157.387	126.365	-66.342	1.00	82.65	A16S	ATOM	33099	N2	GUA	647	161.810	113.814	-59.245	1.00	48.01	A16S
ATOM	33047	C4'	GUA	645	157.830	125.767	-65.035	1.00	82.65	A16S	ATOM	33100	N1	GUA	647	161.268	114.666	-61.310	1.00	48.01	A16S
ATOM	33048	O4'	GUA	645	156.754	125.109	-64.332	1.00	82.65	A16S	ATOM	33101	C6	GUA	647	161.328	115.547	-62.383	1.00	48.01	A16S
ATOM	33049	C1'	GUA	645	157.316	124.300	-63.322	1.00	82.65	A16S	ATOM	33102	O6	GUA	647	160.624	115.352	-63.379	1.00	48.01	A16S
ATOM	33050	N9	GUA	645	156.742	122.963	-63.381	1.00	45.66	A16S	ATOM	33103	C5	GUA	647	162.251	116.592	-62.149	1.00	48.01	A16S
ATOM	33051	C4	GUA	645	156.770	122.046	-62.359	1.00	45.66	A16S	ATOM	33104	N7	GUA	647	162.611	117.667	-62.946	1.00	48.01	A16S
ATOM	33052	N3	GUA	645	157.306	122.245	-61.130	1.00	45.66	A16S	ATOM	33105	C8	GUA	647	163.516	118.299	-62.249	1.00	48.01	A16S
ATOM	33053	C2	GUA	645	157.183	121.177	-60.360	1.00	45.66	A16S	ATOM	33106	C2'	GUA	647	166.134	117.392	-60.309	1.00	50.90	A16S
ATOM	33054	N2	GUA	645	157.666	121.195	-59.114	1.00	45.66	A16S	ATOM	33107	O2'	GUA	647	166.698	117.049	-59.062	1.00	50.90	A16S
ATOM	33055	N1	GUA	645	156.577	120.011	-60.756	1.00	45.66	A16S	ATOM	33108	C3'	GUA	647	166.928	118.483	-61.014	1.00	50.90	A16S
ATOM	33056	C6	GUA	645	156.011	119.783	-62.008	1.00	45.66	A16S	ATOM	33109	O3'	GUA	647	168.324	118.375	-60.789	1.00	50.90	A16S
ATOM	33057	O6	GUA	645	155.470	118.690	-62.252	1.00	45.66	A16S	ATOM	33110	P	ADE	648	169.282	117.811	-61.950	1.00	58.52	A16S
ATOM	33058	C5	GUA	645	156.147	120.923	-62.857	1.00	45.66	A16S	ATOM	33111	O1P	ADE	648	170.194	118.914	-62.340	1.00	39.27	A16S
ATOM	33059	N7	GUA	645	155.732	121.130	-64.166	1.00	45.66	A16S	ATOM	33112	O2P	ADE	648	168.438	117.152	-62.993	1.00	39.27	A16S
ATOM	33060	C8	GUA	645	156.099	122.355	-64.432	1.00	45.66	A16S	ATOM	33113	O5'	ADE	648	170.139	116.703	-61.186	1.00	58.52	A16S
ATOM	33061	C2'	GUA	645	158.826	124.263	-63.553	1.00	82.65	A16S	ATOM	33114	C5'	ADE	648	170.692	115.604	-61.905	1.00	58.52	A16S
ATOM	33062	O2'	GUA	645	159.408	125.167	-62.636	1.00	82.65	A16S	ATOM	33115	C4'	ADE	648	170.900	114.416	-61.001	1.00	58.52	A16S
ATOM	33063	C3'	GUA	645	158.941	124.746	-64.996	1.00	82.65	A16S	ATOM	33116	O4'	ADE	648	172.105	114.550	-60.216	1.00	58.52	A16S
ATOM	33064	O3'	GUA	645	160.202	125.339	-65.234	1.00	82.65	A16S	ATOM	33117	C1'	ADE	648	172.039	113.640	-59.144	1.00	58.52	A16S
ATOM	33065	P	ADE	646	161.402	124.443	-65.816	1.00	55.58	A16S	ATOM	33118	N9	ADE	648	172.512	114.283	-57.927	1.00	39.27	A16S
ATOM	33066	O1P	ADE	646	162.339	125.383	-66.474	1.00	48.65	A16S	ATOM	33119	C4	ADE	648	173.137	113.633	-56.890	1.00	39.27	A16S
ATOM	33067	O2P	ADE	646	160.856	123.295	-66.576	1.00	48.65	A16S	ATOM	33120	N3	ADE	648	173.439	112.325	-56.812	1.00	39.27	A16S
ATOM	33068	O5'	ADE	646	162.122	123.886	-64.513	1.00	55.58	A16S	ATOM	33121	C2	ADE	648	174.053	112.048	-55.663	1.00	39.27	A16S
ATOM	33069	C5'	ADE	646	162.621	124.801	-63.517	1.00	55.58	A16S	ATOM	33122	N1	ADE	648	174.366	112.863	-54.655	1.00	39.27	A16S
ATOM	33070	C4'	ADE	646	162.921	124.077	-62.224	1.00	55.58	A16S	ATOM	33123	C6	ADE	648	174.038	114.171	-54.757	1.00	39.27	A16S
ATOM	33071	O4'	ADE	646	161.699	123.664	-61.561	1.00	55.58	A16S	ATOM	33124	N6	ADE	648	174.331	114.981	-53.738	1.00	39.27	A16S
ATOM	33072	C1'	ADE	646	161.891	122.406	-60.943	1.00	55.58	A16S	ATOM	33125	C5	ADE	648	173.395	114.598	-55.939	1.00	39.27	A16S
ATOM	33073	N9	ADE	646	161.033	121.431	-61.618	1.00	48.65	A16S	ATOM	33126	N7	ADE	648	172.948	115.843	-56.372	1.00	39.27	A16S
ATOM	33074	C4	ADE	646	160.561	120.251	-61.095	1.00	48.65	A16S	ATOM	33127	C8	ADE	648	172.435	115.600	-57.553	1.00	39.27	A16S
ATOM	33075	N3	ADE	646	160.765	119.764	-59.861	1.00	48.65	A16S	ATOM	33128	C2'	ADE	648	170.599	113.143	-59.036	1.00	58.52	A16S
ATOM	33076	C2	ADE	646	160.163	118.586	-59.719	1.00	48.65	A16S	ATOM	33129	O2'	ADE	648	170.583	111.813	-59.500	1.00	58.52	A16S
ATOM	33077	N1	ADE	646	159.444	117.892	-60.603	1.00	48.65	A16S	ATOM	33130	C3'	ADE	648	169.847	114.104	-59.959	1.00	58.52	A16S
ATOM	33078	C6	ADE	646	159.262	118.409	-61.831	1.00	48.65	A16S	ATOM	33131	O3'	ADE	648	168.705	113.473	-60.531	1.00	58.52	A16S
ATOM	33079	N6	ADE	646	158.557	117.710	-62.716	1.00	48.65	A16S	ATOM	33132	P	GUA	649	167.233	113.833	-59.984	1.00	44.38	A16S
ATOM	33080	C5	ADE	646	159.834	119.655	-62.107	1.00	48.65	A16S	ATOM	33133	O1P	GUA	649	166.461	114.302	-61.159	1.00	49.04	A16S
ATOM	33081	N7	ADE	646	159.826	120.452	-63.242	1.00	48.65	A16S	ATOM	33134	O2P	GUA	649	167.344	114.698	-58.786	1.00	49.04	A16S
ATOM	33082	C8	ADE	646	160.550	121.489	-62.901	1.00	48.65	A16S	ATOM	33135	O5'	GUA	649	166.639	112.429	-59.527	1.00	44.38	A16S
ATOM	33083	C2'	ADE	646	163.368	122.052	-61.097	1.00	55.58	A16S	ATOM	33136	C5'	GUA	649	166.923	111.898	-58.231	1.00	44.38	A16S
ATOM	33084	O2'	ADE	646	164.059	122.548	-59.967	1.00	55.58	A16S	ATOM	33137	C4'	GUA	649	165.993	110.750	-57.928	1.00	44.38	A16S
ATOM	33085	C3'	ADE	646	163.720	122.802	-62.373	1.00	55.58	A16S	ATOM	33138	O4'	GUA	649	164.629	111.184	-58.171	1.00	44.38	A16S
ATOM	33086	O3'	ADE	646	165.096	123.084	-62.522	1.00	55.58	A16S	ATOM	33139	C1'	GUA	649	163.854	110.110	-58.682	1.00	44.38	A16S
ATOM	33087	P	GUA	647	166.002	122.108	-63.410	1.00	50.90	A16S	ATOM	33140	N9	GUA	649	163.465	110.437	-60.051	1.00	49.04	A16S
ATOM	33088	O1P	GUA	647	167.311	122.789	-63.549	1.00	48.01	A16S	ATOM	33141	C4	GUA	649	162.803	109.616	-60.933	1.00	49.04	A16S
ATOM	33089	O2P	GUA	647	165.261	121.682	-64.618	1.00	48.01	A16S	ATOM	33142	N3	GUA	649	162.354	108.369	-60.675	1.00	49.04	A16S
ATOM	33090	O5'	GUA	647	166.174	120.835	-62.477	1.00	50.90	A16S	ATOM	33143	C2	GUA	649	161.775	107.827	-61.727	1.00	49.04	A16S

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ATOM  33144  N2  GUA  649     161.268 106.589 -61.642  1.00 49.04      A16S
ATOM  33145  N1  GUA  649     161.654 108.459 -62.937  1.00 49.04      A16S
ATOM  33146  C6  GUA  649     162.128 109.737 -63.225  1.00 49.04      A16S
ATOM  33147  O6  GUA  649     162.006 110.207 -64.366  1.00 49.04      A16S
ATOM  33148  C5  GUA  649     162.730 110.328 -62.105  1.00 49.04      A16S
ATOM  33149  N7  GUA  649     163.305 111.578 -61.959  1.00 49.04      A16S
ATOM  33150  C8  GUA  649     163.720 111.602 -60.726  1.00 49.04      A16S
ATOM  33151  C2' GUA  649     164.748 108.880 -58.667  1.00 44.38      A16S
ATOM  33152  O2' GUA  649     164.535 108.211 -57.442  1.00 44.38      A16S
ATOM  33153  C3' GUA  649     166.124 109.516 -58.798  1.00 44.38      A16S
ATOM  33154  O3' GUA  649     167.178 108.665 -58.395  1.00 44.38      A16S
ATOM  33155  P   GUA  650     168.082 107.951 -59.520  1.00 46.39      A16S
ATOM  33156  O1P GUA  650     169.277 107.404 -58.822  1.00 41.64      A16S
ATOM  33157  O2P GUA  650     168.270 108.888 -60.661  1.00 41.64      A16S
ATOM  33158  O5' GUA  650     167.171 106.743 -60.014  1.00 46.39      A16S
ATOM  33159  C5' GUA  650     166.674 105.788 -59.075  1.00 46.39      A16S
ATOM  33160  C4' GUA  650     165.735 104.835 -59.753  1.00 46.39      A16S
ATOM  33161  O4' GUA  650     164.589 105.577 -60.231  1.00 46.39      A16S
ATOM  33162  C1' GUA  650     164.157 105.043 -61.467  1.00 46.39      A16S
ATOM  33163  N9  GUA  650     164.365 106.060 -62.492  1.00 41.64      A16S
ATOM  33164  C4  GUA  650     163.951 105.979 -63.793  1.00 41.64      A16S
ATOM  33165  N3  GUA  650     163.285 104.944 -64.341  1.00 41.64      A16S
ATOM  33166  C2  GUA  650     162.997 105.156 -65.605  1.00 41.64      A16S
ATOM  33167  N2  GUA  650     162.312 104.224 -66.289  1.00 41.64      A16S
ATOM  33168  N1  GUA  650     163.350 106.295 -66.287  1.00 41.64      A16S
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ATOM  33249  C4' GUA  654     174.799 103.251 -77.992  1.00 67.63      A16S
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ATOM	33358	O5'	ADE	659	195.225	112.595	-68.199	1.00	45.74	A16S	ATOM	33411	O4	URI	661	196.745	103.901	-70.221	1.00	35.96	A16S
ATOM	33359	C5'	ADE	659	195.512	113.092	-66.882	1.00	45.74	A16S	ATOM	33412	C5	URI	661	197.816	103.628	-68.126	1.00	35.96	A16S
ATOM	33360	C4'	ADE	659	195.246	112.026	-65.849	1.00	45.74	A16S	ATOM	33413	C2'	URI	661	199.110	99.701	-66.272	1.00	55.46	A16S
ATOM	33361	O4'	ADE	659	193.857	111.627	-65.909	1.00	45.74	A16S	ATOM	33414	O2'	URI	661	198.963	98.443	-65.637	1.00	55.46	A16S
ATOM	33362	C1'	ADE	659	193.741	110.257	-65.594	1.00	45.74	A16S	ATOM	33415	C3'	URI	661	200.197	100.562	-65.652	1.00	55.46	A16S
ATOM	33363	N9	ADE	659	193.176	109.575	-66.753	1.00	46.04	A16S	ATOM	33416	O3'	URI	661	201.357	99.812	-65.359	1.00	55.46	A16S
ATOM	33364	C4	ADE	659	192.556	108.352	-66.738	1.00	46.04	A16S	ATOM	33417	P	CYT	662	202.587	99.861	-66.386	1.00	58.28	A16S
ATOM	33365	N3	ADE	659	192.322	107.577	-65.670	1.00	46.04	A16S	ATOM	33418	O1P	CYT	662	203.752	99.242	-65.716	1.00	32.03	A16S
ATOM	33366	C2	ADE	659	191.721	106.453	-66.034	1.00	46.04	A16S	ATOM	33419	O2P	CYT	662	202.670	101.269	-66.866	1.00	32.03	A16S
ATOM	33367	N1	ADE	659	191.365	106.042	-67.251	1.00	46.04	A16S	ATOM	33420	O5'	CYT	662	202.117	98.926	-67.586	1.00	58.28	A16S
ATOM	33368	C6	ADE	659	191.622	106.844	-68.305	1.00	46.04	A16S	ATOM	33421	C5'	CYT	662	201.774	97.552	-67.346	1.00	58.28	A16S
ATOM	33369	N6	ADE	659	191.290	106.415	-69.527	1.00	46.04	A16S	ATOM	33422	C4'	CYT	662	201.064	96.974	-68.545	1.00	58.28	A16S
ATOM	33370	C5	ADE	659	192.237	108.075	-68.049	1.00	46.04	A16S	ATOM	33423	O4'	CYT	662	199.841	97.717	-68.766	1.00	58.28	A16S
ATOM	33371	N7	ADE	659	192.616	109.119	-68.879	1.00	46.04	A16S	ATOM	33424	C1'	CYT	662	199.571	97.791	-70.153	1.00	58.28	A16S
ATOM	33372	C8	ADE	659	193.167	109.984	-68.063	1.00	46.04	A16S	ATOM	33425	N1	CYT	662	199.545	99.202	-70.566	1.00	32.03	A16S
ATOM	33373	C2'	ADE	659	195.136	109.738	-65.265	1.00	45.74	A16S	ATOM	33426	C6	CYT	662	200.244	100.161	-69.890	1.00	32.03	A16S
ATOM	33374	O2'	ADE	659	195.348	109.813	-63.873	1.00	45.74	A16S	ATOM	33427	C2	CYT	662	198.786	99.544	-71.683	1.00	32.03	A16S
ATOM	33375	C3'	ADE	659	196.006	110.727	-66.020	1.00	45.74	A16S	ATOM	33428	O2	CYT	662	198.178	98.640	-72.287	1.00	32.03	A16S
ATOM	33376	O3'	ADE	659	197.319	110.801	-65.496	1.00	45.74	A16S	ATOM	33429	N3	CYT	662	198.732	100.836	-72.087	1.00	32.03	A16S
ATOM	33377	P	URI	660	198.428	109.776	-66.031	1.00	54.10	A16S	ATOM	33430	C4	CYT	662	199.406	101.767	-71.420	1.00	32.03	A16S
ATOM	33378	O1P	URI	660	199.726	110.176	-65.457	1.00	46.16	A16S	ATOM	33431	N4	CYT	662	199.313	103.034	-71.844	1.00	32.03	A16S
ATOM	33379	O2P	URI	660	198.285	109.656	-67.502	1.00	46.16	A16S	ATOM	33432	C5	CYT	662	200.205	101.445	-70.281	1.00	32.03	A16S
ATOM	33380	O5'	URI	660	197.987	108.397	-65.372	1.00	54.10	A16S	ATOM	33433	C2'	CYT	662	200.659	97.017	-70.888	1.00	58.28	A16S
ATOM	33381	C5'	URI	660	197.960	108.261	-63.949	1.00	54.10	A16S	ATOM	33434	O2'	CYT	662	200.166	95.727	-71.185	1.00	58.28	A16S
ATOM	33382	C4'	URI	660	197.537	106.873	-63.555	1.00	54.10	A16S	ATOM	33435	C3'	CYT	662	201.797	97.068	-69.875	1.00	58.28	A16S
ATOM	33383	O4'	URI	660	196.151	106.669	-63.908	1.00	54.10	A16S	ATOM	33436	O3'	CYT	662	202.773	96.046	-70.053	1.00	58.28	A16S
ATOM	33384	C1'	URI	660	195.942	105.309	-64.242	1.00	54.10	A16S	ATOM	33437	P	CYT	663	204.126	96.377	-70.861	1.00	71.22	A16S
ATOM	33385	N1	URI	660	195.429	105.220	-65.618	1.00	46.16	A16S	ATOM	33438	O1P	CYT	663	205.013	95.211	-70.643	1.00	49.66	A16S
ATOM	33386	C6	URI	660	195.572	106.249	-66.521	1.00	46.16	A16S	ATOM	33439	O2P	CYT	663	204.609	97.745	-70.520	1.00	49.66	A16S
ATOM	33387	C2	URI	660	194.785	104.056	-65.974	1.00	46.16	A16S	ATOM	33440	O5'	CYT	663	203.651	96.418	-72.381	1.00	71.22	A16S
ATOM	33388	O2	URI	660	194.659	103.122	-65.223	1.00	46.16	A16S	ATOM	33441	C5'	CYT	663	203.066	95.263	-72.998	1.00	71.22	A16S
ATOM	33389	N3	URI	660	194.300	104.022	-67.249	1.00	46.16	A16S	ATOM	33442	C4'	CYT	663	202.530	95.609	-74.363	1.00	71.22	A16S
ATOM	33390	C4	URI	660	194.398	105.010	-68.197	1.00	46.16	A16S	ATOM	33443	O4'	CYT	663	201.420	96.528	-74.232	1.00	71.22	A16S
ATOM	33391	O4	URI	660	193.895	104.827	-69.312	1.00	46.16	A16S	ATOM	33444	C1'	CYT	663	201.376	97.386	-75.361	1.00	71.22	A16S
ATOM	33392	C5	URI	660	195.094	106.187	-67.764	1.00	46.16	A16S	ATOM	33445	N1	CYT	663	201.515	98.782	-74.913	1.00	49.66	A16S
ATOM	33393	C2'	URI	660	197.266	104.579	-64.053	1.00	54.10	A16S	ATOM	33446	C6	CYT	663	201.999	99.087	-73.671	1.00	49.66	A16S
ATOM	33394	O2'	URI	660	197.273	104.030	-62.746	1.00	54.10	A16S	ATOM	33447	C2	CYT	663	201.145	99.808	-75.799	1.00	49.66	A16S
ATOM	33395	C3'	URI	660	198.263	105.718	-64.221	1.00	54.10	A16S	ATOM	33448	O2	CYT	663	200.726	99.504	-76.929	1.00	49.66	A16S
ATOM	33396	O3'	URI	660	199.522	105.445	-63.620	1.00	54.10	A16S	ATOM	33449	N3	CYT	663	201.264	101.098	-75.406	1.00	49.66	A16S
ATOM	33397	P	URI	661	200.725	104.885	-64.531	1.00	55.46	A16S	ATOM	33450	C4	CYT	663	201.747	101.382	-74.198	1.00	49.66	A16S
ATOM	33398	O1P	URI	661	201.907	104.796	-63.649	1.00	35.96	A16S	ATOM	33451	N4	CYT	663	201.874	102.665	-73.868	1.00	49.66	A16S
ATOM	33399	O2P	URI	661	200.795	105.720	-65.768	1.00	35.96	A16S	ATOM	33452	C5	CYT	663	202.131	100.362	-73.277	1.00	49.66	A16S
ATOM	33400	O5'	URI	661	200.255	103.406	-64.903	1.00	55.46	A16S	ATOM	33453	C2'	CYT	663	202.524	96.998	-76.284	1.00	71.22	A16S
ATOM	33401	C5'	URI	661	200.078	102.424	-63.873	1.00	55.46	A16S	ATOM	33454	O2'	CYT	663	202.051	96.126	-77.291	1.00	71.22	A16S
ATOM	33402	C4'	URI	661	199.502	101.148	-64.436	1.00	55.46	A16S	ATOM	33455	C3'	CYT	663	203.476	96.326	-75.308	1.00	71.22	A16S
ATOM	33403	O4'	URI	661	198.142	101.369	-64.884	1.00	55.46	A16S	ATOM	33456	O3'	CYT	663	204.388	95.471	-75.966	1.00	71.22	A16S
ATOM	33404	C1'	URI	661	197.880	100.566	-66.028	1.00	55.46	A16S	ATOM	33457	P	CYT	664	205.803	96.064	-76.439	1.00	68.63	A16S
ATOM	33405	N1	URI	661	197.653	101.458	-67.174	1.00	35.96	A16S	ATOM	33458	O1P	CYT	664	206.598	94.905	-76.914	1.00	62.48	A16S
ATOM	33406	C6	URI	661	198.044	102.776	-67.131	1.00	35.96	A16S	ATOM	33459	O2P	CYT	664	206.341	96.918	-75.356	1.00	62.48	A16S
ATOM	33407	C2	URI	661	197.024	100.934	-68.295	1.00	35.96	A16S	ATOM	33460	O5'	CYT	664	205.426	97.013	-77.666	1.00	68.63	A16S
ATOM	33408	O2	URI	661	196.703	99.754	-68.396	1.00	35.96	A16S	ATOM	33461	C5'	CYT	664	204.872	96.465	-78.878	1.00	68.63	A16S

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ATOM  33462  C4' CYT   664     204.671  97.550 -79.911  1.00 68.63      A16S
ATOM  33463  O4' CYT   664     203.573  98.418 -79.513  1.00 68.63      A16S
ATOM  33464  C1' CYT   664     203.843  99.757 -79.910  1.00 68.63      A16S
ATOM  33465  N1  CYT   664     203.986 100.605 -78.696  1.00 62.48      A16S
ATOM  33466  C6  CYT   664     204.326 100.061 -77.485  1.00 62.48      A16S
ATOM  33467  C2  CYT   664     203.793 101.991 -78.810  1.00 62.48      A16S
ATOM  33468  O2  CYT   664     203.459 102.459 -79.903  1.00 62.48      A16S
ATOM  33469  N3  CYT   664     203.976 102.783 -77.725  1.00 62.48      A16S
ATOM  33470  C4  CYT   664     204.327 102.244 -76.558  1.00 62.48      A16S
ATOM  33471  N4  CYT   664     204.518 103.065 -75.518  1.00 62.48      A16S
ATOM  33472  C5  CYT   664     204.506 100.835 -76.402  1.00 62.48      A16S
ATOM  33473  C2' CYT   664     205.143  99.726 -80.713  1.00 68.63      A16S
ATOM  33474  O2' CYT   664     204.843  99.582 -82.085  1.00 68.63      A16S
ATOM  33475  C3' CYT   664     205.834  98.502 -80.126  1.00 68.63      A16S
ATOM  33476  O3' CYT   664     206.861  97.987 -80.956  1.00 68.63      A16S
ATOM  33477  P   GUA   665     208.376  98.509 -80.756  1.00 87.51      A16S
ATOM  33478  O1P GUA   665     209.230  97.710 -81.677  1.00 57.82      A16S
ATOM  33479  O2P GUA   665     208.710  98.553 -79.312  1.00 57.82      A16S
ATOM  33480  O5' GUA   665     208.332 100.006 -81.295  1.00 87.51      A16S
ATOM  33481  C5' GUA   665     207.988 100.251 -82.661  1.00 87.51      A16S
ATOM  33482  C4' GUA   665     208.011 101.722 -82.971  1.00 87.51      A16S
ATOM  33483  O4' GUA   665     206.855 102.380 -82.398  1.00 87.51      A16S
ATOM  33484  C1' GUA   665     207.178 103.732 -82.119  1.00 87.51      A16S
ATOM  33485  N9  GUA   665     207.059 103.977 -80.684  1.00 57.82      A16S
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ATOM  33487  N3  GUA   665     206.892 106.386 -80.757  1.00 57.82      A16S
ATOM  33488  C2  GUA   665     206.836 107.409 -79.933  1.00 57.82      A16S
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ATOM  33490  N1  GUA   665     206.834 107.291 -78.568  1.00 57.82      A16S
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ATOM  33495  C8  GUA   665     207.083 103.062 -79.657  1.00 57.82      A16S
ATOM  33496  C2' GUA   665     208.630 103.952 -82.543  1.00 87.51      A16S
ATOM  33497  O2' GUA   665     208.680 104.496 -83.849  1.00 87.51      A16S
ATOM  33498  C3' GUA   665     209.185 102.538 -82.464  1.00 87.51      A16S
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ATOM  33501  O1P GUA   666     212.845 102.099 -83.427  1.00 63.08      A16S
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ATOM  33503  O5' GUA   666     211.945 104.181 -82.378  1.00 68.18      A16S
ATOM  33504  C5' GUA   666     211.676 105.019 -83.509  1.00 68.18      A16S
ATOM  33505  C4' GUA   666     211.404 106.439 -83.073  1.00 68.18      A16S
ATOM  33506  O4' GUA   666     210.206 106.504 -82.253  1.00 68.18      A16S
ATOM  33507  C1' GUA   666     210.333 107.554 -81.305  1.00 68.18      A16S
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ATOM  33593  C4' ADE   670     222.372 108.165 -64.407  1.00 49.78      A16S
ATOM  33594  O4' ADE   670     221.407 107.392 -65.141  1.00 49.78      A16S
ATOM  33595  C1' ADE   670     221.424 106.071 -64.677  1.00 49.78      A16S
ATOM  33596  N9  ADE   670     220.941 105.215 -65.759  1.00 55.65      A16S
ATOM  33597  C4  ADE   670     219.951 104.267 -65.657  1.00 55.65      A16S
ATOM  33598  N3  ADE   670     219.250 103.930 -64.560  1.00 55.65      A16S
ATOM  33599  C2  ADE   670     218.375 102.968 -64.839  1.00 55.65      A16S
ATOM  33600  N1  ADE   670     218.142 102.347 -66.000  1.00 55.65      A16S
ATOM  33601  C6  ADE   670     218.870 102.704 -67.079  1.00 55.65      A16S
ATOM  33602  N6  ADE   670     218.656 102.068 -68.229  1.00 55.65      A16S
ATOM  33603  C5  ADE   670     219.821 103.721 -66.919  1.00 55.65      A16S
ATOM  33604  N7  ADE   670     220.705 104.316 -67.802  1.00 55.65      A16S
ATOM  33605  C8  ADE   670     221.346 105.190 -67.066  1.00 55.65      A16S
ATOM  33606  C2' ADE   670     222.826 105.772 -64.140  1.00 49.78      A16S
ATOM  33607  O2' ADE   670     222.778 104.998 -62.958  1.00 49.78      A16S
ATOM  33608  C3' ADE   670     223.445 107.171 -64.002  1.00 49.78      A16S
ATOM  33609  O3' ADE   670     224.166 107.576 -62.810  1.00 49.78      A16S
ATOM  33610  P   GUA   671     223.466 107.585 -61.339  1.00 50.62      A16S
ATOM  33611  O1P GUA   671     224.409 108.384 -60.521  1.00 37.27      A16S
ATOM  33612  O2P GUA   671     223.046 106.232 -60.864  1.00 37.27      A16S
ATOM  33613  O5' GUA   671     222.179 108.501 -61.489  1.00 50.62      A16S
ATOM  33614  C5' GUA   671     221.095 108.403 -60.561  1.00 50.62      A16S
ATOM  33615  C4' GUA   671     219.851 108.006 -61.300  1.00 50.62      A16S
ATOM  33616  O4' GUA   671     219.988 106.634 -61.746  1.00 50.62      A16S
ATOM  33617  C1' GUA   671     218.726 105.996 -61.750  1.00 50.62      A16S
ATOM  33618  N9  GUA   671     218.769 104.915 -60.774  1.00 37.27      A16S
ATOM  33619  C4  GUA   671     217.865 103.892 -60.633  1.00 37.27      A16S
ATOM  33620  N3  GUA   671     216.763 103.695 -61.383  1.00 37.27      A16S
ATOM  33621  C2  GUA   671     216.116 102.596 -61.028  1.00 37.27      A16S
ATOM  33622  N2  GUA   671     215.022 102.222 -61.690  1.00 37.27      A16S
ATOM  33623  N1  GUA   671     216.504 101.775 -60.008  1.00 37.27      A16S
ATOM  33624  C6  GUA   671     217.639 101.957 -59.228  1.00 37.27      A16S
ATOM  33625  O6  GUA   671     217.930 101.132 -58.352  1.00 37.27      A16S
ATOM  33626  C5  GUA   671     218.343 103.122 -59.598  1.00 37.27      A16S
ATOM  33627  N7  GUA   671     219.517 103.654 -59.087  1.00 37.27      A16S
ATOM  33628  C8  GUA   671     219.729 104.716 -59.812  1.00 37.27      A16S
ATOM  33629  C2' GUA   671     217.706 107.056 -61.367  1.00 50.62      A16S
ATOM  33630  O2' GUA   671     217.293 107.702 -62.555  1.00 50.62      A16S
ATOM  33631  C3' GUA   671     218.556 107.990 -60.524  1.00 50.62      A16S
ATOM  33632  O3' GUA   671     217.986 109.278 -60.392  1.00 50.62      A16S
ATOM  33633  P   CYT   672     217.088 109.597 -59.103  1.00 52.20      A16S
ATOM  33634  O1P CYT   672     216.858 111.066 -59.088  1.00 28.96      A16S
ATOM  33635  O2P CYT   672     217.706 108.933 -57.924  1.00 28.96      A16S
ATOM  33636  O5' CYT   672     215.720 108.845 -59.411  1.00 52.20      A16S
ATOM  33637  C5' CYT   672     214.995 109.120 -60.614  1.00 52.20      A16S
ATOM  33638  C4' CYT   672     213.952 108.059 -60.846  1.00 52.20      A16S
ATOM  33639  O4' CYT   672     214.603 106.768 -60.901  1.00 52.20      A16S
ATOM  33640  C1' CYT   672     213.735 105.773 -60.395  1.00 52.20      A16S
ATOM  33641  N1  CYT   672     214.374 105.116 -59.249  1.00 28.96      A16S
ATOM  33642  C6  CYT   672     215.514 105.614 -58.690  1.00 28.96      A16S
ATOM  33643  C2  CYT   672     213.793 103.943 -58.740  1.00 28.96      A16S
ATOM  33644  O2  CYT   672     212.733 103.528 -59.240  1.00 28.96      A16S
ATOM  33645  N3  CYT   672     214.390 103.299 -57.716  1.00 28.96      A16S
ATOM  33646  C4  CYT   672     215.511 103.784 -57.191  1.00 28.96      A16S
ATOM  33647  N4  CYT   672     216.065 103.110 -56.190  1.00 28.96      A16S
ATOM  33648  C5  CYT   672     216.112 104.985 -57.672  1.00 28.96      A16S
ATOM  33649  C2' CYT   672     212.432 106.452 -59.999  1.00 52.20      A16S
ATOM  33650  O2' CYT   672     211.511 106.333 -61.069  1.00 52.20      A16S
ATOM  33651  C3' CYT   672     212.904 107.877 -59.761  1.00 52.20      A16S
ATOM  33652  O3' CYT   672     211.843 108.811 -59.836  1.00 52.20      A16S
ATOM  33653  P   GUA   673     211.273 109.452 -58.482  1.00 47.53      A16S
ATOM  33654  O1P GUA   673     210.248 110.440 -58.893  1.00 39.38      A16S
ATOM  33655  O2P GUA   673     212.415 109.880 -57.632  1.00 39.38      A16S
ATOM  33656  O5' GUA   673     210.567 108.244 -57.727  1.00 47.53      A16S
ATOM  33657  C5' GUA   673     209.533 107.477 -58.352  1.00 47.53      A16S
ATOM  33658  C4' GUA   673     209.228 106.252 -57.520  1.00 47.53      A16S
ATOM  33659  O4' GUA   673     210.395 105.395 -57.472  1.00 47.53      A16S
ATOM  33660  C1' GUA   673     210.555 104.865 -56.166  1.00 47.53      A16S
ATOM  33661  N9  GUA   673     211.851 105.324 -55.672  1.00 39.38      A16S
ATOM  33662  C4  GUA   673     212.669 104.694 -54.775  1.00 39.38      A16S
ATOM  33663  N3  GUA   673     212.406 103.537 -54.138  1.00 39.38      A16S
ATOM  33664  C2  GUA   673     213.411 103.174 -53.343  1.00 39.38      A16S
ATOM  33665  N2  GUA   673     213.336 102.030 -52.626  1.00 39.38      A16S
ATOM  33666  N1  GUA   673     214.566 103.901 -53.197  1.00 39.38      A16S
ATOM  33667  C6  GUA   673     214.844 105.088 -53.858  1.00 39.38      A16S
ATOM  33668  O6  GUA   673     215.919 105.652 -53.677  1.00 39.38      A16S
ATOM  33669  C5  GUA   673     213.792 105.482 -54.690  1.00 39.38      A16S
ATOM  33670  N7  GUA   673     213.675 106.598 -55.494  1.00 39.38      A16S
ATOM  33671  C8  GUA   673     212.508 106.469 -56.052  1.00 39.38      A16S
ATOM  33672  C2' GUA   673     209.342 105.294 -55.334  1.00 47.53      A16S
ATOM  33673  O2' GUA   673     208.372 104.265 -55.375  1.00 47.53      A16S
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ATOM  33674  C3' GUA  673     208.892 106.557 -56.070  1.00 47.53      A16S
ATOM  33675  O3' GUA  673     207.493 106.819 -55.959  1.00 47.53      A16S
ATOM  33676  P   GUA  674     206.973 107.993 -54.998  1.00 50.90      A16S
ATOM  33677  O1P GUA  674     205.511 107.978 -55.205  1.00 38.94      A16S
ATOM  33678  O2P GUA  674     207.730 109.250 -55.237  1.00 38.94      A16S
ATOM  33679  O5' GUA  674     207.316 107.435 -53.551  1.00 50.90      A16S
ATOM  33680  C5' GUA  674     206.689 106.240 -53.096  1.00 50.90      A16S
ATOM  33681  C4' GUA  674     207.447 105.650 -51.952  1.00 50.90      A16S
ATOM  33682  O4' GUA  674     208.727 105.152 -52.405  1.00 50.90      A16S
ATOM  33683  C1' GUA  674     209.670 105.253 -51.349  1.00 50.90      A16S
ATOM  33684  N9  GUA  674     210.776 106.093 -51.786  1.00 38.94      A16S
ATOM  33685  C4  GUA  674     212.085 105.978 -51.395  1.00 38.94      A16S
ATOM  33686  N3  GUA  674     212.590 105.024 -50.586  1.00 38.94      A16S
ATOM  33687  C2  GUA  674     213.881 105.193 -50.377  1.00 38.94      A16S
ATOM  33688  N2  GUA  674     214.563 104.320 -49.621  1.00 38.94      A16S
ATOM  33689  N1  GUA  674     214.604 106.224 -50.902  1.00 38.94      A16S
ATOM  33690  C6  GUA  674     214.098 107.210 -51.741  1.00 38.94      A16S
ATOM  33691  O6  GUA  674     214.842 108.093 -52.175  1.00 38.94      A16S
ATOM  33692  C5  GUA  674     212.733 107.032 -51.987  1.00 38.94      A16S
ATOM  33693  N7  GUA  674     211.862 107.772 -52.773  1.00 38.94      A16S
ATOM  33694  C8  GUA  674     210.714 107.175 -52.628  1.00 38.94      A16S
ATOM  33695  C2' GUA  674     208.966 105.888 -50.149  1.00 50.90      A16S
ATOM  33696  O2' GUA  674     208.577 104.869 -49.250  1.00 50.90      A16S
ATOM  33697  C3' GUA  674     207.794 106.597 -50.822  1.00 50.90      A16S
ATOM  33698  O3' GUA  674     206.689 106.789 -49.956  1.00 50.90      A16S
ATOM  33699  P   URI  675     206.501 108.195 -49.210  1.00 54.00      A16S
ATOM  33700  O1P URI  675     205.097 108.226 -48.742  1.00 55.14      A16S
ATOM  33701  O2P URI  675     207.009 109.292 -50.077  1.00 55.14      A16S
ATOM  33702  O5' URI  675     207.429 108.033 -47.937  1.00 54.00      A16S
ATOM  33703  C5' URI  675     207.131 107.016 -46.984  1.00 54.00      A16S
ATOM  33704  C4' URI  675     208.153 107.012 -45.886  1.00 54.00      A16S
ATOM  33705  O4' URI  675     209.418 106.523 -46.395  1.00 54.00      A16S
ATOM  33706  C1' URI  675     210.480 107.166 -45.717  1.00 54.00      A16S
ATOM  33707  N1  URI  675     211.335 107.830 -46.718  1.00 55.14      A16S
ATOM  33708  C6  URI  675     210.809 108.322 -47.896  1.00 55.14      A16S
ATOM  33709  C2  URI  675     212.698 107.946 -46.447  1.00 55.14      A16S
ATOM  33710  O2  URI  675     213.222 107.551 -45.425  1.00 55.14      A16S
ATOM  33711  N3  URI  675     213.429 108.556 -47.424  1.00 55.14      A16S
ATOM  33712  C4  URI  675     212.972 109.067 -48.609  1.00 55.14      A16S
ATOM  33713  O4  URI  675     213.769 109.633 -49.357  1.00 55.14      A16S
ATOM  33714  C5  URI  675     211.561 108.921 -48.824  1.00 55.14      A16S
ATOM  33715  C2' URI  675     209.859 108.097 -44.666  1.00 54.00      A16S
ATOM  33716  O2' URI  675     209.753 107.385 -43.445  1.00 54.00      A16S
ATOM  33717  C3' URI  675     208.476 108.353 -45.252  1.00 54.00      A16S
ATOM  33718  O3' URI  675     207.518 108.690 -44.252  1.00 54.00      A16S
ATOM  33719  P   GUA  676     207.351 110.220 -43.792  1.00 54.74      A16S
ATOM  33720  O1P GUA  676     205.929 110.451 -43.445  1.00 42.71      A16S
ATOM  33721  O2P GUA  676     207.999 111.095 -44.793  1.00 42.71      A16S
ATOM  33722  O5' GUA  676     208.218 110.298 -42.459  1.00 54.74      A16S
ATOM  33723  C5' GUA  676     208.485 111.562 -41.839  1.00 54.74      A16S
ATOM  33724  C4' GUA  676     209.841 111.553 -41.181  1.00 54.74      A16S
ATOM  33725  O4' GUA  676     209.832 110.689 -40.026  1.00 54.74      A16S
ATOM  33726  C1' GUA  676     211.114 110.121 -39.845  1.00 54.74      A16S
ATOM  33727  N9  GUA  676     210.959 108.675 -39.757  1.00 42.71      A16S
ATOM  33728  C4  GUA  676     211.876 107.779 -39.266  1.00 42.71      A16S
ATOM  33729  N3  GUA  676     213.101 108.076 -38.797  1.00 42.71      A16S
ATOM  33730  C2  GUA  676     213.749 106.993 -38.400  1.00 42.71      A16S
ATOM  33731  N2  GUA  676     214.995 107.088 -37.913  1.00 42.71      A16S
ATOM  33732  N1  GUA  676     213.230 105.732 -38.452  1.00 42.71      A16S
ATOM  33733  C6  GUA  676     211.972 105.408 -38.938  1.00 42.71      A16S
ATOM  33734  O6  GUA  676     211.603 104.227 -38.956  1.00 42.71      A16S
ATOM  33735  C5  GUA  676     211.272 106.549 -39.368  1.00 42.71      A16S
ATOM  33736  N7  GUA  676     210.005 106.665 -39.916  1.00 42.71      A16S
ATOM  33737  C8  GUA  676     209.863 107.941 -40.134  1.00 42.71      A16S
ATOM  33738  C2' GUA  676     212.005 110.589 -40.993  1.00 54.74      A16S
ATOM  33739  O2' GUA  676     212.806 111.661 -40.559  1.00 54.74      A16S
ATOM  33740  C3' GUA  676     210.981 111.035 -42.026  1.00 54.74      A16S
ATOM  33741  O3' GUA  676     211.489 112.061 -42.846  1.00 54.74      A16S
ATOM  33742  P   ADE  677     212.458 111.680 -44.060  1.00 49.76      A16S
ATOM  33743  O1P ADE  677     212.594 112.887 -44.934  1.00 34.44      A16S
ATOM  33744  O2P ADE  677     212.004 110.394 -44.660  1.00 34.44      A16S
ATOM  33745  O5' ADE  677     213.832 111.401 -43.321  1.00 49.76      A16S
ATOM  33746  C5' ADE  677     214.830 110.703 -44.006  1.00 49.76      A16S
ATOM  33747  C4' ADE  677     215.600 109.821 -43.083  1.00 49.76      A16S
ATOM  33748  O4' ADE  677     214.780 109.230 -42.050  1.00 49.76      A16S
ATOM  33749  C1' ADE  677     215.195 107.891 -41.820  1.00 49.76      A16S
ATOM  33750  N9  ADE  677     214.055 107.008 -42.069  1.00 34.44      A16S
ATOM  33751  C4  ADE  677     213.990 105.660 -41.815  1.00 34.44      A16S
ATOM  33752  N3  ADE  677     214.954 104.880 -41.308  1.00 34.44      A16S
ATOM  33753  C2  ADE  677     214.521 103.626 -41.179  1.00 34.44      A16S
ATOM  33754  N1  ADE  677     213.327 103.106 -41.475  1.00 34.44      A16S
ATOM  33755  C6  ADE  677     212.382 103.919 -41.987  1.00 34.44      A16S
ATOM  33756  N6  ADE  677     211.185 103.405 -42.272  1.00 34.44      A16S
ATOM  33757  C5  ADE  677     212.715 105.266 -42.179  1.00 34.44      A16S
ATOM  33758  N7  ADE  677     211.993 106.339 -42.676  1.00 34.44      A16S
ATOM  33759  C8  ADE  677     212.831 107.346 -42.593  1.00 34.44      A16S
ATOM  33760  C2' ADE  677     216.362 107.604 -42.764  1.00 49.76      A16S
ATOM  33761  O2' ADE  677     217.586 107.770 -42.087  1.00 49.76      A16S
ATOM  33762  C3' ADE  677     216.127 108.642 -43.847  1.00 49.76      A16S
ATOM  33763  O3' ADE  677     217.230 109.036 -44.617  1.00 49.76      A16S
ATOM  33764  P   ADE  678     217.260 108.655 -46.174  1.00 50.44      A16S
ATOM  33765  O1P ADE  678     218.261 109.552 -46.820  1.00 40.51      A16S
ATOM  33766  O2P ADE  678     215.878 108.632 -46.703  1.00 40.51      A16S
ATOM  33767  O5' ADE  678     217.802 107.159 -46.093  1.00 50.44      A16S
ATOM  33768  C5' ADE  678     217.096 106.072 -46.681  1.00 50.44      A16S
ATOM  33769  C4' ADE  678     217.169 104.862 -45.789  1.00 50.44      A16S
ATOM  33770  O4' ADE  678     216.112 104.940 -44.811  1.00 50.44      A16S
ATOM  33771  C1' ADE  678     215.481 103.676 -44.676  1.00 50.44      A16S
ATOM  33772  N9  ADE  678     214.116 103.812 -45.170  1.00 40.51      A16S
ATOM  33773  C4  ADE  678     213.117 102.869 -45.130  1.00 40.51      A16S
ATOM  33774  N3  ADE  678     213.183 101.622 -44.625  1.00 40.51      A16S
ATOM  33775  C2  ADE  678     212.019 101.001 -44.773  1.00 40.51      A16S
ATOM  33776  N1  ADE  678     210.882 101.450 -45.324  1.00 40.51      A16S
ATOM  33777  C6  ADE  678     210.855 102.709 -45.815  1.00 40.51      A16S
ATOM  33778  N6  ADE  678     209.728 103.172 -46.350  1.00 40.51      A16S
ATOM  33779  C5  ADE  678     212.019 103.464 -45.727  1.00 40.51      A16S
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ATOM	33780	N7	ADE	678	212.321	104.753	-46.141	1.00	40.51	A16S	ATOM	33833	C4'	GUA	681	211.016	94.486	-54.992	1.00	49.46	A16S
ATOM	33781	C8	ADE	678	213.570	104.909	-45.785	1.00	40.51	A16S	ATOM	33834	O4'	GUA	681	211.175	95.734	-54.268	1.00	49.46	A16S
ATOM	33782	C2'	ADE	678	216.257	102.669	-45.518	1.00	50.44	A16S	ATOM	33835	C1'	GUA	681	211.167	96.827	-55.175	1.00	49.46	A16S
ATOM	33783	O2'	ADE	678	217.169	101.958	-44.719	1.00	50.44	A16S	ATOM	33836	N9	GUA	681	212.447	97.523	-55.066	1.00	38.47	A16S
ATOM	33784	C3'	ADE	678	216.901	103.579	-46.552	1.00	50.44	A16S	ATOM	33837	C4	GUA	681	212.778	98.738	-55.621	1.00	38.47	A16S
ATOM	33785	O3'	ADE	678	218.120	103.067	-47.070	1.00	50.44	A16S	ATOM	33838	N3	GUA	681	211.980	99.505	-56.388	1.00	38.47	A16S
ATOM	33786	P	ADE	679	218.212	102.652	-48.615	1.00	42.61	A16S	ATOM	33839	C2	GUA	681	212.569	100.642	-56.730	1.00	38.47	A16S
ATOM	33787	O1P	ADE	679	219.664	102.687	-48.936	1.00	37.72	A16S	ATOM	33840	N2	GUA	681	211.909	101.552	-57.465	1.00	38.47	A16S
ATOM	33788	O2P	ADE	679	217.264	103.493	-49.408	1.00	37.72	A16S	ATOM	33841	N1	GUA	681	213.844	100.980	-56.368	1.00	38.47	A16S
ATOM	33789	O5'	ADE	679	217.669	101.155	-48.608	1.00	42.61	A16S	ATOM	33842	C6	GUA	681	214.683	100.199	-55.587	1.00	38.47	A16S
ATOM	33790	C5'	ADE	679	218.259	100.178	-47.747	1.00	42.61	A16S	ATOM	33843	O6	GUA	681	215.816	100.598	-55.313	1.00	38.47	A16S
ATOM	33791	C4'	ADE	679	217.257	99.120	-47.385	1.00	42.61	A16S	ATOM	33844	C5	GUA	681	214.064	98.993	-55.201	1.00	38.47	A16S
ATOM	33792	O4'	ADE	679	216.150	99.745	-46.698	1.00	42.61	A16S	ATOM	33845	N7	GUA	681	214.545	97.953	-54.421	1.00	38.47	A16S
ATOM	33793	C1'	ADE	679	214.935	99.105	-47.054	1.00	42.61	A16S	ATOM	33846	C8	GUA	681	213.557	97.102	-54.372	1.00	38.47	A16S
ATOM	33794	N9	ADE	679	214.111	100.087	-47.763	1.00	37.72	A16S	ATOM	33847	C2'	GUA	681	210.930	96.261	-56.570	1.00	49.46	A16S
ATOM	33795	C4	ADE	679	212.766	100.023	-48.012	1.00	37.72	A16S	ATOM	33848	O2'	GUA	681	209.552	96.356	-56.872	1.00	49.46	A16S
ATOM	33796	N3	ADE	679	211.918	99.040	-47.669	1.00	37.72	A16S	ATOM	33849	C3'	GUA	681	211.431	94.830	-56.405	1.00	49.46	A16S
ATOM	33797	C2	ADE	679	210.685	99.327	-48.075	1.00	37.72	A16S	ATOM	33850	O3'	GUA	681	210.889	93.916	-57.344	1.00	49.46	A16S
ATOM	33798	N1	ADE	679	210.239	100.406	-48.736	1.00	37.72	A16S	ATOM	33851	P	CYT	682	211.824	93.355	-58.526	1.00	40.27	A16S
ATOM	33799	C6	ADE	679	211.123	101.375	-49.060	1.00	37.72	A16S	ATOM	33852	O1P	CYT	682	211.088	92.188	-59.113	1.00	37.82	A16S
ATOM	33800	N6	ADE	679	210.689	102.452	-49.714	1.00	37.72	A16S	ATOM	33853	O2P	CYT	682	213.190	93.152	-57.963	1.00	37.82	A16S
ATOM	33801	C5	ADE	679	212.454	101.190	-48.688	1.00	37.72	A16S	ATOM	33854	O5'	CYT	682	211.869	94.569	-59.561	1.00	40.27	A16S
ATOM	33802	N7	ADE	679	213.579	101.973	-48.870	1.00	37.72	A16S	ATOM	33855	C5'	CYT	682	210.673	94.977	-60.215	1.00	40.27	A16S
ATOM	33803	C8	ADE	679	214.533	101.280	-48.309	1.00	37.72	A16S	ATOM	33856	C4'	CYT	682	210.828	96.341	-60.827	1.00	40.27	A16S
ATOM	33804	C2'	ADE	679	215.302	97.902	-47.917	1.00	42.61	A16S	ATOM	33857	O4'	CYT	682	211.067	97.331	-59.802	1.00	40.27	A16S
ATOM	33805	O2'	ADE	679	215.492	96.783	-47.070	1.00	42.61	A16S	ATOM	33858	C1'	CYT	682	211.847	98.395	-60.327	1.00	40.27	A16S
ATOM	33806	C3'	ADE	679	216.614	98.368	-48.535	1.00	42.61	A16S	ATOM	33859	N1	CYT	682	213.129	98.429	-59.605	1.00	37.82	A16S
ATOM	33807	O3'	ADE	679	217.420	97.283	-48.977	1.00	42.61	A16S	ATOM	33860	C6	CYT	682	213.534	97.359	-58.857	1.00	37.82	A16S
ATOM	33808	P	URI	680	217.378	96.838	-50.526	1.00	54.96	A16S	ATOM	33861	C2	CYT	682	213.953	99.567	-59.717	1.00	37.82	A16S
ATOM	33809	O1P	URI	680	218.487	95.864	-50.689	1.00	36.04	A16S	ATOM	33862	O2	CYT	682	213.549	100.546	-60.364	1.00	37.82	A16S
ATOM	33810	O2P	URI	680	217.336	98.053	-51.385	1.00	36.04	A16S	ATOM	33863	N3	CYT	682	215.166	99.565	-59.116	1.00	37.82	A16S
ATOM	33811	O5'	URI	680	215.985	96.071	-50.686	1.00	54.96	A16S	ATOM	33864	C4	CYT	682	215.563	98.494	-58.423	1.00	37.82	A16S
ATOM	33812	C5'	URI	680	215.703	94.895	-49.916	1.00	54.96	A16S	ATOM	33865	N4	CYT	682	216.780	98.507	-57.890	1.00	37.82	A16S
ATOM	33813	C4'	URI	680	214.233	94.549	-49.980	1.00	54.96	A16S	ATOM	33866	C5	CYT	682	214.730	97.350	-58.256	1.00	37.82	A16S
ATOM	33814	O4'	URI	680	213.445	95.627	-49.414	1.00	54.96	A16S	ATOM	33867	C2'	CYT	682	212.088	98.076	-61.796	1.00	40.27	A16S
ATOM	33815	C1'	URI	680	212.166	95.661	-50.024	1.00	54.96	A16S	ATOM	33868	O2'	CYT	682	211.111	98.723	-62.595	1.00	40.27	A16S
ATOM	33816	N1	URI	680	211.931	96.981	-50.633	1.00	36.04	A16S	ATOM	33869	C3'	CYT	682	211.977	96.559	-61.777	1.00	40.27	A16S
ATOM	33817	C6	URI	680	212.952	97.811	-51.011	1.00	36.04	A16S	ATOM	33870	O3'	CYT	682	211.782	95.969	-63.044	1.00	40.27	A16S
ATOM	33818	C2	URI	680	210.616	97.354	-50.827	1.00	36.04	A16S	ATOM	33871	P	GUA	683	213.012	95.194	-63.732	1.00	53.51	A16S
ATOM	33819	O2	URI	680	209.677	96.648	-50.506	1.00	36.04	A16S	ATOM	33872	O1P	GUA	683	212.412	94.407	-64.841	1.00	38.12	A16S
ATOM	33820	N3	URI	680	210.432	98.575	-51.418	1.00	36.04	A16S	ATOM	33873	O2P	GUA	683	213.806	94.486	-62.690	1.00	38.12	A16S
ATOM	33821	C4	URI	680	211.403	99.442	-51.839	1.00	36.04	A16S	ATOM	33874	O5'	GUA	683	213.900	96.394	-64.280	1.00	53.51	A16S
ATOM	33822	O4	URI	680	211.075	100.476	-52.437	1.00	36.04	A16S	ATOM	33875	C5'	GUA	683	213.300	97.450	-65.027	1.00	53.51	A16S
ATOM	33823	C5	URI	680	212.742	98.996	-51.595	1.00	36.04	A16S	ATOM	33876	C4'	GUA	683	214.301	98.537	-65.284	1.00	53.51	A16S
ATOM	33824	C2'	URI	680	212.127	94.555	-51.068	1.00	54.96	A16S	ATOM	33877	O4'	GUA	683	214.500	99.333	-64.090	1.00	53.51	A16S
ATOM	33825	O2'	URI	680	211.471	93.437	-50.502	1.00	54.96	A16S	ATOM	33878	C1'	GUA	683	215.846	99.796	-64.040	1.00	53.51	A16S
ATOM	33826	C3'	URI	680	213.615	94.344	-51.350	1.00	54.96	A16S	ATOM	33879	N9	GUA	683	216.508	99.214	-62.873	1.00	38.12	A16S
ATOM	33827	O3'	URI	680	213.883	93.061	-51.901	1.00	54.96	A16S	ATOM	33880	C4	GUA	683	217.652	99.697	-62.264	1.00	38.12	A16S
ATOM	33828	P	GUA	681	214.284	92.934	-53.461	1.00	49.46	A16S	ATOM	33881	N3	GUA	683	218.344	100.802	-62.631	1.00	38.12	A16S
ATOM	33829	O1P	GUA	681	214.071	91.508	-53.816	1.00	38.47	A16S	ATOM	33882	C2	GUA	683	219.405	101.009	-61.860	1.00	38.12	A16S
ATOM	33830	O2P	GUA	681	215.617	93.559	-53.667	1.00	38.47	A16S	ATOM	33883	N2	GUA	683	220.209	102.068	-62.093	1.00	38.12	A16S
ATOM	33831	O5'	GUA	681	213.214	93.805	-54.264	1.00	49.46	A16S	ATOM	33884	N1	GUA	683	219.753	100.201	-60.809	1.00	38.12	A16S
ATOM	33832	C5'	GUA	681	211.836	93.406	-54.336	1.00	49.46	A16S	ATOM	33885	C6	GUA	683	219.057	99.066	-60.406	1.00	38.12	A16S

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ATOM  33886  O6  GUA  683     219.453  98.422 -59.426  1.00 38.12      A16S
ATOM  33887  C5  GUA  683     217.919  98.819 -61.237  1.00 38.12      A16S
ATOM  33888  N7  GUA  683     216.968  97.800 -61.197  1.00 38.12      A16S
ATOM  33889  C8  GUA  683     216.150  98.079 -62.179  1.00 38.12      A16S
ATOM  33890  C2' GUA  683     216.531  99.310 -65.313  1.00 53.51      A16S
ATOM  33891  O2' GUA  683     216.425 100.297 -66.322  1.00 53.51      A16S
ATOM  33892  C3' GUA  683     215.703  98.076 -65.626  1.00 53.51      A16S
ATOM  33893  O3' GUA  683     215.855  97.609 -66.940  1.00 53.51      A16S
ATOM  33894  P   CYT  684     216.818  96.358 -67.203  1.00 56.74      A16S
ATOM  33895  O1P CYT  684     216.248  95.642 -68.371  1.00 61.58      A16S
ATOM  33896  O2P CYT  684     217.042  95.619 -65.927  1.00 61.58      A16S
ATOM  33897  O5' CYT  684     218.187  97.060 -67.620  1.00 56.74      A16S
ATOM  33898  C5' CYT  684     218.372  97.591 -68.948  1.00 56.74      A16S
ATOM  33899  C4' CYT  684     219.843  97.650 -69.302  1.00 56.74      A16S
ATOM  33900  O4' CYT  684     220.411  98.942 -69.015  1.00 56.74      A16S
ATOM  33901  C1' CYT  684     221.808  98.792 -69.012  1.00 56.74      A16S
ATOM  33902  N1  CYT  684     222.431  99.899 -68.261  1.00 61.58      A16S
ATOM  33903  C6  CYT  684     221.949 100.301 -67.049  1.00 61.58      A16S
ATOM  33904  C2  CYT  684     223.547 100.541 -68.824  1.00 61.58      A16S
ATOM  33905  O2  CYT  684     223.969 100.165 -69.929  1.00 61.58      A16S
ATOM  33906  N3  CYT  684     224.141 101.553 -68.153  1.00 61.58      A16S
ATOM  33907  C4  CYT  684     223.667 101.933 -66.970  1.00 61.58      A16S
ATOM  33908  N4  CYT  684     224.297 102.931 -66.345  1.00 61.58      A16S
ATOM  33909  C5  CYT  684     222.530 101.306 -66.375  1.00 61.58      A16S
ATOM  33910  C2' CYT  684     222.124  97.374 -68.519  1.00 56.74      A16S
ATOM  33911  O2' CYT  684     223.137  96.788 -69.309  1.00 56.74      A16S
ATOM  33912  C3' CYT  684     220.749  96.685 -68.557  1.00 56.74      A16S
ATOM  33913  O3' CYT  684     220.650  95.340 -69.077  1.00 56.74      A16S
ATOM  33914  P   ADE  685     221.337  94.929 -70.482  1.00 61.17      A16S
ATOM  33915  O1P ADE  685     222.372  93.904 -70.193  1.00 79.01      A16S
ATOM  33916  O2P ADE  685     221.687  96.135 -71.280  1.00 79.01      A16S
ATOM  33917  O5' ADE  685     220.174  94.182 -71.250  1.00 61.17      A16S
ATOM  33918  C5' ADE  685     219.626  94.721 -72.452  1.00 61.17      A16S
ATOM  33919  C4' ADE  685     218.262  94.146 -72.665  1.00 61.17      A16S
ATOM  33920  O4' ADE  685     218.323  92.765 -72.305  1.00 61.17      A16S
ATOM  33921  C1' ADE  685     217.026  92.324 -72.059  1.00 61.17      A16S
ATOM  33922  N9  ADE  685     217.133  91.089 -71.282  1.00 79.01      A16S
ATOM  33923  C4  ADE  685     216.320  89.991 -71.387  1.00 79.01      A16S
ATOM  33924  N3  ADE  685     215.255  89.841 -72.195  1.00 79.01      A16S
ATOM  33925  C2  ADE  685     214.712  88.637 -72.031  1.00 79.01      A16S
ATOM  33926  N1  ADE  685     215.085  87.640 -71.213  1.00 79.01      A16S
ATOM  33927  C6  ADE  685     216.163  87.825 -70.419  1.00 79.01      A16S
ATOM  33928  N6  ADE  685     216.536  86.833 -69.607  1.00 79.01      A16S
ATOM  33929  C5  ADE  685     216.828  89.059 -70.499  1.00 79.01      A16S
ATOM  33930  N7  ADE  685     217.941  89.560 -69.846  1.00 79.01      A16S
ATOM  33931  C8  ADE  685     218.074  90.767 -70.335  1.00 79.01      A16S
ATOM  33932  C2' ADE  685     216.295  93.502 -71.406  1.00 61.17      A16S
ATOM  33933  O2' ADE  685     214.955  93.534 -71.836  1.00 61.17      A16S
ATOM  33934  C3' ADE  685     217.134  94.731 -71.823  1.00 61.17      A16S
ATOM  33935  O3' ADE  685     216.523  95.629 -72.755  1.00 61.17      A16S
ATOM  33936  P   GUA  686     215.283  96.558 -72.336  1.00 67.31      A16S
ATOM  33937  O1P GUA  686     214.139  95.697 -71.965  1.00 63.38      A16S
ATOM  33938  O2P GUA  686     215.120  97.550 -73.419  1.00 63.38      A16S
ATOM  33939  O5' GUA  686     215.740  97.346 -71.036  1.00 67.31      A16S
ATOM  33940  C5' GUA  686     214.957  98.460 -70.556  1.00 67.31      A16S
ATOM  33941  C4' GUA  686     215.835  99.660 -70.388  1.00 67.31      A16S
ATOM  33942  O4' GUA  686     217.174  99.253 -70.670  1.00 67.31      A16S
ATOM  33943  C1' GUA  686     217.923 100.390 -70.958  1.00 67.31      A16S
ATOM  33944  N9  GUA  686     219.084 100.017 -71.753  1.00 63.38      A16S
ATOM  33945  C4  GUA  686     220.294 100.663 -71.758  1.00 63.38      A16S
ATOM  33946  N3  GUA  686     220.586 101.806 -71.098  1.00 63.38      A16S
ATOM  33947  C2  GUA  686     221.853 102.163 -71.254  1.00 63.38      A16S
ATOM  33948  N2  GUA  686     222.317 103.283 -70.669  1.00 63.38      A16S
ATOM  33949  N1  GUA  686     222.764 101.447 -71.997  1.00 63.38      A16S
ATOM  33950  C6  GUA  686     222.489 100.264 -72.683  1.00 63.38      A16S
ATOM  33951  O6  GUA  686     223.396  99.686 -73.309  1.00 63.38      A16S
ATOM  33952  C5  GUA  686     221.123  99.880 -72.533  1.00 63.38      A16S
ATOM  33953  N7  GUA  686     220.430  98.791 -73.046  1.00 63.38      A16S
ATOM  33954  C8  GUA  686     219.221  98.924 -72.573  1.00 63.38      A16S
ATOM  33955  C2' GUA  686     216.977 101.495 -71.418  1.00 67.31      A16S
ATOM  33956  O2' GUA  686     217.109 102.471 -70.416  1.00 67.31      A16S
ATOM  33957  C3' GUA  686     215.596 100.837 -71.323  1.00 67.31      A16S
ATOM  33958  O3' GUA  686     214.783 101.748 -70.587  1.00 67.31      A16S
ATOM  33959  P   ADE  687     213.429 102.343 -71.203  1.00 58.46      A16S
ATOM  33960  O1P ADE  687     212.895 101.353 -72.158  1.00 53.54      A16S
ATOM  33961  O2P ADE  687     213.645 103.748 -71.636  1.00 53.54      A16S
ATOM  33962  O5' ADE  687     212.472 102.374 -69.934  1.00 58.46      A16S
ATOM  33963  C5' ADE  687     212.005 101.151 -69.346  1.00 58.46      A16S
ATOM  33964  C4' ADE  687     212.064 101.227 -67.838  1.00 58.46      A16S
ATOM  33965  O4' ADE  687     213.448 101.178 -67.391  1.00 58.46      A16S
ATOM  33966  C1' ADE  687     213.588 101.932 -66.198  1.00 58.46      A16S
ATOM  33967  N9  ADE  687     214.511 103.041 -66.440  1.00 53.54      A16S
ATOM  33968  C4  ADE  687     214.915 103.934 -65.480  1.00 53.54      A16S
ATOM  33969  N3  ADE  687     214.572 103.936 -64.183  1.00 53.54      A16S
ATOM  33970  C2  ADE  687     215.137 104.953 -63.553  1.00 53.54      A16S
ATOM  33971  N1  ADE  687     215.942 105.901 -64.032  1.00 53.54      A16S
ATOM  33972  C6  ADE  687     216.265 105.876 -65.338  1.00 53.54      A16S
ATOM  33973  N6  ADE  687     217.062 106.831 -65.805  1.00 53.54      A16S
ATOM  33974  C5  ADE  687     215.731 104.837 -66.122  1.00 53.54      A16S
ATOM  33975  N7  ADE  687     215.855 104.514 -67.466  1.00 53.54      A16S
ATOM  33976  C8  ADE  687     215.117 103.440 -67.601  1.00 53.54      A16S
ATOM  33977  C2' ADE  687     212.205 102.474 -65.826  1.00 58.46      A16S
ATOM  33978  O2' ADE  687     211.620 101.628 -64.846  1.00 58.46      A16S
ATOM  33979  C3' ADE  687     211.501 102.482 -67.181  1.00 58.46      A16S
ATOM  33980  O3' ADE  687     210.081 102.483 -67.072  1.00 58.46      A16S
ATOM  33981  P   URI  688     209.251 103.805 -67.479  1.00 51.06      A16S
ATOM  33982  O1P URI  688     207.827 103.533 -67.126  1.00 58.44      A16S
ATOM  33983  O2P URI  688     209.596 104.208 -68.859  1.00 58.44      A16S
ATOM  33984  O5' URI  688     209.815 104.934 -66.505  1.00 51.06      A16S
ATOM  33985  C5' URI  688     209.578 104.852 -65.092  1.00 51.06      A16S
ATOM  33986  C4' URI  688     210.267 105.974 -64.359  1.00 51.06      A16S
ATOM  33987  O4' URI  688     211.699 105.830 -64.480  1.00 51.06      A16S
ATOM  33988  C1' URI  688     212.305 107.109 -64.419  1.00 51.06      A16S
ATOM  33989  N1  URI  688     213.053 107.359 -65.663  1.00 58.44      A16S
ATOM  33990  C6  URI  688     212.880 106.591 -66.794  1.00 58.44      A16S
ATOM  33991  C2  URI  688     213.927 108.428 -65.668  1.00 58.44      A16S
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ATOM	33992	O2	URI	688	214.149	109.097	-64.681	1.00	58.44	A16S	ATOM	34045	O2P	CYT	691	204.610	113.528	-72.065	1.00	45.69	A16S
ATOM	33993	N3	URI	688	214.534	108.682	-66.869	1.00	58.44	A16S	ATOM	34046	O5'	CYT	691	205.185	114.465	-74.282	1.00	59.39	A16S
ATOM	33994	C4	URI	688	214.382	107.982	-68.040	1.00	58.44	A16S	ATOM	34047	C5'	CYT	691	205.579	115.496	-75.214	1.00	59.39	A16S
ATOM	33995	O4	URI	688	214.928	108.397	-69.065	1.00	58.44	A16S	ATOM	34048	C4'	CYT	691	205.771	114.914	-76.594	1.00	59.39	A16S
ATOM	33996	C5	URI	688	213.501	106.858	-67.950	1.00	58.44	A16S	ATOM	34049	O4'	CYT	691	206.885	113.988	-76.567	1.00	59.39	A16S
ATOM	33997	C2'	URI	688	211.190	108.137	-64.229	1.00	51.06	A16S	ATOM	34050	C1'	CYT	691	206.639	112.918	-77.464	1.00	59.39	A16S
ATOM	33998	O2'	URI	688	211.051	108.405	-62.845	1.00	51.06	A16S	ATOM	34051	N1	CYT	691	206.624	111.651	-76.715	1.00	45.69	A16S
ATOM	33999	C3'	URI	688	209.986	107.402	-64.801	1.00	51.06	A16S	ATOM	34052	C6	CYT	691	206.471	111.626	-75.358	1.00	45.69	A16S
ATOM	34000	O3'	URI	688	208.779	107.909	-64.239	1.00	51.06	A16S	ATOM	34053	C2	CYT	691	206.773	110.455	-77.431	1.00	45.69	A16S
ATOM	34001	P	ADE	689	207.704	108.661	-65.173	1.00	46.95	A16S	ATOM	34054	O2	CYT	691	206.900	110.508	-78.670	1.00	45.69	A16S
ATOM	34002	O1P	ADE	689	206.614	109.103	-64.271	1.00	63.34	A16S	ATOM	34055	N3	CYT	691	206.769	109.279	-76.764	1.00	45.69	A16S
ATOM	34003	O2P	ADE	689	207.383	107.806	-66.349	1.00	63.34	A16S	ATOM	34056	C4	CYT	691	206.614	109.266	-75.444	1.00	45.69	A16S
ATOM	34004	O5'	ADE	689	208.447	109.969	-65.684	1.00	46.95	A16S	ATOM	34057	N4	CYT	691	206.598	108.083	-74.834	1.00	45.69	A16S
ATOM	34005	C5'	ADE	689	208.635	111.079	-64.812	1.00	46.95	A16S	ATOM	34058	C5	CYT	691	206.462	110.468	-74.689	1.00	45.69	A16S
ATOM	34006	C4'	ADE	689	209.510	112.115	-65.468	1.00	46.95	A16S	ATOM	34059	C2'	CYT	691	205.302	113.179	-78.143	1.00	59.39	A16S
ATOM	34007	O4'	ADE	689	210.839	111.574	-65.688	1.00	46.95	A16S	ATOM	34060	O2'	CYT	691	205.523	113.841	-79.367	1.00	59.39	A16S
ATOM	34008	C1'	ADE	689	211.366	112.066	-66.914	1.00	46.95	A16S	ATOM	34061	C3'	CYT	691	204.624	114.074	-77.125	1.00	59.39	A16S
ATOM	34009	N9	ADE	689	211.498	110.939	-67.845	1.00	63.34	A16S	ATOM	34062	O3'	CYT	691	203.570	114.819	-77.691	1.00	59.39	A16S
ATOM	34010	C4	ADE	689	212.258	110.903	-68.987	1.00	63.34	A16S	ATOM	34063	P	GUA	692	202.070	114.279	-77.519	1.00	63.84	A16S
ATOM	34011	N3	ADE	689	213.061	111.868	-69.463	1.00	63.34	A16S	ATOM	34064	O1P	GUA	692	201.142	115.396	-77.853	1.00	53.23	A16S
ATOM	34012	C2	ADE	689	213.622	111.488	-70.604	1.00	63.34	A16S	ATOM	34065	O2P	GUA	692	201.988	113.633	-76.183	1.00	53.23	A16S
ATOM	34013	N1	ADE	689	213.479	110.341	-71.274	1.00	63.34	A16S	ATOM	34066	O5'	GUA	692	201.952	113.118	-78.605	1.00	63.84	A16S
ATOM	34014	C6	ADE	689	212.659	109.395	-70.767	1.00	63.34	A16S	ATOM	34067	C5'	GUA	692	202.154	113.403	-79.993	1.00	63.84	A16S
ATOM	34015	N6	ADE	689	212.501	108.254	-71.436	1.00	63.34	A16S	ATOM	34068	C4'	GUA	692	202.311	112.127	-80.789	1.00	63.84	A16S
ATOM	34016	C5	ADE	689	212.014	109.672	-69.562	1.00	63.34	A16S	ATOM	34069	O4'	GUA	692	203.486	111.393	-80.355	1.00	63.84	A16S
ATOM	34017	N7	ADE	689	211.136	108.931	-68.791	1.00	63.34	A16S	ATOM	34070	C1'	GUA	692	203.301	110.014	-80.615	1.00	63.84	A16S
ATOM	34018	C8	ADE	689	210.866	109.719	-67.783	1.00	63.34	A16S	ATOM	34071	N9	GUA	692	203.448	109.252	-79.381	1.00	53.23	A16S
ATOM	34019	C2'	ADE	689	210.368	113.095	-67.437	1.00	46.95	A16S	ATOM	34072	C4	GUA	692	203.530	107.886	-79.308	1.00	53.23	A16S
ATOM	34020	O2'	ADE	689	210.705	114.356	-66.899	1.00	46.95	A16S	ATOM	34073	N3	GUA	692	203.538	107.045	-80.359	1.00	53.23	A16S
ATOM	34021	C3'	ADE	689	209.071	112.576	-66.843	1.00	46.95	A16S	ATOM	34074	C2	GUA	692	203.615	105.784	-79.983	1.00	53.23	A16S
ATOM	34022	O3'	ADE	689	208.067	113.559	-66.785	1.00	46.95	A16S	ATOM	34075	N2	GUA	692	203.659	104.820	-80.913	1.00	53.23	A16S
ATOM	34023	P	CYT	690	206.829	113.443	-67.780	1.00	51.45	A16S	ATOM	34076	N1	GUA	692	203.660	105.375	-78.674	1.00	53.23	A16S
ATOM	34024	O1P	CYT	690	205.896	114.557	-67.498	1.00	51.55	A16S	ATOM	34077	C6	GUA	692	203.648	106.222	-77.572	1.00	53.23	A16S
ATOM	34025	O2P	CYT	690	206.358	112.040	-67.710	1.00	51.55	A16S	ATOM	34078	O6	GUA	692	203.686	105.746	-76.431	1.00	53.23	A16S
ATOM	34026	O5'	CYT	690	207.481	113.662	-69.210	1.00	51.45	A16S	ATOM	34079	C5	GUA	692	203.585	107.590	-77.965	1.00	53.23	A16S
ATOM	34027	C5'	CYT	690	208.092	114.915	-69.557	1.00	51.45	A16S	ATOM	34080	N7	GUA	692	203.568	108.751	-77.204	1.00	53.23	A16S
ATOM	34028	C4'	CYT	690	208.441	114.930	-71.025	1.00	51.45	A16S	ATOM	34081	C8	GUA	692	203.494	109.713	-78.087	1.00	53.23	A16S
ATOM	34029	O4'	CYT	690	209.588	114.075	-71.288	1.00	51.45	A16S	ATOM	34082	C2'	GUA	692	201.895	109.832	-81.178	1.00	63.84	A16S
ATOM	34030	C1'	CYT	690	209.467	113.509	-72.585	1.00	51.45	A16S	ATOM	34083	O2'	GUA	692	201.976	109.743	-82.582	1.00	63.84	A16S
ATOM	34031	N1	CYT	690	209.463	112.041	-72.472	1.00	51.55	A16S	ATOM	34084	C3'	GUA	692	201.200	111.100	-80.699	1.00	63.84	A16S
ATOM	34032	C6	CYT	690	209.343	111.418	-71.260	1.00	51.55	A16S	ATOM	34085	O3'	GUA	692	200.087	111.425	-81.511	1.00	63.84	A16S
ATOM	34033	C2	CYT	690	209.555	111.284	-73.647	1.00	51.55	A16S	ATOM	34086	P	GUA	693	198.636	110.835	-81.139	1.00	82.94	A16S
ATOM	34034	O2	CYT	690	209.739	111.870	-74.723	1.00	51.55	A16S	ATOM	34087	O1P	GUA	693	197.697	111.415	-82.146	1.00	59.16	A16S
ATOM	34035	N3	CYT	690	209.456	109.936	-73.578	1.00	51.55	A16S	ATOM	34088	O2P	GUA	693	198.375	111.040	-79.685	1.00	59.16	A16S
ATOM	34036	C4	CYT	690	209.316	109.339	-72.395	1.00	51.55	A16S	ATOM	34089	O5'	GUA	693	198.775	109.268	-81.401	1.00	82.94	A16S
ATOM	34037	N4	CYT	690	209.221	108.013	-72.376	1.00	51.55	A16S	ATOM	34090	C5'	GUA	693	198.860	108.772	-82.742	1.00	82.94	A16S
ATOM	34038	C5	CYT	690	209.268	110.079	-71.177	1.00	51.55	A16S	ATOM	34091	C4'	GUA	693	198.930	107.267	-82.759	1.00	82.94	A16S
ATOM	34039	C2'	CYT	690	208.152	114.003	-73.192	1.00	51.45	A16S	ATOM	34092	O4'	GUA	693	200.175	106.824	-82.167	1.00	82.94	A16S
ATOM	34040	O2'	CYT	690	208.365	115.095	-74.058	1.00	51.45	A16S	ATOM	34093	C1'	GUA	693	199.987	105.550	-81.576	1.00	82.94	A16S
ATOM	34041	C3'	CYT	690	207.367	114.387	-71.949	1.00	51.45	A16S	ATOM	34094	N9	GUA	693	200.259	105.639	-80.145	1.00	59.16	A16S
ATOM	34042	O3'	CYT	690	206.355	115.325	-72.230	1.00	51.45	A16S	ATOM	34095	C4	GUA	693	200.353	104.572	-79.289	1.00	59.16	A16S
ATOM	34043	P	CYT	691	204.932	114.805	-72.747	1.00	59.39	A16S	ATOM	34096	N3	GUA	693	200.242	103.274	-79.634	1.00	59.16	A16S
ATOM	34044	O1P	CYT	691	204.008	115.963	-72.634	1.00	45.69	A16S	ATOM	34097	C2	GUA	693	200.370	102.475	-78.594	1.00	59.16	A16S

ATOM	34098	N2	GUA	693	200.298	101.151	-78.763	1.00	59.16	A16S	ATOM	34151	O2'	ADE	695	193.004	96.404	-75.620	1.00	53.85	A16S
ATOM	34099	N1	GUA	693	200.584	102.915	-77.312	1.00	59.16	A16S	ATOM	34152	C3'	ADE	695	191.981	98.192	-76.920	1.00	53.85	A16S
ATOM	34100	C6	GUA	693	200.701	104.248	-76.934	1.00	59.16	A16S	ATOM	34153	O3'	ADE	695	190.860	97.354	-77.091	1.00	53.85	A16S
ATOM	34101	O6	GUA	693	200.898	104.537	-75.748	1.00	59.16	A16S	ATOM	34154	P	GUA	696	189.424	97.868	-76.593	1.00	63.82	A16S
ATOM	34102	C5	GUA	693	200.568	105.118	-78.044	1.00	59.16	A16S	ATOM	34155	O1P	GUA	696	188.379	96.979	-77.169	1.00	41.80	A16S
ATOM	34103	N7	GUA	693	200.622	106.503	-78.116	1.00	59.16	A16S	ATOM	34156	O2P	GUA	696	189.349	99.347	-76.820	1.00	41.80	A16S
ATOM	34104	C8	GUA	693	200.438	106.768	-79.381	1.00	59.16	A16S	ATOM	34157	O5'	GUA	696	189.474	97.598	-75.028	1.00	63.82	A16S
ATOM	34105	C2'	GUA	693	198.534	105.145	-81.805	1.00	82.94	A16S	ATOM	34158	C5'	GUA	696	189.737	96.284	-74.516	1.00	63.82	A16S
ATOM	34106	O2'	GUA	693	198.456	104.327	-82.952	1.00	82.94	A16S	ATOM	34159	C4'	GUA	696	190.085	96.364	-73.050	1.00	63.82	A16S
ATOM	34107	C3'	GUA	693	197.868	106.498	-81.996	1.00	82.94	A16S	ATOM	34160	O4'	GUA	696	191.301	97.140	-72.887	1.00	63.82	A16S
ATOM	34108	O3'	GUA	693	196.636	106.382	-82.693	1.00	82.94	A16S	ATOM	34161	C1'	GUA	696	191.253	97.863	-71.671	1.00	63.82	A16S
ATOM	34109	P	GUA	694	195.260	106.275	-81.855	1.00	67.90	A16S	ATOM	34162	N9	GUA	696	191.342	99.285	-71.984	1.00	41.80	A16S
ATOM	34110	O1P	GUA	694	194.137	106.381	-82.843	1.00	49.39	A16S	ATOM	34163	C4	GUA	696	191.879	100.279	-71.184	1.00	41.80	A16S
ATOM	34111	O2P	GUA	694	195.338	107.248	-80.723	1.00	49.39	A16S	ATOM	34164	N3	GUA	696	192.441	100.110	-69.963	1.00	41.80	A16S
ATOM	34112	O5'	GUA	694	195.285	104.791	-81.267	1.00	67.90	A16S	ATOM	34165	C2	GUA	696	192.877	101.258	-69.459	1.00	41.80	A16S
ATOM	34113	C5'	GUA	694	195.366	103.676	-82.159	1.00	67.90	A16S	ATOM	34166	N2	GUA	696	193.493	101.275	-68.268	1.00	41.80	A16S
ATOM	34114	C4'	GUA	694	195.705	102.414	-81.415	1.00	67.90	A16S	ATOM	34167	N1	GUA	696	192.748	102.469	-70.086	1.00	41.80	A16S
ATOM	34115	O4'	GUA	694	196.940	102.589	-80.682	1.00	67.90	A16S	ATOM	34168	C6	GUA	696	192.158	102.666	-71.328	1.00	41.80	A16S
ATOM	34116	C1'	GUA	694	196.949	101.724	-79.560	1.00	67.90	A16S	ATOM	34169	O6	GUA	696	192.071	103.803	-71.793	1.00	41.80	A16S
ATOM	34117	N9	GUA	694	197.148	102.501	-78.342	1.00	49.39	A16S	ATOM	34170	C5	GUA	696	191.714	101.449	-71.896	1.00	41.80	A16S
ATOM	34118	C4	GUA	694	197.382	101.971	-77.103	1.00	49.39	A16S	ATOM	34171	N7	GUA	696	191.102	101.201	-73.118	1.00	41.80	A16S
ATOM	34119	N3	GUA	694	197.476	100.655	-76.815	1.00	49.39	A16S	ATOM	34172	C8	GUA	696	190.899	99.909	-73.125	1.00	41.80	A16S
ATOM	34120	C2	GUA	694	197.737	100.445	-75.540	1.00	49.39	A16S	ATOM	34173	C2'	GUA	696	189.942	97.499	-70.980	1.00	63.82	A16S
ATOM	34121	N2	GUA	694	197.893	99.191	-75.091	1.00	49.39	A16S	ATOM	34174	O2'	GUA	696	190.180	96.413	-70.108	1.00	63.82	A16S
ATOM	34122	N1	GUA	694	197.870	101.451	-74.618	1.00	49.39	A16S	ATOM	34175	C3'	GUA	696	189.083	97.079	-72.162	1.00	63.82	A16S
ATOM	34123	C6	GUA	694	197.760	102.814	-74.893	1.00	49.39	A16S	ATOM	34176	O3'	GUA	696	187.999	96.247	-71.789	1.00	63.82	A16S
ATOM	34124	O6	GUA	694	197.884	103.640	-73.984	1.00	49.39	A16S	ATOM	34177	P	GUA	697	186.555	96.909	-71.521	1.00	57.64	A16S
ATOM	34125	C5	GUA	694	197.503	103.049	-76.260	1.00	49.39	A16S	ATOM	34178	O1P	GUA	697	185.535	95.845	-71.688	1.00	40.09	A16S
ATOM	34126	N7	GUA	694	197.346	104.239	-76.954	1.00	49.39	A16S	ATOM	34179	O2P	GUA	697	186.436	98.174	-72.299	1.00	40.09	A16S
ATOM	34127	C8	GUA	694	197.136	103.866	-78.186	1.00	49.39	A16S	ATOM	34180	O5'	GUA	697	186.593	97.287	-69.977	1.00	57.64	A16S
ATOM	34128	C2'	GUA	694	195.607	101.005	-79.519	1.00	67.90	A16S	ATOM	34181	C5'	GUA	697	186.752	96.262	-68.982	1.00	57.64	A16S
ATOM	34129	O2'	GUA	694	195.765	99.710	-80.061	1.00	67.90	A16S	ATOM	34182	C4'	GUA	697	187.312	96.847	-67.715	1.00	57.64	A16S
ATOM	34130	C3'	GUA	694	194.738	101.939	-80.351	1.00	67.90	A16S	ATOM	34183	O4'	GUA	697	188.560	97.518	-68.012	1.00	57.64	A16S
ATOM	34131	O3'	GUA	694	193.605	101.283	-80.883	1.00	67.90	A16S	ATOM	34184	C1'	GUA	697	188.704	98.646	-67.177	1.00	57.64	A16S
ATOM	34132	P	ADE	695	192.210	101.354	-80.085	1.00	53.85	A16S	ATOM	34185	N9	GUA	697	188.736	99.835	-68.022	1.00	40.09	A16S
ATOM	34133	O1P	ADE	695	191.154	100.860	-81.015	1.00	52.87	A16S	ATOM	34186	C4	GUA	697	189.418	101.010	-67.764	1.00	40.09	A16S
ATOM	34134	O2P	ADE	695	192.070	102.706	-79.474	1.00	52.87	A16S	ATOM	34187	N3	GUA	697	190.206	101.262	-66.689	1.00	40.09	A16S
ATOM	34135	O5'	ADE	695	192.389	100.264	-78.937	1.00	53.85	A16S	ATOM	34188	C2	GUA	697	190.705	102.483	-66.723	1.00	40.09	A16S
ATOM	34136	C5'	ADE	695	192.596	98.896	-79.287	1.00	53.85	A16S	ATOM	34189	N2	GUA	697	191.508	102.911	-65.743	1.00	40.09	A16S
ATOM	34137	C4'	ADE	695	192.952	98.093	-78.073	1.00	53.85	A16S	ATOM	34190	N1	GUA	697	190.449	103.377	-67.721	1.00	40.09	A16S
ATOM	34138	O4'	ADE	695	194.200	98.571	-77.519	1.00	53.85	A16S	ATOM	34191	C6	GUA	697	189.635	103.138	-68.824	1.00	40.09	A16S
ATOM	34139	C1'	ADE	695	194.175	98.442	-76.103	1.00	53.85	A16S	ATOM	34192	O6	GUA	697	189.450	104.023	-69.655	1.00	40.09	A16S
ATOM	34140	N9	ADE	695	194.326	99.773	-75.509	1.00	52.87	A16S	ATOM	34193	C5	GUA	697	189.108	101.846	-68.813	1.00	40.09	A16S
ATOM	34141	C4	ADE	695	194.677	100.042	-74.209	1.00	52.87	A16S	ATOM	34194	N7	GUA	697	188.274	101.212	-69.723	1.00	40.09	A16S
ATOM	34142	N3	ADE	695	194.949	99.156	-73.241	1.00	52.87	A16S	ATOM	34195	C8	GUA	697	188.080	100.024	-69.215	1.00	40.09	A16S
ATOM	34143	C2	ADE	695	195.269	99.787	-72.112	1.00	52.87	A16S	ATOM	34196	C2'	GUA	697	187.509	98.660	-66.227	1.00	57.64	A16S
ATOM	34144	N1	ADE	695	195.337	101.099	-71.867	1.00	52.87	A16S	ATOM	34197	O2'	GUA	697	187.858	97.929	-65.073	1.00	57.64	A16S
ATOM	34145	C6	ADE	695	195.050	101.955	-72.868	1.00	52.87	A16S	ATOM	34198	C3'	GUA	697	186.470	97.911	-67.038	1.00	57.64	A16S
ATOM	34146	N6	ADE	695	195.113	103.263	-72.631	1.00	52.87	A16S	ATOM	34199	O3'	GUA	697	185.492	97.314	-66.211	1.00	57.64	A16S
ATOM	34147	C5	ADE	695	194.700	101.418	-74.103	1.00	52.87	A16S	ATOM	34200	P	ADE	698	184.082	98.048	-65.982	1.00	51.10	A16S
ATOM	34148	N7	ADE	695	194.361	102.012	-75.307	1.00	52.87	A16S	ATOM	34201	O1P	ADE	698	183.228	97.016	-65.347	1.00	43.16	A16S
ATOM	34149	C8	ADE	695	194.149	100.998	-76.107	1.00	52.87	A16S	ATOM	34202	O2P	ADE	698	183.634	98.707	-67.230	1.00	43.16	A16S
ATOM	34150	C2'	ADE	695	192.842	97.802	-75.729	1.00	53.85	A16S	ATOM	34203	O5'	ADE	698	184.402	99.205	-64.928	1.00	51.10	A16S

ATOM	34204	C5'	ADE	698	184.796	98.894	-63.570	1.00	51.10	A16S	ATOM	34257	C4	CYT	700	181.773	108.258	-66.650	1.00	44.87	A16S
ATOM	34205	C4'	ADE	698	185.406	100.106	-62.899	1.00	51.10	A16S	ATOM	34258	N4	CYT	700	181.423	107.379	-67.582	1.00	44.87	A16S
ATOM	34206	O4'	ADE	698	186.569	100.538	-63.645	1.00	51.10	A16S	ATOM	34259	C5	CYT	700	181.496	107.994	-65.279	1.00	44.87	A16S
ATOM	34207	C1'	ADE	698	186.686	101.950	-63.583	1.00	51.10	A16S	ATOM	34260	C2'	CYT	700	181.680	111.992	-63.438	1.00	47.17	A16S
ATOM	34208	N9	ADE	698	186.559	102.474	-64.939	1.00	43.16	A16S	ATOM	34261	O2'	CYT	700	181.656	113.102	-64.311	1.00	47.17	A16S
ATOM	34209	C4	ADE	698	187.118	103.629	-65.427	1.00	43.16	A16S	ATOM	34262	C3'	CYT	700	182.032	112.422	-62.025	1.00	47.17	A16S
ATOM	34210	N3	ADE	698	187.890	104.506	-64.765	1.00	43.16	A16S	ATOM	34263	O3'	CYT	700	182.861	113.558	-62.130	1.00	47.17	A16S
ATOM	34211	C2	ADE	698	188.239	105.516	-65.564	1.00	43.16	A16S	ATOM	34264	P	GUA	701	182.556	114.859	-61.241	1.00	51.83	A16S
ATOM	34212	N1	ADE	698	187.926	105.727	-66.849	1.00	43.16	A16S	ATOM	34265	O1P	GUA	701	181.721	114.524	-60.062	1.00	52.62	A16S
ATOM	34213	C6	ADE	698	187.148	104.818	-67.480	1.00	43.16	A16S	ATOM	34266	O2P	GUA	701	182.107	115.938	-62.159	1.00	52.62	A16S
ATOM	34214	N6	ADE	698	186.833	105.015	-68.763	1.00	43.16	A16S	ATOM	34267	O5'	GUA	701	183.998	115.178	-60.660	1.00	51.83	A16S
ATOM	34215	C5	ADE	698	186.713	103.712	-66.746	1.00	43.16	A16S	ATOM	34268	C5'	GUA	701	184.320	116.482	-60.229	1.00	51.83	A16S
ATOM	34216	N7	ADE	698	185.909	102.635	-67.082	1.00	43.16	A16S	ATOM	34269	C4'	GUA	701	185.758	116.811	-60.545	1.00	51.83	A16S
ATOM	34217	C8	ADE	698	185.851	101.931	-65.980	1.00	43.16	A16S	ATOM	34270	O4'	GUA	701	186.197	116.216	-61.789	1.00	51.83	A16S
ATOM	34218	C2'	ADE	698	185.554	102.466	-62.702	1.00	51.10	A16S	ATOM	34271	C1'	GUA	701	186.992	117.145	-62.509	1.00	51.83	A16S
ATOM	34219	O2'	ADE	698	185.994	102.606	-61.369	1.00	51.10	A16S	ATOM	34272	N9	GUA	701	186.362	117.348	-63.813	1.00	52.62	A16S
ATOM	34220	C3'	ADE	698	184.538	101.349	-62.832	1.00	51.10	A16S	ATOM	34273	C4	GUA	701	186.694	118.282	-64.773	1.00	52.62	A16S
ATOM	34221	O3'	ADE	698	183.682	101.345	-61.717	1.00	51.10	A16S	ATOM	34274	N3	GUA	701	187.676	119.206	-64.683	1.00	52.62	A16S
ATOM	34222	P	ADE	699	182.326	102.194	-61.769	1.00	39.61	A16S	ATOM	34275	C2	GUA	701	187.747	119.955	-65.773	1.00	52.62	A16S
ATOM	34223	O1P	ADE	699	181.588	101.781	-60.541	1.00	42.63	A16S	ATOM	34276	N2	GUA	701	188.677	120.917	-65.865	1.00	52.62	A16S
ATOM	34224	O2P	ADE	699	181.690	102.038	-63.116	1.00	42.63	A16S	ATOM	34277	N1	GUA	701	186.914	119.815	-66.857	1.00	52.62	A16S
ATOM	34225	O5'	ADE	699	182.800	103.707	-61.616	1.00	39.61	A16S	ATOM	34278	C6	GUA	701	185.899	118.870	-66.970	1.00	52.62	A16S
ATOM	34226	C5'	ADE	699	183.249	104.182	-60.346	1.00	39.61	A16S	ATOM	34279	O6	GUA	701	185.205	118.822	-67.994	1.00	52.62	A16S
ATOM	34227	C4'	ADE	699	183.924	105.518	-60.476	1.00	39.61	A16S	ATOM	34280	C5	GUA	701	185.815	118.058	-65.820	1.00	52.62	A16S
ATOM	34228	O4'	ADE	699	184.995	105.416	-61.446	1.00	39.61	A16S	ATOM	34281	N7	GUA	701	184.956	117.008	-65.529	1.00	52.62	A16S
ATOM	34229	C1'	ADE	699	185.167	106.661	-62.100	1.00	39.61	A16S	ATOM	34282	C8	GUA	701	185.313	116.621	-64.334	1.00	52.62	A16S
ATOM	34230	N9	ADE	699	184.911	106.477	-63.532	1.00	42.63	A16S	ATOM	34283	C2'	GUA	701	187.146	118.402	-61.644	1.00	51.83	A16S
ATOM	34231	C4	ADE	699	185.220	107.366	-64.537	1.00	42.63	A16S	ATOM	34284	O2'	GUA	701	188.357	118.330	-60.918	1.00	51.83	A16S
ATOM	34232	N3	ADE	699	185.829	108.562	-64.417	1.00	42.63	A16S	ATOM	34285	C3'	GUA	701	185.930	118.301	-60.730	1.00	51.83	A16S
ATOM	34233	C2	ADE	699	185.949	109.156	-65.605	1.00	42.63	A16S	ATOM	34286	O3'	GUA	701	186.088	118.871	-59.444	1.00	51.83	A16S
ATOM	34234	N1	ADE	699	185.562	108.721	-66.810	1.00	42.63	A16S	ATOM	34287	P	CYT	702	184.828	119.562	-58.729	1.00	51.24	A16S
ATOM	34235	C6	ADE	699	184.957	107.510	-66.899	1.00	42.63	A16S	ATOM	34288	O1P	CYT	702	185.258	119.881	-57.337	1.00	47.86	A16S
ATOM	34236	N6	ADE	699	184.570	107.074	-68.099	1.00	42.63	A16S	ATOM	34289	O2P	CYT	702	183.594	118.763	-58.949	1.00	47.86	A16S
ATOM	34237	C5	ADE	699	184.770	106.782	-65.708	1.00	42.63	A16S	ATOM	34290	O5'	CYT	702	184.701	120.926	-59.530	1.00	51.24	A16S
ATOM	34238	N7	ADE	699	184.199	105.543	-65.451	1.00	42.63	A16S	ATOM	34291	C5'	CYT	702	185.823	121.801	-59.623	1.00	51.24	A16S
ATOM	34239	C8	ADE	699	184.309	105.408	-64.152	1.00	42.63	A16S	ATOM	34292	C4'	CYT	702	185.660	122.718	-60.793	1.00	51.24	A16S
ATOM	34240	C2'	ADE	699	184.176	107.635	-61.465	1.00	39.61	A16S	ATOM	34293	O4'	CYT	702	185.741	121.964	-62.016	1.00	51.24	A16S
ATOM	34241	O2'	ADE	699	184.804	108.276	-60.372	1.00	39.61	A16S	ATOM	34294	C1'	CYT	702	184.988	122.624	-63.008	1.00	51.24	A16S
ATOM	34242	C3'	ADE	699	183.095	106.689	-60.969	1.00	39.61	A16S	ATOM	34295	N1	CYT	702	184.231	121.631	-63.779	1.00	47.86	A16S
ATOM	34243	O3'	ADE	699	182.313	107.297	-59.951	1.00	39.61	A16S	ATOM	34296	C6	CYT	702	183.816	120.456	-63.218	1.00	47.86	A16S
ATOM	34244	P	CYT	700	180.933	108.036	-60.345	1.00	47.17	A16S	ATOM	34297	C2	CYT	702	183.966	121.905	-65.119	1.00	47.86	A16S
ATOM	34245	O1P	CYT	700	180.290	108.427	-59.054	1.00	44.87	A16S	ATOM	34298	O2	CYT	702	184.328	122.995	-65.591	1.00	47.86	A16S
ATOM	34246	O2P	CYT	700	180.183	107.193	-61.316	1.00	44.87	A16S	ATOM	34299	N3	CYT	702	183.327	120.987	-65.869	1.00	47.86	A16S
ATOM	34247	O5'	CYT	700	181.377	109.357	-61.123	1.00	47.17	A16S	ATOM	34300	C4	CYT	702	182.948	119.835	-65.328	1.00	47.86	A16S
ATOM	34248	C5'	CYT	700	182.190	110.337	-60.469	1.00	47.17	A16S	ATOM	34301	N4	CYT	702	182.340	118.948	-66.123	1.00	47.86	A16S
ATOM	34249	C4'	CYT	700	182.846	111.257	-61.474	1.00	47.17	A16S	ATOM	34302	C5	CYT	702	183.180	119.535	-63.950	1.00	47.86	A16S
ATOM	34250	O4'	CYT	700	183.287	110.484	-62.614	1.00	47.17	A16S	ATOM	34303	C2'	CYT	702	184.183	123.748	-62.353	1.00	51.24	A16S
ATOM	34251	C1'	CYT	700	182.862	111.106	-63.803	1.00	47.17	A16S	ATOM	34304	O2'	CYT	702	184.791	124.976	-62.678	1.00	51.24	A16S
ATOM	34252	N1	CYT	700	182.489	110.069	-64.778	1.00	44.87	A16S	ATOM	34305	C3'	CYT	702	184.320	123.418	-60.871	1.00	51.24	A16S
ATOM	34253	C6	CYT	700	181.866	108.916	-64.385	1.00	44.87	A16S	ATOM	34306	O3'	CYT	702	184.380	124.590	-60.086	1.00	51.24	A16S
ATOM	34254	C2	CYT	700	182.769	110.294	-66.130	1.00	44.87	A16S	ATOM	34307	P	CYT	703	183.321	124.802	-58.910	1.00	49.34	A16S
ATOM	34255	O2	CYT	700	183.372	111.332	-66.454	1.00	44.87	A16S	ATOM	34308	O1P	CYT	703	183.645	126.102	-58.257	1.00	32.80	A16S
ATOM	34256	N3	CYT	700	182.387	109.374	-67.044	1.00	44.87	A16S	ATOM	34309	O2P	CYT	703	183.337	123.550	-58.104	1.00	32.80	A16S

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ATOM  34310  O5' CYT  703     181.937 124.917 -59.694  1.00 49.34      A16S
ATOM  34311  C5' CYT  703     181.693 126.004 -60.609  1.00 49.34      A16S
ATOM  34312  C4' CYT  703     180.500 125.698 -61.483  1.00 49.34      A16S
ATOM  34313  O4' CYT  703     180.819 124.610 -62.377  1.00 49.34      A16S
ATOM  34314  C1' CYT  703     179.694 123.767 -62.540  1.00 49.34      A16S
ATOM  34315  N1  CYT  703     180.088 122.439 -62.049  1.00 32.80      A16S
ATOM  34316  C6  CYT  703     180.955 122.329 -60.995  1.00 32.80      A16S
ATOM  34317  C2  CYT  703     179.588 121.283 -62.679  1.00 32.80      A16S
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ATOM  34319  N3  CYT  703     179.993 120.068 -62.241  1.00 32.80      A16S
ATOM  34320  C4  CYT  703     180.858 119.981 -61.221  1.00 32.80      A16S
ATOM  34321  N4  CYT  703     181.251 118.769 -60.831  1.00 32.80      A16S
ATOM  34322  C5  CYT  703     181.363 121.136 -60.557  1.00 32.80      A16S
ATOM  34323  C2' CYT  703     178.526 124.395 -61.775  1.00 49.34      A16S
ATOM  34324  O2' CYT  703     177.705 125.147 -62.652  1.00 49.34      A16S
ATOM  34325  C3' CYT  703     179.255 125.250 -60.742  1.00 49.34      A16S
ATOM  34326  O3' CYT  703     178.504 126.378 -60.316  1.00 49.34      A16S
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ATOM  34332  C4' GUA  704     178.752 124.153 -55.916  1.00 55.51      A16S
ATOM  34333  O4' GUA  704     178.020 123.033 -56.475  1.00 55.51      A16S
ATOM  34334  C1' GUA  704     178.924 122.043 -56.925  1.00 55.51      A16S
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ATOM  34347  O2' GUA  704     181.340 121.839 -56.909  1.00 55.51      A16S
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ATOM  34395  O5' GUA  707     172.426 123.678 -49.632  1.00 52.15      A16S
ATOM  34396  C5' GUA  707     171.703 124.811 -50.143  1.00 52.15      A16S
ATOM  34397  C4' GUA  707     171.241 124.570 -51.573  1.00 52.15      A16S
ATOM  34398  O4' GUA  707     172.383 124.214 -52.397  1.00 52.15      A16S
ATOM  34399  C1' GUA  707     171.979 123.333 -53.440  1.00 52.15      A16S
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ATOM  34404  N2  GUA  707     171.359 119.402 -56.975  1.00 53.18      A16S
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ATOM  34407  O6  GUA  707     173.947 117.683 -53.641  1.00 53.18      A16S
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ATOM  34410  C8  GUA  707     173.459 121.670 -52.217  1.00 53.18      A16S
ATOM  34411  C2' GUA  707     170.467 123.179 -53.327  1.00 52.15      A16S
ATOM  34412  O2' GUA  707     169.844 124.122 -54.177  1.00 52.15      A16S
ATOM  34413  C3' GUA  707     170.241 123.453 -51.844  1.00 52.15      A16S
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ATOM  34415  P   GUA  708     167.833 122.570 -51.250  1.00 48.26      A16S
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ATOM  34420  C4' GUA  708     167.071 121.379 -54.911  1.00 48.26      A16S
ATOM  34421  O4' GUA  708     168.405 120.886 -55.201  1.00 48.26      A16S
ATOM  34422  C1' GUA  708     168.336 119.528 -55.594  1.00 48.26      A16S
ATOM  34423  N9  GUA  708     169.055 118.725 -54.611  1.00 35.96      A16S
ATOM  34424  C4  GUA  708     169.319 117.380 -54.712  1.00 35.96      A16S
ATOM  34425  N3  GUA  708     168.986 116.579 -55.752  1.00 35.96      A16S
ATOM  34426  C2  GUA  708     169.372 115.325 -55.555  1.00 35.96      A16S
ATOM  34427  N2  GUA  708     169.147 114.396 -56.492  1.00 35.96      A16S
ATOM  34428  N1  GUA  708     170.013 114.894 -54.427  1.00 35.96      A16S
ATOM  34429  C6  GUA  708     170.361 115.698 -53.350  1.00 35.96      A16S
ATOM  34430  O6  GUA  708     170.928 115.204 -52.389  1.00 35.96      A16S
ATOM  34431  C5  GUA  708     169.974 117.048 -53.550  1.00 35.96      A16S
ATOM  34432  N7  GUA  708     170.145 118.165 -52.744  1.00 35.96      A16S
ATOM  34433  C8  GUA  708     169.584 119.135 -53.411  1.00 35.96      A16S
ATOM  34434  C2' GUA  708     166.865 119.135 -55.641  1.00 48.26      A16S
ATOM  34435  O2' GUA  708     166.383 119.313 -56.958  1.00 48.26      A16S
ATOM  34436  C3' GUA  708     166.268 120.119 -54.647  1.00 48.26      A16S
ATOM  34437  O3' GUA  708     164.878 120.303 -54.829  1.00 48.26      A16S
ATOM  34438  P   CYT  709     163.855 119.348 -54.044  1.00 46.55      A16S
ATOM  34439  O1P CYT  709     162.468 119.742 -54.423  1.00 45.45      A16S
ATOM  34440  O2P CYT  709     164.241 119.306 -52.608  1.00 45.45      A16S
ATOM  34441  O5' CYT  709     164.119 117.922 -54.696  1.00 46.55      A16S
ATOM  34442  C5' CYT  709     163.778 117.701 -56.059  1.00 46.55      A16S
ATOM  34443  C4' CYT  709     163.927 116.256 -56.410  1.00 46.55      A16S
ATOM  34444  O4' CYT  709     165.324 115.895 -56.397  1.00 46.55      A16S
ATOM  34445  C1' CYT  709     165.462 114.543 -56.000  1.00 46.55      A16S
ATOM  34446  N1  CYT  709     166.206 114.489 -54.725  1.00 45.45      A16S
ATOM  34447  C6  CYT  709     166.418 115.612 -53.974  1.00 45.45      A16S
ATOM  34448  C2  CYT  709     166.669 113.253 -54.279  1.00 45.45      A16S
ATOM  34449  O2  CYT  709     166.504 112.263 -54.994  1.00 45.45      A16S
ATOM  34450  N3  CYT  709     167.287 113.167 -53.086  1.00 45.45      A16S
ATOM  34451  C4  CYT  709     167.462 114.261 -52.348  1.00 45.45      A16S
ATOM  34452  N4  CYT  709     168.053 114.120 -51.162  1.00 45.45      A16S
ATOM  34453  C5  CYT  709     167.035 115.543 -52.791  1.00 45.45      A16S
ATOM  34454  C2' CYT  709     164.054 113.993 -55.820  1.00 46.55      A16S
ATOM  34455  O2' CYT  709     163.626 113.489 -57.064  1.00 46.55      A16S
ATOM  34456  C3' CYT  709     163.294 115.256 -55.469  1.00 46.55      A16S
ATOM  34457  O3' CYT  709     161.902 115.124 -55.656  1.00 46.55      A16S
ATOM  34458  P   GUA  710     160.976 114.817 -54.385  1.00 42.53      A16S
ATOM  34459  O1P GUA  710     159.561 114.982 -54.795  1.00 32.49      A16S
ATOM  34460  O2P GUA  710     161.513 115.618 -53.254  1.00 32.49      A16S
ATOM  34461  O5' GUA  710     161.260 113.278 -54.093  1.00 42.53      A16S
ATOM  34462  C5' GUA  710     160.922 112.288 -55.069  1.00 42.53      A16S
ATOM  34463  C4' GUA  710     161.446 110.940 -54.659  1.00 42.53      A16S
ATOM  34464  O4' GUA  710     162.896 110.977 -54.620  1.00 42.53      A16S
ATOM  34465  C1' GUA  710     163.369 110.082 -53.631  1.00 42.53      A16S
ATOM  34466  N9  GUA  710     164.125 110.841 -52.641  1.00 32.49      A16S
ATOM  34467  C4  GUA  710     164.984 110.331 -51.697  1.00 32.49      A16S
ATOM  34468  N3  GUA  710     165.369 109.047 -51.586  1.00 32.49      A16S
ATOM  34469  C2  GUA  710     166.154 108.856 -50.535  1.00 32.49      A16S
ATOM  34470  N2  GUA  710     166.657 107.642 -50.287  1.00 32.49      A16S
ATOM  34471  N1  GUA  710     166.510 109.837 -49.650  1.00 32.49      A16S
ATOM  34472  C6  GUA  710     166.120 111.163 -49.739  1.00 32.49      A16S
ATOM  34473  O6  GUA  710     166.465 111.963 -48.861  1.00 32.49      A16S
ATOM  34474  C5  GUA  710     165.311 111.394 -50.890  1.00 32.49      A16S
ATOM  34475  N7  GUA  710     164.744 112.567 -51.370  1.00 32.49      A16S
ATOM  34476  C8  GUA  710     164.061 112.192 -52.416  1.00 32.49      A16S
ATOM  34477  C2' GUA  710     162.141 109.423 -52.992  1.00 42.53.     A16S
ATOM  34478  O2' GUA  710     161.898 108.183 -53.620  1.00 42.53      A16S
ATOM  34479  C3' GUA  710     161.049 110.443 -53.284  1.00 42.53      A16S
ATOM  34480  O3' GUA  710     159.743 109.878 -53.270  1.00 42.53      A16S
ATOM  34481  P   ADE  711     158.697 110.296 -52.104  1.00 44.47      A16S
ATOM  34482  O1P ADE  711     157.407 109.579 -52.365  1.00 31.43      A16S
ATOM  34483  O2P ADE  711     158.691 111.782 -51.897  1.00 31.43      A16S
ATOM  34484  O5' ADE  711     159.300 109.643 -50.792  1.00 44.47      A16S
ATOM  34485  C5' ADE  711     158.644 109.818 -49.544  1.00 44.47      A16S
ATOM  34486  C4' ADE  711     159.066 108.737 -48.608  1.00 44.47      A16S
ATOM  34487  O4' ADE  711     158.512 107.485 -49.054  1.00 44.47      A16S
ATOM  34488  C1' ADE  711     159.452 106.450 -48.862  1.00 44.47      A16S
ATOM  34489  N9  ADE  711     159.728 105.862 -50.171  1.00 31.43      A16S
ATOM  34490  C4  ADE  711     160.062 104.555 -50.437  1.00 31.43      A16S
ATOM  34491  N3  ADE  711     160.222 103.552 -49.555  1.00 31.43      A16S
ATOM  34492  C2  ADE  711     160.516 102.418 -50.181  1.00 31.43      A16S
ATOM  34493  N1  ADE  711     160.660 102.189 -51.490  1.00 31.43      A16S
ATOM  34494  C6  ADE  711     160.500 103.227 -52.346  1.00 31.43      A16S
ATOM  34495  N6  ADE  711     160.646 103.018 -53.649  1.00 31.43      A16S
ATOM  34496  C5  ADE  711     160.185 104.474 -51.810  1.00 31.43      A16S
ATOM  34497  N7  ADE  711     159.947 105.704 -52.405  1.00 31.43      A16S
ATOM  34498  C8  ADE  711     159.686 106.494 -51.393  1.00 31.43      A16S
ATOM  34499  C2' ADE  711     160.677 107.060 -48.189  1.00 44.47      A16S
ATOM  34500  O2' ADE  711     160.572 106.925 -46.790  1.00 44.47      A16S
ATOM  34501  C3' ADE  711     160.553 108.509 -48.609  1.00 44.47      A16S
ATOM  34502  O3' ADE  711     161.218 109.403 -47.753  1.00 44.47      A16S
ATOM  34503  P   ADE  712     162.729 109.808 -48.091  1.00 36.25      A16S
ATOM  34504  O1P ADE  712     163.108 110.934 -47.188  1.00 35.92      A16S
ATOM  34505  O2P ADE  712     162.827 109.994 -49.566  1.00 35.92      A16S
ATOM  34506  O5' ADE  712     163.545 108.501 -47.668  1.00 36.25      A16S
ATOM  34507  C5' ADE  712     163.731 108.224 -46.285  1.00 36.25      A16S
ATOM  34508  C4' ADE  712     164.154 106.807 -46.064  1.00 36.25      A16S
ATOM  34509  O4' ADE  712     163.202 105.912 -46.672  1.00 36.25      A16S
ATOM  34510  C1' ADE  712     163.854 104.716 -47.059  1.00 36.25      A16S
ATOM  34511  N9  ADE  712     163.745 104.570 -48.510  1.00 35.92      A16S
ATOM  34512  C4  ADE  712     163.837 103.387 -49.199  1.00 35.92      A16S
ATOM  34513  N3  ADE  712     163.995 102.156 -48.682  1.00 35.92      A16S
ATOM  34514  C2  ADE  712     164.066 101.246 -49.651  1.00 35.92      A16S
ATOM  34515  N1  ADE  712     164.020 101.415 -50.978  1.00 35.92      A16S
ATOM  34516  C6  ADE  712     163.875 102.663 -51.466  1.00 35.92      A16S
ATOM  34517  N6  ADE  712     163.878 102.825 -52.788  1.00 35.92      A16S
ATOM  34518  C5  ADE  712     163.752 103.719 -50.535  1.00 35.92      A16S
ATOM  34519  N7  ADE  712     163.565 105.087 -50.686  1.00 35.92      A16S
ATOM  34520  C8  ADE  712     163.568 105.543 -49.459  1.00 35.92      A16S
ATOM  34521  C2' ADE  712     165.312 104.853 -46.643  1.00 36.25      A16S
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ATOM  34522  O2' ADE  712     165.421 104.308 -45.353  1.00 36.25      A16S
ATOM  34523  C3' ADE  712     165.474 106.364 -46.639  1.00 36.25      A16S
ATOM  34524  O3' ADE  712     166.570 106.806 -45.869  1.00 36.25      A16S
ATOM  34525  P   GUA  713     167.929 107.200 -46.622  1.00 35.52      A16S
ATOM  34526  O1P GUA  713     168.916 107.717 -45.641  1.00 37.35      A16S
ATOM  34527  O2P GUA  713     167.562 108.044 -47.789  1.00 37.35      A16S
ATOM  34528  O5' GUA  713     168.443 105.778 -47.122  1.00 35.52      A16S
ATOM  34529  C5' GUA  713     168.850 104.785 -46.164  1.00 35.52      A16S
ATOM  34530  C4' GUA  713     169.142 103.468 -46.846  1.00 35.52      A16S
ATOM  34531  O4' GUA  713     167.937 103.026 -47.510  1.00 35.52      A16S
ATOM  34532  C1' GUA  713     168.270 102.393 -48.733  1.00 35.52      A16S
ATOM  34533  N9  GUA  713     167.797 103.247 -49.814  1.00 37.35      A16S
ATOM  34534  C4  GUA  713     167.872 102.967 -51.147  1.00 37.35      A16S
ATOM  34535  N3  GUA  713     168.362 101.838 -51.682  1.00 37.35      A16S
ATOM  34536  C2  GUA  713     168.346 101.866 -52.995  1.00 37.35      A16S
ATOM  34537  N2  GUA  713     168.816 100.820 -53.673  1.00 37.35      A16S
ATOM  34538  N1  GUA  713     167.871 102.917 -53.734  1.00 37.35      A16S
ATOM  34539  C6  GUA  713     167.347 104.088 -53.207  1.00 37.35      A16S
ATOM  34540  O6  GUA  713     166.925 104.972 -53.966  1.00 37.35      A16S
ATOM  34541  C5  GUA  713     167.375 104.075 -51.784  1.00 37.35      A16S
ATOM  34542  N7  GUA  713     166.970 105.031 -50.861  1.00 37.35      A16S
ATOM  34543  C8  GUA  713     167.230 104.493 -49.706  1.00 37.35      A16S
ATOM  34544  C2' GUA  713     169.791 102.276 -48.786  1.00 35.52      A16S
ATOM  34545  O2' GUA  713     170.144 101.042 -48.204  1.00 35.52      A16S
ATOM  34546  C3' GUA  713     170.212 103.464 -47.933  1.00 35.52      A16S
ATOM  34547  O3' GUA  713     171.513 103.282 -47.400  1.00 35.52      A16S
ATOM  34548  P   GUA  714     172.656 104.372 -47.701  1.00 43.06      A16S
ATOM  34549  O1P GUA  714     173.938 103.623 -47.694  1.00 41.33      A16S
ATOM  34550  O2P GUA  714     172.488 105.527 -46.792  1.00 41.33      A16S
ATOM  34551  O5' GUA  714     172.366 104.921 -49.169  1.00 43.06      A16S
ATOM  34552  C5' GUA  714     172.680 104.138 -50.316  1.00 43.06      A16S
ATOM  34553  C4' GUA  714     171.778 104.509 -51.461  1.00 43.06      A16S
ATOM  34554  O4' GUA  714     170.566 105.106 -50.932  1.00 43.06      A16S
ATOM  34555  C1' GUA  714     170.079 106.086 -51.838  1.00 43.06      A16S
ATOM  34556  N9  GUA  714     170.089 107.395 -51.184  1.00 41.33      A16S
ATOM  34557  C4  GUA  714     169.522 108.541 -51.675  1.00 41.33      A16S
ATOM  34558  N3  GUA  714     168.869 108.657 -52.843  1.00 41.33      A16S
ATOM  34559  C2  GUA  714     168.446 109.885 -53.051  1.00 41.33      A16S
ATOM  34560  N2  GUA  714     167.813 110.179 -54.182  1.00 41.33      A16S
ATOM  34561  N1  GUA  714     168.624 110.920 -52.171  1.00 41.33      A16S
ATOM  34562  C6  GUA  714     169.293 110.826 -50.954  1.00 41.33      A16S
ATOM  34563  O6  GUA  714     169.400 111.831 -50.220  1.00 41.33      A16S
ATOM  34564  C5  GUA  714     169.776 109.508 -50.732  1.00 41.33      A16S
ATOM  34565  N7  GUA  714     170.499 108.986 -49.674  1.00 41.33      A16S
ATOM  34566  C8  GUA  714     170.660 107.731 -49.982  1.00 41.33      A16S
ATOM  34567  C2' GUA  714     170.993 106.065 -53.057  1.00 43.06      A16S
ATOM  34568  O2' GUA  714     170.422 105.184 -54.005  1.00 43.06      A16S
ATOM  34569  C3' GUA  714     172.290 105.546 -52.444  1.00 43.06      A16S
ATOM  34570  O3' GUA  714     173.159 104.984 -53.412  1.00 43.06      A16S
ATOM  34571  P   CYT  715     174.258 105.913 -54.130  1.00 49.19      A16S
ATOM  34572  O1P CYT  715     175.135 105.019 -54.903  1.00 37.77      A16S
ATOM  34573  O2P CYT  715     174.841 106.840 -53.147  1.00 37.77      A16S
ATOM  34574  O5' CYT  715     173.432 106.792 -55.157  1.00 49.19      A16S
ATOM  34575  C5' CYT  715     172.619 106.170 -56.150  1.00 49.19      A16S
ATOM  34576  C4' CYT  715     171.900 107.218 -56.940  1.00 49.19      A16S
ATOM  34577  O4' CYT  715     170.945 107.895 -56.091  1.00 49.19      A16S
ATOM  34578  C1' CYT  715     170.886 109.268 -56.446  1.00 49.19      A16S
ATOM  34579  N1  CYT  715     171.191 110.087 -55.262  1.00 37.77      A16S
ATOM  34580  C6  CYT  715     171.815 109.554 -54.174  1.00 37.77      A16S
ATOM  34581  C2  CYT  715     170.835 111.435 -55.276  1.00 37.77      A16S
ATOM  34582  O2  CYT  715     170.227 111.883 -56.252  1.00 37.77      A16S
ATOM  34583  N3  CYT  715     171.151 112.217 -54.228  1.00 37.77      A16S
ATOM  34584  C4  CYT  715     171.782 111.695 -53.185  1.00 37.77      A16S
ATOM  34585  N4  CYT  715     172.100 112.511 -52.188  1.00 37.77      A16S
ATOM  34586  C5  CYT  715     172.123 110.314 -53.122  1.00 37.77      A16S
ATOM  34587  C2' CYT  715     171.847 109.497 -57.613  1.00 49.19      A16S
ATOM  34588  O2' CYT  715     171.104 109.446 -58.812  1.00 49.19      A16S
ATOM  34589  C3' CYT  715     172.805 108.321 -57.454  1.00 49.19      A16S
ATOM  34590  O3' CYT  715     173.430 107.908 -58.655  1.00 49.19      A16S
ATOM  34591  P   ADE  716     174.941 108.336 -58.959  1.00 64.05      A16S
ATOM  34592  O1P ADE  716     175.537 107.182 -59.658  1.00 42.46      A16S
ATOM  34593  O2P ADE  716     175.609 108.886 -57.767  1.00 42.46      A16S
ATOM  34594  O5' ADE  716     174.750 109.524 -59.988  1.00 64.05      A16S
ATOM  34595  C5' ADE  716     175.865 110.174 -60.583  1.00 64.05      A16S
ATOM  34596  C4' ADE  716     175.537 111.615 -60.761  1.00 64.05      A16S
ATOM  34597  O4' ADE  716     175.356 112.208 -59.467  1.00 64.05      A16S
ATOM  34598  C1' ADE  716     175.443 113.595 -59.619  1.00 64.05      A16S
ATOM  34599  N9  ADE  716     175.981 114.219 -58.420  1.00 42.46      A16S
ATOM  34600  C4  ADE  716     175.835 115.559 -58.174  1.00 42.46      A16S
ATOM  34601  N3  ADE  716     175.242 116.463 -58.973  1.00 42.46      A16S
ATOM  34602  C2  ADE  716     175.239 117.656 -58.401  1.00 42.46      A16S
ATOM  34603  N1  ADE  716     175.728 118.024 -57.211  1.00 42.46      A16S
ATOM  34604  C6  ADE  716     176.324 117.089 -56.435  1.00 42.46      A16S
ATOM  34605  N6  ADE  716     176.811 117.461 -55.244  1.00 42.46      A16S
ATOM  34606  C5  ADE  716     176.389 115.777 -56.931  1.00 42.46      A16S
ATOM  34607  N7  ADE  716     176.904 114.597 -56.408  1.00 42.46      A16S
ATOM  34608  C8  ADE  716     176.647 113.704 -57.337  1.00 42.46      A16S
ATOM  34609  C2' ADE  716     176.171 113.900 -60.923  1.00 64.05      A16S
ATOM  34610  O2' ADE  716     175.200 114.568 -61.719  1.00 64.05      A16S
ATOM  34611  C3' ADE  716     176.573 112.500 -61.419  1.00 64.05      A16S
ATOM  34612  O3' ADE  716     176.344 112.442 -62.825  1.00 64.05      A16S
ATOM  34613  P   GUA  717     177.291 111.567 -63.773  1.00 47.78      A16S
ATOM  34614  O1P GUA  717     176.401 110.601 -64.470  1.00 48.68      A16S
ATOM  34615  O2P GUA  717     178.445 111.072 -62.980  1.00 48.68      A16S
ATOM  34616  O5' GUA  717     177.783 112.608 -64.869  1.00 47.78      A16S
ATOM  34617  C5' GUA  717     178.266 113.911 -64.501  1.00 47.78      A16S
ATOM  34618  C4' GUA  717     178.848 114.590 -65.711  1.00 47.78      A16S
ATOM  34619  O4' GUA  717     179.928 113.766 -66.209  1.00 47.78      A16S
ATOM  34620  C1' GUA  717     179.849 113.664 -67.613  1.00 47.78      A16S
ATOM  34621  N9  GUA  717     179.561 112.269 -67.937  1.00 48.68      A16S
ATOM  34622  C4  GUA  717     179.457 111.721 -69.190  1.00 48.68      A16S
ATOM  34623  N3  GUA  717     179.598 112.381 -70.358  1.00 48.68      A16S
ATOM  34624  C2  GUA  717     179.452 111.588 -71.394  1.00 48.68      A16S
ATOM  34625  N2  GUA  717     179.571 112.086 -72.620  1.00 48.68      A16S
ATOM  34626  N1  GUA  717     179.179 110.246 -71.303  1.00 48.68      A16S
ATOM  34627  C6  GUA  717     179.023 109.538 -70.112  1.00 48.68      A16S
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ATOM	34628	O6	GUA	717	178.773	108.313	-70.135	1.00	48.68	A16S	ATOM	34681	C4'	ADE	720	167.191	111.860	-77.461	1.00	51.37	A16S
ATOM	34629	C5	GUA	717	179.185	110.386	-68.984	1.00	48.68	A16S	ATOM	34682	O4'	ADE	720	168.309	111.054	-77.023	1.00	51.37	A16S
ATOM	34630	N7	GUA	717	179.114	110.101	-67.629	1.00	48.68	A16S	ATOM	34683	C1'	ADE	720	167.841	109.791	-76.582	1.00	51.37	A16S
ATOM	34631	C8	GUA	717	179.343	111.244	-67.048	1.00	48.68	A16S	ATOM	34684	N9	ADE	720	168.243	109.605	-75.188	1.00	49.13	A16S
ATOM	34632	C2'	GUA	717	178.772	114.640	-68.086	1.00	47.78	A16S	ATOM	34685	C4	ADE	720	168.260	108.407	-74.509	1.00	49.13	A16S
ATOM	34633	O2'	GUA	717	179.369	115.889	-68.364	1.00	47.78	A16S	ATOM	34686	N3	ADE	720	167.906	107.198	-74.975	1.00	49.13	A16S
ATOM	34634	C3'	GUA	717	177.867	114.707	-66.867	1.00	47.78	A16S	ATOM	34687	C2	ADE	720	168.057	106.264	-74.034	1.00	49.13	A16S
ATOM	34635	O3'	GUA	717	177.140	115.935	-66.793	1.00	47.78	A16S	ATOM	34688	N1	ADE	720	168.490	106.392	-72.777	1.00	49.13	A16S
ATOM	34636	P	CYT	718	175.577	115.966	-67.187	1.00	51.06	A16S	ATOM	34689	C6	ADE	720	168.835	107.624	-72.340	1.00	49.13	A16S
ATOM	34637	O1P	CYT	718	175.048	117.312	-66.801	1.00	42.52	A16S	ATOM	34690	N6	ADE	720	169.259	107.760	-71.086	1.00	49.13	A16S
ATOM	34638	O2P	CYT	718	174.932	114.729	-66.658	1.00	42.52	A16S	ATOM	34691	C5	ADE	720	168.720	108.700	-73.242	1.00	49.13	A16S
ATOM	34639	O5'	CYT	718	175.573	115.831	-68.773	1.00	51.06	A16S	ATOM	34692	N7	ADE	720	168.979	110.060	-73.115	1.00	49.13	A16S
ATOM	34640	C5'	CYT	718	176.156	116.832	-69.614	1.00	51.06	A16S	ATOM	34693	C8	ADE	720	168.678	110.550	-74.294	1.00	49.13	A16S
ATOM	34641	C4'	CYT	718	176.185	116.330	-71.026	1.00	51.06	A16S	ATOM	34694	C2'	ADE	720	166.323	109.775	-76.746	1.00	51.37	A16S
ATOM	34642	O4'	CYT	718	177.058	115.173	-71.077	1.00	51.06	A16S	ATOM	34695	O2'	ADE	720	165.966	109.161	-77.972	1.00	51.37	A16S
ATOM	34643	C1'	CYT	718	176.535	114.210	-71.978	1.00	51.06	A16S	ATOM	34696	C3'	ADE	720	166.006	111.260	-76.721	1.00	51.37	A16S
ATOM	34644	N1	CYT	718	176.252	112.960	-71.243	1.00	42.52	A16S	ATOM	34697	O3'	ADE	720	164.751	111.539	-77.316	1.00	51.37	A16S
ATOM	34645	C6	CYT	718	176.065	112.960	-69.891	1.00	42.52	A16S	ATOM	34698	P	CYT	721	163.446	111.640	-76.383	1.00	49.21	A16S
ATOM	34646	C2	CYT	718	176.176	111.753	-71.967	1.00	42.52	A16S	ATOM	34699	O1P	CYT	721	162.407	112.373	-77.142	1.00	45.54	A16S
ATOM	34647	O2	CYT	718	176.359	111.770	-73.202	1.00	42.52	A16S	ATOM	34700	O2P	CYT	721	163.848	112.128	-75.046	1.00	45.54	A16S
ATOM	34648	N3	CYT	718	175.911	110.603	-71.306	1.00	42.52	A16S	ATOM	34701	O5'	CYT	721	162.989	110.128	-76.189	1.00	49.21	A16S
ATOM	34649	C4	CYT	718	175.733	110.621	-69.991	1.00	42.52	A16S	ATOM	34702	C5'	CYT	721	162.743	109.285	-77.313	1.00	49.21	A16S
ATOM	34650	N4	CYT	718	175.476	109.467	-69.389	1.00	42.52	A16S	ATOM	34703	C4'	CYT	721	162.701	107.847	-76.873	1.00	49.21	A16S
ATOM	34651	C5	CYT	718	175.811	111.825	-69.234	1.00	42.52	A16S	ATOM	34704	O4'	CYT	721	164.003	107.474	-76.359	1.00	49.21	A16S
ATOM	34652	C2'	CYT	718	175.276	114.797	-72.602	1.00	51.06	A16S	ATOM	34705	C1'	CYT	721	163.849	106.570	-75.273	1.00	49.21	A16S
ATOM	34653	O2'	CYT	718	175.606	115.369	-73.853	1.00	51.06	A16S	ATOM	34706	N1	CYT	721	164.465	107.153	-74.056	1.00	45.54	A16S
ATOM	34654	C3'	CYT	718	174.854	115.798	-71.534	1.00	51.06	A16S	ATOM	34707	C6	CYT	721	164.657	108.504	-73.933	1.00	45.54	A16S
ATOM	34655	O3'	CYT	718	173.972	116.802	-72.008	1.00	51.06	A16S	ATOM	34708	C2	CYT	721	164.837	106.291	-73.008	1.00	45.54	A16S
ATOM	34656	P	CYT	719	172.407	116.471	-72.132	1.00	51.27	A16S	ATOM	34709	O2	CYT	721	164.725	105.063	-73.169	1.00	45.54	A16S
ATOM	34657	O1P	CYT	719	171.753	117.691	-72.661	1.00	45.55	A16S	ATOM	34710	N3	CYT	721	165.322	106.815	-71.860	1.00	45.54	A16S
ATOM	34658	O2P	CYT	719	171.917	115.865	-70.871	1.00	45.55	A16S	ATOM	34711	C4	CYT	721	165.475	108.133	-71.744	1.00	45.54	A16S
ATOM	34659	O5'	CYT	719	172.351	115.335	-73.240	1.00	51.27	A16S	ATOM	34712	N4	CYT	721	165.928	108.606	-70.587	1.00	45.54	A16S
ATOM	34660	C5'	CYT	719	172.708	115.618	-74.599	1.00	51.27	A16S	ATOM	34713	C5	CYT	721	165.161	109.029	-72.809	1.00	45.54	A16S
ATOM	34661	C4'	CYT	719	172.335	114.459	-75.483	1.00	51.27	A16S	ATOM	34714	C2'	CYT	721	162.355	106.296	-75.105	1.00	49.21	A16S
ATOM	34662	O4'	CYT	719	173.188	113.325	-75.191	1.00	51.27	A16S	ATOM	34715	O2'	CYT	721	162.033	105.105	-75.787	1.00	49.21	A16S
ATOM	34663	C1'	CYT	719	172.465	112.119	-75.377	1.00	51.27	A16S	ATOM	34716	C3'	CYT	721	161.741	107.538	-75.736	1.00	49.21	A16S
ATOM	34664	N1	CYT	719	172.499	111.332	-74.137	1.00	45.55	A16S	ATOM	34717	O3'	CYT	721	160.415	107.321	-76.199	1.00	49.21	A16S
ATOM	34665	C6	CYT	719	172.819	111.905	-72.940	1.00	45.55	A16S	ATOM	34718	P	CYT	722	159.170	107.740	-75.264	1.00	66.28	A16S
ATOM	34666	C2	CYT	719	172.177	109.968	-74.204	1.00	45.55	A16S	ATOM	34719	O1P	CYT	722	157.913	107.522	-76.040	1.00	50.34	A16S
ATOM	34667	O2	CYT	719	171.900	109.467	-75.311	1.00	45.55	A16S	ATOM	34720	O2P	CYT	722	159.443	109.078	-74.668	1.00	50.34	A16S
ATOM	34668	N3	CYT	719	172.172	109.230	-73.066	1.00	45.55	A16S	ATOM	34721	O5'	CYT	722	159.207	106.659	-74.101	1.00	66.28	A16S
ATOM	34669	C4	CYT	719	172.480	109.804	-71.903	1.00	45.55	A16S	ATOM	34722	C5'	CYT	722	158.959	105.286	-74.398	1.00	66.28	A16S
ATOM	34670	N4	CYT	719	172.465	109.042	-70.809	1.00	45.55	A16S	ATOM	34723	C4'	CYT	722	159.184	104.443	-73.180	1.00	66.28	A16S
ATOM	34671	C5	CYT	719	172.820	111.189	-71.811	1.00	45.55	A16S	ATOM	34724	O4'	CYT	722	160.592	104.425	-72.843	1.00	66.28	A16S
ATOM	34672	C2'	CYT	719	171.042	112.483	-75.787	1.00	51.27	A16S	ATOM	34725	C1'	CYT	722	160.738	104.312	-71.438	1.00	66.28	A16S
ATOM	34673	O2'	CYT	719	170.936	112.352	-77.189	1.00	51.27	A16S	ATOM	34726	N1	CYT	722	161.415	105.510	-70.922	1.00	50.34	A16S
ATOM	34674	C3'	CYT	719	170.936	113.916	-75.274	1.00	51.27	A16S	ATOM	34727	C6	CYT	722	161.544	106.635	-71.685	1.00	50.34	A16S
ATOM	34675	O3'	CYT	719	169.950	114.696	-75.921	1.00	51.27	A16S	ATOM	34728	C2	CYT	722	161.913	105.484	-69.611	1.00	50.34	A16S
ATOM	34676	P	ADE	720	168.487	114.798	-75.268	1.00	51.37	A16S	ATOM	34729	O2	CYT	722	161.782	104.446	-68.939	1.00	50.34	A16S
ATOM	34677	O1P	ADE	720	167.805	116.007	-75.829	1.00	49.13	A16S	ATOM	34730	N3	CYT	722	162.515	106.585	-69.111	1.00	50.34	A16S
ATOM	34678	O2P	ADE	720	168.647	114.672	-73.793	1.00	49.13	A16S	ATOM	34731	C4	CYT	722	162.624	107.679	-69.863	1.00	50.34	A16S
ATOM	34679	O5'	ADE	720	167.767	113.478	-75.791	1.00	51.37	A16S	ATOM	34732	N4	CYT	722	163.214	108.742	-69.332	1.00	50.34	A16S
ATOM	34680	C5'	ADE	720	167.504	113.300	-77.180	1.00	51.37	A16S	ATOM	34733	C5	CYT	722	162.131	107.732	-71.197	1.00	50.34	A16S

ATOM	34734	C2'	CYT	722	159.338	104.225	-70.844	1.00	66.28	A16S	ATOM	34787	O4'	GUA	725	156.289	109.912	-57.666	1.00	54.03	A16S
ATOM	34735	O2'	CYT	722	158.987	102.866	-70.724	1.00	66.28	A16S	ATOM	34788	C1'	GUA	725	156.851	111.179	-57.380	1.00	54.03	A16S
ATOM	34736	C3'	CYT	722	158.519	104.927	-71.910	1.00	66.28	A16S	ATOM	34789	N9	GUA	725	156.878	111.974	-58.605	1.00	45.39	A16S
ATOM	34737	O3'	CYT	722	157.150	104.601	-71.834	1.00	66.28	A16S	ATOM	34790	C4	GUA	725	157.536	113.170	-58.778	1.00	45.39	A16S
ATOM	34738	P	URI	723	156.137	105.645	-71.155	1.00	59.68	A16S	ATOM	34791	N3	GUA	725	158.281	113.805	-57.849	1.00	45.39	A16S
ATOM	34739	O1P	URI	723	154.789	105.025	-71.257	1.00	45.83	A16S	ATOM	34792	C2	GUA	725	158.754	114.951	-58.294	1.00	45.39	A16S
ATOM	34740	O2P	URI	723	156.369	107.006	-71.710	1.00	45.83	A16S	ATOM	34793	N2	GUA	725	159.482	115.727	-57.481	1.00	45.39	A16S
ATOM	34741	O5'	URI	723	156.590	105.695	-69.627	1.00	59.68	A16S	ATOM	34794	N1	GUA	725	158.534	115.423	-59.562	1.00	45.39	A16S
ATOM	34742	C5'	URI	723	156.384	104.559	-68.776	1.00	59.68	A16S	ATOM	34795	C6	GUA	725	157.774	114.782	-60.534	1.00	45.39	A16S
ATOM	34743	C4'	URI	723	156.992	104.778	-67.413	1.00	59.68	A16S	ATOM	34796	O6	GUA	725	157.628	115.300	-61.642	1.00	45.39	A16S
ATOM	34744	O4'	URI	723	158.425	104.984	-67.533	1.00	59.68	A16S	ATOM	34797	C5	GUA	725	157.250	113.562	-60.063	1.00	45.39	A16S
ATOM	34745	C1'	URI	723	158.880	105.752	-66.434	1.00	59.68	A16S	ATOM	34798	N7	GUA	725	156.444	112.628	-60.696	1.00	45.39	A16S
ATOM	34746	N1	URI	723	159.488	107.003	-66.911	1.00	45.83	A16S	ATOM	34799	C8	GUA	725	156.250	111.705	-59.794	1.00	45.39	A16S
ATOM	34747	C6	URI	723	159.235	107.513	-68.157	1.00	45.83	A16S	ATOM	34800	C2'	GUA	725	155.962	111.841	-56.336	1.00	54.03	A16S
ATOM	34748	C2	URI	723	160.307	107.679	-66.017	1.00	45.83	A16S	ATOM	34801	O2'	GUA	725	156.517	111.568	-55.060	1.00	54.03	A16S
ATOM	34749	O2	URI	723	160.612	107.235	-64.919	1.00	45.83	A16S	ATOM	34802	C3'	GUA	725	154.629	111.151	-56.601	1.00	54.03	A16S
ATOM	34750	N3	URI	723	160.761	108.889	-66.452	1.00	45.83	A16S	ATOM	34803	O3'	GUA	725	153.757	111.200	-55.487	1.00	54.03	A16S
ATOM	34751	C4	URI	723	160.514	109.474	-67.660	1.00	45.83	A16S	ATOM	34804	P	URI	726	152.710	112.411	-55.350	1.00	59.61	A16S
ATOM	34752	O4	URI	723	160.926	110.618	-67.861	1.00	45.83	A16S	ATOM	34805	O1P	URI	726	152.192	112.321	-53.957	1.00	54.20	A16S
ATOM	34753	C5	URI	723	159.707	108.693	-68.553	1.00	45.83	A16S	ATOM	34806	O2P	URI	726	151.764	112.390	-56.497	1.00	54.20	A16S
ATOM	34754	C2'	URI	723	157.662	106.091	-65.582	1.00	59.68	A16S	ATOM	34807	O5'	URI	726	153.610	113.719	-55.461	1.00	59.61	A16S
ATOM	34755	O2'	URI	723	157.561	105.142	-64.546	1.00	59.68	A16S	ATOM	34808	C5'	URI	726	154.531	114.067	-54.412	1.00	59.61	A16S
ATOM	34756	C3'	URI	723	156.535	105.971	-66.595	1.00	59.68	A16S	ATOM	34809	C4'	URI	726	155.161	115.407	-54.695	1.00	59.61	A16S
ATOM	34757	O3'	URI	723	155.291	105.780	-65.944	1.00	59.68	A16S	ATOM	34810	O4'	URI	726	155.979	115.309	-55.882	1.00	59.61	A16S
ATOM	34758	P	GUA	724	154.571	107.036	-65.231	1.00	44.41	A16S	ATOM	34811	C1'	URI	726	155.881	116.509	-56.629	1.00	59.61	A16S
ATOM	34759	O1P	GUA	724	153.132	106.688	-65.062	1.00	46.06	A16S	ATOM	34812	N1	URI	726	155.323	116.192	-57.950	1.00	54.20	A16S
ATOM	34760	O2P	GUA	724	154.944	108.298	-65.937	1.00	46.06	A16S	ATOM	34813	C6	URI	726	154.567	115.065	-58.158	1.00	54.20	A16S
ATOM	34761	O5'	GUA	724	155.238	107.058	-63.788	1.00	44.41	A16S	ATOM	34814	C2	URI	726	155.604	117.064	-58.981	1.00	54.20	A16S
ATOM	34762	C5'	GUA	724	155.144	105.912	-62.936	1.00	44.41	A16S	ATOM	34815	O2	URI	726	156.255	118.085	-58.829	1.00	54.20	A16S
ATOM	34763	C4'	GUA	724	155.747	106.208	-61.592	1.00	44.41	A16S	ATOM	34816	N3	URI	726	155.095	116.699	-60.196	1.00	54.20	A16S
ATOM	34764	O4'	GUA	724	157.182	106.399	-61.712	1.00	44.41	A16S	ATOM	34817	C4	URI	726	154.349	115.578	-60.475	1.00	54.20	A16S
ATOM	34765	C1'	GUA	724	157.623	107.333	-60.739	1.00	44.41	A16S	ATOM	34818	O4	URI	726	153.993	115.365	-61.634	1.00	54.20	A16S
ATOM	34766	N9	GUA	724	158.135	108.518	-61.420	1.00	46.06	A16S	ATOM	34819	C5	URI	726	154.087	114.737	-59.349	1.00	54.20	A16S
ATOM	34767	C4	GUA	724	158.870	109.531	-60.851	1.00	46.06	A16S	ATOM	34820	C2'	URI	726	155.014	117.484	-55.847	1.00	59.61	A16S
ATOM	34768	N3	GUA	724	159.301	109.576	-59.570	1.00	46.06	A16S	ATOM	34821	O2'	URI	726	155.874	118.330	-55.114	1.00	59.61	A16S
ATOM	34769	C2	GUA	724	159.937	110.714	-59.304	1.00	46.06	A16S	ATOM	34822	C3'	URI	726	154.186	116.530	-54.997	1.00	59.61	A16S
ATOM	34770	N2	GUA	724	160.424	110.939	-58.069	1.00	46.06	A16S	ATOM	34823	O3'	URI	726	153.702	117.121	-53.808	1.00	59.61	A16S
ATOM	34771	N1	GUA	724	160.135	111.718	-60.229	1.00	46.06	A16S	ATOM	34824	P	CYT	727	152.331	117.946	-53.841	1.00	49.33	A16S
ATOM	34772	C6	GUA	724	159.693	111.687	-61.546	1.00	46.06	A16S	ATOM	34825	O1P	CYT	727	151.813	117.933	-52.442	1.00	37.14	A16S
ATOM	34773	O6	GUA	724	159.898	112.650	-62.283	1.00	46.06	A16S	ATOM	34826	O2P	CYT	727	151.483	117.408	-54.938	1.00	37.14	A16S
ATOM	34774	C5	GUA	724	159.020	110.477	-61.844	1.00	46.06	A16S	ATOM	34827	O5'	CYT	727	152.804	119.421	-54.236	1.00	49.33	A16S
ATOM	34775	N7	GUA	724	158.433	110.049	-63.023	1.00	46.06	A16S	ATOM	34828	C5'	CYT	727	153.829	120.096	-53.477	1.00	49.33	A16S
ATOM	34776	C8	GUA	724	157.932	108.879	-62.730	1.00	46.06	A16S	ATOM	34829	C4'	CYT	727	154.340	121.311	-54.225	1.00	49.33	A16S
ATOM	34777	C2'	GUA	724	156.399	107.720	-59.917	1.00	44.41	A16S	ATOM	34830	O4'	CYT	727	155.059	120.903	-55.423	1.00	49.33	A16S
ATOM	34778	O2'	GUA	724	156.286	106.852	-58.809	1.00	44.41	A16S	ATOM	34831	C1'	CYT	727	154.865	121.866	-56.451	1.00	49.33	A16S
ATOM	34779	C3'	GUA	724	155.283	107.479	-60.916	1.00	44.41	A16S	ATOM	34832	N1	CYT	727	154.177	121.227	-57.597	1.00	37.14	A16S
ATOM	34780	O3'	GUA	724	154.022	107.361	-60.297	1.00	44.41	A16S	ATOM	34833	C6	CYT	727	153.577	120.003	-57.470	1.00	37.14	A16S
ATOM	34781	P	GUA	725	153.116	108.677	-60.114	1.00	54.03	A16S	ATOM	34834	C2	CYT	727	154.151	121.898	-58.837	1.00	37.14	A16S
ATOM	34782	O1P	GUA	725	151.816	108.194	-59.594	1.00	45.39	A16S	ATOM	34835	O2	CYT	727	154.656	123.029	-58.926	1.00	37.14	A16S
ATOM	34783	O2P	GUA	725	153.164	109.504	-61.346	1.00	45.39	A16S	ATOM	34836	N3	CYT	727	153.565	121.301	-59.899	1.00	37.14	A16S
ATOM	34784	O5'	GUA	725	153.842	109.505	-58.965	1.00	54.03	A16S	ATOM	34837	C4	CYT	727	153.007	120.098	-59.763	1.00	37.14	A16S
ATOM	34785	C5'	GUA	725	154.112	108.896	-57.701	1.00	54.03	A16S	ATOM	34838	N4	CYT	727	152.473	119.538	-60.842	1.00	37.14	A16S
ATOM	34786	C4'	GUA	725	155.068	109.735	-56.908	1.00	54.03	A16S	ATOM	34839	C5	CYT	727	152.983	119.411	-58.515	1.00	37.14	A16S

ATOM	34840	C2'	CYT	727	154.039	123.002	-55.858	1.00	49.33	A16S	ATOM	34893	C1'	CYT	730	142.400	128.540	-62.467	1.00	58.06	A16S
ATOM	34841	O2'	CYT	727	154.918	123.999	-55.375	1.00	49.33	A16S	ATOM	34894	N1	CYT	730	142.763	127.376	-61.644	1.00	59.31	A16S
ATOM	34842	C3'	CYT	727	153.295	122.284	-54.742	1.00	49.33	A16S	ATOM	34895	C6	CYT	730	143.422	127.538	-60.455	1.00	59.31	A16S
ATOM	34843	O3'	CYT	727	152.812	123.178	-53.753	1.00	49.33	A16S	ATOM	34896	C2	CYT	730	142.435	126.092	-62.102	1.00	59.31	A16S
ATOM	34844	P	CYT	728	151.267	123.632	-53.792	1.00	54.50	A16S	ATOM	34897	O2	CYT	730	141.837	125.970	-63.182	1.00	59.31	A16S
ATOM	34845	O1P	CYT	728	150.913	124.124	-52.429	1.00	43.12	A16S	ATOM	34898	N3	CYT	730	142.783	125.019	-61.354	1.00	59.31	A16S
ATOM	34846	O2P	CYT	728	150.481	122.522	-54.399	1.00	43.12	A16S	ATOM	34899	C4	CYT	730	143.432	125.193	-60.197	1.00	59.31	A16S
ATOM	34847	O5'	CYT	728	151.227	124.826	-54.845	1.00	54.50	A16S	ATOM	34900	N4	CYT	730	143.756	124.113	-59.494	1.00	59.31	A16S
ATOM	34848	C5'	CYT	728	152.106	125.953	-54.728	1.00	54.50	A16S	ATOM	34901	C5	CYT	730	143.775	126.486	-59.711	1.00	59.31	A16S
ATOM	34849	C4'	CYT	728	152.081	126.757	-56.000	1.00	54.50	A16S	ATOM	34902	C2'	CYT	730	141.051	129.188	-62.143	1.00	58.06	A16S
ATOM	34850	O4'	CYT	728	152.626	125.957	-57.071	1.00	54.50	A16S	ATOM	34903	O2'	CYT	730	140.413	129.515	-63.360	1.00	58.06	A16S
ATOM	34851	C1'	CYT	728	151.933	126.233	-58.274	1.00	54.50	A16S	ATOM	34904	C3'	CYT	730	141.475	130.401	-61.315	1.00	58.06	A16S
ATOM	34852	N1	CYT	728	151.317	124.988	-58.762	1.00	43.12	A16S	ATOM	34905	O3'	CYT	730	140.609	131.515	-61.426	1.00	58.06	A16S
ATOM	34853	C6	CYT	728	151.229	123.880	-57.961	1.00	43.12	A16S	ATOM	34906	P	CYT	731	139.437	131.724	-60.354	1.00	90.71	A16S
ATOM	34854	C2	CYT	728	150.835	124.947	-60.082	1.00	43.12	A16S	ATOM	34907	O1P	CYT	731	138.933	133.105	-60.518	1.00	61.54	A16S
ATOM	34855	O2	CYT	728	150.886	125.984	-60.777	1.00	43.12	A16S	ATOM	34908	O2P	CYT	731	139.881	131.267	-59.010	1.00	61.54	A16S
ATOM	34856	N3	CYT	728	150.325	123.786	-60.562	1.00	43.12	A16S	ATOM	34909	O5'	CYT	731	138.312	130.745	-60.898	1.00	90.71	A16S
ATOM	34857	C4	CYT	728	150.274	122.706	-59.779	1.00	43.12	A16S	ATOM	34910	C5'	CYT	731	137.328	130.214	-60.025	1.00	90.71	A16S
ATOM	34858	N4	CYT	728	149.794	121.581	-60.300	1.00	43.12	A16S	ATOM	34911	C4'	CYT	731	137.336	128.718	-60.110	1.00	90.71	A16S
ATOM	34859	C5	CYT	728	150.721	122.731	-58.424	1.00	43.12	A16S	ATOM	34912	O4'	CYT	731	138.705	128.267	-60.116	1.00	90.71	A16S
ATOM	34860	C2'	CYT	728	150.908	127.321	-57.988	1.00	54.50	A16S	ATOM	34913	C1'	CYT	731	138.832	127.127	-59.295	1.00	90.71	A16S
ATOM	34861	O2'	CYT	728	151.468	128.571	-58.326	1.00	54.50	A16S	ATOM	34914	N1	CYT	731	139.958	127.336	-58.364	1.00	61.54	A16S
ATOM	34862	C3'	CYT	728	150.697	127.140	-56.495	1.00	54.50	A16S	ATOM	34915	C6	CYT	731	140.398	128.595	-58.060	1.00	61.54	A16S
ATOM	34863	O3'	CYT	728	150.215	128.316	-55.874	1.00	54.50	A16S	ATOM	34916	C2	CYT	731	140.602	126.217	-57.820	1.00	61.54	A16S
ATOM	34864	P	ADE	729	148.633	128.529	-55.710	1.00	58.62	A16S	ATOM	34917	O2	CYT	731	140.151	125.084	-58.065	1.00	61.54	A16S
ATOM	34865	O1P	ADE	729	148.467	129.595	-54.683	1.00	49.09	A16S	ATOM	34918	N3	CYT	731	141.693	126.397	-57.038	1.00	61.54	A16S
ATOM	34866	O2P	ADE	729	147.990	127.204	-55.513	1.00	49.09	A16S	ATOM	34919	C4	CYT	731	142.130	127.629	-56.774	1.00	61.54	A16S
ATOM	34867	O5'	ADE	729	148.178	129.076	-57.134	1.00	58.62	A16S	ATOM	34920	N4	CYT	731	143.216	127.759	-56.012	1.00	61.54	A16S
ATOM	34868	C5'	ADE	729	148.721	130.292	-57.666	1.00	58.62	A16S	ATOM	34921	C5	CYT	731	141.473	128.785	-57.282	1.00	61.54	A16S
ATOM	34869	C4'	ADE	729	148.257	130.473	-59.082	1.00	58.62	A16S	ATOM	34922	C2'	CYT	731	137.462	126.768	-58.712	1.00	90.71	A16S
ATOM	34870	O4'	ADE	729	148.794	129.399	-59.889	1.00	58.62	A16S	ATOM	34923	O2'	CYT	731	136.965	125.646	-59.401	1.00	90.71	A16S
ATOM	34871	C1'	ADE	729	147.823	128.970	-60.832	1.00	58.62	A16S	ATOM	34924	C3'	CYT	731	136.682	128.067	-58.911	1.00	90.71	A16S
ATOM	34872	N9	ADE	729	147.516	127.564	-60.575	1.00	49.09	A16S	ATOM	34925	O3'	CYT	731	135.251	128.051	-59.090	1.00	90.71	A16S
ATOM	34873	C4	ADE	729	146.991	126.676	-61.483	1.00	49.09	A16S	ATOM	34926	P	CYT	732	134.501	126.874	-59.920	1.00	56.53	A16S
ATOM	34874	N3	ADE	729	146.636	126.925	-62.753	1.00	49.09	A16S	ATOM	34927	O1P	CYT	732	133.157	127.454	-60.219	1.00	66.43	A16S
ATOM	34875	C2	ADE	729	146.164	125.825	-63.329	1.00	49.09	A16S	ATOM	34928	O2P	CYT	732	134.585	125.569	-59.188	1.00	66.43	A16S
ATOM	34876	N1	ADE	729	146.027	124.598	-62.822	1.00	49.09	A16S	ATOM	34929	O5'	CYT	732	135.259	126.734	-61.318	1.00	56.53	A16S
ATOM	34877	C6	ADE	729	146.401	124.383	-61.545	1.00	49.09	A16S	ATOM	34930	C5'	CYT	732	134.505	126.711	-62.543	1.00	56.53	A16S
ATOM	34878	N6	ADE	729	146.279	123.158	-61.044	1.00	49.09	A16S	ATOM	34931	C4'	CYT	732	134.654	125.385	-63.247	1.00	56.53	A16S
ATOM	34879	C5	ADE	729	146.903	125.466	-60.821	1.00	49.09	A16S	ATOM	34932	O4'	CYT	732	136.039	125.211	-63.619	1.00	56.53	A16S
ATOM	34880	N7	ADE	729	147.348	125.587	-59.511	1.00	49.09	A16S	ATOM	34933	C1'	CYT	732	136.364	123.833	-63.631	1.00	56.53	A16S
ATOM	34881	C8	ADE	729	147.695	126.848	-59.412	1.00	49.09	A16S	ATOM	34934	N1	CYT	732	137.498	123.607	-62.709	1.00	66.43	A16S
ATOM	34882	C2'	ADE	729	146.600	129.868	-60.686	1.00	58.62	A16S	ATOM	34935	C6	CYT	732	138.088	124.649	-62.052	1.00	66.43	A16S
ATOM	34883	O2'	ADE	729	146.654	130.899	-61.651	1.00	58.62	A16S	ATOM	34936	C2	CYT	732	137.955	122.297	-62.500	1.00	66.43	A16S
ATOM	34884	C3'	ADE	729	146.755	130.351	-59.250	1.00	58.62	A16S	ATOM	34937	O2	CYT	732	137.443	121.371	-63.144	1.00	66.43	A16S
ATOM	34885	O3'	ADE	729	146.086	131.569	-58.991	1.00	58.62	A16S	ATOM	34938	N3	CYT	732	138.946	122.076	-61.609	1.00	66.43	A16S
ATOM	34886	P	CYT	730	144.565	131.534	-58.483	1.00	58.06	A16S	ATOM	34939	C4	CYT	732	139.496	123.101	-60.958	1.00	66.43	A16S
ATOM	34887	O1P	CYT	730	144.149	132.964	-58.370	1.00	59.31	A16S	ATOM	34940	N4	CYT	732	140.456	122.836	-60.078	1.00	66.43	A16S
ATOM	34888	O2P	CYT	730	144.464	130.635	-57.292	1.00	59.31	A16S	ATOM	34941	C5	CYT	732	139.082	124.442	-61.178	1.00	66.43	A16S
ATOM	34889	O5'	CYT	730	143.781	130.863	-59.697	1.00	58.06	A16S	ATOM	34942	C2'	CYT	732	135.099	123.057	-63.242	1.00	56.53	A16S
ATOM	34890	C5'	CYT	730	143.745	131.504	-60.982	1.00	58.06	A16S	ATOM	34943	O2'	CYT	732	134.444	122.556	-64.396	1.00	56.53	A16S
ATOM	34891	C4'	CYT	730	142.817	130.768	-61.909	1.00	58.06	A16S	ATOM	34944	C3'	CYT	732	134.296	124.114	-62.493	1.00	56.53	A16S
ATOM	34892	O4'	CYT	730	143.410	129.517	-62.311	1.00	58.06	A16S	ATOM	34945	O3'	CYT	732	132.906	123.811	-62.551	1.00	56.53	A16S

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ATOM  34946  P   GUA  733     132.234 122.874 -61.422  1.00 59.96      A16S
ATOM  34947  O1P GUA  733     130.754 122.921 -61.588  1.00 53.61      A16S
ATOM  34948  O2P GUA  733     132.838 123.263 -60.116  1.00 53.61      A16S
ATOM  34949  O5' GUA  733     132.692 121.395 -61.808  1.00 59.96      A16S
ATOM  34950  C5' GUA  733     132.217 120.760 -63.017  1.00 59.96      A16S
ATOM  34951  C4' GUA  733     132.686 119.322 -63.085  1.00 59.96      A16S
ATOM  34952  O4' GUA  733     134.136 119.302 -63.061  1.00 59.96      A16S
ATOM  34953  C1' GUA  733     134.589 118.182 -62.317  1.00 59.96      A16S
ATOM  34954  N9  GUA  733     135.310 118.659 -61.136  1.00 53.61      A16S
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ATOM  34961  O6  GUA  733     137.754 118.848 -57.261  1.00 53.61      A16S
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ATOM  34966  O2' GUA  733     133.128 116.368 -62.913  1.00 59.96      A16S
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ATOM  34993  C5' GUA  735     129.818 112.052 -55.350  1.00 49.12      A16S
ATOM  34994  C4' GUA  735     130.513 112.504 -54.094  1.00 49.12      A16S
ATOM  34995  O4' GUA  735     131.234 113.734 -54.384  1.00 49.12      A16S
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ATOM  35008  C2' GUA  735     129.470 114.328 -52.982  1.00 49.12      A16S
ATOM  35009  O2' GUA  735     129.164 114.942 -51.749  1.00 49.12      A16S
ATOM  35010  C3' GUA  735     129.607 112.816 -52.908  1.00 49.12      A16S
ATOM  35011  O3' GUA  735     130.315 112.502 -51.711  1.00 49.12      A16S
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ATOM  35013  O1P ADE  736     129.227 110.353 -51.100  1.00 45.11      A16S
ATOM  35014  O2P ADE  736     128.565 112.517 -49.886  1.00 45.11      A16S
ATOM  35015  O5' ADE  736     130.772 111.440 -49.487  1.00 40.60      A16S
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ATOM  35017  C4' ADE  736     132.854 110.511 -48.684  1.00 40.60      A16S
ATOM  35018  O4' ADE  736     133.535 111.788 -48.632  1.00 40.60      A16S
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ATOM  35022  N3  ADE  736     134.973 114.161 -45.451  1.00 45.11      A16S
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ATOM  35027  C5  ADE  736     133.986 115.843 -46.906  1.00 45.11      A16S
ATOM  35028  N7  ADE  736     133.140 115.860 -48.001  1.00 45.11      A16S
ATOM  35029  C8  ADE  736     132.879 114.594 -48.218  1.00 45.11      A16S
ATOM  35030  C2' ADE  736     132.305 111.632 -46.644  1.00 40.60      A16S
ATOM  35031  O2' ADE  736     132.506 111.592 -45.249  1.00 40.60      A16S
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ATOM  35033  O3' ADE  736     133.194 109.389 -46.596  1.00 40.60      A16S
ATOM  35034  P   CYT  737     133.072 107.802 -46.786  1.00 45.21      A16S
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ATOM  35036  O2P CYT  737     133.925 107.158 -45.765  1.00 39.66      A16S
ATOM  35037  O5' CYT  737     133.750 107.545 -48.203  1.00 45.21      A16S
ATOM  35038  C5' CYT  737     135.141 107.854 -48.407  1.00 45.21      A16S
ATOM  35039  C4' CYT  737     135.525 107.608 -49.839  1.00 45.21      A16S
ATOM  35040  O4' CYT  737     134.626 108.344 -50.691  1.00 45.21      A16S
ATOM  35041  C1' CYT  737     135.310 108.752 -51.850  1.00 45.21      A16S
ATOM  35042  N1  CYT  737     135.004 110.169 -52.095  1.00 39.66      A16S
ATOM  35043  C6  CYT  737     134.286 110.534 -53.195  1.00 39.66      A16S
ATOM  35044  C2  CYT  737     135.437 111.133 -51.188  1.00 39.66      A16S
ATOM  35045  O2  CYT  737     136.110 110.777 -50.218  1.00 39.66      A16S
ATOM  35046  N3  CYT  737     135.117 112.428 -51.395  1.00 39.66      A16S
ATOM  35047  C4  CYT  737     134.410 112.772 -52.465  1.00 39.66      A16S
ATOM  35048  N4  CYT  737     134.118 114.057 -52.632  1.00 39.66      A16S
ATOM  35049  C5  CYT  737     133.973 111.811 -53.417  1.00 39.66      A16S
ATOM  35050  C2' CYT  737     136.785 108.352 -51.724  1.00 45.21      A16S
ATOM  35051  O2' CYT  737     137.013 107.206 -52.520  1.00 45.21      A16S
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ATOM  35052  C3' CYT  737     136.924 108.060 -50.232  1.00 45.21      A16S
ATOM  35053  O3' CYT  737     137.844 106.986 -50.009  1.00 45.21      A16S
ATOM  35054  P   GUA  738     139.378 107.291 -49.617  1.00 44.23      A16S
ATOM  35055  O1P GUA  738     140.115 107.852 -50.785  1.00 40.50      A16S
ATOM  35056  O2P GUA  738     139.896 106.071 -48.949  1.00 40.50      A16S
ATOM  35057  O5' GUA  738     139.279 108.428 -48.515  1.00 44.23      A16S
ATOM  35058  C5' GUA  738     139.747 109.743 -48.787  1.00 44.23      A16S
ATOM  35059  C4' GUA  738     139.992 110.454 -47.498  1.00 44.23      A16S
ATOM  35060  O4' GUA  738     138.767 110.403 -46.719  1.00 44.23      A16S
ATOM  35061  C1' GUA  738     139.075 110.181 -45.358  1.00 44.23      A16S
ATOM  35062  N9  GUA  738     138.596 108.845 -45.004  1.00 40.50      A16S
ATOM  35063  C4  GUA  738     138.630 108.274 -43.753  1.00 40.50      A16S
ATOM  35064  N3  GUA  738     139.070 108.864 -42.629  1.00 40.50      A16S
ATOM  35065  C2  GUA  738     138.998 108.059 -41.588  1.00 40.50      A16S
ATOM  35066  N2  GUA  738     139.378 108.492 -40.384  1.00 40.50      A16S
ATOM  35067  N1  GUA  738     138.551 106.774 -41.643  1.00 40.50      A16S
ATOM  35068  C6  GUA  738     138.112 106.133 -42.792  1.00 40.50      A16S
ATOM  35069  O6  GUA  738     137.766 104.949 -42.737  1.00 40.50      A16S
ATOM  35070  C5  GUA  738     138.154 106.995 -43.920  1.00 40.50      A16S
ATOM  35071  N7  GUA  738     137.792 106.770 -45.243  1.00 40.50      A16S
ATOM  35072  C8  GUA  738     138.065 107.895 -45.846  1.00 40.50      A16S
ATOM  35073  C2' GUA  738     140.601 110.268 -45.232  1.00 44.23      A16S
ATOM  35074  O2' GUA  738     140.975 111.613 -44.971  1.00 44.23      A16S
ATOM  35075  C3' GUA  738     141.037 109.805 -46.612  1.00 44.23      A16S
ATOM  35076  O3' GUA  738     142.346 110.225 -46.961  1.00 44.23      A16S
ATOM  35077  P   CYT  739     143.587 109.218 -46.776  1.00 41.17      A16S
ATOM  35078  O1P CYT  739     144.761 109.857 -47.396  1.00 36.18      A16S
ATOM  35079  O2P CYT  739     143.199 107.856 -47.188  1.00 36.18      A16S
ATOM  35080  O5' CYT  739     143.823 109.192 -45.208  1.00 41.17      A16S
ATOM  35081  C5' CYT  739     144.144 110.395 -44.501  1.00 41.17      A16S
ATOM  35082  C4' CYT  739     144.285 110.116 -43.031  1.00 41.17      A16S
ATOM  35083  O4' CYT  739     143.008 109.691 -42.493  1.00 41.17      A16S
ATOM  35084  C1' CYT  739     143.219 108.759 -41.447  1.00 41.17      A16S
ATOM  35085  N1  CYT  739     142.586 107.484 -41.822  1.00 36.18      A16S
ATOM  35086  C6  CYT  739     142.172 107.262 -43.106  1.00 36.18      A16S
ATOM  35087  C2  CYT  739     142.416 106.487 -40.836  1.00 36.18      A16S
ATOM  35088  O2  CYT  739     142.797 106.711 -39.667  1.00 36.18      A16S
ATOM  35089  N3  CYT  739     141.839 105.312 -41.187  1.00 36.18      A16S
ATOM  35090  C4  CYT  739     141.437 105.113 -42.448  1.00 36.18      A16S
ATOM  35091  N4  CYT  739     140.863 103.946 -42.748  1.00 36.18      A16S
ATOM  35092  C5  CYT  739     141.603 106.104 -43.460  1.00 36.18      A16S
ATOM  35093  C2' CYT  739     144.729 108.612 -41.274  1.00 41.17      A16S
ATOM  35094  O2' CYT  739     145.184 109.547 -40.317  1.00 41.17      A16S
ATOM  35095  C3' CYT  739     145.223 108.988 -42.655  1.00 41.17      A16S
ATOM  35096  O3' CYT  739     146.572 109.386 -42.629  1.00 41.17      A16S
ATOM  35097  P   URI  740     147.702 108.364 -43.136  1.00 34.33      A16S
ATOM  35098  O1P URI  740     148.957 109.159 -43.179  1.00 33.54      A16S
ATOM  35099  O2P URI  740     147.214 107.690 -44.375  1.00 33.54      A16S
ATOM  35100  O5' URI  740     147.788 107.272 -41.974  1.00 34.33      A16S
ATOM  35101  C5' URI  740     148.099 107.638 -40.619  1.00 34.33      A16S
ATOM  35102  C4' URI  740     147.781 106.494 -39.680  1.00 34.33      A16S
ATOM  35103  O4' URI  740     146.363 106.207 -39.739  1.00 34.33      A16S
ATOM  35104  C1' URI  740     146.139 104.826 -39.532  1.00 34.33      A16S
ATOM  35105  N1  URI  740     145.424 104.286 -40.696  1.00 33.54      A16S
ATOM  35106  C6  URI  740     145.507 104.887 -41.918  1.00 33.54      A16S
ATOM  35107  C2  URI  740     144.654 103.143 -40.518  1.00 33.54      A16S
ATOM  35108  O2  URI  740     144.539 102.566 -39.448  1.00 33.54      A16S
ATOM  35109  N3  URI  740     144.018 102.696 -41.642  1.00 33.54      A16S
ATOM  35110  C4  URI  740     144.067 103.248 -42.897  1.00 33.54      A16S
ATOM  35111  O4  URI  740     143.480 102.688 -43.829  1.00 33.54      A16S
ATOM  35112  C5  URI  740     144.870 104.423 -42.995  1.00 33.54      A16S
ATOM  35113  C2' URI  740     147.491 104.165 -39.307  1.00 34.33      A16S
ATOM  35114  O2' URI  740     147.703 104.038 -37.918  1.00 34.33      A16S
ATOM  35115  C3' URI  740     148.431 105.156 -39.978  1.00 34.33      A16S
ATOM  35116  O3' URI  740     149.738 105.067 -39.450  1.00 34.33      A16S
ATOM  35117  P   GUA  741     150.843 104.193 -40.220  1.00 36.37      A16S
ATOM  35118  O1P GUA  741     152.094 104.268 -39.401  1.00 38.44      A16S
ATOM  35119  O2P GUA  741     150.864 104.598 -41.653  1.00 38.44      A16S
ATOM  35120  O5' GUA  741     150.285 102.708 -40.162  1.00 36.37      A16S
ATOM  35121  C5' GUA  741     150.176 102.038 -38.915  1.00 36.37      A16S
ATOM  35122  C4' GUA  741     149.260 100.864 -39.044  1.00 36.37      A16S
ATOM  35123  O4' GUA  741     148.005 101.307 -39.607  1.00 36.37      A16S
ATOM  35124  C1' GUA  741     147.438 100.273 -40.387  1.00 36.37      A16S
ATOM  35125  N9  GUA  741     147.239 100.780 -41.739  1.00 38.44      A16S
ATOM  35126  C4  GUA  741     146.347 100.307 -42.660  1.00 38.44      A16S
ATOM  35127  N3  GUA  741     145.489  99.294 -42.474  1.00 38.44      A16S
ATOM  35128  C2  GUA  741     144.763  99.067 -43.554  1.00 38.44      A16S
ATOM  35129  N2  GUA  741     143.831  98.104 -43.545  1.00 38.44      A16S
ATOM  35130  N1  GUA  741     144.889  99.767 -44.721  1.00 38.44      A16S
ATOM  35131  C6  GUA  741     145.770 100.810 -44.934  1.00 38.44      A16S
ATOM  35132  O6  GUA  741     145.812 101.362 -46.030  1.00 38.44      A16S
ATOM  35133  C5  GUA  741     146.534 101.082 -43.787  1.00 38.44      A16S
ATOM  35134  N7  GUA  741     147.513 102.040 -43.571  1.00 38.44      A16S
ATOM  35135  C8  GUA  741     147.905 101.822 -42.344  1.00 38.44      A16S
ATOM  35136  C2' GUA  741     148.374  99.067 -40.298  1.00 36.37      A16S
ATOM  35137  O2' GUA  741     147.892  98.242 -39.241  1.00 36.37      A16S
ATOM  35138  C3' GUA  741     149.705  99.733 -39.951  1.00 36.37      A16S
ATOM  35139  O3' GUA  741     150.571  98.889 -39.201  1.00 36.37      A16S
ATOM  35140  P   ADE  742     151.165  97.547 -39.853  1.00 36.61      A16S
ATOM  35141  O1P ADE  742     152.639  97.652 -39.716  1.00 47.52      A16S
ATOM  35142  O2P ADE  742     150.563  97.316 -41.187  1.00 47.52      A16S
ATOM  35143  O5' ADE  742     150.665  96.402 -38.865  1.00 36.61      A16S
ATOM  35144  C5' ADE  742     150.852  96.533 -37.446  1.00 36.61      A16S
ATOM  35145  C4' ADE  742     150.443  95.268 -36.735  1.00 36.61      A16S
ATOM  35146  O4' ADE  742     148.997  95.130 -36.710  1.00 36.61      A16S
ATOM  35147  C1' ADE  742     148.653  93.753 -36.673  1.00 36.61      A16S
ATOM  35148  N9  ADE  742     147.835  93.413 -37.836  1.00 47.52      A16S
ATOM  35149  C4  ADE  742     147.060  92.282 -37.935  1.00 47.52      A16S
ATOM  35150  N3  ADE  742     146.874  91.335 -36.995  1.00 47.52      A16S
ATOM  35151  C2  ADE  742     146.074  90.368 -37.449  1.00 47.52      A16S
ATOM  35152  N1  ADE  742     145.489  90.247 -38.642  1.00 47.52      A16S
ATOM  35153  C6  ADE  742     145.697  91.216 -39.564  1.00 47.52      A16S
ATOM  35154  N6  ADE  742     145.115  91.092 -40.758  1.00 47.52      A16S
ATOM  35155  C5  ADE  742     146.522  92.302 -39.205  1.00 47.52      A16S
ATOM  35156  N7  ADE  742     146.926  93.440 -39.891  1.00 47.52      A16S
ATOM  35157  C8  ADE  742     147.694  94.068 -39.035  1.00 47.52      A16S
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ATOM  35158  C2' ADE  742     149.952  92.957 -36.705  1.00 36.61      A16S
ATOM  35159  O2' ADE  742     150.291  92.626 -35.377  1.00 36.61      A16S
ATOM  35160  C3' ADE  742     150.915  93.957 -37.334  1.00 36.61      A16S
ATOM  35161  O3' ADE  742     152.270  93.670 -37.039  1.00 36.61      A16S
ATOM  35162  P   GUA  743     153.287  93.356 -38.245  1.00 48.09      A16S
ATOM  35163  O1P GUA  743     154.553  92.977 -37.584  1.00 45.19      A16S
ATOM  35164  O2P GUA  743     153.285  94.472 -39.220  1.00 45.19      A16S
ATOM  35165  O5' GUA  743     152.640  92.103 -38.992  1.00 48.09      A16S
ATOM  35166  C5' GUA  743     152.538  90.838 -38.333  1.00 48.09      A16S
ATOM  35167  C4' GUA  743     151.594  89.912 -39.070  1.00 48.09      A16S
ATOM  35168  O4' GUA  743     150.287  90.537 -39.202  1.00 48.09      A16S
ATOM  35169  C1' GUA  743     149.633  90.038 -40.360  1.00 48.09      A16S
ATOM  35170  N9  GUA  743     149.459  91.124 -41.321  1.00 45.19      A16S
ATOM  35171  C4  GUA  743     148.724  91.051 -42.478  1.00 45.19      A16S
ATOM  35172  N3  GUA  743     147.995  89.991 -42.882  1.00 45.19      A16S
ATOM  35173  C2  GUA  743     147.423  90.202 -44.052  1.00 45.19      A16S
ATOM  35174  N2  GUA  743     146.659  89.245 -44.597  1.00 45.19      A16S
ATOM  35175  N1  GUA  743     147.557  91.364 -44.777  1.00 45.19      A16S
ATOM  35176  C6  GUA  743     148.304  92.473 -44.384  1.00 45.19      A16S
ATOM  35177  O6  GUA  743     148.361  93.477 -45.121  1.00 45.19      A16S
ATOM  35178  C5  GUA  743     148.923  92.257 -43.116  1.00 45.19      A16S
ATOM  35179  N7  GUA  743     149.739  93.084 -42.358  1.00 45.19      A16S
ATOM  35180  C8  GUA  743     150.025  92.376 -41.298  1.00 45.19      A16S
ATOM  35181  C2' GUA  743     150.578  89.028 -41.001  1.00 48.09      A16S
ATOM  35182  O2' GUA  743     150.290  87.723 -40.551  1.00 48.09      A16S
ATOM  35183  C3' GUA  743     151.920  89.527 -40.502  1.00 48.09      A16S
ATOM  35184  O3' GUA  743     152.929  88.556 -40.680  1.00 48.09      A16S
ATOM  35185  P   GUA  744     153.979  88.761 -41.876  1.00 51.56      A16S
ATOM  35186  O1P GUA  744     154.887  87.598 -41.929  1.00 40.13      A16S
ATOM  35187  O2P GUA  744     154.546  90.124 -41.720  1.00 40.13      A16S
ATOM  35188  O5' GUA  744     153.089  88.756 -43.201  1.00 51.56      A16S
ATOM  35189  C5' GUA  744     152.369  87.581 -43.611  1.00 51.56      A16S
ATOM  35190  C4' GUA  744     151.697  87.820 -44.941  1.00 51.56      A16S
ATOM  35191  O4' GUA  744     150.757  88.914 -44.803  1.00 51.56      A16S
ATOM  35192  C1' GUA  744     150.772  89.723 -45.971  1.00 51.56      A16S
ATOM  35193  N9  GUA  744     151.290  91.038 -45.596  1.00 40.13      A16S
ATOM  35194  C4  GUA  744     151.307  92.179 -46.364  1.00 40.13      A16S
ATOM  35195  N3  GUA  744     150.860  92.292 -47.627  1.00 40.13      A16S
ATOM  35196  C2  GUA  744     151.028  93.520 -48.099  1.00 40.13      A16S
ATOM  35197  N2  GUA  744     150.678  93.812 -49.353  1.00 40.13      A16S
ATOM  35198  N1  GUA  744     151.566  94.554 -47.382  1.00 40.13      A16S
ATOM  35199  C6  GUA  744     152.046  94.460 -46.081  1.00 40.13      A16S
ATOM  35200  O6  GUA  744     152.543  95.457 -45.526  1.00 40.13      A16S
ATOM  35201  C5  GUA  744     151.888  93.148 -45.567  1.00 40.13      A16S
ATOM  35202  N7  GUA  744     152.243  92.624 -44.332  1.00 40.13      A16S
ATOM  35203  C8  GUA  744     151.868  91.377 -44.391  1.00 40.13      A16S
ATOM  35204  C2' GUA  744     151.664  89.022 -46.989  1.00 51.56      A16S
ATOM  35205  O2' GUA  744     150.843  88.198 -47.788  1.00 51.56      A16S
ATOM  35206  C3' GUA  744     152.613  88.247 -46.074  1.00 51.56      A16S
ATOM  35207  O3' GUA  744     153.233  87.132 -46.708  1.00 51.56      A16S
ATOM  35208  P   CYT  745     154.685  87.302 -47.386  1.00 46.54      A16S
ATOM  35209  O1P CYT  745     154.982  86.053 -48.128  1.00 33.14      A16S
ATOM  35210  O2P CYT  745     155.634  87.775 -46.349  1.00 33.14      A16S
ATOM  35211  O5' CYT  745     154.468  88.431 -48.482  1.00 46.54      A16S
ATOM  35212  C5' CYT  745     153.729  88.148 -49.670  1.00 46.54      A16S
ATOM  35213  C4' CYT  745     153.754  89.340 -50.580  1.00 46.54      A16S
ATOM  35214  O4' CYT  745     153.067  90.440 -49.928  1.00 46.54      A16S
ATOM  35215  C1' CYT  745     153.729  91.661 -50.216  1.00 46.54      A16S
ATOM  35216  N1  CYT  745     154.238  92.217 -48.954  1.00 33.14      A16S
ATOM  35217  C6  CYT  745     154.429  91.417 -47.863  1.00 33.14      A16S
ATOM  35218  C2  CYT  745     154.523  93.586 -48.887  1.00 33.14      A16S
ATOM  35219  O2  CYT  745     154.364  94.289 -49.903  1.00 33.14      A16S
ATOM  35220  N3  CYT  745     154.964  94.105 -47.720  1.00 33.14      A16S
ATOM  35221  C4  CYT  745     155.117  93.315 -46.655  1.00 33.14      A16S
ATOM  35222  N4  CYT  745     155.509  93.874 -45.518  1.00 33.14      A16S
ATOM  35223  C5  CYT  745     154.860  91.918 -46.707  1.00 33.14      A16S
ATOM  35224  C2' CYT  745     154.872  91.350 -51.175  1.00 46.54      A16S
ATOM  35225  O2' CYT  745     154.458  91.575 -52.505  1.00 46.54      A16S
ATOM  35226  C3' CYT  745     155.139  89.890 -50.851  1.00 46.54      A16S
ATOM  35227  O3' CYT  745     155.831  89.216 -51.871  1.00 46.54      A16S
ATOM  35228  P   GUA  746     157.437  89.239 -51.864  1.00 51.98      A16S
ATOM  35229  O1P GUA  746     157.868  88.251 -52.899  1.00 28.89      A16S
ATOM  35230  O2P GUA  746     157.915  89.086 -50.468  1.00 28.89      A16S
ATOM  35231  O5' GUA  746     157.809  90.732 -52.299  1.00 51.98      A16S
ATOM  35232  C5' GUA  746     157.327  91.276 -53.529  1.00 51.98      A16S
ATOM  35233  C4' GUA  746     157.510  92.770 -53.549  1.00 51.98      A16S
ATOM  35234  O4' GUA  746     156.735  93.375 -52.484  1.00 51.98      A16S
ATOM  35235  C1' GUA  746     157.373  94.564 -52.044  1.00 51.98      A16S
ATOM  35236  N9  GUA  746     157.720  94.432 -50.632  1.00 28.89      A16S
ATOM  35237  C4  GUA  746     158.197  95.432 -49.829  1.00 28.89      A16S
ATOM  35238  N3  GUA  746     158.440  96.700 -50.214  1.00 28.89      A16S
ATOM  35239  C2  GUA  746     158.885  97.443 -49.221  1.00 28.89      A16S
ATOM  35240  N2  GUA  746     159.185  98.721 -49.452  1.00 28.89      A16S
ATOM  35241  N1  GUA  746     159.068  96.982 -47.933  1.00 28.89      A16S
ATOM  35242  C6  GUA  746     158.815  95.670 -47.510  1.00 28.89      A16S
ATOM  35243  O6  GUA  746     158.992  95.345 -46.315  1.00 28.89      A16S
ATOM  35244  C5  GUA  746     158.354  94.862 -48.584  1.00 28.89      A16S
ATOM  35245  N7  GUA  746     158.007  93.521 -48.610  1.00 28.89      A16S
ATOM  35246  C8  GUA  746     157.638  93.309 -49.843  1.00 28.89      A16S
ATOM  35247  C2' GUA  746     158.628  94.738 -52.881  1.00 51.98      A16S
ATOM  35248  O2' GUA  746     158.332  95.607 -53.957  1.00 51.98      A16S
ATOM  35249  C3' GUA  746     158.905  93.305 -53.305  1.00 51.98      A16S
ATOM  35250  O3' GUA  746     159.741  93.249 -54.437  1.00 51.98      A16S
ATOM  35251  P   CYT  747     161.326  93.074 -54.229  1.00 39.47      A16S
ATOM  35252  O1P CYT  747     161.941  92.899 -55.584  1.00 25.06      A16S
ATOM  35253  O2P CYT  747     161.521  92.028 -53.188  1.00 25.06      A16S
ATOM  35254  O5' CYT  747     161.812  94.497 -53.712  1.00 39.47      A16S
ATOM  35255  C5' CYT  747     161.848  95.600 -54.628  1.00 39.47      A16S
ATOM  35256  C4' CYT  747     162.200  96.870 -53.914  1.00 39.47      A16S
ATOM  35257  O4' CYT  747     161.261  97.065 -52.833  1.00 39.47      A16S
ATOM  35258  C1' CYT  747     161.920  97.660 -51.736  1.00 39.47      A16S
ATOM  35259  N1  CYT  747     161.890  96.726 -50.602  1.00 25.06      A16S
ATOM  35260  C6  CYT  747     161.521  95.419 -50.753  1.00 25.06      A16S
ATOM  35261  C2  CYT  747     162.266  97.207 -49.355  1.00 25.06      A16S
ATOM  35262  O2  CYT  747     162.574  98.411 -49.248  1.00 25.06      A16S
ATOM  35263  N3  CYT  747     162.290  96.365 -48.294  1.00 25.06      A16S
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ATOM	35264	C4	CYT	747	161.958	95.091	-48.452	1.00	25.06	A16S	ATOM	35317	O1P	ADE	750	176.529	99.057	-53.325	1.00	33.45	A16S
ATOM	35265	N4	CYT	747	162.048	94.296	-47.389	1.00	25.06	A16S	ATOM	35318	O2P	ADE	750	174.831	97.555	-52.088	1.00	33.45	A16S
ATOM	35266	C5	CYT	747	161.534	94.575	-49.713	1.00	25.06	A16S	ATOM	35319	O5'	ADE	750	176.929	98.252	-50.951	1.00	46.62	A16S
ATOM	35267	C2'	CYT	747	163.358	97.941	-52.158	1.00	39.47	A16S	ATOM	35320	C5'	ADE	750	178.049	99.122	-50.684	1.00	46.62	A16S
ATOM	35268	O2'	CYT	747	163.472	99.240	-52.701	1.00	39.47	A16S	ATOM	35321	C4'	ADE	750	178.851	98.629	-49.502	1.00	46.62	A16S
ATOM	35269	C3'	CYT	747	163.555	96.893	-53.231	1.00	39.47	A16S	ATOM	35322	O4'	ADE	750	178.044	98.660	-48.300	1.00	46.62	A16S
ATOM	35270	O3'	CYT	747	164.610	97.254	-54.097	1.00	39.47	A16S	ATOM	35323	C1'	ADE	750	178.403	97.579	-47.451	1.00	46.62	A16S
ATOM	35271	P	GUA	748	166.043	96.563	-53.902	1.00	39.69	A16S	ATOM	35324	N9	ADE	750	177.226	96.717	-47.299	1.00	33.45	A16S
ATOM	35272	O1P	GUA	748	166.923	97.189	-54.923	1.00	33.26	A16S	ATOM	35325	C4	ADE	750	176.992	95.773	-46.327	1.00	33.45	A16S
ATOM	35273	O2P	GUA	748	165.856	95.090	-53.884	1.00	33.26	A16S	ATOM	35326	N3	ADE	750	177.786	95.441	-45.297	1.00	33.45	A16S
ATOM	35274	O5'	GUA	748	166.508	97.008	-52.444	1.00	39.69	A16S	ATOM	35327	C2	ADE	750	177.213	94.496	-44.552	1.00	33.45	A16S
ATOM	35275	C5'	GUA	748	166.963	98.345	-52.192	1.00	39.69	A16S	ATOM	35328	N1	ADE	750	176.032	93.894	-44.713	1.00	33.45	A16S
ATOM	35276	C4'	GUA	748	167.147	98.562	-50.714	1.00	39.69	A16S	ATOM	35329	C6	ADE	750	175.272	94.248	-45.766	1.00	33.45	A16S
ATOM	35277	O4'	GUA	748	165.921	98.195	-50.042	1.00	39.69	A16S	ATOM	35330	N6	ADE	750	174.106	93.646	-45.938	1.00	33.45	A16S
ATOM	35278	C1'	GUA	748	166.211	97.591	-48.801	1.00	39.69	A16S	ATOM	35331	C5	ADE	750	175.755	95.230	-46.619	1.00	33.45	A16S
ATOM	35279	N9	GUA	748	165.750	96.212	-48.861	1.00	33.26	A16S	ATOM	35332	N7	ADE	750	175.217	95.815	-47.749	1.00	33.45	A16S
ATOM	35280	C4	GUA	748	165.650	95.350	-47.809	1.00	33.26	A16S	ATOM	35333	C8	ADE	750	176.122	96.689	-48.113	1.00	33.45	A16S
ATOM	35281	N3	GUA	748	165.918	95.646	-46.525	1.00	33.26	A16S	ATOM	35334	C2'	ADE	750	179.589	96.873	-48.110	1.00	46.62	A16S
ATOM	35282	C2	GUA	748	165.743	94.610	-45.734	1.00	33.26	A16S	ATOM	35335	O2'	ADE	750	180.792	97.479	-47.683	1.00	46.62	A16S
ATOM	35283	N2	GUA	748	165.947	94.748	-44.420	1.00	33.26	A16S	ATOM	35336	C3'	ADE	750	179.362	97.206	-49.572	1.00	46.62	A16S
ATOM	35284	N1	GUA	748	165.347	93.368	-46.177	1.00	33.26	A16S	ATOM	35337	O3'	ADE	750	180.566	97.133	-50.299	1.00	46.62	A16S
ATOM	35285	C6	GUA	748	165.061	93.049	-47.506	1.00	33.26	A16S	ATOM	35338	P	ADE	751	180.872	95.831	-51.183	1.00	38.91	A16S
ATOM	35286	O6	GUA	748	164.690	91.900	-47.809	1.00	33.26	A16S	ATOM	35339	O1P	ADE	751	182.127	96.139	-51.919	1.00	32.39	A16S
ATOM	35287	C5	GUA	748	165.242	94.155	-48.352	1.00	33.26	A16S	ATOM	35340	O2P	ADE	751	179.642	95.488	-51.942	1.00	32.39	A16S
ATOM	35288	N7	GUA	748	165.064	94.270	-49.719	1.00	33.26	A16S	ATOM	35341	O5'	ADE	751	181.146	94.700	-50.097	1.00	38.91	A16S
ATOM	35289	C8	GUA	748	165.366	95.509	-49.977	1.00	33.26	A16S	ATOM	35342	C5'	ADE	751	182.258	94.819	-49.205	1.00	38.91	A16S
ATOM	35290	C2'	GUA	748	167.722	97.659	-48.604	1.00	39.69	A16S	ATOM	35343	C4'	ADE	751	182.086	93.904	-48.026	1.00	38.91	A16S
ATOM	35291	O2'	GUA	748	168.023	98.836	-47.878	1.00	39.69	A16S	ATOM	35344	O4'	ADE	751	180.880	94.260	-47.313	1.00	38.91	A16S
ATOM	35292	C3'	GUA	748	168.214	97.716	-50.045	1.00	39.69	A16S	ATOM	35345	C1'	ADE	751	180.254	93.086	-46.818	1.00	38.91	A16S
ATOM	35293	O3'	GUA	748	169.476	98.351	-50.131	1.00	39.69	A16S	ATOM	35346	N9	ADE	751	178.936	92.976	-47.444	1.00	32.39	A16S
ATOM	35294	P	ADE	749	170.554	97.838	-51.190	1.00	34.54	A16S	ATOM	35347	C4	ADE	751	177.942	92.097	-47.083	1.00	32.39	A16S
ATOM	35295	O1P	ADE	749	170.106	98.303	-52.514	1.00	26.97	A16S	ATOM	35348	N3	ADE	751	177.966	91.213	-46.072	1.00	32.39	A16S
ATOM	35296	O2P	ADE	749	170.821	96.396	-50.963	1.00	26.97	A16S	ATOM	35349	C2	ADE	751	176.829	90.523	-46.028	1.00	32.39	A16S
ATOM	35297	O5'	ADE	749	171.867	98.632	-50.791	1.00	34.54	A16S	ATOM	35350	N1	ADE	751	175.764	90.593	-46.838	1.00	32.39	A16S
ATOM	35298	C5'	ADE	749	171.942	100.044	-50.982	1.00	34.54	A16S	ATOM	35351	C6	ADE	751	175.787	91.472	-47.866	1.00	32.39	A16S
ATOM	35299	C4'	ADE	749	173.112	100.624	-50.223	1.00	34.54	A16S	ATOM	35352	N6	ADE	751	174.763	91.486	-48.723	1.00	32.39	A16S
ATOM	35300	O4'	ADE	749	172.838	100.658	-48.802	1.00	34.54	A16S	ATOM	35353	C5	ADE	751	176.914	92.300	-47.989	1.00	32.39	A16S
ATOM	35301	C1'	ADE	749	174.061	100.741	-48.103	1.00	34.54	A16S	ATOM	35354	N7	ADE	751	177.235	93.319	-48.883	1.00	32.39	A16S
ATOM	35302	N9	ADE	749	174.115	99.727	-47.058	1.00	26.97	A16S	ATOM	35355	C8	ADE	751	178.439	93.690	-48.520	1.00	32.39	A16S
ATOM	35303	C4	ADE	749	175.109	99.696	-46.112	1.00	26.97	A16S	ATOM	35356	C2'	ADE	751	181.145	91.895	-47.176	1.00	38.91	A16S
ATOM	35304	N3	ADE	749	176.134	100.561	-45.991	1.00	26.97	A16S	ATOM	35357	O2'	ADE	751	182.000	91.581	-46.094	1.00	38.91	A16S
ATOM	35305	C2	ADE	749	176.905	100.221	-44.974	1.00	26.97	A16S	ATOM	35358	C3'	ADE	751	181.913	92.438	-48.371	1.00	38.91	A16S
ATOM	35306	N1	ADE	749	176.787	99.187	-44.130	1.00	26.97	A16S	ATOM	35359	O3'	ADE	751	183.174	91.808	-48.522	1.00	38.91	A16S
ATOM	35307	C6	ADE	749	175.756	98.329	-44.286	1.00	26.97	A16S	ATOM	35360	P	GUA	752	183.411	90.802	-49.743	1.00	40.72	A16S
ATOM	35308	N6	ADE	749	175.670	97.280	-43.457	1.00	26.97	A16S	ATOM	35361	O1P	GUA	752	184.790	90.282	-49.585	1.00	28.46	A16S
ATOM	35309	C5	ADE	749	174.848	98.592	-45.324	1.00	26.97	A16S	ATOM	35362	O2P	GUA	752	183.016	91.482	-51.016	1.00	28.46	A16S
ATOM	35310	N7	ADE	749	173.697	97.945	-45.755	1.00	26.97	A16S	ATOM	35363	O5'	GUA	752	182.387	89.630	-49.431	1.00	40.72	A16S
ATOM	35311	C8	ADE	749	173.302	98.659	-46.785	1.00	26.97	A16S	ATOM	35364	C5'	GUA	752	182.553	88.872	-48.251	1.00	40.72	A16S
ATOM	35312	C2'	ADE	749	175.182	100.512	-49.107	1.00	34.54	A16S	ATOM	35365	C4'	GUA	752	181.312	88.094	-47.939	1.00	40.72	A16S
ATOM	35313	O2'	ADE	749	175.761	101.758	-49.432	1.00	34.54	A16S	ATOM	35366	O4'	GUA	752	180.178	88.985	-47.830	1.00	40.72	A16S
ATOM	35314	C3'	ADE	749	174.427	99.873	-50.260	1.00	34.54	A16S	ATOM	35367	C1'	GUA	752	178.988	88.270	-48.119	1.00	40.72	A16S
ATOM	35315	O3'	ADE	749	175.137	99.965	-51.477	1.00	34.54	A16S	ATOM	35368	N9	GUA	752	178.272	88.941	-49.197	1.00	28.46	A16S
ATOM	35316	P	ADE	750	175.844	98.641	-52.059	1.00	46.62	A16S	ATOM	35369	C4	GUA	752	177.094	88.525	-49.763	1.00	28.46	A16S

ATOM	35370	N3	GUA	752	176.402	87.413	-49.429	1.00	28.46	A16S	ATOM	35423	O2'	GUA	754	175.607	78.823	-57.728	1.00	49.10	A16S
ATOM	35371	C2	GUA	752	175.284	87.293	-50.136	1.00	28.46	A16S	ATOM	35424	C3'	GUA	754	177.670	79.464	-56.576	1.00	49.10	A16S
ATOM	35372	N2	GUA	752	174.472	86.247	-49.933	1.00	28.46	A16S	ATOM	35425	O3'	GUA	754	178.289	78.303	-57.109	1.00	49.10	A16S
ATOM	35373	N1	GUA	752	174.883	88.190	-51.094	1.00	28.46	A16S	ATOM	35426	P	URI	755	179.524	78.477	-58.126	1.00	47.88	A16S
ATOM	35374	C6	GUA	752	175.587	89.336	-51.456	1.00	28.46	A16S	ATOM	35427	O1P	URI	755	180.191	77.158	-58.168	1.00	46.91	A16S
ATOM	35375	O6	GUA	752	175.141	90.080	-52.337	1.00	28.46	A16S	ATOM	35428	O2P	URI	755	180.309	79.685	-57.748	1.00	46.91	A16S
ATOM	35376	C5	GUA	752	176.783	89.478	-50.703	1.00	28.46	A16S	ATOM	35429	O5'	URI	755	178.828	78.811	-59.523	1.00	47.88	A16S
ATOM	35377	N7	GUA	752	177.753	90.469	-50.738	1.00	28.46	A16S	ATOM	35430	C5'	URI	755	177.920	77.890	-60.137	1.00	47.88	A16S
ATOM	35378	C8	GUA	752	178.617	90.107	-49.831	1.00	28.46	A16S	ATOM	35431	C4'	URI	755	177.345	78.490	-61.392	1.00	47.88	A16S
ATOM	35379	C2'	GUA	752	179.399	86.854	-48.487	1.00	40.72	A16S	ATOM	35432	O4'	URI	755	176.451	79.576	-61.037	1.00	47.88	A16S
ATOM	35380	O2'	GUA	752	179.313	86.101	-47.289	1.00	40.72	A16S	ATOM	35433	C1'	URI	755	176.521	80.600	-62.024	1.00	47.88	A16S
ATOM	35381	C3'	GUA	752	180.833	87.076	-48.948	1.00	40.72	A16S	ATOM	35434	N1	URI	755	176.988	81.846	-61.390	1.00	46.91	A16S
ATOM	35382	O3'	GUA	752	181.624	85.905	-48.939	1.00	40.72	A16S	ATOM	35435	C6	URI	755	177.781	81.823	-60.271	1.00	46.91	A16S
ATOM	35383	P	CYT	753	182.075	85.259	-50.343	1.00	43.22	A16S	ATOM	35436	C2	URI	755	176.629	83.055	-61.972	1.00	46.91	A16S
ATOM	35384	O1P	CYT	753	183.190	84.310	-50.043	1.00	31.64	A16S	ATOM	35437	O2	URI	755	175.898	83.145	-62.932	1.00	46.91	A16S
ATOM	35385	O2P	CYT	753	182.278	86.355	-51.331	1.00	31.64	A16S	ATOM	35438	N3	URI	755	177.158	84.166	-61.380	1.00	46.91	A16S
ATOM	35386	O5'	CYT	753	180.791	84.428	-50.767	1.00	43.22	A16S	ATOM	35439	C4	URI	755	177.977	84.210	-60.289	1.00	46.91	A16S
ATOM	35387	C5'	CYT	753	180.235	83.507	-49.843	1.00	43.22	A16S	ATOM	35440	O4	URI	755	178.457	85.291	-59.944	1.00	46.91	A16S
ATOM	35388	C4'	CYT	753	178.940	82.953	-50.354	1.00	43.22	A16S	ATOM	35441	C5	URI	755	178.273	82.932	-59.714	1.00	46.91	A16S
ATOM	35389	O4'	CYT	753	177.891	83.946	-50.295	1.00	43.22	A16S	ATOM	35442	C2'	URI	755	177.499	80.133	-63.107	1.00	47.88	A16S
ATOM	35390	C1'	CYT	753	176.928	83.667	-51.291	1.00	43.22	A16S	ATOM	35443	O2'	URI	755	176.826	79.559	-64.210	1.00	47.88	A16S
ATOM	35391	N1	CYT	753	176.830	84.828	-52.184	1.00	31.64	A16S	ATOM	35444	C3'	URI	755	178.350	79.134	-62.334	1.00	47.88	A16S
ATOM	35392	C6	CYT	753	177.731	85.847	-52.115	1.00	31.64	A16S	ATOM	35445	O3'	URI	755	179.049	78.231	-63.183	1.00	47.88	A16S
ATOM	35393	C2	CYT	753	175.787	84.872	-53.116	1.00	31.64	A16S	ATOM	35446	P	GUA	756	180.577	78.562	-63.595	1.00	55.14	A16S
ATOM	35394	O2	CYT	753	174.979	83.924	-53.167	1.00	31.64	A16S	ATOM	35447	O1P	GUA	756	181.103	77.364	-64.306	1.00	54.13	A16S
ATOM	35395	N3	CYT	753	175.682	85.938	-53.934	1.00	31.64	A16S	ATOM	35448	O2P	GUA	756	181.299	79.076	-62.401	1.00	54.13	A16S
ATOM	35396	C4	CYT	753	176.555	86.932	-53.840	1.00	31.64	A16S	ATOM	35449	O5'	GUA	756	180.447	79.770	-64.630	1.00	55.14	A16S
ATOM	35397	N4	CYT	753	176.391	87.971	-54.634	1.00	31.64	A16S	ATOM	35450	C5'	GUA	756	179.689	79.611	-65.825	1.00	55.14	A16S
ATOM	35398	C5	CYT	753	177.630	86.907	-52.918	1.00	31.64	A16S	ATOM	35451	C4'	GUA	756	179.423	80.941	-66.473	1.00	55.14	A16S
ATOM	35399	C2'	CYT	753	177.399	82.425	-52.045	1.00	43.22	A16S	ATOM	35452	O4'	GUA	756	178.566	81.749	-65.624	1.00	55.14	A16S
ATOM	35400	O2'	CYT	753	176.810	81.275	-51.468	1.00	43.22	A16S	ATOM	35453	C1'	GUA	756	178.755	83.123	-65.944	1.00	55.14	A16S
ATOM	35401	C3'	CYT	753	178.896	82.471	-51.786	1.00	43.22	A16S	ATOM	35454	N9	GUA	756	179.100	83.883	-64.743	1.00	54.13	A16S
ATOM	35402	O3'	CYT	753	179.510	81.211	-51.970	1.00	43.22	A16S	ATOM	35455	C4	GUA	756	179.056	85.255	-64.625	1.00	54.13	A16S
ATOM	35403	P	GUA	754	180.236	80.904	-53.363	1.00	49.10	A16S	ATOM	35456	N3	GUA	756	178.624	86.117	-65.568	1.00	54.13	A16S
ATOM	35404	O1P	GUA	754	181.076	79.714	-53.135	1.00	38.35	A16S	ATOM	35457	C2	GUA	756	178.741	87.374	-65.182	1.00	54.13	A16S
ATOM	35405	O2P	GUA	754	180.848	82.162	-53.868	1.00	38.35	A16S	ATOM	35458	N2	GUA	756	178.355	88.357	-65.998	1.00	54.13	A16S
ATOM	35406	O5'	GUA	754	179.038	80.537	-54.343	1.00	49.10	A16S	ATOM	35459	N1	GUA	756	179.243	87.758	-63.970	1.00	54.13	A16S
ATOM	35407	C5'	GUA	754	178.176	79.415	-54.077	1.00	49.10	A16S	ATOM	35460	C6	GUA	756	179.698	86.892	-62.984	1.00	54.13	A16S
ATOM	35408	C4'	GUA	754	177.140	79.295	-55.163	1.00	49.10	A16S	ATOM	35461	O6	GUA	756	180.148	87.349	-61.933	1.00	54.13	A16S
ATOM	35409	O4'	GUA	754	176.168	80.362	-55.030	1.00	49.10	A16S	ATOM	35462	C5	GUA	756	179.570	85.533	-63.380	1.00	54.13	A16S
ATOM	35410	C1'	GUA	754	175.729	80.779	-56.317	1.00	49.10	A16S	ATOM	35463	N7	GUA	756	179.893	84.361	-62.707	1.00	54.13	A16S
ATOM	35411	N9	GUA	754	176.069	82.189	-56.501	1.00	38.35	A16S	ATOM	35464	C8	GUA	756	179.583	83.409	-63.546	1.00	54.13	A16S
ATOM	35412	C4	GUA	754	175.539	83.030	-57.445	1.00	38.35	A16S	ATOM	35465	C2'	GUA	756	179.898	83.202	-66.959	1.00	55.14	A16S
ATOM	35413	N3	GUA	754	174.591	82.708	-58.335	1.00	38.35	A16S	ATOM	35466	O2'	GUA	756	179.388	83.323	-68.271	1.00	55.14	A16S
ATOM	35414	C2	GUA	754	174.282	83.726	-59.112	1.00	38.35	A16S	ATOM	35467	C3'	GUA	756	180.598	81.866	-66.749	1.00	55.14	A16S
ATOM	35415	N2	GUA	754	173.323	83.583	-60.034	1.00	38.35	A16S	ATOM	35468	O3'	GUA	756	181.359	81.529	-67.898	1.00	55.14	A16S
ATOM	35416	N1	GUA	754	174.882	84.954	-59.036	1.00	38.35	A16S	ATOM	35469	P	GUA	757	182.898	82.018	-68.005	1.00	64.88	A16S
ATOM	35417	C6	GUA	754	175.873	85.298	-58.131	1.00	38.35	A16S	ATOM	35470	O1P	GUA	757	183.375	81.469	-69.310	1.00	45.37	A16S
ATOM	35418	O6	GUA	754	176.368	86.424	-58.162	1.00	38.35	A16S	ATOM	35471	O2P	GUA	757	183.631	81.674	-66.745	1.00	45.37	A16S
ATOM	35419	C5	GUA	754	176.188	84.231	-57.276	1.00	38.35	A16S	ATOM	35472	O5'	GUA	757	182.812	83.610	-68.138	1.00	64.88	A16S
ATOM	35420	N7	GUA	754	177.093	84.161	-56.228	1.00	38.35	A16S	ATOM	35473	C5'	GUA	757	182.200	84.191	-69.294	1.00	64.88	A16S
ATOM	35421	C8	GUA	754	176.990	82.932	-55.797	1.00	38.35	A16S	ATOM	35474	C4'	GUA	757	182.065	85.691	-69.165	1.00	64.88	A16S
ATOM	35422	C2'	GUA	754	176.435	79.903	-57.350	1.00	49.10	A16S	ATOM	35475	O4'	GUA	757	181.217	86.060	-68.048	1.00	64.88	A16S

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ATOM  35476  C1' GUA  757     181.521  87.390 -67.649  1.00 64.88      A16S
ATOM  35477  N9  GUA  757     181.949  87.409 -66.255  1.00 45.37      A16S
ATOM  35478  C4  GUA  757     182.101  88.530 -65.477  1.00 45.37      A16S
ATOM  35479  N3  GUA  757     181.847  89.799 -65.860  1.00 45.37      A16S
ATOM  35480  C2  GUA  757     182.108  90.661 -64.898  1.00 45.37      A16S
ATOM  35481  N2  GUA  757     181.908  91.960 -65.104  1.00 45.37      A16S
ATOM  35482  N1  GUA  757     182.583  90.306 -63.661  1.00 45.37      A16S
ATOM  35483  C6  GUA  757     182.844  89.002 -63.248  1.00 45.37      A16S
ATOM  35484  O6  GUA  757     183.263  88.782 -62.107  1.00 45.37      A16S
ATOM  35485  C5  GUA  757     182.571  88.075 -64.266  1.00 45.37      A16S
ATOM  35486  N7  GUA  757     182.700  86.696 -64.274  1.00 45.37      A16S
ATOM  35487  C8  GUA  757     182.314  86.343 -65.469  1.00 45.37      A16S
ATOM  35488  C2' GUA  757     182.684  87.862 -68.510  1.00 64.88      A16S
ATOM  35489  O2' GUA  757     182.156  88.606 -69.584  1.00 64.88      A16S
ATOM  35490  C3' GUA  757     183.299  86.541 -68.952  1.00 64.88      A16S
ATOM  35491  O3' GUA  757     184.047  86.738 -70.128  1.00 64.88      A16S
ATOM  35492  P   GUA  758     185.596  87.149 -70.013  1.00 46.23      A16S
ATOM  35493  O1P GUA  758     186.109  87.319 -71.412  1.00 45.81      A16S
ATOM  35494  O2P GUA  758     186.277  86.213 -69.074  1.00 45.81      A16S
ATOM  35495  O5' GUA  758     185.596  88.573 -69.304  1.00 46.23      A16S
ATOM  35496  C5' GUA  758     185.122  89.740 -69.975  1.00 46.23      A16S
ATOM  35497  C4' GUA  758     185.207  90.919 -69.047  1.00 46.23      A16S
ATOM  35498  O4' GUA  758     184.422  90.643 -67.857  1.00 46.23      A16S
ATOM  35499  C1' GUA  758     185.046  91.218 -66.720  1.00 46.23      A16S
ATOM  35500  N9  GUA  758     185.382  90.158 -65.768  1.00 45.81      A16S
ATOM  35501  C4  GUA  758     185.776  90.335 -64.463  1.00 45.81      A16S
ATOM  35502  N3  GUA  758     185.910  91.522 -63.830  1.00 45.81      A16S
ATOM  35503  C2  GUA  758     186.269  91.370 -62.563  1.00 45.81      A16S
ATOM  35504  N2  GUA  758     186.420  92.452 -61.777  1.00 45.81      A16S
ATOM  35505  N1  GUA  758     186.497  90.147 -61.974  1.00 45.81      A16S
ATOM  35506  C6  GUA  758     186.372  88.915 -62.608  1.00 45.81      A16S
ATOM  35507  O6  GUA  758     186.598  87.873 -61.980  1.00 45.81      A16S
ATOM  35508  C5  GUA  758     185.975  89.064 -63.962  1.00 45.81      A16S
ATOM  35509  N7  GUA  758     185.718  88.107 -64.933  1.00 45.81      A16S
ATOM  35510  C8  GUA  758     185.372  88.800 -65.985  1.00 45.81      A16S
ATOM  35511  C2' GUA  758     186.272  91.971 -67.217  1.00 46.23      A16S
ATOM  35512  O2' GUA  758     185.876  93.299 -67.479  1.00 46.23      A16S
ATOM  35513  C3' GUA  758     186.589  91.209 -68.496  1.00 46.23      A16S
ATOM  35514  O3' GUA  758     187.385  91.941 -69.406  1.00 46.23      A16S
ATOM  35515  P   GUA  759     188.981  91.753 -69.381  1.00 48.13      A16S
ATOM  35516  O1P GUA  759     189.284  90.298 -69.304  1.00 42.48      A16S
ATOM  35517  O2P GUA  759     189.581  92.594 -70.451  1.00 42.48      A16S
ATOM  35518  O5' GUA  759     189.424  92.412 -68.010  1.00 48.13      A16S
ATOM  35519  C5' GUA  759     189.115  93.780 -67.737  1.00 48.13      A16S
ATOM  35520  C4' GUA  759     189.443  94.095 -66.311  1.00 48.13      A16S
ATOM  35521  O4' GUA  759     188.634  93.286 -65.428  1.00 48.13      A16S
ATOM  35522  C1' GUA  759     189.368  92.979 -64.261  1.00 48.13      A16S
ATOM  35523  N9  GUA  759     189.455  91.536 -64.157  1.00 42.48      A16S
ATOM  35524  C4  GUA  759     189.693  90.811 -63.022  1.00 42.48      A16S
ATOM  35525  N3  GUA  759     189.877  91.310 -61.783  1.00 42.48      A16S
ATOM  35526  C2  GUA  759     190.094  90.347 -60.897  1.00 42.48      A16S
ATOM  35527  N2  GUA  759     190.302  90.649 -59.613  1.00 42.48      A16S
ATOM  35528  N1  GUA  759     190.126  89.012 -61.206  1.00 42.48      A16S
ATOM  35529  C6  GUA  759     189.944  88.483 -62.478  1.00 42.48      A16S
ATOM  35530  O6  GUA  759     190.007  87.263 -62.657  1.00 42.48      A16S
ATOM  35531  C5  GUA  759     189.705  89.494 -63.429  1.00 42.48      A16S
ATOM  35532  N7  GUA  759     189.467  89.398 -64.790  1.00 42.48      A16S
ATOM  35533  C8  GUA  759     189.325  90.634 -65.179  1.00 42.48      A16S
ATOM  35534  C2' GUA  759     190.742  93.626 -64.389  1.00 48.13      A16S
ATOM  35535  O2' GUA  759     190.705  94.851 -63.684  1.00 48.13      A16S
ATOM  35536  C3' GUA  759     190.864  93.777 -65.902  1.00 48.13      A16S
ATOM  35537  O3' GUA  759     191.709  94.836 -66.310  1.00 48.13      A16S
ATOM  35538  P   ADE  760     193.229  94.542 -66.746  1.00 47.28      A16S
ATOM  35539  O1P ADE  760     193.655  93.227 -66.196  1.00 45.07      A16S
ATOM  35540  O2P ADE  760     193.358  94.799 -68.206  1.00 45.07      A16S
ATOM  35541  O5' ADE  760     193.982  95.701 -65.953  1.00 47.28      A16S
ATOM  35542  C5' ADE  760     194.719  96.693 -66.652  1.00 47.28      A16S
ATOM  35543  C4' ADE  760     194.424  98.070 -66.117  1.00 47.28      A16S
ATOM  35544  O4' ADE  760     193.021  98.391 -66.269  1.00 47.28      A16S
ATOM  35545  C1' ADE  760     192.685  99.422 -65.358  1.00 47.28      A16S
ATOM  35546  N9  ADE  760     191.633  98.959 -64.452  1.00 45.07      A16S
ATOM  35547  C4  ADE  760     190.952  99.774 -63.575  1.00 45.07      A16S
ATOM  35548  N3  ADE  760     191.091 101.105 -63.424  1.00 45.07      A16S
ATOM  35549  C2  ADE  760     190.300 101.549 -62.453  1.00 45.07      A16S
ATOM  35550  N1  ADE  760     189.452 100.868 -61.672  1.00 45.07      A16S
ATOM  35551  C6  ADE  760     189.339  99.536 -61.850  1.00 45.07      A16S
ATOM  35552  N6  ADE  760     188.506  98.861 -61.066  1.00 45.07      A16S
ATOM  35553  C5  ADE  760     190.118  98.940 -62.854  1.00 45.07      A16S
ATOM  35554  N7  ADE  760     190.242  97.624 -63.289  1.00 45.07      A16S
ATOM  35555  C8  ADE  760     191.145  97.690 -64.240  1.00 45.07      A16S
ATOM  35556  C2' ADE  760     193.939  99.723 -64.545  1.00 47.28      A16S
ATOM  35557  O2' ADE  760     194.621 100.767 -65.199  1.00 47.28      A16S
ATOM  35558  C3' ADE  760     194.707  98.417 -64.666  1.00 47.28      A16S
ATOM  35559  O3' ADE  760     196.086  98.648 -64.418  1.00 47.28      A16S
ATOM  35560  P   GUA  761     196.676  98.488 -62.923  1.00 49.93      A16S
ATOM  35561  O1P GUA  761     198.102  98.898 -63.020  1.00 37.14      A16S
ATOM  35562  O2P GUA  761     196.327  97.162 -62.340  1.00 37.14      A16S
ATOM  35563  O5' GUA  761     195.901  99.577 -62.060  1.00 49.93      A16S
ATOM  35564  C5' GUA  761     196.274 100.969 -62.069  1.00 49.93      A16S
ATOM  35565  C4' GUA  761     195.413 101.727 -61.083  1.00 49.93      A16S
ATOM  35566  O4' GUA  761     194.020 101.563 -61.471  1.00 49.93      A16S
ATOM  35567  C1' GUA  761     193.221 101.359 -60.324  1.00 49.93      A16S
ATOM  35568  N9  GUA  761     192.760  99.975 -60.335  1.00 37.14      A16S
ATOM  35569  C4  GUA  761     191.711  99.469 -59.624  1.00 37.14      A16S
ATOM  35570  N3  GUA  761     190.903 100.171 -58.811  1.00 37.14      A16S
ATOM  35571  C2  GUA  761     189.988  99.408 -58.253  1.00 37.14      A16S
ATOM  35572  N2  GUA  761     189.114  99.941 -57.405  1.00 37.14      A16S
ATOM  35573  N1  GUA  761     189.858  98.062 -58.483  1.00 37.14      A16S
ATOM  35574  C6  GUA  761     190.659  97.319 -59.332  1.00 37.14      A16S
ATOM  35575  O6  GUA  761     190.424  96.114 -59.498  1.00 37.14      A16S
ATOM  35576  C5  GUA  761     191.674  98.127 -59.926  1.00 37.14      A16S
ATOM  35577  N7  GUA  761     192.680  97.799 -60.820  1.00 37.14      A16S
ATOM  35578  C8  GUA  761     193.293  98.926 -61.037  1.00 37.14      A16S
ATOM  35579  C2' GUA  761     194.107 101.614 -59.111  1.00 49.93      A16S
ATOM  35580  O2' GUA  761     194.053 102.989 -58.778  1.00 49.93      A16S
ATOM  35581  C3' GUA  761     195.467 101.213 -59.652  1.00 49.93      A16S
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ATOM  35582  O3' GUA  761     196.521 101.790 -58.906  1.00 49.93      A16S
ATOM  35583  P   CYT  762     197.021 101.074 -57.557  1.00 37.42      A16S
ATOM  35584  O1P CYT  762     197.979 102.020 -56.934  1.00 45.75      A16S
ATOM  35585  O2P CYT  762     197.449  99.675 -57.830  1.00 45.75      A16S
ATOM  35586  O5' CYT  762     195.694 100.931 -56.678  1.00 37.42      A16S
ATOM  35587  C5' CYT  762     195.043 102.066 -56.030  1.00 37.42      A16S
ATOM  35588  C4' CYT  762     193.902 101.580 -55.158  1.00 37.42      A16S
ATOM  35589  O4' CYT  762     192.946 100.883 -55.993  1.00 37.42      A16S
ATOM  35590  C1' CYT  762     192.397  99.796 -55.274  1.00 37.42      A16S
ATOM  35591  N1  CYT  762     192.599  98.565 -56.043  1.00 45.75      A16S
ATOM  35592  C6  CYT  762     193.678  98.404 -56.864  1.00 45.75      A16S
ATOM  35593  C2  CYT  762     191.664  97.545 -55.908  1.00 45.75      A16S
ATOM  35594  O2  CYT  762     190.688  97.723 -55.170  1.00 45.75      A16S
ATOM  35595  N3  CYT  762     191.839  96.392 -56.581  1.00 45.75      A16S
ATOM  35596  C4  CYT  762     192.893  96.241 -57.369  1.00 45.75      A16S
ATOM  35597  N4  CYT  762     193.018  95.089 -58.000  1.00 45.75      A16S
ATOM  35598  C5  CYT  762     193.862  97.267 -57.538  1.00 45.75      A16S
ATOM  35599  C2' CYT  762     193.042  99.731 -53.887  1.00 37.42      A16S
ATOM  35600  O2' CYT  762     192.165 100.204 -52.885  1.00 37.42      A16S
ATOM  35601  C3' CYT  762     194.296 100.572 -54.081  1.00 37.42      A16S
ATOM  35602  O3' CYT  762     194.640 101.236 -52.874  1.00 37.42      A16S
ATOM  35603  P   ADE  763     195.661 100.550 -51.850  1.00 34.71      A16S
ATOM  35604  O1P ADE  763     195.757 101.446 -50.672  1.00 54.30      A16S
ATOM  35605  O2P ADE  763     196.890 100.223 -52.620  1.00 54.30      A16S
ATOM  35606  O5' ADE  763     194.957  99.179 -51.431  1.00 34.71      A16S
ATOM  35607  C5' ADE  763     193.968  99.129 -50.392  1.00 34.71      A16S
ATOM  35608  C4' ADE  763     193.265  97.794 -50.398  1.00 34.71      A16S
ATOM  35609  O4' ADE  763     192.939  97.481 -51.772  1.00 34.71      A16S
ATOM  35610  C1' ADE  763     192.981  96.075 -51.969  1.00 34.71      A16S
ATOM  35611  N9  ADE  763     193.874  95.766 -53.089  1.00 54.30      A16S
ATOM  35612  C4  ADE  763     193.771  94.687 -53.933  1.00 54.30      A16S
ATOM  35613  N3  ADE  763     192.832  93.727 -53.925  1.00 54.30      A16S
ATOM  35614  C2  ADE  763     193.071  92.829 -54.877  1.00 54.30      A16S
ATOM  35615  N1  ADE  763     194.067  92.780 -55.763  1.00 54.30      A16S
ATOM  35616  C6  ADE  763     194.992  93.760 -55.743  1.00 54.30      A16S
ATOM  35617  N6  ADE  763     195.993  93.715 -56.619  1.00 54.30      A16S
ATOM  35618  C5  ADE  763     194.847  94.777 -54.791  1.00 54.30      A16S
ATOM  35619  N7  ADE  763     195.603  95.906 -54.514  1.00 54.30      A16S
ATOM  35620  C8  ADE  763     194.983  96.458 -53.504  1.00 54.30      A16S
ATOM  35621  C2' ADE  763     193.395  95.427 -50.648  1.00 34.71      A16S
ATOM  35622  O2' ADE  763     192.245  94.959 -49.994  1.00 34.71      A16S
ATOM  35623  C3' ADE  763     194.045  96.585 -49.905  1.00 34.71      A16S
ATOM  35624  O3' ADE  763     193.877  96.389 -48.505  1.00 34.71      A16S
ATOM  35625  P   ADE  764     195.072  95.742 -47.631  1.00 37.88      A16S
ATOM  35626  O1P ADE  764     195.271  96.601 -46.426  1.00 51.41      A16S
ATOM  35627  O2P ADE  764     196.226  95.457 -48.525  1.00 51.41      A16S
ATOM  35628  O5' ADE  764     194.518  94.355 -47.078  1.00 37.88      A16S
ATOM  35629  C5' ADE  764     193.345  93.772 -47.602  1.00 37.88      A16S
ATOM  35630  C4' ADE  764     192.481  93.251 -46.483  1.00 37.88      A16S
ATOM  35631  O4' ADE  764     191.243  92.790 -47.076  1.00 37.88      A16S
ATOM  35632  C1' ADE  764     190.888  91.540 -46.531  1.00 37.88      A16S
ATOM  35633  N9  ADE  764     191.035  90.544 -47.592  1.00 51.41      A16S
ATOM  35634  C4  ADE  764     190.473  89.298 -47.617  1.00 51.41      A16S
ATOM  35635  N3  ADE  764     189.666  88.755 -46.694  1.00 51.41      A16S
ATOM  35636  C2  ADE  764     189.323  87.526 -47.049  1.00 51.41      A16S
ATOM  35637  N1  ADE  764     189.670  86.831 -48.136  1.00 51.41      A16S
ATOM  35638  C6  ADE  764     190.484  87.410 -49.039  1.00 51.41      A16S
ATOM  35639  N6  ADE  764     190.837  86.716 -50.122  1.00 51.41      A16S
ATOM  35640  C5  ADE  764     190.914  88.711 -48.783  1.00 51.41      A16S
ATOM  35641  N7  ADE  764     191.731  89.578 -49.491  1.00 51.41      A16S
ATOM  35642  C8  ADE  764     191.767  90.648 -48.748  1.00 51.41      A16S
ATOM  35643  C2' ADE  764     191.785  91.297 -45.316  1.00 37.88      A16S
ATOM  35644  O2' ADE  764     191.106  91.854 -44.221  1.00 37.88      A16S
ATOM  35645  C3' ADE  764     193.044  92.072 -45.694  1.00 37.88      A16S
ATOM  35646  O3' ADE  764     193.756  92.557 -44.548  1.00 37.88      A16S
ATOM  35647  P   ADE  765     194.793  91.600 -43.749  1.00 33.54      A16S
ATOM  35648  O1P ADE  765     194.383  91.535 -42.327  1.00 37.11      A16S
ATOM  35649  O2P ADE  765     196.177  92.076 -44.077  1.00 37.11      A16S
ATOM  35650  O5' ADE  765     194.557  90.150 -44.362  1.00 33.54      A16S
ATOM  35651  C5' ADE  765     193.745  89.194 -43.697  1.00 33.54      A16S
ATOM  35652  C4' ADE  765     193.763  87.889 -44.452  1.00 33.54      A16S
ATOM  35653  O4' ADE  765     193.283  88.095 -45.806  1.00 33.54      A16S
ATOM  35654  C1' ADE  765     193.952  87.224 -46.694  1.00 33.54      A16S
ATOM  35655  N9  ADE  765     194.708  88.037 -47.644  1.00 37.11      A16S
ATOM  35656  C4  ADE  765     195.225  87.624 -48.855  1.00 37.11      A16S
ATOM  35657  N3  ADE  765     195.126  86.405 -49.418  1.00 37.11      A16S
ATOM  35658  C2  ADE  765     195.733  86.385 -50.599  1.00 37.11      A16S
ATOM  35659  N1  ADE  765     196.389  87.361 -51.236  1.00 37.11      A16S
ATOM  35660  C6  ADE  765     196.486  88.569 -50.643  1.00 37.11      A16S
ATOM  35661  N6  ADE  765     197.165  89.537 -51.270  1.00 37.11      A16S
ATOM  35662  C5  ADE  765     195.867  88.730 -49.387  1.00 37.11      A16S
ATOM  35663  N7  ADE  765     195.755  89.820 -48.532  1.00 37.11      A16S
ATOM  35664  C8  ADE  765     195.061  89.357 -47.518  1.00 37.11      A16S
ATOM  35665  C2' ADE  765     194.885  86.360 -45.855  1.00 33.54      A16S
ATOM  35666  O2' ADE  765     194.239  85.163 -45.478  1.00 33.54      A16S
ATOM  35667  C3' ADE  765     195.122  87.252 -44.653  1.00 33.54      A16S
ATOM  35668  O3' ADE  765     195.568  86.511 -43.532  1.00 33.54      A16S
ATOM  35669  P   CYT  766     197.097  86.662 -43.063  1.00 47.39      A16S
ATOM  35670  O1P CYT  766     197.341  85.661 -41.982  1.00 34.22      A16S
ATOM  35671  O2P CYT  766     197.348  88.115 -42.812  1.00 34.22      A16S
ATOM  35672  O5' CYT  766     197.942  86.257 -44.349  1.00 47.39      A16S
ATOM  35673  C5' CYT  766     197.866  84.933 -44.874  1.00 47.39      A16S
ATOM  35674  C4' CYT  766     198.411  84.904 -46.271  1.00 47.39      A16S
ATOM  35675  O4' CYT  766     197.694  85.872 -47.079  1.00 47.39      A16S
ATOM  35676  C1' CYT  766     198.572  86.445 -48.031  1.00 47.39      A16S
ATOM  35677  N1  CYT  766     198.649  87.891 -47.780  1.00 34.22      A16S
ATOM  35678  C6  CYT  766     198.210  88.437 -46.601  1.00 34.22      A16S
ATOM  35679  C2  CYT  766     199.187  88.707 -48.777  1.00 34.22      A16S
ATOM  35680  O2  CYT  766     199.582  88.180 -49.824  1.00 34.22      A16S
ATOM  35681  N3  CYT  766     199.264  90.048 -48.573  1.00 34.22      A16S
ATOM  35682  C4  CYT  766     198.821  90.572 -47.429  1.00 34.22      A16S
ATOM  35683  N4  CYT  766     198.886  91.894 -47.285  1.00 34.22      A16S
ATOM  35684  C5  CYT  766     198.280  89.759 -46.384  1.00 34.22      A16S
ATOM  35685  C2' CYT  766     199.932  85.768 -47.868  1.00 47.39      A16S
ATOM  35686  O2' CYT  766     200.042  84.692 -48.784  1.00 47.39      A16S
ATOM  35687  C3' CYT  766     199.860  85.318 -46.416  1.00 47.39      A16S
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ATOM	35688	O3'	CYT	766	200.750	84.269	-46.102	1.00	47.39	A16S	ATOM	35741	C4	GUA	769	208.904	96.310	-44.877	1.00	40.35	A16S
ATOM	35689	P	CYT	767	202.164	84.625	-45.443	1.00	50.38	A16S	ATOM	35742	N3	GUA	769	209.063	97.638	-45.034	1.00	40.35	A16S
ATOM	35690	O1P	CYT	767	202.823	83.338	-45.126	1.00	39.54	A16S	ATOM	35743	C2	GUA	769	208.177	98.322	-44.359	1.00	40.35	A16S
ATOM	35691	O2P	CYT	767	201.980	85.644	-44.375	1.00	39.54	A16S	ATOM	35744	N2	GUA	769	208.222	99.664	-44.406	1.00	40.35	A16S
ATOM	35692	O5'	CYT	767	202.950	85.299	-46.642	1.00	50.38	A16S	ATOM	35745	N1	GUA	769	207.189	97.747	-43.594	1.00	40.35	A16S
ATOM	35693	C5'	CYT	767	203.233	84.538	-47.810	1.00	50.38	A16S	ATOM	35746	C6	GUA	769	207.001	96.377	-43.427	1.00	40.35	A16S
ATOM	35694	C4'	CYT	767	204.144	85.304	-48.701	1.00	50.38	A16S	ATOM	35747	O6	GUA	769	206.055	95.956	-42.741	1.00	40.35	A16S
ATOM	35695	O4'	CYT	767	203.429	86.411	-49.291	1.00	50.38	A16S	ATOM	35748	C5	GUA	769	207.973	95.633	-44.130	1.00	40.35	A16S
ATOM	35696	C1'	CYT	767	204.297	87.515	-49.426	1.00	50.38	A16S	ATOM	35749	N7	GUA	769	208.165	94.262	-44.226	1.00	40.35	A16S
ATOM	35697	N1	CYT	767	203.714	88.684	-48.736	1.00	39.54	A16S	ATOM	35750	C8	GUA	769	209.183	94.139	-45.029	1.00	40.35	A16S
ATOM	35698	C6	CYT	767	202.940	88.544	-47.614	1.00	39.54	A16S	ATOM	35751	C2'	GUA	769	211.992	96.075	-45.567	1.00	42.80	A16S
ATOM	35699	C2	CYT	767	203.977	89.968	-49.258	1.00	39.54	A16S	ATOM	35752	O2'	GUA	769	212.764	96.961	-46.348	1.00	42.80	A16S
ATOM	35700	O2	CYT	767	204.671	90.072	-50.273	1.00	39.54	A16S	ATOM	35753	C3'	GUA	769	212.703	94.763	-45.300	1.00	42.80	A16S
ATOM	35701	N3	CYT	767	203.469	91.059	-48.640	1.00	39.54	A16S	ATOM	35754	O3'	GUA	769	214.057	94.978	-44.983	1.00	42.80	A16S
ATOM	35702	C4	CYT	767	202.732	90.916	-47.539	1.00	39.54	A16S	ATOM	35755	P	ADE	770	214.528	94.865	-43.451	1.00	54.14	A16S
ATOM	35703	N4	CYT	767	202.293	92.025	-46.948	1.00	39.54	A16S	ATOM	35756	O1P	ADE	770	216.016	94.962	-43.449	1.00	45.36	A16S
ATOM	35704	C5	CYT	767	202.428	89.623	-46.991	1.00	39.54	A16S	ATOM	35757	O2P	ADE	770	213.872	93.657	-42.879	1.00	45.36	A16S
ATOM	35705	C2'	CYT	767	205.667	87.100	-48.889	1.00	50.38	A16S	ATOM	35758	O5'	ADE	770	213.917	96.157	-42.733	1.00	54.14	A16S
ATOM	35706	O2'	CYT	767	206.480	86.690	-49.970	1.00	50.38	A16S	ATOM	35759	C5'	ADE	770	214.415	97.469	-43.040	1.00	54.14	A16S
ATOM	35707	C3'	CYT	767	205.303	85.940	-47.972	1.00	50.38	A16S	ATOM	35760	C4'	ADE	770	213.442	98.543	-42.590	1.00	54.14	A16S
ATOM	35708	O3'	CYT	767	206.349	84.998	-47.782	1.00	50.38	A16S	ATOM	35761	O4'	ADE	770	212.096	98.179	-42.996	1.00	54.14	A16S
ATOM	35709	P	GUA	768	207.604	85.374	-46.844	1.00	49.63	A16S	ATOM	35762	C1'	ADE	770	211.158	98.733	-42.093	1.00	54.14	A16S
ATOM	35710	O1P	GUA	768	208.583	84.290	-47.124	1.00	39.62	A16S	ATOM	35763	N9	ADE	770	210.368	97.652	-41.497	1.00	45.36	A16S
ATOM	35711	O2P	GUA	768	207.191	85.653	-45.429	1.00	39.62	A16S	ATOM	35764	C4	ADE	770	209.200	97.810	-40.785	1.00	45.36	A16S
ATOM	35712	O5'	GUA	768	208.145	86.725	-47.488	1.00	49.63	A16S	ATOM	35765	N3	ADE	770	208.569	98.962	-40.485	1.00	45.36	A16S
ATOM	35713	C5'	GUA	768	208.762	87.737	-46.688	1.00	49.63	A16S	ATOM	35766	C2	ADE	770	207.449	98.721	-39.805	1.00	45.36	A16S
ATOM	35714	C4'	GUA	768	209.226	88.869	-47.567	1.00	49.63	A16S	ATOM	35767	N1	ADE	770	206.926	97.552	-39.424	1.00	45.36	A16S
ATOM	35715	O4'	GUA	768	208.087	89.438	-48.261	1.00	49.63	A16S	ATOM	35768	C6	ADE	770	207.581	96.417	-39.747	1.00	45.36	A16S
ATOM	35716	C1'	GUA	768	208.234	90.848	-48.351	1.00	49.63	A16S	ATOM	35769	N6	ADE	770	207.046	95.250	-39.399	1.00	45.36	A16S
ATOM	35717	N9	GUA	768	207.179	91.468	-47.552	1.00	39.62	A16S	ATOM	35770	C5	ADE	770	208.788	96.533	-40.452	1.00	45.36	A16S
ATOM	35718	C4	GUA	768	206.939	92.812	-47.432	1.00	39.62	A16S	ATOM	35771	N7	ADE	770	209.690	95.587	-40.920	1.00	45.36	A16S
ATOM	35719	N3	GUA	768	207.603	93.795	-48.075	1.00	39.62	A16S	ATOM	35772	C8	ADE	770	210.606	96.298	-41.530	1.00	45.36	A16S
ATOM	35720	C2	GUA	768	207.171	94.991	-47.722	1.00	39.62	A16S	ATOM	35773	C2'	ADE	770	211.941	99.530	-41.059	1.00	54.14	A16S
ATOM	35721	N2	GUA	768	207.717	96.076	-48.257	1.00	39.62	A16S	ATOM	35774	O2'	ADE	770	212.006	100.857	-41.536	1.00	54.14	A16S
ATOM	35722	N1	GUA	768	206.172	95.205	-46.814	1.00	39.62	A16S	ATOM	35775	C3'	ADE	770	213.300	98.843	-41.104	1.00	54.14	A16S
ATOM	35723	C6	GUA	768	205.478	94.205	-46.142	1.00	39.62	A16S	ATOM	35776	O3'	ADE	770	214.319	99.723	-40.635	1.00	54.14	A16S
ATOM	35724	O6	GUA	768	204.598	94.504	-45.328	1.00	39.62	A16S	ATOM	35777	P	URI	771	214.763	99.680	-39.088	1.00	48.56	A16S
ATOM	35725	C5	GUA	768	205.925	92.920	-46.514	1.00	39.62	A16S	ATOM	35778	O1P	URI	771	215.789	100.724	-38.889	1.00	35.99	A16S
ATOM	35726	N7	GUA	768	205.510	91.671	-46.089	1.00	39.62	A16S	ATOM	35779	O2P	URI	771	215.057	98.278	-38.706	1.00	35.99	A16S
ATOM	35727	C8	GUA	768	206.273	90.839	-46.737	1.00	39.62	A16S	ATOM	35780	O5'	URI	771	213.457	100.131	-38.295	1.00	48.56	A16S
ATOM	35728	C2'	GUA	768	209.603	91.201	-47.766	1.00	49.63	A16S	ATOM	35781	C5'	URI	771	213.015	101.513	-38.262	1.00	48.56	A16S
ATOM	35729	O2'	GUA	768	210.561	91.300	-48.792	1.00	49.63	A16S	ATOM	35782	C4'	URI	771	211.812	101.646	-37.351	1.00	48.56	A16S
ATOM	35730	C3'	GUA	768	209.834	90.034	-46.822	1.00	49.63	A16S	ATOM	35783	O4'	URI	771	210.709	100.877	-37.901	1.00	48.56	A16S
ATOM	35731	O3'	GUA	768	211.191	89.816	-46.541	1.00	49.63	A16S	ATOM	35784	C1'	URI	771	209.974	100.270	-36.850	1.00	48.56	A16S
ATOM	35732	P	GUA	769	211.815	90.438	-45.208	1.00	42.80	A16S	ATOM	35785	N1	URI	771	210.012	98.810	-37.012	1.00	35.99	A16S
ATOM	35733	O1P	GUA	769	213.234	90.011	-45.139	1.00	40.35	A16S	ATOM	35786	C6	URI	771	211.042	98.183	-37.660	1.00	35.99	A16S
ATOM	35734	O2P	GUA	769	210.901	90.121	-44.074	1.00	40.35	A16S	ATOM	35787	C2	URI	771	208.967	98.086	-36.469	1.00	35.99	A16S
ATOM	35735	O5'	GUA	769	211.786	91.999	-45.510	1.00	42.80	A16S	ATOM	35788	O2	URI	771	208.047	98.613	-35.869	1.00	35.99	A16S
ATOM	35736	C5'	GUA	769	212.585	92.526	-46.561	1.00	42.80	A16S	ATOM	35789	N3	URI	771	209.046	96.726	-36.642	1.00	35.99	A16S
ATOM	35737	C4'	GUA	769	212.486	94.018	-46.601	1.00	42.80	A16S	ATOM	35790	C4	URI	771	210.054	96.036	-37.282	1.00	35.99	A16S
ATOM	35738	O4'	GUA	769	211.143	94.382	-46.989	1.00	42.80	A16S	ATOM	35791	O4	URI	771	210.009	94.803	-37.339	1.00	35.99	A16S
ATOM	35739	C1'	GUA	769	210.785	95.599	-46.368	1.00	42.80	A16S	ATOM	35792	C5	URI	771	211.100	96.861	-37.806	1.00	35.99	A16S
ATOM	35740	N9	GUA	769	209.670	95.346	-45.465	1.00	40.35	A16S	ATOM	35793	C2'	URI	771	210.597	100.690	-35.521	1.00	48.56	A16S

ATOM	35794	O2'	URI	771	209.844	101.737	-34.951	1.00	48.56	A16S
ATOM	35795	C3'	URI	771	212.007	101.081	-35.948	1.00	48.56	A16S
ATOM	35796	O3'	URI	771	212.587	102.025	-35.055	1.00	48.56	A16S
ATOM	35797	P	URI	772	213.557	101.511	-33.882	1.00	54.42	A16S
ATOM	35798	O1P	URI	772	213.935	102.695	-33.063	1.00	50.47	A16S
ATOM	35799	O2P	URI	772	214.619	100.673	-34.513	1.00	50.47	A16S
ATOM	35800	O5'	URI	772	212.625	100.566	-33.003	1.00	54.42	A16S
ATOM	35801	C5'	URI	772	211.512	101.112	-32.296	1.00	54.42	A16S
ATOM	35802	C4'	URI	772	210.740	100.024	-31.608	1.00	54.42	A16S
ATOM	35803	O4'	URI	772	210.048	99.207	-32.581	1.00	54.42	A16S
ATOM	35804	C1'	URI	772	209.926	97.887	-32.087	1.00	54.42	A16S
ATOM	35805	N1	URI	772	210.530	96.950	-33.054	1.00	50.47	A16S
ATOM	35806	C6	URI	772	211.610	97.307	-33.824	1.00	50.47	A16S
ATOM	35807	C2	URI	772	209.995	95.675	-33.145	1.00	50.47	A16S
ATOM	35808	O2	URI	772	208.994	95.325	-32.556	1.00	50.47	A16S
ATOM	35809	N3	URI	772	210.667	94.825	-33.972	1.00	50.47	A16S
ATOM	35810	C4	URI	772	211.760	95.110	-34.734	1.00	50.47	A16S
ATOM	35811	O4	URI	772	212.256	94.222	-35.422	1.00	50.47	A16S
ATOM	35812	C5	URI	772	212.220	96.455	-34.641	1.00	50.47	A16S
ATOM	35813	C2'	URI	772	210.590	97.848	-30.705	1.00	54.42	A16S
ATOM	35814	O2'	URI	772	209.579	98.008	-29.730	1.00	54.42	A16S
ATOM	35815	C3'	URI	772	211.538	99.044	-30.772	1.00	54.42	A16S
ATOM	35816	O3'	URI	772	211.820	99.613	-29.490	1.00	54.42	A16S
ATOM	35817	P	ADE	773	213.187	99.240	-28.714	1.00	55.65	A16S
ATOM	35818	O1P	ADE	773	213.133	99.928	-27.394	1.00	73.81	A16S
ATOM	35819	O2P	ADE	773	214.340	99.498	-29.624	1.00	73.81	A16S
ATOM	35820	O5'	ADE	773	213.037	97.675	-28.465	1.00	55.65	A16S
ATOM	35821	C5'	ADE	773	214.149	96.876	-28.038	1.00	55.65	A16S
ATOM	35822	C4'	ADE	773	213.648	95.574	-27.471	1.00	55.65	A16S
ATOM	35823	O4'	ADE	773	212.862	95.867	-26.292	1.00	55.65	A16S
ATOM	35824	C1'	ADE	773	211.729	95.024	-26.243	1.00	55.65	A16S
ATOM	35825	N9	ADE	773	210.537	95.879	-26.217	1.00	73.81	A16S
ATOM	35826	C4	ADE	773	209.376	95.633	-25.525	1.00	73.81	A16S
ATOM	35827	N3	ADE	773	209.100	94.572	-24.750	1.00	73.81	A16S
ATOM	35828	C2	ADE	773	207.874	94.672	-24.242	1.00	73.81	A16S
ATOM	35829	N1	ADE	773	206.959	95.639	-24.406	1.00	73.81	A16S
ATOM	35830	C6	ADE	773	207.267	96.694	-25.189	1.00	73.81	A16S
ATOM	35831	N6	ADE	773	206.356	97.658	-25.348	1.00	73.81	A16S
ATOM	35832	C5	ADE	773	208.541	96.708	-25.792	1.00	73.81	A16S
ATOM	35833	N7	ADE	773	209.165	97.617	-26.636	1.00	73.81	A16S
ATOM	35834	C8	ADE	773	210.341	97.081	-26.858	1.00	73.81	A16S
ATOM	35835	C2'	ADE	773	211.813	94.053	-27.426	1.00	55.65	A16S
ATOM	35836	O2'	ADE	773	212.385	92.828	-27.014	1.00	55.65	A16S
ATOM	35837	C3'	ADE	773	212.711	94.814	-28.395	1.00	55.65	A16S
ATOM	35838	O3'	ADE	773	213.446	93.953	-29.261	1.00	55.65	A16S
ATOM	35839	P	GUA	774	213.059	93.871	-30.819	1.00	60.21	A16S
ATOM	35840	O1P	GUA	774	214.099	93.036	-31.478	1.00	55.78	A16S
ATOM	35841	O2P	GUA	774	212.777	95.235	-31.331	1.00	55.78	A16S
ATOM	35842	O5'	GUA	774	211.701	93.049	-30.820	1.00	60.21	A16S
ATOM	35843	C5'	GUA	774	211.695	91.656	-30.473	1.00	60.21	A16S
ATOM	35844	C4'	GUA	774	210.282	91.171	-30.314	1.00	60.21	A16S
ATOM	35845	O4'	GUA	774	209.688	91.808	-29.160	1.00	60.21	A16S
ATOM	35846	C1'	GUA	774	208.323	92.081	-29.416	1.00	60.21	A16S
ATOM	35847	N9	GUA	774	208.111	93.516	-29.265	1.00	55.78	A16S
ATOM	35848	C4	GUA	774	206.966	94.127	-28.813	1.00	55.78	A16S
ATOM	35849	N3	GUA	774	205.834	93.501	-28.423	1.00	55.78	A16S
ATOM	35850	C2	GUA	774	204.901	94.358	-28.044	1.00	55.78	A16S
ATOM	35851	N2	GUA	774	203.715	93.894	-27.617	1.00	55.78	A16S
ATOM	35852	N1	GUA	774	205.066	95.725	-28.054	1.00	55.78	A16S
ATOM	35853	C6	GUA	774	206.224	96.388	-28.457	1.00	55.78	A16S
ATOM	35854	O6	GUA	774	206.271	97.625	-28.442	1.00	55.78	A16S
ATOM	35855	C5	GUA	774	207.233	95.479	-28.854	1.00	55.78	A16S
ATOM	35856	N7	GUA	774	208.522	95.714	-29.309	1.00	55.78	A16S
ATOM	35857	C8	GUA	774	209.004	94.524	-29.541	1.00	55.78	A16S
ATOM	35858	C2'	GUA	774	207.989	91.543	-30.808	1.00	60.21	A16S
ATOM	35859	O2'	GUA	774	207.442	90.251	-30.678	1.00	60.21	A16S
ATOM	35860	C3'	GUA	774	209.361	91.514	-31.469	1.00	60.21	A16S
ATOM	35861	O3'	GUA	774	209.466	90.528	-32.484	1.00	60.21	A16S
ATOM	35862	P	ADE	775	209.343	90.956	-34.026	1.00	63.17	A16S
ATOM	35863	O1P	ADE	775	209.985	89.909	-34.845	1.00	64.94	A16S
ATOM	35864	O2P	ADE	775	209.765	92.370	-34.180	1.00	64.94	A16S
ATOM	35865	O5'	ADE	775	207.791	90.841	-34.321	1.00	63.17	A16S
ATOM	35866	C5'	ADE	775	206.851	91.631	-33.595	1.00	63.17	A16S
ATOM	35867	C4'	ADE	775	205.805	92.142	-34.531	1.00	63.17	A16S
ATOM	35868	O4'	ADE	775	204.921	93.021	-33.791	1.00	63.17	A16S
ATOM	35869	C1'	ADE	775	204.996	94.333	-34.304	1.00	63.17	A16S
ATOM	35870	N9	ADE	775	204.973	95.249	-33.156	1.00	64.94	A16S
ATOM	35871	C4	ADE	775	203.831	95.741	-32.569	1.00	64.94	A16S
ATOM	35872	N3	ADE	775	202.560	95.475	-32.913	1.00	64.94	A16S
ATOM	35873	C2	ADE	775	201.718	96.147	-32.146	1.00	64.94	A16S
ATOM	35874	N1	ADE	775	201.977	96.996	-31.148	1.00	64.94	A16S
ATOM	35875	C6	ADE	775	203.264	97.246	-30.825	1.00	64.94	A16S
ATOM	35876	N6	ADE	775	203.523	98.106	-29.835	1.00	64.94	A16S
ATOM	35877	C5	ADE	775	204.259	96.587	-31.560	1.00	64.94	A16S
ATOM	35878	N7	ADE	775	205.646	96.614	-31.491	1.00	64.94	A16S
ATOM	35879	C8	ADE	775	206.023	95.802	-32.451	1.00	64.94	A16S
ATOM	35880	C2'	ADE	775	206.260	94.396	-35.158	1.00	63.17	A16S
ATOM	35881	O2'	ADE	775	206.310	95.424	-36.111	1.00	63.17	A16S
ATOM	35882	C3'	ADE	775	206.395	92.963	-35.658	1.00	63.17	A16S
ATOM	35883	O3'	ADE	775	206.006	92.481	-36.972	1.00	63.17	A16S
ATOM	35884	P	URI	776	204.627	92.926	-37.698	1.00	75.90	A16S
ATOM	35885	O1P	URI	776	204.542	92.050	-38.894	1.00	63.32	A16S
ATOM	35886	O2P	URI	776	204.556	94.386	-37.876	1.00	63.32	A16S
ATOM	35887	O5'	URI	776	203.438	92.478	-36.735	1.00	75.90	A16S
ATOM	35888	C5'	URI	776	203.390	91.159	-36.154	1.00	75.90	A16S
ATOM	35889	C4'	URI	776	202.384	90.299	-36.876	1.00	75.90	A16S
ATOM	35890	O4'	URI	776	202.448	88.961	-36.316	1.00	75.90	A16S
ATOM	35891	C1'	URI	776	201.154	88.516	-35.981	1.00	75.90	A16S
ATOM	35892	N1	URI	776	201.245	87.659	-34.786	1.00	63.32	A16S
ATOM	35893	C6	URI	776	201.583	88.167	-33.549	1.00	63.32	A16S
ATOM	35894	C2	URI	776	200.988	86.301	-34.942	1.00	63.32	A16S
ATOM	35895	O2	URI	776	200.690	85.799	-36.009	1.00	63.32	A16S
ATOM	35896	N3	URI	776	201.104	85.545	-33.800	1.00	63.32	A16S
ATOM	35897	C4	URI	776	201.454	85.984	-32.540	1.00	63.32	A16S
ATOM	35898	O4	URI	776	201.601	85.158	-31.629	1.00	63.32	A16S
ATOM	35899	C5	URI	776	201.696	87.397	-32.451	1.00	63.32	A16S

ATOM	35900	C2'	URI	776	200.295	89.766	-35.819	1.00	75.90	A16S	ATOM	35953	C1'	CYT	779	204.806	103.299	-42.411	1.00	46.76	A16S
ATOM	35901	O2'	URI	776	198.952	89.430	-36.109	1.00	75.90	A16S	ATOM	35954	N1	CYT	779	204.615	101.846	-42.256	1.00	41.09	A16S
ATOM	35902	C3'	URI	776	200.917	90.722	-36.841	1.00	75.90	A16S	ATOM	35955	C6	CYT	779	203.392	101.334	-41.921	1.00	41.09	A16S
ATOM	35903	O3'	URI	776	200.341	90.514	-38.131	1.00	75.90	A16S	ATOM	35956	C2	CYT	779	205.702	100.993	-42.449	1.00	41.09	A16S
ATOM	35904	P	ADE	777	199.199	91.518	-38.684	1.00	52.46	A16S	ATOM	35957	O2	CYT	779	206.802	101.481	-42.763	1.00	41.09	A16S
ATOM	35905	O1P	ADE	777	197.862	91.026	-38.240	1.00	62.35	A16S	ATOM	35958	N3	CYT	779	205.531	99.661	-42.289	1.00	41.09	A16S
ATOM	35906	O2P	ADE	777	199.456	91.732	-40.144	1.00	62.35	A16S	ATOM	35959	C4	CYT	779	204.338	99.180	-41.950	1.00	41.09	A16S
ATOM	35907	O5'	ADE	777	199.467	92.901	-37.945	1.00	52.46	A16S	ATOM	35960	N4	CYT	779	204.216	97.864	-41.785	1.00	41.09	A16S
ATOM	35908	C5'	ADE	777	199.906	94.048	-38.688	1.00	52.46	A16S	ATOM	35961	C5	CYT	779	203.214	100.023	-41.757	1.00	41.09	A16S
ATOM	35909	C4'	ADE	777	199.298	95.292	-38.118	1.00	52.46	A16S	ATOM	35962	C2'	CYT	779	204.784	103.736	-43.875	1.00	46.76	A16S
ATOM	35910	O4'	ADE	777	199.672	95.390	-36.726	1.00	52.46	A16S	ATOM	35963	O2'	CYT	779	205.545	104.914	-44.039	1.00	46.76	A16S
ATOM	35911	C1'	ADE	777	199.894	96.744	-36.389	1.00	52.46	A16S	ATOM	35964	C3'	CYT	779	203.314	104.044	-44.073	1.00	46.76	A16S
ATOM	35912	N9	ADE	777	201.286	96.882	-35.974	1.00	62.35	A16S	ATOM	35965	O3'	CYT	779	203.102	104.888	-45.196	1.00	46.76	A16S
ATOM	35913	C4	ADE	777	201.794	97.824	-35.116	1.00	62.35	A16S	ATOM	35966	P	CYT	780	202.635	104.216	-46.581	1.00	52.39	A16S
ATOM	35914	N3	ADE	777	201.121	98.792	-34.471	1.00	62.35	A16S	ATOM	35967	O1P	CYT	780	202.274	105.245	-47.598	1.00	31.91	A16S
ATOM	35915	C2	ADE	777	201.948	99.529	-33.741	1.00	62.35	A16S	ATOM	35968	O2P	CYT	780	201.646	103.156	-46.209	1.00	31.91	A16S
ATOM	35916	N1	ADE	777	203.270	99.416	-33.591	1.00	62.35	A16S	ATOM	35969	O5'	CYT	780	203.953	103.484	-47.090	1.00	52.39	A16S
ATOM	35917	C6	ADE	777	203.913	98.430	-34.252	1.00	62.35	A16S	ATOM	35970	C5'	CYT	780	205.143	104.235	-47.404	1.00	52.39	A16S
ATOM	35918	N6	ADE	777	205.230	98.308	-34.104	1.00	62.35	A16S	ATOM	35971	C4'	CYT	780	206.209	103.306	-47.921	1.00	52.39	A16S
ATOM	35919	C5	ADE	777	203.152	97.584	-35.060	1.00	62.35	A16S	ATOM	35972	O4'	CYT	780	206.617	102.413	-46.858	1.00	52.39	A16S
ATOM	35920	N7	ADE	777	203.495	96.507	-35.858	1.00	62.35	A16S	ATOM	35973	C1'	CYT	780	206.957	101.155	-47.402	1.00	52.39	A16S
ATOM	35921	C8	ADE	777	202.356	96.124	-36.373	1.00	62.35	A16S	ATOM	35974	N1	CYT	780	206.136	100.115	-46.772	1.00	31.91	A16S
ATOM	35922	C2'	ADE	777	199.583	97.590	-37.623	1.00	52.46	A16S	ATOM	35975	C6	CYT	780	205.025	100.422	-46.038	1.00	31.91	A16S
ATOM	35923	O2'	ADE	777	198.249	98.032	-37.565	1.00	52.46	A16S	ATOM	35976	C2	CYT	780	206.517	98.778	-46.942	1.00	31.91	A16S
ATOM	35924	C3'	ADE	777	199.789	96.583	-38.741	1.00	52.46	A16S	ATOM	35977	O2	CYT	780	207.520	98.527	-47.616	1.00	31.91	A16S
ATOM	35925	O3'	ADE	777	199.038	96.912	-39.892	1.00	52.46	A16S	ATOM	35978	N3	CYT	780	205.777	97.794	-46.374	1.00	31.91	A16S
ATOM	35926	P	CYT	778	199.758	97.639	-41.130	1.00	40.93	A16S	ATOM	35979	C4	CYT	780	204.687	98.104	-45.680	1.00	31.91	A16S
ATOM	35927	O1P	CYT	778	198.845	97.493	-42.293	1.00	57.86	A16S	ATOM	35980	N4	CYT	780	203.973	97.109	-45.186	1.00	31.91	A16S
ATOM	35928	O2P	CYT	778	201.167	97.166	-41.224	1.00	57.86	A16S	ATOM	35981	C5	CYT	780	204.279	99.454	-45.479	1.00	31.91	A16S
ATOM	35929	O5'	CYT	778	199.795	99.177	-40.720	1.00	40.93	A16S	ATOM	35982	C2'	CYT	780	206.743	101.217	-48.908	1.00	52.39	A16S
ATOM	35930	C5'	CYT	778	198.593	99.883	-40.383	1.00	40.93	A16S	ATOM	35983	O2'	CYT	780	207.969	101.509	-49.530	1.00	52.39	A16S
ATOM	35931	C4'	CYT	778	198.893	101.012	-39.428	1.00	40.93	A16S	ATOM	35984	C3'	CYT	780	205.765	102.369	-49.029	1.00	52.39	A16S
ATOM	35932	O4'	CYT	778	199.458	100.491	-38.201	1.00	40.93	A16S	ATOM	35985	O3'	CYT	780	205.808	102.965	-50.312	1.00	52.39	A16S
ATOM	35933	C1'	CYT	778	200.368	101.429	-37.667	1.00	40.93	A16S	ATOM	35986	P	GUA	781	204.876	102.373	-51.482	1.00	45.92	A16S
ATOM	35934	N1	CYT	778	201.681	100.784	-37.518	1.00	57.86	A16S	ATOM	35987	O1P	GUA	781	205.030	103.275	-52.664	1.00	37.68	A16S
ATOM	35935	C6	CYT	778	202.054	99.743	-38.321	1.00	57.86	A16S	ATOM	35988	O2P	GUA	781	203.521	102.120	-50.932	1.00	37.68	A16S
ATOM	35936	C2	CYT	778	202.554	101.268	-36.543	1.00	57.86	A16S	ATOM	35989	O5'	GUA	781	205.536	100.952	-51.797	1.00	45.92	A16S
ATOM	35937	O2	CYT	778	202.173	102.199	-35.801	1.00	57.86	A16S	ATOM	35990	C5'	GUA	781	206.839	100.869	-52.414	1.00	45.92	A16S
ATOM	35938	N3	CYT	778	203.785	100.715	-36.427	1.00	57.86	A16S	ATOM	35991	C4'	GUA	781	207.132	99.456	-52.860	1.00	45.92	A16S
ATOM	35939	C4	CYT	778	204.143	99.715	-37.231	1.00	57.86	A16S	ATOM	35992	O4'	GUA	781	207.398	98.592	-51.725	1.00	45.92	A16S
ATOM	35940	N4	CYT	778	205.367	99.218	-37.099	1.00	57.86	A16S	ATOM	35993	C1'	GUA	781	206.921	97.283	-51.993	1.00	45.92	A16S
ATOM	35941	C5	CYT	778	203.262	99.184	-38.210	1.00	57.86	A16S	ATOM	35994	N9	GUA	781	205.916	96.943	-50.985	1.00	37.68	A16S
ATOM	35942	C2'	CYT	778	200.418	102.634	-38.609	1.00	40.93	A16S	ATOM	35995	C4	GUA	781	205.518	95.683	-50.586	1.00	37.68	A16S
ATOM	35943	O2'	CYT	778	199.604	103.687	-38.113	1.00	40.93	A16S	ATOM	35996	N3	GUA	781	206.004	94.513	-51.039	1.00	37.68	A16S
ATOM	35944	C3'	CYT	778	199.897	102.036	-39.907	1.00	40.93	A16S	ATOM	35997	C2	GUA	781	205.402	93.475	-50.474	1.00	37.68	A16S
ATOM	35945	O3'	CYT	778	199.258	103.002	-40.711	1.00	40.93	A16S	ATOM	35998	N2	GUA	781	205.756	92.239	-50.795	1.00	37.68	A16S
ATOM	35946	P	CYT	779	199.435	102.932	-42.294	1.00	46.76	A16S	ATOM	35999	N1	GUA	781	204.405	93.571	-49.547	1.00	37.68	A16S
ATOM	35947	O1P	CYT	779	198.659	104.032	-42.916	1.00	41.09	A16S	ATOM	36000	C6	GUA	781	203.884	94.760	-49.062	1.00	37.68	A16S
ATOM	35948	O2P	CYT	779	199.164	101.521	-42.677	1.00	41.09	A16S	ATOM	36001	O6	GUA	781	202.964	94.732	-48.216	1.00	37.68	A16S
ATOM	35949	O5'	CYT	779	200.976	103.246	-42.524	1.00	46.76	A16S	ATOM	36002	C5	GUA	781	204.527	95.891	-49.656	1.00	37.68	A16S
ATOM	35950	C5'	CYT	779	201.471	104.584	-42.360	1.00	46.76	A16S	ATOM	36003	N7	GUA	781	204.317	97.247	-49.460	1.00	37.68	A16S
ATOM	35951	C4'	CYT	779	202.933	104.664	-42.740	1.00	46.76	A16S	ATOM	36004	C8	GUA	781	205.162	97.830	-50.262	1.00	37.68	A16S
ATOM	35952	O4'	CYT	779	203.729	103.945	-41.764	1.00	46.76	A16S	ATOM	36005	C2'	GUA	781	206.365	97.293	-53.417	1.00	45.92	A16S

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ATOM  36006  O2' GUA  781     207.399  96.897 -54.280  1.00 45.92      A16S
ATOM  36007  C3' GUA  781     206.026  98.765 -53.618  1.00 45.92      A16S
ATOM  36008  O3' GUA  781     206.061  99.163 -54.977  1.00 45.92      A16S
ATOM  36009  P   GUA  782     204.908  98.666 -55.982  1.00 39.80      A16S
ATOM  36010  O1P GUA  782     205.480  98.651 -57.358  1.00 49.38      A16S
ATOM  36011  O2P GUA  782     203.687  99.467 -55.713  1.00 49.38      A16S
ATOM  36012  O5' GUA  782     204.687  97.159 -55.506  1.00 39.80      A16S
ATOM  36013  C5' GUA  782     203.771  96.280 -56.160  1.00 39.80      A16S
ATOM  36014  C4' GUA  782     204.107  94.851 -55.814  1.00 39.80      A16S
ATOM  36015  O4' GUA  782     204.432  94.743 -54.401  1.00 39.80      A16S
ATOM  36016  C1' GUA  782     203.932  93.518 -53.890  1.00 39.80      A16S
ATOM  36017  N9  GUA  782     202.938  93.807 -52.857  1.00 49.38      A16S
ATOM  36018  C4  GUA  782     202.230  92.880 -52.124  1.00 49.38      A16S
ATOM  36019  N3  GUA  782     202.350  91.539 -52.213  1.00 49.38      A16S
ATOM  36020  C2  GUA  782     201.542  90.912 -51.377  1.00 49.38      A16S
ATOM  36021  N2  GUA  782     201.547  89.580 -51.320  1.00 49.38      A16S
ATOM  36022  N1  GUA  782     200.677  91.547 -50.527  1.00 49.38      A16S
ATOM  36023  C6  GUA  782     200.538  92.928 -50.413  1.00 49.38      A16S
ATOM  36024  O6  GUA  782     199.734  93.406 -49.592  1.00 49.38      A16S
ATOM  36025  C5  GUA  782     201.403  93.614 -51.309  1.00 49.38      A16S
ATOM  36026  N7  GUA  782     201.584  94.973 -51.520  1.00 49.38      A16S
ATOM  36027  C8  GUA  782     202.506  95.040 -52.438  1.00 49.38      A16S
ATOM  36028  C2' GUA  782     203.293  92.757 -55.051  1.00 39.80      A16S
ATOM  36029  O2' GUA  782     204.204  91.818 -55.555  1.00 39.80      A16S
ATOM  36030  C3' GUA  782     202.964  93.883 -56.018  1.00 39.80      A16S
ATOM  36031  O3' GUA  782     202.838  93.459 -57.360  1.00 39.80      A16S
ATOM  36032  P   GUA  783     201.381  93.433 -58.037  1.00 42.19      A16S
ATOM  36033  O1P GUA  783     201.481  92.792 -59.373  1.00 35.16      A16S
ATOM  36034  O2P GUA  783     200.813  94.800 -57.932  1.00 35.16      A16S
ATOM  36035  O5' GUA  783     200.566  92.442 -57.099  1.00 42.19      A16S
ATOM  36036  C5' GUA  783     200.858  91.044 -57.112  1.00 42.19      A16S
ATOM  36037  C4' GUA  783     200.034  90.331 -56.077  1.00 42.19      A16S
ATOM  36038  O4' GUA  783     200.339  90.900 -54.782  1.00 42.19      A16S
ATOM  36039  C1' GUA  783     199.164  90.978 -54.004  1.00 42.19      A16S
ATOM  36040  N9  GUA  783     198.935  92.389 -53.732  1.00 35.16      A16S
ATOM  36041  C4  GUA  783     198.268  92.925 -52.660  1.00 35.16      A16S
ATOM  36042  N3  GUA  783     197.680  92.230 -51.657  1.00 35.16      A16S
ATOM  36043  C2  GUA  783     197.124  93.026 -50.764  1.00 35.16      A16S
ATOM  36044  N2  GUA  783     196.495  92.500 -49.711  1.00 35.16      A16S
ATOM  36045  N1  GUA  783     197.150  94.396 -50.842  1.00 35.16      A16S
ATOM  36046  C6  GUA  783     197.755  95.133 -51.858  1.00 35.16      A16S
ATOM  36047  O6  GUA  783     197.743  96.373 -51.821  1.00 35.16      A16S
ATOM  36048  C5  GUA  783     198.341  94.290 -52.832  1.00 35.16      A16S
ATOM  36049  N7  GUA  783     199.025  94.604 -54.001  1.00 35.16      A16S
ATOM  36050  C8  GUA  783     199.357  93.449 -54.499  1.00 35.16      A16S
ATOM  36051  C2' GUA  783     198.036  90.306 -54.795  1.00 42.19      A16S
ATOM  36052  O2' GUA  783     197.941  88.953 -54.399  1.00 42.19      A16S
ATOM  36053  C3' GUA  783     198.529  90.459 -56.231  1.00 42.19      A16S
ATOM  36054  O3' GUA  783     198.031  89.443 -57.098  1.00 42.19      A16S
ATOM  36055  P   URI  784     196.788  89.754 -58.076  1.00 38.60      A16S
ATOM  36056  O1P URI  784     197.060  89.147 -59.404  1.00 43.00      A16S
ATOM  36057  O2P URI  784     196.473  91.198 -58.008  1.00 43.00      A16S
ATOM  36058  O5' URI  784     195.618  88.890 -57.424  1.00 38.60      A16S
ATOM  36059  C5' URI  784     195.646  87.474 -57.567  1.00 38.60      A16S
ATOM  36060  C4' URI  784     194.803  86.801 -56.521  1.00 38.60      A16S
ATOM  36061  O4' URI  784     195.365  87.016 -55.206  1.00 38.60      A16S
ATOM  36062  C1' URI  784     194.327  86.985 -54.238  1.00 38.60      A16S
ATOM  36063  N1  URI  784     194.261  88.289 -53.551  1.00 43.00      A16S
ATOM  36064  C6  URI  784     194.730  89.441 -54.146  1.00 43.00      A16S
ATOM  36065  C2  URI  784     193.684  88.323 -52.275  1.00 43.00      A16S
ATOM  36066  O2  URI  784     193.288  87.330 -51.690  1.00 43.00      A16S
ATOM  36067  N3  URI  784     193.602  89.564 -51.712  1.00 43.00      A16S
ATOM  36068  C4  URI  784     194.038  90.750 -52.261  1.00 43.00      A16S
ATOM  36069  O4  URI  784     193.858  91.798 -51.639  1.00 43.00      A16S
ATOM  36070  C5  URI  784     194.646  90.631 -53.563  1.00 43.00      A16S
ATOM  36071  C2' URI  784     193.028  86.704 -54.987  1.00 38.60      A16S
ATOM  36072  O2' URI  784     192.782  85.310 -54.965  1.00 38.60      A16S
ATOM  36073  C3' URI  784     193.366  87.240 -56.369  1.00 38.60      A16S
ATOM  36074  O3' URI  784     192.511  86.737 -57.366  1.00 38.60      A16S
ATOM  36075  P   ADE  785     191.286  87.643 -57.862  1.00 46.68      A16S
ATOM  36076  O1P ADE  785     190.812  87.095 -59.160  1.00 33.27      A16S
ATOM  36077  O2P ADE  785     191.702  89.065 -57.781  1.00 33.27      A16S
ATOM  36078  O5' ADE  785     190.177  87.368 -56.759  1.00 46.68      A16S
ATOM  36079  C5' ADE  785     189.784  86.032 -56.450  1.00 46.68      A16S
ATOM  36080  C4' ADE  785     189.003  86.005 -55.166  1.00 46.68      A16S
ATOM  36081  O4' ADE  785     189.857  86.416 -54.072  1.00 46.68      A16S
ATOM  36082  C1' ADE  785     189.111  87.170 -53.133  1.00 46.68      A16S
ATOM  36083  N9  ADE  785     189.694  88.511 -53.065  1.00 33.27      A16S
ATOM  36084  C4  ADE  785     189.478  89.454 -52.090  1.00 33.27      A16S
ATOM  36085  N3  ADE  785     188.731  89.327 -50.983  1.00 33.27      A16S
ATOM  36086  C2  ADE  785     188.756  90.449 -50.276  1.00 33.27      A16S
ATOM  36087  N1  ADE  785     189.386  91.606 -50.530  1.00 33.27      A16S
ATOM  36088  C6  ADE  785     190.119  91.706 -51.657  1.00 33.27      A16S
ATOM  36089  N6  ADE  785     190.728  92.863 -51.926  1.00 33.27      A16S
ATOM  36090  C5  ADE  785     190.190  90.575 -52.488  1.00 33.27      A16S
ATOM  36091  N7  ADE  785     190.865  90.334 -53.675  1.00 33.27      A16S
ATOM  36092  C8  ADE  785     190.544  89.100 -53.971  1.00 33.27      A16S
ATOM  36093  C2' ADE  785     187.659  87.188 -53.618  1.00 46.68      A16S
ATOM  36094  O2' ADE  785     186.922  86.148 -52.998  1.00 46.68      A16S
ATOM  36095  C3' ADE  785     187.822  86.949 -55.111  1.00 46.68      A16S
ATOM  36096  O3' ADE  785     186.674  86.330 -55.651  1.00 46.68      A16S
ATOM  36097  P   GUA  786     185.721  87.155 -56.639  1.00 43.81      A16S
ATOM  36098  O1P GUA  786     184.466  86.357 -56.733  1.00 47.41      A16S
ATOM  36099  O2P GUA  786     186.471  87.497 -57.876  1.00 47.41      A16S
ATOM  36100  O5' GUA  786     185.426  88.506 -55.850  1.00 43.81      A16S
ATOM  36101  C5' GUA  786     184.741  88.478 -54.584  1.00 43.81      A16S
ATOM  36102  C4' GUA  786     184.918  89.784 -53.863  1.00 43.81      A16S
ATOM  36103  O4' GUA  786     186.327  90.010 -53.613  1.00 43.81      A16S
ATOM  36104  C1' GUA  786     186.615  91.385 -53.734  1.00 43.81      A16S
ATOM  36105  N9  GUA  786     187.578  91.553 -54.815  1.00 47.41      A16S
ATOM  36106  C4  GUA  786     188.454  92.600 -54.968  1.00 47.41      A16S
ATOM  36107  N3  GUA  786     188.610  93.633 -54.115  1.00 47.41      A16S
ATOM  36108  C2  GUA  786     189.530  94.482 -54.533  1.00 47.41      A16S
ATOM  36109  N2  GUA  786     189.846  95.542 -53.787  1.00 47.41      A16S
ATOM  36110  N1  GUA  786     190.214  94.348 -55.706  1.00 47.41      A16S
ATOM  36111  C6  GUA  786     190.061  93.305 -56.603  1.00 47.41      A16S
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ATOM	36112	O6	GUA	786	190.717	93.297	-57.643	1.00	47.41	A16S	ATOM	36165	C4'	CYT	789	177.773	95.825	-65.008	1.00	49.22	A16S
ATOM	36113	C5	GUA	786	189.103	92.365	-56.154	1.00	47.41	A16S	ATOM	36166	O4'	CYT	789	178.867	94.878	-65.093	1.00	49.22	A16S
ATOM	36114	N7	GUA	786	188.664	91.180	-56.728	1.00	47.41	A16S	ATOM	36167	C1'	CYT	789	178.355	93.572	-65.285	1.00	49.22	A16S
ATOM	36115	C8	GUA	786	187.769	90.728	-55.896	1.00	47.41	A16S	ATOM	36168	N1	CYT	789	178.810	92.719	-64.169	1.00	32.47	A16S
ATOM	36116	C2'	GUA	786	185.300	92.114	-54.027	1.00	43.81	A16S	ATOM	36169	C6	CYT	789	179.235	93.268	-62.991	1.00	32.47	A16S
ATOM	36117	O2'	GUA	786	184.735	92.605	-52.827	1.00	43.81	A16S	ATOM	36170	C2	CYT	789	178.798	91.326	-64.331	1.00	32.47	A16S
ATOM	36118	C3'	GUA	786	184.461	91.001	-54.638	1.00	43.81	A16S	ATOM	36171	O2	CYT	789	178.428	90.848	-65.422	1.00	32.47	A16S
ATOM	36119	O3'	GUA	786	183.066	91.208	-54.476	1.00	43.81	A16S	ATOM	36172	N3	CYT	789	179.194	90.533	-63.301	1.00	32.47	A16S
ATOM	36120	P	URI	787	182.231	91.961	-55.628	1.00	34.21	A16S	ATOM	36173	C4	CYT	789	179.599	91.083	-62.156	1.00	32.47	A16S
ATOM	36121	O1P	URI	787	180.861	92.108	-55.073	1.00	47.06	A16S	ATOM	36174	N4	CYT	789	179.974	90.272	-61.172	1.00	32.47	A16S
ATOM	36122	O2P	URI	787	182.413	91.320	-56.955	1.00	47.06	A16S	ATOM	36175	C5	CYT	789	179.637	92.495	-61.970	1.00	32.47	A16S
ATOM	36123	O5'	URI	787	182.884	93.406	-55.670	1.00	34.21	A16S	ATOM	36176	C2'	CYT	789	176.831	93.673	-65.384	1.00	49.22	A16S
ATOM	36124	C5'	URI	787	182.617	94.353	-54.627	1.00	34.21	A16S	ATOM	36177	O2'	CYT	789	176.429	93.720	-66.734	1.00	49.22	A16S
ATOM	36125	C4'	URI	787	183.425	95.602	-54.846	1.00	34.21	A16S	ATOM	36178	C3'	CYT	789	176.561	94.985	-64.662	1.00	49.22	A16S
ATOM	36126	O4'	URI	787	184.838	95.269	-54.822	1.00	34.21	A16S	ATOM	36179	O3'	CYT	789	175.354	95.612	-65.062	1.00	49.22	A16S
ATOM	36127	C1'	URI	787	185.540	96.102	-55.731	1.00	34.21	A16S	ATOM	36180	P	ADE	790	173.988	95.254	-64.292	1.00	48.07	A16S
ATOM	36128	N1	URI	787	186.253	95.260	-56.712	1.00	47.06	A16S	ATOM	36181	O1P	ADE	790	172.920	96.115	-64.888	1.00	45.40	A16S
ATOM	36129	C6	URI	787	185.824	93.989	-57.014	1.00	47.06	A16S	ATOM	36182	O2P	ADE	790	174.213	95.268	-62.811	1.00	45.40	A16S
ATOM	36130	C2	URI	787	187.373	95.790	-57.338	1.00	47.06	A16S	ATOM	36183	O5'	ADE	790	173.719	93.757	-64.742	1.00	48.07	A16S
ATOM	36131	O2	URI	787	187.824	96.886	-57.085	1.00	47.06	A16S	ATOM	36184	C5'	ADE	790	173.516	93.463	-66.117	1.00	48.07	A16S
ATOM	36132	N3	URI	787	187.955	94.977	-58.268	1.00	47.06	A16S	ATOM	36185	C4'	ADE	790	173.381	91.987	-66.315	1.00	48.07	A16S
ATOM	36133	C4	URI	787	187.567	93.711	-58.623	1.00	47.06	A16S	ATOM	36186	O4'	ADE	790	174.636	91.338	-66.019	1.00	48.07	A16S
ATOM	36134	O4	URI	787	188.204	93.107	-59.485	1.00	47.06	A16S	ATOM	36187	C1'	ADE	790	174.388	90.005	-65.627	1.00	48.07	A16S
ATOM	36135	C5	URI	787	186.429	93.218	-57.922	1.00	47.06	A16S	ATOM	36188	N9	ADE	790	175.122	89.726	-64.392	1.00	45.40	A16S
ATOM	36136	C2'	URI	787	184.520	97.055	-56.361	1.00	34.21	A16S	ATOM	36189	C4	ADE	790	175.407	88.466	-63.928	1.00	45.40	A16S
ATOM	36137	O2'	URI	787	184.506	98.268	-55.631	1.00	34.21	A16S	ATOM	36190	N3	ADE	790	175.084	87.300	-64.508	1.00	45.40	A16S
ATOM	36138	C3'	URI	787	183.220	96.289	-56.183	1.00	34.21	A16S	ATOM	36191	C2	ADE	790	175.518	86.281	-63.779	1.00	45.40	A16S
ATOM	36139	O3'	URI	787	182.112	97.166	-56.146	1.00	34.21	A16S	ATOM	36192	N1	ADE	790	176.180	86.292	-62.623	1.00	45.40	A16S
ATOM	36140	P	CYT	788	180.829	96.859	-57.049	1.00	49.38	A16S	ATOM	36193	C6	ADE	790	176.482	87.481	-62.061	1.00	45.40	A16S
ATOM	36141	O1P	CYT	788	179.926	98.023	-56.950	1.00	39.46	A16S	ATOM	36194	N6	ADE	790	177.130	87.488	-60.897	1.00	45.40	A16S
ATOM	36142	O2P	CYT	788	180.340	95.507	-56.692	1.00	39.46	A16S	ATOM	36195	C5	ADE	790	176.088	88.643	-62.740	1.00	45.40	A16S
ATOM	36143	O5'	CYT	788	181.389	96.835	-58.532	1.00	49.38	A16S	ATOM	36196	N7	ADE	790	176.242	89.994	-62.455	1.00	45.40	A16S
ATOM	36144	C5'	CYT	788	181.781	98.058	-59.189	1.00	49.38	A16S	ATOM	36197	C8	ADE	790	175.655	90.596	-63.465	1.00	45.40	A16S
ATOM	36145	C4'	CYT	788	181.859	97.845	-60.681	1.00	49.38	A16S	ATOM	36198	C2'	ADE	790	172.874	89.831	-65.502	1.00	48.07	A16S
ATOM	36146	O4'	CYT	788	183.030	97.057	-61.026	1.00	49.38	A16S	ATOM	36199	O2'	ADE	790	172.367	89.186	-66.655	1.00	48.07	A16S
ATOM	36147	C1'	CYT	788	182.715	96.176	-62.090	1.00	49.38	A16S	ATOM	36200	C3'	ADE	790	172.409	91.276	-65.404	1.00	48.07	A16S
ATOM	36148	N1	CYT	788	182.858	94.790	-61.600	1.00	39.46	A16S	ATOM	36201	O3'	ADE	790	171.069	91.449	-65.803	1.00	48.07	A16S
ATOM	36149	C6	CYT	788	182.971	94.527	-60.261	1.00	39.46	A16S	ATOM	36202	P	CYT	791	169.932	91.573	-64.675	1.00	45.93	A16S
ATOM	36150	C2	CYT	788	182.886	93.731	-62.532	1.00	39.46	A16S	ATOM	36203	O1P	CYT	791	168.676	92.014	-65.351	1.00	45.71	A16S
ATOM	36151	O2	CYT	788	182.801	93.986	-63.747	1.00	39.46	A16S	ATOM	36204	O2P	CYT	791	170.476	92.375	-63.540	1.00	45.71	A16S
ATOM	36152	N3	CYT	788	183.016	92.461	-62.081	1.00	39.46	A16S	ATOM	36205	O5'	CYT	791	169.737	90.070	-64.187	1.00	45.93	A16S
ATOM	36153	C4	CYT	788	183.127	92.226	-60.774	1.00	39.46	A16S	ATOM	36206	C5'	CYT	791	169.168	89.104	-65.061	1.00	45.93	A16S
ATOM	36154	N4	CYT	788	183.254	90.968	-60.384	1.00	39.46	A16S	ATOM	36207	C4'	CYT	791	169.296	87.738	-64.470	1.00	45.93	A16S
ATOM	36155	C5	CYT	788	183.111	93.275	-59.812	1.00	39.46	A16S	ATOM	36208	O4'	CYT	791	170.694	87.363	-64.419	1.00	45.93	A16S
ATOM	36156	C2'	CYT	788	181.295	96.504	-62.543	1.00	49.38	A16S	ATOM	36209	C1'	CYT	791	170.926	86.549	-63.283	1.00	45.93	A16S
ATOM	36157	O2'	CYT	788	181.355	97.519	-63.525	1.00	49.38	A16S	ATOM	36210	N1	CYT	791	171.885	87.218	-62.398	1.00	45.71	A16S
ATOM	36158	C3'	CYT	788	180.701	97.061	-61.264	1.00	49.38	A16S	ATOM	36211	C6	CYT	791	171.998	88.580	-62.360	1.00	45.71	A16S
ATOM	36159	O3'	CYT	788	179.577	97.876	-61.493	1.00	49.38	A16S	ATOM	36212	C2	CYT	791	172.661	86.429	-61.562	1.00	45.71	A16S
ATOM	36160	P	CYT	789	178.117	97.231	-61.370	1.00	49.22	A16S	ATOM	36213	O2	CYT	791	172.561	85.198	-61.652	1.00	45.71	A16S
ATOM	36161	O1P	CYT	789	177.142	98.344	-61.488	1.00	32.47	A16S	ATOM	36214	N3	CYT	791	173.504	87.017	-60.681	1.00	45.71	A16S
ATOM	36162	O2P	CYT	789	178.100	96.345	-60.180	1.00	32.47	A16S	ATOM	36215	C4	CYT	791	173.591	88.343	-60.633	1.00	45.71	A16S
ATOM	36163	O5'	CYT	789	177.991	96.315	-62.661	1.00	49.22	A16S	ATOM	36216	N4	CYT	791	174.422	88.877	-59.746	1.00	45.71	A16S
ATOM	36164	C5'	CYT	789	178.079	96.880	-63.980	1.00	49.22	A16S	ATOM	36217	C5	CYT	791	172.827	89.178	-61.496	1.00	45.71	A16S

ATOM	36218	C2'	CYT	791	169.599	86.396	-62.547	1.00	45.93	A16S	ATOM	36271	O4'	CYT	794	170.722	86.071	-48.890	1.00	36.56	A16S
ATOM	36219	O2'	CYT	791	168.947	85.201	-62.908	1.00	45.93	A16S	ATOM	36272	C1'	CYT	794	171.317	87.253	-48.419	1.00	36.56	A16S
ATOM	36220	C3'	CYT	791	168.853	87.622	-63.031	1.00	45.93	A16S	ATOM	36273	N1	CYT	794	171.056	88.333	-49.369	1.00	29.52	A16S
ATOM	36221	O3'	CYT	791	167.469	87.501	-62.854	1.00	45.93	A16S	ATOM	36274	C6	CYT	794	170.136	88.188	-50.362	1.00	29.52	A16S
ATOM	36222	P	GUA	792	166.805	88.183	-61.564	1.00	52.15	A16S	ATOM	36275	C2	CYT	794	171.775	89.526	-49.241	1.00	29.52	A16S
ATOM	36223	O1P	GUA	792	165.341	88.269	-61.840	1.00	42.01	A16S	ATOM	36276	O2	CYT	794	172.634	89.618	-48.340	1.00	29.52	A16S
ATOM	36224	O2P	GUA	792	167.575	89.425	-61.263	1.00	42.01	A16S	ATOM	36277	N3	CYT	794	171.524	90.543	-50.100	1.00	29.52	A16S
ATOM	36225	O5'	GUA	792	167.105	87.149	-60.386	1.00	52.15	A16S	ATOM	36278	C4	CYT	794	170.616	90.385	-51.061	1.00	29.52	A16S
ATOM	36226	C5'	GUA	792	166.665	85.807	-60.488	1.00	52.15	A16S	ATOM	36279	N4	CYT	794	170.396	91.398	-51.879	1.00	29.52	A16S
ATOM	36227	C4'	GUA	792	167.456	84.920	-59.575	1.00	52.15	A16S	ATOM	36280	C5	CYT	794	169.891	89.176	-51.223	1.00	29.52	A16S
ATOM	36228	O4'	GUA	792	168.872	85.069	-59.840	1.00	52.15	A16S	ATOM	36281	C2'	CYT	794	170.872	87.497	-46.978	1.00	36.56	A16S
ATOM	36229	C1'	GUA	792	169.606	84.663	-58.693	1.00	52.15	A16S	ATOM	36282	O2'	CYT	794	171.972	87.279	-46.121	1.00	36.56	A16S
ATOM	36230	N9	GUA	792	170.535	85.717	-58.293	1.00	42.01	A16S	ATOM	36283	C3'	CYT	794	169.744	86.481	-46.810	1.00	36.56	A16S
ATOM	36231	C4	GUA	792	171.551	85.581	-57.378	1.00	42.01	A16S	ATOM	36284	O3'	CYT	794	169.728	85.945	-45.493	1.00	36.56	A16S
ATOM	36232	N3	GUA	792	171.866	84.452	-56.715	1.00	42.01	A16S	ATOM	36285	P	CYT	795	168.580	86.384	-44.471	1.00	45.67	A16S
ATOM	36233	C2	GUA	792	172.888	84.626	-55.901	1.00	42.01	A16S	ATOM	36286	O1P	CYT	795	168.994	85.883	-43.143	1.00	34.72	A16S
ATOM	36234	N2	GUA	792	173.328	83.597	-55.164	1.00	42.01	A16S	ATOM	36287	O2P	CYT	795	167.266	85.988	-45.025	1.00	34.72	A16S
ATOM	36235	N1	GUA	792	173.549	85.817	-55.751	1.00	42.01	A16S	ATOM	36288	O5'	CYT	795	168.639	87.968	-44.522	1.00	45.67	A16S
ATOM	36236	C6	GUA	792	173.233	86.995	-56.416	1.00	42.01	A16S	ATOM	36289	C5'	CYT	795	169.237	88.723	-43.470	1.00	45.67	A16S
ATOM	36237	O6	GUA	792	173.884	88.027	-56.190	1.00	42.01	A16S	ATOM	36290	C4'	CYT	795	168.871	90.170	-43.629	1.00	45.67	A16S
ATOM	36238	C5	GUA	792	172.140	86.818	-57.296	1.00	42.01	A16S	ATOM	36291	O4'	CYT	795	169.211	90.534	-44.983	1.00	45.67	A16S
ATOM	36239	N7	GUA	792	171.511	87.719	-58.141	1.00	42.01	A16S	ATOM	36292	C1'	CYT	795	168.368	91.569	-45.416	1.00	45.67	A16S
ATOM	36240	C8	GUA	792	170.570	87.021	-58.717	1.00	42.01	A16S	ATOM	36293	N1	CYT	795	168.016	91.348	-46.823	1.00	34.72	A16S
ATOM	36241	C2'	GUA	792	168.598	84.401	-57.580	1.00	52.15	A16S	ATOM	36294	C6	CYT	795	167.340	90.231	-47.211	1.00	34.72	A16S
ATOM	36242	O2'	GUA	792	168.368	83.010	-57.492	1.00	52.15	A16S	ATOM	36295	C2	CYT	795	168.402	92.311	-47.778	1.00	34.72	A16S
ATOM	36243	C3'	GUA	792	167.379	85.165	-58.082	1.00	52.15	A16S	ATOM	36296	O2	CYT	795	169.052	93.311	-47.411	1.00	34.72	A16S
ATOM	36244	O3'	GUA	792	166.206	84.652	-57.489	1.00	52.15	A16S	ATOM	36297	N3	CYT	795	168.078	92.116	-49.074	1.00	34.72	A16S
ATOM	36245	P	CYT	793	165.631	85.349	-56.160	1.00	46.01	A16S	ATOM	36298	C4	CYT	795	167.437	91.010	-49.438	1.00	34.72	A16S
ATOM	36246	O1P	CYT	793	164.490	84.486	-55.749	1.00	38.68	A16S	ATOM	36299	N4	CYT	795	167.177	90.841	-50.724	1.00	34.72	A16S
ATOM	36247	O2P	CYT	793	165.403	86.790	-56.442	1.00	38.68	A16S	ATOM	36300	C5	CYT	795	167.041	90.020	-48.498	1.00	34.72	A16S
ATOM	36248	O5'	CYT	793	166.801	85.226	-55.070	1.00	46.01	A16S	ATOM	36301	C2'	CYT	795	167.249	91.766	-44.391	1.00	45.67	A16S
ATOM	36249	C5'	CYT	793	167.018	83.974	-54.392	1.00	46.01	A16S	ATOM	36302	O2'	CYT	795	167.577	92.957	-43.715	1.00	45.67	A16S
ATOM	36250	C4'	CYT	793	168.215	84.014	-53.446	1.00	46.01	A16S	ATOM	36303	C3'	CYT	795	167.391	90.525	-43.511	1.00	45.67	A16S
ATOM	36251	O4'	CYT	793	169.418	84.533	-54.077	1.00	46.01	A16S	ATOM	36304	O3'	CYT	795	167.004	90.622	-42.111	1.00	45.67	A16S
ATOM	36252	C1'	CYT	793	170.365	84.833	-53.071	1.00	46.01	A16S	ATOM	36305	P	URI	796	166.960	92.045	-41.319	1.00	41.48	A16S
ATOM	36253	N1	CYT	793	170.933	86.170	-53.290	1.00	38.68	A16S	ATOM	36306	O1P	URI	796	166.557	91.665	-39.937	1.00	34.46	A16S
ATOM	36254	C6	CYT	793	170.347	87.072	-54.133	1.00	38.68	A16S	ATOM	36307	O2P	URI	796	166.172	93.080	-42.031	1.00	34.46	A16S
ATOM	36255	C2	CYT	793	172.111	86.509	-52.605	1.00	38.68	A16S	ATOM	36308	O5'	URI	796	168.473	92.530	-41.240	1.00	41.48	A16S
ATOM	36256	O2	CYT	793	172.611	85.676	-51.823	1.00	38.68	A16S	ATOM	36309	C5'	URI	796	169.396	91.901	-40.345	1.00	41.48	A16S
ATOM	36257	N3	CYT	793	172.673	87.729	-52.806	1.00	38.68	A16S	ATOM	36310	C4'	URI	796	170.744	92.558	-40.446	1.00	41.48	A16S
ATOM	36258	C4	CYT	793	172.104	88.590	-53.643	1.00	38.68	A16S	ATOM	36311	O4'	URI	796	171.142	92.604	-41.836	1.00	41.48	A16S
ATOM	36259	N4	CYT	793	172.702	89.758	-53.829	1.00	38.68	A16S	ATOM	36312	C1'	URI	796	171.964	93.732	-42.058	1.00	41.48	A16S
ATOM	36260	C5	CYT	793	170.893	88.283	-54.334	1.00	38.68	A16S	ATOM	36313	N1	URI	796	171.443	94.513	-43.193	1.00	34.46	A16S
ATOM	36261	C2'	CYT	793	169.644	84.745	-51.732	1.00	46.01	A16S	ATOM	36314	C6	URI	796	170.162	94.363	-43.664	1.00	34.46	A16S
ATOM	36262	O2'	CYT	793	169.979	83.496	-51.160	1.00	46.01	A16S	ATOM	36315	C2	URI	796	172.317	95.414	-43.788	1.00	34.46	A16S
ATOM	36263	C3'	CYT	793	168.177	84.806	-52.154	1.00	46.01	A16S	ATOM	36316	O2	URI	796	173.473	95.589	-43.390	1.00	34.46	A16S
ATOM	36264	O3'	CYT	793	167.380	84.195	-51.157	1.00	46.01	A16S	ATOM	36317	N3	URI	796	171.801	96.098	-44.865	1.00	34.46	A16S
ATOM	36265	P	CYT	794	166.836	85.081	-49.929	1.00	36.56	A16S	ATOM	36318	C4	URI	796	170.541	95.971	-45.397	1.00	34.46	A16S
ATOM	36266	O1P	CYT	794	166.047	84.195	-49.035	1.00	29.52	A16S	ATOM	36319	O4	URI	796	170.282	96.534	-46.462	1.00	34.46	A16S
ATOM	36267	O2P	CYT	794	166.240	86.343	-50.444	1.00	29.52	A16S	ATOM	36320	C5	URI	796	169.696	95.042	-44.713	1.00	34.46	A16S
ATOM	36268	O5'	CYT	794	168.141	85.541	-49.147	1.00	36.56	A16S	ATOM	36321	C2'	URI	796	172.061	94.507	-40.750	1.00	41.48	A16S
ATOM	36269	C5'	CYT	794	168.913	84.637	-48.348	1.00	36.56	A16S	ATOM	36322	O2'	URI	796	173.252	94.102	-40.104	1.00	41.48	A16S
ATOM	36270	C4'	CYT	794	170.097	85.375	-47.791	1.00	36.56	A16S	ATOM	36323	C3'	URI	796	170.829	94.009	-40.007	1.00	41.48	A16S

ATOM	36324	O3'	URI	796	171.011	94.092	-38.605	1.00	41.48	A16S	ATOM	36377	N9	ADE	799	169.049	100.280	-41.633	1.00	24.35	A16S
ATOM	36325	P	ADE	797	170.347	95.301	-37.781	1.00	43.85	A16S	ATOM	36378	C4	ADE	799	168.479	99.242	-42.327	1.00	24.35	A16S
ATOM	36326	O1P	ADE	797	168.998	95.603	-38.351	1.00	25.19	A16S	ATOM	36379	N3	ADE	799	168.156	99.216	-43.631	1.00	24.35	A16S
ATOM	36327	O2P	ADE	797	170.495	94.896	-36.346	1.00	25.19	A16S	ATOM	36380	C2	ADE	799	167.629	98.037	-43.954	1.00	24.35	A16S
ATOM	36328	O5'	ADE	797	171.257	96.561	-38.110	1.00	43.85	A16S	ATOM	36381	N1	ADE	799	167.410	96.958	-43.180	1.00	24.35	A16S
ATOM	36329	C5'	ADE	797	172.541	96.685	-37.525	1.00	43.85	A16S	ATOM	36382	C6	ADE	799	167.755	97.021	-41.877	1.00	24.35	A16S
ATOM	36330	C4'	ADE	797	173.248	97.882	-38.082	1.00	43.85	A16S	ATOM	36383	N6	ADE	799	167.562	95.943	-41.111	1.00	24.35	A16S
ATOM	36331	O4'	ADE	797	173.563	97.660	-39.468	1.00	43.85	A16S	ATOM	36384	C5	ADE	799	168.312	98.222	-41.409	1.00	24.35	A16S
ATOM	36332	C1'	ADE	797	173.671	98.902	-40.119	1.00	43.85	A16S	ATOM	36385	N7	ADE	799	168.762	98.611	-40.161	1.00	24.35	A16S
ATOM	36333	N9	ADE	797	172.860	98.862	-41.318	1.00	25.19	A16S	ATOM	36386	C8	ADE	799	169.192	99.835	-40.350	1.00	24.35	A16S
ATOM	36334	C4	ADE	797	172.953	99.735	-42.368	1.00	25.19	A16S	ATOM	36387	C2'	ADE	799	168.339	102.647	-41.996	1.00	34.03	A16S
ATOM	36335	N3	ADE	797	173.835	100.732	-42.514	1.00	25.19	A16S	ATOM	36388	O2'	ADE	799	168.334	103.516	-43.111	1.00	34.03	A16S
ATOM	36336	C2	ADE	797	173.596	101.382	-43.631	1.00	25.19	A16S	ATOM	36389	C3'	ADE	799	168.855	103.379	-40.773	1.00	34.03	A16S
ATOM	36337	N1	ADE	797	172.643	101.169	-44.550	1.00	25.19	A16S	ATOM	36390	O3'	ADE	799	168.382	104.706	-40.732	1.00	34.03	A16S
ATOM	36338	C6	ADE	797	171.784	100.148	-44.364	1.00	25.19	A16S	ATOM	36391	P	CYT	800	167.452	105.150	-39.516	1.00	28.52	A16S
ATOM	36339	N6	ADE	797	170.828	99.921	-45.271	1.00	25.19	A16S	ATOM	36392	O1P	CYT	800	166.082	105.324	-40.061	1.00	24.49	A16S
ATOM	36340	C5	ADE	797	171.938	99.386	-43.232	1.00	25.19	A16S	ATOM	36393	O2P	CYT	800	167.675	104.180	-38.398	1.00	24.49	A16S
ATOM	36341	N7	ADE	797	171.246	98.286	-42.760	1.00	25.19	A16S	ATOM	36394	O5'	CYT	800	168.056	106.555	-39.081	1.00	28.52	A16S
ATOM	36342	C8	ADE	797	171.841	98.006	-41.627	1.00	25.19	A16S	ATOM	36395	C5'	CYT	800	167.565	107.785	-39.622	1.00	28.52	A16S
ATOM	36343	C2'	ADE	797	173.205	99.993	-39.158	1.00	43.85	A16S	ATOM	36396	C4'	CYT	800	168.513	108.898	-39.276	1.00	28.52	A16S
ATOM	36344	O2'	ADE	797	174.349	100.668	-38.689	1.00	43.85	A16S	ATOM	36397	O4'	CYT	800	168.921	108.711	-37.898	1.00	28.52	A16S
ATOM	36345	C3'	ADE	797	172.484	99.188	-38.084	1.00	43.85	A16S	ATOM	36398	C1'	CYT	800	170.316	108.630	-37.825	1.00	28.52	A16S
ATOM	36346	O3'	ADE	797	172.593	99.805	-36.814	1.00	43.85	A16S	ATOM	36399	N1	CYT	800	170.676	107.678	-36.777	1.00	24.49	A16S
ATOM	36347	P	ADE	798	171.335	100.588	-36.195	1.00	36.74	A16S	ATOM	36400	C6	CYT	800	169.956	106.536	-36.579	1.00	24.49	A16S
ATOM	36348	O1P	ADE	798	170.181	100.478	-37.134	1.00	25.08	A16S	ATOM	36401	C2	CYT	800	171.770	107.976	-35.961	1.00	24.49	A16S
ATOM	36349	O2P	ADE	798	171.181	100.145	-34.787	1.00	25.08	A16S	ATOM	36402	O2	CYT	800	172.427	109.024	-36.186	1.00	24.49	A16S
ATOM	36350	O5'	ADE	798	171.799	102.108	-36.208	1.00	36.74	A16S	ATOM	36403	N3	CYT	800	172.085	107.134	-34.951	1.00	24.49	A16S
ATOM	36351	C5'	ADE	798	173.012	102.523	-35.561	1.00	36.74	A16S	ATOM	36404	C4	CYT	800	171.351	106.043	-34.749	1.00	24.49	A16S
ATOM	36352	C4'	ADE	798	173.485	103.817	-36.166	1.00	36.74	A16S	ATOM	36405	N4	CYT	800	171.662	105.268	-33.720	1.00	24.49	A16S
ATOM	36353	O4'	ADE	798	174.370	104.518	-35.259	1.00	36.74	A16S	ATOM	36406	C5	CYT	800	170.254	105.704	-35.586	1.00	24.49	A16S
ATOM	36354	C1'	ADE	798	175.536	104.891	-35.943	1.00	36.74	A16S	ATOM	36407	C2'	CYT	800	170.811	108.248	-39.209	1.00	28.52	A16S
ATOM	36355	N9	ADE	798	176.642	104.859	-34.991	1.00	25.08	A16S	ATOM	36408	O2'	CYT	800	172.142	108.721	-39.356	1.00	28.52	A16S
ATOM	36356	C4	ADE	798	177.348	105.949	-34.563	1.00	25.08	A16S	ATOM	36409	C3'	CYT	800	169.794	108.963	-40.097	1.00	28.52	A16S
ATOM	36357	N3	ADE	798	177.196	107.217	-34.958	1.00	25.08	A16S	ATOM	36410	O3'	CYT	800	170.192	110.329	-40.212	1.00	28.52	A16S
ATOM	36358	C2	ADE	798	178.045	108.006	-34.308	1.00	25.08	A16S	ATOM	36411	P	GUA	801	169.281	111.370	-41.021	1.00	34.19	A16S
ATOM	36359	N1	ADE	798	178.951	107.689	-33.383	1.00	25.08	A16S	ATOM	36412	O1P	GUA	801	168.066	110.672	-41.529	1.00	45.50	A16S
ATOM	36360	C6	ADE	798	179.075	106.400	-33.022	1.00	25.08	A16S	ATOM	36413	O2P	GUA	801	170.130	112.127	-41.962	1.00	45.50	A16S
ATOM	36361	N6	ADE	798	179.971	106.076	-32.109	1.00	25.08	A16S	ATOM	36414	O5'	GUA	801	168.842	112.407	-39.902	1.00	34.19	A16S
ATOM	36362	C5	ADE	798	178.250	105.475	-33.630	1.00	25.08	A16S	ATOM	36415	C5'	GUA	801	169.785	113.331	-39.331	1.00	34.19	A16S
ATOM	36363	N7	ADE	798	178.143	104.105	-33.492	1.00	25.08	A16S	ATOM	36416	C4'	GUA	801	169.226	113.900	-38.053	1.00	34.19	A16S
ATOM	36364	C8	ADE	798	177.179	103.785	-34.323	1.00	25.08	A16S	ATOM	36417	O4'	GUA	801	167.928	114.496	-38.347	1.00	34.19	A16S
ATOM	36365	C2'	ADE	798	175.656	103.940	-37.135	1.00	36.74	A16S	ATOM	36418	C1'	GUA	801	166.958	113.938	-37.490	1.00	34.19	A16S
ATOM	36366	O2'	ADE	798	176.389	104.555	-38.175	1.00	36.74	A16S	ATOM	36419	N9	GUA	801	165.643	114.009	-38.109	1.00	45.50	A16S
ATOM	36367	C3'	ADE	798	174.192	103.722	-37.507	1.00	36.74	A16S	ATOM	36420	C4	GUA	801	164.519	114.555	-37.534	1.00	45.50	A16S
ATOM	36368	O3'	ADE	798	173.736	104.789	-38.327	1.00	36.74	A16S	ATOM	36421	N3	GUA	801	164.444	115.108	-36.301	1.00	45.50	A16S
ATOM	36369	P	ADE	799	173.588	104.576	-39.913	1.00	34.03	A16S	ATOM	36422	C2	GUA	801	163.228	115.540	-36.029	1.00	45.50	A16S
ATOM	36370	O1P	ADE	799	172.945	105.802	-40.462	1.00	24.35	A16S	ATOM	36423	N2	GUA	801	162.974	116.107	-34.845	1.00	45.50	A16S
ATOM	36371	O2P	ADE	799	174.901	104.129	-40.465	1.00	24.35	A16S	ATOM	36424	N1	GUA	801	162.175	115.443	-36.903	1.00	45.50	A16S
ATOM	36372	O5'	ADE	799	172.574	103.351	-40.041	1.00	34.03	A16S	ATOM	36425	C6	GUA	801	162.240	114.881	-38.177	1.00	45.50	A16S
ATOM	36373	C5'	ADE	799	171.188	103.490	-39.717	1.00	34.03	A16S	ATOM	36426	O6	GUA	801	161.234	114.846	-38.890	1.00	45.50	A16S
ATOM	36374	C4'	ADE	799	170.356	103.332	-40.963	1.00	34.03	A16S	ATOM	36427	C5	GUA	801	163.526	114.412	-38.471	1.00	45.50	A16S
ATOM	36375	O4'	ADE	799	170.586	102.030	-41.545	1.00	34.03	A16S	ATOM	36428	N7	GUA	801	164.011	113.791	-39.610	1.00	45.50	A16S
ATOM	36376	C1'	ADE	799	169.412	101.580	-42.187	1.00	34.03	A16S	ATOM	36429	C8	GUA	801	165.271	113.570	-39.349	1.00	45.50	A16S

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ATOM  36430  C2' GUA  801     167.485 112.560 -37.133  1.00 34.19      A16S
ATOM  36431  O2' GUA  801     166.799 112.079 -36.005  1.00 34.19      A16S
ATOM  36432  C3' GUA  801     168.973 112.876 -36.951  1.00 34.19      A16S
ATOM  36433  O3' GUA  801     169.160 113.545 -35.706  1.00 34.19      A16S
ATOM  36434  P   ADE  802     170.246 113.019 -34.644  1.00 38.29      A16S
ATOM  36435  O1P ADE  802     170.169 113.971 -33.500  1.00 28.82      A16S
ATOM  36436  O2P ADE  802     171.545 112.808 -35.326  1.00 28.82      A16S
ATOM  36437  O5' ADE  802     169.663 111.626 -34.146  1.00 38.29      A16S
ATOM  36438  C5' ADE  802     169.138 110.733 -35.112  1.00 38.29      A16S
ATOM  36439  C4' ADE  802     168.805 109.403 -34.523  1.00 38.29      A16S
ATOM  36440  O4' ADE  802     169.955 108.854 -33.865  1.00 38.29      A16S
ATOM  36441  C1' ADE  802     169.553 108.175 -32.717  1.00 38.29      A16S
ATOM  36442  N9  ADE  802     170.660 108.263 -31.771  1.00 28.82      A16S
ATOM  36443  C4  ADE  802     171.036 107.315 -30.853  1.00 28.82      A16S
ATOM  36444  N3  ADE  802     170.455 106.129 -30.628  1.00 28.82      A16S
ATOM  36445  C2  ADE  802     171.101 105.472 -29.663  1.00 28.82      A16S
ATOM  36446  N1  ADE  802     172.177 105.841 -28.957  1.00 28.82      A16S
ATOM  36447  C6  ADE  802     172.735 107.039 -29.214  1.00 28.82      A16S
ATOM  36448  N6  ADE  802     173.816 107.399 -28.513  1.00 28.82      A16S
ATOM  36449  C5  ADE  802     172.144 107.831 -30.210  1.00 28.82      A16S
ATOM  36450  N7  ADE  802     172.457 109.082 -30.710  1.00 28.82      A16S
ATOM  36451  C8  ADE  802     171.549 109.291 -31.632  1.00 28.82      A16S
ATOM  36452  C2' ADE  802     168.248 108.835 -32.273  1.00 38.29      A16S
ATOM  36453  O2' ADE  802     167.470 107.869 -31.591  1.00 38.29      A16S
ATOM  36454  C3' ADE  802     167.612 109.254 -33.602  1.00 38.29      A16S
ATOM  36455  O3' ADE  802     166.802 108.227 -34.161  1.00 38.29      A16S
ATOM  36456  P   URI  803     165.715 108.596 -35.292  1.00 31.64      A16S
ATOM  36457  O1P URI  803     165.081 107.334 -35.738  1.00 34.95      A16S
ATOM  36458  O2P URI  803     166.274 109.511 -36.304  1.00 34.95      A16S
ATOM  36459  O5' URI  803     164.658 109.475 -34.494  1.00 31.64      A16S
ATOM  36460  C5' URI  803     163.657 108.879 -33.642  1.00 31.64      A16S
ATOM  36461  C4' URI  803     162.555 109.876 -33.384  1.00 31.64      A16S
ATOM  36462  O4' URI  803     163.099 111.006 -32.660  1.00 31.64      A16S
ATOM  36463  C1' URI  803     162.847 112.189 -33.377  1.00 31.64      A16S
ATOM  36464  N1  URI  803     163.937 113.136 -33.107  1.00 34.95      A16S
ATOM  36465  C6  URI  803     165.197 112.964 -33.628  1.00 34.95      A16S
ATOM  36466  C2  URI  803     163.653 114.207 -32.297  1.00 34.95      A16S
ATOM  36467  O2  URI  803     162.555 114.403 -31.819  1.00 34.95      A16S
ATOM  36468  N3  URI  803     164.710 115.044 -32.063  1.00 34.95      A16S
ATOM  36469  C4  URI  803     165.985 114.924 -32.548  1.00 34.95      A16S
ATOM  36470  O4  URI  803     166.828 115.756 -32.233  1.00 34.95      A16S
ATOM  36471  C5  URI  803     166.200 113.802 -33.382  1.00 34.95      A16S
ATOM  36472  C2' URI  803     162.658 111.761 -34.827  1.00 31.64      A16S
ATOM  36473  O2' URI  803     161.861 112.682 -35.525  1.00 31.64      A16S
ATOM  36474  C3' URI  803     161.925 110.444 -34.648  1.00 31.64      A16S
ATOM  36475  O3' URI  803     160.575 110.790 -34.400  1.00 31.64      A16S
ATOM  36476  P   GUA  804     159.471 109.645 -34.207  1.00 29.54      A16S
ATOM  36477  O1P GUA  804     158.392 110.252 -33.372  1.00 34.53      A16S
ATOM  36478  O2P GUA  804     160.152 108.397 -33.743  1.00 34.53      A16S
ATOM  36479  O5' GUA  804     158.891 109.418 -35.668  1.00 29.54      A16S
ATOM  36480  C5' GUA  804     159.480 108.465 -36.516  1.00 29.54      A16S
ATOM  36481  C4' GUA  804     158.418 107.661 -37.193  1.00 29.54      A16S
ATOM  36482  O4' GUA  804     157.739 106.811 -36.241  1.00 29.54      A16S
ATOM  36483  C1' GUA  804     156.390 106.642 -36.646  1.00 29.54      A16S
ATOM  36484  N9  GUA  804     155.524 107.132 -35.582  1.00 34.53      A16S
ATOM  36485  C4  GUA  804     154.159 107.043 -35.541  1.00 34.53      A16S
ATOM  36486  N3  GUA  804     153.378 106.483 -36.476  1.00 34.53      A16S
ATOM  36487  C2  GUA  804     152.105 106.577 -36.173  1.00 34.53      A16S
ATOM  36488  N2  GUA  804     151.186 106.119 -37.017  1.00 34.53      A16S
ATOM  36489  N1  GUA  804     151.633 107.139 -35.029  1.00 34.53      A16S
ATOM  36490  C6  GUA  804     152.416 107.715 -34.044  1.00 34.53      A16S
ATOM  36491  O6  GUA  804     151.883 108.194 -33.034  1.00 34.53      A16S
ATOM  36492  C5  GUA  804     153.789 107.653 -34.373  1.00 34.53      A16S
ATOM  36493  N7  GUA  804     154.902 108.122 -33.689  1.00 34.53      A16S
ATOM  36494  C8  GUA  804     155.907 107.785 -34.441  1.00 34.53      A16S
ATOM  36495  C2' GUA  804     156.187 107.441 -37.933  1.00 29.54      A16S
ATOM  36496  O2' GUA  804     156.323 106.591 -39.050  1.00 29.54      A16S
ATOM  36497  C3' GUA  804     157.308 108.459 -37.837  1.00 29.54      A16S
ATOM  36498  O3' GUA  804     157.690 108.969 -39.091  1.00 29.54      A16S
ATOM  36499  P   CYT  805     157.233 110.441 -39.498  1.00 32.79      A16S
ATOM  36500  O1P CYT  805     158.055 110.914 -40.632  1.00 40.76      A16S
ATOM  36501  O2P CYT  805     157.145 111.260 -38.268  1.00 40.76      A16S
ATOM  36502  O5' CYT  805     155.768 110.201 -40.048  1.00 32.79      A16S
ATOM  36503  C5' CYT  805     155.555 109.328 -41.159  1.00 32.79      A16S
ATOM  36504  C4' CYT  805     154.084 109.082 -41.351  1.00 32.79      A16S
ATOM  36505  O4' CYT  805     153.546 108.317 -40.237  1.00 32.79      A16S
ATOM  36506  C1' CYT  805     152.212 108.728 -39.978  1.00 32.79      A16S
ATOM  36507  N1  CYT  805     152.134 109.290 -38.621  1.00 40.76      A16S
ATOM  36508  C6  CYT  805     153.254 109.724 -37.971  1.00 40.76      A16S
ATOM  36509  C2  CYT  805     150.887 109.375 -38.004  1.00 40.76      A16S
ATOM  36510  O2  CYT  805     149.887 108.970 -38.608  1.00 40.76      A16S
ATOM  36511  N3  CYT  805     150.798 109.893 -36.768  1.00 40.76      A16S
ATOM  36512  C4  CYT  805     151.892 110.312 -36.143  1.00 40.76      A16S
ATOM  36513  N4  CYT  805     151.751 110.816 -34.927  1.00 40.76      A16S
ATOM  36514  C5  CYT  805     153.179 110.232 -36.741  1.00 40.76      A16S
ATOM  36515  C2' CYT  805     151.852 109.768 -41.029  1.00 32.79      A16S
ATOM  36516  O2' CYT  805     151.285 109.100 -42.135  1.00 32.79      A16S
ATOM  36517  C3' CYT  805     153.222 110.322 -41.362  1.00 32.79      A16S
ATOM  36518  O3' CYT  805     153.257 111.015 -42.573  1.00 32.79      A16S
ATOM  36519  P   GUA  806     153.062 112.598 -42.544  1.00 44.21      A16S
ATOM  36520  O1P GUA  806     153.395 113.094 -43.907  1.00 34.08      A16S
ATOM  36521  O2P GUA  806     153.817 113.105 -41.362  1.00 34.08      A16S
ATOM  36522  O5' GUA  806     151.498 112.764 -42.278  1.00 44.21      A16S
ATOM  36523  C5' GUA  806     150.549 112.048 -43.097  1.00 44.21      A16S
ATOM  36524  C4' GUA  806     149.135 112.297 -42.636  1.00 44.21      A16S
ATOM  36525  O4' GUA  806     148.855 111.562 -41.418  1.00 44.21      A16S
ATOM  36526  C1' GUA  806     147.926 112.291 -40.626  1.00 44.21      A16S
ATOM  36527  N9  GUA  806     148.539 112.603 -39.337  1.00 34.08      A16S
ATOM  36528  C4  GUA  806     147.880 112.806 -38.150  1.00 34.08      A16S
ATOM  36529  N3  GUA  806     146.550 112.747 -37.964  1.00 34.08      A16S
ATOM  36530  C2  GUA  806     146.218 112.981 -36.705  1.00 34.08      A16S
ATOM  36531  N2  GUA  806     144.927 112.965 -36.340  1.00 34.08      A16S
ATOM  36532  N1  GUA  806     147.121 113.250 -35.715  1.00 34.08      A16S
ATOM  36533  C6  GUA  806     148.491 113.317 -35.889  1.00 34.08      A16S
ATOM  36534  O6  GUA  806     149.213 113.569 -34.928  1.00 34.08      A16S
ATOM  36535  C5  GUA  806     148.860 113.069 -37.228  1.00 34.08      A16S
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ATOM	36536	N7	GUA	806	150.111	113.035	-37.818	1.00	34.08	A16S	ATOM	36589	C5'	CYT	809	143.902	126.339	-36.216	1.00	36.27	A16S
ATOM	36537	C8	GUA	806	149.873	112.758	-39.068	1.00	34.08	A16S	ATOM	36590	C4'	CYT	809	144.388	126.475	-34.801	1.00	36.27	A16S
ATOM	36538	C2'	GUA	806	147.571	113.561	-41.392	1.00	44.21	A16S	ATOM	36591	O4'	CYT	809	144.815	125.186	-34.314	1.00	36.27	A16S
ATOM	36539	O2'	GUA	806	146.398	113.342	-42.147	1.00	44.21	A16S	ATOM	36592	C1'	CYT	809	145.916	125.347	-33.437	1.00	36.27	A16S
ATOM	36540	C3'	GUA	806	148.788	113.728	-42.285	1.00	44.21	A16S	ATOM	36593	N1	CYT	809	147.072	124.603	-33.986	1.00	34.77	A16S
ATOM	36541	O3'	GUA	806	148.513	114.546	-43.400	1.00	44.21	A16S	ATOM	36594	C6	CYT	809	147.069	124.137	-35.273	1.00	34.77	A16S
ATOM	36542	P	CYT	807	148.753	116.127	-43.269	1.00	44.25	A16S	ATOM	36595	C2	CYT	809	148.191	124.394	-33.163	1.00	34.77	A16S
ATOM	36543	O1P	CYT	807	148.554	116.781	-44.601	1.00	34.98	A16S	ATOM	36596	O2	CYT	809	148.156	124.792	-31.995	1.00	34.77	A16S
ATOM	36544	O2P	CYT	807	150.031	116.307	-42.535	1.00	34.98	A16S	ATOM	36597	N3	CYT	809	149.269	123.764	-33.662	1.00	34.77	A16S
ATOM	36545	O5'	CYT	807	147.579	116.593	-42.309	1.00	44.25	A16S	ATOM	36598	C4	CYT	809	149.261	123.336	-34.921	1.00	34.77	A16S
ATOM	36546	C5'	CYT	807	146.219	116.471	-42.731	1.00	44.25	A16S	ATOM	36599	N4	CYT	809	150.351	122.735	-35.374	1.00	34.77	A16S
ATOM	36547	C4'	CYT	807	145.307	116.958	-41.654	1.00	44.25	A16S	ATOM	36600	C5	CYT	809	148.130	123.507	-35.773	1.00	34.77	A16S
ATOM	36548	O4'	CYT	807	145.349	116.047	-40.532	1.00	44.25	A16S	ATOM	36601	C2'	CYT	809	146.189	126.844	-33.305	1.00	36.27	A16S
ATOM	36549	C1'	CYT	807	145.167	116.770	-39.332	1.00	44.25	A16S	ATOM	36602	O2'	CYT	809	145.532	127.335	-32.157	1.00	36.27	A16S
ATOM	36550	N1	CYT	807	146.348	116.592	-38.486	1.00	34.98	A16S	ATOM	36603	C3'	CYT	809	145.584	127.382	-34.594	1.00	36.27	A16S
ATOM	36551	C6	CYT	807	147.593	116.424	-39.026	1.00	34.98	A16S	ATOM	36604	O3'	CYT	809	145.175	128.731	-34.462	1.00	36.27	A16S
ATOM	36552	C2	CYT	807	146.180	116.631	-37.104	1.00	34.98	A16S	ATOM	36605	P	URI	810	146.215	129.906	-34.776	1.00	38.06	A16S
ATOM	36553	O2	CYT	807	145.026	116.738	-36.643	1.00	34.98	A16S	ATOM	36606	O1P	URI	810	145.474	131.176	-34.580	1.00	43.00	A16S
ATOM	36554	N3	CYT	807	147.270	116.547	-36.301	1.00	34.98	A16S	ATOM	36607	O2P	URI	810	146.846	129.618	-36.087	1.00	43.00	A16S
ATOM	36555	C4	CYT	807	148.484	116.423	-36.839	1.00	34.98	A16S	ATOM	36608	O5'	URI	810	147.327	129.779	-33.640	1.00	38.06	A16S
ATOM	36556	N4	CYT	807	149.526	116.392	-36.014	1.00	34.98	A16S	ATOM	36609	C5'	URI	810	147.153	130.444	-32.381	1.00	38.06	A16S
ATOM	36557	C5	CYT	807	148.679	116.339	-38.247	1.00	34.98	A16S	ATOM	36610	C4'	URI	810	148.378	130.286	-31.513	1.00	38.06	A16S
ATOM	36558	C2'	CYT	807	144.990	118.240	-39.702	1.00	44.25	A16S	ATOM	36611	O4'	URI	810	148.673	128.882	-31.356	1.00	38.06	A16S
ATOM	36559	O2'	CYT	807	143.612	118.514	-39.822	1.00	44.25	A16S	ATOM	36612	C1'	URI	810	150.061	128.690	-31.214	1.00	38.06	A16S
ATOM	36560	C3'	CYT	807	145.683	118.295	-41.051	1.00	44.25	A16S	ATOM	36613	N1	URI	810	150.517	127.828	-32.314	1.00	43.00	A16S
ATOM	36561	O3'	CYT	807	145.224	119.365	-41.842	1.00	44.25	A16S	ATOM	36614	C6	URI	810	149.683	127.504	-33.349	1.00	43.00	A16S
ATOM	36562	P	GUA	808	145.870	120.818	-41.648	1.00	35.78	A16S	ATOM	36615	C2	URI	810	151.815	127.355	-32.273	1.00	43.00	A16S
ATOM	36563	O1P	GUA	808	145.302	121.665	-42.737	1.00	35.73	A16S	ATOM	36616	O2	URI	810	152.594	127.623	-31.370	1.00	43.00	A16S
ATOM	36564	O2P	GUA	808	147.335	120.676	-41.514	1.00	35.73	A16S	ATOM	36617	N3	URI	810	152.171	126.567	-33.331	1.00	43.00	A16S
ATOM	36565	O5'	GUA	808	145.272	121.306	-40.254	1.00	35.78	A16S	ATOM	36618	C4	URI	810	151.389	126.224	-34.401	1.00	43.00	A16S
ATOM	36566	C5'	GUA	808	143.861	121.512	-40.115	1.00	35.78	A16S	ATOM	36619	O4	URI	810	151.899	125.645	-35.354	1.00	43.00	A16S
ATOM	36567	C4'	GUA	808	143.534	121.924	-38.718	1.00	35.78	A16S	ATOM	36620	C5	URI	810	150.063	126.739	-34.360	1.00	43.00	A16S
ATOM	36568	O4'	GUA	808	143.811	120.837	-37.804	1.00	35.78	A16S	ATOM	36621	C2'	URI	810	150.703	130.070	-31.216	1.00	38.06	A16S
ATOM	36569	C1'	GUA	808	144.217	121.363	-36.555	1.00	35.78	A16S	ATOM	36622	O2'	URI	810	150.766	130.509	-29.876	1.00	38.06	A16S
ATOM	36570	N9	GUA	808	145.540	120.832	-36.222	1.00	35.73	A16S	ATOM	36623	C3'	URI	810	149.683	130.879	-31.996	1.00	38.06	A16S
ATOM	36571	C4	GUA	808	146.169	120.899	-34.994	1.00	35.73	A16S	ATOM	36624	O3'	URI	810	149.777	132.233	-31.621	1.00	38.06	A16S
ATOM	36572	N3	GUA	808	145.659	121.436	-33.867	1.00	35.73	A16S	ATOM	36625	P	ADE	811	150.020	133.345	-32.741	1.00	44.59	A16S
ATOM	36573	C2	GUA	808	146.514	121.385	-32.866	1.00	35.73	A16S	ATOM	36626	O1P	ADE	811	150.154	134.620	-31.972	1.00	47.18	A16S
ATOM	36574	N2	GUA	808	146.173	121.879	-31.683	1.00	35.73	A16S	ATOM	36627	O2P	ADE	811	148.968	133.206	-33.795	1.00	47.18	A16S
ATOM	36575	N1	GUA	808	147.763	120.849	-32.952	1.00	35.73	A16S	ATOM	36628	O5'	ADE	811	151.419	132.979	-33.415	1.00	44.59	A16S
ATOM	36576	C6	GUA	808	148.310	120.285	-34.096	1.00	35.73	A16S	ATOM	36629	C5'	ADE	811	152.656	133.208	-32.725	1.00	44.59	A16S
ATOM	36577	O6	GUA	808	149.457	119.825	-34.067	1.00	35.73	A16S	ATOM	36630	C4'	ADE	811	153.078	134.649	-32.876	1.00	44.59	A16S
ATOM	36578	C5	GUA	808	147.405	120.334	-35.187	1.00	35.73	A16S	ATOM	36631	O4'	ADE	811	154.081	134.946	-31.878	1.00	44.59	A16S
ATOM	36579	N7	GUA	808	147.550	119.899	-36.494	1.00	35.73	A16S	ATOM	36632	C1'	ADE	811	154.961	135.935	-32.367	1.00	44.59	A16S
ATOM	36580	C8	GUA	808	146.418	120.204	-37.067	1.00	35.73	A16S	ATOM	36633	N9	ADE	811	156.299	135.364	-32.426	1.00	47.18	A16S
ATOM	36581	C2'	GUA	808	144.220	122.894	-36.686	1.00	35.78	A16S	ATOM	36634	C4	ADE	811	157.448	135.967	-31.994	1.00	47.18	A16S
ATOM	36582	O2'	GUA	808	143.001	123.442	-36.230	1.00	35.78	A16S	ATOM	36635	N3	ADE	811	157.564	137.177	-31.430	1.00	47.18	A16S
ATOM	36583	C3'	GUA	808	144.342	123.082	-38.184	1.00	35.78	A16S	ATOM	36636	C2	ADE	811	158.835	137.432	-31.130	1.00	47.18	A16S
ATOM	36584	O3'	GUA	808	143.782	124.316	-38.579	1.00	35.78	A16S	ATOM	36637	N1	ADE	811	159.921	136.674	-31.318	1.00	47.18	A16S
ATOM	36585	P	CYT	809	144.700	125.635	-38.620	1.00	36.27	A16S	ATOM	36638	C6	ADE	811	159.766	135.467	-31.898	1.00	47.18	A16S
ATOM	36586	O1P	CYT	809	143.814	126.663	-39.196	1.00	34.77	A16S	ATOM	36639	N6	ADE	811	160.846	134.715	-32.097	1.00	47.18	A16S
ATOM	36587	O2P	CYT	809	146.007	125.344	-39.274	1.00	34.77	A16S	ATOM	36640	C5	ADE	811	158.465	135.076	-32.261	1.00	47.18	A16S
ATOM	36588	O5'	CYT	809	144.983	125.975	-37.088	1.00	36.27	A16S	ATOM	36641	N7	ADE	811	157.964	133.926	-32.856	1.00	47.18	A16S

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ATOM  36642  C8  ADE  811     156.678 134.146 -32.927  1.00 47.18      A16S
ATOM  36643  C2' ADE  811     154.483 136.332 -33.756  1.00 44.59      A16S
ATOM  36644  O2' ADE  811     153.653 137.467 -33.652  1.00 44.59      A16S
ATOM  36645  C3' ADE  811     153.715 135.092 -34.185  1.00 44.59      A16S
ATOM  36646  O3' ADE  811     152.792 135.424 -35.210  1.00 44.59      A16S
ATOM  36647  P   GUA  812     153.337 135.742 -36.695  1.00 44.82      A16S
ATOM  36648  O1P GUA  812     152.191 136.221 -37.495  1.00 42.32      A16S
ATOM  36649  O2P GUA  812     154.133 134.585 -37.170  1.00 42.32      A16S
ATOM  36650  O5' GUA  812     154.321 136.975 -36.490  1.00 44.82      A16S
ATOM  36651  C5' GUA  812     155.415 137.223 -37.385  1.00 44.82      A16S
ATOM  36652  C4' GUA  812     156.546 137.874 -36.629  1.00 44.82      A16S
ATOM  36653  O4' GUA  812     156.893 137.020 -35.512  1.00 44.82      A16S
ATOM  36654  C1' GUA  812     158.298 136.943 -35.380  1.00 44.82      A16S
ATOM  36655  N9  GUA  812     158.694 135.578 -35.721  1.00 42.32      A16S
ATOM  36656  C4  GUA  812     159.946 135.029 -35.578  1.00 42.32      A16S
ATOM  36657  N3  GUA  812     161.033 135.660 -35.096  1.00 42.32      A16S
ATOM  36658  C2  GUA  812     162.094 134.885 -35.095  1.00 42.32      A16S
ATOM  36659  N2  GUA  812     163.261 135.377 -34.675  1.00 42.32      A16S
ATOM  36660  N1  GUA  812     162.091 133.579 -35.510  1.00 42.32      A16S
ATOM  36661  C6  GUA  812     160.982 132.899 -35.998  1.00 42.32      A16S
ATOM  36662  O6  GUA  812     161.080 131.707 -36.319  1.00 42.32      A16S
ATOM  36663  C5  GUA  812     159.835 133.735 -36.037  1.00 42.32      A16S
ATOM  36664  N7  GUA  812     158.542 133.475 -36.472  1.00 42.32      A16S
ATOM  36665  C8  GUA  812     157.900 134.592 -36.259  1.00 42.32      A16S
ATOM  36666  C2' GUA  812     158.903 137.970 -36.339  1.00 44.82      A16S
ATOM  36667  O2' GUA  812     159.089 139.196 -35.672  1.00 44.82      A16S
ATOM  36668  C3' GUA  812     157.833 138.030 -37.416  1.00 44.82      A16S
ATOM  36669  O3' GUA  812     157.855 139.224 -38.172  1.00 44.82      A16S
ATOM  36670  P   GUA  813     158.435 139.192 -39.672  1.00 51.64      A16S
ATOM  36671  O1P GUA  813     158.142 140.517 -40.269  1.00 50.78      A16S
ATOM  36672  O2P GUA  813     157.971 137.950 -40.366  1.00 50.78      A16S
ATOM  36673  O5' GUA  813     159.999 139.102 -39.432  1.00 51.64      A16S
ATOM  36674  C5' GUA  813     160.636 140.104 -38.664  1.00 51.64      A16S
ATOM  36675  C4' GUA  813     162.047 139.708 -38.360  1.00 51.64      A16S
ATOM  36676  O4' GUA  813     162.059 138.553 -37.484  1.00 51.64      A16S
ATOM  36677  C1' GUA  813     163.226 137.788 -37.726  1.00 51.64      A16S
ATOM  36678  N9  GUA  813     162.818 136.459 -38.162  1.00 50.78      A16S
ATOM  36679  C4  GUA  813     163.616 135.347 -38.236  1.00 50.78      A16S
ATOM  36680  N3  GUA  813     164.905 135.278 -37.864  1.00 50.78      A16S
ATOM  36681  C2  GUA  813     165.415 134.086 -38.094  1.00 50.78      A16S
ATOM  36682  N2  GUA  813     166.690 133.840 -37.787  1.00 50.78      A16S
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ATOM	36873	O2	URI	822	148.971	145.114	-56.323	1.00128.72	A16S	ATOM	36926	C5'	CYT	825	159.209	144.734	-49.097	1.00160.58	A16S
ATOM	36874	N3	URI	822	147.654	143.398	-55.650	1.00128.72	A16S	ATOM	36927	C4'	CYT	825	157.892	144.236	-49.647	1.00160.58	A16S
ATOM	36875	C4	URI	822	147.025	142.181	-55.796	1.00128.72	A16S	ATOM	36928	O4'	CYT	825	157.946	144.207	-51.100	1.00160.58	A16S
ATOM	36876	O4	URI	822	146.301	141.762	-54.889	1.00128.72	A16S	ATOM	36929	C1'	CYT	825	157.109	143.169	-51.585	1.00160.58	A16S
ATOM	36877	C5	URI	822	147.272	141.528	-57.048	1.00128.72	A16S	ATOM	36930	N1	CYT	825	157.905	142.221	-52.392	1.00113.96	A16S
ATOM	36878	C2'	URI	822	150.768	144.617	-58.347	1.00109.09	A16S	ATOM	36931	C6	CYT	825	159.157	141.825	-52.002	1.00113.96	A16S
ATOM	36879	O2'	URI	822	150.937	145.875	-58.966	1.00109.09	A16S	ATOM	36932	C2	CYT	825	157.339	141.708	-53.565	1.00113.96	A16S
ATOM	36880	C3'	URI	822	151.805	143.608	-58.813	1.00109.09	A16S	ATOM	36933	O2	CYT	825	156.212	142.104	-53.911	1.00113.96	A16S
ATOM	36881	O3'	URI	822	153.046	144.254	-59.079	1.00109.09	A16S	ATOM	36934	N3	CYT	825	158.033	140.797	-54.295	1.00113.96	A16S
ATOM	36882	P	CYT	823	153.904	144.870	-57.867	1.00139.50	A16S	ATOM	36935	C4	CYT	825	159.247	140.411	-53.898	1.00113.96	A16S
ATOM	36883	O1P	CYT	823	152.998	145.131	-56.718	1.00106.46	A16S	ATOM	36936	N4	CYT	825	159.890	139.514	-54.645	1.00113.96	A16S
ATOM	36884	O2P	CYT	823	154.693	145.983	-58.441	1.00106.46	A16S	ATOM	36937	C5	CYT	825	159.855	140.929	-52.718	1.00113.96	A16S
ATOM	36885	O5'	CYT	823	154.892	143.690	-57.454	1.00139.50	A16S	ATOM	36938	C2'	CYT	825	156.475	142.479	-50.379	1.00160.58	A16S
ATOM	36886	C5'	CYT	823	155.867	143.857	-56.398	1.00139.50	A16S	ATOM	36939	O2'	CYT	825	155.190	143.021	-50.154	1.00160.58	A16S
ATOM	36887	C4'	CYT	823	157.209	143.331	-56.853	1.00139.50	A16S	ATOM	36940	C3'	CYT	825	157.465	142.825	-49.274	1.00160.58	A16S
ATOM	36888	O4'	CYT	823	157.017	141.951	-57.246	1.00139.50	A16S	ATOM	36941	O3'	CYT	825	156.862	142.745	-47.994	1.00160.58	A16S
ATOM	36889	C1'	CYT	823	157.719	141.688	-58.439	1.00139.50	A16S	ATOM	36942	P	CYT	826	156.652	141.304	-47.309	1.00122.30	A16S
ATOM	36890	N1	CYT	823	156.753	141.152	-59.415	1.00106.46	A16S	ATOM	36943	O1P	CYT	826	156.273	141.567	-45.894	1.00 75.97	A16S
ATOM	36891	C6	CYT	823	155.577	141.803	-59.663	1.00106.46	A16S	ATOM	36944	O2P	CYT	826	157.838	140.441	-47.601	1.00 75.97	A16S
ATOM	36892	C2	CYT	823	157.040	139.936	-60.067	1.00106.46	A16S	ATOM	36945	O5'	CYT	826	155.392	140.695	-48.080	1.00122.30	A16S
ATOM	36893	O2	CYT	823	158.130	139.377	-59.861	1.00106.46	A16S	ATOM	36946	C5'	CYT	826	154.116	141.359	-48.041	1.00122.30	A16S
ATOM	36894	N3	CYT	823	156.119	139.403	-60.906	1.00106.46	A16S	ATOM	36947	C4'	CYT	826	153.122	140.684	-48.964	1.00122.30	A16S
ATOM	36895	C4	CYT	823	154.962	140.036	-61.114	1.00106.46	A16S	ATOM	36948	O4'	CYT	826	153.532	140.818	-50.351	1.00122.30	A16S
ATOM	36896	N4	CYT	823	154.069	139.458	-61.926	1.00106.46	A16S	ATOM	36949	C1'	CYT	826	153.034	139.717	-51.100	1.00122.30	A16S
ATOM	36897	C5	CYT	823	154.663	141.285	-60.493	1.00106.46	A16S	ATOM	36950	N1	CYT	826	154.148	139.030	-51.788	1.00 75.97	A16S
ATOM	36898	C2'	CYT	823	158.500	142.947	-58.837	1.00139.50	A16S	ATOM	36951	C6	CYT	826	155.440	139.133	-51.343	1.00 75.97	A16S
ATOM	36899	O2'	CYT	823	159.849	142.813	-58.427	1.00139.50	A16S	ATOM	36952	C2	CYT	826	153.849	138.245	-52.914	1.00 75.97	A16S
ATOM	36900	C3'	CYT	823	157.758	144.051	-58.081	1.00139.50	A16S	ATOM	36953	O2	CYT	826	152.672	138.179	-53.310	1.00 75.97	A16S
ATOM	36901	O3'	CYT	823	158.701	145.095	-57.748	1.00139.50	A16S	ATOM	36954	N3	CYT	826	154.847	137.583	-53.540	1.00 75.97	A16S
ATOM	36902	P	URI	824	158.444	146.088	-56.494	1.00200.42	A16S	ATOM	36955	C4	CYT	826	156.100	137.686	-53.095	1.00 75.97	A16S
ATOM	36903	O1P	URI	824	156.997	146.413	-56.395	1.00201.09	A16S	ATOM	36956	N4	CYT	826	157.046	137.017	-53.751	1.00 75.97	A16S
ATOM	36904	O2P	URI	824	159.430	147.193	-56.605	1.00201.09	A16S	ATOM	36957	C5	CYT	826	156.436	138.483	-51.960	1.00 75.97	A16S
ATOM	36905	O5'	URI	824	158.848	145.203	-55.230	1.00200.42	A16S	ATOM	36958	C2'	CYT	826	152.303	138.783	-50.135	1.00122.30	A16S
ATOM	36906	C5'	URI	824	159.202	145.800	-53.961	1.00200.42	A16S	ATOM	36959	O2'	CYT	826	150.909	139.002	-50.226	1.00122.30	A16S

ATOM	36960	C3'	CYT	826	152.901	139.191	-48.793	1.00122.30	A16S	ATOM	37013	N9	GUA	829	156.234	125.589	-51.212	1.00	50.21	A16S
ATOM	36961	O3'	CYT	826	152.030	138.878	-47.721	1.00122.30	A16S	ATOM	37014	C4	GUA	829	157.531	125.959	-51.499	1.00	50.21	A16S
ATOM	36962	P	URI	827	152.167	137.454	-46.996	1.00 71.69	A16S	ATOM	37015	N3	GUA	829	158.429	125.229	-52.192	1.00	50.21	A16S
ATOM	36963	O1P	URI	827	151.189	137.391	-45.879	1.00 78.92	A16S	ATOM	37016	C2	GUA	829	159.601	125.842	-52.282	1.00	50.21	A16S
ATOM	36964	O2P	URI	827	153.606	137.242	-46.716	1.00 78.92	A16S	ATOM	37017	N2	GUA	829	160.615	125.254	-52.929	1.00	50.21	A16S
ATOM	36965	O5'	URI	827	151.721	136.422	-48.123	1.00 71.69	A16S	ATOM	37018	N1	GUA	829	159.868	127.073	-51.740	1.00	50.21	A16S
ATOM	36966	C5'	URI	827	150.376	136.415	-48.633	1.00 71.69	A16S	ATOM	37019	C6	GUA	829	158.966	127.843	-51.018	1.00	50.21	A16S
ATOM	36967	C4'	URI	827	150.253	135.434	-49.774	1.00 71.69	A16S	ATOM	37020	O6	GUA	829	159.325	128.938	-50.552	1.00	50.21	A16S
ATOM	36968	O4'	URI	827	151.107	135.864	-50.871	1.00 71.69	A16S	ATOM	37021	C5	GUA	829	157.696	127.198	-50.914	1.00	50.21	A16S
ATOM	36969	C1'	URI	827	151.587	134.729	-51.573	1.00 71.69	A16S	ATOM	37022	N7	GUA	829	156.525	127.606	-50.285	1.00	50.21	A16S
ATOM	36970	N1	URI	827	153.060	134.722	-51.559	1.00 78.92	A16S	ATOM	37023	C8	GUA	829	155.687	126.625	-50.491	1.00	50.21	A16S
ATOM	36971	C6	URI	827	153.797	135.328	-50.561	1.00 78.92	A16S	ATOM	37024	C2'	GUA	829	156.069	123.211	-50.663	1.00	58.28	A16S
ATOM	36972	C2	URI	827	153.693	134.058	-52.600	1.00 78.92	A16S	ATOM	37025	O2'	GUA	829	156.068	121.974	-51.345	1.00	58.28	A16S
ATOM	36973	O2	URI	827	153.086	133.508	-53.506	1.00 78.92	A16S	ATOM	37026	C3'	GUA	829	155.023	123.257	-49.565	1.00	58.28	A16S
ATOM	36974	N3	URI	827	155.064	134.056	-52.543	1.00 78.92	A16S	ATOM	37027	O3'	GUA	829	154.981	122.043	-48.853	1.00	58.28	A16S
ATOM	36975	C4	URI	827	155.856	134.629	-51.580	1.00 78.92	A16S	ATOM	37028	P	GUA	830	155.768	121.937	-47.460	1.00	45.45	A16S
ATOM	36976	O4	URI	827	157.080	134.511	-51.666	1.00 78.92	A16S	ATOM	37029	O1P	GUA	830	155.411	120.622	-46.874	1.00	50.61	A16S
ATOM	36977	C5	URI	827	155.137	135.304	-50.536	1.00 78.92	A16S	ATOM	37030	O2P	GUA	830	155.495	123.181	-46.696	1.00	50.61	A16S
ATOM	36978	C2'	URI	827	151.012	133.484	-50.900	1.00 71.69	A16S	ATOM	37031	O5'	GUA	830	157.322	121.980	-47.849	1.00	45.45	A16S
ATOM	36979	O2'	URI	827	149.868	133.045	-51.610	1.00 71.69	A16S	ATOM	37032	C5'	GUA	830	157.937	120.883	-48.551	1.00	45.45	A16S
ATOM	36980	C3'	URI	827	150.701	134.005	-49.501	1.00 71.69	A16S	ATOM	37033	C4'	GUA	830	159.380	121.189	-48.937	1.00	45.45	A16S
ATOM	36981	O3'	URI	827	149.726	133.205	-48.840	1.00 71.69	A16S	ATOM	37034	O4'	GUA	830	159.465	122.344	-49.808	1.00	45.45	A16S
ATOM	36982	P	GUA	828	150.206	132.002	-47.878	1.00 72.99	A16S	ATOM	37035	C1'	GUA	830	160.779	122.871	-49.755	1.00	45.45	A16S
ATOM	36983	O1P	GUA	828	148.980	131.453	-47.244	1.00 53.79	A16S	ATOM	37036	N9	GUA	830	160.718	124.276	-49.394	1.00	50.61	A16S
ATOM	36984	O2P	GUA	828	151.322	132.491	-47.018	1.00 53.79	A16S	ATOM	37037	C4	GUA	830	161.762	125.164	-49.422	1.00	50.61	A16S
ATOM	36985	O5'	GUA	828	150.778	130.884	-48.871	1.00 72.99	A16S	ATOM	37038	N3	GUA	830	163.026	124.892	-49.809	1.00	50.61	A16S
ATOM	36986	C5'	GUA	828	149.867	130.052	-49.616	1.00 72.99	A16S	ATOM	37039	C2	GUA	830	163.817	125.946	-49.692	1.00	50.61	A16S
ATOM	36987	C4'	GUA	828	150.589	128.989	-50.431	1.00 72.99	A16S	ATOM	37040	N2	GUA	830	165.106	125.845	-50.026	1.00	50.61	A16S
ATOM	36988	O4'	GUA	828	151.227	129.548	-51.609	1.00 72.99	A16S	ATOM	37041	N1	GUA	830	163.400	127.175	-49.234	1.00	50.61	A16S
ATOM	36989	C1'	GUA	828	152.247	128.668	-52.042	1.00 72.99	A16S	ATOM	37042	C6	GUA	830	162.096	127.478	-48.829	1.00	50.61	A16S
ATOM	36990	N9	GUA	828	153.523	129.375	-52.077	1.00 53.79	A16S	ATOM	37043	O6	GUA	830	161.810	128.624	-48.416	1.00	50.61	A16S
ATOM	36991	C4	GUA	828	154.651	128.998	-52.786	1.00 53.79	A16S	ATOM	37044	C5	GUA	830	161.242	126.351	-48.952	1.00	50.61	A16S
ATOM	36992	N3	GUA	828	154.758	127.932	-53.612	1.00 53.79	A16S	ATOM	37045	N7	GUA	830	159.896	126.213	-48.651	1.00	50.61	A16S
ATOM	36993	C2	GUA	828	155.978	127.813	-54.111	1.00 53.79	A16S	ATOM	37046	C8	GUA	830	159.629	124.969	-48.937	1.00	50.61	A16S
ATOM	36994	N2	GUA	828	156.259	126.806	-54.941	1.00 53.79	A16S	ATOM	37047	C2'	GUA	830	161.551	122.085	-48.701	1.00	45.45	A16S
ATOM	36995	N1	GUA	828	157.010	128.670	-53.834	1.00 53.79	A16S	ATOM	37048	O2'	GUA	830	162.333	121.098	-49.347	1.00	45.45	A16S
ATOM	36996	C6	GUA	828	156.924	129.779	-53.002	1.00 53.79	A16S	ATOM	37049	C3'	GUA	830	160.429	121.473	-47.874	1.00	45.45	A16S
ATOM	36997	O6	GUA	828	157.917	130.505	-52.834	1.00 53.79	A16S	ATOM	37050	O3'	GUA	830	160.923	120.297	-47.260	1.00	45.45	A16S
ATOM	36998	C5	GUA	828	155.617	129.917	-52.447	1.00 53.79	A16S	ATOM	37051	P	GUA	831	161.672	120.400	-45.844	1.00	34.53	A16S
ATOM	36999	N7	GUA	828	155.106	130.868	-51.572	1.00 53.79	A16S	ATOM	37052	O1P	GUA	831	162.005	119.008	-45.428	1.00	46.09	A16S
ATOM	37000	C8	GUA	828	153.863	130.511	-51.390	1.00 53.79	A16S	ATOM	37053	O2P	GUA	831	160.853	121.257	-44.955	1.00	46.09	A16S
ATOM	37001	C2'	GUA	828	152.305	127.511	-51.048	1.00 72.99	A16S	ATOM	37054	O5'	GUA	831	163.028	121.182	-46.143	1.00	34.53	A16S
ATOM	37002	O2'	GUA	828	151.518	126.461	-51.564	1.00 72.99	A16S	ATOM	37055	C5'	GUA	831	164.102	120.511	-46.809	1.00	34.53	A16S
ATOM	37003	C3'	GUA	828	151.662	128.116	-49.806	1.00 72.99	A16S	ATOM	37056	C4'	GUA	831	165.306	121.402	-46.937	1.00	34.53	A16S
ATOM	37004	O3'	GUA	828	151.132	127.072	-48.995	1.00 72.99	A16S	ATOM	37057	O4'	GUA	831	164.957	122.602	-47.665	1.00	34.53	A16S
ATOM	37005	P	GUA	829	152.104	126.280	-47.977	1.00 58.28	A16S	ATOM	37058	C1'	GUA	831	165.818	123.653	-47.276	1.00	34.53	A16S
ATOM	37006	O1P	GUA	829	151.285	125.323	-47.197	1.00 50.21	A16S	ATOM	37059	N9	GUA	831	165.015	124.771	-46.796	1.00	46.09	A16S
ATOM	37007	O2P	GUA	829	152.947	127.281	-47.267	1.00 50.21	A16S	ATOM	37060	C4	GUA	831	165.470	126.025	-46.488	1.00	46.09	A16S
ATOM	37008	O5'	GUA	829	153.077	125.420	-48.907	1.00 58.28	A16S	ATOM	37061	N3	GUA	831	166.748	126.441	-46.555	1.00	46.09	A16S
ATOM	37009	C5'	GUA	829	152.626	124.206	-49.545	1.00 58.28	A16S	ATOM	37062	C2	GUA	831	166.869	127.703	-46.216	1.00	46.09	A16S
ATOM	37010	C4'	GUA	829	153.752	123.566	-50.331	1.00 58.28	A16S	ATOM	37063	N2	GUA	831	168.061	128.269	-46.216	1.00	46.09	A16S
ATOM	37011	O4'	GUA	829	154.192	124.469	-51.381	1.00 58.28	A16S	ATOM	37064	N1	GUA	831	165.822	128.503	-45.849	1.00	46.09	A16S
ATOM	37012	C1'	GUA	829	155.590	124.330	-51.582	1.00 58.28	A16S	ATOM	37065	C6	GUA	831	164.493	128.093	-45.773	1.00	46.09	A16S

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ATOM  37066  O6  GUA  831     163.607 128.896 -45.434  1.00 46.09      A16S
ATOM  37067  C5  GUA  831     164.354 126.737 -46.122  1.00 46.09      A16S
ATOM  37068  N7  GUA  831     163.224 125.941 -46.170  1.00 46.09      A16S
ATOM  37069  C8  GUA  831     163.664 124.785 -46.575  1.00 46.09      A16S
ATOM  37070  C2' GUA  831     166.769 123.107 -46.211  1.00 34.53      A16S
ATOM  37071  O2' GUA  831     167.998 122.782 -46.845  1.00 34.53      A16S
ATOM  37072  C3' GUA  831     165.999 121.892 -45.677  1.00 34.53      A16S
ATOM  37073  O3' GUA  831     166.944 120.926 -45.255  1.00 34.53      A16S
ATOM  37074  P   GUA  832     167.217 120.635 -43.694  1.00 44.95      A16S
ATOM  37075  O1P GUA  832     168.615 120.148 -43.691  1.00 45.96      A16S
ATOM  37076  O2P GUA  832     166.140 119.764 -43.198  1.00 45.96      A16S
ATOM  37077  O5' GUA  832     167.226 121.991 -42.825  1.00 44.95      A16S
ATOM  37078  C5' GUA  832     167.354 123.304 -43.393  1.00 44.95      A16S
ATOM  37079  C4' GUA  832     168.544 124.071 -42.821  1.00 44.95      A16S
ATOM  37080  O4' GUA  832     168.668 125.223 -43.699  1.00 44.95      A16S
ATOM  37081  C1' GUA  832     168.929 126.393 -42.956  1.00 44.95      A16S
ATOM  37082  N9  GUA  832     167.717 127.204 -42.964  1.00 45.96      A16S
ATOM  37083  C4  GUA  832     167.650 128.557 -42.785  1.00 45.96      A16S
ATOM  37084  N3  GUA  832     168.703 129.384 -42.612  1.00 45.96      A16S
ATOM  37085  C2  GUA  832     168.324 130.637 -42.456  1.00 45.96      A16S
ATOM  37086  N2  GUA  832     169.246 131.594 -42.299  1.00 45.96      A16S
ATOM  37087  N1  GUA  832     167.012 131.045 -42.448  1.00 45.96      A16S
ATOM  37088  C6  GUA  832     165.909 130.212 -42.615  1.00 45.96      A16S
ATOM  37089  O6  GUA  832     164.759 130.686 -42.571  1.00 45.96      A16S
ATOM  37090  C5  GUA  832     166.306 128.863 -42.810  1.00 45.96      A16S
ATOM  37091  N7  GUA  832     165.546 127.725 -43.026  1.00 45.96      A16S
ATOM  37092  C8  GUA  832     166.424 126.768 -43.119  1.00 45.96      A16S
ATOM  37093  C2' GUA  832     169.294 125.947 -41.549  1.00 44.95      A16S
ATOM  37094  O2' GUA  832     170.679 125.692 -41.492  1.00 44.95      A16S
ATOM  37095  C3' GUA  832     168.481 124.667 -41.407  1.00 44.95      A16S
ATOM  37096  O3' GUA  832     169.117 123.877 -40.398  1.00 44.95      A16S
ATOM  37097  P   CYT  833     169.049 124.331 -38.830  1.00 45.58      A16S
ATOM  37098  O1P CYT  833     170.058 123.519 -38.102  1.00 46.18      A16S
ATOM  37099  O2P CYT  833     167.627 124.307 -38.387  1.00 46.18      A16S
ATOM  37100  O5' CYT  833     169.531 125.857 -38.756  1.00 45.58      A16S
ATOM  37101  C5' CYT  833     170.914 126.210 -38.512  1.00 45.58      A16S
ATOM  37102  C4' CYT  833     171.075 127.720 -38.399  1.00 45.58      A16S
ATOM  37103  O4' CYT  833     170.359 128.376 -39.480  1.00 45.58      A16S
ATOM  37104  C1' CYT  833     169.823 129.608 -39.027  1.00 45.58      A16S
ATOM  37105  N1  CYT  833     168.354 129.549 -39.138  1.00 46.18      A16S
ATOM  37106  C6  CYT  833     167.707 128.350 -39.230  1.00 46.18      A16S
ATOM  37107  C2  CYT  833     167.627 130.739 -39.143  1.00 46.18      A16S
ATOM  37108  O2  CYT  833     168.233 131.815 -39.055  1.00 46.18      A16S
ATOM  37109  N3  CYT  833     166.284 130.689 -39.238  1.00 46.18      A16S
ATOM  37110  C4  CYT  833     165.665 129.515 -39.319  1.00 46.18      A16S
ATOM  37111  N4  CYT  833     164.336 129.513 -39.403  1.00 46.18      A16S
ATOM  37112  C5  CYT  833     166.377 128.289 -39.319  1.00 46.18      A16S
ATOM  37113  C2' CYT  833     170.272 129.806 -37.582  1.00 45.58      A16S
ATOM  37114  O2' CYT  833     171.431 130.613 -37.535  1.00 45.58      A16S
ATOM  37115  C3' CYT  833     170.536 128.375 -37.141  1.00 45.58      A16S
ATOM  37116  O3' CYT  833     171.491 128.368 -36.100  1.00 45.58      A16S
ATOM  37117  P   CYT  834     170.993 128.295 -34.580  1.00 49.16      A16S
ATOM  37118  O1P CYT  834     172.219 128.243 -33.730  1.00 53.50      A16S
ATOM  37119  O2P CYT  834     169.983 127.205 -34.486  1.00 53.50      A16S
ATOM  37120  O5' CYT  834     170.201 129.661 -34.350  1.00 49.16      A16S
ATOM  37121  C5' CYT  834     170.901 130.888 -34.127  1.00 49.16      A16S
ATOM  37122  C4' CYT  834     169.933 132.038 -33.916  1.00 49.16      A16S
ATOM  37123  O4' CYT  834     169.075 132.181 -35.078  1.00 49.16      A16S
ATOM  37124  C1' CYT  834     167.872 132.819 -34.695  1.00 49.16      A16S
ATOM  37125  N1  CYT  834     166.723 132.000 -35.125  1.00 53.50      A16S
ATOM  37126  C6  CYT  834     166.868 130.683 -35.457  1.00 53.50      A16S
ATOM  37127  C2  CYT  834     165.461 132.611 -35.201  1.00 53.50      A16S
ATOM  37128  O2  CYT  834     165.348 133.797 -34.855  1.00 53.50      A16S
ATOM  37129  N3  CYT  834     164.403 131.898 -35.641  1.00 53.50      A16S
ATOM  37130  C4  CYT  834     164.559 130.623 -35.981  1.00 53.50      A16S
ATOM  37131  N4  CYT  834     163.494 129.968 -36.421  1.00 53.50      A16S
ATOM  37132  C5  CYT  834     165.822 129.964 -35.887  1.00 53.50      A16S
ATOM  37133  C2' CYT  834     167.916 133.038 -33.184  1.00 49.16      A16S
ATOM  37134  O2' CYT  834     168.342 134.361 -32.901  1.00 49.16      A16S
ATOM  37135  C3' CYT  834     168.949 132.010 -32.750  1.00 49.16      A16S
ATOM  37136  O3' CYT  834     169.496 132.415 -31.503  1.00 49.16      A16S
ATOM  37137  P   GUA  835     168.901 131.791 -30.144  1.00 50.93      A16S
ATOM  37138  O1P GUA  835     169.628 132.452 -29.020  1.00 48.78      A16S
ATOM  37139  O2P GUA  835     168.928 130.298 -30.254  1.00 48.78      A16S
ATOM  37140  O5' GUA  835     167.366 132.248 -30.132  1.00 50.93      A16S
ATOM  37141  C5' GUA  835     166.958 133.487 -29.498  1.00 50.93      A16S
ATOM  37142  C4' GUA  835     165.561 133.905 -29.941  1.00 50.93      A16S
ATOM  37143  O4' GUA  835     165.391 133.599 -31.348  1.00 50.93      A16S
ATOM  37144  C1' GUA  835     164.056 133.231 -31.597  1.00 50.93      A16S
ATOM  37145  N9  GUA  835     164.049 131.832 -31.999  1.00 48.78      A16S
ATOM  37146  C4  GUA  835     162.999 131.159 -32.553  1.00 48.78      A16S
ATOM  37147  N3  GUA  835     161.789 131.680 -32.821  1.00 48.78      A16S
ATOM  37148  C2  GUA  835     160.982 130.795 -33.345  1.00 48.78      A16S
ATOM  37149  N2  GUA  835     159.730 131.150 -33.660  1.00 48.78      A16S
ATOM  37150  N1  GUA  835     161.337 129.490 -33.598  1.00 48.78      A16S
ATOM  37151  C6  GUA  835     162.586 128.931 -33.333  1.00 48.78      A16S
ATOM  37152  O6  GUA  835     162.812 127.739 -33.610  1.00 48.78      A16S
ATOM  37153  C5  GUA  835     163.455 129.875 -32.758  1.00 48.78      A16S
ATOM  37154  N7  GUA  835     164.769 129.743 -32.334  1.00 48.78      A16S
ATOM  37155  C8  GUA  835     165.081 130.929 -31.892  1.00 48.78      A16S
ATOM  37156  C2' GUA  835     163.268 133.445 -30.308  1.00 50.93      A16S
ATOM  37157  O2' GUA  835     162.765 134.763 -30.325  1.00 50.93      A16S
ATOM  37158  C3' GUA  835     164.348 133.283 -29.251  1.00 50.93      A16S
ATOM  37159  O3' GUA  835     163.993 134.036 -28.089  1.00 50.93      A16S
ATOM  37160  P   ADE  836     162.910 133.460 -27.039  1.00 40.55      A16S
ATOM  37161  O1P ADE  836     163.040 134.326 -25.833  1.00 47.18      A16S
ATOM  37162  O2P ADE  836     163.070 131.993 -26.898  1.00 47.18      A16S
ATOM  37163  O5' ADE  836     161.488 133.751 -27.704  1.00 40.55      A16S
ATOM  37164  C5' ADE  836     161.049 135.100 -27.914  1.00 40.55      A16S
ATOM  37165  C4' ADE  836     159.543 135.204 -27.867  1.00 40.55      A16S
ATOM  37166  O4' ADE  836     158.933 134.664 -29.065  1.00 40.55      A16S
ATOM  37167  C1' ADE  836     157.560 134.445 -28.812  1.00 40.55      A16S
ATOM  37168  N9  ADE  836     157.133 133.160 -29.370  1.00 47.18      A16S
ATOM  37169  C4  ADE  836     155.815 132.796 -29.520  1.00 47.18      A16S
ATOM  37170  N3  ADE  836     154.731 133.533 -29.224  1.00 47.18      A16S
ATOM  37171  C2  ADE  836     153.615 132.850 -29.480  1.00 47.18      A16S
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ATOM	37172	N1	ADE	836	153.470	131.615	-29.963	1.00	47.18	A16S	ATOM	37225	C3'	GUA	838	154.892	126.721	-21.900	1.00	31.74	A16S
ATOM	37173	C6	ADE	836	154.576	130.901	-30.252	1.00	47.18	A16S	ATOM	37226	O3'	GUA	838	154.283	125.909	-20.913	1.00	31.74	A16S
ATOM	37174	N6	ADE	836	154.422	129.669	-30.740	1.00	47.18	A16S	ATOM	37227	P	CYT	839	155.204	125.209	-19.796	1.00	38.69	A16S
ATOM	37175	C5	ADE	836	155.829	131.508	-30.021	1.00	47.18	A16S	ATOM	37228	O1P	CYT	839	154.362	124.607	-18.738	1.00	41.89	A16S
ATOM	37176	N7	ADE	836	157.134	131.066	-30.198	1.00	47.18	A16S	ATOM	37229	O2P	CYT	839	156.258	126.181	-19.428	1.00	41.89	A16S
ATOM	37177	C8	ADE	836	157.868	132.084	-29.805	1.00	47.18	A16S	ATOM	37230	O5'	CYT	839	155.899	124.016	-20.578	1.00	38.69	A16S
ATOM	37178	C2'	ADE	836	157.364	134.504	-27.295	1.00	40.55	A16S	ATOM	37231	C5'	CYT	839	155.109	123.053	-21.282	1.00	38.69	A16S
ATOM	37179	O2'	ADE	836	156.713	135.712	-26.972	1.00	40.55	A16S	ATOM	37232	C4'	CYT	839	156.002	122.124	-22.054	1.00	38.69	A16S
ATOM	37180	C3'	ADE	836	158.797	134.470	-26.774	1.00	40.55	A16S	ATOM	37233	O4'	CYT	839	156.644	122.848	-23.131	1.00	38.69	A16S
ATOM	37181	O3'	ADE	836	158.877	135.097	-25.505	1.00	40.55	A16S	ATOM	37234	C1'	CYT	839	157.950	122.337	-23.325	1.00	38.69	A16S
ATOM	37182	P	ADE	837	158.863	134.181	-24.177	1.00	39.49	A16S	ATOM	37235	N1	CYT	839	158.909	123.434	-23.188	1.00	41.89	A16S
ATOM	37183	O1P	ADE	837	158.832	135.096	-23.005	1.00	48.11	A16S	ATOM	37236	C6	CYT	839	158.618	124.525	-22.430	1.00	41.89	A16S
ATOM	37184	O2P	ADE	837	159.964	133.178	-24.284	1.00	48.11	A16S	ATOM	37237	C2	CYT	839	160.126	123.341	-23.846	1.00	41.89	A16S
ATOM	37185	O5'	ADE	837	157.460	133.418	-24.269	1.00	39.49	A16S	ATOM	37238	O2	CYT	839	160.355	122.349	-24.553	1.00	41.89	A16S
ATOM	37186	C5'	ADE	837	156.218	134.110	-24.019	1.00	39.49	A16S	ATOM	37239	N3	CYT	839	161.023	124.332	-23.712	1.00	41.89	A16S
ATOM	37187	C4'	ADE	837	155.033	133.209	-24.300	1.00	39.49	A16S	ATOM	37240	C4	CYT	839	160.730	125.395	-22.976	1.00	41.89	A16S
ATOM	37188	O4'	ADE	837	154.977	132.907	-25.723	1.00	39.49	A16S	ATOM	37241	N4	CYT	839	161.637	126.352	-22.880	1.00	41.89	A16S
ATOM	37189	C1'	ADE	837	154.459	131.599	-25.916	1.00	39.49	A16S	ATOM	37242	C5	CYT	839	159.490	125.522	-22.305	1.00	41.89	A16S
ATOM	37190	N9	ADE	837	155.485	130.769	-26.545	1.00	48.11	A16S	ATOM	37243	C2'	CYT	839	158.186	121.212	-22.314	1.00	38.69	A16S
ATOM	37191	C4	ADE	837	155.279	129.562	-27.163	1.00	48.11	A16S	ATOM	37244	O2'	CYT	839	157.986	119.963	-22.950	1.00	38.69	A16S
ATOM	37192	N3	ADE	837	154.110	128.947	-27.373	1.00	48.11	A16S	ATOM	37245	C3'	CYT	839	157.144	121.530	-21.250	1.00	38.69	A16S
ATOM	37193	C2	ADE	837	154.299	127.790	-27.986	1.00	48.11	A16S	ATOM	37246	O3'	CYT	839	156.731	120.378	-20.541	1.00	38.69	A16S
ATOM	37194	N1	ADE	837	155.434	127.215	-28.373	1.00	48.11	A16S	ATOM	37247	P	URI	840	157.508	119.972	-19.199	1.00	35.30	A16S
ATOM	37195	C6	ADE	837	156.592	127.853	-28.133	1.00	48.11	A16S	ATOM	37248	O1P	URI	840	156.983	118.674	-18.648	1.00	47.16	A16S
ATOM	37196	N6	ADE	837	157.732	127.265	-28.492	1.00	48.11	A16S	ATOM	37249	O2P	URI	840	157.584	121.170	-18.319	1.00	47.16	A16S
ATOM	37197	C5	ADE	837	156.528	129.098	-27.508	1.00	48.11	A16S	ATOM	37250	O5'	URI	840	158.976	119.702	-19.735	1.00	35.30	A16S
ATOM	37198	N7	ADE	837	157.506	130.009	-27.151	1.00	48.11	A16S	ATOM	37251	C5'	URI	840	159.274	118.539	-20.492	1.00	35.30	A16S
ATOM	37199	C8	ADE	837	156.837	130.986	-26.595	1.00	48.11	A16S	ATOM	37252	C4'	URI	840	160.753	118.439	-20.677	1.00	35.30	A16S
ATOM	37200	C2'	ADE	837	154.131	131.029	-24.535	1.00	39.49	A16S	ATOM	37253	O4'	URI	840	161.210	119.500	-21.547	1.00	35.30	A16S
ATOM	37201	O2'	ADE	837	152.768	131.220	-24.278	1.00	39.49	A16S	ATOM	37254	C1'	URI	840	162.520	119.881	-21.181	1.00	35.30	A16S
ATOM	37202	C3'	ADE	837	155.032	131.848	-23.626	1.00	39.49	A16S	ATOM	37255	N1	URI	840	162.531	121.331	-20.939	1.00	47.16	A16S
ATOM	37203	O3'	ADE	837	154.552	131.878	-22.295	1.00	39.49	A16S	ATOM	37256	C6	URI	840	161.405	121.995	-20.516	1.00	47.16	A16S
ATOM	37204	P	GUA	838	155.418	131.181	-21.124	1.00	31.74	A16S	ATOM	37257	C2	URI	840	163.715	122.011	-21.138	1.00	47.16	A16S
ATOM	37205	O1P	GUA	838	154.787	131.500	-19.819	1.00	42.19	A16S	ATOM	37258	O2	URI	840	164.719	121.477	-21.565	1.00	47.16	A16S
ATOM	37206	O2P	GUA	838	156.866	131.492	-21.337	1.00	42.19	A16S	ATOM	37259	N3	URI	840	163.676	123.346	-20.832	1.00	47.16	A16S
ATOM	37207	O5'	GUA	838	155.230	129.624	-21.381	1.00	31.74	A16S	ATOM	37260	C4	URI	840	162.591	124.058	-20.386	1.00	47.16	A16S
ATOM	37208	C5'	GUA	838	153.925	129.071	-21.531	1.00	31.74	A16S	ATOM	37261	O4	URI	840	162.719	125.245	-20.114	1.00	47.16	A16S
ATOM	37209	C4'	GUA	838	153.976	127.826	-22.376	1.00	31.74	A16S	ATOM	37262	C5	URI	840	161.396	123.298	-20.246	1.00	47.16	A16S
ATOM	37210	O4'	GUA	838	154.480	128.164	-23.695	1.00	31.74	A16S	ATOM	37263	C2'	URI	840	162.926	119.035	-19.972	1.00	35.30	A16S
ATOM	37211	C1'	GUA	838	155.256	127.101	-24.203	1.00	31.74	A16S	ATOM	37264	O2'	URI	840	163.657	117.911	-20.413	1.00	35.30	A16S
ATOM	37212	N9	GUA	838	156.622	127.586	-24.362	1.00	42.19	A16S	ATOM	37265	C3'	URI	840	161.575	118.610	-19.421	1.00	35.30	A16S
ATOM	37213	C4	GUA	838	157.651	126.957	-25.016	1.00	42.19	A16S	ATOM	37266	O3'	URI	840	161.639	117.394	-18.703	1.00	35.30	A16S
ATOM	37214	N3	GUA	838	157.581	125.768	-25.648	1.00	42.19	A16S	ATOM	37267	P	ADE	841	161.613	117.418	-17.099	1.00	33.28	A16S
ATOM	37215	C2	GUA	838	158.727	125.438	-26.210	1.00	42.19	A16S	ATOM	37268	O1P	ADE	841	161.647	115.997	-16.657	1.00	45.62	A16S
ATOM	37216	N2	GUA	838	158.819	124.291	-26.893	1.00	42.19	A16S	ATOM	37269	O2P	ADE	841	160.491	118.292	-16.677	1.00	45.62	A16S
ATOM	37217	N1	GUA	838	159.860	126.210	-26.150	1.00	42.19	A16S	ATOM	37270	O5'	ADE	841	162.982	118.127	-16.696	1.00	33.28	A16S
ATOM	37218	C6	GUA	838	159.958	127.434	-25.501	1.00	42.19	A16S	ATOM	37271	C5'	ADE	841	163.332	118.324	-15.317	1.00	33.28	A16S
ATOM	37219	O6	GUA	838	161.024	128.058	-25.513	1.00	42.19	A16S	ATOM	37272	C4'	ADE	841	164.830	118.217	-15.136	1.00	33.28	A16S
ATOM	37220	C5	GUA	838	158.730	127.799	-24.895	1.00	42.19	A16S	ATOM	37273	O4'	ADE	841	165.250	116.832	-15.281	1.00	33.28	A16S
ATOM	37221	N7	GUA	838	158.391	128.931	-24.168	1.00	42.19	A16S	ATOM	37274	C1'	ADE	841	166.470	116.774	-16.000	1.00	33.28	A16S
ATOM	37222	C8	GUA	838	157.134	128.761	-23.877	1.00	42.19	A16S	ATOM	37275	N9	ADE	841	166.215	116.060	-17.259	1.00	45.62	A16S
ATOM	37223	C2'	GUA	838	155.155	125.963	-23.190	1.00	31.74	A16S	ATOM	37276	C4	ADE	841	167.104	115.328	-18.011	1.00	45.62	A16S
ATOM	37224	O2'	GUA	838	154.051	125.168	-23.556	1.00	31.74	A16S	ATOM	37277	N3	ADE	841	168.412	115.137	-17.778	1.00	45.62	A16S

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ATOM  37278  C2  ADE  841     168.940 114.357 -18.705  1.00 45.62      A16S
ATOM  37279  N1  ADE  841     168.358 113.777 -19.760  1.00 45.62      A16S
ATOM  37280  C6  ADE  841     167.050 113.986 -19.970  1.00 45.62      A16S
ATOM  37281  N6  ADE  841     166.476 113.402 -21.018  1.00 45.62      A16S
ATOM  37282  C5  ADE  841     166.371 114.808 -19.063  1.00 45.62      A16S
ATOM  37283  N7  ADE  841     165.056 115.232 -18.998  1.00 45.62      A16S
ATOM  37284  C8  ADE  841     165.017 115.971 -17.918  1.00 45.62      A16S
ATOM  37285  C2' ADE  841     166.961 118.217 -16.177  1.00 33.28      A16S
ATOM  37286  O2' ADE  841     167.786 118.545 -15.079  1.00 33.28      A16S
ATOM  37287  C3' ADE  841     165.654 119.001 -16.146  1.00 33.28      A16S
ATOM  37288  O3' ADE  841     165.839 120.343 -15.711  1.00 33.28      A16S
ATOM  37289  P   ADE  842     165.498 121.567 -16.703  1.00 33.58      A16S
ATOM  37290  O1P ADE  842     165.252 122.755 -15.843  1.00 33.87      A16S
ATOM  37291  O2P ADE  842     164.475 121.142 -17.686  1.00 33.87      A16S
ATOM  37292  O5' ADE  842     166.861 121.863 -17.466  1.00 33.58      A16S
ATOM  37293  C5' ADE  842     168.038 122.226 -16.720  1.00 33.58      A16S
ATOM  37294  C4' ADE  842     169.254 121.575 -17.314  1.00 33.58      A16S
ATOM  37295  O4' ADE  842     169.053 120.138 -17.356  1.00 33.58      A16S
ATOM  37296  C1' ADE  842     169.581 119.612 -18.556  1.00 33.58      A16S
ATOM  37297  N9  ADE  842     168.482 119.037 -19.325  1.00 33.87      A16S
ATOM  37298  C4  ADE  842     168.564 117.993 -20.213  1.00 33.87      A16S
ATOM  37299  N3  ADE  842     169.651 117.264 -20.523  1.00 33.87      A16S
ATOM  37300  C2  ADE  842     169.356 116.359 -21.454  1.00 33.87      A16S
ATOM  37301  N1  ADE  842     168.190 116.119 -22.069  1.00 33.87      A16S
ATOM  37302  C6  ADE  842     167.123 116.867 -21.737  1.00 33.87      A16S
ATOM  37303  N6  ADE  842     165.974 116.638 -22.358  1.00 33.87      A16S
ATOM  37304  C5  ADE  842     167.300 117.858 -20.750  1.00 33.87      A16S
ATOM  37305  N7  ADE  842     166.431 118.775 -20.182  1.00 33.87      A16S
ATOM  37306  C8  ADE  842     167.178 119.441 -19.344  1.00 33.87      A16S
ATOM  37307  C2' ADE  842     170.262 120.761 -19.298  1.00 33.58      A16S
ATOM  37308  O2' ADE  842     171.633 120.721 -18.956  1.00 33.58      A16S
ATOM  37309  C3' ADE  842     169.518 121.975 -18.744  1.00 33.58      A16S
ATOM  37310  O3' ADE  842     170.269 123.178 -18.755  1.00 33.58      A16S
ATOM  37311  P   CYT  843     170.231 124.120 -20.048  1.00 38.41      A16S
ATOM  37312  O1P CYT  843     171.188 125.220 -19.807  1.00 35.06      A16S
ATOM  37313  O2P CYT  843     168.820 124.419 -20.422  1.00 35.06      A16S
ATOM  37314  O5' CYT  843     170.854 123.220 -21.201  1.00 38.41      A16S
ATOM  37315  C5' CYT  843     172.242 122.825 -21.162  1.00 38.41      A16S
ATOM  37316  C4' CYT  843     172.540 121.852 -22.270  1.00 38.41      A16S
ATOM  37317  O4' CYT  843     171.842 120.603 -22.039  1.00 38.41      A16S
ATOM  37318  C1' CYT  843     171.429 120.058 -23.271  1.00 38.41      A16S
ATOM  37319  N1  CYT  843     169.965 119.948 -23.265  1.00 35.06      A16S
ATOM  37320  C6  CYT  843     169.190 120.868 -22.618  1.00 35.06      A16S
ATOM  37321  C2  CYT  843     169.373 118.889 -23.944  1.00 35.06      A16S
ATOM  37322  O2  CYT  843     170.103 118.053 -24.500  1.00 35.06      A16S
ATOM  37323  N3  CYT  843     168.022 118.792 -23.976  1.00 35.06      A16S
ATOM  37324  C4  CYT  843     167.275 119.694 -23.347  1.00 35.06      A16S
ATOM  37325  N4  CYT  843     165.959 119.552 -23.398  1.00 35.06      A16S
ATOM  37326  C5  CYT  843     167.851 120.779 -22.635  1.00 35.06      A16S
ATOM  37327  C2' CYT  843     171.919 120.987 -24.381  1.00 38.41      A16S
ATOM  37328  O2' CYT  843     173.140 120.499 -24.882  1.00 38.41      A16S
ATOM  37329  C3' CYT  843     172.080 122.301 -23.638  1.00 38.41      A16S
ATOM  37330  O3' CYT  843     173.041 123.142 -24.234  1.00 38.41      A16S
ATOM  37331  P   GUA  844     172.584 124.177 -25.363  1.00 33.50      A16S
ATOM  37332  O1P GUA  844     173.757 124.971 -25.799  1.00 42.37      A16S
ATOM  37333  O2P GUA  844     171.367 124.881 -24.889  1.00 42.37      A16S
ATOM  37334  O5' GUA  844     172.183 123.220 -26.561  1.00 33.50      A16S
ATOM  37335  C5' GUA  844     171.112 123.571 -27.434  1.00 33.50      A16S
ATOM  37336  C4' GUA  844     170.099 122.467 -27.469  1.00 33.50      A16S
ATOM  37337  O4' GUA  844     169.642 122.152 -26.127  1.00 33.50      A16S
ATOM  37338  C1' GUA  844     168.246 121.922 -26.148  1.00 33.50      A16S
ATOM  37339  N9  GUA  844     167.609 123.005 -25.402  1.00 42.37      A16S
ATOM  37340  C4  GUA  844     166.258 123.180 -25.159  1.00 42.37      A16S
ATOM  37341  N3  GUA  844     165.259 122.377 -25.580  1.00 42.37      A16S
ATOM  37342  C2  GUA  844     164.081 122.799 -25.160  1.00 42.37      A16S
ATOM  37343  N2  GUA  844     162.984 122.111 -25.470  1.00 42.37      A16S
ATOM  37344  N1  GUA  844     163.895 123.927 -24.402  1.00 42.37      A16S
ATOM  37345  C6  GUA  844     164.905 124.774 -23.974  1.00 42.37      A16S
ATOM  37346  O6  GUA  844     164.632 125.768 -23.316  1.00 42.37      A16S
ATOM  37347  C5  GUA  844     166.170 124.329 -24.399  1.00 42.37      A16S
ATOM  37348  N7  GUA  844     167.427 124.870 -24.176  1.00 42.37      A16S
ATOM  37349  C8  GUA  844     168.245 124.057 -24.792  1.00 42.37      A16S
ATOM  37350  C2' GUA  844     167.813 121.909 -27.615  1.00 33.50      A16S
ATOM  37351  O2' GUA  844     167.931 120.595 -28.111  1.00 33.50      A16S
ATOM  37352  C3' GUA  844     168.850 122.822 -28.244  1.00 33.50      A16S
ATOM  37353  O3' GUA  844     169.043 122.543 -29.609  1.00 33.50      A16S
ATOM  37354  P   CYT  845     168.277 123.410 -30.707  1.00 40.00      A16S
ATOM  37355  O1P CYT  845     168.750 122.962 -32.046  1.00 42.82      A16S
ATOM  37356  O2P CYT  845     168.393 124.842 -30.328  1.00 42.82      A16S
ATOM  37357  O5' CYT  845     166.762 122.946 -30.543  1.00 40.00      A16S
ATOM  37358  C5' CYT  845     166.410 121.566 -30.726  1.00 40.00      A16S
ATOM  37359  C4' CYT  845     164.919 121.362 -30.594  1.00 40.00      A16S
ATOM  37360  O4' CYT  845     164.530 121.441 -29.204  1.00 40.00      A16S
ATOM  37361  C1' CYT  845     163.227 121.978 -29.114  1.00 40.00      A16S
ATOM  37362  N1  CYT  845     163.307 123.297 -28.468  1.00 42.82      A16S
ATOM  37363  C6  CYT  845     164.486 123.978 -28.404  1.00 42.82      A16S
ATOM  37364  C2  CYT  845     162.143 123.857 -27.944  1.00 42.82      A16S
ATOM  37365  O2  CYT  845     161.088 123.189 -27.957  1.00 42.82      A16S
ATOM  37366  N3  CYT  845     162.191 125.100 -27.423  1.00 42.82      A16S
ATOM  37367  C4  CYT  845     163.342 125.760 -27.383  1.00 42.82      A16S
ATOM  37368  N4  CYT  845     163.338 126.981 -26.867  1.00 42.82      A16S
ATOM  37369  C5  CYT  845     164.547 125.198 -27.872  1.00 42.82      A16S
ATOM  37370  C2' CYT  845     162.710 122.150 -30.536  1.00 40.00      A16S
ATOM  37371  O2' CYT  845     162.071 120.965 -30.959  1.00 40.00      A16S
ATOM  37372  C3' CYT  845     164.003 122.352 -31.290  1.00 40.00      A16S
ATOM  37373  O3' CYT  845     163.805 122.105 -32.661  1.00 40.00      A16S
ATOM  37374  P   GUA  846     163.739 123.348 -33.666  1.00 31.37      A16S
ATOM  37375  O1P GUA  846     163.418 122.849 -35.021  1.00 43.87      A16S
ATOM  37376  O2P GUA  846     164.959 124.173 -33.437  1.00 43.87      A16S
ATOM  37377  O5' GUA  846     162.490 124.201 -33.180  1.00 31.37      A16S
ATOM  37378  C5' GUA  846     161.145 123.676 -33.232  1.00 31.37      A16S
ATOM  37379  C4' GUA  846     160.195 124.617 -32.519  1.00 31.37      A16S
ATOM  37380  O4' GUA  846     160.665 124.819 -31.163  1.00 31.37      A16S
ATOM  37381  C1' GUA  846     160.416 126.148 -30.768  1.00 31.37      A16S
ATOM  37382  N9  GUA  846     161.687 126.771 -30.445  1.00 43.87      A16S
ATOM  37383  C4  GUA  846     161.859 127.865 -29.655  1.00 43.87      A16S
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ATOM	37384	N3	GUA	846	160.886	128.517	-29.000	1.00	43.87	A16S	ATOM	37437	P	ADE	849	157.852	120.076	-37.582	1.00	38.25	A16S
ATOM	37385	C2	GUA	846	161.350	129.545	-28.344	1.00	43.87	A16S	ATOM	37438	O1P	ADE	849	157.923	118.592	-37.501	1.00	38.89	A16S
ATOM	37386	N2	GUA	846	160.522	130.276	-27.614	1.00	43.87	A16S	ATOM	37439	O2P	ADE	849	156.627	120.728	-38.092	1.00	38.89	A16S
ATOM	37387	N1	GUA	846	162.667	129.928	-28.349	1.00	43.87	A16S	ATOM	37440	O5'	ADE	849	158.159	120.664	-36.138	1.00	38.25	A16S
ATOM	37388	C6	GUA	846	163.687	129.271	-29.024	1.00	43.87	A16S	ATOM	37441	C5'	ADE	849	159.430	120.447	-35.533	1.00	38.25	A16S
ATOM	37389	O6	GUA	846	164.846	129.703	-28.978	1.00	43.87	A16S	ATOM	37442	C4'	ADE	849	159.280	120.235	-34.053	1.00	38.25	A16S
ATOM	37390	C5	GUA	846	163.202	128.148	-29.710	1.00	43.87	A16S	ATOM	37443	O4'	ADE	849	159.024	121.494	-33.369	1.00	38.25	A16S
ATOM	37391	N7	GUA	846	163.868	127.221	-30.492	1.00	43.87	A16S	ATOM	37444	C1'	ADE	849	158.086	121.245	-32.357	1.00	38.25	A16S
ATOM	37392	C8	GUA	846	162.929	126.417	-30.899	1.00	43.87	A16S	ATOM	37445	N9	ADE	849	157.504	122.488	-31.856	1.00	38.89	A16S
ATOM	37393	C2'	GUA	846	159.719	126.874	-31.918	1.00	31.37	A16S	ATOM	37446	C4	ADE	849	156.510	123.267	-32.393	1.00	38.89	A16S
ATOM	37394	O2'	GUA	846	158.329	126.919	-31.687	1.00	31.37	A16S	ATOM	37447	N3	ADE	849	155.868	123.086	-33.553	1.00	38.89	A16S
ATOM	37395	C3'	GUA	846	160.101	126.014	-33.109	1.00	31.37	A16S	ATOM	37448	C2	ADE	849	154.946	124.026	-33.725	1.00	38.89	A16S
ATOM	37396	O3'	GUA	846	159.078	126.038	-34.074	1.00	31.37	A16S	ATOM	37449	N1	ADE	849	154.610	125.043	-32.927	1.00	38.89	A16S
ATOM	37397	P	URI	847	159.312	126.798	-35.452	1.00	38.39	A16S	ATOM	37450	C6	ADE	849	155.268	125.187	-31.763	1.00	38.89	A16S
ATOM	37398	O1P	URI	847	160.411	126.056	-36.117	1.00	46.79	A16S	ATOM	37451	N6	ADE	849	154.914	126.180	-30.945	1.00	38.89	A16S
ATOM	37399	O2P	URI	847	159.444	128.256	-35.215	1.00	46.79	A16S	ATOM	37452	C5	ADE	849	156.282	124.269	-31.472	1.00	38.89	A16S
ATOM	37400	O5'	URI	847	157.964	126.542	-36.254	1.00	38.39	A16S	ATOM	37453	N7	ADE	849	157.142	124.147	-30.390	1.00	38.89	A16S
ATOM	37401	C5'	URI	847	157.666	125.260	-36.798	1.00	38.39	A16S	ATOM	37454	C8	ADE	849	157.848	123.085	-30.670	1.00	38.89	A16S
ATOM	37402	C4'	URI	847	156.605	125.393	-37.856	1.00	38.39	A16S	ATOM	37455	C2'	ADE	849	157.155	120.208	-32.969	1.00	38.25	A16S
ATOM	37403	O4'	URI	847	155.347	125.749	-37.229	1.00	38.39	A16S	ATOM	37456	O2'	ADE	849	156.403	119.620	-31.928	1.00	38.25	A16S
ATOM	37404	C1'	URI	847	154.847	126.946	-37.796	1.00	38.39	A16S	ATOM	37457	C3'	ADE	849	158.185	119.271	-33.602	1.00	38.25	A16S
ATOM	37405	N1	URI	847	154.209	127.733	-36.732	1.00	46.79	A16S	ATOM	37458	O3'	ADE	849	158.701	118.510	-32.530	1.00	38.25	A16S
ATOM	37406	C6	URI	847	154.924	128.169	-35.646	1.00	46.79	A16S	ATOM	37459	P	ADE	850	159.415	117.112	-32.807	1.00	32.48	A16S
ATOM	37407	C2	URI	847	152.861	128.022	-36.862	1.00	46.79	A16S	ATOM	37460	O1P	ADE	850	160.724	117.405	-33.419	1.00	41.30	A16S
ATOM	37408	O2	URI	847	152.186	127.636	-37.799	1.00	46.79	A16S	ATOM	37461	O2P	ADE	850	158.488	116.162	-33.470	1.00	41.30	A16S
ATOM	37409	N3	URI	847	152.329	128.774	-35.846	1.00	46.79	A16S	ATOM	37462	O5'	ADE	850	159.728	116.612	-31.336	1.00	32.48	A16S
ATOM	37410	C4	URI	847	152.991	129.245	-34.729	1.00	46.79	A16S	ATOM	37463	C5'	ADE	850	158.678	116.239	-30.445	1.00	32.48	A16S
ATOM	37411	O4	URI	847	152.373	129.895	-33.881	1.00	46.79	A16S	ATOM	37464	C4'	ADE	850	158.871	116.928	-29.127	1.00	32.48	A16S
ATOM	37412	C5	URI	847	154.378	128.892	-34.666	1.00	46.79	A16S	ATOM	37465	O4'	ADE	850	160.245	116.756	-28.724	1.00	32.48	A16S
ATOM	37413	C2'	URI	847	156.036	127.644	-38.449	1.00	38.39	A16S	ATOM	37466	C1'	ADE	850	160.878	118.014	-28.609	1.00	32.48	A16S
ATOM	37414	O2'	URI	847	155.609	128.477	-39.508	1.00	38.39	A16S	ATOM	37467	N9	ADE	850	162.246	117.864	-29.112	1.00	41.30	A16S
ATOM	37415	C3'	URI	847	156.878	126.458	-38.912	1.00	38.39	A16S	ATOM	37468	C4	ADE	850	163.401	118.320	-28.526	1.00	41.30	A16S
ATOM	37416	O3'	URI	847	156.433	125.997	-40.184	1.00	38.39	A16S	ATOM	37469	N3	ADE	850	163.517	119.069	-27.421	1.00	41.30	A16S
ATOM	37417	P	URI	848	157.516	125.492	-41.254	1.00	41.49	A16S	ATOM	37470	C2	ADE	850	164.793	119.270	-27.121	1.00	41.30	A16S
ATOM	37418	O1P	URI	848	158.680	126.419	-41.217	1.00	52.47	A16S	ATOM	37471	N1	ADE	850	165.887	118.833	-27.749	1.00	41.30	A16S
ATOM	37419	O2P	URI	848	156.841	125.195	-42.551	1.00	52.47	A16S	ATOM	37472	C6	ADE	850	165.733	118.083	-28.863	1.00	41.30	A16S
ATOM	37420	O5'	URI	848	158.058	124.145	-40.614	1.00	41.49	A16S	ATOM	37473	N6	ADE	850	166.818	117.628	-29.492	1.00	41.30	A16S
ATOM	37421	C5'	URI	848	157.362	122.911	-40.772	1.00	41.49	A16S	ATOM	37474	C5	ADE	850	164.432	117.814	-29.291	1.00	41.30	A16S
ATOM	37422	C4'	URI	848	158.290	121.777	-40.442	1.00	41.49	A16S	ATOM	37475	N7	ADE	850	163.941	117.104	-30.373	1.00	41.30	A16S
ATOM	37423	O4'	URI	848	159.350	121.714	-41.438	1.00	41.49	A16S	ATOM	37476	C8	ADE	850	162.643	117.176	-30.232	1.00	41.30	A16S
ATOM	37424	C1'	URI	848	160.602	121.737	-40.790	1.00	41.49	A16S	ATOM	37477	C2'	ADE	850	159.990	119.032	-29.328	1.00	32.48	A16S
ATOM	37425	N1	URI	848	161.587	122.389	-41.663	1.00	52.47	A16S	ATOM	37478	O2'	ADE	850	160.073	120.296	-28.680	1.00	32.48	A16S
ATOM	37426	C6	URI	848	161.336	123.591	-42.262	1.00	52.47	A16S	ATOM	37479	C3'	ADE	850	158.608	118.426	-29.127	1.00	32.48	A16S
ATOM	37427	C2	URI	848	162.798	121.741	-41.856	1.00	52.47	A16S	ATOM	37480	O3'	ADE	850	158.178	118.774	-27.810	1.00	32.48	A16S
ATOM	37428	O2	URI	848	163.062	120.654	-41.373	1.00	52.47	A16S	ATOM	37481	P	GUA	851	156.646	118.562	-27.369	1.00	38.62	A16S
ATOM	37429	N3	URI	848	163.695	122.409	-42.641	1.00	52.47	A16S	ATOM	37482	O1P	GUA	851	156.732	117.942	-26.019	1.00	34.40	A16S
ATOM	37430	C4	URI	848	163.517	123.621	-43.246	1.00	52.47	A16S	ATOM	37483	O2P	GUA	851	155.870	117.892	-28.462	1.00	34.40	A16S
ATOM	37431	O4	URI	848	164.472	124.144	-43.827	1.00	52.47	A16S	ATOM	37484	O5'	GUA	851	156.092	120.043	-27.219	1.00	38.62	A16S
ATOM	37432	C5	URI	848	162.231	124.212	-43.030	1.00	52.47	A16S	ATOM	37485	C5'	GUA	851	156.523	120.892	-26.150	1.00	38.62	A16S
ATOM	37433	C2'	URI	848	160.368	122.404	-39.438	1.00	41.49	A16S	ATOM	37486	C4'	GUA	851	155.677	122.128	-26.136	1.00	38.62	A16S
ATOM	37434	O2'	URI	848	161.347	122.019	-38.501	1.00	41.49	A16S	ATOM	37487	O4'	GUA	851	155.845	122.804	-27.405	1.00	38.62	A16S
ATOM	37435	C3'	URI	848	158.976	121.892	-39.084	1.00	41.49	A16S	ATOM	37488	C1'	GUA	851	154.598	123.307	-27.856	1.00	38.62	A16S
ATOM	37436	O3'	URI	848	159.058	120.602	-38.498	1.00	41.49	A16S	ATOM	37489	N9	GUA	851	154.312	122.708	-29.154	1.00	34.40	A16S

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ATOM  37490  C4  GUA  851     153.261 123.011 -29.992  1.00 34.40      A16S
ATOM  37491  N3  GUA  851     152.273 123.902 -29.746  1.00 34.40      A16S
ATOM  37492  C2  GUA  851     151.401 123.961 -30.748  1.00 34.40      A16S
ATOM  37493  N2  GUA  851     150.349 124.767 -30.666  1.00 34.40      A16S
ATOM  37494  N1  GUA  851     151.500 123.225 -31.901  1.00 34.40      A16S
ATOM  37495  C6  GUA  851     152.508 122.307 -32.174  1.00 34.40      A16S
ATOM  37496  O6  GUA  851     152.507 121.698 -33.244  1.00 34.40      A16S
ATOM  37497  C5  GUA  851     153.441 122.216 -31.105  1.00 34.40      A16S
ATOM  37498  N7  GUA  851     154.568 121.419 -30.964  1.00 34.40      A16S
ATOM  37499  C8  GUA  851     155.048 121.739 -29.794  1.00 34.40      A16S
ATOM  37500  C2' GUA  851     153.553 123.014 -26.782  1.00 38.62      A16S
ATOM  37501  O2' GUA  851     153.398 124.181 -25.991  1.00 38.62      A16S
ATOM  37502  C3' GUA  851     154.189 121.828 -26.058  1.00 38.62      A16S
ATOM  37503  O3' GUA  851     153.776 121.633 -24.708  1.00 38.62      A16S
ATOM  37504  P   CYT  852     152.693 120.499 -24.376  1.00 36.34      A16S
ATOM  37505  O1P CYT  852     152.565 120.384 -22.906  1.00 32.84      A16S
ATOM  37506  O2P CYT  852     152.985 119.290 -25.181  1.00 32.84      A16S
ATOM  37507  O5' CYT  852     151.349 121.123 -24.946  1.00 36.34      A16S
ATOM  37508  C5' CYT  852     150.850 122.356 -24.429  1.00 36.34      A16S
ATOM  37509  C4' CYT  852     149.616 122.758 -25.172  1.00 36.34      A16S
ATOM  37510  O4' CYT  852     149.957 123.170 -26.515  1.00 36.34      A16S
ATOM  37511  C1' CYT  852     148.911 122.816 -27.399  1.00 36.34      A16S
ATOM  37512  N1  CYT  852     149.455 121.967 -28.463  1.00 32.84      A16S
ATOM  37513  C6  CYT  852     150.584 121.229 -28.265  1.00 32.84      A16S
ATOM  37514  C2  CYT  852     148.784 121.909 -29.678  1.00 32.84      A16S
ATOM  37515  O2  CYT  852     147.776 122.613 -29.841  1.00 32.84      A16S
ATOM  37516  N3  CYT  852     149.245 121.092 -30.649  1.00 32.84      A16S
ATOM  37517  C4  CYT  852     150.335 120.358 -30.436  1.00 32.84      A16S
ATOM  37518  N4  CYT  852     150.745 119.551 -31.408  1.00 32.84      A16S
ATOM  37519  C5  CYT  852     151.051 120.416 -29.215  1.00 32.84      A16S
ATOM  37520  C2' CYT  852     147.833 122.097 -26.588  1.00 36.34      A16S
ATOM  37521  O2' CYT  852     146.790 123.012 -26.311  1.00 36.34      A16S
ATOM  37522  C3' CYT  852     148.620 121.642 -25.364  1.00 36.34      A16S
ATOM  37523  O3' CYT  852     147.833 121.454 -24.203  1.00 36.34      A16S
ATOM  37524  P   GUA  853     147.241 120.004 -23.896  1.00 31.07      A16S
ATOM  37525  O1P GUA  853     146.386 120.099 -22.689  1.00 37.02      A16S
ATOM  37526  O2P GUA  853     148.388 119.064 -23.914  1.00 37.02      A16S
ATOM  37527  O5' GUA  853     146.339 119.735 -25.174  1.00 31.07      A16S
ATOM  37528  C5' GUA  853     146.105 118.414 -25.659  1.00 31.07      A16S
ATOM  37529  C4' GUA  853     145.151 118.476 -26.816  1.00 31.07      A16S
ATOM  37530  O4' GUA  853     145.740 119.252 -27.890  1.00 31.07      A16S
ATOM  37531  C1' GUA  853     145.309 118.748 -29.143  1.00 31.07      A16S
ATOM  37532  N9  GUA  853     146.475 118.310 -29.898  1.00 37.02      A16S
ATOM  37533  C4  GUA  853     146.507 118.023 -31.241  1.00 37.02      A16S
ATOM  37534  N3  GUA  853     145.472 118.132 -32.099  1.00 37.02      A16S
ATOM  37535  C2  GUA  853     145.807 117.760 -33.324  1.00 37.02      A16S
ATOM  37536  N2  GUA  853     144.908 117.811 -34.306  1.00 37.02      A16S
ATOM  37537  N1  GUA  853     147.049 117.313 -33.676  1.00 37.02      A16S
ATOM  37538  C6  GUA  853     148.125 117.191 -32.812  1.00 37.02      A16S
ATOM  37539  O6  GUA  853     149.200 116.768 -33.236  1.00 37.02      A16S
ATOM  37540  C5  GUA  853     147.788 117.595 -31.494  1.00 37.02      A16S
ATOM  37541  N7  GUA  853     148.557 117.637 -30.340  1.00 37.02      A16S
ATOM  37542  C8  GUA  853     147.739 118.071 -29.421  1.00 37.02      A16S
ATOM  37543  C2' GUA  853     144.365 117.583 -28.863  1.00 31.07      A16S
ATOM  37544  O2' GUA  853     143.037 118.059 -28.969  1.00 31.07      A16S
ATOM  37545  C3' GUA  853     144.808 117.160 -27.464  1.00 31.07      A16S
ATOM  37546  O3' GUA  853     143.830 116.476 -26.713  1.00 31.07      A16S
ATOM  37547  P   CYT  854     143.978 114.899 -26.501  1.00 29.71      A16S
ATOM  37548  O1P CYT  854     143.193 114.482 -25.305  1.00 38.67      A16S
ATOM  37549  O2P CYT  854     145.430 114.577 -26.577  1.00 38.67      A16S
ATOM  37550  O5' CYT  854     143.311 114.300 -27.806  1.00 29.71      A16S
ATOM  37551  C5' CYT  854     141.953 114.538 -28.106  1.00 29.71      A16S
ATOM  37552  C4' CYT  854     141.691 114.161 -29.533  1.00 29.71      A16S
ATOM  37553  O4' CYT  854     142.472 115.028 -30.400  1.00 29.71      A16S
ATOM  37554  C1' CYT  854     142.848 114.319 -31.576  1.00 29.71      A16S
ATOM  37555  N1  CYT  854     144.326 114.316 -31.703  1.00 38.67      A16S
ATOM  37556  C6  CYT  854     145.124 114.540 -30.622  1.00 38.67      A16S
ATOM  37557  C2  CYT  854     144.903 114.045 -32.961  1.00 38.67      A16S
ATOM  37558  O2  CYT  854     144.172 113.890 -33.943  1.00 38.67      A16S
ATOM  37559  N3  CYT  854     146.240 113.962 -33.075  1.00 38.67      A16S
ATOM  37560  C4  CYT  854     147.007 114.148 -32.010  1.00 38.67      A16S
ATOM  37561  N4  CYT  854     148.322 114.020 -32.169  1.00 38.67      A16S
ATOM  37562  C5  CYT  854     146.457 114.466 -30.728  1.00 38.67      A16S
ATOM  37563  C2' CYT  854     142.279 112.905 -31.452  1.00 29.71      A16S
ATOM  37564  O2' CYT  854     141.031 112.822 -32.104  1.00 29.71      A16S
ATOM  37565  C3' CYT  854     142.133 112.769 -29.947  1.00 29.71      A16S
ATOM  37566  O3' CYT  854     141.224 111.756 -29.607  1.00 29.71      A16S
ATOM  37567  P   GUA  855     141.784 110.293 -29.268  1.00 34.02      A16S
ATOM  37568  O1P GUA  855     140.709 109.536 -28.554  1.00 39.51      A16S
ATOM  37569  O2P GUA  855     143.116 110.459 -28.624  1.00 39.51      A16S
ATOM  37570  O5' GUA  855     142.010 109.632 -30.695  1.00 34.02      A16S
ATOM  37571  C5' GUA  855     140.944 109.551 -31.620  1.00 34.02      A16S
ATOM  37572  C4' GUA  855     141.448 109.065 -32.946  1.00 34.02      A16S
ATOM  37573  O4' GUA  855     142.336 110.058 -33.526  1.00 34.02      A16S
ATOM  37574  C1' GUA  855     143.288 109.414 -34.366  1.00 34.02      A16S
ATOM  37575  N9  GUA  855     144.640 109.777 -33.938  1.00 39.51      A16S
ATOM  37576  C4  GUA  855     145.760 109.811 -34.740  1.00 39.51      A16S
ATOM  37577  N3  GUA  855     145.804 109.530 -36.062  1.00 39.51      A16S
ATOM  37578  C2  GUA  855     147.023 109.660 -36.554  1.00 39.51      A16S
ATOM  37579  N2  GUA  855     147.248 109.431 -37.853  1.00 39.51      A16S
ATOM  37580  N1  GUA  855     148.111 110.025 -35.814  1.00 39.51      A16S
ATOM  37581  C6  GUA  855     148.093 110.311 -34.460  1.00 39.51      A16S
ATOM  37582  O6  GUA  855     149.138 110.628 -33.891  1.00 39.51      A16S
ATOM  37583  C5  GUA  855     146.790 110.184 -33.912  1.00 39.51      A16S
ATOM  37584  N7  GUA  855     146.333 110.381 -32.616  1.00 39.51      A16S
ATOM  37585  C8  GUA  855     145.054 110.133 -32.681  1.00 39.51      A16S
ATOM  37586  C2' GUA  855     143.031 107.910 -34.281  1.00 34.02      A16S
ATOM  37587  O2' GUA  855     142.253 107.515 -35.395  1.00 34.02      A16S
ATOM  37588  C3' GUA  855     142.299 107.809 -32.947  1.00 34.02      A16S
ATOM  37589  O3' GUA  855     141.578 106.608 -32.759  1.00 34.02      A16S
ATOM  37590  P   CYT  856     142.123 105.557 -31.679  1.00 35.68      A16S
ATOM  37591  O1P CYT  856     141.039 104.612 -31.280  1.00 31.55      A16S
ATOM  37592  O2P CYT  856     142.826 106.341 -30.636  1.00 31.55      A16S
ATOM  37593  O5' CYT  856     143.237 104.781 -32.501  1.00 35.68      A16S
ATOM  37594  C5' CYT  856     142.847 104.003 -33.629  1.00 35.68      A16S
ATOM  37595  C4' CYT  856     144.008 103.758 -34.551  1.00 35.68      A16S
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ATOM	37596	O4'	CYT	856	144.499	105.006	-35.092	1.00	35.68	A16S	ATOM	37649	C2'	GUA	858	156.091	98.984	-32.694	1.00	31.97	A16S
ATOM	37597	C1'	CYT	856	145.861	104.859	-35.445	1.00	35.68	A16S	ATOM	37650	O2'	GUA	858	157.241	98.631	-33.428	1.00	31.97	A16S
ATOM	37598	N1	CYT	856	146.675	105.777	-34.626	1.00	31.55	A16S	ATOM	37651	C3'	GUA	858	155.039	97.885	-32.729	1.00	31.97	A16S
ATOM	37599	C6	CYT	856	146.267	106.146	-33.376	1.00	31.55	A16S	ATOM	37652	O3'	GUA	858	155.589	96.582	-32.560	1.00	31.97	A16S
ATOM	37600	C2	CYT	856	147.922	106.218	-35.122	1.00	31.55	A16S	ATOM	37653	P	CYT	859	155.556	95.882	-31.100	1.00	34.75	A16S
ATOM	37601	O2	CYT	856	148.243	105.947	-36.294	1.00	31.55	A16S	ATOM	37654	O1P	CYT	859	156.165	94.529	-31.217	1.00	34.29	A16S
ATOM	37602	N3	CYT	856	148.736	106.924	-34.308	1.00	31.55	A16S	ATOM	37655	O2P	CYT	859	154.207	96.020	-30.481	1.00	34.29	A16S
ATOM	37603	C4	CYT	856	148.353	107.206	-33.064	1.00	31.55	A16S	ATOM	37656	O5'	CYT	859	156.587	96.762	-30.274	1.00	34.75	A16S
ATOM	37604	N4	CYT	856	149.214	107.825	-32.272	1.00	31.55	A16S	ATOM	37657	C5'	CYT	859	157.949	96.827	-30.684	1.00	34.75	A16S
ATOM	37605	C5	CYT	856	147.073	106.846	-32.567	1.00	31.55	A16S	ATOM	37658	C4'	CYT	859	158.687	97.870	-29.898	1.00	34.75	A16S
ATOM	37606	C2'	CYT	856	146.245	103.424	-35.090	1.00	35.68	A16S	ATOM	37659	O4'	CYT	859	158.060	99.167	-30.089	1.00	34.75	A16S
ATOM	37607	O2'	CYT	856	146.002	102.606	-36.212	1.00	35.68	A16S	ATOM	37660	C1'	CYT	859	158.200	99.939	-28.905	1.00	34.75	A16S
ATOM	37608	C3'	CYT	856	145.253	103.118	-33.990	1.00	35.68	A16S	ATOM	37661	N1	CYT	859	156.864	100.254	-28.364	1.00	34.29	A16S
ATOM	37609	O3'	CYT	856	145.119	101.739	-33.790	1.00	35.68	A16S	ATOM	37662	C6	CYT	859	155.755	99.580	-28.783	1.00	34.29	A16S
ATOM	37610	P	CYT	857	146.062	101.016	-32.712	1.00	36.45	A16S	ATOM	37663	C2	CYT	859	156.752	101.257	-27.403	1.00	34.29	A16S
ATOM	37611	O1P	CYT	857	145.517	99.651	-32.504	1.00	33.31	A16S	ATOM	37664	O2	CYT	859	157.761	101.867	-27.057	1.00	34.29	A16S
ATOM	37612	O2P	CYT	857	146.237	101.906	-31.549	1.00	33.31	A16S	ATOM	37665	N3	CYT	859	155.542	101.542	-26.879	1.00	34.29	A16S
ATOM	37613	O5'	CYT	857	147.438	100.889	-33.502	1.00	36.45	A16S	ATOM	37666	C4	CYT	859	154.464	100.879	-27.296	1.00	34.29	A16S
ATOM	37614	C5'	CYT	857	147.465	100.190	-34.760	1.00	36.45	A16S	ATOM	37667	N4	CYT	859	153.287	101.197	-26.754	1.00	34.29	A16S
ATOM	37615	C4'	CYT	857	148.837	100.221	-35.376	1.00	36.45	A16S	ATOM	37668	C5	CYT	859	154.544	99.860	-28.286	1.00	34.29	A16S
ATOM	37616	O4'	CYT	857	149.194	101.576	-35.736	1.00	36.45	A16S	ATOM	37669	C2'	CYT	859	159.012	99.106	-27.916	1.00	34.75	A16S
ATOM	37617	C1'	CYT	857	150.586	101.756	-35.585	1.00	36.45	A16S	ATOM	37670	O2'	CYT	859	160.383	99.441	-28.055	1.00	34.75	A16S
ATOM	37618	N1	CYT	857	150.818	102.738	-34.514	1.00	33.31	A16S	ATOM	37671	C3'	CYT	859	158.704	97.696	-28.394	1.00	34.75	A16S
ATOM	37619	C6	CYT	857	149.950	102.856	-33.462	1.00	33.31	A16S	ATOM	37672	O3'	CYT	859	159.663	96.761	-27.947	1.00	34.75	A16S
ATOM	37620	C2	CYT	857	151.963	103.531	-34.575	1.00	33.31	A16S	ATOM	37673	P	CYT	860	159.538	96.179	-26.461	1.00	33.24	A16S
ATOM	37621	O2	CYT	857	152.715	103.435	-35.564	1.00	33.31	A16S	ATOM	37674	O1P	CYT	860	160.546	95.111	-26.266	1.00	42.57	A16S
ATOM	37622	N3	CYT	857	152.224	104.380	-33.564	1.00	33.31	A16S	ATOM	37675	O2P	CYT	860	158.105	95.897	-26.197	1.00	42.57	A16S
ATOM	37623	C4	CYT	857	151.392	104.459	-32.525	1.00	33.31	A16S	ATOM	37676	O5'	CYT	860	159.977	97.408	-25.560	1.00	33.24	A16S
ATOM	37624	N4	CYT	857	151.720	105.279	-31.531	1.00	33.31	A16S	ATOM	37677	C5'	CYT	860	161.306	97.909	-25.632	1.00	33.24	A16S
ATOM	37625	C5	CYT	857	150.197	103.694	-32.456	1.00	33.31	A16S	ATOM	37678	C4'	CYT	860	161.561	98.844	-24.492	1.00	33.24	A16S
ATOM	37626	C2'	CYT	857	151.171	100.400	-35.201	1.00	36.45	A16S	ATOM	37679	O4'	CYT	860	160.647	99.962	-24.585	1.00	33.24	A16S
ATOM	37627	O2'	CYT	857	151.513	99.724	-36.392	1.00	36.45	A16S	ATOM	37680	C1'	CYT	860	160.313	100.404	-23.283	1.00	33.24	A16S
ATOM	37628	C3'	CYT	857	149.985	99.748	-34.516	1.00	36.45	A16S	ATOM	37681	N1	CYT	860	158.847	100.400	-23.131	1.00	42.57	A16S
ATOM	37629	O3'	CYT	857	150.084	98.350	-34.523	1.00	36.45	A16S	ATOM	37682	C6	CYT	860	158.047	99.726	-24.006	1.00	42.57	A16S
ATOM	37630	P	GUA	858	150.616	97.607	-33.218	1.00	31.97	A16S	ATOM	37683	C2	CYT	860	158.285	101.109	-22.066	1.00	42.57	A16S
ATOM	37631	O1P	GUA	858	150.354	96.155	-33.417	1.00	27.67	A16S	ATOM	37684	O2	CYT	860	159.033	101.721	-21.290	1.00	42.57	A16S
ATOM	37632	O2P	GUA	858	150.075	98.281	-32.035	1.00	27.67	A16S	ATOM	37685	N3	CYT	860	156.950	101.116	-21.911	1.00	42.57	A16S
ATOM	37633	O5'	GUA	858	152.170	97.936	-33.197	1.00	31.97	A16S	ATOM	37686	C4	CYT	860	156.181	100.456	-22.770	1.00	42.57	A16S
ATOM	37634	C5'	GUA	858	153.016	97.550	-34.283	1.00	31.97	A16S	ATOM	37687	N4	CYT	860	154.866	100.490	-22.576	1.00	42.57	A16S
ATOM	37635	C4'	GUA	858	154.409	98.102	-34.094	1.00	31.97	A16S	ATOM	37688	C5	CYT	860	156.722	99.731	-23.865	1.00	42.57	A16S
ATOM	37636	O4'	GUA	858	154.401	99.548	-34.265	1.00	31.97	A16S	ATOM	37689	C2'	CYT	860	161.056	99.521	-22.279	1.00	33.24	A16S
ATOM	37637	C1'	GUA	858	155.370	100.134	-33.409	1.00	31.97	A16S	ATOM	37690	O2'	CYT	860	162.238	100.212	-21.953	1.00	33.24	A16S
ATOM	37638	N9	GUA	858	154.688	100.972	-32.422	1.00	27.67	A16S	ATOM	37691	C3'	CYT	860	161.338	98.270	-23.103	1.00	33.24	A16S
ATOM	37639	C4	GUA	858	155.284	101.821	-31.517	1.00	27.67	A16S	ATOM	37692	O3'	CYT	860	162.519	97.607	-22.680	1.00	33.24	A16S
ATOM	37640	N3	GUA	858	156.602	102.096	-31.432	1.00	27.67	A16S	ATOM	37693	P	URI	861	162.430	96.390	-21.633	1.00	36.50	A16S
ATOM	37641	C2	GUA	858	156.863	102.930	-30.444	1.00	27.67	A16S	ATOM	37694	O1P	URI	861	163.814	95.929	-21.357	1.00	45.36	A16S
ATOM	37642	N2	GUA	858	158.108	103.335	-30.214	1.00	27.67	A16S	ATOM	37695	O2P	URI	861	161.408	95.417	-22.085	1.00	45.36	A16S
ATOM	37643	N1	GUA	858	155.919	103.437	-29.607	1.00	27.67	A16S	ATOM	37696	O5'	URI	861	161.903	97.095	-20.317	1.00	36.50	A16S
ATOM	37644	C6	GUA	858	154.564	103.159	-29.671	1.00	27.67	A16S	ATOM	37697	C5'	URI	861	162.704	98.070	-19.660	1.00	36.50	A16S
ATOM	37645	O6	GUA	858	153.798	103.659	-28.849	1.00	27.67	A16S	ATOM	37698	C4'	URI	861	162.125	98.362	-18.315	1.00	36.50	A16S
ATOM	37646	C5	GUA	858	154.263	102.284	-30.727	1.00	27.67	A16S	ATOM	37699	O4'	URI	861	160.884	99.099	-18.482	1.00	36.50	A16S
ATOM	37647	N7	GUA	858	153.045	101.777	-31.146	1.00	27.67	A16S	ATOM	37700	C1'	URI	861	159.860	98.441	-17.789	1.00	36.50	A16S
ATOM	37648	C8	GUA	858	153.341	101.019	-32.162	1.00	27.67	A16S	ATOM	37701	N1	URI	861	158.577	98.703	-18.463	1.00	45.36	A16S

ATOM	37702	C6	URI	861	158.159	97.959	-19.533	1.00	45.36	A16S
ATOM	37703	C2	URI	861	157.781	99.721	-17.960	1.00	45.36	A16S
ATOM	37704	O2	URI	861	158.141	100.465	-17.065	1.00	45.36	A16S
ATOM	37705	N3	URI	861	156.553	99.849	-18.559	1.00	45.36	A16S
ATOM	37706	C4	URI	861	156.063	99.107	-19.611	1.00	45.36	A16S
ATOM	37707	O4	URI	861	154.903	99.281	-19.994	1.00	45.36	A16S
ATOM	37708	C5	URI	861	156.965	98.127	-20.110	1.00	45.36	A16S
ATOM	37709	C2'	URI	861	160.296	96.979	-17.677	1.00	36.50	A16S
ATOM	37710	O2'	URI	861	159.678	96.360	-16.569	1.00	36.50	A16S
ATOM	37711	C3'	URI	861	161.806	97.116	-17.503	1.00	36.50	A16S
ATOM	37712	O3'	URI	861	162.123	97.363	-16.142	1.00	36.50	A16S
ATOM	37713	P	GUA	862	163.136	96.386	-15.349	1.00	40.14	A16S
ATOM	37714	O1P	GUA	862	163.205	95.067	-16.031	1.00	37.71	A16S
ATOM	37715	O2P	GUA	862	162.742	96.443	-13.911	1.00	37.71	A16S
ATOM	37716	O5'	GUA	862	164.559	97.091	-15.489	1.00	40.14	A16S
ATOM	37717	C5'	GUA	862	164.676	98.517	-15.576	1.00	40.14	A16S
ATOM	37718	C4'	GUA	862	166.063	98.955	-15.166	1.00	40.14	A16S
ATOM	37719	O4'	GUA	862	166.206	98.822	-13.731	1.00	40.14	A16S
ATOM	37720	C1'	GUA	862	167.538	98.454	-13.411	1.00	40.14	A16S
ATOM	37721	N9	GUA	862	167.508	97.107	-12.852	1.00	37.71	A16S
ATOM	37722	C4	GUA	862	168.537	96.471	-12.200	1.00	37.71	A16S
ATOM	37723	N3	GUA	862	169.757	96.992	-11.941	1.00	37.71	A16S
ATOM	37724	C2	GUA	862	170.538	96.130	-11.329	1.00	37.71	A16S
ATOM	37725	N2	GUA	862	171.779	96.476	-11.023	1.00	37.71	A16S
ATOM	37726	N1	GUA	862	170.154	94.862	-10.980	1.00	37.71	A16S
ATOM	37727	C6	GUA	862	168.902	94.306	-11.230	1.00	37.71	A16S
ATOM	37728	O6	GUA	862	168.653	93.150	-10.868	1.00	37.71	A16S
ATOM	37729	C5	GUA	862	168.058	95.214	-11.902	1.00	37.71	A16S
ATOM	37730	N7	GUA	862	166.755	95.065	-12.346	1.00	37.71	A16S
ATOM	37731	C8	GUA	862	166.468	96.211	-12.895	1.00	37.71	A16S
ATOM	37732	C2'	GUA	862	168.331	98.451	-14.713	1.00	40.14	A16S
ATOM	37733	O2'	GUA	862	168.932	99.710	-14.914	1.00	40.14	A16S
ATOM	37734	C3'	GUA	862	167.237	98.164	-15.725	1.00	40.14	A16S
ATOM	37735	O3'	GUA	862	167.620	98.516	-17.044	1.00	40.14	A16S
ATOM	37736	P	GUA	863	168.288	97.399	-17.986	1.00	40.70	A16S
ATOM	37737	O1P	GUA	863	168.463	98.003	-19.331	1.00	41.63	A16S
ATOM	37738	O2P	GUA	863	167.513	96.137	-17.836	1.00	41.63	A16S
ATOM	37739	O5'	GUA	863	169.715	97.157	-17.330	1.00	40.70	A16S
ATOM	37740	C5'	GUA	863	170.662	98.217	-17.268	1.00	40.70	A16S
ATOM	37741	C4'	GUA	863	171.962	97.731	-16.685	1.00	40.70	A16S
ATOM	37742	O4'	GUA	863	171.788	97.387	-15.291	1.00	40.70	A16S
ATOM	37743	C1'	GUA	863	172.717	96.388	-14.932	1.00	40.70	A16S
ATOM	37744	N9	GUA	863	171.991	95.221	-14.455	1.00	41.63	A16S
ATOM	37745	C4	GUA	863	172.546	94.158	-13.803	1.00	41.63	A16S
ATOM	37746	N3	GUA	863	173.852	94.018	-13.500	1.00	41.63	A16S
ATOM	37747	C2	GUA	863	174.085	92.898	-12.849	1.00	41.63	A16S
ATOM	37748	N2	GUA	863	175.332	92.610	-12.435	1.00	41.63	A16S
ATOM	37749	N1	GUA	863	173.113	91.979	-12.544	1.00	41.63	A16S
ATOM	37750	C6	GUA	863	171.766	92.103	-12.857	1.00	41.63	A16S
ATOM	37751	O6	GUA	863	170.974	91.209	-12.535	1.00	41.63	A16S
ATOM	37752	C5	GUA	863	171.502	93.302	-13.535	1.00	41.63	A16S
ATOM	37753	N7	GUA	863	170.309	93.815	-14.015	1.00	41.63	A16S
ATOM	37754	C8	GUA	863	170.648	94.955	-14.557	1.00	41.63	A16S
ATOM	37755	C2'	GUA	863	173.526	96.051	-16.177	1.00	40.70	A16S
ATOM	37756	O2'	GUA	863	174.709	96.831	-16.233	1.00	40.70	A16S
ATOM	37757	C3'	GUA	863	172.568	96.472	-17.270	1.00	40.70	A16S
ATOM	37758	O3'	GUA	863	173.257	96.657	-18.487	1.00	40.70	A16S
ATOM	37759	P	GUA	864	173.232	95.477	-19.567	1.00	47.11	A16S
ATOM	37760	O1P	GUA	864	173.872	96.037	-20.786	1.00	37.43	A16S
ATOM	37761	O2P	GUA	864	171.839	94.944	-19.627	1.00	37.43	A16S
ATOM	37762	O5'	GUA	864	174.125	94.320	-18.921	1.00	47.11	A16S
ATOM	37763	C5'	GUA	864	175.532	94.516	-18.675	1.00	47.11	A16S
ATOM	37764	C4'	GUA	864	176.129	93.319	-17.963	1.00	47.11	A16S
ATOM	37765	O4'	GUA	864	175.526	93.162	-16.653	1.00	47.11	A16S
ATOM	37766	C1'	GUA	864	175.515	91.794	-16.299	1.00	47.11	A16S
ATOM	37767	N9	GUA	864	174.138	91.358	-16.112	1.00	37.43	A16S
ATOM	37768	C4	GUA	864	173.749	90.218	-15.461	1.00	37.43	A16S
ATOM	37769	N3	GUA	864	174.570	89.345	-14.848	1.00	37.43	A16S
ATOM	37770	C2	GUA	864	173.912	88.327	-14.344	1.00	37.43	A16S
ATOM	37771	N2	GUA	864	174.577	87.356	-13.712	1.00	37.43	A16S
ATOM	37772	N1	GUA	864	172.552	88.181	-14.427	1.00	37.43	A16S
ATOM	37773	C6	GUA	864	171.688	89.076	-15.053	1.00	37.43	A16S
ATOM	37774	O6	GUA	864	170.470	88.853	-15.076	1.00	37.43	A16S
ATOM	37775	C5	GUA	864	172.382	90.166	-15.600	1.00	37.43	A16S
ATOM	37776	N7	GUA	864	171.912	91.267	-16.300	1.00	37.43	A16S
ATOM	37777	C8	GUA	864	172.988	91.954	-16.576	1.00	37.43	A16S
ATOM	37778	C2'	GUA	864	176.131	91.004	-17.452	1.00	47.11	A16S
ATOM	37779	O2'	GUA	864	177.486	90.721	-17.187	1.00	47.11	A16S
ATOM	37780	C3'	GUA	864	175.939	91.961	-18.616	1.00	47.11	A16S
ATOM	37781	O3'	GUA	864	176.871	91.692	-19.649	1.00	47.11	A16S
ATOM	37782	P	GUA	865	176.441	90.739	-20.867	1.00	39.26	A16S
ATOM	37783	O1P	GUA	865	177.653	90.534	-21.694	1.00	46.85	A16S
ATOM	37784	O2P	GUA	865	175.215	91.305	-21.491	1.00	46.85	A16S
ATOM	37785	O5'	GUA	865	176.056	89.357	-20.169	1.00	39.26	A16S
ATOM	37786	C5'	GUA	865	177.069	88.518	-19.590	1.00	39.26	A16S
ATOM	37787	C4'	GUA	865	176.455	87.268	-19.007	1.00	39.26	A16S
ATOM	37788	O4'	GUA	865	175.548	87.649	-17.947	1.00	39.26	A16S
ATOM	37789	C1'	GUA	865	174.382	86.835	-17.982	1.00	39.26	A16S
ATOM	37790	N9	GUA	865	173.255	87.707	-18.318	1.00	46.85	A16S
ATOM	37791	C4	GUA	865	171.915	87.506	-18.051	1.00	46.85	A16S
ATOM	37792	N3	GUA	865	171.375	86.454	-17.398	1.00	46.85	A16S
ATOM	37793	C2	GUA	865	170.049	86.537	-17.332	1.00	46.85	A16S
ATOM	37794	N2	GUA	865	169.343	85.577	-16.718	1.00	46.85	A16S
ATOM	37795	N1	GUA	865	169.319	87.569	-17.863	1.00	46.85	A16S
ATOM	37796	C6	GUA	865	169.857	88.669	-18.533	1.00	46.85	A16S
ATOM	37797	O6	GUA	865	169.107	89.557	-18.980	1.00	46.85	A16S
ATOM	37798	C5	GUA	865	171.269	88.593	-18.608	1.00	46.85	A16S
ATOM	37799	N7	GUA	865	172.179	89.465	-19.186	1.00	46.85	A16S
ATOM	37800	C8	GUA	865	173.338	88.904	-18.990	1.00	46.85	A16S
ATOM	37801	C2'	GUA	865	174.634	85.744	-19.026	1.00	39.26	A16S
ATOM	37802	O2'	GUA	865	175.199	84.607	-18.390	1.00	39.26	A16S
ATOM	37803	C3'	GUA	865	175.615	86.443	-19.963	1.00	39.26	A16S
ATOM	37804	O3'	GUA	865	176.414	85.539	-20.708	1.00	39.26	A16S
ATOM	37805	P	ADE	866	176.054	85.246	-22.244	1.00	71.95	A16S
ATOM	37806	O1P	ADE	866	174.867	84.357	-22.253	1.00	48.08	A16S
ATOM	37807	O2P	ADE	866	177.301	84.812	-22.906	1.00	48.08	A16S

ATOM	37808	O5'	ADE	866	175.640	86.675	-22.810	1.00	71.95	A16S	ATOM	37861	O2	URI	868	171.460	83.084	-23.769	1.00	55.77	A16S
ATOM	37809	C5'	ADE	866	175.757	87.004	-24.211	1.00	71.95	A16S	ATOM	37862	N3	URI	868	169.771	84.451	-24.428	1.00	55.77	A16S
ATOM	37810	C4'	ADE	866	174.636	87.933	-24.595	1.00	71.95	A16S	ATOM	37863	C4	URI	868	169.208	85.454	-25.181	1.00	55.77	A16S
ATOM	37811	O4'	ADE	866	173.429	87.210	-24.317	1.00	71.95	A16S	ATOM	37864	O4	URI	868	168.021	85.741	-25.012	1.00	55.77	A16S
ATOM	37812	C1'	ADE	866	172.453	88.098	-23.847	1.00	71.95	A16S	ATOM	37865	C5	URI	868	170.095	86.065	-26.121	1.00	55.77	A16S
ATOM	37813	N9	ADE	866	171.646	87.407	-22.849	1.00	48.08	A16S	ATOM	37866	C2'	URI	868	173.390	82.717	-26.056	1.00	52.26	A16S
ATOM	37814	C4	ADE	866	170.331	87.666	-22.578	1.00	48.08	A16S	ATOM	37867	O2'	URI	868	174.422	82.069	-25.336	1.00	52.26	A16S
ATOM	37815	N3	ADE	866	169.572	88.637	-23.104	1.00	48.08	A16S	ATOM	37868	C3'	URI	868	173.670	82.892	-27.550	1.00	52.26	A16S
ATOM	37816	C2	ADE	866	168.334	88.561	-22.640	1.00	48.08	A16S	ATOM	37869	O3'	URI	868	174.412	81.810	-28.095	1.00	52.26	A16S
ATOM	37817	N1	ADE	866	167.804	87.687	-21.780	1.00	48.08	A16S	ATOM	37870	P	ADE	869	173.646	80.584	-28.807	1.00	48.67	A16S
ATOM	37818	C6	ADE	866	168.597	86.715	-21.278	1.00	48.08	A16S	ATOM	37871	O1P	ADE	869	174.723	79.681	-29.287	1.00	37.52	A16S
ATOM	37819	N6	ADE	866	168.066	85.817	-20.441	1.00	48.08	A16S	ATOM	37872	O2P	ADE	869	172.628	81.086	-29.766	1.00	37.52	A16S
ATOM	37820	C5	ADE	866	169.935	86.698	-21.680	1.00	48.08	A16S	ATOM	37873	O5'	ADE	869	172.856	79.860	-27.633	1.00	48.67	A16S
ATOM	37821	N7	ADE	866	170.996	85.868	-21.352	1.00	48.08	A16S	ATOM	37874	C5'	ADE	869	173.556	79.214	-26.575	1.00	48.67	A16S
ATOM	37822	C8	ADE	866	171.990	86.341	-22.060	1.00	48.08	A16S	ATOM	37875	C4'	ADE	869	172.586	78.482	-25.694	1.00	48.67	A16S
ATOM	37823	C2'	ADE	866	173.088	89.447	-23.508	1.00	71.95	A16S	ATOM	37876	O4'	ADE	869	171.850	79.422	-24.875	1.00	48.67	A16S
ATOM	37824	O2'	ADE	866	172.554	90.459	-24.344	1.00	71.95	A16S	ATOM	37877	C1'	ADE	869	170.517	78.963	-24.706	1.00	48.67	A16S
ATOM	37825	C3'	ADE	866	174.579	89.186	-23.727	1.00	71.95	A16S	ATOM	37878	N9	ADE	869	169.607	79.962	-25.275	1.00	37.52	A16S
ATOM	37826	O3'	ADE	866	175.159	90.372	-24.323	1.00	71.95	A16S	ATOM	37879	C4	ADE	869	168.273	80.094	-24.977	1.00	37.52	A16S
ATOM	37827	P	GUA	867	175.507	90.446	-25.907	1.00	58.90	A16S	ATOM	37880	N3	ADE	869	167.547	79.334	-24.138	1.00	37.52	A16S
ATOM	37828	O1P	GUA	867	176.006	89.150	-26.400	1.00	54.12	A16S	ATOM	37881	C2	ADE	869	166.282	79.761	-24.098	1.00	37.52	A16S
ATOM	37829	O2P	GUA	867	176.314	91.665	-26.135	1.00	54.12	A16S	ATOM	37882	N1	ADE	869	165.708	80.792	-24.747	1.00	37.52	A16S
ATOM	37830	O5'	GUA	867	174.109	90.716	-26.608	1.00	58.90	A16S	ATOM	37883	C6	ADE	869	166.477	81.539	-25.577	1.00	37.52	A16S
ATOM	37831	C5'	GUA	867	173.904	90.355	-27.970	1.00	58.90	A16S	ATOM	37884	N6	ADE	869	165.924	82.575	-26.212	1.00	37.52	A16S
ATOM	37832	C4'	GUA	867	172.911	89.230	-28.054	1.00	58.90	A16S	ATOM	37885	C5	ADE	869	167.827	81.180	-25.717	1.00	37.52	A16S
ATOM	37833	O4'	GUA	867	171.590	89.699	-27.660	1.00	58.90	A16S	ATOM	37886	N7	ADE	869	168.854	81.710	-26.482	1.00	37.52	A16S
ATOM	37834	C1'	GUA	867	170.668	89.357	-28.667	1.00	58.90	A16S	ATOM	37887	C8	ADE	869	169.884	80.956	-26.188	1.00	37.52	A16S
ATOM	37835	N9	GUA	867	169.534	90.267	-28.623	1.00	54.12	A16S	ATOM	37888	C2'	ADE	869	170.405	77.606	-25.401	1.00	48.67	A16S
ATOM	37836	C4	GUA	867	168.340	90.027	-27.985	1.00	54.12	A16S	ATOM	37889	O2'	ADE	869	170.643	76.560	-24.477	1.00	48.67	A16S
ATOM	37837	N3	GUA	867	168.026	88.919	-27.280	1.00	54.12	A16S	ATOM	37890	C3'	ADE	869	171.514	77.708	-26.435	1.00	48.67	A16S
ATOM	37838	C2	GUA	867	166.805	88.981	-26.779	1.00	54.12	A16S	ATOM	37891	O3'	ADE	869	171.961	76.438	-26.861	1.00	48.67	A16S
ATOM	37839	N2	GUA	867	166.325	87.961	-26.049	1.00	54.12	A16S	ATOM	37892	P	CYT	870	171.303	75.770	-28.160	1.00	57.26	A16S
ATOM	37840	N1	GUA	867	165.961	90.047	-26.953	1.00	54.12	A16S	ATOM	37893	O1P	CYT	870	171.954	74.443	-28.329	1.00	48.64	A16S
ATOM	37841	C6	GUA	867	166.261	91.198	-27.673	1.00	54.12	A16S	ATOM	37894	O2P	CYT	870	171.339	76.768	-29.264	1.00	48.64	A16S
ATOM	37842	O6	GUA	867	165.419	92.104	-27.768	1.00	54.12	A16S	ATOM	37895	O5'	CYT	870	169.789	75.518	-27.743	1.00	57.26	A16S
ATOM	37843	C5	GUA	867	167.573	91.141	-28.220	1.00	54.12	A16S	ATOM	37896	C5'	CYT	870	169.466	74.567	-26.723	1.00	57.26	A16S
ATOM	37844	N7	GUA	867	168.268	92.064	-28.988	1.00	54.12	A16S	ATOM	37897	C4'	CYT	870	167.991	74.595	-26.442	1.00	57.26	A16S
ATOM	37845	C8	GUA	867	169.426	91.503	-29.201	1.00	54.12	A16S	ATOM	37898	O4'	CYT	870	167.634	75.879	-25.864	1.00	57.26	A16S
ATOM	37846	C2'	GUA	867	171.490	89.317	-29.948	1.00	58.90	A16S	ATOM	37899	C1'	CYT	870	166.339	76.257	-26.305	1.00	57.26	A16S
ATOM	37847	O2'	GUA	867	170.837	88.608	-30.971	1.00	58.90	A16S	ATOM	37900	N1	CYT	870	166.432	77.543	-27.024	1.00	48.64	A16S
ATOM	37848	C3'	GUA	867	172.741	88.624	-29.439	1.00	58.90	A16S	ATOM	37901	C6	CYT	870	167.579	77.907	-27.674	1.00	48.64	A16S
ATOM	37849	O3'	GUA	867	172.424	87.265	-29.193	1.00	58.90	A16S	ATOM	37902	C2	CYT	870	165.308	78.388	-27.044	1.00	48.64	A16S
ATOM	37850	P	URI	868	172.585	86.159	-30.337	1.00	52.26	A16S	ATOM	37903	O2	CYT	870	164.283	78.050	-26.423	1.00	48.64	A16S
ATOM	37851	O1P	URI	868	173.604	86.610	-31.331	1.00	55.77	A16S	ATOM	37904	N3	CYT	870	165.370	79.547	-27.733	1.00	48.64	A16S
ATOM	37852	O2P	URI	868	171.214	85.789	-30.802	1.00	55.77	A16S	ATOM	37905	C4	CYT	870	166.491	79.883	-28.370	1.00	48.64	A16S
ATOM	37853	O5'	URI	868	173.142	84.910	-29.511	1.00	52.26	A16S	ATOM	37906	N4	CYT	870	166.506	81.038	-29.037	1.00	48.64	A16S
ATOM	37854	C5'	URI	868	174.448	84.950	-28.901	1.00	52.26	A16S	ATOM	37907	C5	CYT	870	167.650	79.053	-28.353	1.00	48.64	A16S
ATOM	37855	C4'	URI	868	174.460	84.187	-27.594	1.00	52.26	A16S	ATOM	37908	C2'	CYT	870	165.809	75.139	-27.204	1.00	57.26	A16S
ATOM	37856	O4'	URI	868	173.920	84.998	-26.520	1.00	52.26	A16S	ATOM	37909	O2'	CYT	870	164.980	74.291	-26.442	1.00	57.26	A16S
ATOM	37857	C1'	URI	868	173.261	84.169	-25.577	1.00	52.26	A16S	ATOM	37910	C3'	CYT	870	167.100	74.471	-27.664	1.00	57.26	A16S
ATOM	37858	N1	URI	868	171.865	84.625	-25.436	1.00	55.77	A16S	ATOM	37911	O3'	CYT	870	166.924	73.126	-28.075	1.00	57.26	A16S
ATOM	37859	C6	URI	868	171.358	85.643	-26.214	1.00	55.77	A16S	ATOM	37912	P	GUA	871	166.777	72.790	-29.644	1.00	58.47	A16S
ATOM	37860	C2	URI	868	171.061	83.989	-24.492	1.00	55.77	A16S	ATOM	37913	O1P	GUA	871	166.818	71.300	-29.756	1.00	42.58	A16S

ATOM	37914	O2P	GUA	871	167.740	73.612	-30.435	1.00	42.58	A16S	ATOM	37967	C6	CYT	873	162.228	78.334	-38.210	1.00	40.94	A16S
ATOM	37915	O5'	GUA	871	165.308	73.295	-29.998	1.00	58.47	A16S	ATOM	37968	C2	CYT	873	162.967	80.554	-38.749	1.00	40.94	A16S
ATOM	37916	C5'	GUA	871	164.156	72.709	-29.366	1.00	58.47	A16S	ATOM	37969	O2	CYT	873	162.681	81.708	-39.152	1.00	40.94	A16S
ATOM	37917	C4'	GUA	871	162.917	73.485	-29.724	1.00	58.47	A16S	ATOM	37970	N3	CYT	873	164.223	80.216	-38.354	1.00	40.94	A16S
ATOM	37918	O4'	GUA	871	162.949	74.782	-29.085	1.00	58.47	A16S	ATOM	37971	C4	CYT	873	164.476	78.985	-37.913	1.00	40.94	A16S
ATOM	37919	C1'	GUA	871	162.343	75.745	-29.927	1.00	58.47	A16S	ATOM	37972	N4	CYT	873	165.719	78.691	-37.572	1.00	40.94	A16S
ATOM	37920	N9	GUA	871	163.315	76.783	-30.254	1.00	42.58	A16S	ATOM	37973	C5	CYT	873	163.460	77.999	-37.811	1.00	40.94	A16S
ATOM	37921	C4	GUA	871	163.018	78.040	-30.714	1.00	42.58	A16S	ATOM	37974	C2'	CYT	873	160.585	79.737	-40.727	1.00	45.65	A16S
ATOM	37922	N3	GUA	871	161.781	78.528	-30.930	1.00	42.58	A16S	ATOM	37975	O2'	CYT	873	159.719	80.693	-41.304	1.00	45.65	A16S
ATOM	37923	C2	GUA	871	161.812	79.760	-31.398	1.00	42.58	A16S	ATOM	37976	C3'	CYT	873	160.073	78.308	-40.830	1.00	45.65	A16S
ATOM	37924	N2	GUA	871	160.667	80.390	-31.692	1.00	42.58	A16S	ATOM	37977	O3'	CYT	873	159.523	78.009	-42.090	1.00	45.65	A16S
ATOM	37925	N1	GUA	871	162.966	80.467	-31.617	1.00	42.58	A16S	ATOM	37978	P	CYT	874	160.483	77.456	-43.243	1.00	50.95	A16S
ATOM	37926	C6	GUA	871	164.253	79.993	-31.383	1.00	42.58	A16S	ATOM	37979	O1P	CYT	874	159.607	77.207	-44.420	1.00	31.80	A16S
ATOM	37927	O6	GUA	871	165.231	80.730	-31.585	1.00	42.58	A16S	ATOM	37980	O2P	CYT	874	161.307	76.347	-42.679	1.00	31.80	A16S
ATOM	37928	C5	GUA	871	164.234	78.657	-30.907	1.00	42.58	A16S	ATOM	37981	O5'	CYT	874	161.416	78.701	-43.576	1.00	50.95	A16S
ATOM	37929	N7	GUA	871	165.277	77.805	-30.575	1.00	42.58	A16S	ATOM	37982	C5'	CYT	874	160.853	79.884	-44.159	1.00	50.95	A16S
ATOM	37930	C8	GUA	871	164.685	76.708	-30.188	1.00	42.58	A16S	ATOM	37983	C4'	CYT	874	161.918	80.931	-44.380	1.00	50.95	A16S
ATOM	37931	C2'	GUA	871	161.871	75.028	-31.185	1.00	58.47	A16S	ATOM	37984	O4'	CYT	874	162.434	81.376	-43.099	1.00	50.95	A16S
ATOM	37932	O2'	GUA	871	160.516	74.687	-31.036	1.00	58.47	A16S	ATOM	37985	C1'	CYT	874	163.795	81.747	-43.236	1.00	50.95	A16S
ATOM	37933	C3'	GUA	871	162.773	73.809	-31.195	1.00	58.47	A16S	ATOM	37986	N1	CYT	874	164.619	80.870	-42.389	1.00	31.80	A16S
ATOM	37934	O3'	GUA	871	162.198	72.753	-31.920	1.00	58.47	A16S	ATOM	37987	C6	CYT	874	164.138	79.676	-41.926	1.00	31.80	A16S
ATOM	37935	P	GUA	872	162.475	72.648	-33.495	1.00	52.76	A16S	ATOM	37988	C2	CYT	874	165.927	81.267	-42.086	1.00	31.80	A16S
ATOM	37936	O1P	GUA	872	161.883	71.354	-33.933	1.00	42.76	A16S	ATOM	37989	O2	CYT	874	166.320	82.378	-42.475	1.00	31.80	A16S
ATOM	37937	O2P	GUA	872	163.927	72.921	-33.718	1.00	42.76	A16S	ATOM	37990	N3	CYT	874	166.726	80.435	-41.375	1.00	31.80	A16S
ATOM	37938	O5'	GUA	872	161.633	73.849	-34.133	1.00	52.76	A16S	ATOM	37991	C4	CYT	874	166.254	79.258	-40.954	1.00	31.80	A16S
ATOM	37939	C5'	GUA	872	160.201	73.907	-33.980	1.00	52.76	A16S	ATOM	37992	N4	CYT	874	167.075	78.459	-40.281	1.00	31.80	A16S
ATOM	37940	C4'	GUA	872	159.662	75.241	-34.446	1.00	52.76	A16S	ATOM	37993	C5	CYT	874	164.914	78.847	-41.213	1.00	31.80	A16S
ATOM	37941	O4'	GUA	872	160.199	76.303	-33.620	1.00	52.76	A16S	ATOM	37994	C2'	CYT	874	164.172	81.555	-44.702	1.00	50.95	A16S
ATOM	37942	C1'	GUA	872	160.382	77.472	-34.405	1.00	52.76	A16S	ATOM	37995	O2'	CYT	874	164.018	82.767	-45.411	1.00	50.95	A16S
ATOM	37943	N9	GUA	872	161.796	77.836	-34.373	1.00	42.76	A16S	ATOM	37996	C3'	CYT	874	163.164	80.506	-45.132	1.00	50.95	A16S
ATOM	37944	C4	GUA	872	162.332	79.058	-34.690	1.00	42.76	A16S	ATOM	37997	O3'	CYT	874	163.027	80.443	-46.536	1.00	50.95	A16S
ATOM	37945	N3	GUA	872	161.647	80.129	-35.116	1.00	42.76	A16S	ATOM	37998	P	GUA	875	163.875	79.344	-47.344	1.00	48.12	A16S
ATOM	37946	C2	GUA	872	162.437	81.157	-35.340	1.00	42.76	A16S	ATOM	37999	O1P	GUA	875	163.540	79.461	-48.779	1.00	44.10	A16S
ATOM	37947	N2	GUA	872	161.924	82.291	-35.811	1.00	42.76	A16S	ATOM	38000	O2P	GUA	875	163.760	78.031	-46.661	1.00	44.10	A16S
ATOM	37948	N1	GUA	872	163.786	81.146	-35.132	1.00	42.76	A16S	ATOM	38001	O5'	GUA	875	165.371	79.834	-47.165	1.00	48.12	A16S
ATOM	37949	C6	GUA	872	164.513	80.056	-34.685	1.00	42.76	A16S	ATOM	38002	C5'	GUA	875	165.822	80.999	-47.851	1.00	48.12	A16S
ATOM	37950	O6	GUA	872	165.733	80.155	-34.519	1.00	42.76	A16S	ATOM	38003	C4'	GUA	875	167.295	81.161	-47.664	1.00	48.12	A16S
ATOM	37951	C5	GUA	872	163.684	78.936	-34.469	1.00	42.76	A16S	ATOM	38004	O4'	GUA	875	167.555	81.410	-46.263	1.00	48.12	A16S
ATOM	37952	N7	GUA	872	164.000	77.656	-34.044	1.00	42.76	A16S	ATOM	38005	C1'	GUA	875	168.811	80.873	-45.918	1.00	48.12	A16S
ATOM	37953	C8	GUA	872	162.851	77.037	-34.005	1.00	42.76	A16S	ATOM	38006	N9	GUA	875	168.612	79.863	-44.899	1.00	44.10	A16S
ATOM	37954	C2'	GUA	872	159.883	77.170	-35.815	1.00	52.76	A16S	ATOM	38007	C4	GUA	875	169.596	79.338	-44.100	1.00	44.10	A16S
ATOM	37955	O2'	GUA	872	158.547	77.604	-35.935	1.00	52.76	A16S	ATOM	38008	N3	GUA	875	170.884	79.746	-44.058	1.00	44.10	A16S
ATOM	37956	C3'	GUA	872	160.011	75.654	-35.865	1.00	52.76	A16S	ATOM	38009	C2	GUA	875	171.609	79.003	-43.252	1.00	44.10	A16S
ATOM	37957	O3'	GUA	872	159.155	75.071	-36.837	1.00	52.76	A16S	ATOM	38010	N2	GUA	875	172.908	79.278	-43.079	1.00	44.10	A16S
ATOM	37958	P	CYT	873	159.752	74.685	-38.280	1.00	45.65	A16S	ATOM	38011	N1	GUA	875	171.116	77.937	-42.556	1.00	44.10	A16S
ATOM	37959	O1P	CYT	873	158.742	73.820	-38.946	1.00	40.94	A16S	ATOM	38012	C6	GUA	875	169.797	77.498	-42.588	1.00	44.10	A16S
ATOM	37960	O2P	CYT	873	161.137	74.172	-38.077	1.00	40.94	A16S	ATOM	38013	O6	GUA	875	169.466	76.499	-41.943	1.00	44.10	A16S
ATOM	37961	O5'	CYT	873	159.860	76.084	-39.034	1.00	45.65	A16S	ATOM	38014	C5	GUA	875	169.001	78.304	-43.426	1.00	44.10	A16S
ATOM	37962	C5'	CYT	873	158.695	76.885	-39.213	1.00	45.65	A16S	ATOM	38015	N7	GUA	875	167.647	78.231	-43.732	1.00	44.10	A16S
ATOM	37963	C4'	CYT	873	159.059	78.254	-39.712	1.00	45.65	A16S	ATOM	38016	C8	GUA	875	167.459	79.189	-44.600	1.00	44.10	A16S
ATOM	37964	O4'	CYT	873	159.662	79.042	-38.657	1.00	45.65	A16S	ATOM	38017	C2'	GUA	875	169.390	80.196	-47.159	1.00	48.12	A16S
ATOM	37965	C1'	CYT	873	160.619	79.930	-39.214	1.00	45.65	A16S	ATOM	38018	O2'	GUA	875	170.297	81.068	-47.791	1.00	48.12	A16S
ATOM	37966	N1	CYT	873	161.958	79.583	-38.699	1.00	40.94	A16S	ATOM	38019	C3'	GUA	875	168.137	79.939	-47.981	1.00	48.12	A16S

ATOM	38020	O3'	GUA	875	168.397	79.786	-49.375	1.00	48.12	A16S	ATOM	38073	N3	ADE	878	175.847	84.882	-45.051	1.00	33.32	A16S
ATOM	38021	P	CYT	876	168.359	78.313	-50.029	1.00	52.48	A16S	ATOM	38074	C2	ADE	878	174.798	85.545	-45.556	1.00	33.32	A16S
ATOM	38022	O1P	CYT	876	167.150	77.598	-49.524	1.00	46.52	A16S	ATOM	38075	N1	ADE	878	173.497	85.205	-45.556	1.00	33.32	A16S
ATOM	38023	O2P	CYT	876	168.555	78.488	-51.488	1.00	46.52	A16S	ATOM	38076	C6	ADE	878	173.139	84.039	-44.979	1.00	33.32	A16S
ATOM	38024	O5'	CYT	876	169.635	77.581	-49.410	1.00	52.48	A16S	ATOM	38077	N6	ADE	878	171.853	83.711	-44.938	1.00	33.32	A16S
ATOM	38025	C5'	CYT	876	169.901	76.187	-49.655	1.00	52.48	A16S	ATOM	38078	C5	ADE	878	174.146	83.241	-44.439	1.00	33.32	A16S
ATOM	38026	C4'	CYT	876	171.387	75.962	-49.772	1.00	52.48	A16S	ATOM	38079	N7	ADE	878	174.107	82.008	-43.817	1.00	33.32	A16S
ATOM	38027	O4'	CYT	876	171.881	76.698	-50.915	1.00	52.48	A16S	ATOM	38080	C8	ADE	878	175.360	81.773	-43.515	1.00	33.32	A16S
ATOM	38028	C1'	CYT	876	173.150	77.253	-50.620	1.00	52.48	A16S	ATOM	38081	C2'	ADE	878	178.008	83.411	-42.268	1.00	44.57	A16S
ATOM	38029	N1	CYT	876	173.094	78.709	-50.835	1.00	46.52	A16S	ATOM	38082	O2'	ADE	878	179.239	84.099	-42.347	1.00	44.57	A16S
ATOM	38030	C6	CYT	876	171.906	79.381	-50.844	1.00	46.52	A16S	ATOM	38083	C3'	ADE	878	178.158	82.141	-41.447	1.00	44.57	A16S
ATOM	38031	C2	CYT	876	174.283	79.393	-51.030	1.00	46.52	A16S	ATOM	38084	O3'	ADE	878	179.047	82.347	-40.375	1.00	44.57	A16S
ATOM	38032	O2	CYT	876	175.353	78.760	-50.995	1.00	46.52	A16S	ATOM	38085	P	GUA	879	178.538	82.168	-38.871	1.00	42.97	A16S
ATOM	38033	N3	CYT	876	174.253	80.728	-51.242	1.00	46.52	A16S	ATOM	38086	O1P	GUA	879	179.236	83.212	-38.083	1.00	41.76	A16S
ATOM	38034	C4	CYT	876	173.094	81.375	-51.245	1.00	46.52	A16S	ATOM	38087	O2P	GUA	879	178.665	80.742	-38.489	1.00	41.76	A16S
ATOM	38035	N4	CYT	876	173.119	82.696	-51.449	1.00	46.52	A16S	ATOM	38088	O5'	GUA	879	176.986	82.505	-38.926	1.00	42.97	A16S
ATOM	38036	C5	CYT	876	171.861	80.702	-51.040	1.00	46.52	A16S	ATOM	38089	C5'	GUA	879	176.441	83.705	-38.336	1.00	42.97	A16S
ATOM	38037	C2'	CYT	876	173.532	76.858	-49.191	1.00	52.48	A16S	ATOM	38090	C4'	GUA	879	175.601	84.432	-39.357	1.00	42.97	A16S
ATOM	38038	O2'	CYT	876	174.490	75.814	-49.189	1.00	52.48	A16S	ATOM	38091	O4'	GUA	879	175.316	83.528	-40.450	1.00	42.97	A16S
ATOM	38039	C3'	CYT	876	172.179	76.492	-48.594	1.00	52.48	A16S	ATOM	38092	C1'	GUA	879	173.993	83.712	-40.892	1.00	42.97	A16S
ATOM	38040	O3'	CYT	876	172.294	75.502	-47.599	1.00	52.48	A16S	ATOM	38093	N9	GUA	879	173.246	82.516	-40.532	1.00	41.76	A16S
ATOM	38041	P	ADE	877	172.207	75.925	-46.064	1.00	44.32	A16S	ATOM	38094	C4	GUA	879	171.943	82.252	-40.860	1.00	41.76	A16S
ATOM	38042	O1P	ADE	877	172.286	74.697	-45.223	1.00	38.84	A16S	ATOM	38095	N3	GUA	879	171.139	83.048	-41.588	1.00	41.76	A16S
ATOM	38043	O2P	ADE	877	171.018	76.806	-45.960	1.00	38.84	A16S	ATOM	38096	C2	GUA	879	169.938	82.530	-41.729	1.00	41.76	A16S
ATOM	38044	O5'	ADE	877	173.545	76.752	-45.833	1.00	44.32	A16S	ATOM	38097	N2	GUA	879	169.008	83.193	-42.433	1.00	41.76	A16S
ATOM	38045	C5'	ADE	877	174.803	76.063	-45.754	1.00	44.32	A16S	ATOM	38098	N1	GUA	879	169.560	81.327	-41.193	1.00	41.76	A16S
ATOM	38046	C4'	ADE	877	175.944	77.033	-45.874	1.00	44.32	A16S	ATOM	38099	C6	GUA	879	170.376	80.500	-40.437	1.00	41.76	A16S
ATOM	38047	O4'	ADE	877	175.744	77.822	-47.071	1.00	44.32	A16S	ATOM	38100	O6	GUA	879	169.937	79.447	-39.998	1.00	41.76	A16S
ATOM	38048	C1'	ADE	877	176.163	79.148	-46.843	1.00	44.32	A16S	ATOM	38101	C5	GUA	879	171.659	81.037	-40.281	1.00	41.76	A16S
ATOM	38049	N9	ADE	877	175.030	80.034	-47.109	1.00	38.84	A16S	ATOM	38102	N7	GUA	879	172.764	80.541	-39.607	1.00	41.76	A16S
ATOM	38050	C4	ADE	877	175.111	81.348	-47.501	1.00	38.84	A16S	ATOM	38103	C8	GUA	879	173.684	81.448	-39.788	1.00	41.76	A16S
ATOM	38051	N3	ADE	877	176.226	82.081	-47.677	1.00	38.84	A16S	ATOM	38104	C2'	GUA	879	173.445	84.945	-40.181	1.00	42.97	A16S
ATOM	38052	C2	ADE	877	175.919	83.304	-48.088	1.00	38.84	A16S	ATOM	38105	O2'	GUA	879	173.726	86.073	-40.979	1.00	42.97	A16S
ATOM	38053	N1	ADE	877	174.721	83.835	-48.333	1.00	38.84	A16S	ATOM	38106	C3'	GUA	879	174.242	84.917	-38.885	1.00	42.97	A16S
ATOM	38054	C6	ADE	877	173.625	83.068	-48.157	1.00	38.84	A16S	ATOM	38107	O3'	GUA	879	174.312	86.184	-38.254	1.00	42.97	A16S
ATOM	38055	N6	ADE	877	172.435	83.589	-48.428	1.00	38.84	A16S	ATOM	38108	P	GUA	880	173.289	86.533	-37.065	1.00	40.90	A16S
ATOM	38056	C5	ADE	877	173.809	81.760	-47.708	1.00	38.84	A16S	ATOM	38109	O1P	GUA	880	173.795	87.794	-36.453	1.00	42.73	A16S
ATOM	38057	N7	ADE	877	172.918	80.738	-47.420	1.00	38.84	A16S	ATOM	38110	O2P	GUA	880	173.074	85.331	-36.205	1.00	42.73	A16S
ATOM	38058	C8	ADE	877	173.686	79.740	-47.064	1.00	38.84	A16S	ATOM	38111	O5'	GUA	880	171.922	86.835	-37.816	1.00	40.90	A16S
ATOM	38059	C2'	ADE	877	176.740	79.213	-45.431	1.00	44.32	A16S	ATOM	38112	C5'	GUA	880	171.844	87.886	-38.774	1.00	40.90	A16S
ATOM	38060	O2'	ADE	877	178.117	78.957	-45.541	1.00	44.32	A16S	ATOM	38113	C4'	GUA	880	170.490	87.889	-39.444	1.00	40.90	A16S
ATOM	38061	C3'	ADE	877	176.053	78.043	-44.753	1.00	44.32	A16S	ATOM	38114	O4'	GUA	880	170.270	86.629	-40.125	1.00	40.90	A16S
ATOM	38062	O3'	ADE	877	176.852	77.509	-43.713	1.00	44.32	A16S	ATOM	38115	C1'	GUA	880	168.899	86.298	-40.077	1.00	40.90	A16S
ATOM	38063	P	ADE	878	176.584	77.962	-42.192	1.00	44.57	A16S	ATOM	38116	N9	GUA	880	168.775	85.020	-39.393	1.00	42.73	A16S
ATOM	38064	O1P	ADE	878	177.472	77.159	-41.304	1.00	33.32	A16S	ATOM	38117	C4	GUA	880	167.645	84.250	-39.306	1.00	42.73	A16S
ATOM	38065	O2P	ADE	878	175.107	77.979	-41.949	1.00	33.32	A16S	ATOM	38118	N3	GUA	880	166.434	84.559	-39.813	1.00	42.73	A16S
ATOM	38066	O5'	ADE	878	177.125	79.456	-42.122	1.00	44.57	A16S	ATOM	38119	C2	GUA	880	165.549	83.606	-39.583	1.00	42.73	A16S
ATOM	38067	C5'	ADE	878	178.531	79.724	-42.160	1.00	44.57	A16S	ATOM	38120	N2	GUA	880	164.291	83.747	-40.014	1.00	42.73	A16S
ATOM	38068	C4'	ADE	878	178.776	81.184	-42.440	1.00	44.57	A16S	ATOM	38121	N1	GUA	880	165.832	82.443	-38.916	1.00	42.73	A16S
ATOM	38069	O4'	ADE	878	178.190	81.543	-43.715	1.00	44.57	A16S	ATOM	38122	C6	GUA	880	167.071	82.106	-38.392	1.00	42.73	A16S
ATOM	38070	C1'	ADE	878	177.665	82.853	-43.649	1.00	44.57	A16S	ATOM	38123	O6	GUA	880	167.223	81.025	-37.821	1.00	42.73	A16S
ATOM	38071	N9	ADE	878	176.221	82.778	-43.886	1.00	33.32	A16S	ATOM	38124	C5	GUA	880	168.026	83.121	-38.621	1.00	42.73	A16S
ATOM	38072	C4	ADE	878	175.444	83.722	-44.504	1.00	33.32	A16S	ATOM	38125	N7	GUA	880	169.361	83.191	-38.262	1.00	42.73	A16S

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ATOM  38126  C8  GUA  880     169.762  84.337 -38.736  1.00 42.73      A16S
ATOM  38127  C2' GUA  880     168.171  87.436 -39.369  1.00 40.90      A16S
ATOM  38128  O2' GUA  880     167.681  88.353 -40.330  1.00 40.90      A16S
ATOM  38129  C3' GUA  880     169.291  88.032 -38.533  1.00 40.90      A16S
ATOM  38130  O3' GUA  880     169.043  89.379 -38.212  1.00 40.90      A16S
ATOM  38131  P   CYT  881     168.424  89.732 -36.784  1.00 45.86      A16S
ATOM  38132  O1P CYT  881     168.360  91.219 -36.684  1.00 40.38      A16S
ATOM  38133  O2P CYT  881     169.186  88.953 -35.777  1.00 40.38      A16S
ATOM  38134  O5' CYT  881     166.938  89.164 -36.857  1.00 45.86      A16S
ATOM  38135  C5' CYT  881     165.963  89.793 -37.701  1.00 45.86      A16S
ATOM  38136  C4' CYT  881     164.644  89.079 -37.601  1.00 45.86      A16S
ATOM  38137  O4' CYT  881     164.794  87.727 -38.085  1.00 45.86      A16S
ATOM  38138  C1' CYT  881     163.979  86.857 -37.334  1.00 45.86      A16S
ATOM  38139  N1  CYT  881     164.841  85.854 -36.687  1.00 40.38      A16S
ATOM  38140  C6  CYT  881     166.182  86.068 -36.526  1.00 40.38      A16S
ATOM  38141  C2  CYT  881     164.261  84.664 -36.243  1.00 40.38      A16S
ATOM  38142  O2  CYT  881     163.039  84.510 -36.378  1.00 40.38      A16S
ATOM  38143  N3  CYT  881     165.040  83.715 -35.678  1.00 40.38      A16S
ATOM  38144  C4  CYT  881     166.347  83.920 -35.551  1.00 40.38      A16S
ATOM  38145  N4  CYT  881     167.079  82.943 -35.027  1.00 40.38      A16S
ATOM  38146  C5  CYT  881     166.964  85.136 -35.968  1.00 40.38      A16S
ATOM  38147  C2' CYT  881     163.200  87.701 -36.331  1.00 45.86      A16S
ATOM  38148  O2' CYT  881     161.941  88.019 -36.877  1.00 45.86      A16S
ATOM  38149  C3' CYT  881     164.095  88.920 -36.201  1.00 45.86      A16S
ATOM  38150  O3' CYT  881     163.367  90.063 -35.799  1.00 45.86      A16S
ATOM  38151  P   URI  882     163.420  90.526 -34.264  1.00 33.44      A16S
ATOM  38152  O1P URI  882     162.536  91.721 -34.141  1.00 47.61      A16S
ATOM  38153  O2P URI  882     164.855  90.625 -33.872  1.00 47.61      A16S
ATOM  38154  O5' URI  882     162.736  89.313 -33.490  1.00 33.44      A16S
ATOM  38155  C5' URI  882     161.344  89.063 -33.658  1.00 33.44      A16S
ATOM  38156  C4' URI  882     160.975  87.726 -33.090  1.00 33.44      A16S
ATOM  38157  O4' URI  882     161.747  86.680 -33.725  1.00 33.44      A16S
ATOM  38158  C1' URI  882     161.844  85.565 -32.850  1.00 33.44      A16S
ATOM  38159  N1  URI  882     163.261  85.185 -32.705  1.00 47.61      A16S
ATOM  38160  C6  URI  882     164.261  86.120 -32.784  1.00 47.61      A16S
ATOM  38161  C2  URI  882     163.562  83.853 -32.453  1.00 47.61      A16S
ATOM  38162  O2  URI  882     162.724  82.977 -32.433  1.00 47.61      A16S
ATOM  38163  N3  URI  882     164.889  83.588 -32.236  1.00 47.61      A16S
ATOM  38164  C4  URI  882     165.929  84.486 -32.267  1.00 47.61      A16S
ATOM  38165  O4  URI  882     167.059  84.120 -31.951  1.00 47.61      A16S
ATOM  38166  C5  URI  882     165.549  85.821 -32.584  1.00 47.61      A16S
ATOM  38167  C2' URI  882     161.213  85.985 -31.519  1.00 33.44      A16S
ATOM  38168  O2' URI  882     159.889  85.494 -31.435  1.00 33.44      A16S
ATOM  38169  C3' URI  882     161.248  87.503 -31.623  1.00 33.44      A16S
ATOM  38170  O3' URI  882     160.272  88.114 -30.813  1.00 33.44      A16S
ATOM  38171  P   GUA  883     160.735  88.978 -29.542  1.00 43.37      A16S
ATOM  38172  O1P GUA  883     159.490  89.336 -28.813  1.00 41.91      A16S
ATOM  38173  O2P GUA  883     161.645  90.061 -30.004  1.00 41.91      A16S
ATOM  38174  O5' GUA  883     161.558  87.925 -28.676  1.00 43.37      A16S
ATOM  38175  C5' GUA  883     160.872  86.856 -28.004  1.00 43.37      A16S
ATOM  38176  C4' GUA  883     161.847  85.964 -27.277  1.00 43.37      A16S
ATOM  38177  O4' GUA  883     162.629  85.225 -28.246  1.00 43.37      A16S
ATOM  38178  C1' GUA  883     163.960  85.087 -27.779  1.00 43.37      A16S
ATOM  38179  N9  GUA  883     164.800  85.934 -28.609  1.00 41.91      A16S
ATOM  38180  C4  GUA  883     166.138  85.777 -28.851  1.00 41.91      A16S
ATOM  38181  N3  GUA  883     166.914  84.770 -28.406  1.00 41.91      A16S
ATOM  38182  C2  GUA  883     168.168  84.900 -28.806  1.00 41.91      A16S
ATOM  38183  N2  GUA  883     169.073  83.983 -28.466  1.00 41.91      A16S
ATOM  38184  N1  GUA  883     168.625  85.937 -29.572  1.00 41.91      A16S
ATOM  38185  C6  GUA  883     167.845  86.985 -30.035  1.00 41.91      A16S
ATOM  38186  O6  GUA  883     168.356  87.875 -30.708  1.00 41.91      A16S
ATOM  38187  C5  GUA  883     166.496  86.856 -29.627  1.00 41.91      A16S
ATOM  38188  N7  GUA  883     165.397  87.663 -29.887  1.00 41.91      A16S
ATOM  38189  C8  GUA  883     164.413  87.071 -29.271  1.00 41.91      A16S
ATOM  38190  C2' GUA  883     163.995  85.616 -26.351  1.00 43.37      A16S
ATOM  38191  O2' GUA  883     163.708  84.562 -25.460  1.00 43.37      A16S
ATOM  38192  C3' GUA  883     162.883  86.650 -26.400  1.00 43.37      A16S
ATOM  38193  O3' GUA  883     162.406  86.980 -25.114  1.00 43.37      A16S
ATOM  38194  P   ADE  884     163.180  88.090 -24.250  1.00 44.04      A16S
ATOM  38195  O1P ADE  884     162.261  88.390 -23.133  1.00 34.00      A16S
ATOM  38196  O2P ADE  884     163.635  89.191 -25.153  1.00 34.00      A16S
ATOM  38197  O5' ADE  884     164.449  87.298 -23.703  1.00 44.04      A16S
ATOM  38198  C5' ADE  884     164.595  86.967 -22.306  1.00 44.04      A16S
ATOM  38199  C4' ADE  884     163.903  85.655 -21.985  1.00 44.04      A16S
ATOM  38200  O4' ADE  884     164.243  84.630 -22.954  1.00 44.04      A16S
ATOM  38201  C1' ADE  884     164.435  83.383 -22.300  1.00 44.04      A16S
ATOM  38202  N9  ADE  884     165.857  83.056 -22.379  1.00 34.00      A16S
ATOM  38203  C4  ADE  884     166.478  81.971 -21.811  1.00 34.00      A16S
ATOM  38204  N3  ADE  884     165.909  80.999 -21.080  1.00 34.00      A16S
ATOM  38205  C2  ADE  884     166.824  80.116 -20.699  1.00 34.00      A16S
ATOM  38206  N1  ADE  884     168.137  80.094 -20.954  1.00 34.00      A16S
ATOM  38207  C6  ADE  884     168.669  81.083 -21.696  1.00 34.00      A16S
ATOM  38208  N6  ADE  884     169.971  81.053 -21.960  1.00 34.00      A16S
ATOM  38209  C5  ADE  884     167.815  82.083 -22.149  1.00 34.00      A16S
ATOM  38210  N7  ADE  884     168.038  83.221 -22.907  1.00 34.00      A16S
ATOM  38211  C8  ADE  884     166.851  83.762 -23.018  1.00 34.00      A16S
ATOM  38212  C2' ADE  884     164.031  83.574 -20.845  1.00 44.04      A16S
ATOM  38213  O2' ADE  884     162.671  83.246 -20.701  1.00 44.04      A16S
ATOM  38214  C3' ADE  884     164.311  85.056 -20.653  1.00 44.04      A16S
ATOM  38215  O3' ADE  884     163.586  85.608 -19.583  1.00 44.04      A16S
ATOM  38216  P   ADE  885     164.295  85.751 -18.163  1.00 58.69      A16S
ATOM  38217  O1P ADE  885     163.258  86.213 -17.212  1.00 54.98      A16S
ATOM  38218  O2P ADE  885     165.540  86.544 -18.342  1.00 54.98      A16S
ATOM  38219  O5' ADE  885     164.684  84.259 -17.782  1.00 58.69      A16S
ATOM  38220  C5' ADE  885     163.689  83.340 -17.326  1.00 58.69      A16S
ATOM  38221  C4' ADE  885     164.354  82.098 -16.804  1.00 58.69      A16S
ATOM  38222  O4' ADE  885     165.082  81.480 -17.891  1.00 58.69      A16S
ATOM  38223  C1' ADE  885     166.309  80.962 -17.419  1.00 58.69      A16S
ATOM  38224  N9  ADE  885     167.379  81.730 -18.047  1.00 54.98      A16S
ATOM  38225  C4  ADE  885     168.707  81.387 -18.114  1.00 54.98      A16S
ATOM  38226  N3  ADE  885     169.288  80.277 -17.633  1.00 54.98      A16S
ATOM  38227  C2  ADE  885     170.600  80.292 -17.877  1.00 54.98      A16S
ATOM  38228  N1  ADE  885     171.338  81.221 -18.497  1.00 54.98      A16S
ATOM  38229  C6  ADE  885     170.720  82.326 -18.962  1.00 54.98      A16S
ATOM  38230  N6  ADE  885     171.453  83.258 -19.571  1.00 54.98      A16S
ATOM  38231  C5  ADE  885     169.333  82.430 -18.773  1.00 54.98      A16S
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ATOM	38232	N7	ADE	885	168.415	83.408	-19.125	1.00	54.98	A16S	ATOM	38285	C4'	URI	888	175.874	86.369	-8.255	1.00	44.31	A16S
ATOM	38233	C8	ADE	885	167.275	82.946	-18.676	1.00	54.98	A16S	ATOM	38286	O4'	URI	888	175.183	86.392	-9.526	1.00	44.31	A16S
ATOM	38234	C2'	ADE	885	166.315	81.132	-15.903	1.00	58.69	A16S	ATOM	38287	C1'	URI	888	174.926	87.727	-9.897	1.00	44.31	A16S
ATOM	38235	O2'	ADE	885	165.758	79.980	-15.309	1.00	58.69	A16S	ATOM	38288	N1	URI	888	173.484	87.885	-10.105	1.00	61.55	A16S
ATOM	38236	C3'	ADE	885	165.405	82.334	-15.736	1.00	58.69	A16S	ATOM	38289	C6	URI	888	172.573	87.021	-9.546	1.00	61.55	A16S
ATOM	38237	O3'	ADE	885	164.838	82.386	-14.446	1.00	58.69	A16S	ATOM	38290	C2	URI	888	173.077	88.947	-10.886	1.00	61.55	A16S
ATOM	38238	P	ADE	886	165.632	83.128	-13.265	1.00	55.69	A16S	ATOM	38291	O2	URI	888	173.860	89.730	-11.399	1.00	61.55	A16S
ATOM	38239	O1P	ADE	886	164.687	83.218	-12.123	1.00	50.72	A16S	ATOM	38292	N3	URI	888	171.721	89.062	-11.043	1.00	61.55	A16S
ATOM	38240	O2P	ADE	886	166.276	84.378	-13.796	1.00	50.72	A16S	ATOM	38293	C4	URI	888	170.756	88.238	-10.513	1.00	61.55	A16S
ATOM	38241	O5'	ADE	886	166.765	82.083	-12.864	1.00	55.69	A16S	ATOM	38294	O4	URI	888	169.576	88.458	-10.771	1.00	61.55	A16S
ATOM	38242	C5'	ADE	886	166.422	80.767	-12.403	1.00	55.69	A16S	ATOM	38295	C5	URI	888	171.258	87.158	-9.716	1.00	61.55	A16S
ATOM	38243	C4'	ADE	886	167.659	79.916	-12.310	1.00	55.69	A16S	ATOM	38296	C2'	URI	888	175.470	88.636	-8.797	1.00	44.31	A16S
ATOM	38244	O4'	ADE	886	168.250	79.787	-13.628	1.00	55.69	A16S	ATOM	38297	O2'	URI	888	176.745	89.077	-9.186	1.00	44.31	A16S
ATOM	38245	C1'	ADE	886	169.657	79.808	-13.523	1.00	55.69	A16S	ATOM	38298	C3'	URI	888	175.523	87.689	-7.607	1.00	44.31	A16S
ATOM	38246	N9	ADE	886	170.136	80.986	-14.235	1.00	50.72	A16S	ATOM	38299	O3'	URI	888	176.525	88.055	-6.687	1.00	44.31	A16S
ATOM	38247	C4	ADE	886	171.409	81.179	-14.711	1.00	50.72	A16S	ATOM	38300	P	CYT	889	176.203	89.140	-5.550	1.00	56.20	A16S
ATOM	38248	N3	ADE	886	172.440	80.320	-14.653	1.00	50.72	A16S	ATOM	38301	O1P	CYT	889	177.383	89.141	-4.640	1.00	35.03	A16S
ATOM	38249	C2	ADE	886	173.518	80.845	-15.224	1.00	50.72	A16S	ATOM	38302	O2P	CYT	889	174.840	88.904	-5.001	1.00	35.03	A16S
ATOM	38250	N1	ADE	886	173.677	82.044	-15.794	1.00	50.72	A16S	ATOM	38303	O5'	CYT	889	176.190	90.525	-6.328	1.00	56.20	A16S
ATOM	38251	C6	ADE	886	172.624	82.889	-15.826	1.00	50.72	A16S	ATOM	38304	C5'	CYT	889	177.404	91.060	-6.845	1.00	56.20	A16S
ATOM	38252	N6	ADE	886	172.788	84.094	-16.376	1.00	50.72	A16S	ATOM	38305	C4'	CYT	889	177.137	92.350	-7.560	1.00	56.20	A16S
ATOM	38253	C5	ADE	886	171.413	82.446	-15.268	1.00	50.72	A16S	ATOM	38306	O4'	CYT	889	176.301	92.108	-8.703	1.00	56.20	A16S
ATOM	38254	N7	ADE	886	170.158	83.035	-15.163	1.00	50.72	A16S	ATOM	38307	C1'	CYT	889	175.468	93.226	-8.919	1.00	56.20	A16S
ATOM	38255	C8	ADE	886	169.439	82.129	-14.547	1.00	50.72	A16S	ATOM	38308	N1	CYT	889	174.071	92.782	-8.876	1.00	35.03	A16S
ATOM	38256	C2'	ADE	886	170.020	79.877	-12.037	1.00	55.69	A16S	ATOM	38309	C6	CYT	889	173.692	91.677	-8.163	1.00	35.03	A16S
ATOM	38257	O2'	ADE	886	170.271	78.581	-11.541	1.00	55.69	A16S	ATOM	38310	C2	CYT	889	173.140	93.504	-9.605	1.00	35.03	A16S
ATOM	38258	C3'	ADE	886	168.762	80.491	-11.436	1.00	55.69	A16S	ATOM	38311	O2	CYT	889	173.515	94.538	-10.192	1.00	35.03	A16S
ATOM	38259	O3'	ADE	886	168.584	80.094	-10.081	1.00	55.69	A16S	ATOM	38312	N3	CYT	889	171.862	93.074	-9.651	1.00	35.03	A16S
ATOM	38260	P	CYT	887	168.716	81.178	-8.902	1.00	46.58	A16S	ATOM	38313	C4	CYT	889	171.505	91.980	-8.981	1.00	35.03	A16S
ATOM	38261	O1P	CYT	887	168.542	80.383	-7.662	1.00	52.01	A16S	ATOM	38314	N4	CYT	889	170.238	91.579	-9.075	1.00	35.03	A16S
ATOM	38262	O2P	CYT	887	167.815	82.323	-9.179	1.00	52.01	A16S	ATOM	38315	C5	CYT	889	172.432	91.244	-8.189	1.00	35.03	A16S
ATOM	38263	O5'	CYT	887	170.212	81.711	-9.003	1.00	46.58	A16S	ATOM	38316	C2'	CYT	889	175.801	94.269	-7.864	1.00	56.20	A16S
ATOM	38264	C5'	CYT	887	171.317	80.803	-8.937	1.00	46.58	A16S	ATOM	38317	O2'	CYT	889	176.769	95.134	-8.411	1.00	56.20	A16S
ATOM	38265	C4'	CYT	887	172.548	81.427	-9.545	1.00	46.58	A16S	ATOM	38318	C3'	CYT	889	176.399	93.408	-6.773	1.00	56.20	A16S
ATOM	38266	O4'	CYT	887	172.340	81.655	-10.965	1.00	46.58	A16S	ATOM	38319	O3'	CYT	889	177.330	94.154	-6.051	1.00	56.20	A16S
ATOM	38267	C1'	CYT	887	173.065	82.806	-11.374	1.00	46.58	A16S	ATOM	38320	P	ADE	890	177.024	94.557	-4.536	1.00	65.95	A16S
ATOM	38268	N1	CYT	887	172.110	83.787	-11.906	1.00	52.01	A16S	ATOM	38321	O1P	ADE	890	178.170	93.974	-3.789	1.00	31.07	A16S
ATOM	38269	C6	CYT	887	170.765	83.616	-11.735	1.00	52.01	A16S	ATOM	38322	O2P	ADE	890	175.612	94.187	-4.131	1.00	31.07	A16S
ATOM	38270	C2	CYT	887	172.602	84.927	-12.577	1.00	52.01	A16S	ATOM	38323	O5'	ADE	890	177.221	96.137	-4.599	1.00	65.95	A16S
ATOM	38271	O2	CYT	887	173.828	85.050	-12.744	1.00	52.01	A16S	ATOM	38324	C5'	ADE	890	176.305	97.030	-3.957	1.00	65.95	A16S
ATOM	38272	N3	CYT	887	171.728	85.862	-13.021	1.00	52.01	A16S	ATOM	38325	C4'	ADE	890	175.691	97.975	-4.965	1.00	65.95	A16S
ATOM	38273	C4	CYT	887	170.416	85.692	-12.824	1.00	52.01	A16S	ATOM	38326	O4'	ADE	890	174.968	97.206	-5.943	1.00	65.95	A16S
ATOM	38274	N4	CYT	887	169.590	86.646	-13.254	1.00	52.01	A16S	ATOM	38327	C1'	ADE	890	173.781	97.875	-6.288	1.00	65.95	A16S
ATOM	38275	C5	CYT	887	169.892	84.533	-12.169	1.00	52.01	A16S	ATOM	38328	N9	ADE	890	172.689	96.899	-6.408	1.00	31.07	A16S
ATOM	38276	C2'	CYT	887	173.799	83.352	-10.145	1.00	46.58	A16S	ATOM	38329	C4	ADE	890	171.558	97.027	-7.191	1.00	31.07	A16S
ATOM	38277	O2'	CYT	887	175.132	82.882	-10.113	1.00	46.58	A16S	ATOM	38330	N3	ADE	890	171.201	98.074	-7.958	1.00	31.07	A16S
ATOM	38278	C3'	CYT	887	172.957	82.788	-9.011	1.00	46.58	A16S	ATOM	38331	C2	ADE	890	170.053	97.825	-8.585	1.00	31.07	A16S
ATOM	38279	O3'	CYT	887	173.689	82.697	-7.809	1.00	46.58	A16S	ATOM	38332	N1	ADE	890	169.281	96.736	-8.543	1.00	31.07	A16S
ATOM	38280	P	URI	888	173.429	83.777	-6.650	1.00	44.31	A16S	ATOM	38333	C6	ADE	890	169.662	95.709	-7.764	1.00	31.07	A16S
ATOM	38281	O1P	URI	888	174.194	83.311	-5.450	1.00	61.55	A16S	ATOM	38334	N6	ADE	890	168.888	94.632	-7.718	1.00	31.07	A16S
ATOM	38282	O2P	URI	888	171.965	84.026	-6.528	1.00	61.55	A16S	ATOM	38335	C5	ADE	890	170.859	95.841	-7.044	1.00	31.07	A16S
ATOM	38283	O5'	URI	888	174.100	85.098	-7.233	1.00	44.31	A16S	ATOM	38336	N7	ADE	890	171.523	94.985	-6.178	1.00	31.07	A16S
ATOM	38284	C5'	URI	888	175.501	85.128	-7.491	1.00	44.31	A16S	ATOM	38337	C8	ADE	890	172.590	95.661	-5.820	1.00	31.07	A16S

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ATOM  38339  O2' ADE  890     173.792 100.255  -6.169  1.00 65.95      A16S
ATOM  38340  C3' ADE  890     174.675  98.903  -4.329  1.00 65.95      A16S
ATOM  38341  O3' ADE  890     175.359 100.050  -3.741  1.00 65.95      A16S
ATOM  38342  P   ADE  891     175.615 101.441  -4.563  1.00 42.43      A16S
ATOM  38343  O1P ADE  891     176.601 102.166  -3.700  1.00 39.75      A16S
ATOM  38344  O2P ADE  891     174.344 102.131  -4.942  1.00 39.75      A16S
ATOM  38345  O5' ADE  891     176.343 101.038  -5.916  1.00 42.43      A16S
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ATOM  38347  C4' ADE  891     175.953 100.717  -8.261  1.00 42.43      A16S
ATOM  38348  O4' ADE  891     174.677 100.036  -8.187  1.00 42.43      A16S
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ATOM  38354  N1  ADE  891     170.244 100.150 -12.665  1.00 39.75      A16S
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ATOM  38360  C2' ADE  891     175.367 100.056 -10.443  1.00 42.43      A16S
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ATOM  38362  C3' ADE  891     176.040 101.195  -9.690  1.00 42.43      A16S
ATOM  38363  O3' ADE  891     177.402 101.275 -10.041  1.00 42.43      A16S
ATOM  38364  P   ADE  892     177.853 102.198 -11.265  1.00 41.13      A16S
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ATOM  38367  O5' ADE  892     176.937 101.708 -12.484  1.00 41.13      A16S
ATOM  38368  C5' ADE  892     177.183 100.437 -13.134  1.00 41.13      A16S
ATOM  38369  C4' ADE  892     176.267 100.242 -14.320  1.00 41.13      A16S
ATOM  38370  O4' ADE  892     174.911  99.963 -13.886  1.00 41.13      A16S
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ATOM  38373  C4  ADE  892     171.943 101.902 -14.765  1.00 47.62      A16S
ATOM  38374  N3  ADE  892     171.302 101.407 -15.834  1.00 47.62      A16S
ATOM  38375  C2  ADE  892     170.176 102.063 -16.046  1.00 47.62      A16S
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ATOM  38383  O2' ADE  892     174.968 100.216 -17.048  1.00 41.13      A16S
ATOM  38384  C3' ADE  892     176.098 101.425 -15.242  1.00 41.13      A16S
ATOM  38385  O3' ADE  892     177.153 101.633 -16.136  1.00 41.13      A16S
ATOM  38386  P   GUA  893     177.656 103.130 -16.394  1.00 41.64      A16S
ATOM  38387  O1P GUA  893     178.553 103.061 -17.570  1.00 43.24      A16S
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ATOM  38389  O5' GUA  893     176.340 103.951 -16.783  1.00 41.64      A16S
ATOM  38390  C5' GUA  893     175.512 103.506 -17.863  1.00 41.64      A16S
ATOM  38391  C4' GUA  893     174.279 104.370 -18.024  1.00 41.64      A16S
ATOM  38392  O4' GUA  893     173.403 104.273 -16.869  1.00 41.64      A16S
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ATOM  38394  N9  GUA  893     172.701 106.061 -15.499  1.00 43.24      A16S
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ATOM  38397  C2  GUA  893     170.559 108.831 -15.063  1.00 43.24      A16S
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ATOM  38405  C2' GUA  893     173.003 106.345 -17.971  1.00 41.64      A16S
ATOM  38406  O2' GUA  893     172.171 106.099 -19.087  1.00 41.64      A16S
ATOM  38407  C3' GUA  893     174.420 105.863 -18.262  1.00 41.64      A16S
ATOM  38408  O3' GUA  893     174.781 106.179 -19.604  1.00 41.64      A16S
ATOM  38409  P   GUA  894     175.532 107.577 -19.925  1.00 35.89      A16S
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ATOM  38451  O2' ADE  895     172.365 118.295 -19.513  1.00 29.12      A16S
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ATOM  38459  C4' ADE  896     174.756 120.928 -18.490  1.00 40.56      A16S
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ATOM  38534  C8  GUA  899     187.313 120.928 -12.972  1.00 35.18      A16S
ATOM  38535  C2' GUA  899     189.895 120.841 -10.691  1.00 49.95      A16S
ATOM  38536  O2' GUA  899     190.410 120.399  -9.451  1.00 49.95      A16S
ATOM  38537  C3' GUA  899     189.998 122.354 -10.834  1.00 49.95      A16S
ATOM  38538  O3' GUA  899     191.237 122.774 -10.299  1.00 49.95      A16S
ATOM  38539  P   ADE  900     192.515 122.912 -11.263  1.00 46.11      A16S
ATOM  38540  O1P ADE  900     193.574 123.571 -10.471  1.00 30.67      A16S
ATOM  38541  O2P ADE  900     192.065 123.532 -12.534  1.00 30.67      A16S
ATOM  38542  O5' ADE  900     192.982 121.408 -11.495  1.00 46.11      A16S
ATOM  38543  C5' ADE  900     193.588 120.660 -10.430  1.00 46.11      A16S
ATOM  38544  C4' ADE  900     193.724 119.208 -10.819  1.00 46.11      A16S
ATOM  38545  O4' ADE  900     192.403 118.625 -10.979  1.00 46.11      A16S
ATOM  38546  C1' ADE  900     192.396 117.738 -12.090  1.00 46.11      A16S
ATOM  38547  N9  ADE  900     191.670 118.397 -13.181  1.00 30.67      A16S
ATOM  38548  C4  ADE  900     191.068 117.795 -14.261  1.00 30.67      A16S
ATOM  38549  N3  ADE  900     191.001 116.478 -14.534  1.00 30.67      A16S
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ATOM  38550  C2  ADE  900     190.333 116.274 -15.669  1.00 30.67      A16S
ATOM  38551  N1  ADE  900     189.774 117.168 -16.496  1.00 30.67      A16S
ATOM  38552  C6  ADE  900     189.866 118.476 -16.192  1.00 30.67      A16S
ATOM  38553  N6  ADE  900     189.312 119.358 -17.012  1.00 30.67      A16S
ATOM  38554  C5  ADE  900     190.540 118.826 -15.022  1.00 30.67      A16S
ATOM  38555  N7  ADE  900     190.798 120.055 -14.433  1.00 30.67      A16S
ATOM  38556  C8  ADE  900     191.469 119.748 -13.351  1.00 30.67      A16S
ATOM  38557  C2' ADE  900     193.854 117.558 -12.503  1.00 46.11      A16S
ATOM  38558  O2' ADE  900     194.485 116.545 -11.740  1.00 46.11      A16S
ATOM  38559  C3' ADE  900     194.412 118.919 -12.145  1.00 46.11      A16S
ATOM  38560  O3' ADE  900     195.816 118.889 -12.088  1.00 46.11      A16S
ATOM  38561  P   CYT  901     196.652 119.410 -13.352  1.00 53.42      A16S
ATOM  38562  O1P CYT  901     198.076 119.408 -12.900  1.00 39.37      A16S
ATOM  38563  O2P CYT  901     196.033 120.672 -13.848  1.00 39.37      A16S
ATOM  38564  O5' CYT  901     196.417 118.285 -14.456  1.00 53.42      A16S
ATOM  38565  C5' CYT  901     196.862 116.940 -14.234  1.00 53.42      A16S
ATOM  38566  C4' CYT  901     196.360 116.024 -15.327  1.00 53.42      A16S
ATOM  38567  O4' CYT  901     194.910 116.017 -15.318  1.00 53.42      A16S
ATOM  38568  C1' CYT  901     194.433 115.860 -16.639  1.00 53.42      A16S
ATOM  38569  N1  CYT  901     193.749 117.093 -17.037  1.00 39.37      A16S
ATOM  38570  C6  CYT  901     194.034 118.288 -16.442  1.00 39.37      A16S
ATOM  38571  C2  CYT  901     192.820 117.027 -18.073  1.00 39.37      A16S
ATOM  38572  O2  CYT  901     192.566 115.919 -18.575  1.00 39.37      A16S
ATOM  38573  N3  CYT  901     192.227 118.164 -18.509  1.00 39.37      A16S
ATOM  38574  C4  CYT  901     192.543 119.332 -17.951  1.00 39.37      A16S
ATOM  38575  N4  CYT  901     191.976 120.438 -18.447  1.00 39.37      A16S
ATOM  38576  C5  CYT  901     193.466 119.422 -16.867  1.00 39.37      A16S
ATOM  38577  C2' CYT  901     195.643 115.657 -17.547  1.00 53.42      A16S
ATOM  38578  O2' CYT  901     195.901 114.277 -17.697  1.00 53.42      A16S
ATOM  38579  C3' CYT  901     196.730 116.370 -16.763  1.00 53.42      A16S
ATOM  38580  O3' CYT  901     198.016 115.895 -17.125  1.00 53.42      A16S
ATOM  38581  P   GUA  902     198.893 116.701 -18.213  1.00 50.24      A16S
ATOM  38582  O1P GUA  902     200.251 116.107 -18.116  1.00 49.35      A16S
ATOM  38583  O2P GUA  902     198.722 118.172 -18.100  1.00 49.35      A16S
ATOM  38584  O5' GUA  902     198.264 116.283 -19.609  1.00 50.24      A16S
ATOM  38585  C5' GUA  902     198.312 114.925 -20.062  1.00 50.24      A16S
ATOM  38586  C4' GUA  902     197.655 114.824 -21.406  1.00 50.24      A16S
ATOM  38587  O4' GUA  902     196.234 115.048 -21.264  1.00 50.24      A16S
ATOM  38588  C1' GUA  902     195.753 115.768 -22.384  1.00 50.24      A16S
ATOM  38589  N9  GUA  902     195.112 116.999 -21.914  1.00 49.35      A16S
ATOM  38590  C4  GUA  902     194.040 117.647 -22.497  1.00 49.35      A16S
ATOM  38591  N3  GUA  902     193.382 117.259 -23.610  1.00 49.35      A16S
ATOM  38592  C2  GUA  902     192.418 118.106 -23.931  1.00 49.35      A16S
ATOM  38593  N2  GUA  902     191.662 117.900 -25.017  1.00 49.35      A16S
ATOM  38594  N1  GUA  902     192.120 119.230 -23.221  1.00 49.35      A16S
ATOM  38595  C6  GUA  902     192.773 119.650 -22.077  1.00 49.35      A16S
ATOM  38596  O6  GUA  902     192.414 120.695 -21.518  1.00 49.35      A16S
ATOM  38597  C5  GUA  902     193.816 118.756 -21.715  1.00 49.35      A16S
ATOM  38598  N7  GUA  902     194.714 118.803 -20.658  1.00 49.35      A16S
ATOM  38599  C8  GUA  902     195.459 117.745 -20.815  1.00 49.35      A16S
ATOM  38600  C2' GUA  902     196.932 115.993 -23.338  1.00 50.24      A16S
ATOM  38601  O2' GUA  902     196.929 114.992 -24.339  1.00 50.24      A16S
ATOM  38602  C3' GUA  902     198.124 115.865 -22.403  1.00 50.24      A16S
ATOM  38603  O3' GUA  902     199.270 115.387 -23.087  1.00 50.24      A16S
ATOM  38604  P   GUA  903     200.428 116.403 -23.533  1.00 61.92      A16S
ATOM  38605  O1P GUA  903     201.378 116.465 -22.412  1.00 36.14      A16S
ATOM  38606  O2P GUA  903     199.858 117.660 -24.080  1.00 36.14      A16S
ATOM  38607  O5' GUA  903     201.123 115.619 -24.726  1.00 61.92      A16S
ATOM  38608  C5' GUA  903     201.061 116.115 -26.074  1.00 61.92      A16S
ATOM  38609  C4' GUA  903     201.194 114.976 -27.048  1.00 61.92      A16S
ATOM  38610  O4' GUA  903     202.073 113.982 -26.465  1.00 61.92      A16S
ATOM  38611  C1' GUA  903     201.694 112.693 -26.900  1.00 61.92      A16S
ATOM  38612  N9  GUA  903     201.491 111.831 -25.739  1.00 36.14      A16S
ATOM  38613  C4  GUA  903     201.831 110.499 -25.650  1.00 36.14      A16S
ATOM  38614  N3  GUA  903     202.405 109.760 -26.625  1.00 36.14      A16S
ATOM  38615  C2  GUA  903     202.612 108.507 -26.239  1.00 36.14      A16S
ATOM  38616  N2  GUA  903     203.164 107.624 -27.081  1.00 36.14      A16S
ATOM  38617  N1  GUA  903     202.287 108.022 -24.999  1.00 36.14      A16S
ATOM  38618  C6  GUA  903     201.687 108.756 -23.981  1.00 36.14      A16S
ATOM  38619  O6  GUA  903     201.414 108.202 -22.902  1.00 36.14      A16S
ATOM  38620  C5  GUA  903     201.459 110.108 -24.377  1.00 36.14      A16S
ATOM  38621  N7  GUA  903     200.894 111.168 -23.681  1.00 36.14      A16S
ATOM  38622  C8  GUA  903     200.936 112.168 -24.524  1.00 36.14      A16S
ATOM  38623  C2' GUA  903     200.471 112.847 -27.800  1.00 61.92      A16S
ATOM  38624  O2' GUA  903     200.918 112.889 -29.141  1.00 61.92      A16S
ATOM  38625  C3' GUA  903     199.928 114.201 -27.366  1.00 61.92      A16S
ATOM  38626  O3' GUA  903     199.203 114.804 -28.437  1.00 61.92      A16S
ATOM  38627  P   GUA  904     197.671 115.235 -28.218  1.00 53.81      A16S
ATOM  38628  O1P GUA  904     197.155 114.369 -27.129  1.00 50.46      A16S
ATOM  38629  O2P GUA  904     196.956 115.267 -29.518  1.00 50.46      A16S
ATOM  38630  O5' GUA  904     197.814 116.729 -27.679  1.00 53.81      A16S
ATOM  38631  C5' GUA  904     196.766 117.342 -26.933  1.00 53.81      A16S
ATOM  38632  C4' GUA  904     195.907 118.184 -27.840  1.00 53.81      A16S
ATOM  38633  O4' GUA  904     194.592 118.268 -27.248  1.00 53.81      A16S
ATOM  38634  C1' GUA  904     194.037 119.546 -27.494  1.00 53.81      A16S
ATOM  38635  N9  GUA  904     193.976 120.254 -26.226  1.00 50.46      A16S
ATOM  38636  C4  GUA  904     193.240 121.371 -25.977  1.00 50.46      A16S
ATOM  38637  N3  GUA  904     192.421 121.980 -26.855  1.00 50.46      A16S
ATOM  38638  C2  GUA  904     191.862 123.048 -26.338  1.00 50.46      A16S
ATOM  38639  N2  GUA  904     191.019 123.775 -27.080  1.00 50.46      A16S
ATOM  38640  N1  GUA  904     192.092 123.485 -25.055  1.00 50.46      A16S
ATOM  38641  C6  GUA  904     192.939 122.874 -24.137  1.00 50.46      A16S
ATOM  38642  O6  GUA  904     193.086 123.360 -23.013  1.00 50.46      A16S
ATOM  38643  C5  GUA  904     193.538 121.725 -24.680  1.00 50.46      A16S
ATOM  38644  N7  GUA  904     194.432 120.828 -24.118  1.00 50.46      A16S
ATOM  38645  C8  GUA  904     194.660 119.969 -25.069  1.00 50.46      A16S
ATOM  38646  C2' GUA  904     194.990 120.292 -28.415  1.00 53.81      A16S
ATOM  38647  O2' GUA  904     194.590 120.099 -29.755  1.00 53.81      A16S
ATOM  38648  C3' GUA  904     196.316 119.634 -28.060  1.00 53.81      A16S
ATOM  38649  O3' GUA  904     197.280 119.838 -29.072  1.00 53.81      A16S
ATOM  38650  P   GUA  905     198.190 121.167 -29.042  1.00 55.96      A16S
ATOM  38651  O1P GUA  905     199.057 121.077 -30.241  1.00 47.02      A16S
ATOM  38652  O2P GUA  905     198.817 121.306 -27.684  1.00 47.02      A16S
ATOM  38653  O5' GUA  905     197.172 122.376 -29.281  1.00 55.96      A16S
ATOM  38654  C5' GUA  905     196.549 122.576 -30.566  1.00 55.96      A16S
ATOM  38655  C4' GUA  905     195.709 123.845 -30.579  1.00 55.96      A16S
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ATOM	38656	O4'	GUA	905	194.552	123.721	-29.696	1.00	55.96	A16S	ATOM	38709	C4	CYT	907	199.589	130.492	-23.326	1.00	39.29	A16S
ATOM	38657	C1'	GUA	905	194.247	124.981	-29.109	1.00	55.96	A16S	ATOM	38710	N4	CYT	907	200.103	129.379	-22.809	1.00	39.29	A16S
ATOM	38658	N9	GUA	905	194.525	124.888	-27.675	1.00	47.02	A16S	ATOM	38711	C5	CYT	907	199.428	130.623	-24.738	1.00	39.29	A16S
ATOM	38659	C4	GUA	905	194.207	125.806	-26.696	1.00	47.02	A16S	ATOM	38712	C2'	CYT	907	199.099	135.047	-24.870	1.00	71.15	A16S
ATOM	38660	N3	GUA	905	193.500	126.944	-26.864	1.00	47.02	A16S	ATOM	38713	O2'	CYT	907	198.610	136.318	-24.486	1.00	71.15	A16S
ATOM	38661	C2	GUA	905	193.375	127.626	-25.728	1.00	47.02	A16S	ATOM	38714	C3'	CYT	907	199.512	134.966	-26.328	1.00	71.15	A16S
ATOM	38662	N2	GUA	905	192.674	128.770	-25.699	1.00	47.02	A16S	ATOM	38715	O3'	CYT	907	200.183	136.132	-26.716	1.00	71.15	A16S
ATOM	38663	N1	GUA	905	193.924	127.231	-24.535	1.00	47.02	A16S	ATOM	38716	P	CYT	908	201.781	136.193	-26.589	1.00	65.33	A16S
ATOM	38664	C6	GUA	905	194.669	126.072	-24.343	1.00	47.02	A16S	ATOM	38717	O1P	CYT	908	202.088	137.610	-26.968	1.00	32.65	A16S
ATOM	38665	O6	GUA	905	195.150	125.824	-23.230	1.00	47.02	A16S	ATOM	38718	O2P	CYT	908	202.414	135.071	-27.328	1.00	32.65	A16S
ATOM	38666	C5	GUA	905	194.781	125.318	-25.540	1.00	47.02	A16S	ATOM	38719	O5'	CYT	908	202.079	135.923	-25.047	1.00	65.33	A16S
ATOM	38667	N7	GUA	905	195.403	124.101	-25.772	1.00	47.02	A16S	ATOM	38720	C5'	CYT	908	201.632	136.849	-24.063	1.00	65.33	A16S
ATOM	38668	C8	GUA	905	195.216	123.881	-27.043	1.00	47.02	A16S	ATOM	38721	C4'	CYT	908	202.072	136.435	-22.683	1.00	65.33	A16S
ATOM	38669	C2'	GUA	905	195.185	125.998	-29.762	1.00	55.96	A16S	ATOM	38722	O4'	CYT	908	201.451	135.192	-22.281	1.00	65.33	A16S
ATOM	38670	O2'	GUA	905	194.586	126.557	-30.916	1.00	55.96	A16S	ATOM	38723	C1'	CYT	908	202.157	134.681	-21.173	1.00	65.33	A16S
ATOM	38671	C3'	GUA	905	196.378	125.125	-30.121	1.00	55.96	A16S	ATOM	38724	N1	CYT	908	202.398	133.245	-21.337	1.00	32.65	A16S
ATOM	38672	O3'	GUA	905	197.205	125.721	-31.100	1.00	55.96	A16S	ATOM	38725	C6	CYT	908	202.389	132.648	-22.561	1.00	32.65	A16S
ATOM	38673	P	GUA	906	198.426	126.656	-30.623	1.00	63.15	A16S	ATOM	38726	C2	CYT	908	202.667	132.488	-20.190	1.00	32.65	A16S
ATOM	38674	O1P	GUA	906	199.196	127.094	-31.814	1.00	41.62	A16S	ATOM	38727	O2	CYT	908	202.649	133.045	-19.090	1.00	32.65	A16S
ATOM	38675	O2P	GUA	906	199.132	125.975	-29.514	1.00	41.62	A16S	ATOM	38728	N3	CYT	908	202.942	131.177	-20.305	1.00	32.65	A16S
ATOM	38676	O5'	GUA	906	197.688	127.938	-30.047	1.00	63.15	A16S	ATOM	38729	C4	CYT	908	202.955	130.609	-21.500	1.00	32.65	A16S
ATOM	38677	C5'	GUA	906	196.808	128.691	-30.887	1.00	63.15	A16S	ATOM	38730	N4	CYT	908	203.255	129.328	-21.559	1.00	32.65	A16S
ATOM	38678	C4'	GUA	906	196.225	129.844	-30.126	1.00	63.15	A16S	ATOM	38731	C5	CYT	908	202.665	131.340	-22.689	1.00	32.65	A16S
ATOM	38679	O4'	GUA	906	195.384	129.338	-29.062	1.00	63.15	A16S	ATOM	38732	C2'	CYT	908	203.467	135.450	-21.072	1.00	65.33	A16S
ATOM	38680	C1'	GUA	906	195.451	130.208	-27.951	1.00	63.15	A16S	ATOM	38733	O2'	CYT	908	203.331	136.344	-19.987	1.00	65.33	A16S
ATOM	38681	N9	GUA	906	195.982	129.475	-26.808	1.00	41.62	A16S	ATOM	38734	C3'	CYT	908	203.535	136.147	-22.430	1.00	65.33	A16S
ATOM	38682	C4	GUA	906	195.980	129.921	-25.510	1.00	41.62	A16S	ATOM	38735	O3'	CYT	908	204.323	137.332	-22.380	1.00	65.33	A16S
ATOM	38683	N3	GUA	906	195.490	131.106	-25.085	1.00	41.62	A16S	ATOM	38736	P	CYT	909	205.902	137.227	-22.053	1.00	49.41	A16S
ATOM	38684	C2	GUA	906	195.624	131.260	-23.785	1.00	41.62	A16S	ATOM	38737	O1P	CYT	909	206.524	138.543	-22.412	1.00	35.82	A16S
ATOM	38685	N2	GUA	906	195.175	132.377	-23.212	1.00	41.62	A16S	ATOM	38738	O2P	CYT	909	206.441	135.958	-22.642	1.00	35.82	A16S
ATOM	38686	N1	GUA	906	196.200	130.326	-22.955	1.00	41.62	A16S	ATOM	38739	O5'	CYT	909	205.918	137.093	-20.465	1.00	49.41	A16S
ATOM	38687	C6	GUA	906	196.705	129.096	-23.361	1.00	41.62	A16S	ATOM	38740	C5'	CYT	909	207.057	136.605	-19.785	1.00	49.41	A16S
ATOM	38688	O6	GUA	906	197.186	128.321	-22.523	1.00	41.62	A16S	ATOM	38741	C4'	CYT	909	206.674	136.153	-18.409	1.00	49.41	A16S
ATOM	38689	C5	GUA	906	196.567	128.917	-24.774	1.00	41.62	A16S	ATOM	38742	O4'	CYT	909	205.707	135.085	-18.502	1.00	49.41	A16S
ATOM	38690	N7	GUA	906	196.936	127.858	-25.597	1.00	41.62	A16S	ATOM	38743	C1'	CYT	909	206.000	134.087	-17.542	1.00	49.41	A16S
ATOM	38691	C8	GUA	906	196.573	128.236	-26.793	1.00	41.62	A16S	ATOM	38744	N1	CYT	909	206.257	132.821	-18.252	1.00	35.82	A16S
ATOM	38692	C2'	GUA	906	196.362	131.371	-28.329	1.00	63.15	A16S	ATOM	38745	C6	CYT	909	206.200	132.757	-19.615	1.00	35.82	A16S
ATOM	38693	O2'	GUA	906	195.577	132.440	-28.818	1.00	63.15	A16S	ATOM	38746	C2	CYT	909	206.563	131.669	-17.507	1.00	35.82	A16S
ATOM	38694	C3'	GUA	906	197.220	130.739	-29.411	1.00	63.15	A16S	ATOM	38747	O2	CYT	909	206.642	131.752	-16.273	1.00	35.82	A16S
ATOM	38695	O3'	GUA	906	197.808	131.712	-30.253	1.00	63.15	A16S	ATOM	38748	N3	CYT	909	206.774	130.500	-18.147	1.00	35.82	A16S
ATOM	38696	P	CYT	907	199.253	132.293	-29.876	1.00	71.15	A16S	ATOM	38749	C4	CYT	909	206.703	130.450	-19.474	1.00	35.82	A16S
ATOM	38697	O1P	CYT	907	199.578	133.307	-30.901	1.00	39.29	A16S	ATOM	38750	N4	CYT	909	206.911	129.278	-20.060	1.00	35.82	A16S
ATOM	38698	O2P	CYT	907	200.198	131.166	-29.615	1.00	39.29	A16S	ATOM	38751	C5	CYT	909	206.412	131.606	-20.261	1.00	35.82	A16S
ATOM	38699	O5'	CYT	907	199.010	133.037	-28.491	1.00	71.15	A16S	ATOM	38752	C2'	CYT	909	207.199	134.565	-16.723	1.00	49.41	A16S
ATOM	38700	C5'	CYT	907	198.209	134.221	-28.432	1.00	71.15	A16S	ATOM	38753	O2'	CYT	909	206.790	135.168	-15.520	1.00	49.41	A16S
ATOM	38701	C4'	CYT	907	198.181	134.771	-27.027	1.00	71.15	A16S	ATOM	38754	C3'	CYT	909	207.844	135.547	-17.678	1.00	49.41	A16S
ATOM	38702	O4'	CYT	907	197.479	133.866	-26.139	1.00	71.15	A16S	ATOM	38755	O3'	CYT	909	208.592	136.553	-17.046	1.00	49.41	A16S
ATOM	38703	C1'	CYT	907	197.973	134.025	-24.821	1.00	71.15	A16S	ATOM	38756	P	GUA	910	210.161	136.641	-17.324	1.00	46.76	A16S
ATOM	38704	N1	CYT	907	198.529	132.758	-24.340	1.00	39.29	A16S	ATOM	38757	O1P	GUA	910	210.599	137.977	-16.872	1.00	30.32	A16S
ATOM	38705	C6	CYT	907	198.892	131.759	-25.197	1.00	39.29	A16S	ATOM	38758	O2P	GUA	910	210.432	136.231	-18.728	1.00	30.32	A16S
ATOM	38706	C2	CYT	907	198.705	132.604	-22.962	1.00	39.29	A16S	ATOM	38759	O5'	GUA	910	210.735	135.546	-16.327	1.00	46.76	A16S
ATOM	38707	O2	CYT	907	198.378	133.533	-22.214	1.00	39.29	A16S	ATOM	38760	C5'	GUA	910	210.647	135.759	-14.926	1.00	46.76	A16S
ATOM	38708	N3	CYT	907	199.234	131.459	-22.483	1.00	39.29	A16S	ATOM	38761	C4'	GUA	910	211.035	134.519	-14.188	1.00	46.76	A16S

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ATOM  38762  O4' GUA  910      210.094 133.488 -14.531  1.00 46.76      A16S
ATOM  38763  C1' GUA  910      210.746 132.234 -14.539  1.00 46.76      A16S
ATOM  38764  N9  GUA  910      210.536 131.604 -15.841  1.00 30.32      A16S
ATOM  38765  C4  GUA  910      210.466 130.258 -16.069  1.00 30.32      A16S
ATOM  38766  N3  GUA  910      210.580 129.295 -15.133  1.00 30.32      A16S
ATOM  38767  C2  GUA  910      210.484 128.084 -15.660  1.00 30.32      A16S
ATOM  38768  N2  GUA  910      210.577 127.003 -14.871  1.00 30.32      A16S
ATOM  38769  N1  GUA  910      210.289 127.841 -17.002  1.00 30.32      A16S
ATOM  38770  C6  GUA  910      210.165 128.822 -17.984  1.00 30.32      A16S
ATOM  38771  O6  GUA  910      209.987 128.497 -19.161  1.00 30.32      A16S
ATOM  38772  C5  GUA  910      210.269 130.126 -17.432  1.00 30.32      A16S
ATOM  38773  N7  GUA  910      210.209 131.369 -18.045  1.00 30.32      A16S
ATOM  38774  C8  GUA  910      210.373 132.218 -17.066  1.00 30.32      A16S
ATOM  38775  C2' GUA  910      212.217 132.464 -14.192  1.00 46.76      A16S
ATOM  38776  O2' GUA  910      212.432 132.181 -12.827  1.00 46.76      A16S
ATOM  38777  C3' GUA  910      212.391 133.936 -14.539  1.00 46.76      A16S
ATOM  38778  O3' GUA  910      213.446 134.560 -13.808  1.00 46.76      A16S
ATOM  38779  P   CYT  911      214.637 135.301 -14.604  1.00 47.70      A16S
ATOM  38780  O1P CYT  911      215.325 136.197 -13.638  1.00 61.89      A16S
ATOM  38781  O2P CYT  911      214.093 135.872 -15.871  1.00 61.89      A16S
ATOM  38782  O5' CYT  911      215.629 134.110 -14.967  1.00 47.70      A16S
ATOM  38783  C5' CYT  911      216.132 133.218 -13.951  1.00 47.70      A16S
ATOM  38784  C4' CYT  911      216.652 131.956 -14.595  1.00 47.70      A16S
ATOM  38785  O4' CYT  911      217.697 132.290 -15.548  1.00 47.70      A16S
ATOM  38786  C1' CYT  911      218.768 131.391 -15.381  1.00 47.70      A16S
ATOM  38787  N1  CYT  911      219.996 131.984 -15.926  1.00 61.89      A16S
ATOM  38788  C6  CYT  911      220.788 132.802 -15.171  1.00 61.89      A16S
ATOM  38789  C2  CYT  911      220.340 131.696 -17.251  1.00 61.89      A16S
ATOM  38790  O2  CYT  911      219.607 130.939 -17.917  1.00 61.89      A16S
ATOM  38791  N3  CYT  911      221.456 132.247 -17.775  1.00 61.89      A16S
ATOM  38792  C4  CYT  911      222.212 133.056 -17.034  1.00 61.89      A16S
ATOM  38793  N4  CYT  911      223.288 133.601 -17.603  1.00 61.89      A16S
ATOM  38794  C5  CYT  911      221.894 133.353 -15.681  1.00 61.89      A16S
ATOM  38795  C2' CYT  911      218.745 131.026 -13.904  1.00 47.70      A16S
ATOM  38796  O2' CYT  911      219.467 129.829 -13.704  1.00 47.70      A16S
ATOM  38797  C3' CYT  911      217.242 130.883 -13.679  1.00 47.70      A16S
ATOM  38798  O3' CYT  911      216.887 129.624 -14.220  1.00 47.70      A16S
ATOM  38799  P   ADE  912      215.711 128.765 -13.555  1.00 56.92      A16S
ATOM  38800  O1P ADE  912      214.640 129.706 -13.135  1.00 31.49      A16S
ATOM  38801  O2P ADE  912      216.312 127.842 -12.542  1.00 31.49      A16S
ATOM  38802  O5' ADE  912      215.154 127.948 -14.804  1.00 56.92      A16S
ATOM  38803  C5' ADE  912      214.694 126.606 -14.674  1.00 56.92      A16S
ATOM  38804  C4' ADE  912      214.264 126.095 -16.019  1.00 56.92      A16S
ATOM  38805  O4' ADE  912      213.190 126.933 -16.511  1.00 56.92      A16S
ATOM  38806  C1' ADE  912      213.278 127.056 -17.920  1.00 56.92      A16S
ATOM  38807  N9  ADE  912      213.383 128.476 -18.265  1.00 31.49      A16S
ATOM  38808  C4  ADE  912      213.291 128.994 -19.529  1.00 31.49      A16S
ATOM  38809  N3  ADE  912      213.124 128.313 -20.665  1.00 31.49      A16S
ATOM  38810  C2  ADE  912      213.062 129.144 -21.704  1.00 31.49      A16S
ATOM  38811  N1  ADE  912      213.141 130.476 -21.730  1.00 31.49      A16S
ATOM  38812  C6  ADE  912      213.311 131.133 -20.570  1.00 31.49      A16S
ATOM  38813  N6  ADE  912      213.379 132.463 -20.607  1.00 31.49      A16S
ATOM  38814  C5  ADE  912      213.398 130.364 -19.391  1.00 31.49      A16S
ATOM  38815  N7  ADE  912      213.579 130.708 -18.059  1.00 31.49      A16S
ATOM  38816  C8  ADE  912      213.569 129.553 -17.434  1.00 31.49      A16S
ATOM  38817  C2' ADE  912      214.472 126.228 -18.376  1.00 56.92      A16S
ATOM  38818  O2' ADE  912      214.032 124.934 -18.714  1.00 56.92      A16S
ATOM  38819  C3' ADE  912      215.310 126.190 -17.112  1.00 56.92      A16S
ATOM  38820  O3' ADE  912      216.207 125.099 -17.110  1.00 56.92      A16S
ATOM  38821  P   CYT  913      217.712 125.320 -17.637  1.00 43.31      A16S
ATOM  38822  O1P CYT  913      218.445 124.073 -17.290  1.00 36.01      A16S
ATOM  38823  O2P CYT  913      218.222 126.633 -17.153  1.00 36.01      A16S
ATOM  38824  O5' CYT  913      217.552 125.426 -19.220  1.00 43.31      A16S
ATOM  38825  C5' CYT  913      217.286 124.256 -19.980  1.00 43.31      A16S
ATOM  38826  C4' CYT  913      216.856 124.612 -21.366  1.00 43.31      A16S
ATOM  38827  O4' CYT  913      215.831 125.628 -21.301  1.00 43.31      A16S
ATOM  38828  C1' CYT  913      215.846 126.393 -22.493  1.00 43.31      A16S
ATOM  38829  N1  CYT  913      216.058 127.814 -22.167  1.00 36.01      A16S
ATOM  38830  C6  CYT  913      216.362 128.217 -20.896  1.00 36.01      A16S
ATOM  38831  C2  CYT  913      215.956 128.759 -23.202  1.00 36.01      A16S
ATOM  38832  O2  CYT  913      215.661 128.374 -24.338  1.00 36.01      A16S
ATOM  38833  N3  CYT  913      216.179 130.060 -22.936  1.00 36.01      A16S
ATOM  38834  C4  CYT  913      216.480 130.441 -21.697  1.00 36.01      A16S
ATOM  38835  N4  CYT  913      216.690 131.739 -21.484  1.00 36.01      A16S
ATOM  38836  C5  CYT  913      216.578 129.508 -20.620  1.00 36.01      A16S
ATOM  38837  C2' CYT  913      216.985 125.855 -23.350  1.00 43.31      A16S
ATOM  38838  O2' CYT  913      216.439 124.904 -24.243  1.00 43.31      A16S
ATOM  38839  C3' CYT  913      217.883 125.219 -22.297  1.00 43.31      A16S
ATOM  38840  O3' CYT  913      218.748 124.244 -22.859  1.00 43.31      A16S
ATOM  38841  P   ADE  914      220.264 124.643 -23.227  1.00 43.71      A16S
ATOM  38842  O1P ADE  914      220.815 123.445 -23.902  1.00 44.22      A16S
ATOM  38843  O2P ADE  914      220.961 125.177 -22.031  1.00 44.22      A16S
ATOM  38844  O5' ADE  914      220.115 125.805 -24.312  1.00 43.71      A16S
ATOM  38845  C5' ADE  914      219.850 125.484 -25.685  1.00 43.71      A16S
ATOM  38846  C4' ADE  914      219.568 126.733 -26.476  1.00 43.71      A16S
ATOM  38847  O4' ADE  914      218.560 127.479 -25.753  1.00 43.71      A16S
ATOM  38848  C1' ADE  914      218.812 128.873 -25.857  1.00 43.71      A16S
ATOM  38849  N9  ADE  914      219.208 129.376 -24.537  1.00 44.22      A16S
ATOM  38850  C4  ADE  914      219.295 130.701 -24.188  1.00 44.22      A16S
ATOM  38851  N3  ADE  914      219.059 131.764 -24.975  1.00 44.22      A16S
ATOM  38852  C2  ADE  914      219.238 132.892 -24.302  1.00 44.22      A16S
ATOM  38853  N1  ADE  914      219.587 133.063 -23.025  1.00 44.22      A16S
ATOM  38854  C6  ADE  914      219.809 131.970 -22.260  1.00 44.22      A16S
ATOM  38855  N6  ADE  914      220.128 132.140 -20.980  1.00 44.22      A16S
ATOM  38856  C5  ADE  914      219.675 130.717 -22.860  1.00 44.22      A16S
ATOM  38857  N7  ADE  914      219.854 129.426 -22.378  1.00 44.22      A16S
ATOM  38858  C8  ADE  914      219.565 128.668 -23.406  1.00 44.22      A16S
ATOM  38859  C2' ADE  914      219.950 129.039 -26.852  1.00 43.71      A16S
ATOM  38860  O2' ADE  914      219.379 129.190 -28.136  1.00 43.71      A16S
ATOM  38861  C3' ADE  914      220.704 127.732 -26.640  1.00 43.71      A16S
ATOM  38862  O3' ADE  914      221.630 127.429 -27.679  1.00 43.71      A16S
ATOM  38863  P   ADE  915      223.214 127.524 -27.369  1.00 43.90      A16S
ATOM  38864  O1P ADE  915      223.971 127.093 -28.584  1.00 48.32      A16S
ATOM  38865  O2P ADE  915      223.462 126.827 -26.069  1.00 48.32      A16S
ATOM  38866  O5' ADE  915      223.460 129.086 -27.156  1.00 43.90      A16S
ATOM  38867  C5' ADE  915      223.390 130.001 -28.263  1.00 43.90      A16S
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ATOM	38868	C4'	ADE	915	223.807	131.378	-27.821	1.00	43.90	A16S	ATOM	38921	C4	CYT	917	228.933	129.148	-18.819	1.00	59.90	A16S
ATOM	38869	O4'	ADE	915	222.839	131.846	-26.853	1.00	43.90	A16S	ATOM	38922	N4	CYT	917	228.178	128.059	-18.930	1.00	59.90	A16S
ATOM	38870	C1'	ADE	915	223.494	132.514	-25.793	1.00	43.90	A16S	ATOM	38923	C5	CYT	917	229.490	129.755	-19.980	1.00	59.90	A16S
ATOM	38871	N9	ADE	915	223.294	131.718	-24.581	1.00	48.32	A16S	ATOM	38924	C2'	CYT	917	232.847	131.795	-17.944	1.00	50.00	A16S
ATOM	38872	C4	ADE	915	223.444	132.158	-23.291	1.00	48.32	A16S	ATOM	38925	O2'	CYT	917	233.485	132.656	-17.025	1.00	50.00	A16S
ATOM	38873	N3	ADE	915	223.811	133.382	-22.888	1.00	48.32	A16S	ATOM	38926	C3'	CYT	917	233.556	131.708	-19.290	1.00	50.00	A16S
ATOM	38874	C2	ADE	915	223.830	133.454	-21.562	1.00	48.32	A16S	ATOM	38927	O3'	CYT	917	234.963	131.667	-19.151	1.00	50.00	A16S
ATOM	38875	N1	ADE	915	223.544	132.520	-20.663	1.00	48.32	A16S	ATOM	38928	P	GUA	918	235.685	130.254	-18.895	1.00	39.71	A16S
ATOM	38876	C6	ADE	915	223.176	131.298	-21.099	1.00	48.32	A16S	ATOM	38929	O1P	GUA	918	237.153	130.492	-18.801	1.00	58.99	A16S
ATOM	38877	N6	ADE	915	222.875	130.360	-20.196	1.00	48.32	A16S	ATOM	38930	O2P	GUA	918	235.157	129.286	-19.903	1.00	58.99	A16S
ATOM	38878	C5	ADE	915	223.124	131.084	-22.485	1.00	48.32	A16S	ATOM	38931	O5'	GUA	918	235.179	129.809	-17.450	1.00	39.71	A16S
ATOM	38879	N7	ADE	915	222.794	129.971	-23.251	1.00	48.32	A16S	ATOM	38932	C5'	GUA	918	235.717	130.413	-16.267	1.00	39.71	A16S
ATOM	38880	C8	ADE	915	222.912	130.396	-24.483	1.00	48.32	A16S	ATOM	38933	C4'	GUA	918	235.040	129.863	-15.035	1.00	39.71	A16S
ATOM	38881	C2'	ADE	915	224.969	132.636	-26.169	1.00	43.90	A16S	ATOM	38934	O4'	GUA	918	233.611	130.088	-15.147	1.00	39.71	A16S
ATOM	38882	O2'	ADE	915	225.205	133.878	-26.804	1.00	43.90	A16S	ATOM	38935	C1'	GUA	918	232.917	129.037	-14.490	1.00	39.71	A16S
ATOM	38883	C3'	ADE	915	225.144	131.439	-27.099	1.00	43.90	A16S	ATOM	38936	N9	GUA	918	232.082	128.318	-15.456	1.00	58.99	A16S
ATOM	38884	O3'	ADE	915	226.261	131.576	-27.977	1.00	43.90	A16S	ATOM	38937	C4	GUA	918	231.096	127.411	-15.139	1.00	58.99	A16S
ATOM	38885	P	GUA	916	227.637	130.816	-27.631	1.00	67.71	A16S	ATOM	38938	N3	GUA	918	230.719	127.062	-13.896	1.00	58.99	A16S
ATOM	38886	O1P	GUA	916	228.591	131.272	-28.657	1.00	51.07	A16S	ATOM	38939	C2	GUA	918	229.767	126.165	-13.907	1.00	58.99	A16S
ATOM	38887	O2P	GUA	916	227.385	129.363	-27.447	1.00	51.07	A16S	ATOM	38940	N2	GUA	918	229.276	125.720	-12.763	1.00	58.99	A16S
ATOM	38888	O5'	GUA	916	228.084	131.373	-26.204	1.00	67.71	A16S	ATOM	38941	N1	GUA	918	229.224	125.638	-15.042	1.00	58.99	A16S
ATOM	38889	C5'	GUA	916	228.476	132.743	-26.037	1.00	67.71	A16S	ATOM	38942	C6	GUA	918	229.588	125.979	-16.334	1.00	58.99	A16S
ATOM	38890	C4'	GUA	916	228.696	133.081	-24.570	1.00	67.71	A16S	ATOM	38943	O6	GUA	918	229.025	125.442	-17.288	1.00	58.99	A16S
ATOM	38891	O4'	GUA	916	227.466	132.928	-23.818	1.00	67.71	A16S	ATOM	38944	C5	GUA	918	230.615	126.954	-16.343	1.00	58.99	A16S
ATOM	38892	C1'	GUA	916	227.784	132.750	-22.449	1.00	67.71	A16S	ATOM	38945	N7	GUA	918	231.271	127.569	-17.403	1.00	58.99	A16S
ATOM	38893	N9	GUA	916	227.048	131.611	-21.908	1.00	51.07	A16S	ATOM	38946	C8	GUA	918	232.129	128.371	-16.831	1.00	58.99	A16S
ATOM	38894	C4	GUA	916	226.737	131.429	-20.590	1.00	51.07	A16S	ATOM	38947	C2'	GUA	918	233.961	128.092	-13.894	1.00	39.71	A16S
ATOM	38895	N3	GUA	916	227.006	132.294	-19.592	1.00	51.07	A16S	ATOM	38948	O2'	GUA	918	234.223	128.383	-12.530	1.00	39.71	A16S
ATOM	38896	C2	GUA	916	226.615	131.836	-18.422	1.00	51.07	A16S	ATOM	38949	C3'	GUA	918	235.156	128.366	-14.785	1.00	39.71	A16S
ATOM	38897	N2	GUA	916	226.818	132.576	-17.321	1.00	51.07	A16S	ATOM	38950	O3'	GUA	918	236.338	127.966	-14.125	1.00	39.71	A16S
ATOM	38898	N1	GUA	916	226.000	130.618	-18.247	1.00	51.07	A16S	ATOM	38951	P	GUA	919	236.888	126.466	-14.334	1.00	44.49	A16S
ATOM	38899	C6	GUA	916	225.717	129.712	-19.267	1.00	51.07	A16S	ATOM	38952	O1P	GUA	919	238.134	126.341	-13.533	1.00	57.01	A16S
ATOM	38900	O6	GUA	916	225.171	128.637	-19.006	1.00	51.07	A16S	ATOM	38953	O2P	GUA	919	236.917	126.195	-15.795	1.00	57.01	A16S
ATOM	38901	C5	GUA	916	226.133	130.198	-20.522	1.00	51.07	A16S	ATOM	38954	O5'	GUA	919	235.781	125.513	-13.683	1.00	44.49	A16S
ATOM	38902	N7	GUA	916	226.032	129.630	-21.780	1.00	51.07	A16S	ATOM	38955	C5'	GUA	919	235.585	125.512	-12.264	1.00	44.49	A16S
ATOM	38903	C8	GUA	916	226.576	130.508	-22.573	1.00	51.07	A16S	ATOM	38956	C4'	GUA	919	234.358	124.719	-11.856	1.00	44.49	A16S
ATOM	38904	C2'	GUA	916	229.301	132.567	-22.324	1.00	67.71	A16S	ATOM	38957	O4'	GUA	919	233.208	125.012	-12.690	1.00	44.49	A16S
ATOM	38905	O2'	GUA	916	229.892	133.741	-21.801	1.00	67.71	A16S	ATOM	38958	C1'	GUA	919	232.207	124.048	-12.413	1.00	44.49	A16S
ATOM	38906	C3'	GUA	916	229.718	132.286	-23.765	1.00	67.71	A16S	ATOM	38959	N9	GUA	919	231.588	123.549	-13.639	1.00	57.01	A16S
ATOM	38907	O3'	GUA	916	231.046	132.763	-23.969	1.00	67.71	A16S	ATOM	38960	C4	GUA	919	230.580	122.608	-13.684	1.00	57.01	A16S
ATOM	38908	P	CYT	917	232.298	131.810	-23.647	1.00	50.00	A16S	ATOM	38961	N3	GUA	919	229.960	122.060	-12.615	1.00	57.01	A16S
ATOM	38909	O1P	CYT	917	233.461	132.449	-24.304	1.00	59.90	A16S	ATOM	38962	C2	GUA	919	229.064	121.158	-12.968	1.00	57.01	A16S
ATOM	38910	O2P	CYT	917	231.934	130.410	-23.971	1.00	59.90	A16S	ATOM	38963	N2	GUA	919	228.337	120.536	-12.031	1.00	57.01	A16S
ATOM	38911	O5'	CYT	917	232.491	131.890	-22.072	1.00	50.00	A16S	ATOM	38964	N1	GUA	919	228.811	120.803	-14.264	1.00	57.01	A16S
ATOM	38912	C5'	CYT	917	233.171	133.002	-21.490	1.00	50.00	A16S	ATOM	38965	C6	GUA	919	229.436	121.345	-15.380	1.00	57.01	A16S
ATOM	38913	C4'	CYT	917	233.069	132.964	-19.984	1.00	50.00	A16S	ATOM	38966	O6	GUA	919	229.139	120.937	-16.506	1.00	57.01	A16S
ATOM	38914	O4'	CYT	917	231.681	133.081	-19.565	1.00	50.00	A16S	ATOM	38967	C5	GUA	919	230.386	122.340	-15.017	1.00	57.01	A16S
ATOM	38915	C1'	CYT	917	231.497	132.390	-18.343	1.00	50.00	A16S	ATOM	38968	N7	GUA	919	231.213	123.134	-15.804	1.00	57.01	A16S
ATOM	38916	N1	CYT	917	230.540	131.297	-18.552	1.00	59.90	A16S	ATOM	38969	C8	GUA	919	231.899	123.842	-14.946	1.00	57.01	A16S
ATOM	38917	C6	CYT	917	230.278	130.817	-19.803	1.00	59.90	A16S	ATOM	38970	C2'	GUA	919	232.895	122.893	-11.683	1.00	44.49	A16S
ATOM	38918	C2	CYT	917	229.933	130.717	-17.431	1.00	59.90	A16S	ATOM	38971	O2'	GUA	919	232.507	122.962	-10.332	1.00	44.49	A16S
ATOM	38919	O2	CYT	917	230.128	131.217	-16.308	1.00	59.90	A16S	ATOM	38972	C3'	GUA	919	234.377	123.204	-11.872	1.00	44.49	A16S
ATOM	38920	N3	CYT	917	229.146	129.632	-17.598	1.00	59.90	A16S	ATOM	38973	O3'	GUA	919	235.083	122.655	-10.767	1.00	44.49	A16S

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ATOM  39036  C2' GUA   922     239.049 110.914 -12.194  1.00 42.30      A16S
ATOM  39037  O2' GUA   922     239.595 109.783 -12.833  1.00 42.30      A16S
ATOM  39038  C3' GUA   922     237.873 110.526 -11.321  1.00 42.30      A16S
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ATOM  39044  C5' ADE   923     241.182 109.476  -9.512  1.00 41.43      A16S
ATOM  39045  C4' ADE   923     242.285 110.305  -8.928  1.00 41.43      A16S
ATOM  39046  O4' ADE   923     242.163 111.660  -9.422  1.00 41.43      A16S
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ATOM  39065  O5' GUA   924     243.067 109.833  -4.395  1.00 47.91      A16S
ATOM  39066  C5' GUA   924     244.466 109.942  -4.053  1.00 47.91      A16S
ATOM  39067  C4' GUA   924     244.731 111.193  -3.257  1.00 47.91      A16S
ATOM  39068  O4' GUA   924     244.468 112.367  -4.065  1.00 47.91      A16S
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ATOM  39076  C6  GUA   924     239.927 115.977  -4.214  1.00 55.05      A16S
ATOM  39077  O6  GUA   924     238.801 116.057  -4.704  1.00 55.05      A16S
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ATOM  39079  N7  GUA   924     240.633 113.581  -4.685  1.00 55.05      A16S
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ATOM	39080	C8	GUA	924	241.744	112.968	-4.383	1.00	55.05	A16S	ATOM	39133	O4'	URI	927	233.724	116.856	5.915	1.00	60.43	A16S
ATOM	39081	C2'	GUA	924	243.946	112.892	-1.811	1.00	47.91	A16S	ATOM	39134	C1'	URI	927	232.621	116.313	5.199	1.00	60.43	A16S
ATOM	39082	O2'	GUA	924	245.137	113.335	-1.197	1.00	47.91	A16S	ATOM	39135	N1	URI	927	233.078	115.135	4.431	1.00	52.17	A16S
ATOM	39083	C3'	GUA	924	243.877	111.383	-2.021	1.00	47.91	A16S	ATOM	39136	C6	URI	927	234.182	114.406	4.814	1.00	52.17	A16S
ATOM	39084	O3'	GUA	924	244.377	110.617	-0.927	1.00	47.91	A16S	ATOM	39137	C2	URI	927	232.351	114.768	3.308	1.00	52.17	A16S
ATOM	39085	P	CYT	925	243.340	109.970	0.126	1.00	52.45	A16S	ATOM	39138	O2	URI	927	231.374	115.378	2.917	1.00	52.17	A16S
ATOM	39086	O1P	CYT	925	244.083	109.098	1.086	1.00	58.72	A16S	ATOM	39139	N3	URI	927	232.811	113.656	2.658	1.00	52.17	A16S
ATOM	39087	O2P	CYT	925	242.203	109.386	-0.656	1.00	58.72	A16S	ATOM	39140	C4	URI	927	233.897	112.884	2.994	1.00	52.17	A16S
ATOM	39088	O5'	CYT	925	242.822	111.258	0.924	1.00	52.45	A16S	ATOM	39141	O4	URI	927	234.166	111.889	2.313	1.00	52.17	A16S
ATOM	39089	C5'	CYT	925	243.739	112.055	1.697	1.00	52.45	A16S	ATOM	39142	C5	URI	927	234.602	113.325	4.152	1.00	52.17	A16S
ATOM	39090	C4'	CYT	925	243.198	113.452	1.920	1.00	52.45	A16S	ATOM	39143	C2'	URI	927	231.558	115.940	6.231	1.00	60.43	A16S
ATOM	39091	O4'	CYT	925	242.937	114.106	0.652	1.00	52.45	A16S	ATOM	39144	O2'	URI	927	230.689	117.036	6.440	1.00	60.43	A16S
ATOM	39092	C1'	CYT	925	241.873	115.037	0.805	1.00	52.45	A16S	ATOM	39145	C3'	URI	927	232.408	115.694	7.462	1.00	60.43	A16S
ATOM	39093	N1	CYT	925	240.772	114.679	-0.105	1.00	58.72	A16S	ATOM	39146	O3'	URI	927	231.624	115.794	8.628	1.00	60.43	A16S
ATOM	39094	C6	CYT	925	240.707	113.444	-0.694	1.00	58.72	A16S	ATOM	39147	P	GUA	928	231.019	114.458	9.275	1.00	47.58	A16S
ATOM	39095	C2	CYT	925	239.768	115.630	-0.343	1.00	58.72	A16S	ATOM	39148	O1P	GUA	928	230.635	114.769	10.675	1.00	53.95	A16S
ATOM	39096	O2	CYT	925	239.855	116.754	0.202	1.00	58.72	A16S	ATOM	39149	O2P	GUA	928	231.936	113.317	9.006	1.00	53.95	A16S
ATOM	39097	N3	CYT	925	238.731	115.302	-1.151	1.00	58.72	A16S	ATOM	39150	O5'	GUA	928	229.686	114.221	8.439	1.00	47.58	A16S
ATOM	39098	C4	CYT	925	238.671	114.087	-1.706	1.00	58.72	A16S	ATOM	39151	C5'	GUA	928	228.521	115.038	8.670	1.00	47.58	A16S
ATOM	39099	N4	CYT	925	237.622	113.803	-2.477	1.00	58.72	A16S	ATOM	39152	C4'	GUA	928	227.422	114.683	7.699	1.00	47.58	A16S
ATOM	39100	C5	CYT	925	239.684	113.110	-1.490	1.00	58.72	A16S	ATOM	39153	O4'	GUA	928	227.830	115.066	6.359	1.00	47.58	A16S
ATOM	39101	C2'	CYT	925	241.392	114.965	2.251	1.00	52.45	A16S	ATOM	39154	C1'	GUA	928	227.297	114.147	5.422	1.00	47.58	A16S
ATOM	39102	O2'	CYT	925	241.907	116.058	2.979	1.00	52.45	A16S	ATOM	39155	N9	GUA	928	228.389	113.408	4.777	1.00	53.95	A16S
ATOM	39103	C3'	CYT	925	241.891	113.588	2.675	1.00	52.45	A16S	ATOM	39156	C4	GUA	928	228.311	112.719	3.579	1.00	53.95	A16S
ATOM	39104	O3'	CYT	925	242.056	113.503	4.075	1.00	52.45	A16S	ATOM	39157	N3	GUA	928	227.241	112.669	2.758	1.00	53.95	A16S
ATOM	39105	P	ADE	926	240.793	113.121	4.986	1.00	48.56	A16S	ATOM	39158	C2	GUA	928	227.445	111.880	1.722	1.00	53.95	A16S
ATOM	39106	O1P	ADE	926	241.262	112.897	6.386	1.00	65.25	A16S	ATOM	39159	N2	GUA	928	226.484	111.716	0.814	1.00	53.95	A16S
ATOM	39107	O2P	ADE	926	240.056	112.029	4.281	1.00	65.25	A16S	ATOM	39160	N1	GUA	928	228.600	111.190	1.499	1.00	53.95	A16S
ATOM	39108	O5'	ADE	926	239.908	114.448	4.944	1.00	48.56	A16S	ATOM	39161	C6	GUA	928	229.717	111.216	2.320	1.00	53.95	A16S
ATOM	39109	C5'	ADE	926	240.344	115.631	5.615	1.00	48.56	A16S	ATOM	39162	O6	GUA	928	230.706	110.530	2.027	1.00	53.95	A16S
ATOM	39110	C4'	ADE	926	239.227	116.640	5.691	1.00	48.56	A16S	ATOM	39163	C5	GUA	928	229.521	112.077	3.446	1.00	53.95	A16S
ATOM	39111	O4'	ADE	926	238.983	117.195	4.376	1.00	48.56	A16S	ATOM	39164	N7	GUA	928	230.365	112.392	4.505	1.00	53.95	A16S
ATOM	39112	C1'	ADE	926	237.595	117.427	4.214	1.00	48.56	A16S	ATOM	39165	C8	GUA	928	229.659	113.192	5.259	1.00	53.95	A16S
ATOM	39113	N9	ADE	926	237.106	116.468	3.225	1.00	65.25	A16S	ATOM	39166	C2'	GUA	928	226.407	113.180	6.210	1.00	47.58	A16S
ATOM	39114	C4	ADE	926	235.971	116.567	2.460	1.00	65.25	A16S	ATOM	39167	O2'	GUA	928	225.087	113.679	6.296	1.00	47.58	A16S
ATOM	39115	N3	ADE	926	235.083	117.574	2.440	1.00	65.25	A16S	ATOM	39168	C3'	GUA	928	227.054	113.211	7.578	1.00	47.58	A16S
ATOM	39116	C2	ADE	926	234.106	117.312	1.582	1.00	65.25	A16S	ATOM	39169	O3'	GUA	928	226.138	112.745	8.560	1.00	47.58	A16S
ATOM	39117	N1	ADE	926	233.931	116.241	0.800	1.00	65.25	A16S	ATOM	39170	P	URI	929	225.998	111.155	8.840	1.00	49.16	A16S
ATOM	39118	C6	ADE	926	234.846	115.250	0.849	1.00	65.25	A16S	ATOM	39171	O1P	URI	929	224.930	110.963	9.872	1.00	53.91	A16S
ATOM	39119	N6	ADE	926	234.680	114.175	0.075	1.00	65.25	A16S	ATOM	39172	O2P	URI	929	227.351	110.569	9.074	1.00	53.91	A16S
ATOM	39120	C5	ADE	926	235.923	115.405	1.715	1.00	65.25	A16S	ATOM	39173	O5'	URI	929	225.416	110.563	7.475	1.00	49.16	A16S
ATOM	39121	N7	ADE	926	237.008	114.592	1.997	1.00	65.25	A16S	ATOM	39174	C5'	URI	929	224.086	110.908	7.026	1.00	49.16	A16S
ATOM	39122	C8	ADE	926	237.679	115.265	2.890	1.00	65.25	A16S	ATOM	39175	C4'	URI	929	223.762	110.229	5.710	1.00	49.16	A16S
ATOM	39123	C2'	ADE	926	236.925	117.157	5.563	1.00	48.56	A16S	ATOM	39176	O4'	URI	929	224.681	110.670	4.671	1.00	49.16	A16S
ATOM	39124	O2'	ADE	926	236.866	118.342	6.335	1.00	48.56	A16S	ATOM	39177	C1'	URI	929	224.869	109.622	3.728	1.00	49.16	A16S
ATOM	39125	C3'	ADE	926	237.872	116.138	6.169	1.00	48.56	A16S	ATOM	39178	N1	URI	929	226.292	109.234	3.679	1.00	53.91	A16S
ATOM	39126	O3'	ADE	926	237.747	116.112	7.581	1.00	48.56	A16S	ATOM	39179	C6	URI	929	227.188	109.601	4.649	1.00	53.91	A16S
ATOM	39127	P	URI	927	236.853	114.968	8.275	1.00	60.43	A16S	ATOM	39180	C2	URI	929	226.694	108.441	2.626	1.00	53.91	A16S
ATOM	39128	O1P	URI	927	236.930	115.178	9.746	1.00	52.17	A16S	ATOM	39181	O2	URI	929	225.949	108.124	1.720	1.00	53.91	A16S
ATOM	39129	O2P	URI	927	237.264	113.653	7.710	1.00	52.17	A16S	ATOM	39182	N3	URI	929	227.998	108.029	2.669	1.00	53.91	A16S
ATOM	39130	O5'	URI	927	235.372	115.307	7.788	1.00	60.43	A16S	ATOM	39183	C4	URI	929	228.925	108.325	3.623	1.00	53.91	A16S
ATOM	39131	C5'	URI	927	234.771	116.582	8.100	1.00	60.43	A16S	ATOM	39184	O4	URI	929	230.030	107.794	3.572	1.00	53.91	A16S
ATOM	39132	C4'	URI	927	233.469	116.776	7.343	1.00	60.43	A16S	ATOM	39185	C5	URI	929	228.456	109.180	4.657	1.00	53.91	A16S

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ATOM  39186  C2' URI   929     224.012 108.439   4.179  1.00 49.16      A16S
ATOM  39187  O2' URI   929     222.778 108.455   3.493  1.00 49.16      A16S
ATOM  39188  C3' URI   929     223.856 108.715   5.665  1.00 49.16      A16S
ATOM  39189  O3' URI   929     222.706 108.071   6.164  1.00 49.16      A16S
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ATOM  39192  O2P GUA   930     224.063 106.212   7.124  1.00 55.37      A16S
ATOM  39193  O5' GUA   930     222.824 105.830   5.017  1.00 57.47      A16S
ATOM  39194  C5' GUA   930     221.690 105.842   4.135  1.00 57.47      A16S
ATOM  39195  C4' GUA   930     221.971 104.963   2.949  1.00 57.47      A16S
ATOM  39196  O4' GUA   930     223.161 105.459   2.282  1.00 57.47      A16S
ATOM  39197  C1' GUA   930     223.951 104.371   1.837  1.00 57.47      A16S
ATOM  39198  N9  GUA   930     225.265 104.453   2.475  1.00 55.37      A16S
ATOM  39199  C4  GUA   930     226.401 103.739   2.126  1.00 55.37      A16S
ATOM  39200  N3  GUA   930     226.508 102.852   1.111  1.00 55.37      A16S
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ATOM  39203  N1  GUA   930     228.745 102.647   1.885  1.00 55.37      A16S
ATOM  39204  C6  GUA   930     228.661 103.554   2.933  1.00 55.37      A16S
ATOM  39205  O6  GUA   930     229.643 103.763   3.636  1.00 55.37      A16S
ATOM  39206  C5  GUA   930     227.368 104.129   3.027  1.00 55.37      A16S
ATOM  39207  N7  GUA   930     226.867 105.079   3.909  1.00 55.37      A16S
ATOM  39208  C8  GUA   930     225.622 105.240   3.544  1.00 55.37      A16S
ATOM  39209  C2' GUA   930     223.202 103.081   2.174  1.00 57.47      A16S
ATOM  39210  O2' GUA   930     222.456 102.625   1.063  1.00 57.47      A16S
ATOM  39211  C3' GUA   930     222.318 103.534   3.324  1.00 57.47      A16S
ATOM  39212  O3' GUA   930     221.175 102.711   3.487  1.00 57.47      A16S
ATOM  39213  P   GUA   931     221.163 101.612   4.660  1.00 61.85      A16S
ATOM  39214  O1P GUA   931     219.883 100.851   4.571  1.00 64.62      A16S
ATOM  39215  O2P GUA   931     221.515 102.330   5.915  1.00 64.62      A16S
ATOM  39216  O5' GUA   931     222.356 100.614   4.297  1.00 61.85      A16S
ATOM  39217  C5' GUA   931     222.339  99.868   3.062  1.00 61.85      A16S
ATOM  39218  C4' GUA   931     223.721  99.354   2.715  1.00 61.85      A16S
ATOM  39219  O4' GUA   931     224.643 100.467   2.606  1.00 61.85      A16S
ATOM  39220  C1' GUA   931     225.938 100.050   2.993  1.00 61.85      A16S
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ATOM  39225  N2  GUA   931     230.945  99.806   4.360  1.00 64.62      A16S
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ATOM  39228  O6  GUA   931     229.072 102.819   7.265  1.00 64.62      A16S
ATOM  39229  C5  GUA   931     227.675 101.825   5.598  1.00 64.62      A16S
ATOM  39230  N7  GUA   931     226.404 102.356   5.775  1.00 64.62      A16S
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ATOM  39232  C2' GUA   931     225.864  98.581   3.409  1.00 61.85      A16S
ATOM  39233  O2' GUA   931     226.348  97.774   2.357  1.00 61.85      A16S
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ATOM  39235  O3' GUA   931     223.946  97.083   3.526  1.00 61.85      A16S
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ATOM  39239  O5' URI   932     225.316  95.818   5.231  1.00 57.14      A16S
ATOM  39240  C5' URI   932     226.172  95.002   4.403  1.00 57.14      A16S
ATOM  39241  C4' URI   932     227.616  95.128   4.836  1.00 57.14      A16S
ATOM  39242  O4' URI   932     228.014  96.520   4.763  1.00 57.14      A16S
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ATOM  39262  O4' URI   933     231.106  95.209   9.129  1.00 61.35      A16S
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ATOM  39291  C5  URI   934     227.818  95.190  14.147  1.00 66.11      A16S
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ATOM	39292	C2'	URI	934	231.244	95.460	17.005	1.00	66.03	A16S	ATOM	39345	C4'	URI	937	227.000	101.768	16.341	1.00	67.40	A16S
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ATOM	39294	C3'	URI	934	231.612	94.045	16.564	1.00	66.03	A16S	ATOM	39347	C1'	URI	937	229.219	102.456	16.034	1.00	67.40	A16S
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ATOM	39298	O2P	ADE	935	230.932	91.231	17.604	1.00	88.11	A16S	ATOM	39351	O2	URI	937	228.895	100.490	14.076	1.00	72.70	A16S
ATOM	39299	O5'	ADE	935	230.505	93.091	19.222	1.00	82.92	A16S	ATOM	39352	N3	URI	937	230.973	99.656	14.374	1.00	72.70	A16S
ATOM	39300	C5'	ADE	935	229.524	92.471	20.082	1.00	82.92	A16S	ATOM	39353	C4	URI	937	232.214	99.600	14.960	1.00	72.70	A16S
ATOM	39301	C4'	ADE	935	229.032	93.470	21.104	1.00	82.92	A16S	ATOM	39354	O4	URI	937	232.976	98.678	14.670	1.00	72.70	A16S
ATOM	39302	O4'	ADE	935	230.082	93.722	22.063	1.00	82.92	A16S	ATOM	39355	C5	URI	937	232.452	100.607	15.949	1.00	72.70	A16S
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ATOM	39304	N9	ADE	935	231.469	95.579	22.251	1.00	88.11	A16S	ATOM	39357	O2'	URI	937	228.789	104.412	14.601	1.00	67.40	A16S
ATOM	39305	C4	ADE	935	232.050	96.645	22.897	1.00	88.11	A16S	ATOM	39358	C3'	URI	937	226.955	102.903	15.333	1.00	67.40	A16S
ATOM	39306	N3	ADE	935	231.473	97.487	23.769	1.00	88.11	A16S	ATOM	39359	O3'	URI	937	226.141	104.018	15.787	1.00	67.40	A16S
ATOM	39307	C2	ADE	935	232.354	98.386	24.214	1.00	88.11	A16S	ATOM	39360	P	URI	938	226.680	105.106	16.859	1.00	67.49	A16S
ATOM	39308	N1	ADE	935	233.647	98.532	23.908	1.00	88.11	A16S	ATOM	39361	O1P	URI	938	226.857	106.410	16.167	1.00	57.02	A16S
ATOM	39309	C6	ADE	935	234.200	97.674	23.026	1.00	88.11	A16S	ATOM	39362	O2P	URI	938	227.776	104.565	17.704	1.00	57.02	A16S
ATOM	39310	N6	ADE	935	235.492	97.825	22.719	1.00	88.11	A16S	ATOM	39363	O5'	URI	938	225.415	105.288	17.803	1.00	67.49	A16S
ATOM	39311	C5	ADE	935	233.370	96.667	22.480	1.00	88.11	A16S	ATOM	39364	C5'	URI	938	224.774	104.146	18.403	1.00	67.49	A16S
ATOM	39312	N7	ADE	935	233.612	95.648	21.570	1.00	88.11	A16S	ATOM	39365	C4'	URI	938	223.506	104.574	19.091	1.00	67.49	A16S
ATOM	39313	C8	ADE	935	232.457	95.041	21.462	1.00	88.11	A16S	ATOM	39366	O4'	URI	938	223.806	105.762	19.871	1.00	67.49	A16S
ATOM	39314	C2'	ADE	935	228.966	95.801	21.654	1.00	82.92	A16S	ATOM	39367	C1'	URI	938	222.692	106.641	19.861	1.00	67.49	A16S
ATOM	39315	O2'	ADE	935	227.881	95.979	22.540	1.00	82.92	A16S	ATOM	39368	N1	URI	938	223.085	107.920	19.250	1.00	57.02	A16S
ATOM	39316	C3'	ADE	935	228.661	94.822	20.516	1.00	82.92	A16S	ATOM	39369	C6	URI	938	224.279	108.080	18.600	1.00	57.02	A16S
ATOM	39317	O3'	ADE	935	227.267	94.781	20.174	1.00	82.92	A16S	ATOM	39370	C2	URI	938	222.184	108.962	19.339	1.00	57.02	A16S
ATOM	39318	P	ADE	936	226.785	95.072	18.661	1.00	63.15	A16S	ATOM	39371	O2	URI	938	221.124	108.864	19.934	1.00	57.02	A16S
ATOM	39319	O1P	ADE	936	225.473	94.405	18.462	1.00	77.60	A16S	ATOM	39372	N3	URI	938	222.566	110.120	18.715	1.00	57.02	A16S
ATOM	39320	O2P	ADE	936	227.910	94.764	17.739	1.00	77.60	A16S	ATOM	39373	C4	URI	938	223.738	110.341	18.036	1.00	57.02	A16S
ATOM	39321	O5'	ADE	936	226.531	96.643	18.664	1.00	63.15	A16S	ATOM	39374	O4	URI	938	223.937	111.439	17.513	1.00	57.02	A16S
ATOM	39322	C5'	ADE	936	225.636	97.237	19.625	1.00	63.15	A16S	ATOM	39375	C5	URI	938	224.627	109.222	18.005	1.00	57.02	A16S
ATOM	39323	C4'	ADE	936	226.098	98.628	19.999	1.00	63.15	A16S	ATOM	39376	C2'	URI	938	221.584	105.974	19.054	1.00	67.49	A16S
ATOM	39324	O4'	ADE	936	227.323	98.553	20.762	1.00	63.15	A16S	ATOM	39377	O2'	URI	938	220.661	105.318	19.907	1.00	67.49	A16S
ATOM	39325	C1'	ADE	936	228.122	99.690	20.488	1.00	63.15	A16S	ATOM	39378	C3'	URI	938	222.383	105.027	18.176	1.00	67.49	A16S
ATOM	39326	N9	ADE	936	229.448	99.233	20.079	1.00	77.60	A16S	ATOM	39379	O3'	URI	938	221.579	103.974	17.687	1.00	67.49	A16S
ATOM	39327	C4	ADE	936	230.648	99.645	20.607	1.00	77.60	A16S	ATOM	39380	P	CYT	939	220.917	104.116	16.231	1.00	57.20	A16S
ATOM	39328	N3	ADE	936	230.842	100.537	21.593	1.00	77.60	A16S	ATOM	39381	O1P	CYT	939	220.094	102.904	16.009	1.00	55.73	A16S
ATOM	39329	C2	ADE	936	232.135	100.676	21.846	1.00	77.60	A16S	ATOM	39382	O2P	CYT	939	222.024	104.434	15.291	1.00	55.73	A16S
ATOM	39330	N1	ADE	936	233.181	100.078	21.268	1.00	77.60	A16S	ATOM	39383	O5'	CYT	939	219.990	105.417	16.333	1.00	57.20	A16S
ATOM	39331	C6	ADE	936	232.950	99.186	20.278	1.00	77.60	A16S	ATOM	39384	C5'	CYT	939	218.965	105.500	17.333	1.00	57.20	A16S
ATOM	39332	N6	ADE	936	233.991	98.578	19.699	1.00	77.60	A16S	ATOM	39385	C4'	CYT	939	218.286	106.856	17.333	1.00	57.20	A16S
ATOM	39333	C5	ADE	936	231.621	98.946	19.918	1.00	77.60	A16S	ATOM	39386	O4'	CYT	939	219.191	107.923	17.737	1.00	57.20	A16S
ATOM	39334	N7	ADE	936	231.050	98.110	18.970	1.00	77.60	A16S	ATOM	39387	C1'	CYT	939	218.719	109.164	17.216	1.00	57.20	A16S
ATOM	39335	C8	ADE	936	229.763	98.315	19.106	1.00	77.60	A16S	ATOM	39388	N1	CYT	939	219.751	109.781	16.356	1.00	55.73	A16S
ATOM	39336	C2'	ADE	936	227.402	100.549	19.445	1.00	63.15	A16S	ATOM	39389	C6	CYT	939	220.832	109.069	15.912	1.00	55.73	A16S
ATOM	39337	O2'	ADE	936	226.794	101.658	20.071	1.00	63.15	A16S	ATOM	39390	C2	CYT	939	219.585	111.134	15.965	1.00	55.73	A16S
ATOM	39338	C3'	ADE	936	226.416	99.552	18.838	1.00	63.15	A16S	ATOM	39391	O2	CYT	939	218.602	111.770	16.382	1.00	55.73	A16S
ATOM	39339	O3'	ADE	936	225.233	100.181	18.365	1.00	63.15	A16S	ATOM	39392	N3	CYT	939	220.494	111.699	15.140	1.00	55.73	A16S
ATOM	39340	P	URI	937	224.472	99.586	17.081	1.00	67.40	A16S	ATOM	39393	C4	CYT	939	221.529	110.983	14.700	1.00	55.73	A16S
ATOM	39341	O1P	URI	937	223.115	100.181	17.134	1.00	72.70	A16S	ATOM	39394	N4	CYT	939	222.382	111.576	13.880	1.00	55.73	A16S
ATOM	39342	O2P	URI	937	224.624	98.103	17.023	1.00	72.70	A16S	ATOM	39395	C5	CYT	939	221.732	109.623	15.084	1.00	55.73	A16S
ATOM	39343	O5'	URI	937	225.235	100.218	15.832	1.00	67.40	A16S	ATOM	39396	C2'	CYT	939	217.488	108.857	16.363	1.00	57.20	A16S
ATOM	39344	C5'	URI	937	226.655	100.386	15.845	1.00	67.40	A16S	ATOM	39397	O2'	CYT	939	216.298	109.139	17.081	1.00	57.20	A16S

ATOM	39398	C3'	CYT	939	217.706	107.382	16.038	1.00	57.20	A16S	ATOM	39451	O4'	ADE	942	214.951	111.940	2.461	1.00	67.25	A16S
ATOM	39399	O3'	CYT	939	216.531	106.728	15.592	1.00	57.20	A16S	ATOM	39452	C1'	ADE	942	215.119	110.579	2.138	1.00	67.25	A16S
ATOM	39400	P	GUA	940	216.384	106.385	14.024	1.00	55.30	A16S	ATOM	39453	N9	ADE	942	215.711	109.906	3.288	1.00	56.69	A16S
ATOM	39401	O1P	GUA	940	215.390	105.281	13.927	1.00	52.65	A16S	ATOM	39454	C4	ADE	942	216.816	109.091	3.251	1.00	56.69	A16S
ATOM	39402	O2P	GUA	940	217.750	106.189	13.455	1.00	52.65	A16S	ATOM	39455	N3	ADE	942	217.532	108.736	2.169	1.00	56.69	A16S
ATOM	39403	O5'	GUA	940	215.808	107.729	13.390	1.00	55.30	A16S	ATOM	39456	C2	ADE	942	218.543	107.948	2.520	1.00	56.69	A16S
ATOM	39404	C5'	GUA	940	214.676	108.357	13.966	1.00	55.30	A16S	ATOM	39457	N1	ADE	942	218.888	107.501	3.733	1.00	56.69	A16S
ATOM	39405	C4'	GUA	940	214.717	109.845	13.744	1.00	55.30	A16S	ATOM	39458	C6	ADE	942	218.136	107.867	4.795	1.00	56.69	A16S
ATOM	39406	O4'	GUA	940	215.960	110.384	14.260	1.00	55.30	A16S	ATOM	39459	N6	ADE	942	218.458	107.403	6.004	1.00	56.69	A16S
ATOM	39407	C1'	GUA	940	216.308	111.554	13.535	1.00	55.30	A16S	ATOM	39460	C5	ADE	942	217.048	108.713	4.560	1.00	56.69	A16S
ATOM	39408	N9	GUA	940	217.607	111.354	12.890	1.00	52.65	A16S	ATOM	39461	N7	ADE	942	216.105	109.273	5.408	1.00	56.69	A16S
ATOM	39409	C4	GUA	940	218.284	112.277	12.119	1.00	52.65	A16S	ATOM	39462	C8	ADE	942	215.331	109.962	4.603	1.00	56.69	A16S
ATOM	39410	N3	GUA	940	217.883	113.535	11.857	1.00	52.65	A16S	ATOM	39463	C2'	ADE	942	213.809	110.010	1.586	1.00	67.25	A16S
ATOM	39411	C2	GUA	940	218.738	114.175	11.080	1.00	52.65	A16S	ATOM	39464	O2'	ADE	942	213.953	109.772	0.207	1.00	67.25	A16S
ATOM	39412	N2	GUA	940	218.497	115.441	10.739	1.00	52.65	A16S	ATOM	39465	C3'	ADE	942	212.800	111.081	1.984	1.00	67.25	A16S
ATOM	39413	N1	GUA	940	219.891	113.625	10.583	1.00	52.65	A16S	ATOM	39466	O3'	ADE	942	211.644	111.321	1.159	1.00	67.25	A16S
ATOM	39414	C6	GUA	940	220.321	112.330	10.826	1.00	52.65	A16S	ATOM	39467	P	GUA	943	211.739	111.367	-0.463	1.00	42.88	A16S
ATOM	39415	O6	GUA	940	221.370	111.926	10.313	1.00	52.65	A16S	ATOM	39468	O1P	GUA	943	211.906	109.980	-0.989	1.00	56.90	A16S
ATOM	39416	C5	GUA	940	219.416	111.629	11.679	1.00	52.65	A16S	ATOM	39469	O2P	GUA	943	210.551	112.147	-0.869	1.00	56.90	A16S
ATOM	39417	N7	GUA	940	219.468	110.334	12.180	1.00	52.65	A16S	ATOM	39470	O5'	GUA	943	212.984	112.292	-0.837	1.00	42.88	A16S
ATOM	39418	C8	GUA	940	218.382	110.216	12.896	1.00	52.65	A16S	ATOM	39471	C5'	GUA	943	214.111	111.766	-1.567	1.00	42.88	A16S
ATOM	39419	C2'	GUA	940	215.205	111.780	12.498	1.00	55.30	A16S	ATOM	39472	C4'	GUA	943	214.310	112.496	-2.875	1.00	42.88	A16S
ATOM	39420	O2'	GUA	940	214.216	112.645	13.030	1.00	55.30	A16S	ATOM	39473	O4'	GUA	943	213.350	112.043	-3.864	1.00	42.88	A16S
ATOM	39421	C3'	GUA	940	214.666	110.370	12.319	1.00	55.30	A16S	ATOM	39474	C1'	GUA	943	213.187	113.054	-4.853	1.00	42.88	A16S
ATOM	39422	O3'	GUA	940	213.358	110.396	11.767	1.00	55.30	A16S	ATOM	39475	N9	GUA	943	211.769	113.329	-5.076	1.00	56.90	A16S
ATOM	39423	P	ADE	941	213.141	110.002	10.220	1.00	58.04	A16S	ATOM	39476	C4	GUA	943	211.268	114.151	-6.060	1.00	56.90	A16S
ATOM	39424	O1P	ADE	941	211.676	109.950	9.968	1.00	52.20	A16S	ATOM	39477	N3	GUA	943	211.999	114.819	-6.979	1.00	56.90	A16S
ATOM	39425	O2P	ADE	941	213.977	108.802	9.926	1.00	52.20	A16S	ATOM	39478	C2	GUA	943	211.242	115.549	-7.779	1.00	56.90	A16S
ATOM	39426	O5'	ADE	941	213.729	111.245	9.419	1.00	58.04	A16S	ATOM	39479	N2	GUA	943	211.813	116.285	-8.748	1.00	56.90	A16S
ATOM	39427	C5'	ADE	941	213.220	112.577	9.619	1.00	58.04	A16S	ATOM	39480	N1	GUA	943	209.876	115.614	-7.685	1.00	56.90	A16S
ATOM	39428	C4'	ADE	941	214.035	113.566	8.813	1.00	58.04	A16S	ATOM	39481	C6	GUA	943	209.105	114.935	-6.748	1.00	56.90	A16S
ATOM	39429	O4'	ADE	941	215.394	113.571	9.320	1.00	58.04	A16S	ATOM	39482	O6	GUA	943	207.880	115.072	-6.749	1.00	56.90	A16S
ATOM	39430	C1'	ADE	941	216.313	113.667	8.245	1.00	58.04	A16S	ATOM	39483	C5	GUA	943	209.906	114.150	-5.882	1.00	56.90	A16S
ATOM	39431	N9	ADE	941	217.142	112.455	8.254	1.00	52.20	A16S	ATOM	39484	N7	GUA	943	209.550	113.338	-4.814	1.00	56.90	A16S
ATOM	39432	C4	ADE	941	218.270	112.223	7.507	1.00	52.20	A16S	ATOM	39485	C8	GUA	943	210.686	112.867	-4.370	1.00	56.90	A16S
ATOM	39433	N3	ADE	941	218.848	113.056	6.621	1.00	52.20	A16S	ATOM	39486	C2'	GUA	943	213.919	114.306	-4.374	1.00	42.88	A16S
ATOM	39434	C2	ADE	941	219.926	112.486	6.080	1.00	52.20	A16S	ATOM	39487	O2'	GUA	943	215.101	114.464	-5.127	1.00	42.88	A16S
ATOM	39435	N1	ADE	941	220.453	111.262	6.310	1.00	52.20	A16S	ATOM	39488	C3'	GUA	943	214.131	114.003	-2.889	1.00	42.88	A16S
ATOM	39436	C6	ADE	941	219.841	110.452	7.206	1.00	52.20	A16S	ATOM	39489	O3'	GUA	943	215.215	114.738	-2.352	1.00	42.88	A16S
ATOM	39437	N6	ADE	941	220.351	109.241	7.430	1.00	52.20	A16S	ATOM	39490	P	CYT	944	214.927	116.180	-1.705	1.00	38.22	A16S
ATOM	39438	C5	ADE	941	218.692	110.942	7.848	1.00	52.20	A16S	ATOM	39491	O1P	CYT	944	216.191	116.663	-1.081	1.00	58.55	A16S
ATOM	39439	N7	ADE	941	217.852	110.383	8.797	1.00	52.20	A16S	ATOM	39492	O2P	CYT	944	213.696	116.039	-0.880	1.00	58.55	A16S
ATOM	39440	C8	ADE	941	216.955	111.314	9.005	1.00	52.20	A16S	ATOM	39493	O5'	CYT	944	214.557	117.125	-2.931	1.00	38.22	A16S
ATOM	39441	C2'	ADE	941	215.505	113.870	6.957	1.00	58.04	A16S	ATOM	39494	C5'	CYT	944	215.550	117.496	-3.892	1.00	38.22	A16S
ATOM	39442	O2'	ADE	941	215.418	115.254	6.660	1.00	58.04	A16S	ATOM	39495	C4'	CYT	944	214.953	118.399	-4.934	1.00	38.22	A16S
ATOM	39443	C3'	ADE	941	214.165	113.239	7.330	1.00	58.04	A16S	ATOM	39496	O4'	CYT	944	213.919	117.678	-5.632	1.00	38.22	A16S
ATOM	39444	O3'	ADE	941	213.067	113.765	6.579	1.00	58.04	A16S	ATOM	39497	C1'	CYT	944	212.854	118.553	-5.958	1.00	38.22	A16S
ATOM	39445	P	ADE	942	212.133	112.771	5.723	1.00	67.25	A16S	ATOM	39498	N1	CYT	944	211.627	118.017	-5.343	1.00	58.55	A16S
ATOM	39446	O1P	ADE	942	210.964	113.550	5.215	1.00	56.69	A16S	ATOM	39499	C6	CYT	944	211.704	117.174	-4.266	1.00	58.55	A16S
ATOM	39447	O2P	ADE	942	211.906	111.528	6.517	1.00	56.69	A16S	ATOM	39500	C2	CYT	944	210.381	118.381	-5.867	1.00	58.55	A16S
ATOM	39448	O5'	ADE	942	213.055	112.387	4.485	1.00	67.25	A16S	ATOM	39501	O2	CYT	944	210.334	119.142	-6.848	1.00	58.55	A16S
ATOM	39449	C5'	ADE	942	213.109	113.200	3.287	1.00	67.25	A16S	ATOM	39502	N3	CYT	944	209.260	117.893	-5.283	1.00	58.55	A16S
ATOM	39450	C4'	ADE	942	213.607	112.359	2.142	1.00	67.25	A16S	ATOM	39503	C4	CYT	944	209.357	117.076	-4.222	1.00	58.55	A16S

ATOM	39504	N4	CYT	944	208.235	116.622	-3.669	1.00	58.55	A16S	ATOM	39557	O5'	CYT	947	220.758	116.900	2.820	1.00	44.03	A16S
ATOM	39505	C5	CYT	944	210.608	116.689	-3.681	1.00	58.55	A16S	ATOM	39558	C5'	CYT	947	221.191	116.455	4.116	1.00	44.03	A16S
ATOM	39506	C2'	CYT	944	213.242	119.958	-5.485	1.00	38.22	A16S	ATOM	39559	C4'	CYT	947	222.247	115.388	3.988	1.00	44.03	A16S
ATOM	39507	O2'	CYT	944	213.750	120.674	-6.589	1.00	38.22	A16S	ATOM	39560	O4'	CYT	947	221.676	114.231	3.324	1.00	44.03	A16S
ATOM	39508	C3'	CYT	944	214.291	119.662	-4.412	1.00	38.22	A16S	ATOM	39561	C1'	CYT	947	222.673	113.593	2.541	1.00	44.03	A16S
ATOM	39509	O3'	CYT	944	215.281	120.691	-4.303	1.00	38.22	A16S	ATOM	39562	N1	CYT	947	222.257	113.614	1.123	1.00	64.12	A16S
ATOM	39510	P	ADE	945	215.123	121.861	-3.211	1.00	63.24	A16S	ATOM	39563	C6	CYT	947	221.466	114.616	0.631	1.00	64.12	A16S
ATOM	39511	O1P	ADE	945	213.965	122.683	-3.657	1.00	58.97	A16S	ATOM	39564	C2	CYT	947	222.705	112.596	0.280	1.00	64.12	A16S
ATOM	39512	O2P	ADE	945	216.450	122.507	-3.014	1.00	58.97	A16S	ATOM	39565	O2	CYT	947	223.407	111.689	0.754	1.00	64.12	A16S
ATOM	39513	O5'	ADE	945	214.735	121.087	-1.870	1.00	63.24	A16S	ATOM	39566	N3	CYT	947	222.367	112.624	-1.029	1.00	64.12	A16S
ATOM	39514	C5'	ADE	945	214.765	121.747	-0.582	1.00	63.24	A16S	ATOM	39567	C4	CYT	947	221.613	113.615	-1.503	1.00	64.12	A16S
ATOM	39515	C4'	ADE	945	213.716	121.158	0.337	1.00	63.24	A16S	ATOM	39568	N4	CYT	947	221.328	113.613	-2.809	1.00	64.12	A16S
ATOM	39516	O4'	ADE	945	212.409	121.506	-0.170	1.00	63.24	A16S	ATOM	39569	C5	CYT	947	221.124	114.655	-0.664	1.00	64.12	A16S
ATOM	39517	C1'	ADE	945	211.648	120.336	-0.384	1.00	63.24	A16S	ATOM	39570	C2'	CYT	947	223.980	114.356	2.754	1.00	44.03	A16S
ATOM	39518	N9	ADE	945	210.876	120.531	-1.609	1.00	58.97	A16S	ATOM	39571	O2'	CYT	947	224.702	113.746	3.796	1.00	44.03	A16S
ATOM	39519	C4	ADE	945	209.598	120.089	-1.855	1.00	58.97	A16S	ATOM	39572	C3'	CYT	947	223.470	115.730	3.152	1.00	44.03	A16S
ATOM	39520	N3	ADE	945	208.817	119.355	-1.046	1.00	58.97	A16S	ATOM	39573	O3'	CYT	947	224.446	116.493	3.848	1.00	44.03	A16S
ATOM	39521	C2	ADE	945	207.628	119.161	-1.600	1.00	58.97	A16S	ATOM	39574	P	GUA	948	224.949	117.890	3.217	1.00	49.62	A16S
ATOM	39522	N1	ADE	945	207.171	119.579	-2.783	1.00	58.97	A16S	ATOM	39575	O1P	GUA	948	224.033	118.963	3.686	1.00	75.98	A16S
ATOM	39523	C6	ADE	945	207.989	120.302	-3.576	1.00	58.97	A16S	ATOM	39576	O2P	GUA	948	225.147	117.686	1.758	1.00	75.98	A16S
ATOM	39524	N6	ADE	945	207.547	120.706	-4.767	1.00	58.97	A16S	ATOM	39577	O5'	GUA	948	226.386	118.107	3.876	1.00	49.62	A16S
ATOM	39525	C5	ADE	945	209.265	120.585	-3.103	1.00	58.97	A16S	ATOM	39578	C5'	GUA	948	226.563	118.060	5.311	1.00	49.62	A16S
ATOM	39526	N7	ADE	945	210.320	121.303	-3.650	1.00	58.97	A16S	ATOM	39579	C4'	GUA	948	227.132	119.367	5.824	1.00	49.62	A16S
ATOM	39527	C8	ADE	945	211.254	121.231	-2.734	1.00	58.97	A16S	ATOM	39580	O4'	GUA	948	228.581	119.320	5.883	1.00	49.62	A16S
ATOM	39528	C2'	ADE	945	212.629	119.170	-0.442	1.00	63.24	A16S	ATOM	39581	C1'	GUA	948	229.085	120.546	5.419	1.00	49.62	A16S
ATOM	39529	O2'	ADE	945	211.998	117.992	0.020	1.00	63.24	A16S	ATOM	39582	N9	GUA	948	230.467	120.374	4.993	1.00	75.98	A16S
ATOM	39530	C3'	ADE	945	213.730	119.639	0.505	1.00	63.24	A16S	ATOM	39583	C4	GUA	948	231.546	120.332	5.829	1.00	75.98	A16S
ATOM	39531	O3'	ADE	945	213.345	119.300	1.834	1.00	63.24	A16S	ATOM	39584	N3	GUA	948	231.501	120.405	7.171	1.00	75.98	A16S
ATOM	39532	P	ADE	946	214.462	119.127	2.972	1.00	45.78	A16S	ATOM	39585	C2	GUA	948	232.700	120.355	7.706	1.00	75.98	A16S
ATOM	39533	O1P	ADE	946	213.886	118.303	4.066	1.00	48.69	A16S	ATOM	39586	N2	GUA	948	232.836	120.408	9.034	1.00	75.98	A16S
ATOM	39534	O2P	ADE	946	214.990	120.486	3.271	1.00	48.69	A16S	ATOM	39587	N1	GUA	948	233.854	120.250	6.983	1.00	75.98	A16S
ATOM	39535	O5'	ADE	946	215.588	118.246	2.274	1.00	45.78	A16S	ATOM	39588	C6	GUA	948	233.928	120.180	5.600	1.00	75.98	A16S
ATOM	39536	C5'	ADE	946	215.440	116.821	2.166	1.00	45.78	A16S	ATOM	39589	O6	GUA	948	235.033	120.103	5.043	1.00	75.98	A16S
ATOM	39537	C4'	ADE	946	216.304	116.130	3.191	1.00	45.78	A16S	ATOM	39590	C5	GUA	948	232.642	120.219	5.011	1.00	75.98	A16S
ATOM	39538	O4'	ADE	946	216.001	114.713	3.169	1.00	45.78	A16S	ATOM	39591	N7	GUA	948	232.257	120.166	3.679	1.00	75.98	A16S
ATOM	39539	C1'	ADE	946	217.197	113.964	3.313	1.00	45.78	A16S	ATOM	39592	C8	GUA	948	230.957	120.254	3.717	1.00	75.98	A16S
ATOM	39540	N9	ADE	946	217.468	113.329	2.025	1.00	48.69	A16S	ATOM	39593	C2'	GUA	948	228.086	121.006	4.370	1.00	49.62	A16S
ATOM	39541	C4	ADE	946	218.367	112.325	1.775	1.00	48.69	A16S	ATOM	39594	O2'	GUA	948	228.250	122.385	4.108	1.00	49.62	A16S
ATOM	39542	N3	ADE	946	219.155	111.697	2.662	1.00	48.69	A16S	ATOM	39595	C3'	GUA	948	226.772	120.638	5.056	1.00	49.62	A16S
ATOM	39543	C2	ADE	946	219.917	110.798	2.048	1.00	48.69	A16S	ATOM	39596	O3'	GUA	948	226.433	121.676	5.959	1.00	49.62	A16S
ATOM	39544	N1	ADE	946	219.972	110.483	0.748	1.00	48.69	A16S	ATOM	39597	P	CYT	949	225.209	122.659	5.619	1.00	57.90	A16S
ATOM	39545	C6	ADE	946	219.163	111.138	-0.110	1.00	48.69	A16S	ATOM	39598	O1P	CYT	949	224.921	122.614	4.148	1.00	45.65	A16S
ATOM	39546	N6	ADE	946	219.213	110.833	-1.405	1.00	48.69	A16S	ATOM	39599	O2P	CYT	949	225.483	123.962	6.240	1.00	45.65	A16S
ATOM	39547	C5	ADE	946	218.314	112.106	0.412	1.00	48.69	A16S	ATOM	39600	O5'	CYT	949	224.024	122.016	6.457	1.00	57.90	A16S
ATOM	39548	N7	ADE	946	217.384	112.942	-0.186	1.00	48.69	A16S	ATOM	39601	C5'	CYT	949	223.689	120.629	6.350	1.00	57.90	A16S
ATOM	39549	C8	ADE	946	216.905	113.640	0.810	1.00	48.69	A16S	ATOM	39602	C4'	CYT	949	222.298	120.424	6.880	1.00	57.90	A16S
ATOM	39550	C2'	ADE	946	218.314	114.954	3.641	1.00	45.78	A16S	ATOM	39603	O4'	CYT	949	221.715	119.236	6.307	1.00	57.90	A16S
ATOM	39551	O2'	ADE	946	218.431	115.099	5.043	1.00	45.78	A16S	ATOM	39604	C1'	CYT	949	220.844	118.641	7.249	1.00	57.90	A16S
ATOM	39552	C3'	ADE	946	217.804	116.210	2.950	1.00	45.78	A16S	ATOM	39605	N1	CYT	949	221.426	117.364	7.669	1.00	45.65	A16S
ATOM	39553	O3'	ADE	946	218.390	117.405	3.454	1.00	45.78	A16S	ATOM	39606	C6	CYT	949	222.754	117.103	7.501	1.00	45.65	A16S
ATOM	39554	P	CYT	947	219.662	118.049	2.697	1.00	44.03	A16S	ATOM	39607	C2	CYT	949	220.602	116.438	8.275	1.00	45.65	A16S
ATOM	39555	O1P	CYT	947	220.127	119.197	3.528	1.00	64.12	A16S	ATOM	39608	O2	CYT	949	219.395	116.695	8.369	1.00	45.65	A16S
ATOM	39556	O2P	CYT	947	219.341	118.281	1.248	1.00	64.12	A16S	ATOM	39609	N3	CYT	949	221.127	115.281	8.743	1.00	45.65	A16S

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ATOM  39610  C4  CYT  949     222.429 115.039   8.593  1.00 45.65      A16S
ATOM  39611  N4  CYT  949     222.914 113.886   9.068  1.00 45.65      A16S
ATOM  39612  C5  CYT  949     223.294 115.967   7.946  1.00 45.65      A16S
ATOM  39613  C2' CYT  949     220.780 119.567   8.459  1.00 57.90      A16S
ATOM  39614  O2' CYT  949     219.732 120.502   8.303  1.00 57.90      A16S
ATOM  39615  C3' CYT  949     222.139 120.235   8.380  1.00 57.90      A16S
ATOM  39616  O3' CYT  949     222.186 121.429   9.140  1.00 57.90      A16S
ATOM  39617  P   GUA  950     222.763 121.383  10.643  1.00 48.78      A16S
ATOM  39618  O1P GUA  950     223.116 122.793  10.963  1.00 41.21      A16S
ATOM  39619  O2P GUA  950     223.781 120.319  10.815  1.00 41.21      A16S
ATOM  39620  O5' GUA  950     221.515 120.909  11.507  1.00 48.78      A16S
ATOM  39621  C5' GUA  950     220.375 121.766  11.700  1.00 48.78      A16S
ATOM  39622  C4' GUA  950     219.542 121.257  12.848  1.00 48.78      A16S
ATOM  39623  O4' GUA  950     218.967 119.974  12.490  1.00 48.78      A16S
ATOM  39624  C1' GUA  950     219.002 119.104  13.604  1.00 48.78      A16S
ATOM  39625  N9  GUA  950     219.962 118.041  13.315  1.00 41.21      A16S
ATOM  39626  C4  GUA  950     219.911 116.729  13.748  1.00 41.21      A16S
ATOM  39627  N3  GUA  950     218.944 116.175  14.510  1.00 41.21      A16S
ATOM  39628  C2  GUA  950     219.177 114.893  14.744  1.00 41.21      A16S
ATOM  39629  N2  GUA  950     218.324 114.178  15.477  1.00 41.21      A16S
ATOM  39630  N1  GUA  950     220.264 114.217  14.272  1.00 41.21      A16S
ATOM  39631  C6  GUA  950     221.260 114.764  13.480  1.00 41.21      A16S
ATOM  39632  O6  GUA  950     222.181 114.059  13.090  1.00 41.21      A16S
ATOM  39633  C5  GUA  950     221.034 116.129  13.224  1.00 41.21      A16S
ATOM  39634  N7  GUA  950     221.777 117.035  12.477  1.00 41.21      A16S
ATOM  39635  C8  GUA  950     221.107 118.152  12.559  1.00 41.21      A16S
ATOM  39636  C2' GUA  950     219.447 119.933  14.802  1.00 48.78      A16S
ATOM  39637  O2' GUA  950     218.291 120.481  15.400  1.00 48.78      A16S
ATOM  39638  C3' GUA  950     220.316 120.990  14.131  1.00 48.78      A16S
ATOM  39639  O3' GUA  950     220.513 122.186  14.904  1.00 48.78      A16S
ATOM  39640  P   ADE  951     221.311 122.121  16.308  1.00 64.49      A16S
ATOM  39641  O1P ADE  951     221.422 120.686  16.748  1.00 43.27      A16S
ATOM  39642  O2P ADE  951     220.641 123.111  17.187  1.00 43.27      A16S
ATOM  39643  O5' ADE  951     222.769 122.690  16.011  1.00 64.49      A16S
ATOM  39644  C5' ADE  951     223.470 122.341  14.820  1.00 64.49      A16S
ATOM  39645  C4' ADE  951     224.820 121.767  15.152  1.00 64.49      A16S
ATOM  39646  O4' ADE  951     224.667 120.594  15.995  1.00 64.49      A16S
ATOM  39647  C1' ADE  951     225.221 119.459  15.356  1.00 64.49      A16S
ATOM  39648  N9  ADE  951     224.363 118.305  15.643  1.00 43.27      A16S
ATOM  39649  C4  ADE  951     224.690 116.967  15.564  1.00 43.27      A16S
ATOM  39650  N3  ADE  951     225.859 116.427  15.180  1.00 43.27      A16S
ATOM  39651  C2  ADE  951     225.811 115.092  15.250  1.00 43.27      A16S
ATOM  39652  N1  ADE  951     224.803 114.294  15.633  1.00 43.27      A16S
ATOM  39653  C6  ADE  951     223.640 114.869  16.017  1.00 43.27      A16S
ATOM  39654  N6  ADE  951     222.631 114.083  16.416  1.00 43.27      A16S
ATOM  39655  C5  ADE  951     223.561 116.275  15.979  1.00 43.27      A16S
ATOM  39656  N7  ADE  951     222.532 117.154  16.291  1.00 43.27      A16S
ATOM  39657  C8  ADE  951     223.055 118.341  16.074  1.00 43.27      A16S
ATOM  39658  C2' ADE  951     225.316 119.809  13.872  1.00 64.49      A16S
ATOM  39659  O2' ADE  951     226.324 119.053  13.222  1.00 64.49      A16S
ATOM  39660  C3' ADE  951     225.585 121.314  13.922  1.00 64.49      A16S
ATOM  39661  O3' ADE  951     226.958 121.614  14.121  1.00 64.49      A16S
ATOM  39662  P   ADE  952     227.595 122.916  13.423  1.00 57.54      A16S
ATOM  39663  O1P ADE  952     226.568 123.606  12.589  1.00 66.50      A16S
ATOM  39664  O2P ADE  952     228.871 122.465  12.808  1.00 66.50      A16S
ATOM  39665  O5' ADE  952     227.943 123.889  14.632  1.00 57.54      A16S
ATOM  39666  C5' ADE  952     228.141 125.306  14.426  1.00 57.54      A16S
ATOM  39667  C4' ADE  952     227.759 126.071  15.675  1.00 57.54      A16S
ATOM  39668  O4' ADE  952     227.881 127.484  15.416  1.00 57.54      A16S
ATOM  39669  C1' ADE  952     226.647 128.129  15.599  1.00 57.54      A16S
ATOM  39670  N9  ADE  952     226.232 128.583  14.279  1.00 66.50      A16S
ATOM  39671  C4  ADE  952     226.011 129.883  13.920  1.00 66.50      A16S
ATOM  39672  N3  ADE  952     226.056 130.956  14.720  1.00 66.50      A16S
ATOM  39673  C2  ADE  952     225.840 132.065  14.017  1.00 66.50      A16S
ATOM  39674  N1  ADE  952     225.598 132.207  12.698  1.00 66.50      A16S
ATOM  39675  C6  ADE  952     225.549 131.099  11.926  1.00 66.50      A16S
ATOM  39676  N6  ADE  952     225.298 131.237  10.625  1.00 66.50      A16S
ATOM  39677  C5  ADE  952     225.766 129.863  12.551  1.00 66.50      A16S
ATOM  39678  N7  ADE  952     225.789 128.564  12.064  1.00 66.50      A16S
ATOM  39679  C8  ADE  952     226.054 127.840  13.128  1.00 66.50      A16S
ATOM  39680  C2' ADE  952     225.714 127.190  16.361  1.00 57.54      A16S
ATOM  39681  O2' ADE  952     225.645 127.531  17.718  1.00 57.54      A16S
ATOM  39682  C3' ADE  952     226.319 125.817  16.073  1.00 57.54      A16S
ATOM  39683  O3' ADE  952     226.261 124.807  17.109  1.00 57.54      A16S
ATOM  39684  P   GUA  953     226.967 125.056  18.548  1.00 49.71      A16S
ATOM  39685  O1P GUA  953     225.907 124.974  19.576  1.00 84.52      A16S
ATOM  39686  O2P GUA  953     227.792 126.280  18.457  1.00 84.52      A16S
ATOM  39687  O5' GUA  953     227.958 123.815  18.739  1.00 49.71      A16S
ATOM  39688  C5' GUA  953     228.439 123.084  17.598  1.00 49.71      A16S
ATOM  39689  C4' GUA  953     229.850 122.566  17.814  1.00 49.71      A16S
ATOM  39690  O4' GUA  953     230.916 123.379  17.252  1.00 49.71      A16S
ATOM  39691  C1' GUA  953     232.080 123.167  18.026  1.00 49.71      A16S
ATOM  39692  N9  GUA  953     232.983 124.306  17.870  1.00 84.52      A16S
ATOM  39693  C4  GUA  953     234.105 124.338  17.078  1.00 84.52      A16S
ATOM  39694  N3  GUA  953     234.572 123.317  16.328  1.00 84.52      A16S
ATOM  39695  C2  GUA  953     235.668 123.647  15.673  1.00 84.52      A16S
ATOM  39696  N2  GUA  953     236.268 122.739  14.890  1.00 84.52      A16S
ATOM  39697  N1  GUA  953     236.258 124.887  15.739  1.00 84.52      A16S
ATOM  39698  C6  GUA  953     235.797 125.955  16.502  1.00 84.52      A16S
ATOM  39699  O6  GUA  953     236.405 127.033  16.487  1.00 84.52      A16S
ATOM  39700  C5  GUA  953     234.622 125.610  17.221  1.00 84.52      A16S
ATOM  39701  N7  GUA  953     233.849 126.359  18.098  1.00 84.52      A16S
ATOM  39702  C8  GUA  953     232.893 125.545  18.462  1.00 84.52      A16S
ATOM  39703  C2' GUA  953     231.564 122.927  19.445  1.00 49.71      A16S
ATOM  39704  O2' GUA  953     232.543 122.249  20.213  1.00 49.71      A16S
ATOM  39705  C3' GUA  953     230.304 122.092  19.184  1.00 49.71      A16S
ATOM  39706  O3' GUA  953     230.661 120.737  19.069  1.00 49.71      A16S
ATOM  39707  P   ADE  954     229.778 119.636  19.805  1.00 61.56      A16S
ATOM  39708  O1P ADE  954     228.391 119.788  19.296  1.00 84.84      A16S
ATOM  39709  O2P ADE  954     230.039 119.722  21.268  1.00 84.84      A16S
ATOM  39710  O5' ADE  954     230.378 118.274  19.257  1.00 61.56      A16S
ATOM  39711  C5' ADE  954     231.769 118.006  19.370  1.00 61.56      A16S
ATOM  39712  C4' ADE  954     231.963 116.766  20.175  1.00 61.56      A16S
ATOM  39713  O4' ADE  954     231.181 115.710  19.581  1.00 61.56      A16S
ATOM  39714  C1' ADE  954     231.810 114.475  19.828  1.00 61.56      A16S
ATOM  39715  N9  ADE  954     231.802 113.677  18.597  1.00 84.84      A16S
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ATOM	39716	C4	ADE	954	232.838	113.426	17.723	1.00	84.84	A16S	ATOM	39769	C3'	CYT	956	234.429	111.842	28.758	1.00	84.03	A16S
ATOM	39717	N3	ADE	954	234.103	113.875	17.796	1.00	84.84	A16S	ATOM	39770	O3'	CYT	956	233.421	110.882	29.037	1.00	84.03	A16S
ATOM	39718	C2	ADE	954	234.824	113.423	16.774	1.00	84.84	A16S	ATOM	39771	P	CYT	957	231.923	111.138	28.497	1.00	71.94	A16S
ATOM	39719	N1	ADE	954	234.458	112.633	15.763	1.00	84.84	A16S	ATOM	39772	O1P	CYT	957	231.038	110.203	29.286	1.00	64.21	A16S
ATOM	39720	C6	ADE	954	233.182	112.197	15.716	1.00	84.84	A16S	ATOM	39773	O2P	CYT	957	231.951	111.043	27.012	1.00	64.21	A16S
ATOM	39721	N6	ADE	954	232.814	111.408	14.705	1.00	84.84	A16S	ATOM	39774	O5'	CYT	957	231.634	112.674	28.853	1.00	71.94	A16S
ATOM	39722	C5	ADE	954	232.311	112.607	16.743	1.00	84.84	A16S	ATOM	39775	C5'	CYT	957	231.702	113.132	30.219	1.00	71.94	A16S
ATOM	39723	N7	ADE	954	230.970	112.351	16.985	1.00	84.84	A16S	ATOM	39776	C4'	CYT	957	231.385	114.610	30.332	1.00	71.94	A16S
ATOM	39724	C8	ADE	954	230.718	113.008	18.089	1.00	84.84	A16S	ATOM	39777	O4'	CYT	957	232.436	115.418	29.749	1.00	71.94	A16S
ATOM	39725	C2'	ADE	954	233.155	114.742	20.517	1.00	61.56	A16S	ATOM	39778	C1'	CYT	957	231.883	116.625	29.245	1.00	71.94	A16S
ATOM	39726	O2'	ADE	954	233.028	114.471	21.897	1.00	61.56	A16S	ATOM	39779	N1	CYT	957	232.182	116.701	27.808	1.00	64.21	A16S
ATOM	39727	C3'	ADE	954	233.379	116.229	20.245	1.00	61.56	A16S	ATOM	39780	C6	CYT	957	232.359	115.556	27.083	1.00	64.21	A16S
ATOM	39728	O3'	ADE	954	234.060	116.884	21.322	1.00	61.56	A16S	ATOM	39781	C2	CYT	957	232.305	117.967	27.185	1.00	64.21	A16S
ATOM	39729	P	ADE	955	235.664	116.782	21.469	1.00	53.05	A16S	ATOM	39782	O2	CYT	957	232.101	119.005	27.843	1.00	64.21	A16S
ATOM	39730	O1P	ADE	955	236.054	117.847	22.425	1.00	67.65	A16S	ATOM	39783	N3	CYT	957	232.642	118.019	25.877	1.00	64.21	A16S
ATOM	39731	O2P	ADE	955	236.274	116.751	20.115	1.00	67.65	A16S	ATOM	39784	C4	CYT	957	232.841	116.886	25.193	1.00	64.21	A16S
ATOM	39732	O5'	ADE	955	235.912	115.381	22.184	1.00	53.05	A16S	ATOM	39785	N4	CYT	957	233.203	116.984	23.917	1.00	64.21	A16S
ATOM	39733	C5'	ADE	955	236.040	114.176	21.421	1.00	53.05	A16S	ATOM	39786	C5	CYT	957	232.686	115.602	25.791	1.00	64.21	A16S
ATOM	39734	C4'	ADE	955	236.963	113.225	22.123	1.00	53.05	A16S	ATOM	39787	C2'	CYT	957	230.388	116.614	29.551	1.00	71.94	A16S
ATOM	39735	O4'	ADE	955	238.278	113.821	22.176	1.00	53.05	A16S	ATOM	39788	O2'	CYT	957	230.191	117.334	30.753	1.00	71.94	A16S
ATOM	39736	C1'	ADE	955	238.905	113.496	23.404	1.00	53.05	A16S	ATOM	39789	C3'	CYT	957	230.109	115.120	29.692	1.00	71.94	A16S
ATOM	39737	N9	ADE	955	239.330	114.742	24.044	1.00	67.65	A16S	ATOM	39790	O3'	CYT	957	228.986	114.870	30.517	1.00	71.94	A16S
ATOM	39738	C4	ADE	955	240.489	114.933	24.758	1.00	67.65	A16S	ATOM	39791	P	URI	958	227.677	114.188	29.887	1.00	76.14	A16S
ATOM	39739	N3	ADE	955	241.437	114.022	25.035	1.00	67.65	A16S	ATOM	39792	O1P	URI	958	226.542	114.447	30.825	1.00	56.92	A16S
ATOM	39740	C2	ADE	955	242.423	114.572	25.728	1.00	67.65	A16S	ATOM	39793	O2P	URI	958	228.012	112.786	29.512	1.00	56.92	A16S
ATOM	39741	N1	ADE	955	242.568	115.839	26.141	1.00	67.65	A16S	ATOM	39794	O5'	URI	958	227.407	115.045	28.573	1.00	76.14	A16S
ATOM	39742	C6	ADE	955	241.605	116.733	25.837	1.00	67.65	A16S	ATOM	39795	C5'	URI	958	227.045	116.429	28.680	1.00	76.14	A16S
ATOM	39743	N6	ADE	955	241.760	118.002	26.224	1.00	67.65	A16S	ATOM	39796	C4'	URI	958	227.192	117.124	27.352	1.00	76.14	A16S
ATOM	39744	C5	ADE	955	240.494	116.270	25.116	1.00	67.65	A16S	ATOM	39797	O4'	URI	958	228.576	117.047	26.916	1.00	76.14	A16S
ATOM	39745	N7	ADE	955	239.350	116.907	24.656	1.00	67.65	A16S	ATOM	39798	C1'	URI	958	228.627	116.928	25.504	1.00	76.14	A16S
ATOM	39746	C8	ADE	955	238.692	115.959	24.033	1.00	67.65	A16S	ATOM	39799	N1	URI	958	229.269	115.645	25.169	1.00	56.92	A16S
ATOM	39747	C2'	ADE	955	237.950	112.623	24.218	1.00	53.05	A16S	ATOM	39800	C6	URI	958	229.285	114.591	26.060	1.00	56.92	A16S
ATOM	39748	O2'	ADE	955	238.356	111.274	24.109	1.00	53.05	A16S	ATOM	39801	C2	URI	958	229.852	115.521	23.924	1.00	56.92	A16S
ATOM	39749	C3'	ADE	955	236.600	112.940	23.569	1.00	53.05	A16S	ATOM	39802	O2	URI	958	229.852	116.422	23.099	1.00	56.92	A16S
ATOM	39750	O3'	ADE	955	235.669	111.861	23.647	1.00	53.05	A16S	ATOM	39803	N3	URI	958	230.431	114.297	23.675	1.00	56.92	A16S
ATOM	39751	P	CYT	956	234.310	112.049	24.476	1.00	84.03	A16S	ATOM	39804	C4	URI	958	230.478	113.204	24.520	1.00	56.92	A16S
ATOM	39752	O1P	CYT	956	233.478	110.828	24.311	1.00	53.44	A16S	ATOM	39805	O4	URI	958	231.020	112.163	24.142	1.00	56.92	A16S
ATOM	39753	O2P	CYT	956	233.761	113.370	24.118	1.00	53.44	A16S	ATOM	39806	C5	URI	958	229.853	113.409	25.784	1.00	56.92	A16S
ATOM	39754	O5'	CYT	956	234.807	112.128	25.981	1.00	84.03	A16S	ATOM	39807	C2'	URI	958	227.191	117.018	24.982	1.00	76.14	A16S
ATOM	39755	C5'	CYT	956	235.468	111.012	26.588	1.00	84.03	A16S	ATOM	39808	O2'	URI	958	226.913	118.358	24.613	1.00	76.14	A16S
ATOM	39756	C4'	CYT	956	235.641	111.255	28.061	1.00	84.03	A16S	ATOM	39809	C3'	URI	958	226.396	116.543	26.194	1.00	76.14	A16S
ATOM	39757	O4'	CYT	956	236.682	112.242	28.279	1.00	84.03	A16S	ATOM	39810	O3'	URI	958	225.041	116.981	26.193	1.00	76.14	A16S
ATOM	39758	C1'	CYT	956	236.343	113.059	29.388	1.00	84.03	A16S	ATOM	39811	P	URI	959	223.898	116.028	25.575	1.00	75.37	A16S
ATOM	39759	N1	CYT	956	236.151	114.442	28.903	1.00	53.44	A16S	ATOM	39812	O1P	URI	959	224.149	115.986	24.109	1.00	52.24	A16S
ATOM	39760	C6	CYT	956	236.007	114.706	27.569	1.00	53.44	A16S	ATOM	39813	O2P	URI	959	222.572	116.473	26.077	1.00	52.24	A16S
ATOM	39761	C2	CYT	956	236.092	115.495	29.844	1.00	53.44	A16S	ATOM	39814	O5'	URI	959	224.195	114.583	26.182	1.00	75.37	A16S
ATOM	39762	O2	CYT	956	236.280	115.244	31.053	1.00	53.44	A16S	ATOM	39815	C5'	URI	959	223.179	113.568	26.177	1.00	75.37	A16S
ATOM	39763	N3	CYT	956	235.843	116.755	29.407	1.00	53.44	A16S	ATOM	39816	C4'	URI	959	223.797	112.204	26.012	1.00	75.37	A16S
ATOM	39764	C4	CYT	956	235.686	116.991	28.103	1.00	53.44	A16S	ATOM	39817	O4'	URI	959	224.453	112.120	24.721	1.00	75.37	A16S
ATOM	39765	N4	CYT	956	235.435	118.249	27.718	1.00	53.44	A16S	ATOM	39818	C1'	URI	959	225.793	111.701	24.895	1.00	75.37	A16S
ATOM	39766	C5	CYT	956	235.778	115.951	27.131	1.00	53.44	A16S	ATOM	39819	N1	URI	959	226.634	112.309	23.847	1.00	52.24	A16S
ATOM	39767	C2'	CYT	956	235.052	112.497	29.983	1.00	84.03	A16S	ATOM	39820	C6	URI	959	226.397	113.583	23.362	1.00	52.24	A16S
ATOM	39768	O2'	CYT	956	235.360	111.577	31.017	1.00	84.03	A16S	ATOM	39821	C2	URI	959	227.672	111.541	23.336	1.00	52.24	A16S

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ATOM  39822  O2  URI   959     227.953 110.435  23.763  1.00 52.24      A16S
ATOM  39823  N3  URI   959     228.372 112.120  22.308  1.00 52.24      A16S
ATOM  39824  C4  URI   959     228.158 113.363  21.748  1.00 52.24      A16S
ATOM  39825  O4  URI   959     228.747 113.657  20.707  1.00 52.24      A16S
ATOM  39826  C5  URI   959     227.106 114.121  22.359  1.00 52.24      A16S
ATOM  39827  C2' URI   959     226.165 112.049  26.335  1.00 75.37      A16S
ATOM  39828  O2' URI   959     227.189 111.187  26.798  1.00 75.37      A16S
ATOM  39829  C3' URI   959     224.839 111.807  27.050  1.00 75.37      A16S
ATOM  39830  O3' URI   959     224.717 110.413  27.294  1.00 75.37      A16S
ATOM  39831  P   ADE   960     223.845 109.895  28.535  1.00 65.02      A16S
ATOM  39832  O1P ADE   960     223.647 111.041  29.466  1.00 58.14      A16S
ATOM  39833  O2P ADE   960     224.467 108.635  29.026  1.00 58.14      A16S
ATOM  39834  O5' ADE   960     222.428 109.537  27.894  1.00 65.02      A16S
ATOM  39835  C5' ADE   960     222.270 108.395  27.017  1.00 65.02      A16S
ATOM  39836  C4' ADE   960     221.127 108.629  26.060  1.00 65.02      A16S
ATOM  39837  O4' ADE   960     221.301 109.921  25.435  1.00 65.02      A16S
ATOM  39838  C1' ADE   960     220.793 109.880  24.122  1.00 65.02      A16S
ATOM  39839  N9  ADE   960     221.778 110.482  23.231  1.00 58.14      A16S
ATOM  39840  C4  ADE   960     222.971 109.947  22.812  1.00 58.14      A16S
ATOM  39841  N3  ADE   960     223.481 108.744  23.125  1.00 58.14      A16S
ATOM  39842  C2  ADE   960     224.667 108.574  22.545  1.00 58.14      A16S
ATOM  39843  N1  ADE   960     225.347 109.406  21.741  1.00 58.14      A16S
ATOM  39844  C6  ADE   960     224.803 110.608  21.445  1.00 58.14      A16S
ATOM  39845  N6  ADE   960     225.472 111.438  20.637  1.00 58.14      A16S
ATOM  39846  C5  ADE   960     223.553 110.913  22.006  1.00 58.14      A16S
ATOM  39847  N7  ADE   960     222.742 112.038  21.917  1.00 58.14      A16S
ATOM  39848  C8  ADE   960     221.703 111.729  22.654  1.00 58.14      A16S
ATOM  39849  C2' ADE   960     220.353 108.447  23.807  1.00 65.02      A16S
ATOM  39850  O2' ADE   960     218.947 108.383  23.874  1.00 65.02      A16S
ATOM  39851  C3' ADE   960     221.025 107.636  24.915  1.00 65.02      A16S
ATOM  39852  O3' ADE   960     220.176 106.555  25.282  1.00 65.02      A16S
ATOM  39853  P   CYT   961     220.804 105.202  25.872  1.00 69.70      A16S
ATOM  39854  O1P CYT   961     219.739 104.169  25.970  1.00 80.18      A16S
ATOM  39855  O2P CYT   961     221.556 105.586  27.083  1.00 80.18      A16S
ATOM  39856  O5' CYT   961     221.848 104.726  24.766  1.00 69.70      A16S
ATOM  39857  C5' CYT   961     221.403 104.190  23.504  1.00 69.70      A16S
ATOM  39858  C4' CYT   961     222.550 103.524  22.777  1.00 69.70      A16S
ATOM  39859  O4' CYT   961     223.548 104.510  22.421  1.00 69.70      A16S
ATOM  39860  C1' CYT   961     224.839 103.935  22.502  1.00 69.70      A16S
ATOM  39861  N1  CYT   961     225.661 104.747  23.425  1.00 80.18      A16S
ATOM  39862  C6  CYT   961     225.073 105.603  24.312  1.00 80.18      A16S
ATOM  39863  C2  CYT   961     227.066 104.640  23.372  1.00 80.18      A16S
ATOM  39864  O2  CYT   961     227.590 103.850  22.564  1.00 80.18      A16S
ATOM  39865  N3  CYT   961     227.814 105.401  24.200  1.00 80.18      A16S
ATOM  39866  C4  CYT   961     227.224 106.242  25.049  1.00 80.18      A16S
ATOM  39867  N4  CYT   961     228.002 106.989  25.830  1.00 80.18      A16S
ATOM  39868  C5  CYT   961     225.808 106.361  25.132  1.00 80.18      A16S
ATOM  39869  C2' CYT   961     224.677 102.469  22.910  1.00 69.70      A16S
ATOM  39870  O2' CYT   961     224.699 101.644  21.762  1.00 69.70      A16S
ATOM  39871  C3' CYT   961     223.310 102.482  23.575  1.00 69.70      A16S
ATOM  39872  O3' CYT   961     222.679 101.220  23.496  1.00 69.70      A16S
ATOM  39873  P   CYT   962     222.758 100.222  24.747  1.00 66.40      A16S
ATOM  39874  O1P CYT   962     221.869  99.059  24.459  1.00 66.55      A16S
ATOM  39875  O2P CYT   962     222.546 101.044  25.978  1.00 66.55      A16S
ATOM  39876  O5' CYT   962     224.256  99.689  24.720  1.00 66.40      A16S
ATOM  39877  C5' CYT   962     224.690  98.818  23.667  1.00 66.40      A16S
ATOM  39878  C4' CYT   962     226.159  98.520  23.801  1.00 66.40      A16S
ATOM  39879  O4' CYT   962     226.923  99.743  23.646  1.00 66.40      A16S
ATOM  39880  C1' CYT   962     228.085  99.682  24.453  1.00 66.40      A16S
ATOM  39881  N1  CYT   962     228.100 100.836  25.374  1.00 66.55      A16S
ATOM  39882  C6  CYT   962     226.980 101.592  25.580  1.00 66.55      A16S
ATOM  39883  C2  CYT   962     229.302 101.159  26.038  1.00 66.55      A16S
ATOM  39884  O2  CYT   962     230.305 100.450  25.852  1.00 66.55      A16S
ATOM  39885  N3  CYT   962     229.337 102.235  26.861  1.00 66.55      A16S
ATOM  39886  C4  CYT   962     228.244 102.978  27.033  1.00 66.55      A16S
ATOM  39887  N4  CYT   962     228.336 104.047  27.826  1.00 66.55      A16S
ATOM  39888  C5  CYT   962     227.007 102.662  26.389  1.00 66.55      A16S
ATOM  39889  C2' CYT   962     228.085  98.330  25.162  1.00 66.40      A16S
ATOM  39890  O2' CYT   962     228.854  97.431  24.390  1.00 66.40      A16S
ATOM  39891  C3' CYT   962     226.605  97.973  25.142  1.00 66.40      A16S
ATOM  39892  O3' CYT   962     226.373  96.576  25.260  1.00 66.40      A16S
ATOM  39893  P   ADE   963     226.071  95.950  26.713  1.00 75.73      A16S
ATOM  39894  O1P ADE   963     225.665  94.537  26.513  1.00 68.86      A16S
ATOM  39895  O2P ADE   963     225.166  96.883  27.443  1.00 68.86      A16S
ATOM  39896  O5' ADE   963     227.489  95.963  27.446  1.00 75.73      A16S
ATOM  39897  C5' ADE   963     228.549  95.104  26.995  1.00 75.73      A16S
ATOM  39898  C4' ADE   963     229.828  95.374  27.756  1.00 75.73      A16S
ATOM  39899  O4' ADE   963     230.320  96.712  27.479  1.00 75.73      A16S
ATOM  39900  C1' ADE   963     231.049  97.190  28.598  1.00 75.73      A16S
ATOM  39901  N9  ADE   963     230.443  98.439  29.064  1.00 68.86      A16S
ATOM  39902  C4  ADE   963     231.092  99.433  29.759  1.00 68.86      A16S
ATOM  39903  N3  ADE   963     232.375  99.444  30.157  1.00 68.86      A16S
ATOM  39904  C2  ADE   963     232.659 100.578  30.795  1.00 68.86      A16S
ATOM  39905  N1  ADE   963     231.868 101.628  31.054  1.00 68.86      A16S
ATOM  39906  C6  ADE   963     230.584 101.585  30.641  1.00 68.86      A16S
ATOM  39907  N6  ADE   963     229.799 102.630  30.900  1.00 68.86      A16S
ATOM  39908  C5  ADE   963     230.154 100.431  29.959  1.00 68.86      A16S
ATOM  39909  N7  ADE   963     228.928 100.066  29.421  1.00 68.86      A16S
ATOM  39910  C8  ADE   963     229.150  98.878  28.906  1.00 68.86      A16S
ATOM  39911  C2' ADE   963     231.020  96.099  29.663  1.00 75.73      A16S
ATOM  39912  O2' ADE   963     232.197  95.325  29.542  1.00 75.73      A16S
ATOM  39913  C3' ADE   963     229.774  95.319  29.269  1.00 75.73      A16S
ATOM  39914  O3' ADE   963     229.800  93.996  29.766  1.00 75.73      A16S
ATOM  39915  P   GUA   964     228.960  93.641  31.089  1.00 96.25      A16S
ATOM  39916  O1P GUA   964     228.909  92.153  31.173  1.00 70.69      A16S
ATOM  39917  O2P GUA   964     227.700  94.418  31.062  1.00 70.69      A16S
ATOM  39918  O5' GUA   964     229.833  94.228  32.288  1.00 96.25      A16S
ATOM  39919  C5' GUA   964     231.072  93.605  32.684  1.00 96.25      A16S
ATOM  39920  C4' GUA   964     231.907  94.566  33.494  1.00 96.25      A16S
ATOM  39921  O4' GUA   964     232.076  95.783  32.722  1.00 96.25      A16S
ATOM  39922  C1' GUA   964     232.067  96.908  33.585  1.00 96.25      A16S
ATOM  39923  N9  GUA   964     230.909  97.735  33.261  1.00 70.69      A16S
ATOM  39924  C4  GUA   964     230.713  99.035  33.649  1.00 70.69      A16S
ATOM  39925  N3  GUA   964     231.570  99.778  34.377  1.00 70.69      A16S
ATOM  39926  C2  GUA   964     231.102 100.994  34.600  1.00 70.69      A16S
ATOM  39927  N2  GUA   964     231.831 101.867  35.309  1.00 70.69      A16S
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ATOM	39928	N1	GUA	964	229.885	101.443	34.143	1.00	70.69	A16S	ATOM	39981	P	CYT	967	225.756	99.867	45.832	1.00106.83	A16S
ATOM	39929	C6	GUA	964	228.988	100.691	33.391	1.00	70.69	A16S	ATOM	39982	O1P	CYT	967	225.918	99.869	47.310	1.00 91.77	A16S
ATOM	39930	O6	GUA	964	227.915	101.190	33.028	1.00	70.69	A16S	ATOM	39983	O2P	CYT	967	225.200	98.661	45.155	1.00 91.77	A16S
ATOM	39931	C5	GUA	964	229.481	99.387	33.146	1.00	70.69	A16S	ATOM	39984	O5'	CYT	967	224.858	101.127	45.439	1.00106.83	A16S
ATOM	39932	N7	GUA	964	228.915	98.331	32.445	1.00	70.69	A16S	ATOM	39985	C5'	CYT	967	225.073	102.407	46.068	1.00106.83	A16S
ATOM	39933	C8	GUA	964	229.796	97.373	32.537	1.00	70.69	A16S	ATOM	39986	C4'	CYT	967	223.940	103.362	45.755	1.00106.83	A16S
ATOM	39934	C2'	GUA	964	231.968	96.390	35.016	1.00	96.25	A16S	ATOM	39987	O4'	CYT	967	223.939	103.686	44.340	1.00106.83	A16S
ATOM	39935	O2'	GUA	964	233.266	96.307	35.567	1.00	96.25	A16S	ATOM	39988	C1'	CYT	967	222.606	103.904	43.900	1.00106.83	A16S
ATOM	39936	C3'	GUA	964	231.297	95.041	34.802	1.00	96.25	A16S	ATOM	39989	N1	CYT	967	222.286	102.935	42.826	1.00 91.77	A16S
ATOM	39937	O3'	GUA	964	231.529	94.148	35.880	1.00	96.25	A16S	ATOM	39990	C6	CYT	967	222.823	101.673	42.823	1.00 91.77	A16S
ATOM	39938	P	GUA	965	230.547	94.179	37.155	1.00	87.77	A16S	ATOM	39991	C2	CYT	967	221.409	103.328	41.803	1.00 91.77	A16S
ATOM	39939	O1P	GUA	965	230.947	93.048	38.040	1.00	76.66	A16S	ATOM	39992	O2	CYT	967	220.931	104.480	41.825	1.00 91.77	A16S
ATOM	39940	O2P	GUA	965	229.143	94.257	36.657	1.00	76.66	A16S	ATOM	39993	N3	CYT	967	221.104	102.445	40.820	1.00 91.77	A16S
ATOM	39941	O5'	GUA	965	230.911	95.551	37.890	1.00	87.77	A16S	ATOM	39994	C4	CYT	967	221.634	101.218	40.832	1.00 91.77	A16S
ATOM	39942	C5'	GUA	965	232.119	95.663	38.675	1.00	87.77	A16S	ATOM	39995	N4	CYT	967	221.302	100.383	39.846	1.00 91.77	A16S
ATOM	39943	C4'	GUA	965	232.151	96.966	39.451	1.00	87.77	A16S	ATOM	39996	C5	CYT	967	222.526	100.793	41.857	1.00 91.77	A16S
ATOM	39944	O4'	GUA	965	232.243	98.086	38.533	1.00	87.77	A16S	ATOM	39997	C2'	CYT	967	221.687	103.759	45.113	1.00106.83	A16S
ATOM	39945	C1'	GUA	965	231.573	99.211	39.078	1.00	87.77	A16S	ATOM	39998	O2'	CYT	967	221.430	105.041	45.654	1.00106.83	A16S
ATOM	39946	N9	GUA	965	230.426	99.514	38.229	1.00	76.66	A16S	ATOM	39999	C3'	CYT	967	222.525	102.875	46.032	1.00106.83	A16S
ATOM	39947	C4	GUA	965	229.781	100.721	38.149	1.00	76.66	A16S	ATOM	40000	O3'	CYT	967	222.152	103.012	47.399	1.00106.83	A16S
ATOM	39948	N3	GUA	965	230.126	101.844	38.812	1.00	76.66	A16S	ATOM	40001	P	URI	968	221.442	101.780	48.155	1.00142.68	A16S
ATOM	39949	C2	GUA	965	229.300	102.841	38.553	1.00	76.66	A16S	ATOM	40002	O1P	URI	968	222.285	101.450	49.329	1.00112.10	A16S
ATOM	39950	N2	GUA	965	229.499	104.038	39.132	1.00	76.66	A16S	ATOM	40003	O2P	URI	968	221.111	100.717	47.168	1.00112.10	A16S
ATOM	39951	N1	GUA	965	228.221	102.740	37.710	1.00	76.66	A16S	ATOM	40004	O5'	URI	968	220.087	102.408	48.703	1.00142.68	A16S
ATOM	39952	C6	GUA	965	227.846	101.593	37.018	1.00	76.66	A16S	ATOM	40005	C5'	URI	968	218.803	101.969	48.219	1.00142.68	A16S
ATOM	39953	O6	GUA	965	226.845	101.611	36.287	1.00	76.66	A16S	ATOM	40006	C4'	URI	968	218.188	103.044	47.360	1.00142.68	A16S
ATOM	39954	C5	GUA	965	228.725	100.517	37.285	1.00	76.66	A16S	ATOM	40007	O4'	URI	968	218.867	103.078	46.085	1.00142.68	A16S
ATOM	39955	N7	GUA	965	228.718	99.211	36.815	1.00	76.66	A16S	ATOM	40008	C1'	URI	968	217.948	103.419	45.067	1.00142.68	A16S
ATOM	39956	C8	GUA	965	229.748	98.655	37.392	1.00	76.66	A16S	ATOM	40009	N1	URI	968	218.032	102.406	43.998	1.00112.10	A16S
ATOM	39957	C2'	GUA	965	231.071	98.818	40.465	1.00	87.77	A16S	ATOM	40010	C6	URI	968	218.576	101.160	44.236	1.00112.10	A16S
ATOM	39958	O2'	GUA	965	231.981	99.236	41.464	1.00	87.77	A16S	ATOM	40011	C2	URI	968	217.572	102.746	42.731	1.00112.10	A16S
ATOM	39959	C3'	GUA	965	230.953	97.306	40.324	1.00	87.77	A16S	ATOM	40012	O2	URI	968	217.055	103.818	42.473	1.00112.10	A16S
ATOM	39960	O3'	GUA	965	230.944	96.650	41.581	1.00	87.77	A16S	ATOM	40013	N3	URI	968	217.741	101.775	41.773	1.00112.10	A16S
ATOM	39961	P	CYT	966	229.535	96.249	42.246	1.00	94.92	A16S	ATOM	40014	C4	URI	968	218.302	100.525	41.942	1.00112.10	A16S
ATOM	39962	O1P	CYT	966	229.870	95.549	43.505	1.00	89.76	A16S	ATOM	40015	O4	URI	968	218.439	99.784	40.967	1.00112.10	A16S
ATOM	39963	O2P	CYT	966	228.706	95.558	41.228	1.00	89.76	A16S	ATOM	40016	C5	URI	968	218.726	100.238	43.277	1.00112.10	A16S
ATOM	39964	O5'	CYT	966	228.850	97.652	42.591	1.00	94.92	A16S	ATOM	40017	C2'	URI	968	216.578	103.646	45.713	1.00142.68	A16S
ATOM	39965	C5'	CYT	966	229.508	98.583	43.472	1.00	94.92	A16S	ATOM	40018	O2'	URI	968	216.421	105.036	45.909	1.00142.68	A16S
ATOM	39966	C4'	CYT	966	228.874	99.961	43.403	1.00	94.92	A16S	ATOM	40019	C3'	URI	968	216.711	102.888	47.035	1.00142.68	A16S
ATOM	39967	O4'	CYT	966	228.904	100.465	42.040	1.00	94.92	A16S	ATOM	40020	O3'	URI	968	216.003	103.502	48.123	1.00142.68	A16S
ATOM	39968	C1'	CYT	966	227.842	101.393	41.854	1.00	94.92	A16S	ATOM	40021	P	URI	969	214.401	103.693	48.078	1.00 94.79	A16S
ATOM	39969	N1	CYT	966	226.936	100.919	40.783	1.00	89.76	A16S	ATOM	40022	O1P	URI	969	213.808	102.681	48.992	1.00130.54	A16S
ATOM	39970	C6	CYT	966	226.825	99.588	40.480	1.00	89.76	A16S	ATOM	40023	O2P	URI	969	213.928	103.772	46.673	1.00130.54	A16S
ATOM	39971	C2	CYT	966	226.155	101.869	40.094	1.00	89.76	A16S	ATOM	40024	O5'	URI	969	214.202	105.133	48.734	1.00 94.79	A16S
ATOM	39972	O2	CYT	966	226.291	103.077	40.365	1.00	89.76	A16S	ATOM	40025	C5'	URI	969	215.150	106.177	48.468	1.00 94.79	A16S
ATOM	39973	N3	CYT	966	225.275	101.443	39.156	1.00	89.76	A16S	ATOM	40026	C4'	URI	969	214.444	107.435	48.033	1.00 94.79	A16S
ATOM	39974	C4	CYT	966	225.163	100.138	38.888	1.00	89.76	A16S	ATOM	40027	O4'	URI	969	213.318	107.086	47.186	1.00 94.79	A16S
ATOM	39975	N4	CYT	966	224.272	99.763	37.972	1.00	89.76	A16S	ATOM	40028	C1'	URI	969	212.336	108.104	47.274	1.00 94.79	A16S
ATOM	39976	C5	CYT	966	225.957	99.159	39.552	1.00	89.76	A16S	ATOM	40029	N1	URI	969	210.984	107.518	47.260	1.00130.54	A16S
ATOM	39977	C2'	CYT	966	227.081	101.483	43.173	1.00	94.92	A16S	ATOM	40030	C6	URI	969	210.778	106.162	47.384	1.00130.54	A16S
ATOM	39978	O2'	CYT	966	227.563	102.593	43.907	1.00	94.92	A16S	ATOM	40031	C2	URI	969	209.907	108.386	47.085	1.00130.54	A16S
ATOM	39979	C3'	CYT	966	227.420	100.143	43.817	1.00	94.92	A16S	ATOM	40032	O2	URI	969	210.029	109.598	47.017	1.00130.54	A16S
ATOM	39980	O3'	CYT	966	227.216	100.197	45.225	1.00	94.92	A16S	ATOM	40033	N3	URI	969	208.681	107.781	46.999	1.00130.54	A16S

ATOM	40034	C4	URI	969	208.413	106.433	47.082	1.00130.54	A16S	ATOM	40087	O1P	CYT	972	219.870	116.593	45.701	1.00 68.99	A16S
ATOM	40035	O4	URI	969	207.258	106.036	46.903	1.00130.54	A16S	ATOM	40088	O2P	CYT	972	218.246	115.125	44.352	1.00 68.99	A16S
ATOM	40036	C5	URI	969	209.565	105.606	47.304	1.00130.54	A16S	ATOM	40089	O5'	CYT	972	218.806	117.448	43.627	1.00106.10	A16S
ATOM	40037	C2'	URI	969	212.687	109.037	48.437	1.00 94.79	A16S	ATOM	40090	C5'	CYT	972	217.527	117.988	43.931	1.00106.10	A16S
ATOM	40038	O2'	URI	969	213.015	110.299	47.901	1.00 94.79	A16S	ATOM	40091	C4'	CYT	972	216.872	118.517	42.684	1.00106.10	A16S
ATOM	40039	C3'	URI	969	213.824	108.279	49.135	1.00 94.79	A16S	ATOM	40092	O4'	CYT	972	216.979	117.548	41.612	1.00106.10	A16S
ATOM	40040	O3'	URI	969	214.817	109.074	49.818	1.00 94.79	A16S	ATOM	40093	C1'	CYT	972	215.743	117.458	40.922	1.00106.10	A16S
ATOM	40041	P	GUA	970	215.599	110.272	49.058	1.00140.99	A16S	ATOM	40094	N1	CYT	972	215.219	116.080	41.102	1.00 68.99	A16S
ATOM	40042	O1P	GUA	970	216.856	110.429	49.827	1.00 77.09	A16S	ATOM	40095	C6	CYT	972	216.014	115.095	41.627	1.00 68.99	A16S
ATOM	40043	O2P	GUA	970	214.715	111.451	48.880	1.00 77.09	A16S	ATOM	40096	C2	CYT	972	213.896	115.780	40.709	1.00 68.99	A16S
ATOM	40044	O5'	GUA	970	215.992	109.646	47.640	1.00140.99	A16S	ATOM	40097	O2	CYT	972	213.165	116.692	40.266	1.00 68.99	A16S
ATOM	40045	C5'	GUA	970	216.352	110.470	46.499	1.00140.99	A16S	ATOM	40098	N3	CYT	972	213.445	114.505	40.828	1.00 68.99	A16S
ATOM	40046	C4'	GUA	970	217.146	109.652	45.495	1.00140.99	A16S	ATOM	40099	C4	CYT	972	214.241	113.556	41.325	1.00 68.99	A16S
ATOM	40047	O4'	GUA	970	216.512	108.359	45.344	1.00140.99	A16S	ATOM	40100	N4	CYT	972	213.751	112.314	41.413	1.00 68.99	A16S
ATOM	40048	C1'	GUA	970	216.669	107.900	44.017	1.00140.99	A16S	ATOM	40101	C5	CYT	972	215.572	113.835	41.753	1.00 68.99	A16S
ATOM	40049	N9	GUA	970	215.413	107.296	43.564	1.00 77.09	A16S	ATOM	40102	C2'	CYT	972	214.830	118.555	41.476	1.00106.10	A16S
ATOM	40050	C4	GUA	970	214.139	107.829	43.608	1.00 77.09	A16S	ATOM	40103	O2'	CYT	972	214.942	119.743	40.716	1.00106.10	A16S
ATOM	40051	N3	GUA	970	213.805	109.080	43.999	1.00 77.09	A16S	ATOM	40104	C3'	CYT	972	215.385	118.712	42.876	1.00106.10	A16S
ATOM	40052	C2	GUA	970	212.485	109.265	43.997	1.00 77.09	A16S	ATOM	40105	O3'	CYT	972	215.094	119.941	43.498	1.00106.10	A16S
ATOM	40053	N2	GUA	970	211.966	110.456	44.363	1.00 77.09	A16S	ATOM	40106	P	ADE	973	214.189	119.938	44.818	1.00129.52	A16S
ATOM	40054	N1	GUA	970	211.576	108.295	43.640	1.00 77.09	A16S	ATOM	40107	O1P	ADE	973	214.389	121.241	45.507	1.00 63.20	A16S
ATOM	40055	C6	GUA	970	211.902	107.004	43.234	1.00 77.09	A16S	ATOM	40108	O2P	ADE	973	214.461	118.667	45.547	1.00 63.20	A16S
ATOM	40056	O6	GUA	970	211.007	106.199	42.953	1.00 77.09	A16S	ATOM	40109	O5'	ADE	973	212.709	119.842	44.243	1.00129.52	A16S
ATOM	40057	C5	GUA	970	213.303	106.799	43.219	1.00 77.09	A16S	ATOM	40110	C5'	ADE	973	212.195	120.842	43.349	1.00129.52	A16S
ATOM	40058	N7	GUA	970	214.033	105.673	42.873	1.00 77.09	A16S	ATOM	40111	C4'	ADE	973	210.702	120.709	43.249	1.00129.52	A16S
ATOM	40059	C8	GUA	970	215.274	106.017	43.077	1.00 77.09	A16S	ATOM	40112	O4'	ADE	973	210.368	119.519	42.497	1.00129.52	A16S
ATOM	40060	C2'	GUA	970	217.384	108.970	43.187	1.00140.99	A16S	ATOM	40113	C1'	ADE	973	209.243	118.887	43.079	1.00129.52	A16S
ATOM	40061	O2'	GUA	970	218.705	108.525	42.957	1.00140.99	A16S	ATOM	40114	N9	ADE	973	209.664	117.564	43.529	1.00 63.20	A16S
ATOM	40062	C3'	GUA	970	217.251	110.212	44.079	1.00140.99	A16S	ATOM	40115	C4	ADE	973	208.858	116.464	43.718	1.00 63.20	A16S
ATOM	40063	O3'	GUA	970	218.251	111.255	43.959	1.00140.99	A16S	ATOM	40116	N3	ADE	973	207.526	116.385	43.537	1.00 63.20	A16S
ATOM	40064	P	ADE	971	219.845	110.924	44.000	1.00 87.21	A16S	ATOM	40117	C2	ADE	973	207.084	115.154	43.815	1.00 63.20	A16S
ATOM	40065	O1P	ADE	971	220.298	110.330	42.717	1.00 73.66	A16S	ATOM	40118	N1	ADE	973	207.771	114.074	44.227	1.00 63.20	A16S
ATOM	40066	O2P	ADE	971	220.183	110.235	45.269	1.00 73.66	A16S	ATOM	40119	C6	ADE	973	209.109	114.188	44.401	1.00 63.20	A16S
ATOM	40067	O5'	ADE	971	220.480	112.382	44.069	1.00 87.21	A16S	ATOM	40120	N6	ADE	973	209.794	113.118	44.813	1.00 63.20	A16S
ATOM	40068	C5'	ADE	971	221.771	112.677	43.496	1.00 87.21	A16S	ATOM	40121	C5	ADE	973	209.701	115.444	44.135	1.00 63.20	A16S
ATOM	40069	C4'	ADE	971	221.638	113.748	42.430	1.00 87.21	A16S	ATOM	40122	N7	ADE	973	211.013	115.896	44.213	1.00 63.20	A16S
ATOM	40070	O4'	ADE	971	221.557	113.147	41.110	1.00 87.21	A16S	ATOM	40123	C8	ADE	973	210.936	117.156	43.849	1.00 63.20	A16S
ATOM	40071	C1'	ADE	971	220.633	113.871	40.305	1.00 87.21	A16S	ATOM	40124	C2'	ADE	973	208.759	119.760	44.237	1.00129.52	A16S
ATOM	40072	N9	ADE	971	219.534	112.954	39.954	1.00 73.66	A16S	ATOM	40125	O2'	ADE	973	207.717	120.608	43.801	1.00129.52	A16S
ATOM	40073	C4	ADE	971	218.315	113.262	39.386	1.00 73.66	A16S	ATOM	40126	C3'	ADE	973	210.027	120.517	44.592	1.00129.52	A16S
ATOM	40074	N3	ADE	971	217.866	114.472	39.012	1.00 73.66	A16S	ATOM	40127	O3'	ADE	973	209.782	121.756	45.220	1.00129.52	A16S
ATOM	40075	C2	ADE	971	216.640	114.381	38.500	1.00 73.66	A16S	ATOM	40128	P	URI	974	209.914	121.872	46.812	1.00130.81	A16S
ATOM	40076	N1	ADE	971	215.869	113.302	38.331	1.00 73.66	A16S	ATOM	40129	O1P	URI	974	210.211	123.305	47.084	1.00 64.87	A16S
ATOM	40077	C6	ADE	971	216.350	112.099	38.714	1.00 73.66	A16S	ATOM	40130	O2P	URI	974	210.832	120.816	47.333	1.00 64.87	A16S
ATOM	40078	N6	ADE	971	215.585	111.016	38.539	1.00 73.66	A16S	ATOM	40131	O5'	URI	974	208.453	121.513	47.327	1.00130.81	A16S
ATOM	40079	C5	ADE	971	217.637	112.059	39.273	1.00 73.66	A16S	ATOM	40132	C5'	URI	974	207.350	122.402	47.101	1.00130.81	A16S
ATOM	40080	N7	ADE	971	218.408	111.010	39.752	1.00 73.66	A16S	ATOM	40133	C4'	URI	974	206.052	121.693	47.379	1.00130.81	A16S
ATOM	40081	C8	ADE	971	219.519	111.587	40.137	1.00 73.66	A16S	ATOM	40134	O4'	URI	974	205.904	120.611	46.422	1.00130.81	A16S
ATOM	40082	C2'	ADE	971	220.199	115.106	41.107	1.00 87.21	A16S	ATOM	40135	C1'	URI	974	205.260	119.508	47.041	1.00130.81	A16S
ATOM	40083	O2'	ADE	971	221.013	116.222	40.787	1.00 87.21	A16S	ATOM	40136	N1	URI	974	206.199	118.378	47.103	1.00 64.87	A16S
ATOM	40084	C3'	ADE	971	220.401	114.626	42.541	1.00 87.21	A16S	ATOM	40137	C6	URI	974	207.568	118.569	47.169	1.00 64.87	A16S
ATOM	40085	O3'	ADE	971	220.573	115.680	43.481	1.00 87.21	A16S	ATOM	40138	C2	URI	974	205.655	117.099	47.130	1.00 64.87	A16S
ATOM	40086	P	CYT	972	219.327	116.153	44.388	1.00106.10	A16S	ATOM	40139	O2	URI	974	204.456	116.882	47.044	1.00 64.87	A16S

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ATOM  40140  N3  URI  974     206.567 116.083  47.266  1.00 64.87      A16S
ATOM  40141  C4  URI  974     207.938 116.204  47.372  1.00 64.87      A16S
ATOM  40142  O4  URI  974     208.612 115.193  47.592  1.00 64.87      A16S
ATOM  40143  C5  URI  974     208.432 117.556  47.301  1.00 64.87      A16S
ATOM  40144  C2' URI  974     204.907 119.924  48.466  1.00130.81      A16S
ATOM  40145  O2' URI  974     203.583 120.415  48.545  1.00130.81      A16S
ATOM  40146  C3' URI  974     205.957 120.989  48.725  1.00130.81      A16S
ATOM  40147  O3' URI  974     205.620 121.808  49.825  1.00130.81      A16S
ATOM  40148  P   GUA  975     206.139 121.391  51.290  1.00113.48      A16S
ATOM  40149  O1P GUA  975     205.526 122.363  52.231  1.00103.42      A16S
ATOM  40150  O2P GUA  975     207.620 121.244  51.244  1.00103.42      A16S
ATOM  40151  O5' GUA  975     205.501 119.949  51.546  1.00113.48      A16S
ATOM  40152  C5' GUA  975     204.081 119.822  51.698  1.00113.48      A16S
ATOM  40153  C4' GUA  975     203.641 118.374  51.746  1.00113.48      A16S
ATOM  40154  O4' GUA  975     204.304 117.600  50.713  1.00113.48      A16S
ATOM  40155  C1' GUA  975     204.114 116.226  50.996  1.00113.48      A16S
ATOM  40156  N9  GUA  975     205.366 115.492  50.872  1.00103.42      A16S
ATOM  40157  C4  GUA  975     205.471 114.121  50.948  1.00103.42      A16S
ATOM  40158  N3  GUA  975     204.443 113.262  51.115  1.00103.42      A16S
ATOM  40159  C2  GUA  975     204.848 112.010  51.176  1.00103.42      A16S
ATOM  40160  N2  GUA  975     203.950 111.033  51.346  1.00103.42      A16S
ATOM  40161  N1  GUA  975     206.163 111.622  51.077  1.00103.42      A16S
ATOM  40162  C6  GUA  975     207.241 112.485  50.901  1.00103.42      A16S
ATOM  40163  O6  GUA  975     208.388 112.024  50.816  1.00103.42      A16S
ATOM  40164  C5  GUA  975     206.815 113.848  50.839  1.00103.42      A16S
ATOM  40165  N7  GUA  975     207.545 115.024  50.682  1.00103.42      A16S
ATOM  40166  C8  GUA  975     206.643 115.973  50.701  1.00103.42      A16S
ATOM  40167  C2' GUA  975     203.621 116.118  52.436  1.00113.48      A16S
ATOM  40168  O2' GUA  975     202.250 115.768  52.418  1.00113.48      A16S
ATOM  40169  C3' GUA  975     203.903 117.519  52.978  1.00113.48      A16S
ATOM  40170  O3' GUA  975     203.041 117.779  54.087  1.00113.48      A16S
ATOM  40171  P   CYT  976     203.417 117.191  55.545  1.00142.64      A16S
ATOM  40172  O1P CYT  976     202.411 117.749  56.487  1.00112.01      A16S
ATOM  40173  O2P CYT  976     204.866 117.411  55.804  1.00112.01      A16S
ATOM  40174  O5' CYT  976     203.178 115.617  55.426  1.00142.64      A16S
ATOM  40175  C5' CYT  976     201.843 115.088  55.332  1.00142.64      A16S
ATOM  40176  C4' CYT  976     201.806 113.621  55.702  1.00142.64      A16S
ATOM  40177  O4' CYT  976     202.394 112.810  54.654  1.00142.64      A16S
ATOM  40178  C1' CYT  976     202.877 111.601  55.216  1.00142.64      A16S
ATOM  40179  N1  CYT  976     204.283 111.384  54.817  1.00112.01      A16S
ATOM  40180  C6  CYT  976     205.158 112.428  54.682  1.00112.01      A16S
ATOM  40181  C2  CYT  976     204.717 110.065  54.591  1.00112.01      A16S
ATOM  40182  O2  CYT  976     203.903 109.133  54.708  1.00112.01      A16S
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ATOM  40187  C2' CYT  976     202.692 111.672  56.734  1.00142.64      A16S
ATOM  40188  O2' CYT  976     201.555 110.913  57.096  1.00142.64      A16S
ATOM  40189  C3' CYT  976     202.523 113.173  56.969  1.00142.64      A16S
ATOM  40190  O3' CYT  976     201.765 113.434  58.150  1.00142.64      A16S
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ATOM  40193  O2P URI  977     203.858 114.074  59.419  1.00112.59      A16S
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ATOM  40195  C5' URI  977     201.532 111.163  60.371  1.00143.05      A16S
ATOM  40196  C4' URI  977     201.934 109.730  60.642  1.00143.05      A16S
ATOM  40197  O4' URI  977     202.334 109.086  59.402  1.00143.05      A16S
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ATOM  40236  O5' GUA  979     209.420 106.603  67.078  1.00201.09      A16S
ATOM  40237  C5' GUA  979     209.668 105.351  67.751  1.00201.09      A16S
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ATOM  40245  N2  GUA  979     216.708 105.665  62.607  1.00201.03      A16S
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ATOM	40246	N1	GUA	979	215.040	107.100	61.918	1.00201.03	A16S	ATOM	40299	O2'	GUA	981	223.040	112.607	65.400	1.00169.08	A16S
ATOM	40247	C6	GUA	979	213.767	107.666	61.898	1.00201.03	A16S	ATOM	40300	C3'	GUA	981	221.800	112.287	67.487	1.00169.08	A16S
ATOM	40248	O6	GUA	979	213.514	108.592	61.115	1.00201.03	A16S	ATOM	40301	O3'	GUA	981	222.933	112.895	68.107	1.00169.08	A16S
ATOM	40249	C5	GUA	979	212.908	107.050	62.846	1.00201.03	A16S	ATOM	40302	P	ADE	982	222.920	114.476	68.424	1.00181.16	A16S
ATOM	40250	N7	GUA	979	211.577	107.304	63.152	1.00201.03	A16S	ATOM	40303	O1P	ADE	982	224.301	114.980	68.210	1.00186.60	A16S
ATOM	40251	C8	GUA	979	211.295	106.455	64.102	1.00201.03	A16S	ATOM	40304	O2P	ADE	982	222.268	114.670	69.741	1.00186.60	A16S
ATOM	40252	C2'	GUA	979	213.275	105.129	66.673	1.00201.09	A16S	ATOM	40305	O5'	ADE	982	221.966	115.099	67.305	1.00181.16	A16S
ATOM	40253	O2'	GUA	979	213.959	104.029	67.241	1.00201.09	A16S	ATOM	40306	C5'	ADE	982	222.454	116.052	66.330	1.00181.16	A16S
ATOM	40254	C3'	GUA	979	212.232	105.739	67.603	1.00201.09	A16S	ATOM	40307	C4'	ADE	982	221.862	115.756	64.967	1.00181.16	A16S
ATOM	40255	O3'	GUA	979	212.691	105.786	68.948	1.00201.09	A16S	ATOM	40308	O4'	ADE	982	220.414	115.691	65.056	1.00181.16	A16S
ATOM	40256	P	GUA	980	213.292	107.160	69.534	1.00201.02	A16S	ATOM	40309	C1'	ADE	982	219.846	116.093	63.821	1.00181.16	A16S
ATOM	40257	O1P	GUA	980	213.664	106.906	70.949	1.00186.91	A16S	ATOM	40310	N9	ADE	982	218.829	117.124	64.061	1.00186.60	A16S
ATOM	40258	O2P	GUA	980	212.343	108.259	69.210	1.00186.91	A16S	ATOM	40311	C4	ADE	982	217.600	116.950	64.663	1.00186.60	A16S
ATOM	40259	O5'	GUA	980	214.631	107.407	68.700	1.00201.02	A16S	ATOM	40312	N3	ADE	982	217.091	115.819	65.180	1.00186.60	A16S
ATOM	40260	C5'	GUA	980	215.734	106.473	68.751	1.00201.02	A16S	ATOM	40313	C2	ADE	982	215.870	116.031	65.673	1.00186.60	A16S
ATOM	40261	C4'	GUA	980	216.725	106.774	67.646	1.00201.02	A16S	ATOM	40314	N1	ADE	982	215.152	117.158	65.704	1.00186.60	A16S
ATOM	40262	O4'	GUA	980	216.024	106.733	66.377	1.00201.02	A16S	ATOM	40315	C6	ADE	982	215.688	118.278	65.175	1.00186.60	A16S
ATOM	40263	C1'	GUA	980	216.523	107.742	65.516	1.00201.02	A16S	ATOM	40316	N6	ADE	982	214.966	119.402	65.198	1.00186.60	A16S
ATOM	40264	N9	GUA	980	215.423	108.643	65.172	1.00186.91	A16S	ATOM	40317	C5	ADE	982	216.983	118.189	64.623	1.00186.60	A16S
ATOM	40265	C4	GUA	980	215.412	109.573	64.157	1.00186.91	A16S	ATOM	40318	N7	ADE	982	217.809	119.128	64.021	1.00186.60	A16S
ATOM	40266	N3	GUA	980	216.430	109.837	63.311	1.00186.91	A16S	ATOM	40319	C8	ADE	982	218.887	118.454	63.714	1.00186.60	A16S
ATOM	40267	C2	GUA	980	216.113	110.775	62.437	1.00186.91	A16S	ATOM	40320	C2'	ADE	982	220.983	116.508	62.882	1.00181.16	A16S
ATOM	40268	N2	GUA	980	217.018	111.179	61.538	1.00186.91	A16S	ATOM	40321	O2'	ADE	982	221.263	115.458	61.978	1.00181.16	A16S
ATOM	40269	N1	GUA	980	214.889	111.396	62.385	1.00186.91	A16S	ATOM	40322	C3'	ADE	982	222.127	116.768	63.859	1.00181.16	A16S
ATOM	40270	C6	GUA	980	213.826	111.140	63.243	1.00186.91	A16S	ATOM	40323	O3'	ADE	982	223.398	116.556	63.248	1.00181.16	A16S
ATOM	40271	O6	GUA	980	212.760	111.754	63.105	1.00186.91	A16S	ATOM	40324	P	ADE	983	223.912	117.546	62.084	1.00196.80	A16S
ATOM	40272	C5	GUA	980	214.157	110.145	64.198	1.00186.91	A16S	ATOM	40325	O1P	ADE	983	223.391	117.024	60.793	1.00198.89	A16S
ATOM	40273	N7	GUA	980	213.401	109.603	65.228	1.00186.91	A16S	ATOM	40326	O2P	ADE	983	225.370	117.719	62.266	1.00198.89	A16S
ATOM	40274	C8	GUA	980	214.191	108.721	65.779	1.00186.91	A16S	ATOM	40327	O5'	ADE	983	223.212	118.946	62.390	1.00196.80	A16S
ATOM	40275	C2'	GUA	980	217.688	108.431	66.227	1.00201.02	A16S	ATOM	40328	C5'	ADE	983	222.098	119.409	61.601	1.00196.80	A16S
ATOM	40276	O2'	GUA	980	218.901	107.841	65.807	1.00201.02	A16S	ATOM	40329	C4'	ADE	983	222.287	120.861	61.231	1.00196.80	A16S
ATOM	40277	C3'	GUA	980	217.370	108.154	67.691	1.00201.02	A16S	ATOM	40330	O4'	ADE	983	222.398	121.641	62.449	1.00196.80	A16S
ATOM	40278	O3'	GUA	980	218.552	108.154	68.488	1.00201.02	A16S	ATOM	40331	C1'	ADE	983	223.291	122.720	62.244	1.00196.80	A16S
ATOM	40279	P	GUA	981	218.822	109.358	69.521	1.00169.08	A16S	ATOM	40332	N9	ADE	983	224.371	122.636	63.231	1.00198.89	A16S
ATOM	40280	O1P	GUA	981	219.536	108.766	70.681	1.00156.52	A16S	ATOM	40333	C4	ADE	983	224.774	123.642	64.079	1.00198.89	A16S
ATOM	40281	O2P	GUA	981	217.545	110.091	69.736	1.00156.52	A16S	ATOM	40334	N3	ADE	983	224.255	124.879	64.187	1.00198.89	A16S
ATOM	40282	O5'	GUA	981	219.823	110.341	68.759	1.00169.08	A16S	ATOM	40335	C2	ADE	983	224.905	125.582	65.110	1.00198.89	A16S
ATOM	40283	C5'	GUA	981	221.248	110.083	68.711	1.00169.08	A16S	ATOM	40336	N1	ADE	983	225.939	125.221	65.878	1.00198.89	A16S
ATOM	40284	C4'	GUA	981	221.858	110.762	67.503	1.00169.08	A16S	ATOM	40337	C6	ADE	983	226.439	123.973	65.743	1.00198.89	A16S
ATOM	40285	O4'	GUA	981	221.086	110.354	66.343	1.00169.08	A16S	ATOM	40338	N6	ADE	983	227.477	123.614	66.502	1.00198.89	A16S
ATOM	40286	C1'	GUA	981	220.926	111.447	65.456	1.00169.08	A16S	ATOM	40339	C5	ADE	983	225.834	123.124	64.802	1.00198.89	A16S
ATOM	40287	N9	GUA	981	219.505	111.784	65.400	1.00156.52	A16S	ATOM	40340	N7	ADE	983	226.090	121.812	64.428	1.00198.89	A16S
ATOM	40288	C4	GUA	981	218.874	112.504	64.416	1.00156.52	A16S	ATOM	40341	C8	ADE	983	225.197	121.569	63.499	1.00198.89	A16S
ATOM	40289	N3	GUA	981	219.455	113.013	63.313	1.00156.52	A16S	ATOM	40342	C2'	ADE	983	223.783	122.661	60.795	1.00196.80	A16S
ATOM	40290	C2	GUA	981	218.593	113.668	62.562	1.00156.52	A16S	ATOM	40343	O2'	ADE	983	223.016	123.557	60.014	1.00196.80	A16S
ATOM	40291	N2	GUA	981	219.009	114.244	61.428	1.00156.52	A16S	ATOM	40344	C3'	ADE	983	223.545	121.196	60.437	1.00196.80	A16S
ATOM	40292	N1	GUA	981	217.263	113.811	62.867	1.00156.52	A16S	ATOM	40345	O3'	ADE	983	223.344	121.029	59.028	1.00196.80	A16S
ATOM	40293	C6	GUA	981	216.644	113.294	63.998	1.00156.52	A16S	ATOM	40346	P	CYT	984	224.460	120.284	58.129	1.00173.72	A16S
ATOM	40294	O6	GUA	981	215.438	113.481	64.181	1.00156.52	A16S	ATOM	40347	O1P	CYT	984	224.151	120.602	56.713	1.00189.81	A16S
ATOM	40295	C5	GUA	981	217.557	112.589	64.813	1.00156.52	A16S	ATOM	40348	O2P	CYT	984	224.541	118.863	58.557	1.00189.81	A16S
ATOM	40296	N7	GUA	981	217.360	111.925	66.014	1.00156.52	A16S	ATOM	40349	O5'	CYT	984	225.840	120.996	58.500	1.00173.72	A16S
ATOM	40297	C8	GUA	981	218.539	111.464	66.324	1.00156.52	A16S	ATOM	40350	C5'	CYT	984	226.034	122.413	58.293	1.00173.72	A16S
ATOM	40298	C2'	GUA	981	221.759	112.607	65.998	1.00169.08	A16S	ATOM	40351	C4'	CYT	984	227.274	122.885	59.025	1.00173.72	A16S

ATOM	40352	O4'	CYT	984	227.163	122.494	60.418	1.00173.72	A16S	ATOM	40405	O3'	CYT	986	240.448	118.399	57.047	1.00186.26	A16S
ATOM	40353	C1'	CYT	984	228.434	122.116	60.918	1.00173.72	A16S	ATOM	40406	P	GUA	987	240.953	117.256	56.034	1.00150.57	A16S
ATOM	40354	N1	CYT	984	228.355	120.711	61.367	1.00189.81	A16S	ATOM	40407	O1P	GUA	987	242.287	117.661	55.518	1.00153.73	A16S
ATOM	40355	C6	CYT	984	227.850	119.742	60.542	1.00189.81	A16S	ATOM	40408	O2P	GUA	987	239.856	116.954	55.077	1.00153.73	A16S
ATOM	40356	C2	CYT	984	228.802	120.378	62.657	1.00189.81	A16S	ATOM	40409	O5'	GUA	987	241.158	115.990	56.978	1.00150.57	A16S
ATOM	40357	O2	CYT	984	229.265	121.270	63.390	1.00189.81	A16S	ATOM	40410	C5'	GUA	987	241.295	114.679	56.430	1.00150.57	A16S
ATOM	40358	N3	CYT	984	228.718	119.090	63.070	1.00189.81	A16S	ATOM	40411	C4'	GUA	987	241.396	113.664	57.538	1.00150.57	A16S
ATOM	40359	C4	CYT	984	228.217	118.158	62.254	1.00189.81	A16S	ATOM	40412	O4'	GUA	987	240.219	113.731	58.383	1.00150.57	A16S
ATOM	40360	N4	CYT	984	228.143	116.904	62.706	1.00189.81	A16S	ATOM	40413	C1'	GUA	987	239.851	112.423	58.798	1.00150.57	A16S
ATOM	40361	C5	CYT	984	227.766	118.468	60.940	1.00189.81	A16S	ATOM	40414	N9	GUA	987	238.482	112.162	58.351	1.00153.73	A16S
ATOM	40362	C2'	CYT	984	229.464	122.350	59.811	1.00173.72	A16S	ATOM	40415	C4	GUA	987	237.806	110.960	58.414	1.00153.73	A16S
ATOM	40363	O2'	CYT	984	230.083	123.606	60.000	1.00173.72	A16S	ATOM	40416	N3	GUA	987	238.288	109.802	58.916	1.00153.73	A16S
ATOM	40364	C3'	CYT	984	228.595	122.288	58.558	1.00173.72	A16S	ATOM	40417	C2	GUA	987	237.401	108.822	58.834	1.00153.73	A16S
ATOM	40365	O3'	CYT	984	229.161	123.036	57.484	1.00173.72	A16S	ATOM	40418	N2	GUA	987	237.710	107.602	59.299	1.00153.73	A16S
ATOM	40366	P	CYT	985	230.245	122.347	56.514	1.00177.14	A16S	ATOM	40419	N1	GUA	987	236.145	108.965	58.294	1.00153.73	A16S
ATOM	40367	O1P	CYT	985	230.665	123.361	55.507	1.00132.39	A16S	ATOM	40420	C6	GUA	987	235.628	110.144	57.768	1.00153.73	A16S
ATOM	40368	O2P	CYT	985	229.686	121.046	56.055	1.00132.39	A16S	ATOM	40421	O6	GUA	987	234.479	110.161	57.299	1.00153.73	A16S
ATOM	40369	O5'	CYT	985	231.487	122.047	57.469	1.00177.14	A16S	ATOM	40422	C5	GUA	987	236.566	111.209	57.858	1.00153.73	A16S
ATOM	40370	C5'	CYT	985	232.327	123.115	57.958	1.00177.14	A16S	ATOM	40423	N7	GUA	987	236.458	112.536	57.466	1.00153.73	A16S
ATOM	40371	C4'	CYT	985	233.450	122.559	58.806	1.00177.14	A16S	ATOM	40424	C8	GUA	987	237.612	113.062	57.777	1.00153.73	A16S
ATOM	40372	O4'	CYT	985	232.901	121.959	60.007	1.00177.14	A16S	ATOM	40425	C2'	GUA	987	240.881	111.441	58.227	1.00150.57	A16S
ATOM	40373	C1'	CYT	985	233.666	120.819	60.361	1.00177.14	A16S	ATOM	40426	O2'	GUA	987	241.843	111.129	59.215	1.00150.57	A16S
ATOM	40374	N1	CYT	985	232.790	119.637	60.338	1.00132.39	A16S	ATOM	40427	C3'	GUA	987	241.448	112.229	57.050	1.00150.57	A16S
ATOM	40375	C6	CYT	985	231.623	119.637	59.622	1.00132.39	A16S	ATOM	40428	O3'	GUA	987	242.786	111.875	56.721	1.00150.57	A16S
ATOM	40376	C2	CYT	985	233.175	118.500	61.058	1.00132.39	A16S	ATOM	40429	P	GUA	988	243.105	111.193	55.302	1.00126.18	A16S
ATOM	40377	O2	CYT	985	234.238	118.526	61.705	1.00132.39	A16S	ATOM	40430	O1P	GUA	988	244.497	111.561	54.934	1.00140.95	A16S
ATOM	40378	N3	CYT	985	232.381	117.403	61.032	1.00132.39	A16S	ATOM	40431	O2P	GUA	988	241.995	111.512	54.369	1.00140.95	A16S
ATOM	40379	C4	CYT	985	231.246	117.416	60.331	1.00132.39	A16S	ATOM	40432	O5'	GUA	988	243.065	109.635	55.624	1.00126.18	A16S
ATOM	40380	N4	CYT	985	230.491	116.314	60.339	1.00132.39	A16S	ATOM	40433	C5'	GUA	988	243.879	109.093	56.673	1.00126.18	A16S
ATOM	40381	C5	CYT	985	230.831	118.560	59.591	1.00132.39	A16S	ATOM	40434	C4'	GUA	988	243.275	107.820	57.205	1.00126.18	A16S
ATOM	40382	C2'	CYT	985	234.819	120.690	59.366	1.00177.14	A16S	ATOM	40435	O4'	GUA	988	241.967	108.095	57.777	1.00126.18	A16S
ATOM	40383	O2'	CYT	985	235.990	121.254	59.916	1.00177.14	A16S	ATOM	40436	C1'	GUA	988	241.131	106.956	57.619	1.00126.18	A16S
ATOM	40384	C3'	CYT	985	234.279	121.456	58.165	1.00177.14	A16S	ATOM	40437	N9	GUA	988	239.925	107.334	56.883	1.00140.95	A16S
ATOM	40385	O3'	CYT	985	235.325	121.977	57.358	1.00177.14	A16S	ATOM	40438	C4	GUA	988	238.810	106.543	56.694	1.00140.95	A16S
ATOM	40386	P	CYT	986	236.052	121.024	56.290	1.00186.26	A16S	ATOM	40439	N3	GUA	988	238.628	105.294	57.182	1.00140.95	A16S
ATOM	40387	O1P	CYT	986	236.943	121.885	55.469	1.00170.00	A16S	ATOM	40440	C2	GUA	988	237.463	104.785	56.816	1.00140.95	A16S
ATOM	40388	O2P	CYT	986	235.015	120.191	55.625	1.00170.00	A16S	ATOM	40441	N2	GUA	988	237.117	103.552	57.217	1.00140.95	A16S
ATOM	40389	O5'	CYT	986	236.962	120.069	57.183	1.00186.26	A16S	ATOM	40442	N1	GUA	988	236.551	105.445	56.030	1.00140.95	A16S
ATOM	40390	C5'	CYT	986	238.147	120.569	57.830	1.00186.26	A16S	ATOM	40443	C6	GUA	988	236.717	106.727	55.513	1.00140.95	A16S
ATOM	40391	C4'	CYT	986	238.849	119.454	58.566	1.00186.26	A16S	ATOM	40444	O6	GUA	988	235.833	107.225	54.805	1.00140.95	A16S
ATOM	40392	O4'	CYT	986	237.973	118.939	59.602	1.00186.26	A16S	ATOM	40445	C5	GUA	988	237.961	107.291	55.906	1.00140.95	A16S
ATOM	40393	C1'	CYT	986	238.178	117.543	59.751	1.00186.26	A16S	ATOM	40446	N7	GUA	988	238.517	108.532	55.623	1.00140.95	A16S
ATOM	40394	N1	CYT	986	236.901	116.839	59.528	1.00170.00	A16S	ATOM	40447	C8	GUA	988	239.676	108.516	56.225	1.00140.95	A16S
ATOM	40395	C6	CYT	986	235.919	117.384	58.745	1.00170.00	A16S	ATOM	40448	C2'	GUA	988	241.933	105.887	56.873	1.00126.18	A16S
ATOM	40396	C2	CYT	986	236.708	115.584	60.132	1.00170.00	A16S	ATOM	40449	O2'	GUA	988	242.447	104.949	57.797	1.00126.18	A16S
ATOM	40397	O2	CYT	986	237.611	115.106	60.840	1.00170.00	A16S	ATOM	40450	C3'	GUA	988	243.010	106.724	56.187	1.00126.18	A16S
ATOM	40398	N3	CYT	986	235.547	114.925	59.926	1.00170.00	A16S	ATOM	40451	O3'	GUA	988	244.174	105.966	55.874	1.00126.18	A16S
ATOM	40399	C4	CYT	986	234.599	115.465	59.157	1.00170.00	A16S	ATOM	40452	P	GUA	989	244.240	105.154	54.486	1.00140.50	A16S
ATOM	40400	N4	CYT	986	233.470	114.774	58.981	1.00170.00	A16S	ATOM	40453	O1P	GUA	989	245.570	104.496	54.398	1.00140.17	A16S
ATOM	40401	C5	CYT	986	234.766	116.739	58.534	1.00170.00	A16S	ATOM	40454	O2P	GUA	989	243.796	106.063	53.395	1.00140.17	A16S
ATOM	40402	C2'	CYT	986	239.262	117.114	58.764	1.00186.26	A16S	ATOM	40455	O5'	GUA	989	243.139	104.016	54.662	1.00140.50	A16S
ATOM	40403	O2'	CYT	986	240.507	117.016	59.427	1.00186.26	A16S	ATOM	40456	C5'	GUA	989	243.313	102.968	55.634	1.00140.50	A16S
ATOM	40404	C3'	CYT	986	239.209	118.235	57.730	1.00186.26	A16S	ATOM	40457	C4'	GUA	989	242.269	101.897	55.441	1.00140.50	A16S

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ATOM  40458  O4' GUA  989     240.965 102.392  55.841  1.00140.50      A16S
ATOM  40459  C1' GUA  989     239.966 101.864  54.981  1.00140.50      A16S
ATOM  40460  N9  GUA  989     239.288 102.980  54.322  1.00140.17      A16S
ATOM  40461  C4  GUA  989     238.064 102.941  53.686  1.00140.17      A16S
ATOM  40462  N3  GUA  989     237.272 101.854  53.548  1.00140.17      A16S
ATOM  40463  C2  GUA  989     236.159 102.132  52.887  1.00140.17      A16S
ATOM  40464  N2  GUA  989     235.262 101.161  52.656  1.00140.17      A16S
ATOM  40465  N1  GUA  989     235.843 103.381  52.404  1.00140.17      A16S
ATOM  40466  C6  GUA  989     236.639 104.516  52.534  1.00140.17      A16S
ATOM  40467  O6  GUA  989     236.258 105.598  52.062  1.00140.17      A16S
ATOM  40468  C5  GUA  989     237.843 104.230  53.237  1.00140.17      A16S
ATOM  40469  N7  GUA  989     238.907 105.059  53.573  1.00140.17      A16S
ATOM  40470  C8  GUA  989     239.737 104.278  54.213  1.00140.17      A16S
ATOM  40471  C2' GUA  989     240.655 100.914  53.997  1.00140.50      A16S
ATOM  40472  O2' GUA  989     240.565  99.581  54.464  1.00140.50      A16S
ATOM  40473  C3' GUA  989     242.081 101.450  54.005  1.00140.50      A16S
ATOM  40474  O3' GUA  989     243.051 100.496  53.608  1.00140.50      A16S
ATOM  40475  P   URI  990     243.629 100.546  52.111  1.00144.63      A16S
ATOM  40476  O1P URI  990     244.703  99.529  52.003  1.00 76.93      A16S
ATOM  40477  O2P URI  990     243.930 101.964  51.781  1.00 76.93      A16S
ATOM  40478  O5' URI  990     242.393 100.068  51.227  1.00144.63      A16S
ATOM  40479  C5' URI  990     241.914  98.709  51.307  1.00144.63      A16S
ATOM  40480  C4' URI  990     240.718  98.510  50.403  1.00144.63      A16S
ATOM  40481  O4' URI  990     239.556  99.187  50.954  1.00144.63      A16S
ATOM  40482  C1' URI  990     238.742  99.673  49.897  1.00144.63      A16S
ATOM  40483  N1  URI  990     238.727 101.144  49.945  1.00 76.93      A16S
ATOM  40484  C6  URI  990     239.803 101.867  50.413  1.00 76.93      A16S
ATOM  40485  C2  URI  990     237.597 101.787  49.472  1.00 76.93      A16S
ATOM  40486  O2  URI  990     236.615 101.184  49.064  1.00 76.93      A16S
ATOM  40487  N3  URI  990     237.657 103.163  49.490  1.00 76.93      A16S
ATOM  40488  C4  URI  990     238.706 103.948  49.927  1.00 76.93      A16S
ATOM  40489  O4  URI  990     238.616 105.181  49.863  1.00 76.93      A16S
ATOM  40490  C5  URI  990     239.832 103.208  50.417  1.00 76.93      A16S
ATOM  40491  C2' URI  990     239.377  99.221  48.586  1.00144.63      A16S
ATOM  40492  O2' URI  990     238.805  98.004  48.150  1.00144.63      A16S
ATOM  40493  C3' URI  990     240.832  99.076  48.997  1.00144.63      A16S
ATOM  40494  O3' URI  990     241.572  98.283  48.091  1.00144.63      A16S
ATOM  40495  P   GUA  991     242.350  99.005  46.886  1.00119.74      A16S
ATOM  40496  O1P GUA  991     242.849  97.927  45.996  1.00123.24      A16S
ATOM  40497  O2P GUA  991     243.305  99.996  47.449  1.00123.24      A16S
ATOM  40498  O5' GUA  991     241.201  99.814  46.129  1.00119.74      A16S
ATOM  40499  C5' GUA  991     240.152  99.115  45.424  1.00119.74      A16S
ATOM  40500  C4' GUA  991     239.331 100.071  44.580  1.00119.74      A16S
ATOM  40501  O4' GUA  991     238.480 100.896  45.416  1.00119.74      A16S
ATOM  40502  C1' GUA  991     238.279 102.153  44.792  1.00119.74      A16S
ATOM  40503  N9  GUA  991     238.753 103.201  45.686  1.00123.24      A16S
ATOM  40504  C4  GUA  991     238.241 104.472  45.791  1.00123.24      A16S
ATOM  40505  N3  GUA  991     237.199 104.968  45.091  1.00123.24      A16S
ATOM  40506  C2  GUA  991     236.945 106.228  45.407  1.00123.24      A16S
ATOM  40507  N2  GUA  991     235.943 106.879  44.801  1.00123.24      A16S
ATOM  40508  N1  GUA  991     237.654 106.941  46.342  1.00123.24      A16S
ATOM  40509  C6  GUA  991     238.724 106.448  47.083  1.00123.24      A16S
ATOM  40510  O6  GUA  991     239.282 107.171  47.921  1.00123.24      A16S
ATOM  40511  C5  GUA  991     239.015 105.100  46.743  1.00123.24      A16S
ATOM  40512  N7  GUA  991     239.995 104.242  47.225  1.00123.24      A16S
ATOM  40513  C8  GUA  991     239.799 103.129  46.574  1.00123.24      A16S
ATOM  40514  C2' GUA  991     239.049 102.154  43.471  1.00119.74      A16S
ATOM  40515  O2' GUA  991     238.164 101.853  42.411  1.00119.74      A16S
ATOM  40516  C3' GUA  991     240.090 101.065  43.716  1.00119.74      A16S
ATOM  40517  O3' GUA  991     240.561 100.491  42.504  1.00119.74      A16S
ATOM  40518  P   ADE  992     241.751 101.211  41.698  1.00107.82      A16S
ATOM  40519  O1P ADE  992     242.066 100.327  40.554  1.00 95.68      A16S
ATOM  40520  O2P ADE  992     242.823 101.578  42.652  1.00 95.68      A16S
ATOM  40521  O5' ADE  992     241.080 102.556  41.159  1.00107.82      A16S
ATOM  40522  C5' ADE  992     241.828 103.499  40.361  1.00107.82      A16S
ATOM  40523  C4' ADE  992     240.944 104.103  39.287  1.00107.82      A16S
ATOM  40524  O4' ADE  992     240.504 103.059  38.386  1.00107.82      A16S
ATOM  40525  C1' ADE  992     239.163 103.289  37.999  1.00107.82      A16S
ATOM  40526  N9  ADE  992     238.384 102.123  38.413  1.00 95.68      A16S
ATOM  40527  C4  ADE  992     237.227 101.649  37.844  1.00 95.68      A16S
ATOM  40528  N3  ADE  992     236.544 102.180  36.816  1.00 95.68      A16S
ATOM  40529  C2  ADE  992     235.483 101.430  36.524  1.00 95.68      A16S
ATOM  40530  N1  ADE  992     235.063 100.289  37.098  1.00 95.68      A16S
ATOM  40531  C6  ADE  992     235.776  99.782  38.127  1.00 95.68      A16S
ATOM  40532  N6  ADE  992     235.371  98.641  38.693  1.00 95.68      A16S
ATOM  40533  C5  ADE  992     236.916 100.490  38.539  1.00 95.68      A16S
ATOM  40534  N7  ADE  992     237.842 100.255  39.544  1.00 95.68      A16S
ATOM  40535  C8  ADE  992     238.683 101.252  39.432  1.00 95.68      A16S
ATOM  40536  C2' ADE  992     238.714 104.619  38.606  1.00107.82      A16S
ATOM  40537  O2' ADE  992     238.866 105.642  37.642  1.00107.82      A16S
ATOM  40538  C3' ADE  992     239.670 104.761  39.787  1.00107.82      A16S
ATOM  40539  O3' ADE  992     239.926 106.122  40.107  1.00107.82      A16S
ATOM  40540  P   ADE  993     239.919 106.593  41.642  1.00 99.71      A16S
ATOM  40541  O1P ADE  993     241.081 107.500  41.842  1.00 67.78      A16S
ATOM  40542  O2P ADE  993     239.785 105.358  42.477  1.00 67.78      A16S
ATOM  40543  O5' ADE  993     238.598 107.476  41.764  1.00 99.71      A16S
ATOM  40544  C5' ADE  993     238.407 108.641  40.934  1.00 99.71      A16S
ATOM  40545  C4' ADE  993     237.043 108.602  40.292  1.00 99.71      A16S
ATOM  40546  O4' ADE  993     236.932 107.384  39.515  1.00 99.71      A16S
ATOM  40547  C1' ADE  993     235.618 106.862  39.619  1.00 99.71      A16S
ATOM  40548  N9  ADE  993     235.699 105.507  40.175  1.00 67.78      A16S
ATOM  40549  C4  ADE  993     234.845 104.449  39.936  1.00 67.78      A16S
ATOM  40550  N3  ADE  993     233.733 104.442  39.177  1.00 67.78      A16S
ATOM  40551  C2  ADE  993     233.171 103.229  39.170  1.00 67.78      A16S
ATOM  40552  N1  ADE  993     233.565 102.105  39.785  1.00 67.78      A16S
ATOM  40553  C6  ADE  993     234.687 102.144  40.536  1.00 67.78      A16S
ATOM  40554  N6  ADE  993     235.090 101.024  41.143  1.00 67.78      A16S
ATOM  40555  C5  ADE  993     235.373 103.374  40.631  1.00 67.78      A16S
ATOM  40556  N7  ADE  993     236.523 103.749  41.313  1.00 67.78      A16S
ATOM  40557  C8  ADE  993     236.664 105.020  41.020  1.00 67.78      A16S
ATOM  40558  C2' ADE  993     234.793 107.846  40.447  1.00 99.71      A16S
ATOM  40559  O2' ADE  993     234.134 108.740  39.573  1.00 99.71      A16S
ATOM  40560  C3' ADE  993     235.871 108.548  41.259  1.00 99.71      A16S
ATOM  40561  O3' ADE  993     235.462 109.855  41.649  1.00 99.71      A16S
ATOM  40562  P   ADE  994     234.637 110.062  43.016  1.00 93.79      A16S
ATOM  40563  O1P ADE  994     234.396 111.523  43.127  1.00 68.48      A16S
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ATOM	40564	O2P	ADE	994	235.322	109.340	44.122	1.00	68.48	A16S	ATOM	40617	C2	CYT	996	232.413	103.097	50.478	1.00	79.35	A16S
ATOM	40565	O5'	ADE	994	233.245	109.329	42.763	1.00	93.79	A16S	ATOM	40618	O2	CYT	996	232.997	102.004	50.571	1.00	79.35	A16S
ATOM	40566	C5'	ADE	994	232.218	109.928	41.945	1.00	93.79	A16S	ATOM	40619	N3	CYT	996	233.079	104.271	50.599	1.00	79.35	A16S
ATOM	40567	C4'	ADE	994	231.106	108.936	41.703	1.00	93.79	A16S	ATOM	40620	C4	CYT	996	232.414	105.430	50.506	1.00	79.35	A16S
ATOM	40568	O4'	ADE	994	231.677	107.764	41.072	1.00	93.79	A16S	ATOM	40621	N4	CYT	996	233.115	106.566	50.612	1.00	79.35	A16S
ATOM	40569	C1'	ADE	994	231.062	106.594	41.577	1.00	93.79	A16S	ATOM	40622	C5	CYT	996	231.000	105.477	50.295	1.00	79.35	A16S
ATOM	40570	N9	ADE	994	232.083	105.816	42.271	1.00	68.48	A16S	ATOM	40623	C2'	CYT	996	229.715	101.350	51.412	1.00	114.63	A16S
ATOM	40571	C4	ADE	994	232.066	104.458	42.462	1.00	68.48	A16S	ATOM	40624	O2'	CYT	996	229.710	99.936	51.433	1.00	114.63	A16S
ATOM	40572	N3	ADE	994	231.122	103.592	42.057	1.00	68.48	A16S	ATOM	40625	C3'	CYT	996	228.313	101.935	51.340	1.00	114.63	A16S
ATOM	40573	C2	ADE	994	231.448	102.350	42.406	1.00	68.48	A16S	ATOM	40626	O3'	CYT	996	227.401	101.243	52.173	1.00	114.63	A16S
ATOM	40574	N1	ADE	994	232.527	101.910	43.065	1.00	68.48	A16S	ATOM	40627	P	CYT	997	227.143	101.770	53.668	1.00	160.45	A16S
ATOM	40575	C6	ADE	994	233.457	102.811	43.460	1.00	68.48	A16S	ATOM	40628	O1P	CYT	997	226.098	100.876	54.228	1.00	84.04	A16S
ATOM	40576	N6	ADE	994	234.539	102.377	44.116	1.00	68.48	A16S	ATOM	40629	O2P	CYT	997	226.914	103.242	53.637	1.00	84.04	A16S
ATOM	40577	C5	ADE	994	233.229	104.161	43.150	1.00	68.48	A16S	ATOM	40630	O5'	CYT	997	228.526	101.496	54.415	1.00	160.45	A16S
ATOM	40578	N7	ADE	994	233.964	105.313	43.398	1.00	68.48	A16S	ATOM	40631	C5'	CYT	997	228.967	100.149	54.683	1.00	160.45	A16S
ATOM	40579	C8	ADE	994	233.244	106.265	42.861	1.00	68.48	A16S	ATOM	40632	C4'	CYT	997	230.307	100.151	55.389	1.00	160.45	A16S
ATOM	40580	C2'	ADE	994	229.946	107.024	42.522	1.00	93.79	A16S	ATOM	40633	O4'	CYT	997	231.326	100.703	54.514	1.00	160.45	A16S
ATOM	40581	O2'	ADE	994	228.716	107.036	41.825	1.00	93.79	A16S	ATOM	40634	C1'	CYT	997	232.311	101.372	55.288	1.00	160.45	A16S
ATOM	40582	C3'	ADE	994	230.432	108.400	42.957	1.00	93.79	A16S	ATOM	40635	N1	CYT	997	232.339	102.799	54.914	1.00	84.04	A16S
ATOM	40583	O3'	ADE	994	229.370	109.234	43.393	1.00	93.79	A16S	ATOM	40636	C6	CYT	997	231.192	103.463	54.569	1.00	84.04	A16S
ATOM	40584	P	GUA	995	229.157	109.491	44.964	1.00	104.44	A16S	ATOM	40637	C2	CYT	997	233.568	103.482	54.948	1.00	84.04	A16S
ATOM	40585	O1P	GUA	995	227.915	110.303	45.082	1.00	79.69	A16S	ATOM	40638	O2	CYT	997	234.602	102.857	55.250	1.00	84.04	A16S
ATOM	40586	O2P	GUA	995	230.435	110.003	45.531	1.00	79.69	A16S	ATOM	40639	N3	CYT	997	233.597	104.804	54.657	1.00	84.04	A16S
ATOM	40587	O5'	GUA	995	228.902	108.041	45.576	1.00	104.44	A16S	ATOM	40640	C4	CYT	997	232.469	105.446	54.346	1.00	84.04	A16S
ATOM	40588	C5'	GUA	995	227.852	107.208	45.064	1.00	104.44	A16S	ATOM	40641	N4	CYT	997	232.547	106.758	54.092	1.00	84.04	A16S
ATOM	40589	C4'	GUA	995	228.131	105.756	45.367	1.00	104.44	A16S	ATOM	40642	C5	CYT	997	231.210	104.774	54.287	1.00	84.04	A16S
ATOM	40590	O4'	GUA	995	229.432	105.399	44.843	1.00	104.44	A16S	ATOM	40643	C2'	CYT	997	231.924	101.220	56.757	1.00	160.45	A16S
ATOM	40591	C1'	GUA	995	230.039	104.436	45.684	1.00	104.44	A16S	ATOM	40644	O2'	CYT	997	232.619	100.131	57.328	1.00	160.45	A16S
ATOM	40592	N9	GUA	995	231.280	104.997	46.207	1.00	79.69	A16S	ATOM	40645	C3'	CYT	997	230.422	100.987	56.654	1.00	160.45	A16S
ATOM	40593	C4	GUA	995	232.354	104.279	46.673	1.00	79.69	A16S	ATOM	40646	O3'	CYT	997	229.905	100.354	57.813	1.00	160.45	A16S
ATOM	40594	N3	GUA	995	232.451	102.931	46.705	1.00	79.69	A16S	ATOM	40647	P	URI	998	229.419	101.257	59.054	1.00	150.32	A16S
ATOM	40595	C2	GUA	995	233.602	102.530	47.215	1.00	79.69	A16S	ATOM	40648	O1P	URI	998	229.037	100.311	60.133	1.00	132.07	A16S
ATOM	40596	N2	GUA	995	233.871	101.213	47.309	1.00	79.69	A16S	ATOM	40649	O2P	URI	998	228.431	102.259	58.576	1.00	132.07	A16S
ATOM	40597	N1	GUA	995	234.575	103.389	47.670	1.00	79.69	A16S	ATOM	40650	O5'	URI	998	230.735	102.042	59.501	1.00	150.32	A16S
ATOM	40598	C6	GUA	995	234.490	104.779	47.656	1.00	79.69	A16S	ATOM	40651	C5'	URI	998	231.874	101.326	60.015	1.00	150.32	A16S
ATOM	40599	O6	GUA	995	235.417	105.457	48.109	1.00	79.69	A16S	ATOM	40652	C4'	URI	998	233.054	102.252	60.206	1.00	150.32	A16S
ATOM	40600	C5	GUA	995	233.268	105.221	47.096	1.00	79.69	A16S	ATOM	40653	O4'	URI	998	233.417	102.851	58.933	1.00	150.32	A16S
ATOM	40601	N7	GUA	995	232.786	106.508	46.885	1.00	79.69	A16S	ATOM	40654	C1'	URI	998	233.960	104.143	59.154	1.00	150.32	A16S
ATOM	40602	C8	GUA	995	231.606	106.327	46.354	1.00	79.69	A16S	ATOM	40655	N1	URI	998	233.128	105.146	58.468	1.00	132.07	A16S
ATOM	40603	C2'	GUA	995	229.054	104.108	46.804	1.00	104.44	A16S	ATOM	40656	C6	URI	998	231.780	104.942	58.243	1.00	132.07	A16S
ATOM	40604	O2'	GUA	995	228.328	102.946	46.459	1.00	104.44	A16S	ATOM	40657	C2	URI	998	233.741	106.331	58.074	1.00	132.07	A16S
ATOM	40605	C3'	GUA	995	228.197	105.367	46.834	1.00	104.44	A16S	ATOM	40658	O2	URI	998	234.934	106.546	58.227	1.00	132.07	A16S
ATOM	40606	O3'	GUA	995	226.902	105.115	47.361	1.00	104.44	A16S	ATOM	40659	N3	URI	998	232.904	107.254	57.494	1.00	132.07	A16S
ATOM	40607	P	CYT	996	226.620	105.358	48.922	1.00	114.63	A16S	ATOM	40660	C4	URI	998	231.549	107.120	57.264	1.00	132.07	A16S
ATOM	40608	O1P	CYT	996	225.157	105.191	49.120	1.00	79.35	A16S	ATOM	40661	O4	URI	998	230.923	108.065	56.782	1.00	132.07	A16S
ATOM	40609	O2P	CYT	996	227.283	106.633	49.331	1.00	79.35	A16S	ATOM	40662	C5	URI	998	230.993	105.864	57.672	1.00	132.07	A16S
ATOM	40610	O5'	CYT	996	227.349	104.130	49.624	1.00	114.63	A16S	ATOM	40663	C2'	URI	998	233.974	104.388	60.663	1.00	150.32	A16S
ATOM	40611	C5'	CYT	996	226.944	102.777	49.340	1.00	114.63	A16S	ATOM	40664	O2'	URI	998	235.256	104.074	61.170	1.00	150.32	A16S
ATOM	40612	C4'	CYT	996	227.971	101.802	49.864	1.00	114.63	A16S	ATOM	40665	C3'	URI	998	232.879	103.440	61.142	1.00	150.32	A16S
ATOM	40613	O4'	CYT	996	229.235	102.028	49.185	1.00	114.63	A16S	ATOM	40666	O3'	URI	998	233.019	103.092	62.522	1.00	150.32	A16S
ATOM	40614	C1'	CYT	996	230.309	101.834	50.092	1.00	114.63	A16S	ATOM	40667	P	GUA	999	232.611	104.158	63.665	1.00	167.43	A16S
ATOM	40615	N1	CYT	996	231.025	103.116	50.248	1.00	79.35	A16S	ATOM	40668	O1P	GUA	999	232.508	103.410	64.944	1.00	146.35	A16S
ATOM	40616	C6	CYT	996	230.354	104.310	50.171	1.00	79.35	A16S	ATOM	40669	O2P	GUA	999	231.461	104.981	63.204	1.00	146.35	A16S

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ATOM  40670  O5' GUA   999     233.885 105.108  63.762  1.00167.43      A16S
ATOM  40671  C5' GUA   999     235.172 104.562  64.100  1.00167.43      A16S
ATOM  40672  C4' GUA   999     236.199 105.660  64.235  1.00167.43      A16S
ATOM  40673  O4' GUA   999     236.541 106.206  62.933  1.00167.43      A16S
ATOM  40674  C1' GUA   999     236.872 107.582  63.068  1.00167.43      A16S
ATOM  40675  N9  GUA   999     235.971 108.382  62.236  1.00146.35      A16S
ATOM  40676  C4  GUA   999     236.060 109.744  62.012  1.00146.35      A16S
ATOM  40677  N3  GUA   999     237.011 110.573  62.503  1.00146.35      A16S
ATOM  40678  C2  GUA   999     236.821 111.828  62.124  1.00146.35      A16S
ATOM  40679  N2  GUA   999     237.675 112.783  62.519  1.00146.35      A16S
ATOM  40680  N1  GUA   999     235.779 112.238  61.330  1.00146.35      A16S
ATOM  40681  C6  GUA   999     234.788 111.407  60.813  1.00146.35      A16S
ATOM  40682  O6  GUA   999     233.889 111.885  60.109  1.00146.35      A16S
ATOM  40683  C5  GUA   999     234.982 110.053  61.208  1.00146.35      A16S
ATOM  40684  N7  GUA   999     234.240 108.915  60.917  1.00146.35      A16S
ATOM  40685  C8  GUA   999     234.863 107.950  61.542  1.00146.35      A16S
ATOM  40686  C2' GUA   999     236.741 107.945  64.549  1.00167.43      A16S
ATOM  40687  O2' GUA   999     238.012 107.912  65.172  1.00167.43      A16S
ATOM  40688  C3' GUA   999     235.783 106.870  65.052  1.00167.43      A16S
ATOM  40689  O3' GUA   999     235.872 106.651  66.454  1.00167.43      A16S
ATOM  40690  P   GUA  1000     234.736 107.256  67.425  1.00159.12      A16S
ATOM  40691  O1P GUA  1000     235.028 106.778  68.798  1.00156.58      A16S
ATOM  40692  O2P GUA  1000     233.404 106.981  66.819  1.00156.58      A16S
ATOM  40693  O5' GUA  1000     234.991 108.830  67.387  1.00159.12      A16S
ATOM  40694  C5' GUA  1000     236.332 109.363  67.381  1.00159.12      A16S
ATOM  40695  C4' GUA  1000     236.365 110.688  66.656  1.00159.12      A16S
ATOM  40696  O4' GUA  1000     235.816 110.517  65.322  1.00159.12      A16S
ATOM  40697  C1' GUA  1000     235.065 111.665  64.954  1.00159.12      A16S
ATOM  40698  N9  GUA  1000     233.674 111.261  64.733  1.00156.58      A16S
ATOM  40699  C4  GUA  1000     232.699 111.988  64.080  1.00156.58      A16S
ATOM  40700  N3  GUA  1000     232.860 113.200  63.506  1.00156.58      A16S
ATOM  40701  C2  GUA  1000     231.736 113.646  62.971  1.00156.58      A16S
ATOM  40702  N2  GUA  1000     231.720 114.829  62.355  1.00156.58      A16S
ATOM  40703  N1  GUA  1000     230.547 112.962  62.999  1.00156.58      A16S
ATOM  40704  C6  GUA  1000     230.356 111.713  63.581  1.00156.58      A16S
ATOM  40705  O6  GUA  1000     229.239 111.184  63.550  1.00156.58      A16S
ATOM  40706  C5  GUA  1000     231.555 111.218  64.156  1.00156.58      A16S
ATOM  40707  N7  GUA  1000     231.805 110.028  64.827  1.00156.58      A16S
ATOM  40708  C8  GUA  1000     233.070 110.095  65.147  1.00156.58      A16S
ATOM  40709  C2' GUA  1000     235.210 112.685  66.084  1.00159.12      A16S
ATOM  40710  O2' GUA  1000     236.269 113.579  65.792  1.00159.12      A16S
ATOM  40711  C3' GUA  1000     235.514 111.783  67.274  1.00159.12      A16S
ATOM  40712  O3' GUA  1000     236.206 112.471  68.303  1.00159.12      A16S
ATOM  40713  P   GUA  1001     235.373 113.198  69.470  1.00151.98      A16S
ATOM  40714  O1P GUA  1001     235.585 112.420  70.717  1.00183.63      A16S
ATOM  40715  O2P GUA  1001     233.986 113.444  68.987  1.00183.63      A16S
ATOM  40716  O5' GUA  1001     236.112 114.601  69.624  1.00151.98      A16S
ATOM  40717  C5' GUA  1001     235.364 115.823  69.723  1.00151.98      A16S
ATOM  40718  C4' GUA  1001     235.985 116.889  68.855  1.00151.98      A16S
ATOM  40719  O4' GUA  1001     236.110 116.397  67.494  1.00151.98      A16S
ATOM  40720  C1' GUA  1001     235.775 117.426  66.571  1.00151.98      A16S
ATOM  40721  N9  GUA  1001     234.573 116.998  65.852  1.00183.63      A16S
ATOM  40722  C4  GUA  1001     233.665 117.797  65.180  1.00183.63      A16S
ATOM  40723  N3  GUA  1001     233.739 119.140  65.028  1.00183.63      A16S
ATOM  40724  C2  GUA  1001     232.703 119.619  64.355  1.00183.63      A16S
ATOM  40725  N2  GUA  1001     232.619 120.934  64.102  1.00183.63      A16S
ATOM  40726  N1  GUA  1001     231.675 118.845  63.879  1.00183.63      A16S
ATOM  40727  C6  GUA  1001     231.576 117.465  64.026  1.00183.63      A16S
ATOM  40728  O6  GUA  1001     230.601 116.864  63.566  1.00183.63      A16S
ATOM  40729  C5  GUA  1001     232.684 116.936  64.733  1.00183.63      A16S
ATOM  40730  N7  GUA  1001     232.977 115.626  65.087  1.00183.63      A16S
ATOM  40731  C8  GUA  1001     234.104 115.710  65.739  1.00183.63      A16S
ATOM  40732  C2' GUA  1001     235.560 118.708  67.384  1.00151.98      A16S
ATOM  40733  O2' GUA  1001     236.757 119.460  67.446  1.00151.98      A16S
ATOM  40734  C3' GUA  1001     235.139 118.141  68.733  1.00151.98      A16S
ATOM  40735  O3' GUA  1001     235.333 119.029  69.821  1.00151.98      A16S
ATOM  40736  P   GUA  1002     234.121 119.289  70.844  1.00201.05      A16S
ATOM  40737  O1P GUA  1002     234.339 120.611  71.481  1.00148.09      A16S
ATOM  40738  O2P GUA  1002     233.970 118.079  71.693  1.00148.09      A16S
ATOM  40739  O5' GUA  1002     232.839 119.393  69.903  1.00201.05      A16S
ATOM  40740  C5' GUA  1002     232.616 120.549  69.069  1.00201.05      A16S
ATOM  40741  C4' GUA  1002     231.275 120.447  68.376  1.00201.05      A16S
ATOM  40742  O4' GUA  1002     231.328 119.462  67.310  1.00201.05      A16S
ATOM  40743  C1' GUA  1002     230.070 118.811  67.196  1.00201.05      A16S
ATOM  40744  N9  GUA  1002     230.263 117.365  67.335  1.00148.09      A16S
ATOM  40745  C4  GUA  1002     229.339 116.380  67.043  1.00148.09      A16S
ATOM  40746  N3  GUA  1002     228.084 116.577  66.580  1.00148.09      A16S
ATOM  40747  C2  GUA  1002     227.437 115.437  66.404  1.00148.09      A16S
ATOM  40748  N2  GUA  1002     226.177 115.450  65.951  1.00148.09      A16S
ATOM  40749  N1  GUA  1002     227.976 114.199  66.660  1.00148.09      A16S
ATOM  40750  C6  GUA  1002     229.262 113.969  67.137  1.00148.09      A16S
ATOM  40751  O6  GUA  1002     229.647 112.809  67.339  1.00148.09      A16S
ATOM  40752  C5  GUA  1002     229.972 115.187  67.331  1.00148.09      A16S
ATOM  40753  N7  GUA  1002     231.263 115.412  67.790  1.00148.09      A16S
ATOM  40754  C8  GUA  1002     231.392 116.712  67.777  1.00148.09      A16S
ATOM  40755  C2' GUA  1002     229.132 119.416  68.245  1.00201.05      A16S
ATOM  40756  O2' GUA  1002     228.319 120.401  67.638  1.00201.05      A16S
ATOM  40757  C3' GUA  1002     230.118 120.000  69.253  1.00201.05      A16S
ATOM  40758  O3' GUA  1002     229.571 121.074  70.007  1.00201.05      A16S
ATOM  40759  P   URI  1003     228.946 120.782  71.460  1.00200.54      A16S
ATOM  40760  O1P URI  1003     228.488 122.090  72.006  1.00156.38      A16S
ATOM  40761  O2P URI  1003     229.929 119.975  72.230  1.00156.38      A16S
ATOM  40762  O5' URI  1003     227.676 119.866  71.138  1.00200.54      A16S
ATOM  40763  C5' URI  1003     226.338 120.327  71.409  1.00200.54      A16S
ATOM  40764  C4' URI  1003     225.980 121.454  70.468  1.00200.54      A16S
ATOM  40765  O4' URI  1003     225.806 120.949  69.117  1.00200.54      A16S
ATOM  40766  C1' URI  1003     224.848 121.748  68.434  1.00200.54      A16S
ATOM  40767  N1  URI  1003     223.779 120.889  67.889  1.00156.38      A16S
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ATOM  40769  C2  URI  1003     223.033 121.387  66.822  1.00156.38      A16S
ATOM  40770  O2  URI  1003     223.220 122.489  66.330  1.00156.38      A16S
ATOM  40771  N3  URI  1003     222.056 120.545  66.358  1.00156.38      A16S
ATOM  40772  C4  URI  1003     221.747 119.292  66.832  1.00156.38      A16S
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ATOM  40774  C5  URI  1003     222.551 118.848  67.931  1.00156.38      A16S
ATOM  40775  C2' URI  1003     224.336 122.806  69.415  1.00200.54      A16S
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ATOM	40776	O2'	URI	1003	225.004	124.033	69.182	1.00200.54	A16S
ATOM	40777	C3'	URI	1003	224.682	122.183	70.764	1.00200.54	A16S
ATOM	40778	O3'	URI	1003	224.868	123.175	71.765	1.00200.54	A16S
ATOM	40779	P	GUA	1004	224.179	122.993	73.205	1.00174.66	A16S
ATOM	40780	O1P	GUA	1004	225.224	122.444	74.106	1.00170.13	A16S
ATOM	40781	O2P	GUA	1004	222.889	122.266	73.053	1.00170.13	A16S
ATOM	40782	O5'	GUA	1004	223.869	124.488	73.659	1.00174.66	A16S
ATOM	40783	C5'	GUA	1004	222.621	125.126	73.322	1.00174.66	A16S
ATOM	40784	C4'	GUA	1004	222.826	126.104	72.191	1.00174.66	A16S
ATOM	40785	O4'	GUA	1004	223.225	125.371	71.002	1.00174.66	A16S
ATOM	40786	C1'	GUA	1004	222.641	125.964	69.850	1.00174.66	A16S
ATOM	40787	N9	GUA	1004	221.741	124.993	69.226	1.00170.13	A16S
ATOM	40788	C4	GUA	1004	221.040	125.167	68.053	1.00170.13	A16S
ATOM	40789	N3	GUA	1004	221.070	126.264	67.267	1.00170.13	A16S
ATOM	40790	C2	GUA	1004	220.275	126.142	66.220	1.00170.13	A16S
ATOM	40791	N2	GUA	1004	220.180	127.146	65.337	1.00170.13	A16S
ATOM	40792	N1	GUA	1004	219.515	125.028	65.961	1.00170.13	A16S
ATOM	40793	C6	GUA	1004	219.471	123.886	66.754	1.00170.13	A16S
ATOM	40794	O6	GUA	1004	218.753	122.936	66.428	1.00170.13	A16S
ATOM	40795	C5	GUA	1004	220.315	124.006	67.883	1.00170.13	A16S
ATOM	40796	N7	GUA	1004	220.559	123.115	68.919	1.00170.13	A16S
ATOM	40797	C8	GUA	1004	221.407	123.740	69.690	1.00170.13	A16S
ATOM	40798	C2'	GUA	1004	221.891	127.213	70.312	1.00174.66	A16S
ATOM	40799	O2'	GUA	1004	222.721	128.352	70.181	1.00174.66	A16S
ATOM	40800	C3'	GUA	1004	221.583	126.864	71.761	1.00174.66	A16S
ATOM	40801	O3'	GUA	1004	221.346	128.020	72.549	1.00174.66	A16S
ATOM	40802	P	CYT	1005	219.858	128.326	73.077	1.00200.24	A16S
ATOM	40803	O1P	CYT	1005	219.796	129.776	73.406	1.00168.30	A16S
ATOM	40804	O2P	CYT	1005	219.537	127.322	74.124	1.00168.30	A16S
ATOM	40805	O5'	CYT	1005	218.922	128.045	71.813	1.00200.24	A16S
ATOM	40806	C5'	CYT	1005	219.071	128.801	70.587	1.00200.24	A16S
ATOM	40807	C4'	CYT	1005	218.019	128.397	69.569	1.00200.24	A16S
ATOM	40808	O4'	CYT	1005	218.245	127.037	69.115	1.00200.24	A16S
ATOM	40809	C1'	CYT	1005	217.002	126.423	68.813	1.00200.24	A16S
ATOM	40810	N1	CYT	1005	216.895	125.148	69.563	1.00168.30	A16S
ATOM	40811	C6	CYT	1005	217.963	124.658	70.267	1.00168.30	A16S
ATOM	40812	C2	CYT	1005	215.679	124.435	69.540	1.00168.30	A16S
ATOM	40813	O2	CYT	1005	214.718	124.892	68.900	1.00168.30	A16S
ATOM	40814	N3	CYT	1005	215.585	123.267	70.219	1.00168.30	A16S
ATOM	40815	C4	CYT	1005	216.636	122.803	70.900	1.00168.30	A16S
ATOM	40816	N4	CYT	1005	216.494	121.647	71.555	1.00168.30	A16S
ATOM	40817	C5	CYT	1005	217.878	123.502	70.941	1.00168.30	A16S
ATOM	40818	C2'	CYT	1005	215.889	127.442	69.091	1.00200.24	A16S
ATOM	40819	O2'	CYT	1005	215.499	128.039	67.872	1.00200.24	A16S
ATOM	40820	C3'	CYT	1005	216.574	128.420	70.042	1.00200.24	A16S
ATOM	40821	O3'	CYT	1005	216.028	129.731	69.925	1.00200.24	A16S
ATOM	40822	P	CYT	1006	215.452	130.479	71.228	1.00201.09	A16S
ATOM	40823	O1P	CYT	1006	215.486	131.940	70.924	1.00141.18	A16S
ATOM	40824	O2P	CYT	1006	216.160	129.964	72.432	1.00141.18	A16S
ATOM	40825	O5'	CYT	1006	213.936	129.994	71.317	1.00201.09	A16S
ATOM	40826	C5'	CYT	1006	212.853	130.866	70.934	1.00201.09	A16S
ATOM	40827	C4'	CYT	1006	211.526	130.254	71.314	1.00201.09	A16S
ATOM	40828	O4'	CYT	1006	211.354	129.008	70.590	1.00201.09	A16S
ATOM	40829	C1'	CYT	1006	210.666	128.072	71.402	1.00201.09	A16S
ATOM	40830	N1	CYT	1006	211.543	126.907	71.629	1.00141.18	A16S
ATOM	40831	C6	CYT	1006	212.902	127.055	71.739	1.00141.18	A16S
ATOM	40832	C2	CYT	1006	210.960	125.636	71.747	1.00141.18	A16S
ATOM	40833	O2	CYT	1006	209.725	125.522	71.629	1.00141.18	A16S
ATOM	40834	N3	CYT	1006	211.755	124.566	71.988	1.00141.18	A16S
ATOM	40835	C4	CYT	1006	213.076	124.725	72.105	1.00141.18	A16S
ATOM	40836	N4	CYT	1006	213.816	123.640	72.354	1.00141.18	A16S
ATOM	40837	C5	CYT	1006	213.697	126.003	71.976	1.00141.18	A16S
ATOM	40838	C2'	CYT	1006	210.305	128.769	72.713	1.00201.09	A16S
ATOM	40839	O2'	CYT	1006	208.984	129.268	72.641	1.00201.09	A16S
ATOM	40840	C3'	CYT	1006	211.361	129.866	72.776	1.00201.09	A16S
ATOM	40841	O3'	CYT	1006	210.960	130.953	73.598	1.00201.09	A16S
ATOM	40842	P	CYT	1007	211.242	130.891	75.181	1.00200.42	A16S
ATOM	40843	O1P	CYT	1007	210.925	132.228	75.752	1.00138.30	A16S
ATOM	40844	O2P	CYT	1007	212.592	130.303	75.392	1.00138.30	A16S
ATOM	40845	O5'	CYT	1007	210.171	129.841	75.718	1.00200.42	A16S
ATOM	40846	C5'	CYT	1007	208.757	130.082	75.575	1.00200.42	A16S
ATOM	40847	C4'	CYT	1007	207.977	128.826	75.891	1.00200.42	A16S
ATOM	40848	O4'	CYT	1007	208.318	127.793	74.928	1.00200.42	A16S
ATOM	40849	C1'	CYT	1007	208.334	126.525	75.568	1.00200.42	A16S
ATOM	40850	N1	CYT	1007	209.701	125.967	75.485	1.00138.30	A16S
ATOM	40851	C6	CYT	1007	210.786	126.782	75.300	1.00138.30	A16S
ATOM	40852	C2	CYT	1007	209.876	124.577	75.621	1.00138.30	A16S
ATOM	40853	O2	CYT	1007	208.876	123.850	75.774	1.00138.30	A16S
ATOM	40854	N3	CYT	1007	211.132	124.064	75.584	1.00138.30	A16S
ATOM	40855	C4	CYT	1007	212.182	124.874	75.416	1.00138.30	A16S
ATOM	40856	N4	CYT	1007	213.400	124.326	75.400	1.00138.30	A16S
ATOM	40857	C5	CYT	1007	212.030	126.285	75.261	1.00138.30	A16S
ATOM	40858	C2'	CYT	1007	207.896	126.733	77.019	1.00200.42	A16S
ATOM	40859	O2'	CYT	1007	206.511	126.477	77.148	1.00200.42	A16S
ATOM	40860	C3'	CYT	1007	208.268	128.194	77.244	1.00200.42	A16S
ATOM	40861	O3'	CYT	1007	207.540	128.792	78.310	1.00200.42	A16S
ATOM	40862	P	CYT	1008	208.053	128.597	79.823	1.00166.08	A16S
ATOM	40863	O1P	CYT	1008	207.156	129.384	80.711	1.00158.27	A16S
ATOM	40864	O2P	CYT	1008	209.520	128.838	79.867	1.00158.27	A16S
ATOM	40865	O5'	CYT	1008	207.798	127.048	80.101	1.00166.08	A16S
ATOM	40866	C5'	CYT	1008	206.458	126.540	80.255	1.00166.08	A16S
ATOM	40867	C4'	CYT	1008	206.478	125.169	80.895	1.00166.08	A16S
ATOM	40868	O4'	CYT	1008	206.859	124.159	79.922	1.00166.08	A16S
ATOM	40869	C1'	CYT	1008	207.587	123.126	80.569	1.00166.08	A16S
ATOM	40870	N1	CYT	1008	208.947	123.074	80.000	1.00158.27	A16S
ATOM	40871	C6	CYT	1008	209.550	124.205	79.520	1.00158.27	A16S
ATOM	40872	C2	CYT	1008	209.631	121.848	79.982	1.00158.27	A16S
ATOM	40873	O2	CYT	1008	209.056	120.825	80.393	1.00158.27	A16S
ATOM	40874	N3	CYT	1008	210.901	121.810	79.513	1.00158.27	A16S
ATOM	40875	C4	CYT	1008	211.482	122.926	79.063	1.00158.27	A16S
ATOM	40876	N4	CYT	1008	212.739	122.844	78.618	1.00158.27	A16S
ATOM	40877	C5	CYT	1008	210.803	124.177	79.050	1.00158.27	A16S
ATOM	40878	C2'	CYT	1008	207.633	123.458	82.061	1.00166.08	A16S
ATOM	40879	O2'	CYT	1008	206.594	122.776	82.733	1.00166.08	A16S
ATOM	40880	C3'	CYT	1008	207.451	124.972	82.046	1.00166.08	A16S
ATOM	40881	O3'	CYT	1008	206.984	125.498	83.284	1.00166.08	A16S

ATOM	40882	P	GUA	1009	208.023	126.233	84.274	1.00200.80	A16S	ATOM	40935	N3	GUA	1011	215.579	117.229	89.050	1.00141.03	A16S
ATOM	40883	O1P	GUA	1009	207.279	126.626	85.497	1.00188.33	A16S	ATOM	40936	C2	GUA	1011	214.549	116.447	89.346	1.00141.03	A16S
ATOM	40884	O2P	GUA	1009	208.774	127.265	83.508	1.00188.33	A16S	ATOM	40937	N2	GUA	1011	214.762	115.242	89.904	1.00141.03	A16S
ATOM	40885	O5'	GUA	1009	209.045	125.079	84.677	1.00200.80	A16S	ATOM	40938	N1	GUA	1011	213.236	116.788	89.117	1.00141.03	A16S
ATOM	40886	C5'	GUA	1009	208.575	123.841	85.249	1.00200.80	A16S	ATOM	40939	C6	GUA	1011	212.806	117.987	88.553	1.00141.03	A16S
ATOM	40887	C4'	GUA	1009	209.708	122.849	85.362	1.00200.80	A16S	ATOM	40940	O6	GUA	1011	211.593	118.194	88.388	1.00141.03	A16S
ATOM	40888	O4'	GUA	1009	210.197	122.517	84.035	1.00200.80	A16S	ATOM	40941	C5	GUA	1011	213.903	118.838	88.234	1.00141.03	A16S
ATOM	40889	C1'	GUA	1009	211.604	122.338	84.073	1.00200.80	A16S	ATOM	40942	N7	GUA	1011	213.924	120.105	87.668	1.00141.03	A16S
ATOM	40890	N9	GUA	1009	212.221	123.331	83.193	1.00188.33	A16S	ATOM	40943	C8	GUA	1011	215.191	120.409	87.598	1.00141.03	A16S
ATOM	40891	C4	GUA	1009	213.542	123.374	82.807	1.00188.33	A16S	ATOM	40944	C2'	GUA	1011	218.110	118.802	86.894	1.00182.60	A16S
ATOM	40892	N3	GUA	1009	214.504	122.497	83.167	1.00188.33	A16S	ATOM	40945	O2'	GUA	1011	219.280	118.101	87.267	1.00182.60	A16S
ATOM	40893	C2	GUA	1009	215.678	122.809	82.644	1.00188.33	A16S	ATOM	40946	C3'	GUA	1011	218.391	120.029	86.034	1.00182.60	A16S
ATOM	40894	N2	GUA	1009	216.749	122.045	82.901	1.00188.33	A16S	ATOM	40947	O3'	GUA	1011	219.473	119.816	85.128	1.00182.60	A16S
ATOM	40895	N1	GUA	1009	215.892	123.895	81.831	1.00188.33	A16S	ATOM	40948	P	ADE	1012	219.207	119.075	83.726	1.00186.36	A16S
ATOM	40896	C6	GUA	1009	214.919	124.813	81.449	1.00188.33	A16S	ATOM	40949	O1P	ADE	1012	220.482	119.079	82.968	1.00147.17	A16S
ATOM	40897	O6	GUA	1009	215.223	125.764	80.715	1.00188.33	A16S	ATOM	40950	O2P	ADE	1012	217.991	119.658	83.112	1.00147.17	A16S
ATOM	40898	C5	GUA	1009	213.652	124.490	82.002	1.00188.33	A16S	ATOM	40951	O5'	ADE	1012	218.880	117.571	84.139	1.00186.36	A16S
ATOM	40899	N7	GUA	1009	212.426	125.131	81.878	1.00188.33	A16S	ATOM	40952	C5'	ADE	1012	219.911	116.707	84.650	1.00186.36	A16S
ATOM	40900	C8	GUA	1009	211.609	124.410	82.596	1.00188.33	A16S	ATOM	40953	C4'	ADE	1012	219.361	115.325	84.921	1.00186.36	A16S
ATOM	40901	C2'	GUA	1009	212.051	122.484	85.529	1.00200.80	A16S	ATOM	40954	O4'	ADE	1012	218.393	115.378	86.001	1.00186.36	A16S
ATOM	40902	O2'	GUA	1009	212.120	121.204	86.123	1.00200.80	A16S	ATOM	40955	C1'	ADE	1012	217.413	114.371	85.808	1.00186.36	A16S
ATOM	40903	C3'	GUA	1009	210.935	123.345	86.111	1.00200.80	A16S	ATOM	40956	N9	ADE	1012	216.082	114.984	85.797	1.00147.17	A16S
ATOM	40904	O3'	GUA	1009	210.788	123.192	87.519	1.00200.80	A16S	ATOM	40957	C4	ADE	1012	214.926	114.375	86.226	1.00147.17	A16S
ATOM	40905	P	CYT	1010	211.130	124.427	88.496	1.00195.63	A16S	ATOM	40958	N3	ADE	1012	214.797	113.139	86.742	1.00147.17	A16S
ATOM	40906	O1P	CYT	1010	210.442	124.140	89.779	1.00124.55	A16S	ATOM	40959	C2	ADE	1012	213.525	112.884	87.040	1.00147.17	A16S
ATOM	40907	O2P	CYT	1010	210.853	125.710	87.783	1.00124.55	A16S	ATOM	40960	N1	ADE	1012	212.446	113.663	86.890	1.00147.17	A16S
ATOM	40908	O5'	CYT	1010	212.703	124.309	88.739	1.00195.63	A16S	ATOM	40961	C6	ADE	1012	212.608	114.898	86.364	1.00147.17	A16S
ATOM	40909	C5'	CYT	1010	213.507	125.477	89.015	1.00195.63	A16S	ATOM	40962	N6	ADE	1012	211.531	115.671	86.206	1.00147.17	A16S
ATOM	40910	C4'	CYT	1010	214.840	125.068	89.597	1.00195.63	A16S	ATOM	40963	C5	ADE	1012	213.913	115.293	86.011	1.00147.17	A16S
ATOM	40911	O4'	CYT	1010	214.628	124.468	90.899	1.00195.63	A16S	ATOM	40964	N7	ADE	1012	214.420	116.466	85.465	1.00147.17	A16S
ATOM	40912	C1'	CYT	1010	215.553	123.411	91.096	1.00195.63	A16S	ATOM	40965	C8	ADE	1012	215.707	116.234	85.361	1.00147.17	A16S
ATOM	40913	N1	CYT	1010	214.800	122.166	91.369	1.00124.55	A16S	ATOM	40966	C2'	ADE	1012	217.735	113.637	84.504	1.00186.36	A16S
ATOM	40914	C6	CYT	1010	213.464	122.075	91.085	1.00124.55	A16S	ATOM	40967	O2'	ADE	1012	218.397	112.423	84.805	1.00186.36	A16S
ATOM	40915	C2	CYT	1010	215.478	121.066	91.943	1.00124.55	A16S	ATOM	40968	C3'	ADE	1012	218.619	114.649	83.778	1.00186.36	A16S
ATOM	40916	O2	CYT	1010	216.698	121.156	92.179	1.00124.55	A16S	ATOM	40969	O3'	ADE	1012	219.510	114.006	82.871	1.00186.36	A16S
ATOM	40917	N3	CYT	1010	214.784	119.938	92.220	1.00124.55	A16S	ATOM	40970	P	GUA	1013	219.453	114.363	81.303	1.00190.57	A16S
ATOM	40918	C4	CYT	1010	213.478	119.871	91.948	1.00124.55	A16S	ATOM	40971	O1P	GUA	1013	220.251	113.326	80.600	1.00147.23	A16S
ATOM	40919	N4	CYT	1010	212.835	118.740	92.250	1.00124.55	A16S	ATOM	40972	O2P	GUA	1013	219.818	115.794	81.154	1.00147.23	A16S
ATOM	40920	C5	CYT	1010	212.773	120.960	91.356	1.00124.55	A16S	ATOM	40973	O5'	GUA	1013	217.919	114.193	80.893	1.00190.57	A16S
ATOM	40921	C2'	CYT	1010	216.467	123.347	89.869	1.00195.63	A16S	ATOM	40974	C5'	GUA	1013	217.146	113.061	81.345	1.00190.57	A16S
ATOM	40922	O2'	CYT	1010	217.667	124.042	90.151	1.00195.63	A16S	ATOM	40975	C4'	GUA	1013	215.685	113.435	81.479	1.00190.57	A16S
ATOM	40923	C3'	CYT	1010	215.612	124.025	88.802	1.00195.63	A16S	ATOM	40976	O4'	GUA	1013	215.589	114.706	82.174	1.00190.57	A16S
ATOM	40924	O3'	CYT	1010	216.405	124.634	87.787	1.00195.63	A16S	ATOM	40977	C1'	GUA	1013	214.473	115.436	81.691	1.00190.57	A16S
ATOM	40925	P	GUA	1011	216.330	124.088	86.274	1.00182.60	A16S	ATOM	40978	N9	GUA	1013	214.932	116.725	81.179	1.00147.23	A16S
ATOM	40926	O1P	GUA	1011	217.183	124.984	85.454	1.00141.03	A16S	ATOM	40979	C4	GUA	1013	214.191	117.883	81.116	1.00147.23	A16S
ATOM	40927	O2P	GUA	1011	214.904	123.892	85.903	1.00141.03	A16S	ATOM	40980	N3	GUA	1013	212.911	118.029	81.522	1.00147.23	A16S
ATOM	40928	O5'	GUA	1011	217.025	122.656	86.332	1.00182.60	A16S	ATOM	40981	C2	GUA	1013	212.468	119.260	81.330	1.00147.23	A16S
ATOM	40929	C5'	GUA	1011	218.424	122.519	86.647	1.00182.60	A16S	ATOM	40982	N2	GUA	1013	211.212	119.580	81.674	1.00147.23	A16S
ATOM	40930	C4'	GUA	1011	218.724	121.100	87.064	1.00182.60	A16S	ATOM	40983	N1	GUA	1013	213.222	120.270	80.784	1.00147.23	A16S
ATOM	40931	O4'	GUA	1011	217.901	120.776	88.214	1.00182.60	A16S	ATOM	40984	C6	GUA	1013	214.541	120.145	80.359	1.00147.23	A16S
ATOM	40932	C1'	GUA	1011	217.470	119.429	88.135	1.00182.60	A16S	ATOM	40985	O6	GUA	1013	215.130	121.124	79.880	1.00147.23	A16S
ATOM	40933	N9	GUA	1011	216.011	119.417	88.082	1.00141.03	A16S	ATOM	40986	C5	GUA	1013	215.030	118.824	80.557	1.00147.23	A16S
ATOM	40934	C4	GUA	1011	215.184	118.400	88.501	1.00141.03	A16S	ATOM	40987	N7	GUA	1013	216.273	118.272	80.276	1.00147.23	A16S

ATOM	40988	C8	GUA	1013	216.170	117.029	80.661	1.00147.23	A16S	ATOM	41041	O2P	GUA	1016	208.417	115.016	69.917	1.00121.05	A16S
ATOM	40989	C2'	GUA	1013	213.783	114.592	80.621	1.00190.57	A16S	ATOM	41042	O5'	GUA	1016	207.211	117.041	69.115	1.00170.11	A16S
ATOM	40990	O2'	GUA	1013	212.679	113.918	81.193	1.00190.57	A16S	ATOM	41043	C5'	GUA	1016	206.056	117.805	68.725	1.00170.11	A16S
ATOM	40991	C3'	GUA	1013	214.906	113.654	80.188	1.00190.57	A16S	ATOM	41044	C4'	GUA	1016	206.455	119.216	68.359	1.00170.11	A16S
ATOM	40992	O3'	GUA	1013	214.385	112.432	79.673	1.00190.57	A16S	ATOM	41045	O4'	GUA	1016	207.125	119.828	69.493	1.00170.11	A16S
ATOM	40993	P	GUA	1014	213.809	112.382	78.171	1.00189.46	A16S	ATOM	41046	C1'	GUA	1016	208.097	120.751	69.030	1.00170.11	A16S
ATOM	40994	O1P	GUA	1014	213.342	110.993	77.915	1.00131.11	A16S	ATOM	41047	N9	GUA	1016	209.417	120.349	69.509	1.00121.05	A16S
ATOM	40995	O2P	GUA	1014	214.813	112.997	77.266	1.00131.11	A16S	ATOM	41048	C4	GUA	1016	210.517	121.169	69.584	1.00121.05	A16S
ATOM	40996	O5'	GUA	1014	212.537	113.342	78.208	1.00189.46	A16S	ATOM	41049	N3	GUA	1016	210.549	122.480	69.255	1.00121.05	A16S
ATOM	40997	C5'	GUA	1014	211.284	112.894	78.755	1.00189.46	A16S	ATOM	41050	C2	GUA	1016	211.751	123.001	69.416	1.00121.05	A16S
ATOM	40998	C4'	GUA	1014	210.195	113.893	78.451	1.00189.46	A16S	ATOM	41051	N2	GUA	1016	211.957	124.292	69.130	1.00121.05	A16S
ATOM	40999	O4'	GUA	1014	210.472	115.136	79.145	1.00189.46	A16S	ATOM	41052	N1	GUA	1016	212.841	122.293	69.868	1.00121.05	A16S
ATOM	41000	C1'	GUA	1014	210.026	116.230	78.361	1.00189.46	A16S	ATOM	41053	C6	GUA	1016	212.834	120.944	70.213	1.00121.05	A16S
ATOM	41001	N9	GUA	1014	211.163	117.104	78.078	1.00131.11	A16S	ATOM	41054	O6	GUA	1016	213.875	120.405	70.608	1.00121.05	A16S
ATOM	41002	C4	GUA	1014	211.095	118.413	77.661	1.00131.11	A16S	ATOM	41055	C5	GUA	1016	211.542	120.368	70.041	1.00121.05	A16S
ATOM	41003	N3	GUA	1014	209.964	119.123	77.454	1.00131.11	A16S	ATOM	41056	N7	GUA	1016	211.094	119.070	70.262	1.00121.05	A16S
ATOM	41004	C2	GUA	1014	210.219	120.352	77.035	1.00131.11	A16S	ATOM	41057	C8	GUA	1016	209.828	119.107	69.939	1.00121.05	A16S
ATOM	41005	N2	GUA	1014	209.208	121.196	76.777	1.00131.11	A16S	ATOM	41058	C2'	GUA	1016	208.060	120.745	67.504	1.00170.11	A16S
ATOM	41006	N1	GUA	1014	211.486	120.848	76.838	1.00131.11	A16S	ATOM	41059	O2'	GUA	1016	207.277	121.829	67.045	1.00170.11	A16S
ATOM	41007	C6	GUA	1014	212.665	120.140	77.048	1.00131.11	A16S	ATOM	41060	C3'	GUA	1016	207.446	119.381	67.216	1.00170.11	A16S
ATOM	41008	O6	GUA	1014	213.755	120.687	76.844	1.00131.11	A16S	ATOM	41061	O3'	GUA	1016	206.842	119.342	65.929	1.00170.11	A16S
ATOM	41009	C5	GUA	1014	212.405	118.814	77.495	1.00131.11	A16S	ATOM	41062	P	ADE	1017	207.765	119.128	64.627	1.00187.07	A16S
ATOM	41010	N7	GUA	1014	213.279	117.782	77.812	1.00131.11	A16S	ATOM	41063	O1P	ADE	1017	206.861	118.908	63.468	1.00181.32	A16S
ATOM	41011	C8	GUA	1014	212.501	116.791	78.155	1.00131.11	A16S	ATOM	41064	O2P	ADE	1017	208.799	118.111	64.952	1.00181.32	A16S
ATOM	41012	C2'	GUA	1014	209.397	115.668	77.085	1.00189.46	A16S	ATOM	41065	O5'	ADE	1017	208.494	120.534	64.429	1.00187.07	A16S
ATOM	41013	O2'	GUA	1014	207.994	115.596	77.239	1.00189.46	A16S	ATOM	41066	C5'	ADE	1017	207.748	121.701	64.027	1.00187.07	A16S
ATOM	41014	C3'	GUA	1014	210.055	114.297	76.991	1.00189.46	A16S	ATOM	41067	C4'	ADE	1017	208.678	122.858	63.726	1.00187.07	A16S
ATOM	41015	O3'	GUA	1014	209.267	113.372	76.251	1.00189.46	A16S	ATOM	41068	O4'	ADE	1017	209.367	123.264	64.937	1.00187.07	A16S
ATOM	41016	P	GUA	1015	209.548	113.165	74.679	1.00196.48	A16S	ATOM	41069	C1'	ADE	1017	210.665	123.732	64.612	1.00187.07	A16S
ATOM	41017	O1P	GUA	1015	208.881	111.900	74.281	1.00135.58	A16S	ATOM	41070	N9	ADE	1017	211.647	122.889	65.293	1.00181.32	A16S
ATOM	41018	O2P	GUA	1015	211.003	113.335	74.429	1.00135.58	A16S	ATOM	41071	C4	ADE	1017	212.917	123.268	65.654	1.00181.32	A16S
ATOM	41019	O5'	GUA	1015	208.787	114.380	73.984	1.00196.48	A16S	ATOM	41072	N3	ADE	1017	213.492	124.470	65.469	1.00181.32	A16S
ATOM	41020	C5'	GUA	1015	207.354	114.505	74.073	1.00196.48	A16S	ATOM	41073	C2	ADE	1017	214.739	124.470	65.935	1.00181.32	A16S
ATOM	41021	C4'	GUA	1015	206.919	115.892	73.658	1.00196.48	A16S	ATOM	41074	N1	ADE	1017	215.425	123.480	66.520	1.00181.32	A16S
ATOM	41022	O4'	GUA	1015	207.534	116.866	74.544	1.00196.48	A16S	ATOM	41075	C6	ADE	1017	214.816	122.285	66.692	1.00181.32	A16S
ATOM	41023	C1'	GUA	1015	207.835	118.050	73.821	1.00196.48	A16S	ATOM	41076	N6	ADE	1017	215.498	121.299	67.279	1.00181.32	A16S
ATOM	41024	N9	GUA	1015	209.280	118.274	73.859	1.00135.58	A16S	ATOM	41077	C5	ADE	1017	213.492	122.154	66.238	1.00181.32	A16S
ATOM	41025	C4	GUA	1015	209.919	119.475	73.648	1.00135.58	A16S	ATOM	41078	N7	ADE	1017	212.599	121.091	66.253	1.00181.32	A16S
ATOM	41026	N3	GUA	1015	209.320	120.656	73.389	1.00135.58	A16S	ATOM	41079	C8	ADE	1017	211.522	121.578	65.687	1.00181.32	A16S
ATOM	41027	C2	GUA	1015	210.197	121.632	73.218	1.00135.58	A16S	ATOM	41080	C2'	ADE	1017	210.824	123.662	63.093	1.00187.07	A16S
ATOM	41028	N2	GUA	1015	209.765	122.870	72.943	1.00135.58	A16S	ATOM	41081	O2'	ADE	1017	210.560	124.932	62.529	1.00187.07	A16S
ATOM	41029	N1	GUA	1015	211.559	121.464	73.301	1.00135.58	A16S	ATOM	41082	C3'	ADE	1017	209.792	122.603	62.721	1.00187.07	A16S
ATOM	41030	C6	GUA	1015	212.203	120.259	73.566	1.00135.58	A16S	ATOM	41083	O3'	ADE	1017	209.351	122.730	61.373	1.00187.07	A16S
ATOM	41031	O6	GUA	1015	213.440	120.219	73.615	1.00135.58	A16S	ATOM	41084	P	GUA	1018	210.117	121.931	60.206	1.00178.21	A16S
ATOM	41032	C5	GUA	1015	211.267	119.196	73.748	1.00135.58	A16S	ATOM	41085	O1P	GUA	1018	209.279	122.038	58.986	1.00178.81	A16S
ATOM	41033	N7	GUA	1015	211.473	117.849	74.023	1.00135.58	A16S	ATOM	41086	O2P	GUA	1018	210.498	120.587	60.715	1.00178.81	A16S
ATOM	41034	C8	GUA	1015	210.269	117.343	74.085	1.00135.58	A16S	ATOM	41087	O5'	GUA	1018	211.451	122.775	59.976	1.00178.21	A16S
ATOM	41035	C2'	GUA	1015	207.336	117.858	72.388	1.00196.48	A16S	ATOM	41088	C5'	GUA	1018	211.413	124.049	59.298	1.00178.21	A16S
ATOM	41036	O2'	GUA	1015	206.049	118.427	72.244	1.00196.48	A16S	ATOM	41089	C4'	GUA	1018	212.798	124.658	59.228	1.00178.21	A16S
ATOM	41037	C3'	GUA	1015	207.337	116.340	72.265	1.00196.48	A16S	ATOM	41090	O4'	GUA	1018	213.262	124.959	60.567	1.00178.21	A16S
ATOM	41038	O3'	GUA	1015	206.463	115.884	71.240	1.00196.48	A16S	ATOM	41091	C1'	GUA	1018	214.666	124.773	60.638	1.00178.21	A16S
ATOM	41039	P	GUA	1016	207.053	115.595	69.769	1.00170.11	A16S	ATOM	41092	N9	GUA	1018	214.959	123.813	61.702	1.00178.81	A16S
ATOM	41040	O1P	GUA	1016	206.015	114.846	69.013	1.00121.05	A16S	ATOM	41093	C4	GUA	1018	216.207	123.467	62.175	1.00178.81	A16S

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ATOM  41094  N3  GUA  1018     217.391 123.930  61.715  1.00178.81      A16S
ATOM  41095  C2  GUA  1018     218.416 123.416  62.378  1.00178.81      A16S
ATOM  41096  N2  GUA  1018     219.671 123.751  62.040  1.00178.81      A16S
ATOM  41097  N1  GUA  1018     218.287 122.533  63.420  1.00178.81      A16S
ATOM  41098  C6  GUA  1018     217.080 122.053  63.918  1.00178.81      A16S
ATOM  41099  O6  GUA  1018     217.077 121.282  64.881  1.00178.81      A16S
ATOM  41100  C5  GUA  1018     215.974 122.575  63.201  1.00178.81      A16S
ATOM  41101  N7  GUA  1018     214.614 122.343  63.353  1.00178.81      A16S
ATOM  41102  C8  GUA  1018     214.052 123.094  62.445  1.00178.81      A16S
ATOM  41103  C2' GUA  1018     215.162 124.347  59.254  1.00178.21      A16S
ATOM  41104  O2' GUA  1018     215.672 125.476  58.570  1.00178.21      A16S
ATOM  41105  C3' GUA  1018     213.892 123.790  58.619  1.00178.21      A16S
ATOM  41106  O3' GUA  1018     213.935 123.906  57.199  1.00178.21      A16S
ATOM  41107  P   CYT  1019     214.394 122.647  56.309  1.00200.97      A16S
ATOM  41108  O1P CYT  1019     214.834 123.173  54.991  1.00166.52      A16S
ATOM  41109  O2P CYT  1019     213.325 121.619  56.368  1.00166.52      A16S
ATOM  41110  O5' CYT  1019     215.671 122.075  57.072  1.00200.97      A16S
ATOM  41111  C5' CYT  1019     216.965 122.698  56.944  1.00200.97      A16S
ATOM  41112  C4' CYT  1019     218.021 121.824  57.578  1.00200.97      A16S
ATOM  41113  O4' CYT  1019     217.791 121.759  59.009  1.00200.97      A16S
ATOM  41114  C1' CYT  1019     218.072 120.449  59.484  1.00200.97      A16S
ATOM  41115  N1  CYT  1019     216.843 119.892  60.102  1.00166.52      A16S
ATOM  41116  C6  CYT  1019     215.638 120.531  59.971  1.00166.52      A16S
ATOM  41117  C2  CYT  1019     216.928 118.690  60.834  1.00166.52      A16S
ATOM  41118  O2  CYT  1019     218.026 118.116  60.935  1.00166.52      A16S
ATOM  41119  N3  CYT  1019     215.807 118.187  61.407  1.00166.52      A16S
ATOM  41120  C4  CYT  1019     214.642 118.826  61.273  1.00166.52      A16S
ATOM  41121  N4  CYT  1019     213.566 118.295  61.857  1.00166.52      A16S
ATOM  41122  C5  CYT  1019     214.526 120.038  60.534  1.00166.52      A16S
ATOM  41123  C2' CYT  1019     218.596 119.627  58.302  1.00200.97      A16S
ATOM  41124  O2' CYT  1019     220.010 119.630  58.308  1.00200.97      A16S
ATOM  41125  C3' CYT  1019     218.001 120.376  57.115  1.00200.97      A16S
ATOM  41126  O3' CYT  1019     218.744 120.191  55.917  1.00200.97      A16S
ATOM  41127  P   CYT  1020     218.261 119.094  54.845  1.00180.24      A16S
ATOM  41128  O1P CYT  1020     219.115 119.259  53.641  1.00153.18      A16S
ATOM  41129  O2P CYT  1020     216.784 119.184  54.713  1.00153.18      A16S
ATOM  41130  O5' CYT  1020     218.615 117.698  55.529  1.00180.24      A16S
ATOM  41131  C5' CYT  1020     219.976 117.364  55.869  1.00180.24      A16S
ATOM  41132  C4' CYT  1020     220.019 116.110  56.713  1.00180.24      A16S
ATOM  41133  O4' CYT  1020     219.354 116.347  57.979  1.00180.24      A16S
ATOM  41134  C1' CYT  1020     218.702 115.162  58.408  1.00180.24      A16S
ATOM  41135  N1  CYT  1020     217.274 115.461  58.663  1.00153.18      A16S
ATOM  41136  C6  CYT  1020     216.672 116.550  58.091  1.00153.18      A16S
ATOM  41137  C2  CYT  1020     216.537 114.617  59.518  1.00153.18      A16S
ATOM  41138  O2  CYT  1020     217.084 113.620  60.006  1.00153.18      A16S
ATOM  41139  N3  CYT  1020     215.245 114.911  59.783  1.00153.18      A16S
ATOM  41140  C4  CYT  1020     214.678 115.986  59.232  1.00153.18      A16S
ATOM  41141  N4  CYT  1020     213.407 116.246  59.535  1.00153.18      A16S
ATOM  41142  C5  CYT  1020     215.391 116.846  58.347  1.00153.18      A16S
ATOM  41143  C2' CYT  1020     218.969 114.070  57.367  1.00180.24      A16S
ATOM  41144  O2' CYT  1020     220.028 113.252  57.824  1.00180.24      A16S
ATOM  41145  C3' CYT  1020     219.329 114.889  56.128  1.00180.24      A16S
ATOM  41146  O3' CYT  1020     220.213 114.197  55.250  1.00180.24      A16S
ATOM  41147  P   CYT  1021     219.677 112.955  54.381  1.00134.28      A16S
ATOM  41148  O1P CYT  1021     220.684 112.708  53.317  1.00123.05      A16S
ATOM  41149  O2P CYT  1021     218.256 113.189  54.010  1.00123.05      A16S
ATOM  41150  O5' CYT  1021     219.734 111.728  55.394  1.00134.28      A16S
ATOM  41151  C5' CYT  1021     220.997 111.176  55.803  1.00134.28      A16S
ATOM  41152  C4' CYT  1021     220.783 109.993  56.714  1.00134.28      A16S
ATOM  41153  O4' CYT  1021     220.199 110.434  57.968  1.00134.28      A16S
ATOM  41154  C1' CYT  1021     219.317 109.435  58.460  1.00134.28      A16S
ATOM  41155  N1  CYT  1021     217.961 110.007  58.574  1.00123.05      A16S
ATOM  41156  C6  CYT  1021     217.661 111.219  58.015  1.00123.05      A16S
ATOM  41157  C2  CYT  1021     216.970 109.284  59.268  1.00123.05      A16S
ATOM  41158  O2  CYT  1021     217.253 108.174  59.753  1.00123.05      A16S
ATOM  41159  N3  CYT  1021     215.727 109.811  59.382  1.00123.05      A16S
ATOM  41160  C4  CYT  1021     215.452 110.998  58.831  1.00123.05      A16S
ATOM  41161  N4  CYT  1021     214.213 111.482  58.971  1.00123.05      A16S
ATOM  41162  C5  CYT  1021     216.432 111.743  58.113  1.00123.05      A16S
ATOM  41163  C2' CYT  1021     219.362 108.256  57.489  1.00134.28      A16S
ATOM  41164  O2' CYT  1021     220.275 107.288  57.963  1.00134.28      A16S
ATOM  41165  C3' CYT  1021     219.824 108.932  56.204  1.00134.28      A16S
ATOM  41166  O3' CYT  1021     220.440 108.019  55.309  1.00134.28      A16S
ATOM  41167  P   URI  1022     219.523 107.156  54.311  1.00143.50      A16S
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ATOM  41169  O2P URI  1022     218.575 108.077  53.629  1.00155.45      A16S
ATOM  41170  O5' URI  1022     218.686 106.207  55.282  1.00143.50      A16S
ATOM  41171  C5' URI  1022     219.354 105.240  56.113  1.00143.50      A16S
ATOM  41172  C4' URI  1022     218.394 104.630  57.111  1.00143.50      A16S
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ATOM  41181  O4  URI  1022     213.101 109.362  57.198  1.00155.45      A16S
ATOM  41182  C5  URI  1022     215.155 108.279  56.706  1.00155.45      A16S
ATOM  41183  C2' URI  1022     216.200 104.011  57.768  1.00143.50      A16S
ATOM  41184  O2' URI  1022     216.427 102.922  58.642  1.00143.50      A16S
ATOM  41185  C3' URI  1022     217.122 104.013  56.557  1.00143.50      A16S
ATOM  41186  O3' URI  1022     217.321 102.713  56.033  1.00143.50      A16S
ATOM  41187  P   ADE  1023     216.490 102.256  54.737  1.00141.11      A16S
ATOM  41188  O1P ADE  1023     217.175 101.068  54.169  1.00123.93      A16S
ATOM  41189  O2P ADE  1023     216.275 103.459  53.884  1.00123.93      A16S
ATOM  41190  O5' ADE  1023     215.077 101.802  55.322  1.00141.11      A16S
ATOM  41191  C5' ADE  1023     214.938 100.563  56.049  1.00141.11      A16S
ATOM  41192  C4' ADE  1023     213.573 100.480  56.694  1.00141.11      A16S
ATOM  41193  O4' ADE  1023     213.442 101.535  57.678  1.00141.11      A16S
ATOM  41194  C1' ADE  1023     212.107 102.003  57.702  1.00141.11      A16S
ATOM  41195  N9  ADE  1023     212.108 103.418  57.338  1.00123.93      A16S
ATOM  41196  C4  ADE  1023     211.067 104.297  57.517  1.00123.93      A16S
ATOM  41197  N3  ADE  1023     209.863 104.037  58.058  1.00123.93      A16S
ATOM  41198  C2  ADE  1023     209.106 105.129  58.064  1.00123.93      A16S
ATOM  41199  N1  ADE  1023     209.391 106.360  57.621  1.00123.93      A16S
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ATOM	41200	C6	ADE	1023	210.609	106.589	57.081	1.00123.93	A16S	ATOM	41253	O1P	ADE	1026	200.711	103.610	47.564	1.00 96.47	A16S
ATOM	41201	N6	ADE	1023	210.893	107.817	56.638	1.00123.93	A16S	ATOM	41254	O2P	ADE	1026	203.275	103.659	47.454	1.00 96.47	A16S
ATOM	41202	C5	ADE	1023	211.508	105.510	57.019	1.00123.93	A16S	ATOM	41255	O5'	ADE	1026	201.968	105.749	47.905	1.00124.24	A16S
ATOM	41203	N7	ADE	1023	212.806	105.399	56.537	1.00123.93	A16S	ATOM	41256	C5'	ADE	1026	200.784	106.470	48.281	1.00124.24	A16S
ATOM	41204	C8	ADE	1023	213.115	104.144	56.751	1.00123.93	A16S	ATOM	41257	C4'	ADE	1026	200.847	107.916	47.840	1.00124.24	A16S
ATOM	41205	C2'	ADE	1023	211.297	101.164	56.715	1.00141.11	A16S	ATOM	41258	O4'	ADE	1026	201.676	108.708	48.728	1.00124.24	A16S
ATOM	41206	O2'	ADE	1023	210.648	100.118	57.410	1.00141.11	A16S	ATOM	41259	C1'	ADE	1026	202.058	109.899	48.056	1.00124.24	A16S
ATOM	41207	C3'	ADE	1023	212.382	100.671	55.768	1.00141.11	A16S	ATOM	41260	N9	ADE	1026	203.510	110.072	48.119	1.00 96.47	A16S
ATOM	41208	O3'	ADE	1023	212.013	99.463	55.117	1.00141.11	A16S	ATOM	41261	C4	ADE	1026	204.152	111.269	47.903	1.00 96.47	A16S
ATOM	41209	P	GUA	1024	211.602	99.491	53.564	1.00171.93	A16S	ATOM	41262	N3	ADE	1026	203.586	112.465	47.658	1.00 96.47	A16S
ATOM	41210	O1P	GUA	1024	211.606	98.073	53.119	1.00114.03	A16S	ATOM	41263	C2	ADE	1026	204.516	113.395	47.460	1.00 96.47	A16S
ATOM	41211	O2P	GUA	1024	212.466	100.482	52.868	1.00114.03	A16S	ATOM	41264	N1	ADE	1026	205.847	113.278	47.478	1.00 96.47	A16S
ATOM	41212	O5'	GUA	1024	210.104	100.044	53.557	1.00171.93	A16S	ATOM	41265	C6	ADE	1026	206.387	112.064	47.731	1.00 96.47	A16S
ATOM	41213	C5'	GUA	1024	208.991	99.167	53.829	1.00171.93	A16S	ATOM	41266	N6	ADE	1026	207.718	111.948	47.747	1.00 96.47	A16S
ATOM	41214	C4'	GUA	1024	207.748	99.959	54.181	1.00171.93	A16S	ATOM	41267	C5	ADE	1026	205.504	110.988	47.961	1.00 96.47	A16S
ATOM	41215	O4'	GUA	1024	208.065	100.885	55.255	1.00171.93	A16S	ATOM	41268	N7	ADE	1026	205.715	109.643	48.243	1.00 96.47	A16S
ATOM	41216	C1'	GUA	1024	207.242	102.036	55.149	1.00171.93	A16S	ATOM	41269	C8	ADE	1026	204.504	109.147	48.337	1.00 96.47	A16S
ATOM	41217	N9	GUA	1024	208.072	103.210	54.910	1.00114.03	A16S	ATOM	41270	C2'	ADE	1026	201.617	109.770	46.598	1.00124.24	A16S
ATOM	41218	C4	GUA	1024	207.616	104.502	54.883	1.00114.03	A16S	ATOM	41271	O2'	ADE	1026	200.459	110.552	46.370	1.00124.24	A16S
ATOM	41219	N3	GUA	1024	206.340	104.890	55.093	1.00114.03	A16S	ATOM	41272	C3'	ADE	1026	201.380	108.268	46.461	1.00124.24	A16S
ATOM	41220	C2	GUA	1024	206.200	106.199	54.994	1.00114.03	A16S	ATOM	41273	O3'	ADE	1026	200.475	108.005	45.396	1.00124.24	A16S
ATOM	41221	N2	GUA	1024	204.991	106.750	55.166	1.00114.03	A16S	ATOM	41274	P	CYT	1027	201.048	107.530	43.965	1.00132.75	A16S
ATOM	41222	N1	GUA	1024	207.233	107.062	54.717	1.00114.03	A16S	ATOM	41275	O1P	CYT	1027	199.936	107.681	42.986	1.00 96.49	A16S
ATOM	41223	C6	GUA	1024	208.555	106.685	54.500	1.00114.03	A16S	ATOM	41276	O2P	CYT	1027	201.705	106.203	44.139	1.00 96.49	A16S
ATOM	41224	O6	GUA	1024	209.410	107.548	54.265	1.00114.03	A16S	ATOM	41277	O5'	CYT	1027	202.180	108.593	43.594	1.00132.75	A16S
ATOM	41225	C5	GUA	1024	208.717	105.275	54.595	1.00114.03	A16S	ATOM	41278	C5'	CYT	1027	201.896	110.007	43.577	1.00132.75	A16S
ATOM	41226	N7	GUA	1024	209.849	104.483	54.446	1.00114.03	A16S	ATOM	41279	C4'	CYT	1027	203.165	110.814	43.774	1.00132.75	A16S
ATOM	41227	C8	GUA	1024	209.419	103.266	54.646	1.00114.03	A16S	ATOM	41280	O4'	CYT	1027	204.109	110.072	44.595	1.00132.75	A16S
ATOM	41228	C2'	GUA	1024	206.330	101.845	53.945	1.00171.93	A16S	ATOM	41281	C1'	CYT	1027	205.439	110.411	44.226	1.00132.75	A16S
ATOM	41229	O2'	GUA	1024	205.074	101.356	54.371	1.00171.93	A16S	ATOM	41282	N1	CYT	1027	206.170	109.190	43.824	1.00 96.49	A16S
ATOM	41230	C3'	GUA	1024	207.130	100.854	53.113	1.00171.93	A16S	ATOM	41283	C6	CYT	1027	205.502	108.037	43.511	1.00 96.49	A16S
ATOM	41231	O3'	GUA	1024	206.278	100.185	52.197	1.00171.93	A16S	ATOM	41284	C2	CYT	1027	207.581	109.231	43.755	1.00 96.49	A16S
ATOM	41232	P	CYT	1025	205.908	100.897	50.799	1.00150.42	A16S	ATOM	41285	O2	CYT	1027	208.174	110.286	44.048	1.00 96.49	A16S
ATOM	41233	O1P	CYT	1025	204.894	100.043	50.122	1.00155.14	A16S	ATOM	41286	N3	CYT	1027	208.256	108.123	43.365	1.00 96.49	A16S
ATOM	41234	O2P	CYT	1025	207.180	101.224	50.101	1.00155.14	A16S	ATOM	41287	C4	CYT	1027	207.587	107.011	43.046	1.00 96.49	A16S
ATOM	41235	O5'	CYT	1025	205.209	102.273	51.212	1.00150.42	A16S	ATOM	41288	N4	CYT	1027	208.291	105.951	42.642	1.00 96.49	A16S
ATOM	41236	C5'	CYT	1025	203.891	102.287	51.801	1.00150.42	A16S	ATOM	41289	C5	CYT	1027	206.163	106.938	43.121	1.00 96.49	A16S
ATOM	41237	C4'	CYT	1025	203.287	103.675	51.743	1.00150.42	A16S	ATOM	41290	C2'	CYT	1027	205.358	111.431	43.094	1.00132.75	A16S
ATOM	41238	O4'	CYT	1025	204.079	104.602	52.531	1.00150.42	A16S	ATOM	41291	O2'	CYT	1027	205.489	112.728	43.638	1.00132.75	A16S
ATOM	41239	C1'	CYT	1025	203.973	105.904	51.976	1.00150.42	A16S	ATOM	41292	C3'	CYT	1027	203.965	111.168	42.532	1.00132.75	A16S
ATOM	41240	N1	CYT	1025	205.314	106.416	51.644	1.00155.14	A16S	ATOM	41293	O3'	CYT	1027	203.448	112.326	41.891	1.00132.75	A16S
ATOM	41241	C6	CYT	1025	206.351	105.570	51.358	1.00155.14	A16S	ATOM	41294	P	ADE	1028	204.060	112.788	40.479	1.00113.00	A16S
ATOM	41242	C2	CYT	1025	205.506	107.807	51.605	1.00155.14	A16S	ATOM	41295	O1P	ADE	1028	203.401	114.072	40.097	1.00 90.56	A16S
ATOM	41243	O2	CYT	1025	204.557	108.553	51.888	1.00155.14	A16S	ATOM	41296	O2P	ADE	1028	204.013	111.623	39.551	1.00 90.56	A16S
ATOM	41244	N3	CYT	1025	206.715	108.300	51.261	1.00155.14	A16S	ATOM	41297	O5'	ADE	1028	205.584	113.098	40.819	1.00113.00	A16S
ATOM	41245	C4	CYT	1025	207.714	107.466	50.965	1.00155.14	A16S	ATOM	41298	C5'	ADE	1028	206.595	113.093	39.800	1.00113.00	A16S
ATOM	41246	N4	CYT	1025	208.887	108.000	50.610	1.00155.14	A16S	ATOM	41299	C4'	ADE	1028	207.951	113.294	40.425	1.00113.00	A16S
ATOM	41247	C5	CYT	1025	207.555	106.047	51.016	1.00155.14	A16S	ATOM	41300	O4'	ADE	1028	208.220	112.212	41.351	1.00113.00	A16S
ATOM	41248	C2'	CYT	1025	203.092	105.819	50.732	1.00150.42	A16S	ATOM	41301	C1'	ADE	1028	209.594	111.869	41.303	1.00113.00	A16S
ATOM	41249	O2'	CYT	1025	201.782	106.236	51.056	1.00150.42	A16S	ATOM	41302	N9	ADE	1028	209.700	110.481	40.849	1.00 90.56	A16S
ATOM	41250	C3'	CYT	1025	203.189	104.339	50.377	1.00150.42	A16S	ATOM	41303	C4	ADE	1028	210.859	109.789	40.580	1.00 90.56	A16S
ATOM	41251	O3'	CYT	1025	202.055	103.908	49.634	1.00150.42	A16S	ATOM	41304	N3	ADE	1028	212.123	110.239	40.680	1.00 90.56	A16S
ATOM	41252	P	ADE	1026	202.008	104.158	48.044	1.00124.24	A16S	ATOM	41305	C2	ADE	1028	212.991	109.287	40.329	1.00 90.56	A16S

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ATOM  41306  N1  ADE  1028     212.754 108.030  39.919  1.00 90.56      A16S
ATOM  41307  C6  ADE  1028     211.470 107.611  39.828  1.00 90.56      A16S
ATOM  41308  N6  ADE  1028     211.228 106.361  39.419  1.00 90.56      A16S
ATOM  41309  C5  ADE  1028     210.457 108.525  40.173  1.00 90.56      A16S
ATOM  41310  N7  ADE  1028     209.074 108.420  40.190  1.00 90.56      A16S
ATOM  41311  C8  ADE  1028     208.674 109.600  40.597  1.00 90.56      A16S
ATOM  41312  C2' ADE  1028     210.277 112.848  40.350  1.00113.00      A16S
ATOM  41313  O2' ADE  1028     210.801 113.932  41.088  1.00113.00      A16S
ATOM  41314  C3' ADE  1028     209.116 113.265  39.459  1.00113.00      A16S
ATOM  41315  O3' ADE  1028     209.325 114.535  38.871  1.00113.00      A16S
ATOM  41316  P   GUA  1029     209.542 114.641  37.286  1.00 89.42      A16S
ATOM  41317  O1P GUA  1029     210.133 115.975  37.035  1.00 75.21      A16S
ATOM  41318  O2P GUA  1029     208.281 114.262  36.603  1.00 75.21      A16S
ATOM  41319  O5' GUA  1029     210.620 113.510  36.970  1.00 89.42      A16S
ATOM  41320  C5' GUA  1029     212.001 113.670  37.348  1.00 89.42      A16S
ATOM  41321  C4' GUA  1029     212.820 112.490  36.869  1.00 89.42      A16S
ATOM  41322  O4' GUA  1029     212.445 111.296  37.607  1.00 89.42      A16S
ATOM  41323  C1' GUA  1029     212.450 110.169  36.744  1.00 89.42      A16S
ATOM  41324  N9  GUA  1029     211.067 109.737  36.571  1.00 75.21      A16S
ATOM  41325  C4  GUA  1029     210.638 108.540  36.052  1.00 75.21      A16S
ATOM  41326  N3  GUA  1029     211.427 107.528  35.633  1.00 75.21      A16S
ATOM  41327  C2  GUA  1029     210.720 106.517  35.149  1.00 75.21      A16S
ATOM  41328  N2  GUA  1029     211.344 105.434  34.671  1.00 75.21      A16S
ATOM  41329  N1  GUA  1029     209.348 106.494  35.093  1.00 75.21      A16S
ATOM  41330  C6  GUA  1029     208.514 107.523  35.528  1.00 75.21      A16S
ATOM  41331  O6  GUA  1029     207.281 107.402  35.439  1.00 75.21      A16S
ATOM  41332  C5  GUA  1029     209.261 108.620  36.039  1.00 75.21      A16S
ATOM  41333  N7  GUA  1029     208.833 109.834  36.556  1.00 75.21      A16S
ATOM  41334  C8  GUA  1029     209.934 110.460  36.863  1.00 75.21      A16S
ATOM  41335  C2' GUA  1029     213.009 110.633  35.403  1.00 89.42      A16S
ATOM  41336  O2' GUA  1029     214.405 110.421  35.370  1.00 89.42      A16S
ATOM  41337  C3' GUA  1029     212.616 112.104  35.416  1.00 89.42      A16S
ATOM  41338  O3' GUA  1029     213.345 112.906  34.502  1.00 89.42      A16S
ATOM  41339  P   GUA  1030     212.722 113.188  33.049  1.00 78.87      A16S
ATOM  41340  O1P GUA  1030     213.660 114.079  32.322  1.00 70.69      A16S
ATOM  41341  O2P GUA  1030     211.301 113.602  33.218  1.00 70.69      A16S
ATOM  41342  O5' GUA  1030     212.749 111.749  32.362  1.00 78.87      A16S
ATOM  41343  C5' GUA  1030     214.007 111.112  32.081  1.00 78.87      A16S
ATOM  41344  C4' GUA  1030     213.809 109.845  31.282  1.00 78.87      A16S
ATOM  41345  O4' GUA  1030     213.202 108.818  32.115  1.00 78.87      A16S
ATOM  41346  C1' GUA  1030     212.420 107.953  31.304  1.00 78.87      A16S
ATOM  41347  N9  GUA  1030     211.015 108.098  31.670  1.00 70.69      A16S
ATOM  41348  C4  GUA  1030     210.017 107.206  31.365  1.00 70.69      A16S
ATOM  41349  N3  GUA  1030     210.186 106.004  30.775  1.00 70.69      A16S
ATOM  41350  C2  GUA  1030     209.035 105.407  30.537  1.00 70.69      A16S
ATOM  41351  N2  GUA  1030     209.018 104.203  29.948  1.00 70.69      A16S
ATOM  41352  N1  GUA  1030     207.816 105.949  30.856  1.00 70.69      A16S
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ATOM  41359  O2' GUA  1030     213.551 107.694  29.188  1.00 78.87      A16S
ATOM  41360  C3' GUA  1030     212.895 109.906  30.071  1.00 78.87      A16S
ATOM  41361  O3' GUA  1030     213.432 110.553  28.932  1.00 78.87      A16S
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ATOM  41365  O5' URI  1031     213.062 111.807  26.746  1.00 82.33      A16S
ATOM  41366  C5' URI  1031     212.978 110.642  25.892  1.00 82.33      A16S
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ATOM  41377  C5  URI  1031     215.631 115.401  24.861  1.00 72.08      A16S
ATOM  41378  C2' URI  1031     216.678 110.866  25.576  1.00 82.33      A16S
ATOM  41379  O2' URI  1031     217.575 109.938  25.029  1.00 82.33      A16S
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ATOM  41381  O3' URI  1031     215.536 108.893  26.701  1.00 82.33      A16S
ATOM  41382  P   GUA  1032     215.774 107.690  25.639  1.00 81.15      A16S
ATOM  41383  O1P GUA  1032     216.831 106.795  26.164  1.00 66.32      A16S
ATOM  41384  O2P GUA  1032     215.913 108.247  24.275  1.00 66.32      A16S
ATOM  41385  O5' GUA  1032     214.429 106.830  25.663  1.00 81.15      A16S
ATOM  41386  C5' GUA  1032     214.504 105.417  25.390  1.00 81.15      A16S
ATOM  41387  C4' GUA  1032     213.146 104.802  25.081  1.00 81.15      A16S
ATOM  41388  O4' GUA  1032     212.350 104.621  26.284  1.00 81.15      A16S
ATOM  41389  C1' GUA  1032     210.997 104.409  25.910  1.00 81.15      A16S
ATOM  41390  N9  GUA  1032     210.131 105.417  26.517  1.00 66.32      A16S
ATOM  41391  C4  GUA  1032     208.761 105.423  26.421  1.00 66.32      A16S
ATOM  41392  N3  GUA  1032     208.014 104.479  25.811  1.00 66.32      A16S
ATOM  41393  C2  GUA  1032     206.734 104.778  25.824  1.00 66.32      A16S
ATOM  41394  N2  GUA  1032     205.860 103.942  25.240  1.00 66.32      A16S
ATOM  41395  N1  GUA  1032     206.219 105.918  26.406  1.00 66.32      A16S
ATOM  41396  C6  GUA  1032     206.970 106.903  27.046  1.00 66.32      A16S
ATOM  41397  O6  GUA  1032     206.408 107.893  27.533  1.00 66.32      A16S
ATOM  41398  C5  GUA  1032     208.354 106.590  27.029  1.00 66.32      A16S
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ATOM  41400  C8  GUA  1032     210.476 106.548  27.219  1.00 66.32      A16S
ATOM  41401  C2' GUA  1032     210.912 104.581  24.393  1.00 81.15      A16S
ATOM  41402  O2' GUA  1032     210.945 103.316  23.764  1.00 81.15      A16S
ATOM  41403  C3' GUA  1032     212.156 105.411  24.092  1.00 81.15      A16S
ATOM  41404  O3' GUA  1032     212.463 105.274  22.705  1.00 81.15      A16S
ATOM  41405  P   CYT  1033     211.583 106.086  21.614  1.00 69.76      A16S
ATOM  41406  O1P CYT  1033     212.186 105.859  20.272  1.00 63.17      A16S
ATOM  41407  O2P CYT  1033     211.377 107.481  22.100  1.00 63.17      A16S
ATOM  41408  O5' CYT  1033     210.171 105.341  21.602  1.00 69.76      A16S
ATOM  41409  C5' CYT  1033     210.014 104.047  20.962  1.00 69.76      A16S
ATOM  41410  C4' CYT  1033     208.558 103.789  20.613  1.00 69.76      A16S
ATOM  41411  O4' CYT  1033     207.764 103.790  21.830  1.00 69.76      A16S
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ATOM	41412	C1'	CYT	1033	206.494	104.372	21.576	1.00	69.76	A16S	ATOM	41465	O2'	GUA	1035	203.410	115.337	13.231	1.00	58.14	A16S
ATOM	41413	N1	CYT	1033	206.354	105.579	22.417	1.00	63.17	A16S	ATOM	41466	C3'	GUA	1035	203.765	112.917	12.708	1.00	58.14	A16S
ATOM	41414	C6	CYT	1033	207.458	106.281	22.823	1.00	63.17	A16S	ATOM	41467	O3'	GUA	1035	202.447	113.111	12.225	1.00	58.14	A16S
ATOM	41415	C2	CYT	1033	205.066	106.007	22.791	1.00	63.17	A16S	ATOM	41468	P	CYT	1036	202.177	113.073	10.662	1.00	75.29	A16S
ATOM	41416	O2	CYT	1033	204.075	105.341	22.432	1.00	63.17	A16S	ATOM	41469	O1P	CYT	1036	203.326	113.765	10.044	1.00	92.24	A16S
ATOM	41417	N3	CYT	1033	204.939	107.132	23.538	1.00	63.17	A16S	ATOM	41470	O2P	CYT	1036	200.805	113.562	10.415	1.00	92.24	A16S
ATOM	41418	C4	CYT	1033	206.026	107.813	23.917	1.00	63.17	A16S	ATOM	41471	O5'	CYT	1036	202.249	111.515	10.362	1.00	75.29	A16S
ATOM	41419	N4	CYT	1033	205.854	108.924	24.641	1.00	63.17	A16S	ATOM	41472	C5'	CYT	1036	201.977	110.563	11.420	1.00	75.29	A16S
ATOM	41420	C5	CYT	1033	207.341	107.389	23.566	1.00	63.17	A16S	ATOM	41473	C4'	CYT	1036	200.512	110.593	11.764	1.00	75.29	A16S
ATOM	41421	C2'	CYT	1033	206.414	104.695	20.082	1.00	69.76	A16S	ATOM	41474	O4'	CYT	1036	199.782	110.019	10.650	1.00	75.29	A16S
ATOM	41422	O2'	CYT	1033	205.739	103.662	19.390	1.00	69.76	A16S	ATOM	41475	C1'	CYT	1036	198.636	109.354	11.124	1.00	75.29	A16S
ATOM	41423	C3'	CYT	1033	207.888	104.818	19.711	1.00	69.76	A16S	ATOM	41476	N1	CYT	1036	198.738	107.930	10.747	1.00	92.24	A16S
ATOM	41424	O3'	CYT	1033	208.109	104.564	18.327	1.00	69.76	A16S	ATOM	41477	C6	CYT	1036	199.268	107.012	11.617	1.00	92.24	A16S
ATOM	41425	P	URI	1034	207.968	105.766	17.269	1.00	67.20	A16S	ATOM	41478	C2	CYT	1036	198.264	107.518	9.481	1.00	92.24	A16S
ATOM	41426	O1P	URI	1034	208.279	105.198	15.934	1.00	83.41	A16S	ATOM	41479	O2	CYT	1036	197.825	108.368	8.686	1.00	92.24	A16S
ATOM	41427	O2P	URI	1034	208.725	106.944	17.761	1.00	83.41	A16S	ATOM	41480	N3	CYT	1036	198.306	106.205	9.160	1.00	92.24	A16S
ATOM	41428	O5'	URI	1034	206.424	106.157	17.316	1.00	67.20	A16S	ATOM	41481	C4	CYT	1036	198.807	105.318	10.030	1.00	92.24	A16S
ATOM	41429	C5'	URI	1034	205.416	105.252	16.828	1.00	67.20	A16S	ATOM	41482	N4	CYT	1036	198.820	104.026	9.676	1.00	92.24	A16S
ATOM	41430	C4'	URI	1034	204.040	105.807	17.092	1.00	67.20	A16S	ATOM	41483	C5	CYT	1036	199.319	105.713	11.305	1.00	92.24	A16S
ATOM	41431	O4'	URI	1034	203.810	105.872	18.521	1.00	67.20	A16S	ATOM	41484	C2'	CYT	1036	198.573	109.598	12.632	1.00	75.29	A16S
ATOM	41432	C1'	URI	1034	202.996	106.995	18.819	1.00	67.20	A16S	ATOM	41485	O2'	CYT	1036	197.859	110.799	12.842	1.00	75.29	A16S
ATOM	41433	N1	URI	1034	203.715	107.899	19.737	1.00	83.41	A16S	ATOM	41486	C3'	CYT	1036	200.039	109.804	12.973	1.00	75.29	A16S
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ATOM	41435	C2	URI	1034	202.961	108.827	20.448	1.00	83.41	A16S	ATOM	41488	P	ADE	1037	199.976	109.805	15.614	1.00	51.70	A16S
ATOM	41436	O2	URI	1034	201.745	108.885	20.384	1.00	83.41	A16S	ATOM	41489	O1P	ADE	1037	201.068	110.256	16.501	1.00	63.39	A16S
ATOM	41437	N3	URI	1034	203.686	109.685	21.236	1.00	83.41	A16S	ATOM	41490	O2P	ADE	1037	199.736	108.340	15.422	1.00	63.39	A16S
ATOM	41438	C4	URI	1034	205.053	109.714	21.397	1.00	83.41	A16S	ATOM	41491	O5'	ADE	1037	198.647	110.448	16.194	1.00	51.70	A16S
ATOM	41439	O4	URI	1034	205.562	110.612	22.072	1.00	83.41	A16S	ATOM	41492	C5'	ADE	1037	197.351	109.954	15.807	1.00	51.70	A16S
ATOM	41440	C5	URI	1034	205.763	108.709	20.661	1.00	83.41	A16S	ATOM	41493	C4'	ADE	1037	196.276	110.763	16.483	1.00	51.70	A16S
ATOM	41441	C2'	URI	1034	202.641	107.679	17.496	1.00	67.20	A16S	ATOM	41494	O4'	ADE	1037	196.345	110.548	17.922	1.00	51.70	A16S
ATOM	41442	O2'	URI	1034	201.369	107.223	17.072	1.00	67.20	A16S	ATOM	41495	C1'	ADE	1037	196.164	111.780	18.598	1.00	51.70	A16S
ATOM	41443	C3'	URI	1034	203.771	107.217	16.583	1.00	67.20	A16S	ATOM	41496	N9	ADE	1037	197.441	112.160	19.216	1.00	63.39	A16S
ATOM	41444	O3'	URI	1034	203.318	107.193	15.233	1.00	67.20	A16S	ATOM	41497	C4	ADE	1037	197.663	113.232	20.052	1.00	63.39	A16S
ATOM	41445	P	GUA	1035	204.101	108.016	14.083	1.00	58.14	A16S	ATOM	41498	N3	ADE	1037	196.762	114.118	20.503	1.00	63.39	A16S
ATOM	41446	O1P	GUA	1035	203.289	107.826	12.837	1.00	60.95	A16S	ATOM	41499	C2	ADE	1037	197.346	115.033	21.284	1.00	63.39	A16S
ATOM	41447	O2P	GUA	1035	205.540	107.634	14.091	1.00	60.95	A16S	ATOM	41500	N1	ADE	1037	198.630	115.159	21.631	1.00	63.39	A16S
ATOM	41448	O5'	GUA	1035	203.985	109.563	14.457	1.00	58.14	A16S	ATOM	41501	C6	ADE	1037	199.511	114.260	21.154	1.00	63.39	A16S
ATOM	41449	C5'	GUA	1035	204.231	110.529	13.431	1.00	58.14	A16S	ATOM	41502	N6	ADE	1037	200.794	114.400	21.481	1.00	63.39	A16S
ATOM	41450	C4'	GUA	1035	203.747	111.883	13.835	1.00	58.14	A16S	ATOM	41503	C5	ADE	1037	199.016	113.226	20.324	1.00	63.39	A16S
ATOM	41451	O4'	GUA	1035	204.633	112.431	14.812	1.00	58.14	A16S	ATOM	41504	N7	ADE	1037	199.636	112.159	19.691	1.00	63.39	A16S
ATOM	41452	C1'	GUA	1035	204.409	113.815	14.821	1.00	58.14	A16S	ATOM	41505	C8	ADE	1037	198.662	111.557	19.057	1.00	63.39	A16S
ATOM	41453	N9	GUA	1035	205.511	114.503	15.476	1.00	60.95	A16S	ATOM	41506	C2'	ADE	1037	195.743	112.802	17.539	1.00	51.70	A16S
ATOM	41454	C4	GUA	1035	205.416	115.741	16.033	1.00	60.95	A16S	ATOM	41507	O2'	ADE	1037	194.335	112.772	17.383	1.00	51.70	A16S
ATOM	41455	N3	GUA	1035	204.309	116.510	16.044	1.00	60.95	A16S	ATOM	41508	C3'	ADE	1037	196.439	112.260	16.304	1.00	51.70	A16S
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ATOM	41459	C6	GUA	1035	206.859	117.230	17.233	1.00	60.95	A16S	ATOM	41512	O2P	URI	1038	197.728	113.898	13.925	1.00	70.92	A16S
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ATOM	41463	C8	GUA	1035	206.804	114.080	15.670	1.00	60.95	A16S	ATOM	41516	O4'	URI	1038	197.692	116.413	17.952	1.00	47.04	A16S
ATOM	41464	C2'	GUA	1035	204.274	114.210	13.357	1.00	58.14	A16S	ATOM	41517	C1'	URI	1038	198.343	117.313	18.841	1.00	47.04	A16S

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ATOM  41527  O2' URI  1038     197.069 119.365  18.895  1.00 47.04      A16S
ATOM  41528  C3' URI  1038     197.902 118.460  16.809  1.00 47.04      A16S
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ATOM  41532  O2P GUA  1039     199.093 120.292  14.855  1.00 64.03      A16S
ATOM  41533  O5' GUA  1039     198.473 121.550  16.893  1.00 56.41      A16S
ATOM  41534  C5' GUA  1039     197.586 122.167  17.849  1.00 56.41      A16S
ATOM  41535  C4' GUA  1039     198.367 122.994  18.848  1.00 56.41      A16S
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ATOM  41537  C1' GUA  1039     200.402 122.820  20.002  1.00 56.41      A16S
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ATOM  41559  O4' GUA  1040     203.108 125.752  19.081  1.00 54.07      A16S
ATOM  41560  C1' GUA  1040     204.388 125.529  18.518  1.00 54.07      A16S
ATOM  41561  N9  GUA  1040     204.301 124.355  17.656  1.00 63.45      A16S
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ATOM  41571  C8  GUA  1040     203.176 123.912  17.008  1.00 63.45      A16S
ATOM  41572  C2' GUA  1040     204.786 126.794  17.747  1.00 54.07      A16S
ATOM  41573  O2' GUA  1040     205.612 127.589  18.570  1.00 54.07      A16S
ATOM  41574  C3' GUA  1040     203.435 127.444  17.467  1.00 54.07      A16S
ATOM  41575  O3' GUA  1040     203.513 128.859  17.345  1.00 54.07      A16S
ATOM  41576  P   CYT  1041     203.458 129.541  15.892  1.00 60.10      A16S
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ATOM  41578  O2P CYT  1041     202.368 128.894  15.129  1.00 70.95      A16S
ATOM  41579  O5' CYT  1041     204.846 129.097  15.267  1.00 60.10      A16S
ATOM  41580  C5' CYT  1041     206.072 129.386  15.954  1.00 60.10      A16S
ATOM  41581  C4' CYT  1041     207.203 128.554  15.396  1.00 60.10      A16S
ATOM  41582  O4' CYT  1041     207.084 127.172  15.821  1.00 60.10      A16S
ATOM  41583  C1' CYT  1041     207.586 126.326  14.808  1.00 60.10      A16S
ATOM  41584  N1  CYT  1041     206.496 125.457  14.338  1.00 70.95      A16S
ATOM  41585  C6  CYT  1041     205.230 125.944  14.168  1.00 70.95      A16S
ATOM  41586  C2  CYT  1041     206.781 124.118  14.047  1.00 70.95      A16S
ATOM  41587  O2  CYT  1041     207.938 123.697  14.219  1.00 70.95      A16S
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ATOM  41589  C4  CYT  1041     204.564 123.801  13.424  1.00 70.95      A16S
ATOM  41590  N4  CYT  1041     203.620 122.970  12.979  1.00 70.95      A16S
ATOM  41591  C5  CYT  1041     204.245 125.160  13.714  1.00 70.95      A16S
ATOM  41592  C2' CYT  1041     208.109 127.214  13.680  1.00 60.10      A16S
ATOM  41593  O2' CYT  1041     209.477 127.471  13.891  1.00 60.10      A16S
ATOM  41594  C3' CYT  1041     207.296 128.477  13.884  1.00 60.10      A16S
ATOM  41595  O3' CYT  1041     207.926 129.610  13.318  1.00 60.10      A16S
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ATOM  41598  O2P CYT  1042     206.150 129.797  11.573  1.00 62.72      A16S
ATOM  41599  O5' CYT  1042     208.395 128.870  10.978  1.00 56.53      A16S
ATOM  41600  C5' CYT  1042     209.807 128.620  11.218  1.00 56.53      A16S
ATOM  41601  C4' CYT  1042     210.290 127.376  10.479  1.00 56.53      A16S
ATOM  41602  O4' CYT  1042     209.767 126.162  11.081  1.00 56.53      A16S
ATOM  41603  C1' CYT  1042     209.607 125.167  10.081  1.00 56.53      A16S
ATOM  41604  N1  CYT  1042     208.185 124.830   9.971  1.00 62.72      A16S
ATOM  41605  C6  CYT  1042     207.219 125.739  10.298  1.00 62.72      A16S
ATOM  41606  C2  CYT  1042     207.833 123.576   9.505  1.00 62.72      A16S
ATOM  41607  O2  CYT  1042     208.724 122.766   9.240  1.00 62.72      A16S
ATOM  41608  N3  CYT  1042     206.529 123.272   9.351  1.00 62.72      A16S
ATOM  41609  C4  CYT  1042     205.594 124.175   9.650  1.00 62.72      A16S
ATOM  41610  N4  CYT  1042     204.319 123.850   9.451  1.00 62.72      A16S
ATOM  41611  C5  CYT  1042     205.925 125.454  10.156  1.00 62.72      A16S
ATOM  41612  C2' CYT  1042     210.093 125.751   8.759  1.00 56.53      A16S
ATOM  41613  O2' CYT  1042     211.427 125.353   8.558  1.00 56.53      A16S
ATOM  41614  C3' CYT  1042     209.940 127.244   9.007  1.00 56.53      A16S
ATOM  41615  O3' CYT  1042     210.811 127.990   8.189  1.00 56.53      A16S
ATOM  41616  P   GUA  1043     210.339 128.404   6.719  1.00 45.77      A16S
ATOM  41617  O1P GUA  1043     211.303 129.404   6.183  1.00 68.56      A16S
ATOM  41618  O2P GUA  1043     208.895 128.732   6.768  1.00 68.56      A16S
ATOM  41619  O5' GUA  1043     210.503 127.058   5.888  1.00 45.77      A16S
ATOM  41620  C5' GUA  1043     211.777 126.402   5.794  1.00 45.77      A16S
ATOM  41621  C4' GUA  1043     211.657 125.117   5.005  1.00 45.77      A16S
ATOM  41622  O4' GUA  1043     210.812 124.176   5.711  1.00 45.77      A16S
ATOM  41623  C1' GUA  1043     210.064 123.413   4.774  1.00 45.77      A16S
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ATOM	41624	N9	GUA	1043	208.640	123.666	4.999	1.00	68.56	A16S	ATOM	41677	C3'	CYT	1045	205.671	125.799	-6.259	1.00	36.93	A16S
ATOM	41625	C4	GUA	1043	207.583	122.952	4.481	1.00	68.56	A16S	ATOM	41678	O3'	CYT	1045	205.757	125.959	-7.651	1.00	36.93	A16S
ATOM	41626	N3	GUA	1043	207.670	121.894	3.655	1.00	68.56	A16S	ATOM	41679	P	GUA	1046	205.481	127.391	-8.295	1.00	44.67	A16S
ATOM	41627	C2	GUA	1043	206.481	121.413	3.343	1.00	68.56	A16S	ATOM	41680	O1P	GUA	1046	204.020	127.631	-8.207	1.00	75.75	A16S
ATOM	41628	N2	GUA	1043	206.385	120.360	2.520	1.00	68.56	A16S	ATOM	41681	O2P	GUA	1046	206.146	127.430	-9.625	1.00	75.75	A16S
ATOM	41629	N1	GUA	1043	205.300	121.926	3.812	1.00	68.56	A16S	ATOM	41682	O5'	GUA	1046	206.250	128.372	-7.298	1.00	44.67	A16S
ATOM	41630	C6	GUA	1043	205.186	123.011	4.665	1.00	68.56	A16S	ATOM	41683	C5'	GUA	1046	206.616	129.734	-7.663	1.00	44.67	A16S
ATOM	41631	O6	GUA	1043	204.072	123.383	5.043	1.00	68.56	A16S	ATOM	41684	C4'	GUA	1046	206.872	130.541	-6.407	1.00	44.67	A16S
ATOM	41632	C5	GUA	1043	206.454	123.546	4.996	1.00	68.56	A16S	ATOM	41685	O4'	GUA	1046	205.598	130.759	-5.754	1.00	44.67	A16S
ATOM	41633	N7	GUA	1043	206.789	124.625	5.801	1.00	68.56	A16S	ATOM	41686	C1'	GUA	1046	205.639	130.211	-4.456	1.00	44.67	A16S
ATOM	41634	C8	GUA	1043	208.091	124.659	5.774	1.00	68.56	A16S	ATOM	41687	N9	GUA	1046	204.311	129.716	-4.115	1.00	75.75	A16S
ATOM	41635	C2'	GUA	1043	210.524	123.826	3.376	1.00	45.77	A16S	ATOM	41688	C4	GUA	1046	203.669	129.919	-2.924	1.00	75.75	A16S
ATOM	41636	O2'	GUA	1043	211.565	122.967	2.971	1.00	45.77	A16S	ATOM	41689	N3	GUA	1046	204.156	130.611	-1.878	1.00	75.75	A16S
ATOM	41637	C3'	GUA	1043	211.032	125.233	3.628	1.00	45.77	A16S	ATOM	41690	C2	GUA	1046	203.326	130.610	-0.861	1.00	75.75	A16S
ATOM	41638	O3'	GUA	1043	211.979	125.616	2.658	1.00	45.77	A16S	ATOM	41691	N2	GUA	1046	203.667	131.221	0.262	1.00	75.75	A16S
ATOM	41639	P	URI	1044	211.523	126.558	1.445	1.00	56.72	A16S	ATOM	41692	N1	GUA	1046	202.103	129.998	-0.868	1.00	75.75	A16S
ATOM	41640	O1P	URI	1044	212.723	126.691	0.573	1.00	73.43	A16S	ATOM	41693	C6	GUA	1046	201.573	129.285	-1.934	1.00	75.75	A16S
ATOM	41641	O2P	URI	1044	210.873	127.781	1.995	1.00	73.43	A16S	ATOM	41694	O6	GUA	1046	200.453	128.771	-1.832	1.00	75.75	A16S
ATOM	41642	O5'	URI	1044	210.406	125.688	0.704	1.00	56.72	A16S	ATOM	41695	C5	GUA	1046	202.467	129.264	-3.038	1.00	75.75	A16S
ATOM	41643	C5'	URI	1044	210.716	124.387	0.150	1.00	56.72	A16S	ATOM	41696	N7	GUA	1046	202.348	128.669	-4.285	1.00	75.75	A16S
ATOM	41644	C4'	URI	1044	209.482	123.754	-0.454	1.00	56.72	A16S	ATOM	41697	C8	GUA	1046	203.464	128.968	-4.891	1.00	75.75	A16S
ATOM	41645	O4'	URI	1044	208.584	123.315	0.591	1.00	56.72	A16S	ATOM	41698	C2'	GUA	1046	206.759	129.169	-4.465	1.00	44.67	A16S
ATOM	41646	C1'	URI	1044	207.243	123.444	0.142	1.00	56.72	A16S	ATOM	41699	O2'	GUA	1046	207.265	128.915	-3.172	1.00	44.67	A16S
ATOM	41647	N1	URI	1044	206.486	124.262	1.105	1.00	73.43	A16S	ATOM	41700	C3'	GUA	1046	207.776	129.846	-5.376	1.00	44.67	A16S
ATOM	41648	C6	URI	1044	207.084	125.273	1.821	1.00	73.43	A16S	ATOM	41701	O3'	GUA	1046	208.449	130.788	-4.518	1.00	44.67	A16S
ATOM	41649	C2	URI	1044	205.139	123.987	1.261	1.00	73.43	A16S	ATOM	41702	P	URI	1047	209.823	131.499	-4.964	1.00	53.87	A16S
ATOM	41650	O2	URI	1044	204.571	123.090	0.664	1.00	73.43	A16S	ATOM	41703	O1P	URI	1047	210.290	130.937	-6.257	1.00	79.70	A16S
ATOM	41651	N3	URI	1044	204.481	124.798	2.146	1.00	73.43	A16S	ATOM	41704	O2P	URI	1047	210.717	131.474	-3.781	1.00	79.70	A16S
ATOM	41652	C4	URI	1044	205.016	125.826	2.887	1.00	73.43	A16S	ATOM	41705	O5'	URI	1047	209.363	132.999	-5.217	1.00	53.87	A16S
ATOM	41653	O4	URI	1044	204.293	126.452	3.664	1.00	73.43	A16S	ATOM	41706	C5'	URI	1047	208.156	133.240	-5.936	1.00	53.87	A16S
ATOM	41654	C5	URI	1044	206.413	126.041	2.682	1.00	73.43	A16S	ATOM	41707	C4'	URI	1047	207.637	134.625	-5.685	1.00	53.87	A16S
ATOM	41655	C2'	URI	1044	207.258	124.023	-1.279	1.00	56.72	A16S	ATOM	41708	O4'	URI	1047	207.236	134.863	-4.324	1.00	53.87	A16S
ATOM	41656	O2'	URI	1044	207.080	123.001	-2.240	1.00	56.72	A16S	ATOM	41709	C1'	URI	1047	206.993	136.241	-4.235	1.00	53.87	A16S
ATOM	41657	C3'	URI	1044	208.642	124.650	-1.352	1.00	56.72	A16S	ATOM	41710	N1	URI	1047	206.914	136.663	-2.830	1.00	79.70	A16S
ATOM	41658	O3'	URI	1044	209.121	124.615	-2.680	1.00	56.72	A16S	ATOM	41711	C6	URI	1047	207.749	136.149	-1.869	1.00	79.70	A16S
ATOM	41659	P	CYT	1045	209.266	125.978	-3.510	1.00	36.93	A16S	ATOM	41712	C2	URI	1047	205.961	137.623	-2.509	1.00	79.70	A16S
ATOM	41660	O1P	CYT	1045	210.542	125.865	-4.270	1.00	66.12	A16S	ATOM	41713	O2	URI	1047	205.190	138.102	-3.328	1.00	79.70	A16S
ATOM	41661	O2P	CYT	1045	209.038	127.141	-2.610	1.00	66.12	A16S	ATOM	41714	N3	URI	1047	205.945	138.005	-1.193	1.00	79.70	A16S
ATOM	41662	O5'	CYT	1045	208.059	125.941	-4.544	1.00	36.93	A16S	ATOM	41715	C4	URI	1047	206.760	137.536	-0.185	1.00	79.70	A16S
ATOM	41663	C5'	CYT	1045	207.937	124.871	-5.488	1.00	36.93	A16S	ATOM	41716	O4	URI	1047	206.615	137.968	0.960	1.00	79.70	A16S
ATOM	41664	C4'	CYT	1045	206.486	124.608	-5.793	1.00	36.93	A16S	ATOM	41717	C5	URI	1047	207.708	136.544	-0.592	1.00	79.70	A16S
ATOM	41665	O4'	CYT	1045	205.825	124.156	-4.588	1.00	36.93	A16S	ATOM	41718	C2'	URI	1047	208.103	136.909	-5.052	1.00	53.87	A16S
ATOM	41666	C1'	CYT	1045	204.495	124.637	-4.571	1.00	36.93	A16S	ATOM	41719	O2'	URI	1047	207.592	138.058	-5.697	1.00	53.87	A16S
ATOM	41667	N1	CYT	1045	204.309	125.450	-3.351	1.00	66.12	A16S	ATOM	41720	C3'	URI	1047	208.599	135.758	-5.952	1.00	53.87	A16S
ATOM	41668	C6	CYT	1045	205.246	126.371	-2.972	1.00	66.12	A16S	ATOM	41721	O3'	URI	1047	208.750	135.981	-7.366	1.00	53.87	A16S
ATOM	41669	C2	CYT	1045	203.154	125.265	-2.581	1.00	66.12	A16S	ATOM	41722	P	CYT	1048	207.462	136.210	-8.317	1.00	52.30	A16S
ATOM	41670	O2	CYT	1045	202.321	124.411	-2.930	1.00	66.12	A16S	ATOM	41723	O1P	CYT	1048	208.012	136.264	-9.701	1.00	70.73	A16S
ATOM	41671	N3	CYT	1045	202.977	126.016	-1.470	1.00	66.12	A16S	ATOM	41724	O2P	CYT	1048	206.598	137.328	-7.837	1.00	70.73	A16S
ATOM	41672	C4	CYT	1045	203.900	126.907	-1.112	1.00	66.12	A16S	ATOM	41725	O5'	CYT	1048	206.642	134.848	-8.179	1.00	52.30	A16S
ATOM	41673	N4	CYT	1045	203.685	127.615	-0.004	1.00	66.12	A16S	ATOM	41726	C5'	CYT	1048	206.657	133.859	-9.227	1.00	52.30	A16S
ATOM	41674	C5	CYT	1045	205.084	127.110	-1.871	1.00	66.12	A16S	ATOM	41727	C4'	CYT	1048	205.303	133.197	-9.349	1.00	52.30	A16S
ATOM	41675	C2'	CYT	1045	204.261	125.401	-5.876	1.00	36.93	A16S	ATOM	41728	O4'	CYT	1048	205.024	132.430	-8.154	1.00	52.30	A16S
ATOM	41676	O2'	CYT	1045	203.708	124.534	-6.844	1.00	36.93	A16S	ATOM	41729	C1'	CYT	1048	203.625	132.416	-7.930	1.00	52.30	A16S

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ATOM  41730  N1  CYT  1048     203.351 132.745  -6.518  1.00 70.73      A16S
ATOM  41731  C6  CYT  1048     204.229 133.491  -5.782  1.00 70.73      A16S
ATOM  41732  C2  CYT  1048     202.183 132.257  -5.932  1.00 70.73      A16S
ATOM  41733  O2  CYT  1048     201.381 131.621  -6.630  1.00 70.73      A16S
ATOM  41734  N3  CYT  1048     201.952 132.493  -4.623  1.00 70.73      A16S
ATOM  41735  C4  CYT  1048     202.830 133.193  -3.905  1.00 70.73      A16S
ATOM  41736  N4  CYT  1048     202.579 133.367  -2.603  1.00 70.73      A16S
ATOM  41737  C5  CYT  1048     204.010 133.735  -4.485  1.00 70.73      A16S
ATOM  41738  C2' CYT  1048     202.942 133.287  -8.992  1.00 52.30      A16S
ATOM  41739  O2' CYT  1048     202.404 132.441  -9.981  1.00 52.30      A16S
ATOM  41740  C3' CYT  1048     204.099 134.116  -9.540  1.00 52.30      A16S
ATOM  41741  O3' CYT  1048     203.902 134.348 -10.932  1.00 52.30      A16S
ATOM  41742  P   ADE  1049     203.156 135.677 -11.435  1.00 45.52      A16S
ATOM  41743  O1P ADE  1049     202.952 135.614 -12.905  1.00 59.07      A16S
ATOM  41744  O2P ADE  1049     203.880 136.826 -10.847  1.00 59.07      A16S
ATOM  41745  O5' ADE  1049     201.719 135.571 -10.770  1.00 45.52      A16S
ATOM  41746  C5' ADE  1049     200.791 134.529 -11.161  1.00 45.52      A16S
ATOM  41747  C4' ADE  1049     199.372 134.935 -10.825  1.00 45.52      A16S
ATOM  41748  O4' ADE  1049     199.208 134.959  -9.378  1.00 45.52      A16S
ATOM  41749  C1' ADE  1049     198.992 136.279  -8.923  1.00 45.52      A16S
ATOM  41750  N9  ADE  1049     199.976 136.518  -7.869  1.00 59.07      A16S
ATOM  41751  C4  ADE  1049     199.805 136.351  -6.515  1.00 59.07      A16S
ATOM  41752  N3  ADE  1049     198.689 135.974  -5.871  1.00 59.07      A16S
ATOM  41753  C2  ADE  1049     198.910 135.887  -4.562  1.00 59.07      A16S
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ATOM  41755  C6  ADE  1049     201.131 136.509  -4.553  1.00 59.07      A16S
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ATOM  41759  C8  ADE  1049     201.280 136.919  -8.028  1.00 59.07      A16S
ATOM  41760  C2' ADE  1049     199.202 137.221 -10.104  1.00 45.52      A16S
ATOM  41761  O2' ADE  1049     198.440 138.387 -10.002  1.00 45.52      A16S
ATOM  41762  C3' ADE  1049     199.004 136.319 -11.329  1.00 45.52      A16S
ATOM  41763  O3' ADE  1049     197.841 136.334 -12.199  1.00 45.52      A16S
ATOM  41764  P   GUA  1050     196.352 136.062 -11.631  1.00 33.05      A16S
ATOM  41765  O1P GUA  1050     195.388 136.245 -12.757  1.00 47.67      A16S
ATOM  41766  O2P GUA  1050     196.204 136.882 -10.415  1.00 47.67      A16S
ATOM  41767  O5' GUA  1050     196.344 134.530 -11.196  1.00 33.05      A16S
ATOM  41768  C5' GUA  1050     195.247 133.994 -10.452  1.00 33.05      A16S
ATOM  41769  C4' GUA  1050     195.741 133.365  -9.173  1.00 33.05      A16S
ATOM  41770  O4' GUA  1050     196.566 134.316  -8.457  1.00 33.05      A16S
ATOM  41771  C1' GUA  1050     196.247 134.303  -7.071  1.00 33.05      A16S
ATOM  41772  N9  GUA  1050     195.686 135.615  -6.738  1.00 47.67      A16S
ATOM  41773  C4  GUA  1050     195.263 136.073  -5.504  1.00 47.67      A16S
ATOM  41774  N3  GUA  1050     195.277 135.382  -4.343  1.00 47.67      A16S
ATOM  41775  C2  GUA  1050     194.776 136.091  -3.340  1.00 47.67      A16S
ATOM  41776  N2  GUA  1050     194.693 135.556  -2.121  1.00 47.67      A16S
ATOM  41777  N1  GUA  1050     194.312 137.375  -3.463  1.00 47.67      A16S
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ATOM  41779  O6  GUA  1050     193.842 139.258  -4.655  1.00 47.67      A16S
ATOM  41780  C5  GUA  1050     194.814 137.361  -5.728  1.00 47.67      A16S
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ATOM  41782  C8  GUA  1050     195.473 136.649  -7.619  1.00 47.67      A16S
ATOM  41783  C2' GUA  1050     195.285 133.138  -6.839  1.00 33.05      A16S
ATOM  41784  O2' GUA  1050     196.000 131.972  -6.497  1.00 33.05      A16S
ATOM  41785  C3' GUA  1050     194.623 133.013  -8.205  1.00 33.05      A16S
ATOM  41786  O3' GUA  1050     194.089 131.711  -8.443  1.00 33.05      A16S
ATOM  41787  P   CYT  1051     192.524 131.454  -8.218  1.00 56.88      A16S
ATOM  41788  O1P CYT  1051     192.254 130.027  -8.496  1.00 51.62      A16S
ATOM  41789  O2P CYT  1051     191.773 132.517  -8.972  1.00 51.62      A16S
ATOM  41790  O5' CYT  1051     192.354 131.652  -6.648  1.00 56.88      A16S
ATOM  41791  C5' CYT  1051     192.953 130.725  -5.727  1.00 56.88      A16S
ATOM  41792  C4' CYT  1051     192.499 131.019  -4.317  1.00 56.88      A16S
ATOM  41793  O4' CYT  1051     193.064 132.279  -3.874  1.00 56.88      A16S
ATOM  41794  C1' CYT  1051     192.141 132.955  -3.036  1.00 56.88      A16S
ATOM  41795  N1  CYT  1051     191.777 134.239  -3.667  1.00 51.62      A16S
ATOM  41796  C6  CYT  1051     191.846 134.411  -5.021  1.00 51.62      A16S
ATOM  41797  C2  CYT  1051     191.357 135.287  -2.848  1.00 51.62      A16S
ATOM  41798  O2  CYT  1051     191.291 135.094  -1.619  1.00 51.62      A16S
ATOM  41799  N3  CYT  1051     191.030 136.481  -3.411  1.00 51.62      A16S
ATOM  41800  C4  CYT  1051     191.106 136.638  -4.735  1.00 51.62      A16S
ATOM  41801  N4  CYT  1051     190.777 137.828  -5.252  1.00 51.62      A16S
ATOM  41802  C5  CYT  1051     191.522 135.582  -5.590  1.00 51.62      A16S
ATOM  41803  C2' CYT  1051     190.936 132.041  -2.855  1.00 56.88      A16S
ATOM  41804  O2' CYT  1051     191.112 131.287  -1.671  1.00 56.88      A16S
ATOM  41805  C3' CYT  1051     191.005 131.198  -4.123  1.00 56.88      A16S
ATOM  41806  O3' CYT  1051     190.313 129.967  -4.005  1.00 56.88      A16S
ATOM  41807  P   URI  1052     188.715 129.960  -4.115  1.00 56.25      A16S
ATOM  41808  O1P URI  1052     188.234 128.600  -3.759  1.00 37.38      A16S
ATOM  41809  O2P URI  1052     188.327 130.580  -5.407  1.00 37.38      A16S
ATOM  41810  O5' URI  1052     188.284 130.936  -2.942  1.00 56.25      A16S
ATOM  41811  C5' URI  1052     187.034 131.622  -2.962  1.00 56.25      A16S
ATOM  41812  C4' URI  1052     186.946 132.533  -1.771  1.00 56.25      A16S
ATOM  41813  O4' URI  1052     187.945 133.575  -1.882  1.00 56.25      A16S
ATOM  41814  C1' URI  1052     187.424 134.790  -1.383  1.00 56.25      A16S
ATOM  41815  N1  URI  1052     187.398 135.759  -2.488  1.00 37.38      A16S
ATOM  41816  C6  URI  1052     187.681 135.368  -3.768  1.00 37.38      A16S
ATOM  41817  C2  URI  1052     187.094 137.081  -2.206  1.00 37.38      A16S
ATOM  41818  O2  URI  1052     186.798 137.481  -1.094  1.00 37.38      A16S
ATOM  41819  N3  URI  1052     187.141 137.924  -3.284  1.00 37.38      A16S
ATOM  41820  C4  URI  1052     187.442 137.596  -4.581  1.00 37.38      A16S
ATOM  41821  O4  URI  1052     187.556 138.490  -5.418  1.00 37.38      A16S
ATOM  41822  C5  URI  1052     187.709 136.216  -4.794  1.00 37.38      A16S
ATOM  41823  C2' URI  1052     186.040 134.489  -0.811  1.00 56.25      A16S
ATOM  41824  O2' URI  1052     186.197 134.198   0.564  1.00 56.25      A16S
ATOM  41825  C3' URI  1052     185.635 133.269  -1.624  1.00 56.25      A16S
ATOM  41826  O3' URI  1052     184.694 132.440  -0.964  1.00 56.25      A16S
ATOM  41827  P   CYT  1053     183.127 132.646  -1.239  1.00 63.56      A16S
ATOM  41828  O1P CYT  1053     182.425 131.420  -0.736  1.00 34.17      A16S
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ATOM  41830  O5' CYT  1053     182.776 133.887  -0.307  1.00 63.56      A16S
ATOM  41831  C5' CYT  1053     183.252 133.945   1.060  1.00 63.56      A16S
ATOM  41832  C4' CYT  1053     183.053 135.332   1.632  1.00 63.56      A16S
ATOM  41833  O4' CYT  1053     183.987 136.264   1.031  1.00 63.56      A16S
ATOM  41834  C1' CYT  1053     183.369 137.529   0.889  1.00 63.56      A16S
ATOM  41835  N1  CYT  1053     183.399 137.920  -0.529  1.00 34.17      A16S
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ATOM  41836  C6  CYT  1053     183.709 137.017  -1.504  1.00 34.17      A16S
ATOM  41837  C2  CYT  1053     183.106 139.253  -0.870  1.00 34.17      A16S
ATOM  41838  O2  CYT  1053     182.788 140.049   0.034  1.00 34.17      A16S
ATOM  41839  N3  CYT  1053     183.162 139.635  -2.174  1.00 34.17      A16S
ATOM  41840  C4  CYT  1053     183.476 138.740  -3.116  1.00 34.17      A16S
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ATOM  41842  C5  CYT  1053     183.757 137.378  -2.796  1.00 34.17      A16S
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ATOM  41844  O2' CYT  1053     181.960 137.949   2.770  1.00 63.56      A16S
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ATOM  41847  P   GUA  1054     179.161 135.475   1.962  1.00 53.57      A16S
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ATOM  41849  O2P GUA  1054     178.936 134.947   0.592  1.00 48.56      A16S
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ATOM  41851  C5' GUA  1054     178.869 137.840   3.075  1.00 53.57      A16S
ATOM  41852  C4' GUA  1054     178.434 139.239   2.754  1.00 53.57      A16S
ATOM  41853  O4' GUA  1054     179.449 139.904   1.966  1.00 53.57      A16S
ATOM  41854  C1' GUA  1054     178.838 140.860   1.118  1.00 53.57      A16S
ATOM  41855  N9  GUA  1054     179.241 140.610  -0.266  1.00 48.56      A16S
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ATOM  41866  C2' GUA  1054     177.323 140.758   1.322  1.00 53.57      A16S
ATOM  41867  O2' GUA  1054     176.906 141.758   2.221  1.00 53.57      A16S
ATOM  41868  C3' GUA  1054     177.175 139.367   1.920  1.00 53.57      A16S
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ATOM  41887  O2' URI  1055     172.564 143.461  -1.730  1.00 42.58      A16S
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ATOM  41894  C5' GUA  1056     170.093 142.069  -3.322  1.00 40.14      A16S
ATOM  41895  C4' GUA  1056     170.497 142.497  -4.706  1.00 40.14      A16S
ATOM  41896  O4' GUA  1056     171.935 142.663  -4.799  1.00 40.14      A16S
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ATOM  41909  C2' GUA  1056     171.122 141.993  -6.922  1.00 40.14      A16S
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ATOM  41913  P   CYT  1057     168.033 140.383  -6.728  1.00 43.60      A16S
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ATOM  41915  O2P CYT  1057     168.381 139.323  -5.741  1.00 45.01      A16S
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ATOM  41917  C5' CYT  1057     168.501 140.911  -9.249  1.00 43.60      A16S
ATOM  41918  C4' CYT  1057     169.356 140.458 -10.396  1.00 43.60      A16S
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ATOM  41939  O4' CYT  1058     170.872 135.558 -13.818  1.00 49.69      A16S
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ATOM  41941  N1  CYT  1058     171.572 134.058 -12.179  1.00 34.07      A16S
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ATOM  41973  O2' GUA  1059     169.519 126.713 -13.418  1.00 37.08      A16S
ATOM  41974  C3' GUA  1059     167.989 128.591 -13.411  1.00 37.08      A16S
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ATOM  42002  O4' GUA  1061     169.056 123.120  -8.045  1.00 37.91      A16S
ATOM  42003  C1' GUA  1061     170.273 122.652  -8.583  1.00 37.91      A16S
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ATOM  42005  C4  GUA  1061     170.874 122.594 -11.039  1.00 35.72      A16S
ATOM  42006  N3  GUA  1061     171.369 121.346 -11.093  1.00 35.72      A16S
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ATOM  42008  N2  GUA  1061     172.164 119.766 -12.553  1.00 35.72      A16S
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ATOM  42012  C5  GUA  1061     170.674 123.483 -12.072  1.00 35.72      A16S
ATOM  42013  N7  GUA  1061     170.154 124.679 -11.600  1.00 35.72      A16S
ATOM  42014  C8  GUA  1061     170.024 124.487 -10.316  1.00 35.72      A16S
ATOM  42015  C2' GUA  1061     171.376 123.001  -7.587  1.00 37.91      A16S
ATOM  42016  O2' GUA  1061     171.515 121.920  -6.683  1.00 37.91      A16S
ATOM  42017  C3' GUA  1061     170.774 124.200  -6.876  1.00 37.91      A16S
ATOM  42018  O3' GUA  1061     171.303 124.356  -5.577  1.00 37.91      A16S
ATOM  42019  P   ADE  1062     172.601 125.268  -5.367  1.00 36.89      A16S
ATOM  42020  O1P ADE  1062     172.774 125.473  -3.916  1.00 29.90      A16S
ATOM  42021  O2P ADE  1062     172.510 126.424  -6.277  1.00 29.90      A16S
ATOM  42022  O5' ADE  1062     173.800 124.333  -5.807  1.00 36.89      A16S
ATOM  42023  C5' ADE  1062     174.073 123.136  -5.075  1.00 36.89      A16S
ATOM  42024  C4' ADE  1062     175.100 122.321  -5.795  1.00 36.89      A16S
ATOM  42025  O4' ADE  1062     174.548 121.836  -7.040  1.00 36.89      A16S
ATOM  42026  C1' ADE  1062     175.568 121.780  -8.012  1.00 36.89      A16S
ATOM  42027  N9  ADE  1062     175.171 122.590  -9.162  1.00 29.90      A16S
ATOM  42028  C4  ADE  1062     175.074 122.139 -10.458  1.00 29.90      A16S
ATOM  42029  N3  ADE  1062     175.318 120.897 -10.913  1.00 29.90      A16S
ATOM  42030  C2  ADE  1062     175.112 120.829 -12.220  1.00 29.90      A16S
ATOM  42031  N1  ADE  1062     174.713 121.781 -13.060  1.00 29.90      A16S
ATOM  42032  C6  ADE  1062     174.471 123.017 -12.572  1.00 29.90      A16S
ATOM  42033  N6  ADE  1062     174.050 123.966 -13.408  1.00 29.90      A16S
ATOM  42034  C5  ADE  1062     174.665 123.226 -11.205  1.00 29.90      A16S
ATOM  42035  N7  ADE  1062     174.514 124.346 -10.402  1.00 29.90      A16S
ATOM  42036  C8  ADE  1062     174.823 123.917  -9.201  1.00 29.90      A16S
ATOM  42037  C2' ADE  1062     176.867 122.236  -7.352  1.00 36.89      A16S
ATOM  42038  O2' ADE  1062     177.511 121.066  -6.897  1.00 36.89      A16S
ATOM  42039  C3' ADE  1062     176.352 123.076  -6.193  1.00 36.89      A16S
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ATOM  42041  P   GUA  1063     178.128 124.450  -4.811  1.00 30.19      A16S
ATOM  42042  O1P GUA  1063     178.927 124.168  -3.588  1.00 46.29      A16S
ATOM  42043  O2P GUA  1063     177.234 125.632  -4.855  1.00 46.29      A16S
ATOM  42044  O5' GUA  1063     179.094 124.550  -6.069  1.00 30.19      A16S
ATOM  42045  C5' GUA  1063     179.412 125.795  -6.671  1.00 30.19      A16S
ATOM  42046  C4' GUA  1063     178.962 125.795  -8.102  1.00 30.19      A16S
ATOM  42047  O4' GUA  1063     177.517 125.630  -8.148  1.00 30.19      A16S
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ATOM  42048  C1' GUA  1063     176.967 126.495  -9.136  1.00 30.19      A16S
ATOM  42049  N9  GUA  1063     176.145 127.490  -8.451  1.00 46.29      A16S
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ATOM  42151  O1P URI  1068     189.907 136.901 -13.757  1.00 62.35      A16S
ATOM  42152  O2P URI  1068     190.028 139.117 -15.042  1.00 62.35      A16S
ATOM  42153  O5' URI  1068     189.095 137.067 -16.084  1.00 52.95      A16S
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ATOM	42154	C5'	URI	1068	188.387	135.801	-16.115	1.00	52.95	A16S	ATOM	42207	C6	GUA	1070	190.946	145.155	-20.144	1.00	44.76	A16S
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ATOM	42157	C1'	URI	1068	185.340	137.109	-17.559	1.00	52.95	A16S	ATOM	42210	N7	GUA	1070	190.323	143.147	-21.556	1.00	44.76	A16S
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ATOM	42166	C2'	URI	1068	186.122	136.997	-18.872	1.00	52.95	A16S	ATOM	42219	O5'	GUA	1071	194.566	144.554	-25.823	1.00	74.15	A16S
ATOM	42167	O2'	URI	1068	185.597	135.938	-19.641	1.00	52.95	A16S	ATOM	42220	C5'	GUA	1071	194.630	145.744	-26.619	1.00	74.15	A16S
ATOM	42168	C3'	URI	1068	187.528	136.698	-18.373	1.00	52.95	A16S	ATOM	42221	C4'	GUA	1071	195.037	146.920	-25.774	1.00	74.15	A16S
ATOM	42169	O3'	URI	1068	188.307	136.033	-19.353	1.00	52.95	A16S	ATOM	42222	O4'	GUA	1071	193.990	147.188	-24.806	1.00	74.15	A16S
ATOM	42170	P	GUA	1069	189.446	136.844	-20.139	1.00	49.87	A16S	ATOM	42223	C1'	GUA	1071	194.570	147.690	-23.617	1.00	74.15	A16S
ATOM	42171	O1P	GUA	1069	190.138	135.856	-20.997	1.00	42.65	A16S	ATOM	42224	N9	GUA	1071	194.339	146.748	-22.526	1.00	53.27	A16S
ATOM	42172	O2P	GUA	1069	190.240	137.630	-19.161	1.00	42.65	A16S	ATOM	42225	C4	GUA	1071	194.516	147.037	-21.198	1.00	53.27	A16S
ATOM	42173	O5'	GUA	1069	188.620	137.837	-21.068	1.00	49.87	A16S	ATOM	42226	N3	GUA	1071	194.865	148.243	-20.696	1.00	53.27	A16S
ATOM	42174	C5'	GUA	1069	187.810	137.323	-22.127	1.00	49.87	A16S	ATOM	42227	C2	GUA	1071	194.996	148.219	-19.386	1.00	53.27	A16S
ATOM	42175	C4'	GUA	1069	187.191	138.452	-22.901	1.00	49.87	A16S	ATOM	42228	N2	GUA	1071	195.325	149.345	-18.748	1.00	53.27	A16S
ATOM	42176	O4'	GUA	1069	186.263	139.152	-22.042	1.00	49.87	A16S	ATOM	42229	N1	GUA	1071	194.810	147.091	-18.613	1.00	53.27	A16S
ATOM	42177	C1'	GUA	1069	186.316	140.544	-22.310	1.00	49.87	A16S	ATOM	42230	C6	GUA	1071	194.452	145.837	-19.103	1.00	53.27	A16S
ATOM	42178	N9	GUA	1069	186.784	141.215	-21.098	1.00	42.65	A16S	ATOM	42231	O6	GUA	1071	194.321	144.893	-18.321	1.00	53.27	A16S
ATOM	42179	C4	GUA	1069	186.984	142.563	-20.933	1.00	42.65	A16S	ATOM	42232	C5	GUA	1071	194.295	145.855	-20.529	1.00	53.27	A16S
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ATOM	42181	C2	GUA	1069	187.071	144.713	-21.409	1.00	42.65	A16S	ATOM	42234	C8	GUA	1071	193.977	145.426	-22.593	1.00	53.27	A16S
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ATOM	42189	C2'	GUA	1069	187.252	140.750	-23.500	1.00	49.87	A16S	ATOM	42242	O5'	URI	1072	199.124	146.677	-23.649	1.00	72.64	A16S
ATOM	42190	O2'	GUA	1069	186.501	140.757	-24.699	1.00	49.87	A16S	ATOM	42243	C5'	URI	1072	199.456	148.047	-23.416	1.00	72.64	A16S
ATOM	42191	C3'	GUA	1069	188.152	139.528	-23.385	1.00	49.87	A16S	ATOM	42244	C4'	URI	1072	199.537	148.316	-21.938	1.00	72.64	A16S
ATOM	42192	O3'	GUA	1069	188.770	139.193	-24.619	1.00	49.87	A16S	ATOM	42245	O4'	URI	1072	198.252	148.032	-21.322	1.00	72.64	A16S
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ATOM	42194	O1P	GUA	1070	190.745	138.533	-25.945	1.00	44.76	A16S	ATOM	42247	N1	URI	1072	197.916	146.214	-19.861	1.00	69.38	A16S
ATOM	42195	O2P	GUA	1070	190.989	139.109	-23.451	1.00	44.76	A16S	ATOM	42248	C6	URI	1072	197.605	145.439	-20.953	1.00	69.38	A16S
ATOM	42196	O5'	GUA	1070	190.551	140.905	-25.131	1.00	72.06	A16S	ATOM	42249	C2	URI	1072	197.757	145.727	-18.579	1.00	69.38	A16S
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ATOM	42198	C4'	GUA	1070	190.273	142.928	-26.427	1.00	72.06	A16S	ATOM	42251	N3	URI	1072	197.310	144.434	-18.499	1.00	69.38	A16S
ATOM	42199	O4'	GUA	1070	189.327	143.530	-25.506	1.00	72.06	A16S	ATOM	42252	C4	URI	1072	197.003	143.595	-19.545	1.00	69.38	A16S
ATOM	42200	C1'	GUA	1070	189.923	144.644	-24.863	1.00	72.06	A16S	ATOM	42253	O4	URI	1072	196.643	142.440	-19.308	1.00	69.38	A16S
ATOM	42201	N9	GUA	1070	190.107	144.324	-23.450	1.00	44.76	A16S	ATOM	42254	C5	URI	1072	197.168	144.178	-20.843	1.00	69.38	A16S
ATOM	42202	C4	GUA	1070	190.432	145.225	-22.483	1.00	44.76	A16S	ATOM	42255	C2'	URI	1072	199.962	147.553	-19.737	1.00	72.64	A16S
ATOM	42203	N3	GUA	1070	190.599	146.545	-22.676	1.00	44.76	A16S	ATOM	42256	O2'	URI	1072	200.343	148.737	-19.071	1.00	72.64	A16S
ATOM	42204	C2	GUA	1070	190.953	147.159	-21.574	1.00	44.76	A16S	ATOM	42257	C3'	URI	1072	200.519	147.464	-21.150	1.00	72.64	A16S
ATOM	42205	N2	GUA	1070	191.186	148.475	-21.617	1.00	44.76	A16S	ATOM	42258	O3'	URI	1072	201.851	147.946	-21.210	1.00	72.64	A16S
ATOM	42206	N1	GUA	1070	191.113	146.524	-20.360	1.00	44.76	A16S	ATOM	42259	P	URI	1073	203.072	146.927	-20.966	1.00	58.31	A16S

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ATOM  42305  C5' ADE  1075     202.370 139.954 -12.805  1.00 65.87      A16S
ATOM  42306  C4' ADE  1075     201.581 140.300 -11.571  1.00 65.87      A16S
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ATOM  42342  C2' GUA  1076     194.931 140.165  -9.251  1.00 55.86      A16S
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ATOM  42391  C4' CYT  1079     192.611 153.471 -16.216  1.00 76.12      A16S
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ATOM  42402  C2' CYT  1079     191.477 152.494 -18.061  1.00 76.12      A16S
ATOM  42403  O2' CYT  1079     191.689 153.385 -19.139  1.00 76.12      A16S
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ATOM  42405  O3' CYT  1079     190.478 154.408 -16.921  1.00 76.12      A16S
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ATOM  42407  O1P CYT  1080     188.463 155.841 -16.723  1.00 62.90      A16S
ATOM  42408  O2P CYT  1080     188.657 153.648 -15.370  1.00 62.90      A16S
ATOM  42409  O5' CYT  1080     188.251 153.656 -17.878  1.00 65.72      A16S
ATOM  42410  C5' CYT  1080     188.128 154.324 -19.146  1.00 65.72      A16S
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ATOM  42412  O4' CYT  1080     188.846 152.341 -20.360  1.00 65.72      A16S
ATOM  42413  C1' CYT  1080     188.287 151.126 -20.835  1.00 65.72      A16S
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ATOM  42421  C5  CYT  1080     188.907 149.477 -17.577  1.00 62.90      A16S
ATOM  42422  C2' CYT  1080     186.808 151.379 -21.087  1.00 65.72      A16S
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ATOM  42424  C3' CYT  1080     186.541 152.528 -20.136  1.00 65.72      A16S
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ATOM  42432  O4' GUA  1081     184.474 148.885 -21.499  1.00 69.76      A16S
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ATOM  42445  C2' GUA  1081     182.600 147.454 -21.262  1.00 69.76      A16S
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ATOM  42448  O3' GUA  1081     180.907 149.103 -21.871  1.00 69.76      A16S
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ATOM  42452  O5' CYT  1082     179.272 147.910 -20.346  1.00 56.06      A16S
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ATOM  42456  C1' CYT  1082     180.223 144.707 -18.668  1.00 56.06      A16S
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ATOM  42461  N3  CYT  1082     181.999 145.833 -15.622  1.00 44.06      A16S
ATOM  42462  C4  CYT  1082     182.141 147.130 -15.882  1.00 44.06      A16S
ATOM  42463  N4  CYT  1082     182.775 147.879 -14.976  1.00 44.06      A16S
ATOM  42464  C5  CYT  1082     181.643 147.718 -17.084  1.00 44.06      A16S
ATOM  42465  C2' CYT  1082     178.766 144.430 -18.322  1.00 56.06      A16S
ATOM  42466  O2' CYT  1082     178.469 143.089 -18.644  1.00 56.06      A16S
ATOM  42467  C3' CYT  1082     178.046 145.445 -19.199  1.00 56.06      A16S
ATOM  42468  O3' CYT  1082     176.744 145.011 -19.550  1.00 56.06      A16S
ATOM  42469  P   ADE  1083     175.464 145.725 -18.901  1.00 70.26      A16S
ATOM  42470  O1P ADE  1083     174.299 145.338 -19.758  1.00 45.42      A16S
ATOM  42471  O2P ADE  1083     175.786 147.165 -18.705  1.00 45.42      A16S
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ATOM  42472  O5' ADE  1083     175.333 145.030 -17.473  1.00 70.26      A16S
ATOM  42473  C5' ADE  1083     175.201 143.606 -17.371  1.00 70.26      A16S
ATOM  42474  C4' ADE  1083     175.500 143.148 -15.968  1.00 70.26      A16S
ATOM  42475  O4' ADE  1083     174.554 143.720 -15.054  1.00 70.26      A16S
ATOM  42476  C1' ADE  1083     174.363 142.838 -13.969  1.00 70.26      A16S
ATOM  42477  N9  ADE  1083     172.971 142.961 -13.529  1.00 45.42      A16S
ATOM  42478  C4  ADE  1083     172.549 143.102 -12.229  1.00 45.42      A16S
ATOM  42479  N3  ADE  1083     173.307 143.095 -11.117  1.00 45.42      A16S
ATOM  42480  C2  ADE  1083     172.561 143.316 -10.039  1.00 45.42      A16S
ATOM  42481  N1  ADE  1083     171.244 143.519  -9.950  1.00 45.42      A16S
ATOM  42482  C6  ADE  1083     170.510 143.501 -11.081  1.00 45.42      A16S
ATOM  42483  N6  ADE  1083     169.189 143.680 -10.987  1.00 45.42      A16S
ATOM  42484  C5  ADE  1083     171.186 143.286 -12.297  1.00 45.42      A16S
ATOM  42485  N7  ADE  1083     170.749 143.226 -13.612  1.00 45.42      A16S
ATOM  42486  C8  ADE  1083     171.838 143.019 -14.299  1.00 45.42      A16S
ATOM  42487  C2' ADE  1083     174.867 141.440 -14.352  1.00 70.26      A16S
ATOM  42488  O2' ADE  1083     175.786 140.908 -13.421  1.00 70.26      A16S
ATOM  42489  C3' ADE  1083     175.410 141.645 -15.767  1.00 70.26      A16S
ATOM  42490  O3' ADE  1083     176.677 141.018 -16.066  1.00 70.26      A16S
ATOM  42491  P   ADE  1084     178.069 141.535 -15.390  1.00 51.18      A16S
ATOM  42492  O1P ADE  1084     179.051 141.348 -16.479  1.00 50.90      A16S
ATOM  42493  O2P ADE  1084     178.353 140.959 -14.044  1.00 50.90      A16S
ATOM  42494  O5' ADE  1084     177.922 143.106 -15.217  1.00 51.18      A16S
ATOM  42495  C5' ADE  1084     178.794 143.835 -14.340  1.00 51.18      A16S
ATOM  42496  C4' ADE  1084     177.974 144.610 -13.347  1.00 51.18      A16S
ATOM  42497  O4' ADE  1084     177.101 143.686 -12.666  1.00 51.18      A16S
ATOM  42498  C1' ADE  1084     176.979 144.057 -11.313  1.00 51.18      A16S
ATOM  42499  N9  ADE  1084     177.489 142.957 -10.500  1.00 50.90      A16S
ATOM  42500  C4  ADE  1084     177.258 142.745  -9.162  1.00 50.90      A16S
ATOM  42501  N3  ADE  1084     176.536 143.511  -8.326  1.00 50.90      A16S
ATOM  42502  C2  ADE  1084     176.535 142.988  -7.096  1.00 50.90      A16S
ATOM  42503  N1  ADE  1084     177.124 141.872  -6.650  1.00 50.90      A16S
ATOM  42504  C6  ADE  1084     177.835 141.130  -7.521  1.00 50.90      A16S
ATOM  42505  N6  ADE  1084     178.412 140.017  -7.081  1.00 50.90      A16S
ATOM  42506  C5  ADE  1084     177.920 141.577  -8.847  1.00 50.90      A16S
ATOM  42507  N7  ADE  1084     178.559 141.064  -9.960  1.00 50.90      A16S
ATOM  42508  C8  ADE  1084     178.277 141.920 -10.910  1.00 50.90      A16S
ATOM  42509  C2' ADE  1084     177.716 145.384 -11.121  1.00 51.18      A16S
ATOM  42510  O2' ADE  1084     176.764 146.424 -11.299  1.00 51.18      A16S
ATOM  42511  C3' ADE  1084     178.742 145.333 -12.250  1.00 51.18      A16S
ATOM  42512  O3' ADE  1084     179.112 146.638 -12.707  1.00 51.18      A16S
ATOM  42513  P   CYT  1085     180.278 147.465 -11.958  1.00 56.46      A16S
ATOM  42514  O1P CYT  1085     180.348 148.734 -12.729  1.00 52.67      A16S
ATOM  42515  O2P CYT  1085     181.503 146.647 -11.784  1.00 52.67      A16S
ATOM  42516  O5' CYT  1085     179.698 147.738 -10.498  1.00 56.46      A16S
ATOM  42517  C5' CYT  1085     178.711 148.762 -10.273  1.00 56.46      A16S
ATOM  42518  C4' CYT  1085     178.458 148.924  -8.799  1.00 56.46      A16S
ATOM  42519  O4' CYT  1085     177.835 147.725  -8.276  1.00 56.46      A16S
ATOM  42520  C1' CYT  1085     178.319 147.459  -6.971  1.00 56.46      A16S
ATOM  42521  N1  CYT  1085     178.958 146.134  -6.970  1.00 52.67      A16S
ATOM  42522  C6  CYT  1085     179.350 145.543  -8.136  1.00 52.67      A16S
ATOM  42523  C2  CYT  1085     179.161 145.484  -5.747  1.00 52.67      A16S
ATOM  42524  O2  CYT  1085     178.809 146.048  -4.700  1.00 52.67      A16S
ATOM  42525  N3  CYT  1085     179.736 144.261  -5.735  1.00 52.67      A16S
ATOM  42526  C4  CYT  1085     180.107 143.692  -6.878  1.00 52.67      A16S
ATOM  42527  N4  CYT  1085     180.658 142.486  -6.821  1.00 52.67      A16S
ATOM  42528  C5  CYT  1085     179.925 144.336  -8.135  1.00 52.67      A16S
ATOM  42529  C2' CYT  1085     179.295 148.569  -6.596  1.00 56.46      A16S
ATOM  42530  O2' CYT  1085     178.631 149.508  -5.777  1.00 56.46      A16S
ATOM  42531  C3' CYT  1085     179.715 149.079  -7.972  1.00 56.46      A16S
ATOM  42532  O3' CYT  1085     180.206 150.405  -7.984  1.00 56.46      A16S
ATOM  42533  P   GUA  1086     181.732 150.667  -7.577  1.00 51.91      A16S
ATOM  42534  O1P GUA  1086     182.006 152.141  -7.601  1.00 46.21      A16S
ATOM  42535  O2P GUA  1086     182.556 149.749  -8.412  1.00 46.21      A16S
ATOM  42536  O5' GUA  1086     181.771 150.186  -6.060  1.00 51.91      A16S
ATOM  42537  C5' GUA  1086     182.998 149.875  -5.414  1.00 51.91      A16S
ATOM  42538  C4' GUA  1086     182.715 149.320  -4.052  1.00 51.91      A16S
ATOM  42539  O4' GUA  1086     181.764 148.237  -4.180  1.00 51.91      A16S
ATOM  42540  C1' GUA  1086     182.064 147.223  -3.236  1.00 51.91      A16S
ATOM  42541  N9  GUA  1086     182.380 145.992  -3.959  1.00 46.21      A16S
ATOM  42542  C4  GUA  1086     182.527 144.740  -3.407  1.00 46.21      A16S
ATOM  42543  N3  GUA  1086     182.390 144.429  -2.104  1.00 46.21      A16S
ATOM  42544  C2  GUA  1086     182.606 143.148  -1.882  1.00 46.21      A16S
ATOM  42545  N2  GUA  1086     182.520 142.667  -0.645  1.00 46.21      A16S
ATOM  42546  N1  GUA  1086     182.924 142.245  -2.857  1.00 46.21      A16S
ATOM  42547  C6  GUA  1086     183.076 142.545  -4.201  1.00 46.21      A16S
ATOM  42548  O6  GUA  1086     183.380 141.659  -4.991  1.00 46.21      A16S
ATOM  42549  C5  GUA  1086     182.849 143.912  -4.459  1.00 46.21      A16S
ATOM  42550  N7  GUA  1086     182.899 144.622  -5.650  1.00 46.21      A16S
ATOM  42551  C8  GUA  1086     182.609 145.848  -5.309  1.00 46.21      A16S
ATOM  42552  C2' GUA  1086     183.253 147.704  -2.405  1.00 51.91      A16S
ATOM  42553  O2' GUA  1086     182.801 148.323  -1.223  1.00 51.91      A16S
ATOM  42554  C3' GUA  1086     183.903 148.694  -3.355  1.00 51.91      A16S
ATOM  42555  O3' GUA  1086     184.700 149.642  -2.679  1.00 51.91      A16S
ATOM  42556  P   ADE  1087     186.236 149.291  -2.358  1.00 57.93      A16S
ATOM  42557  O1P ADE  1087     186.800 150.460  -1.624  1.00 57.64      A16S
ATOM  42558  O2P ADE  1087     186.878 148.842  -3.632  1.00 57.64      A16S
ATOM  42559  O5' ADE  1087     186.151 148.067  -1.335  1.00 57.93      A16S
ATOM  42560  C5' ADE  1087     185.556 148.250  -0.050  1.00 57.93      A16S
ATOM  42561  C4' ADE  1087     185.420 146.939   0.663  1.00 57.93      A16S
ATOM  42562  O4' ADE  1087     184.599 146.038  -0.116  1.00 57.93      A16S
ATOM  42563  C1' ADE  1087     185.025 144.698   0.099  1.00 57.93      A16S
ATOM  42564  N9  ADE  1087     185.485 144.136  -1.174  1.00 57.64      A16S
ATOM  42565  C4  ADE  1087     185.847 142.823  -1.404  1.00 57.64      A16S
ATOM  42566  N3  ADE  1087     185.835 141.797  -0.529  1.00 57.64      A16S
ATOM  42567  C2  ADE  1087     186.247 140.676  -1.116  1.00 57.64      A16S
ATOM  42568  N1  ADE  1087     186.645 140.481  -2.376  1.00 57.64      A16S
ATOM  42569  C6  ADE  1087     186.648 141.533  -3.224  1.00 57.64      A16S
ATOM  42570  N6  ADE  1087     187.045 141.350  -4.479  1.00 57.64      A16S
ATOM  42571  C5  ADE  1087     186.231 142.768  -2.733  1.00 57.64      A16S
ATOM  42572  N7  ADE  1087     186.113 144.015  -3.333  1.00 57.64      A16S
ATOM  42573  C8  ADE  1087     185.667 144.789  -2.371  1.00 57.64      A16S
ATOM  42574  C2' ADE  1087     186.181 144.746   1.094  1.00 57.93      A16S
ATOM  42575  O2' ADE  1087     185.705 144.507   2.403  1.00 57.93      A16S
ATOM  42576  C3' ADE  1087     186.697 146.159   0.883  1.00 57.93      A16S
ATOM  42577  O3' ADE  1087     187.435 146.609   1.991  1.00 57.93      A16S
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ATOM	42578	P	GUA	1088	189.004	146.294	2.065	1.00	54.71	A16S	ATOM	42631	N3	GUA	1090	197.160	139.587	-3.889	1.00	51.93	A16S
ATOM	42579	O1P	GUA	1088	189.567	147.124	3.147	1.00	52.97	A16S	ATOM	42632	C2	GUA	1090	196.940	140.295	-4.981	1.00	51.93	A16S
ATOM	42580	O2P	GUA	1088	189.570	146.387	0.697	1.00	52.97	A16S	ATOM	42633	N2	GUA	1090	197.344	139.832	-6.162	1.00	51.93	A16S
ATOM	42581	O5'	GUA	1088	189.069	144.796	2.580	1.00	54.71	A16S	ATOM	42634	N1	GUA	1090	196.302	141.509	-4.995	1.00	51.93	A16S
ATOM	42582	C5'	GUA	1088	188.614	144.485	3.893	1.00	54.71	A16S	ATOM	42635	C6	GUA	1090	195.795	142.158	-3.872	1.00	51.93	A16S
ATOM	42583	C4'	GUA	1088	188.787	143.026	4.158	1.00	54.71	A16S	ATOM	42636	O6	GUA	1090	195.221	143.246	-3.997	1.00	51.93	A16S
ATOM	42584	O4'	GUA	1088	187.958	142.273	3.238	1.00	54.71	A16S	ATOM	42637	C5	GUA	1090	196.030	141.407	-2.683	1.00	51.93	A16S
ATOM	42585	C1'	GUA	1088	188.637	141.092	2.846	1.00	54.71	A16S	ATOM	42638	N7	GUA	1090	195.708	141.684	-1.361	1.00	51.93	A16S
ATOM	42586	N9	GUA	1088	188.885	141.142	1.407	1.00	52.97	A16S	ATOM	42639	C8	GUA	1090	196.162	140.652	-0.694	1.00	51.93	A16S
ATOM	42587	C4	GUA	1088	189.279	140.076	0.636	1.00	52.97	A16S	ATOM	42640	C2'	GUA	1090	198.940	138.720	-1.323	1.00	65.18	A16S
ATOM	42588	N3	GUA	1088	189.491	138.818	1.080	1.00	52.97	A16S	ATOM	42641	O2'	GUA	1090	199.531	137.489	-1.690	1.00	65.18	A16S
ATOM	42589	C2	GUA	1088	189.866	138.010	0.111	1.00	52.97	A16S	ATOM	42642	C3'	GUA	1090	199.394	139.192	0.052	1.00	65.18	A16S
ATOM	42590	N2	GUA	1088	190.122	136.732	0.389	1.00	52.97	A16S	ATOM	42643	O3'	GUA	1090	200.816	139.067	0.148	1.00	65.18	A16S
ATOM	42591	N1	GUA	1088	190.019	138.396	-1.197	1.00	52.97	A16S	ATOM	42644	P	CYT	1091	201.750	140.309	-0.306	1.00	49.14	A16S
ATOM	42592	C6	GUA	1088	189.805	139.681	-1.686	1.00	52.97	A16S	ATOM	42645	O1P	CYT	1091	203.145	139.802	-0.484	1.00	74.02	A16S
ATOM	42593	O6	GUA	1088	189.964	139.915	-2.893	1.00	52.97	A16S	ATOM	42646	O2P	CYT	1091	201.501	141.459	0.601	1.00	74.02	A16S
ATOM	42594	C5	GUA	1088	189.407	140.574	-0.646	1.00	52.97	A16S	ATOM	42647	O5'	CYT	1091	201.168	140.757	-1.723	1.00	49.14	A16S
ATOM	42595	N7	GUA	1088	189.101	141.934	-0.679	1.00	52.97	A16S	ATOM	42648	C5'	CYT	1091	201.608	140.131	-2.930	1.00	49.14	A16S
ATOM	42596	C8	GUA	1088	188.796	142.226	0.559	1.00	52.97	A16S	ATOM	42649	C4'	CYT	1091	201.581	141.113	-4.070	1.00	49.14	A16S
ATOM	42597	C2'	GUA	1088	189.956	141.048	3.609	1.00	54.71	A16S	ATOM	42650	O4'	CYT	1091	200.220	141.507	-4.345	1.00	49.14	A16S
ATOM	42598	O2'	GUA	1088	189.798	140.293	4.793	1.00	54.71	A16S	ATOM	42651	C1'	CYT	1091	200.199	142.836	-4.833	1.00	49.14	A16S
ATOM	42599	C3'	GUA	1088	190.183	142.522	3.881	1.00	54.71	A16S	ATOM	42652	N1	CYT	1091	199.301	143.645	-3.993	1.00	74.02	A16S
ATOM	42600	O3'	GUA	1088	191.064	142.752	4.946	1.00	54.71	A16S	ATOM	42653	C6	CYT	1091	198.918	143.217	-2.752	1.00	74.02	A16S
ATOM	42601	P	CYT	1089	192.615	142.955	4.625	1.00	62.00	A16S	ATOM	42654	C2	CYT	1091	198.845	144.871	-4.487	1.00	74.02	A16S
ATOM	42602	O1P	CYT	1089	193.318	143.357	5.873	1.00	43.66	A16S	ATOM	42655	O2	CYT	1091	199.215	145.244	-5.611	1.00	74.02	A16S
ATOM	42603	O2P	CYT	1089	192.658	143.851	3.427	1.00	43.66	A16S	ATOM	42656	N3	CYT	1091	198.023	145.622	-3.728	1.00	74.02	A16S
ATOM	42604	O5'	CYT	1089	193.097	141.488	4.218	1.00	62.00	A16S	ATOM	42657	C4	CYT	1091	197.665	145.200	-2.516	1.00	74.02	A16S
ATOM	42605	C5'	CYT	1089	193.102	140.417	5.186	1.00	62.00	A16S	ATOM	42658	N4	CYT	1091	196.869	145.988	-1.791	1.00	74.02	A16S
ATOM	42606	C4'	CYT	1089	193.630	139.128	4.575	1.00	62.00	A16S	ATOM	42659	C5	CYT	1091	198.110	143.956	-1.987	1.00	74.02	A16S
ATOM	42607	O4'	CYT	1089	192.700	138.608	3.585	1.00	62.00	A16S	ATOM	42660	C2'	CYT	1091	201.634	143.359	-4.840	1.00	49.14	A16S
ATOM	42608	C1'	CYT	1089	193.412	137.933	2.561	1.00	62.00	A16S	ATOM	42661	O2'	CYT	1091	202.152	143.271	-6.150	1.00	49.14	A16S
ATOM	42609	N1	CYT	1089	193.238	138.690	1.313	1.00	43.66	A16S	ATOM	42662	C3'	CYT	1091	202.315	142.421	-3.851	1.00	49.14	A16S
ATOM	42610	C6	CYT	1089	192.893	140.010	1.346	1.00	43.66	A16S	ATOM	42663	O3'	CYT	1091	203.700	142.294	-4.125	1.00	49.14	A16S
ATOM	42611	C2	CYT	1089	193.443	138.045	0.084	1.00	43.66	A16S	ATOM	42664	P	ADE	1092	204.754	143.194	-3.320	1.00	63.18	A16S
ATOM	42612	O2	CYT	1089	193.734	136.828	0.077	1.00	43.66	A16S	ATOM	42665	O1P	ADE	1092	206.076	142.981	-3.966	1.00	71.91	A16S
ATOM	42613	N3	CYT	1089	193.312	138.761	-1.064	1.00	43.66	A16S	ATOM	42666	O2P	ADE	1092	204.593	142.903	-1.869	1.00	71.91	A16S
ATOM	42614	C4	CYT	1089	192.982	140.057	-1.010	1.00	43.66	A16S	ATOM	42667	O5'	ADE	1092	204.276	144.688	-3.607	1.00	63.18	A16S
ATOM	42615	N4	CYT	1089	192.872	140.735	-2.152	1.00	43.66	A16S	ATOM	42668	C5'	ADE	1092	204.510	145.306	-4.890	1.00	63.18	A16S
ATOM	42616	C5	CYT	1089	192.754	140.722	0.222	1.00	43.66	A16S	ATOM	42669	C4'	ADE	1092	203.899	146.691	-4.930	1.00	63.18	A16S
ATOM	42617	C2'	CYT	1089	194.879	137.924	2.970	1.00	62.00	A16S	ATOM	42670	O4'	ADE	1092	202.457	146.572	-4.795	1.00	63.18	A16S
ATOM	42618	O2'	CYT	1089	195.160	136.755	3.721	1.00	62.00	A16S	ATOM	42671	C1'	ADE	1092	201.962	147.613	-3.970	1.00	63.18	A16S
ATOM	42619	C3'	CYT	1089	194.952	139.177	3.828	1.00	62.00	A16S	ATOM	42672	N9	ADE	1092	201.516	147.002	-2.716	1.00	71.91	A16S
ATOM	42620	O3'	CYT	1089	196.087	139.153	4.665	1.00	62.00	A16S	ATOM	42673	C4	ADE	1092	200.597	147.515	-1.835	1.00	71.91	A16S
ATOM	42621	P	GUA	1090	197.356	140.054	4.280	1.00	65.18	A16S	ATOM	42674	N3	ADE	1092	199.944	148.685	-1.930	1.00	71.91	A16S
ATOM	42622	O1P	GUA	1090	198.435	139.508	5.137	1.00	51.93	A16S	ATOM	42675	C2	ADE	1092	199.119	148.838	-0.903	1.00	71.91	A16S
ATOM	42623	O2P	GUA	1090	196.991	141.494	4.365	1.00	51.93	A16S	ATOM	42676	N1	ADE	1092	198.882	148.014	0.125	1.00	71.91	A16S
ATOM	42624	O5'	GUA	1090	197.686	139.701	2.754	1.00	65.18	A16S	ATOM	42677	C6	ADE	1092	199.551	146.841	0.184	1.00	71.91	A16S
ATOM	42625	C5'	GUA	1090	198.444	138.515	2.444	1.00	65.18	A16S	ATOM	42678	N6	ADE	1092	199.294	146.002	1.190	1.00	71.91	A16S
ATOM	42626	C4'	GUA	1090	198.570	138.273	0.946	1.00	65.18	A16S	ATOM	42679	C5	ADE	1092	200.470	146.569	-0.831	1.00	71.91	A16S
ATOM	42627	O4'	GUA	1090	197.271	138.267	0.291	1.00	65.18	A16S	ATOM	42680	N7	ADE	1092	201.317	145.494	-1.054	1.00	71.91	A16S
ATOM	42628	C1'	GUA	1090	197.451	138.495	-1.096	1.00	65.18	A16S	ATOM	42681	C8	ADE	1092	201.916	145.798	-2.178	1.00	71.91	A16S
ATOM	42629	N9	GUA	1090	196.777	139.724	-1.493	1.00	51.93	A16S	ATOM	42682	C2'	ADE	1092	203.115	148.587	-3.742	1.00	63.18	A16S
ATOM	42630	C4	GUA	1090	196.683	140.198	-2.783	1.00	51.93	A16S	ATOM	42683	O2'	ADE	1092	203.110	149.556	-4.777	1.00	63.18	A16S

ATOM	42684	C3'	ADE	1092	204.308	147.644	-3.816	1.00	63.18	A16S	ATOM	42737	C6	CYT	1095	209.271	150.294	5.556	1.00	71.57	A16S
ATOM	42685	O3'	ADE	1092	205.527	148.317	-4.074	1.00	63.18	A16S	ATOM	42738	C2	CYT	1095	210.617	148.319	5.803	1.00	71.57	A16S
ATOM	42686	P	ADE	1093	206.548	148.590	-2.862	1.00	75.98	A16S	ATOM	42739	O2	CYT	1095	211.215	147.528	6.545	1.00	71.57	A16S
ATOM	42687	O1P	ADE	1093	207.759	149.160	-3.495	1.00	62.71	A16S	ATOM	42740	N3	CYT	1095	210.595	148.148	4.464	1.00	71.57	A16S
ATOM	42688	O2P	ADE	1093	206.664	147.385	-1.988	1.00	62.71	A16S	ATOM	42741	C4	CYT	1095	209.939	149.016	3.689	1.00	71.57	A16S
ATOM	42689	O5'	ADE	1093	205.831	149.706	-1.980	1.00	75.98	A16S	ATOM	42742	N4	CYT	1095	209.947	148.808	2.369	1.00	71.57	A16S
ATOM	42690	C5'	ADE	1093	205.458	150.987	-2.533	1.00	75.98	A16S	ATOM	42743	C5	CYT	1095	209.243	150.134	4.229	1.00	71.57	A16S
ATOM	42691	C4'	ADE	1093	204.575	151.737	-1.558	1.00	75.98	A16S	ATOM	42744	C2'	CYT	1095	211.355	150.140	8.292	1.00	55.88	A16S
ATOM	42692	O4'	ADE	1093	203.322	151.017	-1.405	1.00	75.98	A16S	ATOM	42745	O2'	CYT	1095	211.620	149.708	9.613	1.00	55.88	A16S
ATOM	42693	C1'	ADE	1093	202.898	151.068	-0.054	1.00	75.98	A16S	ATOM	42746	C3'	CYT	1095	211.153	151.643	8.193	1.00	55.88	A16S
ATOM	42694	N9	ADE	1093	202.921	149.705	0.480	1.00	62.71	A16S	ATOM	42747	O3'	CYT	1095	212.096	152.375	8.949	1.00	55.88	A16S
ATOM	42695	C4	ADE	1093	202.166	149.212	1.517	1.00	62.71	A16S	ATOM	42748	P	CYT	1096	213.334	153.071	8.192	1.00	78.81	A16S
ATOM	42696	N3	ADE	1093	201.255	149.872	2.249	1.00	62.71	A16S	ATOM	42749	O1P	CYT	1096	213.900	154.105	9.099	1.00	70.41	A16S
ATOM	42697	C2	ADE	1093	200.723	149.074	3.170	1.00	62.71	A16S	ATOM	42750	O2P	CYT	1096	212.882	153.466	6.826	1.00	70.41	A16S
ATOM	42698	N1	ADE	1093	200.981	147.790	3.426	1.00	62.71	A16S	ATOM	42751	O5'	CYT	1096	214.394	151.891	8.051	1.00	78.81	A16S
ATOM	42699	C6	ADE	1093	201.907	147.155	2.676	1.00	62.71	A16S	ATOM	42752	C5'	CYT	1096	214.742	151.078	9.181	1.00	78.81	A16S
ATOM	42700	N6	ADE	1093	202.173	145.873	2.941	1.00	62.71	A16S	ATOM	42753	C4'	CYT	1096	215.645	149.951	8.750	1.00	78.81	A16S
ATOM	42701	C5	ADE	1093	202.539	147.890	1.660	1.00	62.71	A16S	ATOM	42754	O4'	CYT	1096	214.905	149.023	7.919	1.00	78.81	A16S
ATOM	42702	N7	ADE	1093	203.509	147.551	0.731	1.00	62.71	A16S	ATOM	42755	C1'	CYT	1096	215.743	148.523	6.889	1.00	78.81	A16S
ATOM	42703	C8	ADE	1093	203.700	148.658	0.059	1.00	62.71	A16S	ATOM	42756	N1	CYT	1096	215.211	148.976	5.588	1.00	70.41	A16S
ATOM	42704	C2'	ADE	1093	203.862	151.985	0.699	1.00	75.98	A16S	ATOM	42757	C6	CYT	1096	214.501	150.140	5.483	1.00	70.41	A16S
ATOM	42705	O2'	ADE	1093	203.341	153.300	0.727	1.00	75.98	A16S	ATOM	42758	C2	CYT	1096	215.440	148.193	4.460	1.00	70.41	A16S
ATOM	42706	C3'	ADE	1093	205.126	151.853	-0.142	1.00	75.98	A16S	ATOM	42759	O2	CYT	1096	216.111	147.165	4.574	1.00	70.41	A16S
ATOM	42707	O3'	ADE	1093	206.033	152.945	0.022	1.00	75.98	A16S	ATOM	42760	N3	CYT	1096	214.932	148.578	3.272	1.00	70.41	A16S
ATOM	42708	P	CYT	1094	207.293	152.795	1.022	1.00	83.21	A16S	ATOM	42761	C4	CYT	1096	214.225	149.703	3.183	1.00	70.41	A16S
ATOM	42709	O1P	CYT	1094	208.148	153.991	0.815	1.00	66.27	A16S	ATOM	42762	N4	CYT	1096	213.720	150.030	1.992	1.00	70.41	A16S
ATOM	42710	O2P	CYT	1094	207.883	151.438	0.875	1.00	66.27	A16S	ATOM	42763	C5	CYT	1096	213.997	150.539	4.312	1.00	70.41	A16S
ATOM	42711	O5'	CYT	1094	206.647	152.871	2.479	1.00	83.21	A16S	ATOM	42764	C2'	CYT	1096	217.143	149.068	7.142	1.00	78.81	A16S
ATOM	42712	C5'	CYT	1094	206.002	154.077	2.952	1.00	83.21	A16S	ATOM	42765	O2'	CYT	1096	217.850	148.158	7.958	1.00	78.81	A16S
ATOM	42713	C4'	CYT	1094	205.361	153.836	4.302	1.00	83.21	A16S	ATOM	42766	C3'	CYT	1096	216.823	150.355	7.883	1.00	78.81	A16S
ATOM	42714	O4'	CYT	1094	204.279	152.878	4.169	1.00	83.21	A16S	ATOM	42767	O3'	CYT	1096	217.919	150.828	8.627	1.00	78.81	A16S
ATOM	42715	C1'	CYT	1094	204.220	152.062	5.325	1.00	83.21	A16S	ATOM	42768	P	CYT	1097	218.887	151.918	7.971	1.00	92.79	A16S
ATOM	42716	N1	CYT	1094	204.377	150.654	4.916	1.00	66.27	A16S	ATOM	42769	O1P	CYT	1097	219.776	152.368	9.069	1.00	70.13	A16S
ATOM	42717	C6	CYT	1094	204.832	150.339	3.667	1.00	66.27	A16S	ATOM	42770	O2P	CYT	1097	218.059	152.906	7.228	1.00	70.13	A16S
ATOM	42718	C2	CYT	1094	204.060	149.630	5.832	1.00	66.27	A16S	ATOM	42771	O5'	CYT	1097	219.744	151.094	6.911	1.00	92.79	A16S
ATOM	42719	O2	CYT	1094	203.636	149.921	6.947	1.00	66.27	A16S	ATOM	42772	C5'	CYT	1097	220.803	150.217	7.342	1.00	92.79	A16S
ATOM	42720	N3	CYT	1094	204.228	148.345	5.469	1.00	66.27	A16S	ATOM	42773	C4'	CYT	1097	221.495	149.594	6.152	1.00	92.79	A16S
ATOM	42721	C4	CYT	1094	204.678	148.051	4.251	1.00	66.27	A16S	ATOM	42774	O4'	CYT	1097	220.566	148.732	5.442	1.00	92.79	A16S
ATOM	42722	N4	CYT	1094	204.822	146.760	3.939	1.00	66.27	A16S	ATOM	42775	C1'	CYT	1097	220.849	148.766	4.052	1.00	92.79	A16S
ATOM	42723	C5	CYT	1094	204.998	149.066	3.296	1.00	66.27	A16S	ATOM	42776	N1	CYT	1097	219.703	149.360	3.336	1.00	70.13	A16S
ATOM	42724	C2'	CYT	1094	205.302	152.540	6.299	1.00	83.21	A16S	ATOM	42777	C6	CYT	1097	218.686	149.978	4.008	1.00	70.13	A16S
ATOM	42725	O2'	CYT	1094	204.712	153.409	7.244	1.00	83.21	A16S	ATOM	42778	C2	CYT	1097	219.694	149.310	1.934	1.00	70.13	A16S
ATOM	42726	C3'	CYT	1094	206.277	153.260	5.372	1.00	83.21	A16S	ATOM	42779	O2	CYT	1097	220.603	148.698	1.350	1.00	70.13	A16S
ATOM	42727	O3'	CYT	1094	206.961	154.306	6.060	1.00	83.21	A16S	ATOM	42780	N3	CYT	1097	218.698	149.923	1.255	1.00	70.13	A16S
ATOM	42728	P	CYT	1095	208.565	154.414	5.973	1.00	55.88	A16S	ATOM	42781	C4	CYT	1097	217.730	150.554	1.920	1.00	70.13	A16S
ATOM	42729	O1P	CYT	1095	208.971	155.604	6.767	1.00	71.57	A16S	ATOM	42782	N4	CYT	1097	216.787	151.180	1.207	1.00	70.13	A16S
ATOM	42730	O2P	CYT	1095	208.955	154.337	4.540	1.00	71.57	A16S	ATOM	42783	C5	CYT	1097	217.689	150.582	3.346	1.00	70.13	A16S
ATOM	42731	O5'	CYT	1095	209.087	153.121	6.746	1.00	55.88	A16S	ATOM	42784	C2'	CYT	1097	222.079	149.651	3.861	1.00	92.79	A16S
ATOM	42732	C5'	CYT	1095	209.007	153.041	8.174	1.00	55.88	A16S	ATOM	42785	O2'	CYT	1097	223.246	148.853	3.847	1.00	92.79	A16S
ATOM	42733	C4'	CYT	1095	209.723	151.812	8.669	1.00	55.88	A16S	ATOM	42786	C3'	CYT	1097	221.993	150.550	5.082	1.00	92.79	A16S
ATOM	42734	O4'	CYT	1095	209.044	150.636	8.163	1.00	55.88	A16S	ATOM	42787	O3'	CYT	1097	223.239	151.150	5.380	1.00	92.79	A16S
ATOM	42735	C1'	CYT	1095	209.991	149.629	7.832	1.00	55.88	A16S	ATOM	42788	P	CYT	1098	223.524	152.653	4.877	1.00	67.82	A16S
ATOM	42736	N1	CYT	1095	209.947	149.419	6.364	1.00	71.57	A16S	ATOM	42789	O1P	CYT	1098	224.744	153.122	5.590	1.00	59.42	A16S

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ATOM  42790  O2P CYT  1098     222.260 153.430   4.987  1.00 59.42      A16S
ATOM  42791  O5' CYT  1098     223.835 152.514   3.319  1.00 67.82      A16S
ATOM  42792  C5' CYT  1098     224.895 151.666   2.851  1.00 67.82      A16S
ATOM  42793  C4' CYT  1098     224.842 151.534   1.350  1.00 67.82      A16S
ATOM  42794  O4' CYT  1098     223.614 150.869   0.952  1.00 67.82      A16S
ATOM  42795  C1' CYT  1098     223.229 151.319  -0.338  1.00 67.82      A16S
ATOM  42796  N1  CYT  1098     221.871 151.898  -0.301  1.00 59.42      A16S
ATOM  42797  C6  CYT  1098     221.184 152.062   0.869  1.00 59.42      A16S
ATOM  42798  C2  CYT  1098     221.299 152.318  -1.518  1.00 59.42      A16S
ATOM  42799  O2  CYT  1098     221.911 152.097  -2.576  1.00 59.42      A16S
ATOM  42800  N3  CYT  1098     220.098 152.939  -1.513  1.00 59.42      A16S
ATOM  42801  C4  CYT  1098     219.451 153.119  -0.365  1.00 59.42      A16S
ATOM  42802  N4  CYT  1098     218.281 153.751  -0.408  1.00 59.42      A16S
ATOM  42803  C5  CYT  1098     219.981 152.661   0.883  1.00 59.42      A16S
ATOM  42804  C2' CYT  1098     224.235 152.381  -0.774  1.00 67.82      A16S
ATOM  42805  O2' CYT  1098     225.175 151.816  -1.661  1.00 67.82      A16S
ATOM  42806  C3' CYT  1098     224.818 152.828   0.559  1.00 67.82      A16S
ATOM  42807  O3' CYT  1098     226.095 153.434   0.414  1.00 67.82      A16S
ATOM  42808  P   GUA  1099     226.224 155.040   0.477  1.00 75.59      A16S
ATOM  42809  O1P GUA  1099     227.618 155.339   0.892  1.00 67.01      A16S
ATOM  42810  O2P GUA  1099     225.083 155.589   1.259  1.00 67.01      A16S
ATOM  42811  O5' GUA  1099     226.053 155.529  -1.024  1.00 75.59      A16S
ATOM  42812  C5' GUA  1099     224.935 155.112  -1.782  1.00 75.59      A16S
ATOM  42813  C4' GUA  1099     225.014 155.647  -3.177  1.00 75.59      A16S
ATOM  42814  O4' GUA  1099     223.898 155.065  -3.883  1.00 75.59      A16S
ATOM  42815  C1' GUA  1099     223.092 156.079  -4.434  1.00 75.59      A16S
ATOM  42816  N9  GUA  1099     221.890 156.167  -3.605  1.00 67.01      A16S
ATOM  42817  C4  GUA  1099     220.611 156.457  -4.024  1.00 67.01      A16S
ATOM  42818  N3  GUA  1099     220.222 156.686  -5.297  1.00 67.01      A16S
ATOM  42819  C2  GUA  1099     218.928 156.966  -5.378  1.00 67.01      A16S
ATOM  42820  N2  GUA  1099     218.368 157.208  -6.574  1.00 67.01      A16S
ATOM  42821  N1  GUA  1099     218.087 157.030  -4.295  1.00 67.01      A16S
ATOM  42822  C6  GUA  1099     218.464 156.802  -2.974  1.00 67.01      A16S
ATOM  42823  O6  GUA  1099     217.626 156.908  -2.065  1.00 67.01      A16S
ATOM  42824  C5  GUA  1099     219.847 156.477  -2.875  1.00 67.01      A16S
ATOM  42825  N7  GUA  1099     220.619 156.164  -1.763  1.00 67.01      A16S
ATOM  42826  C8  GUA  1099     221.819 155.988  -2.242  1.00 67.01      A16S
ATOM  42827  C2' GUA  1099     223.953 157.348  -4.482  1.00 75.59      A16S
ATOM  42828  O2' GUA  1099     224.658 157.398  -5.706  1.00 75.59      A16S
ATOM  42829  C3' GUA  1099     224.856 157.159  -3.261  1.00 75.59      A16S
ATOM  42830  O3' GUA  1099     226.145 157.777  -3.422  1.00 75.59      A16S
ATOM  42831  P   CYT  1100     226.580 159.037  -2.502  1.00 77.81      A16S
ATOM  42832  O1P CYT  1100     228.013 159.307  -2.793  1.00 70.89      A16S
ATOM  42833  O2P CYT  1100     226.161 158.781  -1.100  1.00 70.89      A16S
ATOM  42834  O5' CYT  1100     225.743 160.251  -3.099  1.00 77.81      A16S
ATOM  42835  C5' CYT  1100     226.080 160.800  -4.382  1.00 77.81      A16S
ATOM  42836  C4' CYT  1100     225.294 162.059  -4.644  1.00 77.81      A16S
ATOM  42837  O4' CYT  1100     223.894 161.716  -4.829  1.00 77.81      A16S
ATOM  42838  C1' CYT  1100     223.074 162.712  -4.232  1.00 77.81      A16S
ATOM  42839  N1  CYT  1100     222.380 162.109  -3.065  1.00 70.89      A16S
ATOM  42840  C6  CYT  1100     222.902 161.013  -2.433  1.00 70.89      A16S
ATOM  42841  C2  CYT  1100     221.184 162.687  -2.596  1.00 70.89      A16S
ATOM  42842  O2  CYT  1100     220.718 163.671  -3.181  1.00 70.89      A16S
ATOM  42843  N3  CYT  1100     220.572 162.156  -1.511  1.00 70.89      A16S
ATOM  42844  C4  CYT  1100     221.105 161.097  -0.894  1.00 70.89      A16S
ATOM  42845  N4  CYT  1100     220.479 160.617   0.186  1.00 70.89      A16S
ATOM  42846  C5  CYT  1100     222.306 160.483  -1.353  1.00 70.89      A16S
ATOM  42847  C2' CYT  1100     223.999 163.851  -3.797  1.00 77.81      A16S
ATOM  42848  O2' CYT  1100     224.136 164.809  -4.838  1.00 77.81      A16S
ATOM  42849  C3' CYT  1100     225.288 163.088  -3.518  1.00 77.81      A16S
ATOM  42850  O3' CYT  1100     226.451 163.918  -3.438  1.00 77.81      A16S
ATOM  42851  P   CYT  1101     226.890 164.527  -2.007  1.00 95.60      A16S
ATOM  42852  O1P CYT  1101     228.190 165.200  -2.203  1.00 77.06      A16S
ATOM  42853  O2P CYT  1101     226.764 163.485  -0.955  1.00 77.06      A16S
ATOM  42854  O5' CYT  1101     225.793 165.652  -1.742  1.00 95.60      A16S
ATOM  42855  C5' CYT  1101     225.583 166.711  -2.704  1.00 95.60      A16S
ATOM  42856  C4' CYT  1101     224.429 167.599  -2.288  1.00 95.60      A16S
ATOM  42857  O4' CYT  1101     223.185 166.850  -2.350  1.00 95.60      A16S
ATOM  42858  C1' CYT  1101     222.330 167.254  -1.290  1.00 95.60      A16S
ATOM  42859  N1  CYT  1101     222.153 166.110  -0.371  1.00 77.06      A16S
ATOM  42860  C6  CYT  1101     223.080 165.103  -0.317  1.00 77.06      A16S
ATOM  42861  C2  CYT  1101     221.027 166.077   0.469  1.00 77.06      A16S
ATOM  42862  O2  CYT  1101     220.193 166.993   0.398  1.00 77.06      A16S
ATOM  42863  N3  CYT  1101     220.882 165.049   1.337  1.00 77.06      A16S
ATOM  42864  C4  CYT  1101     221.801 164.080   1.387  1.00 77.06      A16S
ATOM  42865  N4  CYT  1101     221.623 163.090   2.267  1.00 77.06      A16S
ATOM  42866  C5  CYT  1101     222.946 164.082   0.539  1.00 77.06      A16S
ATOM  42867  C2' CYT  1101     223.010 168.419  -0.567  1.00 95.60      A16S
ATOM  42868  O2' CYT  1101     222.554 169.656  -1.085  1.00 95.60      A16S
ATOM  42869  C3' CYT  1101     224.478 168.146  -0.868  1.00 95.60      A16S
ATOM  42870  O3' CYT  1101     225.287 169.310  -0.738  1.00 95.60      A16S
ATOM  42871  P   GUA  1102     226.011 169.618   0.667  1.00118.44      A16S
ATOM  42872  O1P GUA  1102     226.952 170.732   0.410  1.00101.88      A16S
ATOM  42873  O2P GUA  1102     226.516 168.352   1.266  1.00101.88      A16S
ATOM  42874  O5' GUA  1102     224.833 170.142   1.604  1.00118.44      A16S
ATOM  42875  C5' GUA  1102     224.153 171.387   1.337  1.00118.44      A16S
ATOM  42876  C4' GUA  1102     223.051 171.609   2.350  1.00118.44      A16S
ATOM  42877  O4' GUA  1102     222.088 170.526   2.244  1.00118.44      A16S
ATOM  42878  C1' GUA  1102     221.584 170.198   3.530  1.00118.44      A16S
ATOM  42879  N9  GUA  1102     221.975 168.828   3.854  1.00101.88      A16S
ATOM  42880  C4  GUA  1102     221.422 168.035   4.833  1.00101.88      A16S
ATOM  42881  N3  GUA  1102     220.395 168.373   5.638  1.00101.88      A16S
ATOM  42882  C2  GUA  1102     220.098 167.408   6.492  1.00101.88      A16S
ATOM  42883  N2  GUA  1102     219.093 167.576   7.361  1.00101.88      A16S
ATOM  42884  N1  GUA  1102     220.760 166.208   6.555  1.00101.88      A16S
ATOM  42885  C6  GUA  1102     221.823 165.839   5.740  1.00101.88      A16S
ATOM  42886  O6  GUA  1102     222.359 164.733   5.891  1.00101.88      A16S
ATOM  42887  C5  GUA  1102     222.147 166.864   4.809  1.00101.88      A16S
ATOM  42888  N7  GUA  1102     223.121 166.908   3.820  1.00101.88      A16S
ATOM  42889  C8  GUA  1102     222.978 168.085   3.277  1.00101.88      A16S
ATOM  42890  C2' GUA  1102     222.191 171.183   4.527  1.00118.44      A16S
ATOM  42891  O2' GUA  1102     221.306 172.267   4.720  1.00118.44      A16S
ATOM  42892  C3' GUA  1102     223.474 171.587   3.813  1.00118.44      A16S
ATOM  42893  O3' GUA  1102     223.971 172.838   4.273  1.00118.44      A16S
ATOM  42894  P   URI  1103     224.810 172.903   5.647  1.00106.61      A16S
ATOM  42895  O1P URI  1103     225.398 174.262   5.724  1.00115.04      A16S
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ATOM	42898	C5'	URI	1103	222.702	173.776	6.984	1.00106.61	A16S
ATOM	42899	C4'	URI	1103	221.838	173.424	8.170	1.00106.61	A16S
ATOM	42900	O4'	URI	1103	221.087	172.220	7.873	1.00106.61	A16S
ATOM	42901	C1'	URI	1103	220.985	171.416	9.039	1.00106.61	A16S
ATOM	42902	N1	URI	1103	221.628	170.118	8.768	1.00115.04	A16S
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ATOM	42905	O2	URI	1103	220.147	169.019	10.147	1.00115.04	A16S
ATOM	42906	N3	URI	1103	221.789	167.824	9.132	1.00115.04	A16S
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ATOM	42910	C2'	URI	1103	221.658	172.170	10.190	1.00106.61	A16S
ATOM	42911	O2'	URI	1103	220.700	172.856	10.975	1.00106.61	A16S
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ATOM	42915	O1P	URI	1104	224.416	175.604	11.669	1.00120.52	A16S
ATOM	42916	O2P	URI	1104	225.391	173.652	10.305	1.00120.52	A16S
ATOM	42917	O5'	URI	1104	223.904	173.241	12.279	1.00 99.88	A16S
ATOM	42918	C5'	URI	1104	222.790	173.510	13.146	1.00 99.88	A16S
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ATOM	42921	C1'	URI	1104	222.556	169.997	13.828	1.00 99.88	A16S
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ATOM	42928	O4	URI	1104	225.417	167.207	10.049	1.00120.52	A16S
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ATOM	42935	O1P	ADE	1105	225.504	173.310	17.829	1.00105.67	A16S
ATOM	42936	O2P	ADE	1105	226.317	173.407	15.393	1.00105.67	A16S
ATOM	42937	O5'	ADE	1105	226.084	171.223	16.607	1.00148.46	A16S
ATOM	42938	C5'	ADE	1105	225.697	170.410	17.730	1.00148.46	A16S
ATOM	42939	C4'	ADE	1105	226.596	169.203	17.846	1.00148.46	A16S
ATOM	42940	O4'	ADE	1105	226.250	168.219	16.837	1.00148.46	A16S
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ATOM	42942	N9	ADE	1105	227.631	167.653	15.020	1.00105.67	A16S
ATOM	42943	C4	ADE	1105	227.857	166.635	14.122	1.00105.67	A16S
ATOM	42944	N3	ADE	1105	227.887	165.313	14.374	1.00105.67	A16S
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ATOM	42947	C6	ADE	1105	228.341	166.413	11.803	1.00105.67	A16S
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ATOM	42949	C5	ADE	1105	228.063	167.250	12.899	1.00105.67	A16S
ATOM	42950	N7	ADE	1105	227.949	168.628	13.016	1.00105.67	A16S
ATOM	42951	C8	ADE	1105	227.686	168.816	14.287	1.00105.67	A16S
ATOM	42952	C2'	ADE	1105	228.587	168.049	17.274	1.00148.46	A16S
ATOM	42953	O2'	ADE	1105	228.808	167.225	18.400	1.00148.46	A16S
ATOM	42954	C3'	ADE	1105	228.084	169.440	17.641	1.00148.46	A16S
ATOM	42955	O3'	ADE	1105	228.727	169.978	18.787	1.00148.46	A16S
ATOM	42956	P	GUA	1106	229.558	171.350	18.652	1.00141.28	A16S
ATOM	42957	O1P	GUA	1106	229.811	171.854	20.021	1.00126.00	A16S
ATOM	42958	O2P	GUA	1106	228.858	172.217	17.668	1.00126.00	A16S
ATOM	42959	O5'	GUA	1106	230.949	170.921	18.005	1.00141.28	A16S
ATOM	42960	C5'	GUA	1106	232.024	170.372	18.804	1.00141.28	A16S
ATOM	42961	C4'	GUA	1106	232.205	168.913	18.472	1.00141.28	A16S
ATOM	42962	O4'	GUA	1106	231.635	168.673	17.172	1.00141.28	A16S
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ATOM	42964	N9	GUA	1106	232.475	167.928	15.125	1.00126.00	A16S
ATOM	42965	C4	GUA	1106	232.583	167.007	14.109	1.00126.00	A16S
ATOM	42966	N3	GUA	1106	232.646	165.665	14.262	1.00126.00	A16S
ATOM	42967	C2	GUA	1106	232.706	165.040	13.104	1.00126.00	A16S
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ATOM	42969	N1	GUA	1106	232.694	165.681	11.886	1.00126.00	A16S
ATOM	42970	C6	GUA	1106	232.621	167.060	11.705	1.00126.00	A16S
ATOM	42971	O6	GUA	1106	232.592	167.534	10.564	1.00126.00	A16S
ATOM	42972	C5	GUA	1106	232.575	167.744	12.943	1.00126.00	A16S
ATOM	42973	N7	GUA	1106	232.511	169.104	13.219	1.00126.00	A16S
ATOM	42974	C8	GUA	1106	232.465	169.167	14.523	1.00126.00	A16S
ATOM	42975	C2'	GUA	1106	233.552	167.241	17.392	1.00141.28	A16S
ATOM	42976	O2'	GUA	1106	233.331	165.980	17.998	1.00141.28	A16S
ATOM	42977	C3'	GUA	1106	233.637	168.395	18.399	1.00141.28	A16S
ATOM	42978	O3'	GUA	1106	234.044	167.924	19.687	1.00141.28	A16S
ATOM	42979	P	URI	1107	235.589	167.585	19.970	1.00201.09	A16S
ATOM	42980	O1P	URI	1107	235.733	167.351	21.423	1.00 68.73	A16S
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ATOM	42982	O5'	URI	1107	235.846	166.174	19.256	1.00201.09	A16S
ATOM	42983	C5'	URI	1107	236.829	166.024	18.200	1.00201.09	A16S
ATOM	42984	C4'	URI	1107	237.954	165.090	18.626	1.00201.09	A16S
ATOM	42985	O4'	URI	1107	238.447	165.507	19.924	1.00201.09	A16S
ATOM	42986	C1'	URI	1107	238.938	164.382	20.633	1.00201.09	A16S
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ATOM	42989	C2	URI	1107	238.889	163.681	22.972	1.00 68.73	A16S
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ATOM	42992	C4	URI	1107	236.865	164.059	24.356	1.00 68.73	A16S
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ATOM	42994	C5	URI	1107	236.229	164.626	23.192	1.00 68.73	A16S
ATOM	42995	C2'	URI	1107	238.755	163.144	19.761	1.00201.09	A16S
ATOM	42996	O2'	URI	1107	239.987	162.815	19.150	1.00201.09	A16S
ATOM	42997	C3'	URI	1107	237.669	163.596	18.785	1.00201.09	A16S
ATOM	42998	O3'	URI	1107	237.813	162.900	17.543	1.00201.09	A16S
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ATOM	43001	O2P	URI	1108	238.016	160.696	18.803	1.00200.99	A16S

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ATOM  43003  C5' URI  1108     238.777 159.507  15.857  1.00193.82      A16S
ATOM  43004  C4' URI  1108     238.378 159.559  14.397  1.00193.82      A16S
ATOM  43005  O4' URI  1108     237.095 160.231  14.302  1.00193.82      A16S
ATOM  43006  C1' URI  1108     237.051 161.027  13.132  1.00193.82      A16S
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ATOM  43011  N3  URI  1108     235.918 164.531  13.015  1.00200.99      A16S
ATOM  43012  C4  URI  1108     236.231 165.068  14.248  1.00200.99      A16S
ATOM  43013  O4  URI  1108     235.970 166.247  14.481  1.00200.99      A16S
ATOM  43014  C5  URI  1108     236.870 164.165  15.145  1.00200.99      A16S
ATOM  43015  C2' URI  1108     238.363 160.826  12.372  1.00193.82      A16S
ATOM  43016  O2' URI  1108     238.166 159.861  11.362  1.00193.82      A16S
ATOM  43017  C3' URI  1108     239.303 160.340  13.471  1.00193.82      A16S
ATOM  43018  O3' URI  1108     240.301 159.485  12.916  1.00193.82      A16S
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ATOM  43021  O2P GUA  1109     242.403 160.683  13.515  1.00187.52      A16S
ATOM  43022  O5' GUA  1109     241.242 161.297  11.392  1.00 74.50      A16S
ATOM  43023  C5' GUA  1109     240.777 161.033  10.062  1.00 74.50      A16S
ATOM  43024  C4' GUA  1109     240.194 162.284   9.449  1.00 74.50      A16S
ATOM  43025  O4' GUA  1109     239.128 162.780  10.289  1.00 74.50      A16S
ATOM  43026  C1' GUA  1109     239.113 164.196  10.260  1.00 74.50      A16S
ATOM  43027  N9  GUA  1109     239.262 164.684  11.627  1.00187.52      A16S
ATOM  43028  C4  GUA  1109     239.038 165.964  12.057  1.00187.52      A16S
ATOM  43029  N3  GUA  1109     238.672 167.003  11.282  1.00187.52      A16S
ATOM  43030  C2  GUA  1109     238.518 168.108  11.985  1.00187.52      A16S
ATOM  43031  N2  GUA  1109     238.171 169.244  11.367  1.00187.52      A16S
ATOM  43032  N1  GUA  1109     238.696 168.183  13.344  1.00187.52      A16S
ATOM  43033  C6  GUA  1109     239.069 167.123  14.163  1.00187.52      A16S
ATOM  43034  O6  GUA  1109     239.190 167.296  15.382  1.00187.52      A16S
ATOM  43035  C5  GUA  1109     239.254 165.937  13.418  1.00187.52      A16S
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ATOM  43037  C8  GUA  1109     239.628 163.960  12.737  1.00187.52      A16S
ATOM  43038  C2' GUA  1109     240.216 164.663   9.314  1.00 74.50      A16S
ATOM  43039  O2' GUA  1109     239.647 164.962   8.054  1.00 74.50      A16S
ATOM  43040  C3' GUA  1109     241.147 163.455   9.308  1.00 74.50      A16S
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ATOM  43042  P   CYT  1110     243.478 163.183   8.165  1.00110.34      A16S
ATOM  43043  O1P CYT  1110     243.815 161.880   7.546  1.00108.76      A16S
ATOM  43044  O2P CYT  1110     243.934 163.471   9.550  1.00108.76      A16S
ATOM  43045  O5' CYT  1110     243.994 164.343   7.204  1.00110.34      A16S
ATOM  43046  C5' CYT  1110     243.263 164.694   6.014  1.00110.34      A16S
ATOM  43047  C4' CYT  1110     242.976 166.177   5.997  1.00110.34      A16S
ATOM  43048  O4' CYT  1110     242.234 166.522   7.191  1.00110.34      A16S
ATOM  43049  C1' CYT  1110     242.601 167.821   7.622  1.00110.34      A16S
ATOM  43050  N1  CYT  1110     243.026 167.755   9.038  1.00108.76      A16S
ATOM  43051  C6  CYT  1110     243.392 166.565   9.608  1.00108.76      A16S
ATOM  43052  C2  CYT  1110     243.019 168.934   9.807  1.00108.76      A16S
ATOM  43053  O2  CYT  1110     242.733 170.017   9.259  1.00108.76      A16S
ATOM  43054  N3  CYT  1110     243.331 168.861  11.126  1.00108.76      A16S
ATOM  43055  C4  CYT  1110     243.652 167.686  11.675  1.00108.76      A16S
ATOM  43056  N4  CYT  1110     243.922 167.657  12.982  1.00108.76      A16S
ATOM  43057  C5  CYT  1110     243.705 166.486  10.909  1.00108.76      A16S
ATOM  43058  C2' CYT  1110     243.631 168.376   6.637  1.00110.34      A16S
ATOM  43059  O2' CYT  1110     242.965 169.153   5.665  1.00110.34      A16S
ATOM  43060  C3' CYT  1110     244.183 167.109   6.003  1.00110.34      A16S
ATOM  43061  O3' CYT  1110     244.603 167.376   4.668  1.00110.34      A16S
ATOM  43062  P   CYT  1111     246.098 167.881   4.383  1.00201.09      A16S
ATOM  43063  O1P CYT  1111     246.461 167.358   3.053  1.00200.85      A16S
ATOM  43064  O2P CYT  1111     246.956 167.560   5.555  1.00200.85      A16S
ATOM  43065  O5' CYT  1111     245.956 169.463   4.267  1.00201.09      A16S
ATOM  43066  C5' CYT  1111     245.608 170.252   5.417  1.00201.09      A16S
ATOM  43067  C4' CYT  1111     246.057 171.686   5.248  1.00201.09      A16S
ATOM  43068  O4' CYT  1111     245.712 172.392   6.462  1.00201.09      A16S
ATOM  43069  C1' CYT  1111     246.815 173.144   6.929  1.00201.09      A16S
ATOM  43070  N1  CYT  1111     247.122 172.673   8.300  1.00200.85      A16S
ATOM  43071  C6  CYT  1111     246.205 171.908   8.969  1.00200.85      A16S
ATOM  43072  C2  CYT  1111     248.343 173.018   8.922  1.00200.85      A16S
ATOM  43073  O2  CYT  1111     249.167 173.725   8.312  1.00200.85      A16S
ATOM  43074  N3  CYT  1111     248.583 172.570  10.181  1.00200.85      A16S
ATOM  43075  C4  CYT  1111     247.670 171.822  10.813  1.00200.85      A16S
ATOM  43076  N4  CYT  1111     247.950 171.389  12.044  1.00200.85      A16S
ATOM  43077  C5  CYT  1111     246.432 171.476  10.209  1.00200.85      A16S
ATOM  43078  C2' CYT  1111     247.917 173.108   5.861  1.00201.09      A16S
ATOM  43079  O2' CYT  1111     247.922 174.332   5.160  1.00201.09      A16S
ATOM  43080  C3' CYT  1111     247.558 171.849   5.064  1.00201.09      A16S
ATOM  43081  O3' CYT  1111     247.914 171.794   3.660  1.00201.09      A16S
ATOM  43082  P   ADE  1112     247.379 172.921   2.617  1.00122.56      A16S
ATOM  43083  O1P ADE  1112     248.504 173.263   1.702  1.00 89.52      A16S
ATOM  43084  O2P ADE  1112     246.668 174.007   3.342  1.00 89.52      A16S
ATOM  43085  O5' ADE  1112     246.265 172.182   1.741  1.00122.56      A16S
ATOM  43086  C5' ADE  1112     245.173 171.471   2.374  1.00122.56      A16S
ATOM  43087  C4' ADE  1112     243.864 172.210   2.192  1.00122.56      A16S
ATOM  43088  O4' ADE  1112     242.904 171.635   3.111  1.00122.56      A16S
ATOM  43089  C1' ADE  1112     242.064 172.650   3.624  1.00122.56      A16S
ATOM  43090  N9  ADE  1112     242.071 172.577   5.088  1.00 89.52      A16S
ATOM  43091  C4  ADE  1112     241.240 173.249   5.957  1.00 89.52      A16S
ATOM  43092  N3  ADE  1112     240.297 174.160   5.650  1.00 89.52      A16S
ATOM  43093  C2  ADE  1112     239.659 174.563   6.752  1.00 89.52      A16S
ATOM  43094  N1  ADE  1112     239.838 174.182   8.030  1.00 89.52      A16S
ATOM  43095  C6  ADE  1112     240.790 173.262   8.303  1.00 89.52      A16S
ATOM  43096  N6  ADE  1112     240.950 172.862   9.568  1.00 89.52      A16S
ATOM  43097  C5  ADE  1112     241.549 172.769   7.224  1.00 89.52      A16S
ATOM  43098  N7  ADE  1112     242.586 171.850   7.160  1.00 89.52      A16S
ATOM  43099  C8  ADE  1112     242.865 171.783   5.880  1.00 89.52      A16S
ATOM  43100  C2' ADE  1112     242.474 173.984   2.999  1.00122.56      A16S
ATOM  43101  O2' ADE  1112     241.587 174.260   1.938  1.00122.56      A16S
ATOM  43102  C3' ADE  1112     243.895 173.699   2.521  1.00122.56      A16S
ATOM  43103  O3' ADE  1112     244.159 174.419   1.313  1.00122.56      A16S
ATOM  43104  P   GUA  1113     245.119 175.721   1.312  1.00199.89      A16S
ATOM  43105  O1P GUA  1113     244.688 176.539   0.141  1.00138.48      A16S
ATOM  43106  O2P GUA  1113     246.535 175.293   1.404  1.00138.48      A16S
ATOM  43107  O5' GUA  1113     244.738 176.543   2.627  1.00199.89      A16S
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ATOM	43108	C5'	GUA	1113	244.689	177.986	2.589	1.00199.89	A16S
ATOM	43109	C4'	GUA	1113	245.097	178.575	3.917	1.00199.89	A16S
ATOM	43110	O4'	GUA	1113	244.090	178.275	4.915	1.00199.89	A16S
ATOM	43111	C1'	GUA	1113	244.705	178.155	6.187	1.00199.89	A16S
ATOM	43112	N9	GUA	1113	244.468	176.812	6.701	1.00138.48	A16S
ATOM	43113	C4	GUA	1113	244.175	176.477	8.001	1.00138.48	A16S
ATOM	43114	N3	GUA	1113	244.005	177.341	9.025	1.00138.48	A16S
ATOM	43115	C2	GUA	1113	243.748	176.717	10.162	1.00138.48	A16S
ATOM	43116	N2	GUA	1113	243.535	177.427	11.281	1.00138.48	A16S
ATOM	43117	N1	GUA	1113	243.675	175.352	10.287	1.00138.48	A16S
ATOM	43118	C6	GUA	1113	243.847	174.443	9.249	1.00138.48	A16S
ATOM	43119	O6	GUA	1113	243.763	173.226	9.472	1.00138.48	A16S
ATOM	43120	C5	GUA	1113	244.112	175.102	8.018	1.00138.48	A16S
ATOM	43121	N7	GUA	1113	244.330	174.585	6.749	1.00138.48	A16S
ATOM	43122	C8	GUA	1113	244.532	175.634	6.001	1.00138.48	A16S
ATOM	43123	C2'	GUA	1113	246.204	178.392	6.007	1.00199.89	A16S
ATOM	43124	O2'	GUA	1113	246.528	179.728	6.332	1.00199.89	A16S
ATOM	43125	C3'	GUA	1113	246.394	178.074	4.532	1.00199.89	A16S
ATOM	43126	O3'	GUA	1113	247.551	178.714	4.017	1.00199.89	A16S
ATOM	43127	P	CYT	1114	249.008	178.183	4.450	1.00152.91	A16S
ATOM	43128	O1P	CYT	1114	249.971	178.645	3.419	1.00133.59	A16S
ATOM	43129	O2P	CYT	1114	248.912	176.736	4.763	1.00133.59	A16S
ATOM	43130	O5'	CYT	1114	249.306	178.937	5.823	1.00152.91	A16S
ATOM	43131	C5'	CYT	1114	249.511	180.364	5.861	1.00152.91	A16S
ATOM	43132	C4'	CYT	1114	249.704	180.829	7.287	1.00152.91	A16S
ATOM	43133	O4'	CYT	1114	248.501	180.543	8.049	1.00152.91	A16S
ATOM	43134	C1'	CYT	1114	248.850	180.193	9.379	1.00152.91	A16S
ATOM	43135	N1	CYT	1114	248.331	178.841	9.674	1.00133.59	A16S
ATOM	43136	C6	CYT	1114	247.955	177.991	8.668	1.00133.59	A16S
ATOM	43137	C2	CYT	1114	248.233	178.431	11.018	1.00133.59	A16S
ATOM	43138	O2	CYT	1114	248.579	179.216	11.920	1.00133.59	A16S
ATOM	43139	N3	CYT	1114	247.768	177.194	11.297	1.00133.59	A16S
ATOM	43140	C4	CYT	1114	247.404	176.378	10.307	1.00133.59	A16S
ATOM	43141	N4	CYT	1114	246.944	175.171	10.636	1.00133.59	A16S
ATOM	43142	C5	CYT	1114	247.492	176.765	8.936	1.00133.59	A16S
ATOM	43143	C2'	CYT	1114	250.372	180.290	9.512	1.00152.91	A16S
ATOM	43144	O2'	CYT	1114	250.719	181.525	10.104	1.00152.91	A16S
ATOM	43145	C3'	CYT	1114	250.825	180.149	8.063	1.00152.91	A16S
ATOM	43146	O3'	CYT	1114	252.088	180.771	7.829	1.00152.91	A16S
ATOM	43147	P	GUA	1115	253.446	179.935	8.053	1.00146.40	A16S
ATOM	43148	O1P	GUA	1115	254.554	180.722	7.449	1.00169.38	A16S
ATOM	43149	O2P	GUA	1115	253.220	178.533	7.611	1.00169.38	A16S
ATOM	43150	O5'	GUA	1115	253.641	179.927	9.636	1.00146.40	A16S
ATOM	43151	C5'	GUA	1115	254.208	181.063	10.332	1.00146.40	A16S
ATOM	43152	C4'	GUA	1115	254.426	180.725	11.790	1.00146.40	A16S
ATOM	43153	O4'	GUA	1115	253.141	180.468	12.413	1.00146.40	A16S
ATOM	43154	C1'	GUA	1115	253.241	179.359	13.290	1.00146.40	A16S
ATOM	43155	N9	GUA	1115	252.422	178.281	12.740	1.00169.38	A16S
ATOM	43156	C4	GUA	1115	252.185	177.056	13.316	1.00169.38	A16S
ATOM	43157	N3	GUA	1115	252.644	176.643	14.515	1.00169.38	A16S
ATOM	43158	C2	GUA	1115	252.269	175.407	14.787	1.00169.38	A16S
ATOM	43159	N2	GUA	1115	252.631	174.845	15.943	1.00169.38	A16S
ATOM	43160	N1	GUA	1115	251.509	174.635	13.943	1.00169.38	A16S
ATOM	43161	C6	GUA	1115	251.029	175.042	12.701	1.00169.38	A16S
ATOM	43162	O6	GUA	1115	250.358	174.266	12.014	1.00169.38	A16S
ATOM	43163	C5	GUA	1115	251.414	176.367	12.404	1.00169.38	A16S
ATOM	43164	N7	GUA	1115	251.150	177.148	11.290	1.00169.38	A16S
ATOM	43165	C8	GUA	1115	251.760	178.274	11.534	1.00169.38	A16S
ATOM	43166	C2'	GUA	1115	254.717	178.958	13.363	1.00146.40	A16S
ATOM	43167	O2'	GUA	1115	255.338	179.571	14.473	1.00146.40	A16S
ATOM	43168	C3'	GUA	1115	255.235	179.458	12.022	1.00146.40	A16S
ATOM	43169	O3'	GUA	1115	256.630	179.717	12.026	1.00146.40	A16S
ATOM	43170	P	GUA	1116	257.637	178.646	11.376	1.00143.14	A16S
ATOM	43171	O1P	GUA	1116	258.945	179.324	11.196	1.00161.73	A16S
ATOM	43172	O2P	GUA	1116	256.962	178.040	10.200	1.00161.73	A16S
ATOM	43173	O5'	GUA	1116	257.797	177.528	12.505	1.00143.14	A16S
ATOM	43174	C5'	GUA	1116	258.390	177.842	13.783	1.00143.14	A16S
ATOM	43175	C4'	GUA	1116	258.156	176.719	14.771	1.00143.14	A16S
ATOM	43176	O4'	GUA	1116	256.726	176.482	14.881	1.00143.14	A16S
ATOM	43177	C1'	GUA	1116	256.482	175.097	15.078	1.00143.14	A16S
ATOM	43178	N9	GUA	1116	255.697	174.594	13.947	1.00161.73	A16S
ATOM	43179	C4	GUA	1116	255.192	173.316	13.799	1.00161.73	A16S
ATOM	43180	N3	GUA	1116	255.312	172.306	14.687	1.00161.73	A16S
ATOM	43181	C2	GUA	1116	254.738	171.197	14.254	1.00161.73	A16S
ATOM	43182	N2	GUA	1116	254.765	170.095	15.017	1.00161.73	A16S
ATOM	43183	N1	GUA	1116	254.097	171.085	13.043	1.00161.73	A16S
ATOM	43184	C6	GUA	1116	253.961	172.108	12.111	1.00161.73	A16S
ATOM	43185	O6	GUA	1116	253.367	171.898	11.045	1.00161.73	A16S
ATOM	43186	C5	GUA	1116	254.570	173.308	12.565	1.00161.73	A16S
ATOM	43187	N7	GUA	1116	254.665	174.553	11.957	1.00161.73	A16S
ATOM	43188	C8	GUA	1116	255.334	175.283	12.811	1.00161.73	A16S
ATOM	43189	C2'	GUA	1116	257.843	174.402	15.192	1.00143.14	A16S
ATOM	43190	O2'	GUA	1116	258.204	174.275	16.556	1.00143.14	A16S
ATOM	43191	C3'	GUA	1116	258.747	175.358	14.421	1.00143.14	A16S
ATOM	43192	O3'	GUA	1116	260.115	175.226	14.817	1.00143.14	A16S
ATOM	43193	P	URI	1117	261.148	174.398	13.889	1.00201.09	A16S
ATOM	43194	O1P	URI	1117	260.842	174.731	12.472	1.00146.34	A16S
ATOM	43195	O2P	URI	1117	262.527	174.602	14.406	1.00146.34	A16S
ATOM	43196	O5'	URI	1117	260.769	172.865	14.112	1.00201.09	A16S
ATOM	43197	C5'	URI	1117	260.994	172.209	15.378	1.00201.09	A16S
ATOM	43198	C4'	URI	1117	260.325	170.852	15.382	1.00201.09	A16S
ATOM	43199	O4'	URI	1117	258.942	171.044	14.987	1.00201.09	A16S
ATOM	43200	C1'	URI	1117	258.527	169.981	14.148	1.00201.09	A16S
ATOM	43201	N1	URI	1117	258.107	170.548	12.853	1.00146.34	A16S
ATOM	43202	C6	URI	1117	258.649	171.725	12.374	1.00146.34	A16S
ATOM	43203	C2	URI	1117	257.136	169.869	12.126	1.00146.34	A16S
ATOM	43204	O2	URI	1117	256.639	168.813	12.495	1.00146.34	A16S
ATOM	43205	N3	URI	1117	256.771	170.473	10.946	1.00146.34	A16S
ATOM	43206	C4	URI	1117	257.264	171.652	10.425	1.00146.34	A16S
ATOM	43207	O4	URI	1117	256.800	172.088	9.373	1.00146.34	A16S
ATOM	43208	C5	URI	1117	258.270	172.281	11.219	1.00146.34	A16S
ATOM	43209	C2'	URI	1117	259.671	168.966	14.069	1.00201.09	A16S
ATOM	43210	O2'	URI	1117	259.456	167.943	15.022	1.00201.09	A16S
ATOM	43211	C3'	URI	1117	260.885	169.832	14.396	1.00201.09	A16S
ATOM	43212	O3'	URI	1117	261.937	169.067	15.000	1.00201.09	A16S
ATOM	43213	P	URI	1118	262.853	168.085	14.101	1.00185.81	A16S

ATOM	43214	O1P	URI	1118	262.431	168.183	12.676	1.00138.13	A16S	ATOM	43267	C6	GUA	1120	256.597	165.203	14.968	1.00139.81	A16S
ATOM	43215	O2P	URI	1118	264.268	168.342	14.463	1.00138.13	A16S	ATOM	43268	O6	GUA	1120	257.153	165.931	15.801	1.00139.81	A16S
ATOM	43216	O5'	URI	1118	262.476	166.625	14.616	1.00185.81	A16S	ATOM	43269	C5	GUA	1120	256.320	163.811	15.051	1.00139.81	A16S
ATOM	43217	C5'	URI	1118	263.280	165.470	14.271	1.00185.81	A16S	ATOM	43270	N7	GUA	1120	256.579	162.900	16.067	1.00139.81	A16S
ATOM	43218	C4'	URI	1118	262.796	164.257	15.038	1.00185.81	A16S	ATOM	43271	C8	GUA	1120	256.126	161.765	15.608	1.00139.81	A16S
ATOM	43219	O4'	URI	1118	262.978	164.519	16.449	1.00185.81	A16S	ATOM	43272	C2'	GUA	1120	253.563	160.901	13.199	1.00153.07	A16S
ATOM	43220	C1'	URI	1118	261.845	164.082	17.172	1.00185.81	A16S	ATOM	43273	O2'	GUA	1120	252.961	159.626	13.280	1.00153.07	A16S
ATOM	43221	N1	URI	1118	261.288	165.248	17.878	1.00138.13	A16S	ATOM	43274	C3'	GUA	1120	253.600	161.457	11.779	1.00153.07	A16S
ATOM	43222	C6	URI	1118	261.445	166.525	17.374	1.00138.13	A16S	ATOM	43275	O3'	GUA	1120	252.469	161.066	11.015	1.00153.07	A16S
ATOM	43223	C2	URI	1118	260.623	165.035	19.078	1.00138.13	A16S	ATOM	43276	P	GUA	1121	252.151	161.809	9.623	1.00152.83	A16S
ATOM	43224	O2	URI	1118	260.424	163.922	19.548	1.00138.13	A16S	ATOM	43277	O1P	GUA	1121	252.942	161.129	8.565	1.00147.75	A16S
ATOM	43225	N3	URI	1118	260.194	166.178	19.706	1.00138.13	A16S	ATOM	43278	O2P	GUA	1121	252.299	163.274	9.815	1.00147.75	A16S
ATOM	43226	C4	URI	1118	260.345	167.479	19.266	1.00138.13	A16S	ATOM	43279	O5'	GUA	1121	250.611	161.488	9.363	1.00152.83	A16S
ATOM	43227	O4	URI	1118	259.957	168.406	19.976	1.00138.13	A16S	ATOM	43280	C5'	GUA	1121	249.689	161.331	10.462	1.00152.83	A16S
ATOM	43228	C5	URI	1118	261.010	167.613	18.008	1.00138.13	A16S	ATOM	43281	C4'	GUA	1121	249.815	162.499	11.404	1.00152.83	A16S
ATOM	43229	C2'	URI	1118	260.898	163.371	16.200	1.00185.81	A16S	ATOM	43282	O4'	GUA	1121	249.877	163.714	10.632	1.00152.83	A16S
ATOM	43230	O2'	URI	1118	261.113	161.976	16.277	1.00185.81	A16S	ATOM	43283	C1'	GUA	1121	249.335	164.770	11.388	1.00152.83	A16S
ATOM	43231	C3'	URI	1118	261.312	163.964	14.854	1.00185.81	A16S	ATOM	43284	N9	GUA	1121	248.457	165.562	10.537	1.00147.75	A16S
ATOM	43232	O3'	URI	1118	261.114	162.996	13.823	1.00185.81	A16S	ATOM	43285	C4	GUA	1121	247.762	166.680	10.915	1.00147.75	A16S
ATOM	43233	P	CYT	1119	261.283	163.406	12.273	1.00187.29	A16S	ATOM	43286	N3	GUA	1121	247.746	167.220	12.153	1.00147.75	A16S
ATOM	43234	O1P	CYT	1119	262.685	163.847	12.050	1.00160.91	A16S	ATOM	43287	C2	GUA	1121	247.006	168.309	12.205	1.00147.75	A16S
ATOM	43235	O2P	CYT	1119	260.740	162.279	11.478	1.00160.91	A16S	ATOM	43288	N2	GUA	1121	246.885	168.981	13.358	1.00147.75	A16S
ATOM	43236	O5'	CYT	1119	260.327	164.664	12.070	1.00187.29	A16S	ATOM	43289	N1	GUA	1121	246.331	168.823	11.126	1.00147.75	A16S
ATOM	43237	C5'	CYT	1119	258.916	164.572	12.327	1.00187.29	A16S	ATOM	43290	C6	GUA	1121	246.333	168.280	9.841	1.00147.75	A16S
ATOM	43238	C4'	CYT	1119	258.136	165.280	11.244	1.00187.29	A16S	ATOM	43291	O6	GUA	1121	245.693	168.827	8.934	1.00147.75	A16S
ATOM	43239	O4'	CYT	1119	258.535	166.668	11.184	1.00187.29	A16S	ATOM	43292	C5	GUA	1121	247.123	167.115	9.774	1.00147.75	A16S
ATOM	43240	C1'	CYT	1119	258.373	167.144	9.864	1.00187.29	A16S	ATOM	43293	N7	GUA	1121	247.397	166.276	8.702	1.00147.75	A16S
ATOM	43241	N1	CYT	1119	259.596	167.858	9.450	1.00160.91	A16S	ATOM	43294	C8	GUA	1121	248.185	165.365	9.201	1.00147.75	A16S
ATOM	43242	C6	CYT	1119	260.834	167.434	9.850	1.00160.91	A16S	ATOM	43295	C2'	GUA	1121	248.731	164.208	12.678	1.00152.83	A16S
ATOM	43243	C2	CYT	1119	259.468	168.995	8.633	1.00160.91	A16S	ATOM	43296	O2'	GUA	1121	249.569	164.569	13.750	1.00152.83	A16S
ATOM	43244	O2	CYT	1119	258.335	169.362	8.278	1.00160.91	A16S	ATOM	43297	C3'	GUA	1121	248.687	162.703	12.399	1.00152.83	A16S
ATOM	43245	N3	CYT	1119	260.580	169.663	8.254	1.00160.91	A16S	ATOM	43298	O3'	GUA	1121	248.945	161.882	13.544	1.00152.83	A16S
ATOM	43246	C4	CYT	1119	261.782	169.242	8.654	1.00160.91	A16S	ATOM	43299	P	CYT	1122	248.377	162.296	14.992	1.00175.55	A16S
ATOM	43247	N4	CYT	1119	262.850	169.935	8.255	1.00160.91	A16S	ATOM	43300	O1P	CYT	1122	248.104	161.030	15.729	1.00115.28	A16S
ATOM	43248	C5	CYT	1119	261.942	168.091	9.481	1.00160.91	A16S	ATOM	43301	O2P	CYT	1122	247.284	163.295	14.817	1.00115.28	A16S
ATOM	43249	C2'	CYT	1119	257.941	165.977	8.970	1.00187.29	A16S	ATOM	43302	O5'	CYT	1122	249.623	163.023	15.679	1.00175.55	A16S
ATOM	43250	O2'	CYT	1119	256.554	166.097	8.724	1.00187.29	A16S	ATOM	43303	C5'	CYT	1122	250.640	162.266	16.374	1.00175.55	A16S
ATOM	43251	C3'	CYT	1119	258.296	164.757	9.823	1.00187.29	A16S	ATOM	43304	C4'	CYT	1122	251.739	163.177	16.899	1.00175.55	A16S
ATOM	43252	O3'	CYT	1119	257.348	163.711	9.608	1.00187.29	A16S	ATOM	43305	O4'	CYT	1122	252.706	163.491	15.862	1.00175.55	A16S
ATOM	43253	P	GUA	1120	257.823	162.271	9.060	1.00153.07	A16S	ATOM	43306	C1'	CYT	1122	253.279	164.767	16.119	1.00175.55	A16S
ATOM	43254	O1P	GUA	1120	257.558	162.248	7.597	1.00139.81	A16S	ATOM	43307	N1	CYT	1122	253.105	165.638	14.934	1.00115.28	A16S
ATOM	43255	O2P	GUA	1120	259.185	161.971	9.559	1.00139.81	A16S	ATOM	43308	C6	CYT	1122	252.384	165.222	13.851	1.00115.28	A16S
ATOM	43256	O5'	GUA	1120	256.805	161.263	9.764	1.00153.07	A16S	ATOM	43309	C2	CYT	1122	253.699	166.915	14.934	1.00115.28	A16S
ATOM	43257	C5'	GUA	1120	255.469	161.698	10.093	1.00153.07	A16S	ATOM	43310	O2	CYT	1122	254.354	167.281	15.924	1.00115.28	A16S
ATOM	43258	C4'	GUA	1120	254.869	160.852	11.197	1.00153.07	A16S	ATOM	43311	N3	CYT	1122	253.545	167.715	13.856	1.00115.28	A16S
ATOM	43259	O4'	GUA	1120	255.781	160.743	12.318	1.00153.07	A16S	ATOM	43312	C4	CYT	1122	252.838	167.294	12.808	1.00115.28	A16S
ATOM	43260	C1'	GUA	1120	255.053	160.781	13.534	1.00153.07	A16S	ATOM	43313	N4	CYT	1122	252.716	168.117	11.765	1.00115.28	A16S
ATOM	43261	N9	GUA	1120	255.592	161.868	14.346	1.00139.81	A16S	ATOM	43314	C5	CYT	1122	252.227	166.009	12.779	1.00115.28	A16S
ATOM	43262	C4	GUA	1120	255.697	163.195	13.988	1.00139.81	A16S	ATOM	43315	C2'	CYT	1122	252.623	165.332	17.381	1.00175.55	A16S
ATOM	43263	N3	GUA	1120	255.280	163.739	12.824	1.00139.81	A16S	ATOM	43316	O2'	CYT	1122	253.464	165.112	18.496	1.00175.55	A16S
ATOM	43264	C2	GUA	1120	255.537	165.033	12.764	1.00139.81	A16S	ATOM	43317	C3'	CYT	1122	251.327	164.532	17.451	1.00175.55	A16S
ATOM	43265	N2	GUA	1120	255.186	165.733	11.676	1.00139.81	A16S	ATOM	43318	O3'	CYT	1122	250.842	164.469	18.782	1.00175.55	A16S
ATOM	43266	N1	GUA	1120	256.159	165.739	13.762	1.00139.81	A16S	ATOM	43319	P	CYT	1123	249.875	165.633	19.320	1.00167.37	A16S

ATOM	43320	O1P	CYT	1123	249.607	165.341	20.753	1.00145.82	A16S	ATOM	43373	C2	GUA	1125	244.787	173.075	13.355	1.00182.47	A16S
ATOM	43321	O2P	CYT	1123	248.736	165.763	18.371	1.00145.82	A16S	ATOM	43374	N2	GUA	1125	244.673	173.301	12.042	1.00182.47	A16S
ATOM	43322	O5'	CYT	1123	250.762	166.956	19.209	1.00167.37	A16S	ATOM	43375	N1	GUA	1125	244.839	171.758	13.738	1.00182.47	A16S
ATOM	43323	C5'	CYT	1123	251.687	167.327	20.256	1.00167.37	A16S	ATOM	43376	C6	GUA	1125	244.956	171.310	15.049	1.00182.47	A16S
ATOM	43324	C4'	CYT	1123	251.912	168.824	20.256	1.00167.37	A16S	ATOM	43377	O6	GUA	1125	244.994	170.096	15.284	1.00182.47	A16S
ATOM	43325	O4'	CYT	1123	252.722	169.211	19.117	1.00167.37	A16S	ATOM	43378	C5	GUA	1125	245.017	172.391	15.966	1.00182.47	A16S
ATOM	43326	C1'	CYT	1123	252.304	170.482	18.643	1.00167.37	A16S	ATOM	43379	N7	GUA	1125	245.133	172.389	17.349	1.00182.47	A16S
ATOM	43327	N1	CYT	1123	251.888	170.349	17.234	1.00145.82	A16S	ATOM	43380	C8	GUA	1125	245.141	173.653	17.676	1.00182.47	A16S
ATOM	43328	C6	CYT	1123	251.396	169.165	16.752	1.00145.82	A16S	ATOM	43381	C2'	GUA	1125	243.583	176.528	16.456	1.00116.42	A16S
ATOM	43329	C2	CYT	1123	252.002	171.461	16.388	1.00145.82	A16S	ATOM	43382	O2'	GUA	1125	243.626	177.750	15.738	1.00116.42	A16S
ATOM	43330	O2	CYT	1123	252.443	172.524	16.847	1.00145.82	A16S	ATOM	43383	C3'	GUA	1125	243.148	176.691	17.909	1.00116.42	A16S
ATOM	43331	N3	CYT	1123	251.626	171.348	15.093	1.00145.82	A16S	ATOM	43384	O3'	GUA	1125	242.126	177.669	18.074	1.00116.42	A16S
ATOM	43332	C4	CYT	1123	251.148	170.187	14.635	1.00145.82	A16S	ATOM	43385	P	GUA	1126	240.583	177.213	18.086	1.00148.14	A16S
ATOM	43333	N4	CYT	1123	250.787	170.120	13.351	1.00145.82	A16S	ATOM	43386	O1P	GUA	1126	239.754	178.421	18.340	1.00184.66	A16S
ATOM	43334	C5	CYT	1123	251.018	169.041	15.474	1.00145.82	A16S	ATOM	43387	O2P	GUA	1126	240.450	176.030	18.979	1.00184.66	A16S
ATOM	43335	C2'	CYT	1123	251.175	170.978	19.547	1.00167.37	A16S	ATOM	43388	O5'	GUA	1126	240.320	176.740	16.588	1.00148.14	A16S
ATOM	43336	O2'	CYT	1123	251.687	171.864	20.518	1.00167.37	A16S	ATOM	43389	C5'	GUA	1126	240.381	177.677	15.490	1.00148.14	A16S
ATOM	43337	C3'	CYT	1123	250.658	169.674	20.138	1.00167.37	A16S	ATOM	43390	C4'	GUA	1126	240.157	176.962	14.175	1.00148.14	A16S
ATOM	43338	O3'	CYT	1123	250.027	169.866	21.388	1.00167.37	A16S	ATOM	43391	O4'	GUA	1126	241.307	176.136	13.860	1.00148.14	A16S
ATOM	43339	P	GUA	1124	248.441	170.083	21.439	1.00109.17	A16S	ATOM	43392	C1'	GUA	1126	240.878	174.931	13.247	1.00148.14	A16S
ATOM	43340	O1P	GUA	1124	248.019	169.846	22.845	1.00157.91	A16S	ATOM	43393	N9	GUA	1126	241.236	173.822	14.127	1.00184.66	A16S
ATOM	43341	O2P	GUA	1124	247.821	169.298	20.345	1.00157.91	A16S	ATOM	43394	C4	GUA	1126	241.267	172.495	13.787	1.00184.66	A16S
ATOM	43342	O5'	GUA	1124	248.255	171.628	21.098	1.00109.17	A16S	ATOM	43395	N3	GUA	1126	240.977	171.985	12.573	1.00184.66	A16S
ATOM	43343	C5'	GUA	1124	248.549	172.627	22.087	1.00109.17	A16S	ATOM	43396	C2	GUA	1126	241.088	170.671	12.553	1.00184.66	A16S
ATOM	43344	C4'	GUA	1124	248.495	174.009	21.481	1.00109.17	A16S	ATOM	43397	N2	GUA	1126	240.826	170.005	11.424	1.00184.66	A16S
ATOM	43345	O4'	GUA	1124	249.485	174.117	20.429	1.00109.17	A16S	ATOM	43398	N1	GUA	1126	241.460	169.916	13.639	1.00184.66	A16S
ATOM	43346	C1'	GUA	1124	249.014	174.995	19.425	1.00109.17	A16S	ATOM	43399	C6	GUA	1126	241.763	170.422	14.899	1.00184.66	A16S
ATOM	43347	N9	GUA	1124	248.987	174.277	18.155	1.00157.91	A16S	ATOM	43400	O6	GUA	1126	242.090	169.655	15.813	1.00184.66	A16S
ATOM	43348	C4	GUA	1124	248.839	174.838	16.909	1.00157.91	A16S	ATOM	43401	C5	GUA	1126	241.643	171.830	14.935	1.00184.66	A16S
ATOM	43349	N3	GUA	1124	248.706	176.154	16.640	1.00157.91	A16S	ATOM	43402	N7	GUA	1126	241.846	172.722	15.977	1.00184.66	A16S
ATOM	43350	C2	GUA	1124	248.573	176.382	15.345	1.00157.91	A16S	ATOM	43403	C8	GUA	1126	241.596	173.890	15.453	1.00184.66	A16S
ATOM	43351	N2	GUA	1124	248.439	177.634	14.896	1.00157.91	A16S	ATOM	43404	C2'	GUA	1126	239.364	175.022	13.054	1.00148.14	A16S
ATOM	43352	N1	GUA	1124	248.565	175.400	14.394	1.00157.91	A16S	ATOM	43405	O2'	GUA	1126	239.063	175.502	11.757	1.00148.14	A16S
ATOM	43353	C6	GUA	1124	248.699	174.041	14.648	1.00157.91	A16S	ATOM	43406	C3'	GUA	1126	238.982	175.998	14.156	1.00148.14	A16S
ATOM	43354	O6	GUA	1124	248.677	173.241	13.714	1.00157.91	A16S	ATOM	43407	O3'	GUA	1126	237.756	176.649	13.906	1.00148.14	A16S
ATOM	43355	C5	GUA	1124	248.849	173.779	16.030	1.00157.91	A16S	ATOM	43408	P	CYT	1127	236.543	176.463	14.939	1.00129.76	A16S
ATOM	43356	N7	GUA	1124	249.011	172.577	16.706	1.00157.91	A16S	ATOM	43409	O1P	CYT	1127	236.615	177.592	15.894	1.00124.90	A16S
ATOM	43357	C8	GUA	1124	249.090	172.921	17.961	1.00157.91	A16S	ATOM	43410	O2P	CYT	1127	236.551	175.068	15.461	1.00124.90	A16S
ATOM	43358	C2'	GUA	1124	247.633	175.502	19.846	1.00109.17	A16S	ATOM	43411	O5'	CYT	1127	235.266	176.682	14.017	1.00129.76	A16S
ATOM	43359	O2'	GUA	1124	247.768	176.779	20.439	1.00109.17	A16S	ATOM	43412	C5'	CYT	1127	234.329	175.620	13.784	1.00129.76	A16S
ATOM	43360	C3'	GUA	1124	247.186	174.423	20.828	1.00109.17	A16S	ATOM	43413	C4'	CYT	1127	234.768	174.774	12.607	1.00129.76	A16S
ATOM	43361	O3'	GUA	1124	246.271	174.933	21.792	1.00109.17	A16S	ATOM	43414	O4'	CYT	1127	235.953	174.010	12.951	1.00129.76	A16S
ATOM	43362	P	GUA	1125	244.700	174.625	21.645	1.00116.42	A16S	ATOM	43415	C1'	CYT	1127	235.862	172.703	12.412	1.00129.76	A16S
ATOM	43363	O1P	GUA	1125	244.007	175.321	22.758	1.00182.47	A16S	ATOM	43416	N1	CYT	1127	235.946	171.753	13.538	1.00124.90	A16S
ATOM	43364	O2P	GUA	1125	244.527	173.159	21.476	1.00182.47	A16S	ATOM	43417	C6	CYT	1127	234.884	171.554	14.379	1.00124.90	A16S
ATOM	43365	O5'	GUA	1125	244.288	175.340	20.281	1.00116.42	A16S	ATOM	43418	C2	CYT	1127	237.151	171.071	13.753	1.00124.90	A16S
ATOM	43366	C5'	GUA	1125	244.528	176.749	20.077	1.00116.42	A16S	ATOM	43419	O2	CYT	1127	238.095	171.256	12.970	1.00124.90	A16S
ATOM	43367	C4'	GUA	1125	244.441	177.093	18.604	1.00116.42	A16S	ATOM	43420	N3	CYT	1127	237.259	170.234	14.809	1.00124.90	A16S
ATOM	43368	O4'	GUA	1125	245.487	176.390	17.880	1.00116.42	A16S	ATOM	43421	C4	CYT	1127	236.224	170.064	15.634	1.00124.90	A16S
ATOM	43369	C1'	GUA	1125	244.998	175.961	16.618	1.00116.42	A16S	ATOM	43422	N4	CYT	1127	236.383	169.242	16.675	1.00124.90	A16S
ATOM	43370	N9	GUA	1125	245.034	174.496	16.592	1.00182.47	A16S	ATOM	43423	C5	CYT	1127	234.981	170.732	15.432	1.00124.90	A16S
ATOM	43371	C4	GUA	1125	244.957	173.682	15.479	1.00182.47	A16S	ATOM	43424	C2'	CYT	1127	234.586	172.628	11.572	1.00129.76	A16S
ATOM	43372	N3	GUA	1125	244.842	174.094	14.198	1.00182.47	A16S	ATOM	43425	O2'	CYT	1127	234.922	172.883	10.229	1.00129.76	A16S

ATOM	43426	C3'	CYT	1127	233.741	173.740	12.190	1.00129.76	A16S	ATOM	43479	C6	URI	1130	235.269	164.667	6.295	1.00	89.68	A16S
ATOM	43427	O3'	CYT	1127	232.834	174.381	11.299	1.00129.76	A16S	ATOM	43480	C2	URI	1130	236.660	163.021	7.366	1.00	89.68	A16S
ATOM	43428	P	ADE	1128	231.910	173.511	10.328	1.00130.20	A16S	ATOM	43481	O2	URI	1130	237.406	162.057	7.346	1.00	89.68	A16S
ATOM	43429	O1P	ADE	1128	230.721	174.353	10.026	1.00 85.58	A16S	ATOM	43482	N3	URI	1130	236.317	163.646	8.535	1.00	89.68	A16S
ATOM	43430	O2P	ADE	1128	231.721	172.162	10.936	1.00 85.58	A16S	ATOM	43483	C4	URI	1130	235.486	164.731	8.682	1.00	89.68	A16S
ATOM	43431	O5'	ADE	1128	232.808	173.380	9.014	1.00130.20	A16S	ATOM	43484	O4	URI	1130	235.208	165.122	9.816	1.00	89.68	A16S
ATOM	43432	C5'	ADE	1128	233.035	174.523	8.167	1.00130.20	A16S	ATOM	43485	C5	URI	1130	234.954	165.252	7.455	1.00	89.68	A16S
ATOM	43433	C4'	ADE	1128	233.999	174.195	7.041	1.00130.20	A16S	ATOM	43486	C2'	URI	1130	235.419	161.731	4.715	1.00	90.58	A16S
ATOM	43434	O4'	ADE	1128	235.378	174.297	7.474	1.00130.20	A16S	ATOM	43487	O2'	URI	1130	236.096	160.616	4.168	1.00	90.58	A16S
ATOM	43435	C1'	ADE	1128	236.194	173.515	6.618	1.00130.20	A16S	ATOM	43488	C3'	URI	1130	234.412	162.352	3.759	1.00	90.58	A16S
ATOM	43436	N9	ADE	1128	237.032	172.624	7.419	1.00 85.58	A16S	ATOM	43489	O3'	URI	1130	233.773	161.348	2.999	1.00	90.58	A16S
ATOM	43437	C4	ADE	1128	237.947	171.728	6.914	1.00 85.58	A16S	ATOM	43490	P	CYT	1131	232.370	160.757	3.502	1.00	69.41	A16S
ATOM	43438	N3	ADE	1128	238.262	171.522	5.620	1.00 85.58	A16S	ATOM	43491	O1P	CYT	1131	232.063	159.594	2.629	1.00	98.99	A16S
ATOM	43439	C2	ADE	1128	239.180	170.563	5.507	1.00 85.58	A16S	ATOM	43492	O2P	CYT	1131	231.417	161.889	3.575	1.00	98.99	A16S
ATOM	43440	N1	ADE	1128	239.773	169.835	6.466	1.00 85.58	A16S	ATOM	43493	O5'	CYT	1131	232.647	160.252	4.991	1.00	69.41	A16S
ATOM	43441	C6	ADE	1128	239.432	170.060	7.756	1.00 85.58	A16S	ATOM	43494	C5'	CYT	1131	233.531	159.149	5.250	1.00	69.41	A16S
ATOM	43442	N6	ADE	1128	240.006	169.319	8.709	1.00 85.58	A16S	ATOM	43495	C4'	CYT	1131	233.851	159.073	6.725	1.00	69.41	A16S
ATOM	43443	C5	ADE	1128	238.474	171.066	8.013	1.00 85.58	A16S	ATOM	43496	O4'	CYT	1131	234.380	160.355	7.136	1.00	69.41	A16S
ATOM	43444	N7	ADE	1128	237.920	171.556	9.191	1.00 85.58	A16S	ATOM	43497	C1'	CYT	1131	233.933	160.667	8.445	1.00	69.41	A16S
ATOM	43445	C8	ADE	1128	237.079	172.475	8.785	1.00 85.58	A16S	ATOM	43498	N1	CYT	1131	233.160	161.930	8.385	1.00	98.99	A16S
ATOM	43446	C2'	ADE	1128	235.276	172.746	5.665	1.00130.20	A16S	ATOM	43499	C6	CYT	1131	232.749	162.445	7.183	1.00	98.99	A16S
ATOM	43447	O2'	ADE	1128	235.288	173.385	4.405	1.00130.20	A16S	ATOM	43500	C2	CYT	1131	232.852	162.600	9.582	1.00	98.99	A16S
ATOM	43448	C3'	ADE	1128	233.926	172.831	6.374	1.00130.20	A16S	ATOM	43501	O2	CYT	1131	233.226	162.115	10.663	1.00	98.99	A16S
ATOM	43449	O3'	ADE	1128	232.853	172.722	5.446	1.00130.20	A16S	ATOM	43502	N3	CYT	1131	232.153	163.758	9.526	1.00	98.99	A16S
ATOM	43450	P	CYT	1129	232.126	171.302	5.235	1.00114.18	A16S	ATOM	43503	C4	CYT	1131	231.761	164.250	8.346	1.00	98.99	A16S
ATOM	43451	O1P	CYT	1129	231.672	170.808	6.565	1.00 80.48	A16S	ATOM	43504	N4	CYT	1131	231.073	165.394	8.340	1.00	98.99	A16S
ATOM	43452	O2P	CYT	1129	231.144	171.470	4.137	1.00 80.48	A16S	ATOM	43505	C5	CYT	1131	232.057	163.590	7.119	1.00	98.99	A16S
ATOM	43453	O5'	CYT	1129	233.293	170.336	4.740	1.00114.18	A16S	ATOM	43506	C2'	CYT	1131	233.138	159.469	8.964	1.00	69.41	A16S
ATOM	43454	C5'	CYT	1129	233.921	170.518	3.453	1.00114.18	A16S	ATOM	43507	O2'	CYT	1131	233.991	158.633	9.718	1.00	69.41	A16S
ATOM	43455	C4'	CYT	1129	234.988	169.467	3.240	1.00114.18	A16S	ATOM	43508	C3'	CYT	1131	232.678	158.820	7.664	1.00	69.41	A16S
ATOM	43456	O4'	CYT	1129	236.087	169.694	4.155	1.00114.18	A16S	ATOM	43509	O3'	CYT	1131	232.433	157.426	7.838	1.00	69.41	A16S
ATOM	43457	C1'	CYT	1129	236.610	168.453	4.596	1.00114.18	A16S	ATOM	43510	P	URI	1132	230.942	156.908	8.139	1.00	99.32	A16S
ATOM	43458	N1	CYT	1129	236.503	168.391	6.063	1.00 80.48	A16S	ATOM	43511	O1P	URI	1132	230.964	155.431	8.017	1.00	78.15	A16S
ATOM	43459	C6	CYT	1129	235.534	169.096	6.724	1.00 80.48	A16S	ATOM	43512	O2P	URI	1132	229.991	157.707	7.324	1.00	78.15	A16S
ATOM	43460	C2	CYT	1129	237.414	167.589	6.782	1.00 80.48	A16S	ATOM	43513	O5'	URI	1132	230.702	157.263	9.667	1.00	99.32	A16S
ATOM	43461	O2	CYT	1129	238.286	166.956	6.162	1.00 80.48	A16S	ATOM	43514	C5'	URI	1132	231.494	156.656	10.701	1.00	99.32	A16S
ATOM	43462	N3	CYT	1129	237.315	167.528	8.131	1.00 80.48	A16S	ATOM	43515	C4'	URI	1132	231.162	157.288	12.027	1.00	99.32	A16S
ATOM	43463	C4	CYT	1129	236.358	168.218	8.761	1.00 80.48	A16S	ATOM	43516	O4'	URI	1132	231.528	158.691	11.978	1.00	99.32	A16S
ATOM	43464	N4	CYT	1129	236.283	168.116	10.087	1.00 80.48	A16S	ATOM	43517	C1'	URI	1132	230.538	159.469	12.630	1.00	99.32	A16S
ATOM	43465	C5	CYT	1129	235.426	169.040	8.057	1.00 80.48	A16S	ATOM	43518	N1	URI	1132	230.005	160.450	11.665	1.00	78.15	A16S
ATOM	43466	C2'	CYT	1129	235.840	167.332	3.898	1.00114.18	A16S	ATOM	43519	C6	URI	1132	230.002	160.201	10.312	1.00	78.15	A16S
ATOM	43467	O2'	CYT	1129	236.621	166.858	2.823	1.00114.18	A16S	ATOM	43520	C2	URI	1132	229.516	161.651	12.159	1.00	78.15	A16S
ATOM	43468	C3'	CYT	1129	234.542	168.038	3.507	1.00114.18	A16S	ATOM	43521	O2	URI	1132	229.471	161.913	13.351	1.00	78.15	A16S
ATOM	43469	O3'	CYT	1129	233.917	167.488	2.351	1.00114.18	A16S	ATOM	43522	N3	URI	1132	229.076	162.537	11.206	1.00	78.15	A16S
ATOM	43470	P	URI	1130	232.810	166.333	2.510	1.00 90.58	A16S	ATOM	43523	C4	URI	1132	229.062	162.355	9.846	1.00	78.15	A16S
ATOM	43471	O1P	URI	1130	231.842	166.724	3.567	1.00 89.68	A16S	ATOM	43524	O4	URI	1132	228.662	163.264	9.118	1.00	78.15	A16S
ATOM	43472	O2P	URI	1130	232.315	166.040	1.136	1.00 89.68	A16S	ATOM	43525	C5	URI	1132	229.560	161.088	9.413	1.00	78.15	A16S
ATOM	43473	O5'	URI	1130	233.653	165.091	3.053	1.00 90.58	A16S	ATOM	43526	C2'	URI	1132	229.502	158.512	13.225	1.00	99.32	A16S
ATOM	43474	C5'	URI	1130	234.582	164.406	2.190	1.00 90.58	A16S	ATOM	43527	O2'	URI	1132	229.834	158.261	14.574	1.00	99.32	A16S
ATOM	43475	C4'	URI	1130	235.276	163.283	2.925	1.00 90.58	A16S	ATOM	43528	C3'	URI	1132	229.676	157.280	12.345	1.00	99.32	A16S
ATOM	43476	O4'	URI	1130	236.239	163.809	3.873	1.00 90.58	A16S	ATOM	43529	O3'	URI	1132	229.301	156.063	12.983	1.00	99.32	A16S
ATOM	43477	C1'	URI	1130	236.388	162.891	4.946	1.00 90.58	A16S	ATOM	43530	P	ADE	1133	227.931	155.334	12.559	1.00	74.21	A16S
ATOM	43478	N1	URI	1130	236.092	163.563	6.221	1.00 89.68	A16S	ATOM	43531	O1P	ADE	1133	227.850	154.040	13.305	1.00	83.09	A16S

ATOM	43532	O2P	ADE	1133	227.820	155.349	11.079	1.00	83.09	A16S	ATOM	43585	O2	CYT	1135	218.511	165.804	9.250	1.00109.40	A16S
ATOM	43533	O5'	ADE	1133	226.807	156.304	13.119	1.00	74.21	A16S	ATOM	43586	N3	CYT	1135	219.614	163.970	8.519	1.00109.40	A16S
ATOM	43534	C5'	ADE	1133	226.737	156.584	14.516	1.00	74.21	A16S	ATOM	43587	C4	CYT	1135	219.839	162.660	8.650	1.00109.40	A16S
ATOM	43535	C4'	ADE	1133	225.603	157.525	14.797	1.00	74.21	A16S	ATOM	43588	N4	CYT	1135	220.713	162.089	7.815	1.00109.40	A16S
ATOM	43536	O4'	ADE	1133	225.900	158.836	14.237	1.00	74.21	A16S	ATOM	43589	C5	CYT	1135	219.180	161.876	9.646	1.00109.40	A16S
ATOM	43537	C1'	ADE	1133	224.762	159.313	13.560	1.00	74.21	A16S	ATOM	43590	C2'	CYT	1135	215.717	164.626	10.473	1.00 86.43	A16S
ATOM	43538	N9	ADE	1133	225.174	160.272	12.536	1.00	83.09	A16S	ATOM	43591	O2'	CYT	1135	215.146	165.897	10.707	1.00 86.43	A16S
ATOM	43539	C4	ADE	1133	224.986	161.632	12.626	1.00	83.09	A16S	ATOM	43592	C3'	CYT	1135	214.948	163.474	11.112	1.00 86.43	A16S
ATOM	43540	N3	ADE	1133	224.408	162.311	13.635	1.00	83.09	A16S	ATOM	43593	O3'	CYT	1135	213.550	163.708	11.069	1.00 86.43	A16S
ATOM	43541	C2	ADE	1133	224.396	163.617	13.375	1.00	83.09	A16S	ATOM	43594	P	GUA	1136	212.756	163.493	9.689	1.00101.37	A16S
ATOM	43542	N1	ADE	1133	224.863	164.275	12.304	1.00	83.09	A16S	ATOM	43595	O1P	GUA	1136	211.316	163.765	9.950	1.00130.49	A16S
ATOM	43543	C6	ADE	1133	225.439	163.566	11.310	1.00	83.09	A16S	ATOM	43596	O2P	GUA	1136	213.165	162.181	9.124	1.00130.49	A16S
ATOM	43544	N6	ADE	1133	225.906	164.224	10.250	1.00	83.09	A16S	ATOM	43597	O5'	GUA	1136	213.317	164.638	8.734	1.00101.37	A16S
ATOM	43545	C5	ADE	1133	225.511	162.165	11.461	1.00	83.09	A16S	ATOM	43598	C5'	GUA	1136	212.909	165.999	8.914	1.00101.37	A16S
ATOM	43546	N7	ADE	1133	226.019	161.160	10.648	1.00	83.09	A16S	ATOM	43599	C4'	GUA	1136	213.562	166.888	7.887	1.00101.37	A16S
ATOM	43547	C8	ADE	1133	225.796	160.059	11.330	1.00	83.09	A16S	ATOM	43600	O4'	GUA	1136	215.002	166.856	8.057	1.00101.37	A16S
ATOM	43548	C2'	ADE	1133	224.032	158.068	13.071	1.00	74.21	A16S	ATOM	43601	C1'	GUA	1136	215.631	167.026	6.796	1.00101.37	A16S
ATOM	43549	O2'	ADE	1133	222.683	158.384	12.811	1.00	74.21	A16S	ATOM	43602	N9	GUA	1136	216.420	165.837	6.491	1.00130.49	A16S
ATOM	43550	C3'	ADE	1133	224.237	157.117	14.254	1.00	74.21	A16S	ATOM	43603	C4	GUA	1136	217.326	165.721	5.466	1.00130.49	A16S
ATOM	43551	O3'	ADE	1133	223.273	157.352	15.269	1.00	74.21	A16S	ATOM	43604	N3	GUA	1136	217.670	166.700	4.602	1.00130.49	A16S
ATOM	43552	P	ADE	1134	221.804	156.729	15.136	1.00	79.87	A16S	ATOM	43605	C2	GUA	1136	218.549	166.287	3.711	1.00130.49	A16S
ATOM	43553	O1P	ADE	1134	221.425	156.279	16.493	1.00	101.51	A16S	ATOM	43606	N2	GUA	1136	219.008	167.140	2.789	1.00130.49	A16S
ATOM	43554	O2P	ADE	1134	221.791	155.755	14.018	1.00	101.51	A16S	ATOM	43607	N1	GUA	1136	219.044	165.006	3.661	1.00130.49	A16S
ATOM	43555	O5'	ADE	1134	220.908	157.988	14.725	1.00	79.87	A16S	ATOM	43608	C6	GUA	1136	218.698	163.978	4.535	1.00130.49	A16S
ATOM	43556	C5'	ADE	1134	220.254	158.777	15.736	1.00	79.87	A16S	ATOM	43609	O6	GUA	1136	219.189	162.850	4.387	1.00130.49	A16S
ATOM	43557	C4'	ADE	1134	219.713	160.085	15.179	1.00	79.87	A16S	ATOM	43610	C5	GUA	1136	217.766	164.416	5.511	1.00130.49	A16S
ATOM	43558	O4'	ADE	1134	220.791	160.928	14.710	1.00	79.87	A16S	ATOM	43611	N7	GUA	1136	217.172	163.732	6.563	1.00130.49	A16S
ATOM	43559	C1'	ADE	1134	220.238	161.955	13.915	1.00	79.87	A16S	ATOM	43612	C8	GUA	1136	216.387	164.614	7.120	1.00130.49	A16S
ATOM	43560	N9	ADE	1134	221.058	162.170	12.730	1.00	101.51	A16S	ATOM	43613	C2'	GUA	1136	214.532	167.203	5.750	1.00101.37	A16S
ATOM	43561	C4	ADE	1134	221.180	163.369	12.069	1.00	101.51	A16S	ATOM	43614	O2'	GUA	1136	214.318	168.581	5.509	1.00101.37	A16S
ATOM	43562	N3	ADE	1134	220.595	164.537	12.386	1.00	101.51	A16S	ATOM	43615	C3'	GUA	1136	213.356	166.514	6.429	1.00101.37	A16S
ATOM	43563	C2	ADE	1134	220.937	165.487	11.516	1.00	101.51	A16S	ATOM	43616	O3'	GUA	1136	212.107	166.941	5.913	1.00101.37	A16S
ATOM	43564	N1	ADE	1134	221.734	165.407	10.445	1.00	101.51	A16S	ATOM	43617	P	GUA	1137	211.428	166.115	4.711	1.00 89.79	A16S
ATOM	43565	C6	ADE	1134	222.303	164.218	10.152	1.00	101.51	A16S	ATOM	43618	O1P	GUA	1137	210.014	166.567	4.600	1.00 87.16	A16S
ATOM	43566	N6	ADE	1134	223.090	164.136	9.079	1.00	101.51	A16S	ATOM	43619	O2P	GUA	1137	211.724	164.668	4.920	1.00 87.16	A16S
ATOM	43567	C5	ADE	1134	222.022	163.128	11.004	1.00	101.51	A16S	ATOM	43620	O5'	GUA	1137	212.202	166.627	3.417	1.00 89.79	A16S
ATOM	43568	N7	ADE	1134	222.428	161.801	10.994	1.00	101.51	A16S	ATOM	43621	C5'	GUA	1137	212.259	168.029	3.130	1.00 89.79	A16S
ATOM	43569	C8	ADE	1134	221.832	161.279	12.038	1.00	101.51	A16S	ATOM	43622	C4'	GUA	1137	213.253	168.316	2.033	1.00 89.79	A16S
ATOM	43570	C2'	ADE	1134	218.801	161.568	13.573	1.00	79.87	A16S	ATOM	43623	O4'	GUA	1137	214.590	167.927	2.436	1.00 89.79	A16S
ATOM	43571	O2'	ADE	1134	217.941	162.382	14.342	1.00	79.87	A16S	ATOM	43624	C1'	GUA	1137	215.338	167.552	1.292	1.00 89.79	A16S
ATOM	43572	C3'	ADE	1134	218.738	160.105	14.007	1.00	79.87	A16S	ATOM	43625	N9	GUA	1137	215.875	166.205	1.488	1.00 87.16	A16S
ATOM	43573	O3'	ADE	1134	217.396	159.817	14.395	1.00	79.87	A16S	ATOM	43626	C4	GUA	1137	216.731	165.535	0.635	1.00 87.16	A16S
ATOM	43574	P	CYT	1135	216.250	159.645	13.268	1.00	86.43	A16S	ATOM	43627	N3	GUA	1137	217.203	166.000	-0.545	1.00 87.16	A16S
ATOM	43575	O1P	CYT	1135	214.985	159.317	13.980	1.00	109.40	A16S	ATOM	43628	C2	GUA	1137	218.014	165.137	-1.127	1.00 87.16	A16S
ATOM	43576	O2P	CYT	1135	216.762	158.726	12.224	1.00	109.40	A16S	ATOM	43629	N2	GUA	1137	218.569	165.442	-2.303	1.00 87.16	A16S
ATOM	43577	O5'	CYT	1135	216.085	161.091	12.607	1.00	86.43	A16S	ATOM	43630	N1	GUA	1137	218.340	163.913	-0.597	1.00 87.16	A16S
ATOM	43578	C5'	CYT	1135	215.362	162.139	13.284	1.00	86.43	A16S	ATOM	43631	C6	GUA	1137	217.869	163.413	0.615	1.00 87.16	A16S
ATOM	43579	C4'	CYT	1135	215.489	163.446	12.533	1.00	86.43	A16S	ATOM	43632	O6	GUA	1137	218.235	162.300	1.007	1.00 87.16	A16S
ATOM	43580	O4'	CYT	1135	216.891	163.798	12.380	1.00	86.43	A16S	ATOM	43633	C5	GUA	1137	216.991	164.328	1.250	1.00 87.16	A16S
ATOM	43581	C1'	CYT	1135	217.072	164.525	11.171	1.00	86.43	A16S	ATOM	43634	N7	GUA	1137	216.302	164.228	2.452	1.00 87.16	A16S
ATOM	43582	N1	CYT	1135	218.061	163.839	10.318	1.00	109.40	A16S	ATOM	43635	C8	GUA	1137	215.651	165.357	2.550	1.00 87.16	A16S
ATOM	43583	C6	CYT	1135	218.309	162.501	10.451	1.00	109.40	A16S	ATOM	43636	C2'	GUA	1137	214.422	167.687	0.076	1.00 89.79	A16S
ATOM	43584	C2	CYT	1135	218.736	164.589	9.339	1.00	109.40	A16S	ATOM	43637	O2'	GUA	1137	214.647	168.945	-0.529	1.00 89.79	A16S

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ATOM  43638  C3' GUA  1137     213.043 167.604   0.714  1.00 89.79      A16S
ATOM  43639  O3' GUA  1137     212.069 168.263  -0.074  1.00 89.79      A16S
ATOM  43640  P   GUA  1138     211.103 167.393  -1.013  1.00105.85      A16S
ATOM  43641  O1P GUA  1138     210.312 168.338  -1.853  1.00 67.04      A16S
ATOM  43642  O2P GUA  1138     210.398 166.396  -0.148  1.00 67.04      A16S
ATOM  43643  O5' GUA  1138     212.117 166.621  -1.974  1.00105.85      A16S
ATOM  43644  C5' GUA  1138     212.790 167.313  -3.051  1.00105.85      A16S
ATOM  43645  C4' GUA  1138     213.600 166.345  -3.888  1.00105.85      A16S
ATOM  43646  O4' GUA  1138     214.755 165.882  -3.142  1.00105.85      A16S
ATOM  43647  C1' GUA  1138     215.023 164.529  -3.464  1.00105.85      A16S
ATOM  43648  N9  GUA  1138     214.815 163.737  -2.257  1.00 67.04      A16S
ATOM  43649  C4  GUA  1138     215.497 162.600  -1.876  1.00 67.04      A16S
ATOM  43650  N3  GUA  1138     216.508 162.006  -2.554  1.00 67.04      A16S
ATOM  43651  C2  GUA  1138     216.962 160.930  -1.922  1.00 67.04      A16S
ATOM  43652  N2  GUA  1138     217.979 160.223  -2.442  1.00 67.04      A16S
ATOM  43653  N1  GUA  1138     216.456 160.470  -0.729  1.00 67.04      A16S
ATOM  43654  C6  GUA  1138     215.415 161.061  -0.019  1.00 67.04      A16S
ATOM  43655  O6  GUA  1138     215.033 160.563   1.044  1.00 67.04      A16S
ATOM  43656  C5  GUA  1138     214.927 162.219  -0.676  1.00 67.04      A16S
ATOM  43657  N7  GUA  1138     213.917 163.095  -0.311  1.00 67.04      A16S
ATOM  43658  C8  GUA  1138     213.885 163.975  -1.274  1.00 67.04      A16S
ATOM  43659  C2' GUA  1138     214.052 164.127  -4.573  1.00105.85      A16S
ATOM  43660  O2' GUA  1138     214.661 164.370  -5.825  1.00105.85      A16S
ATOM  43661  C3' GUA  1138     212.890 165.072  -4.312  1.00105.85      A16S
ATOM  43662  O3' GUA  1138     212.062 165.268  -5.447  1.00105.85      A16S
ATOM  43663  P   ADE  1139     210.541 164.749  -5.411  1.00 92.67      A16S
ATOM  43664  O1P ADE  1139     209.712 165.824  -6.012  1.00104.45      A16S
ATOM  43665  O2P ADE  1139     210.227 164.252  -4.044  1.00104.45      A16S
ATOM  43666  O5' ADE  1139     210.528 163.491  -6.388  1.00 92.67      A16S
ATOM  43667  C5' ADE  1139     209.333 162.703  -6.576  1.00 92.67      A16S
ATOM  43668  C4' ADE  1139     209.694 161.320  -7.067  1.00 92.67      A16S
ATOM  43669  O4' ADE  1139     210.434 161.449  -8.303  1.00 92.67      A16S
ATOM  43670  C1' ADE  1139     211.691 160.828  -8.179  1.00 92.67      A16S
ATOM  43671  N9  ADE  1139     212.656 161.621  -8.940  1.00104.45      A16S
ATOM  43672  C4  ADE  1139     213.761 161.146  -9.605  1.00104.45      A16S
ATOM  43673  N3  ADE  1139     214.194 159.876  -9.666  1.00104.45      A16S
ATOM  43674  C2  ADE  1139     215.287 159.794 -10.412  1.00104.45      A16S
ATOM  43675  N1  ADE  1139     215.945 160.764 -11.059  1.00104.45      A16S
ATOM  43676  C6  ADE  1139     215.481 162.027 -10.976  1.00104.45      A16S
ATOM  43677  N6  ADE  1139     216.133 162.995 -11.620  1.00104.45      A16S
ATOM  43678  C5  ADE  1139     214.333 162.247 -10.214  1.00104.45      A16S
ATOM  43679  N7  ADE  1139     213.616 163.397  -9.928  1.00104.45      A16S
ATOM  43680  C8  ADE  1139     212.638 162.975  -9.167  1.00104.45      A16S
ATOM  43681  C2' ADE  1139     211.968 160.709  -6.681  1.00 92.67      A16S
ATOM  43682  O2' ADE  1139     212.827 159.622  -6.407  1.00 92.67      A16S
ATOM  43683  C3' ADE  1139     210.563 160.488  -6.129  1.00 92.67      A16S
ATOM  43684  O3' ADE  1139     210.241 159.106  -6.288  1.00 92.67      A16S
ATOM  43685  P   CYT  1140     208.797 158.555  -5.844  1.00 84.85      A16S
ATOM  43686  O1P CYT  1140     208.465 159.183  -4.535  1.00 95.94      A16S
ATOM  43687  O2P CYT  1140     208.846 157.073  -5.954  1.00 95.94      A16S
ATOM  43688  O5' CYT  1140     207.798 159.116  -6.963  1.00 84.85      A16S
ATOM  43689  C5' CYT  1140     206.376 159.177  -6.717  1.00 84.85      A16S
ATOM  43690  C4' CYT  1140     205.668 160.063  -7.733  1.00 84.85      A16S
ATOM  43691  O4' CYT  1140     206.234 161.393  -7.727  1.00 84.85      A16S
ATOM  43692  C1' CYT  1140     205.945 162.019  -8.961  1.00 84.85      A16S
ATOM  43693  N1  CYT  1140     207.119 162.800  -9.381  1.00 95.94      A16S
ATOM  43694  C6  CYT  1140     207.088 164.162  -9.318  1.00 95.94      A16S
ATOM  43695  C2  CYT  1140     208.263 162.143  -9.836  1.00 95.94      A16S
ATOM  43696  O2  CYT  1140     208.276 160.909  -9.874  1.00 95.94      A16S
ATOM  43697  N3  CYT  1140     209.333 162.870 -10.215  1.00 95.94      A16S
ATOM  43698  C4  CYT  1140     209.296 164.198 -10.146  1.00 95.94      A16S
ATOM  43699  N4  CYT  1140     210.379 164.873 -10.533  1.00 95.94      A16S
ATOM  43700  C5  CYT  1140     208.146 164.893  -9.681  1.00 95.94      A16S
ATOM  43701  C2' CYT  1140     205.420 160.964  -9.945  1.00 84.85      A16S
ATOM  43702  O2' CYT  1140     204.057 161.206 -10.242  1.00 84.85      A16S
ATOM  43703  C3' CYT  1140     205.691 159.650  -9.201  1.00 84.85      A16S
ATOM  43704  O3' CYT  1140     204.652 158.702  -9.456  1.00 84.85      A16S
ATOM  43705  P   URI  1141     204.856 157.563 -10.566  1.00106.34      A16S
ATOM  43706  O1P URI  1141     204.301 156.308 -10.021  1.00121.66      A16S
ATOM  43707  O2P URI  1141     206.259 157.589 -11.051  1.00121.66      A16S
ATOM  43708  O5' URI  1141     203.909 158.028 -11.752  1.00106.34      A16S
ATOM  43709  C5' URI  1141     204.272 157.744 -13.101  1.00106.34      A16S
ATOM  43710  C4' URI  1141     205.004 158.920 -13.690  1.00106.34      A16S
ATOM  43711  O4' URI  1141     205.896 158.501 -14.728  1.00106.34      A16S
ATOM  43712  C1' URI  1141     206.252 159.643 -15.461  1.00106.34      A16S
ATOM  43713  N1  URI  1141     206.828 159.203 -16.749  1.00121.66      A16S
ATOM  43714  C6  URI  1141     207.187 157.884 -16.944  1.00121.66      A16S
ATOM  43715  C2  URI  1141     207.027 160.140 -17.756  1.00121.66      A16S
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ATOM  43717  N3  URI  1141     207.613 159.649 -18.897  1.00121.66      A16S
ATOM  43718  C4  URI  1141     208.010 158.351 -19.140  1.00121.66      A16S
ATOM  43719  O4  URI  1141     208.577 158.079 -20.201  1.00121.66      A16S
ATOM  43720  C5  URI  1141     207.755 157.443 -18.070  1.00121.66      A16S
ATOM  43721  C2' URI  1141     204.997 160.536 -15.489  1.00106.34      A16S
ATOM  43722  O2' URI  1141     205.330 161.907 -15.404  1.00106.34      A16S
ATOM  43723  C3' URI  1141     204.156 160.032 -14.295  1.00106.34      A16S
ATOM  43724  O3' URI  1141     203.940 161.010 -13.263  1.00106.34      A16S
ATOM  43725  P   GUA  1142     202.865 162.200 -13.462  1.00 92.23      A16S
ATOM  43726  O1P GUA  1142     201.799 161.995 -12.454  1.00103.99      A16S
ATOM  43727  O2P GUA  1142     202.495 162.344 -14.901  1.00103.99      A16S
ATOM  43728  O5' GUA  1142     203.698 163.488 -13.034  1.00 92.23      A16S
ATOM  43729  C5' GUA  1142     203.154 164.468 -12.140  1.00 92.23      A16S
ATOM  43730  C4' GUA  1142     204.041 165.691 -12.104  1.00 92.23      A16S
ATOM  43731  O4' GUA  1142     205.311 165.364 -11.477  1.00 92.23      A16S
ATOM  43732  C1' GUA  1142     206.347 166.132 -12.074  1.00 92.23      A16S
ATOM  43733  N9  GUA  1142     207.331 165.227 -12.667  1.00103.99      A16S
ATOM  43734  C4  GUA  1142     208.476 165.600 -13.341  1.00103.99      A16S
ATOM  43735  N3  GUA  1142     208.893 166.867 -13.560  1.00103.99      A16S
ATOM  43736  C2  GUA  1142     210.021 166.905 -14.244  1.00103.99      A16S
ATOM  43737  N2  GUA  1142     210.580 168.086 -14.542  1.00103.99      A16S
ATOM  43738  N1  GUA  1142     210.684 165.789 -14.685  1.00103.99      A16S
ATOM  43739  C6  GUA  1142     210.271 164.478 -14.475  1.00103.99      A16S
ATOM  43740  O6  GUA  1142     210.936 163.546 -14.924  1.00103.99      A16S
ATOM  43741  C5  GUA  1142     209.069 164.421 -13.736  1.00103.99      A16S
ATOM  43742  N7  GUA  1142     208.325 163.328 -13.311  1.00103.99      A16S
ATOM  43743  C8  GUA  1142     207.306 163.852 -12.683  1.00103.99      A16S
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ATOM	43744	C2'	GUA	1142	205.711	167.034	-13.131	1.00 92.23	A16S	ATOM	43797	C6	CYT	1145	207.157	166.013	-25.701	1.00140.31	A16S
ATOM	43745	O2'	GUA	1142	205.484	168.320	-12.588	1.00 92.23	A16S	ATOM	43798	C2	CYT	1145	207.784	163.971	-26.811	1.00140.31	A16S
ATOM	43746	C3'	GUA	1142	204.432	166.274	-13.454	1.00 92.23	A16S	ATOM	43799	O2	CYT	1145	208.235	163.406	-27.821	1.00140.31	A16S
ATOM	43747	O3'	GUA	1142	203.434	167.110	-14.021	1.00 92.23	A16S	ATOM	43800	N3	CYT	1145	207.450	163.274	-25.701	1.00140.31	A16S
ATOM	43748	P	CYT	1143	203.335	167.245	-15.619	1.00107.83	A16S	ATOM	43801	C4	CYT	1145	206.982	163.914	-24.627	1.00140.31	A16S
ATOM	43749	O1P	CYT	1143	202.186	168.135	-15.912	1.00126.15	A16S	ATOM	43802	N4	CYT	1145	206.651	163.183	-23.562	1.00140.31	A16S
ATOM	43750	O2P	CYT	1143	203.376	165.884	-16.210	1.00126.15	A16S	ATOM	43803	C5	CYT	1145	206.830	165.331	-24.597	1.00140.31	A16S
ATOM	43751	O5'	CYT	1143	204.674	168.009	-16.023	1.00107.83	A16S	ATOM	43804	C2'	CYT	1145	206.843	165.948	-29.121	1.00127.98	A16S
ATOM	43752	C5'	CYT	1143	204.853	169.411	-15.713	1.00107.83	A16S	ATOM	43805	O2'	CYT	1145	207.446	165.862	-30.397	1.00127.98	A16S
ATOM	43753	C4'	CYT	1143	206.008	169.984	-16.506	1.00107.83	A16S	ATOM	43806	C3'	CYT	1145	206.009	167.213	-28.924	1.00127.98	A16S
ATOM	43754	O4'	CYT	1143	207.249	169.383	-16.049	1.00107.83	A16S	ATOM	43807	O3'	CYT	1145	205.282	167.580	-30.095	1.00127.98	A16S
ATOM	43755	C1'	CYT	1143	208.113	169.173	-17.156	1.00107.83	A16S	ATOM	43808	P	GUA	1146	203.799	166.994	-30.331	1.00130.42	A16S
ATOM	43756	N1	CYT	1143	208.367	167.721	-17.286	1.00126.15	A16S	ATOM	43809	O1P	GUA	1146	203.275	167.591	-31.589	1.00130.11	A16S
ATOM	43757	C6	CYT	1143	207.609	166.810	-16.599	1.00126.15	A16S	ATOM	43810	O2P	GUA	1146	203.021	167.136	-29.072	1.00130.11	A16S
ATOM	43758	C2	CYT	1143	209.408	167.280	-18.129	1.00126.15	A16S	ATOM	43811	O5'	GUA	1146	204.039	165.445	-30.600	1.00130.42	A16S
ATOM	43759	O2	CYT	1143	210.070	168.117	-18.767	1.00126.15	A16S	ATOM	43812	C5'	GUA	1146	204.771	165.011	-31.756	1.00130.42	A16S
ATOM	43760	N3	CYT	1143	209.658	165.955	-18.229	1.00126.15	A16S	ATOM	43813	C4'	GUA	1146	204.817	163.506	-31.809	1.00130.42	A16S
ATOM	43761	C4	CYT	1143	208.918	165.081	-17.542	1.00126.15	A16S	ATOM	43814	O4'	GUA	1146	205.674	162.989	-30.757	1.00130.42	A16S
ATOM	43762	N4	CYT	1143	209.213	163.786	-17.661	1.00126.15	A16S	ATOM	43815	C1'	GUA	1146	205.169	161.741	-30.300	1.00130.42	A16S
ATOM	43763	C5	CYT	1143	207.847	165.496	-16.698	1.00126.15	A16S	ATOM	43816	N9	GUA	1146	204.867	161.836	-28.873	1.00130.11	A16S
ATOM	43764	C2'	CYT	1143	207.442	169.771	-18.396	1.00107.83	A16S	ATOM	43817	C4	GUA	1146	204.715	160.774	-28.012	1.00130.11	A16S
ATOM	43765	O2'	CYT	1143	207.894	171.094	-18.606	1.00107.83	A16S	ATOM	43818	N3	GUA	1146	204.854	159.469	-28.333	1.00130.11	A16S
ATOM	43766	C3'	CYT	1143	205.972	169.717	-18.007	1.00107.83	A16S	ATOM	43819	C2	GUA	1146	204.626	158.679	-27.301	1.00130.11	A16S
ATOM	43767	O3'	CYT	1143	205.203	170.679	-18.725	1.00107.83	A16S	ATOM	43820	N2	GUA	1146	204.735	157.353	-27.448	1.00130.11	A16S
ATOM	43768	P	CYT	1144	204.569	170.286	-20.150	1.00136.01	A16S	ATOM	43821	N1	GUA	1146	204.280	159.133	-26.050	1.00130.11	A16S
ATOM	43769	O1P	CYT	1144	203.749	171.438	-20.610	1.00144.69	A16S	ATOM	43822	C6	GUA	1146	204.132	160.471	-25.695	1.00130.11	A16S
ATOM	43770	O2P	CYT	1144	203.940	168.948	-20.011	1.00144.69	A16S	ATOM	43823	O6	GUA	1146	203.815	160.770	-24.539	1.00130.11	A16S
ATOM	43771	O5'	CYT	1144	205.830	170.135	-21.117	1.00136.01	A16S	ATOM	43824	C5	GUA	1146	204.382	161.332	-26.795	1.00130.11	A16S
ATOM	43772	C5'	CYT	1144	206.494	171.292	-21.673	1.00136.01	A16S	ATOM	43825	N7	GUA	1146	204.346	162.718	-26.881	1.00130.11	A16S
ATOM	43773	C4'	CYT	1144	207.461	170.873	-22.761	1.00136.01	A16S	ATOM	43826	C8	GUA	1146	204.645	162.972	-28.127	1.00130.11	A16S
ATOM	43774	O4'	CYT	1144	208.533	170.086	-22.181	1.00136.01	A16S	ATOM	43827	C2'	GUA	1146	203.909	161.426	-31.108	1.00130.42	A16S
ATOM	43775	C1'	CYT	1144	208.904	169.049	-23.076	1.00136.01	A16S	ATOM	43828	O2'	GUA	1146	204.216	160.545	-32.171	1.00130.42	A16S
ATOM	43776	N1	CYT	1144	208.680	167.752	-22.409	1.00144.69	A16S	ATOM	43829	C3'	GUA	1146	203.490	162.814	-31.572	1.00130.42	A16S
ATOM	43777	C6	CYT	1144	207.820	167.646	-21.348	1.00144.69	A16S	ATOM	43830	O3'	GUA	1146	202.664	162.796	-32.717	1.00130.42	A16S
ATOM	43778	C2	CYT	1144	209.359	166.620	-22.882	1.00144.69	A16S	ATOM	43831	P	CYT	1147	201.072	162.801	-32.526	1.00141.45	A16S
ATOM	43779	O2	CYT	1144	210.133	166.737	-23.848	1.00144.69	A16S	ATOM	43832	O1P	CYT	1147	200.464	163.040	-33.865	1.00105.35	A16S
ATOM	43780	N3	CYT	1144	209.151	165.428	-22.277	1.00144.69	A16S	ATOM	43833	O2P	CYT	1147	200.751	163.723	-31.397	1.00105.35	A16S
ATOM	43781	C4	CYT	1144	208.310	165.340	-21.243	1.00144.69	A16S	ATOM	43834	O5'	CYT	1147	200.751	161.304	-32.076	1.00141.45	A16S
ATOM	43782	N4	CYT	1144	208.139	164.146	-20.675	1.00144.69	A16S	ATOM	43835	C5'	CYT	1147	200.983	160.204	-32.981	1.00141.45	A16S
ATOM	43783	C5	CYT	1144	207.607	166.472	-20.744	1.00144.69	A16S	ATOM	43836	C4'	CYT	1147	200.691	158.882	-32.310	1.00141.45	A16S
ATOM	43784	C2'	CYT	1144	208.076	169.201	-24.354	1.00136.01	A16S	ATOM	43837	O4'	CYT	1147	201.637	158.666	-31.229	1.00141.45	A16S
ATOM	43785	O2'	CYT	1144	208.833	169.871	-25.341	1.00136.01	A16S	ATOM	43838	C1'	CYT	1147	201.008	157.940	-30.184	1.00141.45	A16S
ATOM	43786	C3'	CYT	1144	206.870	169.990	-23.851	1.00136.01	A16S	ATOM	43839	N1	CYT	1147	201.008	158.765	-28.958	1.00105.35	A16S
ATOM	43787	O3'	CYT	1144	206.257	170.760	-24.879	1.00136.01	A16S	ATOM	43840	C6	CYT	1147	200.786	160.116	-29.018	1.00105.35	A16S
ATOM	43788	P	CYT	1145	205.061	170.124	-25.742	1.00127.98	A16S	ATOM	43841	C2	CYT	1147	201.212	158.137	-27.716	1.00105.35	A16S
ATOM	43789	O1P	CYT	1145	204.519	171.192	-26.624	1.00140.31	A16S	ATOM	43842	O2	CYT	1147	201.441	156.917	-27.685	1.00105.35	A16S
ATOM	43790	O2P	CYT	1145	204.152	169.418	-24.803	1.00140.31	A16S	ATOM	43843	N3	CYT	1147	201.154	158.877	-26.585	1.00105.35	A16S
ATOM	43791	O5'	CYT	1145	205.786	169.039	-26.655	1.00127.98	A16S	ATOM	43844	C4	CYT	1147	200.909	160.187	-26.656	1.00105.35	A16S
ATOM	43792	C5'	CYT	1145	206.580	169.446	-27.776	1.00127.98	A16S	ATOM	43845	N4	CYT	1147	200.831	160.869	-25.512	1.00105.35	A16S
ATOM	43793	C4'	CYT	1145	207.062	168.243	-28.545	1.00127.98	A16S	ATOM	43846	C5	CYT	1147	200.725	160.855	-27.903	1.00105.35	A16S
ATOM	43794	O4'	CYT	1145	208.024	167.502	-27.750	1.00127.98	A16S	ATOM	43847	C2'	CYT	1147	199.581	157.622	-30.634	1.00141.45	A16S
ATOM	43795	C1'	CYT	1145	207.929	166.118	-28.054	1.00127.98	A16S	ATOM	43848	O2'	CYT	1147	199.528	156.321	-31.190	1.00141.45	A16S
ATOM	43796	N1	CYT	1145	207.618	165.370	-26.818	1.00140.31	A16S	ATOM	43849	C3'	CYT	1147	199.326	158.726	-31.654	1.00141.45	A16S

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ATOM  43850  O3' CYT  1147     198.290 158.391 -32.573  1.00141.45      A16S
ATOM  43851  P   GUA  1148     196.759 158.759 -32.217  1.00143.23      A16S
ATOM  43852  O1P GUA  1148     195.907 158.154 -33.276  1.00 85.28      A16S
ATOM  43853  O2P GUA  1148     196.637 160.219 -31.915  1.00 85.28      A16S
ATOM  43854  O5' GUA  1148     196.486 157.962 -30.867  1.00143.23      A16S
ATOM  43855  C5' GUA  1148     196.458 156.527 -30.859  1.00143.23      A16S
ATOM  43856  C4' GUA  1148     196.088 156.016 -29.489  1.00143.23      A16S
ATOM  43857  O4' GUA  1148     197.164 156.285 -28.549  1.00143.23      A16S
ATOM  43858  C1' GUA  1148     196.623 156.548 -27.263  1.00143.23      A16S
ATOM  43859  N9  GUA  1148     196.934 157.929 -26.899  1.00 85.28      A16S
ATOM  43860  C4  GUA  1148     197.057 158.433 -25.625  1.00 85.28      A16S
ATOM  43861  N3  GUA  1148     196.969 157.727 -24.478  1.00 85.28      A16S
ATOM  43862  C2  GUA  1148     197.090 158.501 -23.412  1.00 85.28      A16S
ATOM  43863  N2  GUA  1148     197.028 157.966 -22.192  1.00 85.28      A16S
ATOM  43864  N1  GUA  1148     197.281 159.854 -23.464  1.00 85.28      A16S
ATOM  43865  C6  GUA  1148     197.380 160.601 -24.631  1.00 85.28      A16S
ATOM  43866  O6  GUA  1148     197.552 161.822 -24.566  1.00 85.28      A16S
ATOM  43867  C5  GUA  1148     197.255 159.787 -25.785  1.00 85.28      A16S
ATOM  43868  N7  GUA  1148     197.292 160.124 -27.131  1.00 85.28      A16S
ATOM  43869  C8  GUA  1148     197.108 158.992 -27.753  1.00 85.28      A16S
ATOM  43870  C2' GUA  1148     195.108 156.372 -27.367  1.00143.23      A16S
ATOM  43871  O2' GUA  1148     194.754 155.051 -27.007  1.00143.23      A16S
ATOM  43872  C3' GUA  1148     194.874 156.658 -28.843  1.00143.23      A16S
ATOM  43873  O3' GUA  1148     193.636 156.163 -29.320  1.00143.23      A16S
ATOM  43874  P   ADE  1149     192.419 157.191 -29.530  1.00111.16      A16S
ATOM  43875  O1P ADE  1149     191.209 156.397 -29.856  1.00 92.75      A16S
ATOM  43876  O2P ADE  1149     192.877 158.248 -30.463  1.00 92.75      A16S
ATOM  43877  O5' ADE  1149     192.232 157.852 -28.090  1.00111.16      A16S
ATOM  43878  C5' ADE  1149     191.331 158.962 -27.876  1.00111.16      A16S
ATOM  43879  C4' ADE  1149     190.584 158.775 -26.572  1.00111.16      A16S
ATOM  43880  O4' ADE  1149     189.776 157.579 -26.683  1.00111.16      A16S
ATOM  43881  C1' ADE  1149     189.813 156.855 -25.467  1.00111.16      A16S
ATOM  43882  N9  ADE  1149     190.389 155.540 -25.749  1.00 92.75      A16S
ATOM  43883  C4  ADE  1149     190.462 154.472 -24.888  1.00 92.75      A16S
ATOM  43884  N3  ADE  1149     190.052 154.425 -23.609  1.00 92.75      A16S
ATOM  43885  C2  ADE  1149     190.267 153.220 -23.095  1.00 92.75      A16S
ATOM  43886  N1  ADE  1149     190.804 152.138 -23.669  1.00 92.75      A16S
ATOM  43887  C6  ADE  1149     191.210 152.221 -24.954  1.00 92.75      A16S
ATOM  43888  N6  ADE  1149     191.752 151.145 -25.526  1.00 92.75      A16S
ATOM  43889  C5  ADE  1149     191.038 153.445 -25.612  1.00 92.75      A16S
ATOM  43890  N7  ADE  1149     191.343 153.860 -26.898  1.00 92.75      A16S
ATOM  43891  C8  ADE  1149     190.945 155.106 -26.928  1.00 92.75      A16S
ATOM  43892  C2' ADE  1149     190.600 157.677 -24.446  1.00111.16      A16S
ATOM  43893  O2' ADE  1149     189.704 158.415 -23.641  1.00111.16      A16S
ATOM  43894  C3' ADE  1149     191.466 158.545 -25.351  1.00111.16      A16S
ATOM  43895  O3' ADE  1149     191.824 159.772 -24.726  1.00111.16      A16S
ATOM  43896  P   ADE  1150     193.272 159.925 -24.042  1.00 83.76      A16S
ATOM  43897  O1P ADE  1150     193.402 161.337 -23.578  1.00 81.47      A16S
ATOM  43898  O2P ADE  1150     194.276 159.368 -24.995  1.00 81.47      A16S
ATOM  43899  O5' ADE  1150     193.196 158.997 -22.744  1.00 83.76      A16S
ATOM  43900  C5' ADE  1150     192.416 159.395 -21.590  1.00 83.76      A16S
ATOM  43901  C4' ADE  1150     192.311 158.254 -20.607  1.00 83.76      A16S
ATOM  43902  O4' ADE  1150     191.672 157.129 -21.260  1.00 83.76      A16S
ATOM  43903  C1' ADE  1150     192.302 155.924 -20.867  1.00 83.76      A16S
ATOM  43904  N9  ADE  1150     192.892 155.327 -22.067  1.00 81.47      A16S
ATOM  43905  C4  ADE  1150     193.255 154.016 -22.259  1.00 81.47      A16S
ATOM  43906  N3  ADE  1150     193.175 153.007 -21.379  1.00 81.47      A16S
ATOM  43907  C2  ADE  1150     193.598 151.872 -21.926  1.00 81.47      A16S
ATOM  43908  N1  ADE  1150     194.051 151.644 -23.161  1.00 81.47      A16S
ATOM  43909  C6  ADE  1150     194.113 152.677 -24.024  1.00 81.47      A16S
ATOM  43910  N6  ADE  1150     194.540 152.445 -25.267  1.00 81.47      A16S
ATOM  43911  C5  ADE  1150     193.709 153.939 -23.561  1.00 81.47      A16S
ATOM  43912  N7  ADE  1150     193.661 155.182 -24.171  1.00 81.47      A16S
ATOM  43913  C8  ADE  1150     193.176 155.968 -23.245  1.00 81.47      A16S
ATOM  43914  C2' ADE  1150     193.327 156.265 -19.785  1.00 83.76      A16S
ATOM  43915  O2' ADE  1150     192.740 156.104 -18.512  1.00 83.76      A16S
ATOM  43916  C3' ADE  1150     193.639 157.719 -20.102  1.00 83.76      A16S
ATOM  43917  O3' ADE  1150     194.054 158.426 -18.947  1.00 83.76      A16S
ATOM  43918  P   ADE  1151     195.617 158.532 -18.600  1.00 71.04      A16S
ATOM  43919  O1P ADE  1151     195.763 159.419 -17.419  1.00 85.07      A16S
ATOM  43920  O2P ADE  1151     196.331 158.866 -19.857  1.00 85.07      A16S
ATOM  43921  O5' ADE  1151     196.027 157.061 -18.143  1.00 71.04      A16S
ATOM  43922  C5' ADE  1151     195.676 156.559 -16.834  1.00 71.04      A16S
ATOM  43923  C4' ADE  1151     195.910 155.066 -16.766  1.00 71.04      A16S
ATOM  43924  O4' ADE  1151     195.171 154.449 -17.851  1.00 71.04      A16S
ATOM  43925  C1' ADE  1151     195.922 153.379 -18.399  1.00 71.04      A16S
ATOM  43926  N9  ADE  1151     196.211 153.698 -19.802  1.00 85.07      A16S
ATOM  43927  C4  ADE  1151     196.557 152.814 -20.799  1.00 85.07      A16S
ATOM  43928  N3  ADE  1151     196.705 151.483 -20.697  1.00 85.07      A16S
ATOM  43929  C2  ADE  1151     197.046 150.958 -21.870  1.00 85.07      A16S
ATOM  43930  N1  ADE  1151     197.242 151.565 -23.046  1.00 85.07      A16S
ATOM  43931  C6  ADE  1151     197.088 152.904 -23.116  1.00 85.07      A16S
ATOM  43932  N6  ADE  1151     197.286 153.512 -24.291  1.00 85.07      A16S
ATOM  43933  C5  ADE  1151     196.725 153.580 -21.939  1.00 85.07      A16S
ATOM  43934  N7  ADE  1151     196.490 154.919 -21.671  1.00 85.07      A16S
ATOM  43935  C8  ADE  1151     196.193 154.936 -20.396  1.00 85.07      A16S
ATOM  43936  C2' ADE  1151     197.177 153.207 -17.539  1.00 71.04      A16S
ATOM  43937  O2' ADE  1151     196.938 152.236 -16.537  1.00 71.04      A16S
ATOM  43938  C3' ADE  1151     197.351 154.604 -16.958  1.00 71.04      A16S
ATOM  43939  O3' ADE  1151     198.073 154.556 -15.728  1.00 71.04      A16S
ATOM  43940  P   GUA  1152     199.537 155.222 -15.627  1.00100.77      A16S
ATOM  43941  O1P GUA  1152     200.158 154.705 -14.384  1.00 83.61      A16S
ATOM  43942  O2P GUA  1152     199.399 156.687 -15.821  1.00 83.61      A16S
ATOM  43943  O5' GUA  1152     200.341 154.639 -16.875  1.00100.77      A16S
ATOM  43944  C5' GUA  1152     200.535 153.222 -17.031  1.00100.77      A16S
ATOM  43945  C4' GUA  1152     200.767 152.868 -18.486  1.00100.77      A16S
ATOM  43946  O4' GUA  1152     199.823 153.601 -19.312  1.00100.77      A16S
ATOM  43947  C1' GUA  1152     200.388 153.827 -20.591  1.00100.77      A16S
ATOM  43948  N9  GUA  1152     200.317 155.246 -20.917  1.00 83.61      A16S
ATOM  43949  C4  GUA  1152     200.356 155.776 -22.182  1.00 83.61      A16S
ATOM  43950  N3  GUA  1152     200.475 155.073 -23.329  1.00 83.61      A16S
ATOM  43951  C2  GUA  1152     200.468 155.858 -24.397  1.00 83.61      A16S
ATOM  43952  N2  GUA  1152     200.574 155.316 -25.627  1.00 83.61      A16S
ATOM  43953  N1  GUA  1152     200.355 157.230 -24.339  1.00 83.61      A16S
ATOM  43954  C6  GUA  1152     200.233 157.974 -23.169  1.00 83.61      A16S
ATOM  43955  O6  GUA  1152     200.135 159.204 -23.231  1.00 83.61      A16S
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ATOM	43956	C5	GUA	1152	200.238	157.138	-22.014	1.00 83.61	A16S	ATOM	44009	O5'	GUA	1155	213.062	156.118	-25.988	1.00113.62	A16S
ATOM	43957	N7	GUA	1152	200.139	157.460	-20.667	1.00 83.61	A16S	ATOM	44010	C5'	GUA	1155	213.345	156.447	-27.361	1.00113.62	A16S
ATOM	43958	C8	GUA	1152	200.194	156.308	-20.054	1.00 83.61	A16S	ATOM	44011	C4'	GUA	1155	213.214	157.935	-27.600	1.00113.62	A16S
ATOM	43959	C2'	GUA	1152	201.814	153.284	-20.588	1.00100.77	A16S	ATOM	44012	O4'	GUA	1155	211.832	158.350	-27.431	1.00113.62	A16S
ATOM	43960	O2'	GUA	1152	201.812	152.026	-21.227	1.00100.77	A16S	ATOM	44013	C1'	GUA	1155	211.793	159.698	-26.981	1.00113.62	A16S
ATOM	43961	C3'	GUA	1152	202.121	153.206	-19.094	1.00100.77	A16S	ATOM	44014	N9	GUA	1155	211.134	159.760	-25.680	1.00110.01	A16S
ATOM	43962	O3'	GUA	1152	203.094	152.199	-18.829	1.00100.77	A16S	ATOM	44015	C4	GUA	1155	210.691	160.905	-25.069	1.00110.01	A16S
ATOM	43963	P	CYT	1153	204.625	152.446	-19.254	1.00118.52	A16S	ATOM	44016	N3	GUA	1155	210.735	162.147	-25.597	1.00110.01	A16S
ATOM	43964	O1P	CYT	1153	205.425	151.331	-18.685	1.00 82.86	A16S	ATOM	44017	C2	GUA	1155	210.272	163.053	-24.759	1.00110.01	A16S
ATOM	43965	O2P	CYT	1153	204.986	153.848	-18.935	1.00 82.86	A16S	ATOM	44018	N2	GUA	1155	210.240	164.344	-25.129	1.00110.01	A16S
ATOM	43966	O5'	CYT	1153	204.607	152.342	-20.843	1.00118.52	A16S	ATOM	44019	N1	GUA	1155	209.805	162.762	-23.499	1.00110.01	A16S
ATOM	43967	C5'	CYT	1153	204.622	151.069	-21.515	1.00118.52	A16S	ATOM	44020	C6	GUA	1155	209.754	161.490	-22.935	1.00110.01	A16S
ATOM	43968	C4'	CYT	1153	204.970	151.262	-22.971	1.00118.52	A16S	ATOM	44021	O6	GUA	1155	209.328	161.339	-21.783	1.00110.01	A16S
ATOM	43969	O4'	CYT	1153	203.919	152.030	-23.615	1.00118.52	A16S	ATOM	44022	C5	GUA	1155	210.240	160.508	-23.828	1.00110.01	A16S
ATOM	43970	C1'	CYT	1153	204.486	152.912	-24.573	1.00118.52	A16S	ATOM	44023	N7	GUA	1155	210.359	159.133	-23.676	1.00110.01	A16S
ATOM	43971	N1	CYT	1153	204.198	154.306	-24.178	1.00 82.86	A16S	ATOM	44024	C8	GUA	1155	210.884	158.729	-24.802	1.00110.01	A16S
ATOM	43972	C6	CYT	1153	204.039	154.656	-22.861	1.00 82.86	A16S	ATOM	44025	C2'	GUA	1155	213.235	160.185	-26.824	1.00113.62	A16S
ATOM	43973	C2	CYT	1153	204.112	155.285	-25.186	1.00 82.86	A16S	ATOM	44026	O2'	GUA	1155	213.620	160.987	-27.925	1.00113.62	A16S
ATOM	43974	O2	CYT	1153	204.244	154.941	-26.378	1.00 82.86	A16S	ATOM	44027	C3'	GUA	1155	213.994	158.867	-26.683	1.00113.62	A16S
ATOM	43975	N3	CYT	1153	203.891	156.576	-24.836	1.00 82.86	A16S	ATOM	44028	O3'	GUA	1155	215.368	159.004	-27.024	1.00113.62	A16S
ATOM	43976	C4	CYT	1153	203.754	156.906	-23.548	1.00 82.86	A16S	ATOM	44029	P	GUA	1156	216.424	159.433	-25.889	1.00122.04	A16S
ATOM	43977	N4	CYT	1153	203.550	158.193	-23.256	1.00 82.86	A16S	ATOM	44030	O1P	GUA	1156	217.773	159.367	-26.501	1.00140.53	A16S
ATOM	43978	C5	CYT	1153	203.822	155.931	-22.505	1.00 82.86	A16S	ATOM	44031	O2P	GUA	1156	216.138	158.647	-24.661	1.00140.53	A16S
ATOM	43979	C2'	CYT	1153	205.992	152.662	-24.607	1.00118.52	A16S	ATOM	44032	O5'	GUA	1156	216.088	160.965	-25.602	1.00122.04	A16S
ATOM	43980	O2'	CYT	1153	206.319	151.783	-25.664	1.00118.52	A16S	ATOM	44033	C5'	GUA	1156	216.354	161.970	-26.594	1.00122.04	A16S
ATOM	43981	C3'	CYT	1153	206.230	152.078	-23.221	1.00118.52	A16S	ATOM	44034	C4'	GUA	1156	215.907	163.331	-26.113	1.00122.04	A16S
ATOM	43982	O3'	CYT	1153	207.426	151.323	-23.133	1.00118.52	A16S	ATOM	44035	O4'	GUA	1156	214.474	163.310	-25.867	1.00122.04	A16S
ATOM	43983	P	GUA	1154	208.815	152.084	-22.859	1.00130.29	A16S	ATOM	44036	C1'	GUA	1156	214.156	164.210	-24.811	1.00122.04	A16S
ATOM	43984	O1P	GUA	1154	209.871	151.042	-22.800	1.00 96.68	A16S	ATOM	44037	N9	GUA	1156	213.536	163.469	-23.710	1.00140.53	A16S
ATOM	43985	O2P	GUA	1154	208.653	153.037	-21.723	1.00 96.68	A16S	ATOM	44038	C4	GUA	1156	212.901	164.023	-22.618	1.00140.53	A16S
ATOM	43986	O5'	GUA	1154	209.026	152.939	-24.182	1.00130.29	A16S	ATOM	44039	N3	GUA	1156	212.724	165.343	-22.387	1.00140.53	A16S
ATOM	43987	C5'	GUA	1154	209.246	152.287	-25.437	1.00130.29	A16S	ATOM	44040	C2	GUA	1156	212.089	165.566	-21.249	1.00140.53	A16S
ATOM	43988	C4'	GUA	1154	209.488	153.307	-26.512	1.00130.29	A16S	ATOM	44041	N2	GUA	1156	211.830	166.824	-20.865	1.00140.53	A16S
ATOM	43989	O4'	GUA	1154	208.265	154.049	-26.757	1.00130.29	A16S	ATOM	44042	N1	GUA	1156	211.660	164.574	-20.404	1.00140.53	A16S
ATOM	43990	C1'	GUA	1154	208.583	155.392	-27.085	1.00130.29	A16S	ATOM	44043	C6	GUA	1156	211.828	163.209	-20.619	1.00140.53	A16S
ATOM	43991	N9	GUA	1154	208.024	156.263	-26.056	1.00 96.68	A16S	ATOM	44044	O6	GUA	1156	211.398	162.399	-19.790	1.00140.53	A16S
ATOM	43992	C4	GUA	1154	207.824	157.623	-26.162	1.00 96.68	A16S	ATOM	44045	C5	GUA	1156	212.511	162.953	-21.839	1.00140.53	A16S
ATOM	43993	N3	GUA	1154	208.047	158.379	-27.263	1.00 96.68	A16S	ATOM	44046	N7	GUA	1156	212.882	161.751	-22.429	1.00140.53	A16S
ATOM	43994	C2	GUA	1154	207.807	159.661	-27.038	1.00 96.68	A16S	ATOM	44047	C8	GUA	1156	213.481	162.103	-23.535	1.00140.53	A16S
ATOM	43995	N2	GUA	1154	207.975	160.556	-28.018	1.00 96.68	A16S	ATOM	44048	C2'	GUA	1156	215.458	164.875	-24.365	1.00122.04	A16S
ATOM	43996	N1	GUA	1154	207.384	160.162	-25.833	1.00 96.68	A16S	ATOM	44049	O2'	GUA	1156	215.600	166.133	-25.004	1.00122.04	A16S
ATOM	43997	C6	GUA	1154	207.149	159.404	-24.688	1.00 96.68	A16S	ATOM	44050	C3'	GUA	1156	216.495	163.846	-24.806	1.00122.04	A16S
ATOM	43998	O6	GUA	1154	206.780	159.958	-23.648	1.00 96.68	A16S	ATOM	44051	O3'	GUA	1156	217.790	164.420	-24.937	1.00122.04	A16S
ATOM	43999	C5	GUA	1154	207.396	158.025	-24.914	1.00 96.68	A16S	ATOM	44052	P	ADE	1157	218.735	164.552	-23.637	1.00134.60	A16S
ATOM	44000	N7	GUA	1154	207.287	156.938	-24.055	1.00 96.68	A16S	ATOM	44053	O1P	ADE	1157	220.054	165.026	-24.124	1.00115.28	A16S
ATOM	44001	C8	GUA	1154	207.656	155.914	-24.777	1.00 96.68	A16S	ATOM	44054	O2P	ADE	1157	218.651	163.299	-22.833	1.00115.28	A16S
ATOM	44002	C2'	GUA	1154	210.111	155.518	-27.094	1.00130.29	A16S	ATOM	44055	O5'	ADE	1157	218.080	165.733	-22.789	1.00134.60	A16S
ATOM	44003	O2'	GUA	1154	210.621	155.399	-28.409	1.00130.29	A16S	ATOM	44056	C5'	ADE	1157	218.137	167.095	-23.257	1.00134.60	A16S
ATOM	44004	C3'	GUA	1154	210.519	154.372	-26.178	1.00130.29	A16S	ATOM	44057	C4'	ADE	1157	217.630	168.048	-22.196	1.00134.60	A16S
ATOM	44005	O3'	GUA	1154	211.859	153.938	-26.380	1.00130.29	A16S	ATOM	44058	O4'	ADE	1157	216.220	167.808	-21.957	1.00134.60	A16S
ATOM	44006	P	GUA	1155	213.046	154.595	-25.511	1.00113.62	A16S	ATOM	44059	C1'	ADE	1157	215.923	168.035	-20.589	1.00134.60	A16S
ATOM	44007	O1P	GUA	1155	214.304	153.953	-25.969	1.00110.01	A16S	ATOM	44060	N9	ADE	1157	215.428	166.782	-20.017	1.00115.28	A16S
ATOM	44008	O2P	GUA	1155	212.688	154.550	-24.066	1.00110.01	A16S	ATOM	44061	C4	ADE	1157	214.571	166.654	-18.951	1.00115.28	A16S

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ATOM  44062  N3  ADE  1157     214.020 167.641 -18.225  1.00115.28      A16S
ATOM  44063  C2  ADE  1157     213.239 167.138 -17.273  1.00115.28      A16S
ATOM  44064  N1  ADE  1157     212.964 165.860 -16.990  1.00115.28      A16S
ATOM  44065  C6  ADE  1157     213.532 164.896 -17.744  1.00115.28      A16S
ATOM  44066  N6  ADE  1157     213.247 163.624 -17.474  1.00115.28      A16S
ATOM  44067  C5  ADE  1157     214.386 165.294 -18.776  1.00115.28      A16S
ATOM  44068  N7  ADE  1157     215.118 164.574 -19.709  1.00115.28      A16S
ATOM  44069  C8  ADE  1157     215.715 165.498 -20.420  1.00115.28      A16S
ATOM  44070  C2' ADE  1157     217.203 168.521 -19.907  1.00134.60      A16S
ATOM  44071  O2' ADE  1157     217.215 169.935 -19.857  1.00134.60      A16S
ATOM  44072  C3' ADE  1157     218.278 167.949 -20.823  1.00134.60      A16S
ATOM  44073  O3' ADE  1157     219.491 168.689 -20.747  1.00134.60      A16S
ATOM  44074  P   GUA  1158     220.662 168.206 -19.753  1.00 96.06      A16S
ATOM  44075  O1P GUA  1158     221.875 168.982 -20.117  1.00110.93      A16S
ATOM  44076  O2P GUA  1158     220.716 166.721 -19.772  1.00110.93      A16S
ATOM  44077  O5' GUA  1158     220.172 168.670 -18.304  1.00 96.06      A16S
ATOM  44078  C5' GUA  1158     219.790 170.044 -18.037  1.00 96.06      A16S
ATOM  44079  C4' GUA  1158     218.920 170.116 -16.797  1.00 96.06      A16S
ATOM  44080  O4' GUA  1158     217.665 169.431 -17.047  1.00 96.06      A16S
ATOM  44081  C1' GUA  1158     217.281 168.687 -15.901  1.00 96.06      A16S
ATOM  44082  N9  GUA  1158     217.283 167.270 -16.266  1.00110.93      A16S
ATOM  44083  C4  GUA  1158     216.592 166.251 -15.649  1.00110.93      A16S
ATOM  44084  N3  GUA  1158     215.768 166.377 -14.590  1.00110.93      A16S
ATOM  44085  C2  GUA  1158     215.271 165.213 -14.214  1.00110.93      A16S
ATOM  44086  N2  GUA  1158     214.433 165.151 -13.168  1.00110.93      A16S
ATOM  44087  N1  GUA  1158     215.558 164.021 -14.832  1.00110.93      A16S
ATOM  44088  C6  GUA  1158     216.401 163.868 -15.926  1.00110.93      A16S
ATOM  44089  O6  GUA  1158     216.596 162.744 -16.408  1.00110.93      A16S
ATOM  44090  C5  GUA  1158     216.941 165.105 -16.337  1.00110.93      A16S
ATOM  44091  N7  GUA  1158     217.820 165.397 -17.369  1.00110.93      A16S
ATOM  44092  C8  GUA  1158     217.994 166.688 -17.291  1.00110.93      A16S
ATOM  44093  C2' GUA  1158     218.278 169.002 -14.784  1.00 96.06      A16S
ATOM  44094  O2' GUA  1158     217.771 170.018 -13.948  1.00 96.06      A16S
ATOM  44095  C3' GUA  1158     219.506 169.427 -15.577  1.00 96.06      A16S
ATOM  44096  O3' GUA  1158     220.338 170.303 -14.841  1.00 96.06      A16S
ATOM  44097  P   GUA  1159     221.705 169.750 -14.222  1.00 93.81      A16S
ATOM  44098  O1P GUA  1159     222.304 170.807 -13.375  1.00101.59      A16S
ATOM  44099  O2P GUA  1159     222.487 169.181 -15.351  1.00101.59      A16S
ATOM  44100  O5' GUA  1159     221.231 168.573 -13.262  1.00 93.81      A16S
ATOM  44101  C5' GUA  1159     220.353 168.834 -12.153  1.00 93.81      A16S
ATOM  44102  C4' GUA  1159     219.932 167.538 -11.491  1.00 93.81      A16S
ATOM  44103  O4' GUA  1159     218.988 166.818 -12.331  1.00 93.81      A16S
ATOM  44104  C1' GUA  1159     219.153 165.418 -12.143  1.00 93.81      A16S
ATOM  44105  N9  GUA  1159     219.516 164.807 -13.423  1.00101.59      A16S
ATOM  44106  C4  GUA  1159     219.226 163.522 -13.825  1.00101.59      A16S
ATOM  44107  N3  GUA  1159     218.534 162.607 -13.115  1.00101.59      A16S
ATOM  44108  C2  GUA  1159     218.421 161.461 -13.762  1.00101.59      A16S
ATOM  44109  N2  GUA  1159     217.755 160.447 -13.202  1.00101.59      A16S
ATOM  44110  N1  GUA  1159     218.952 161.223 -15.005  1.00101.59      A16S
ATOM  44111  C6  GUA  1159     219.673 162.141 -15.756  1.00101.59      A16S
ATOM  44112  O6  GUA  1159     220.115 161.813 -16.866  1.00101.59      A16S
ATOM  44113  C5  GUA  1159     219.796 163.390 -15.075  1.00101.59      A16S
ATOM  44114  N7  GUA  1159     220.421 164.570 -15.458  1.00101.59      A16S
ATOM  44115  C8  GUA  1159     220.227 165.381 -14.452  1.00101.59      A16S
ATOM  44116  C2' GUA  1159     220.249 165.220 -11.095  1.00 93.81      A16S
ATOM  44117  O2' GUA  1159     219.688 165.067  -9.803  1.00 93.81      A16S
ATOM  44118  C3' GUA  1159     221.028 166.520 -11.224  1.00 93.81      A16S
ATOM  44119  O3' GUA  1159     221.806 166.795 -10.074  1.00 93.81      A16S
ATOM  44120  P   ADE  1160     223.381 166.484 -10.109  1.00 80.41      A16S
ATOM  44121  O1P ADE  1160     224.030 167.261  -9.014  1.00 74.70      A16S
ATOM  44122  O2P ADE  1160     223.849 166.658 -11.520  1.00 74.70      A16S
ATOM  44123  O5' ADE  1160     223.483 164.939  -9.731  1.00 80.41      A16S
ATOM  44124  C5' ADE  1160     224.749 164.256  -9.792  1.00 80.41      A16S
ATOM  44125  C4' ADE  1160     224.588 162.801  -9.419  1.00 80.41      A16S
ATOM  44126  O4' ADE  1160     224.271 162.688  -8.007  1.00 80.41      A16S
ATOM  44127  C1' ADE  1160     223.386 161.601  -7.805  1.00 80.41      A16S
ATOM  44128  N9  ADE  1160     222.126 162.133  -7.277  1.00 74.70      A16S
ATOM  44129  C4  ADE  1160     221.252 161.474  -6.449  1.00 74.70      A16S
ATOM  44130  N3  ADE  1160     221.377 160.232  -5.961  1.00 74.70      A16S
ATOM  44131  C2  ADE  1160     220.345 159.935  -5.174  1.00 74.70      A16S
ATOM  44132  N1  ADE  1160     219.281 160.681  -4.847  1.00 74.70      A16S
ATOM  44133  C6  ADE  1160     219.183 161.920  -5.359  1.00 74.70      A16S
ATOM  44134  N6  ADE  1160     218.123 162.654  -5.032  1.00 74.70      A16S
ATOM  44135  C5  ADE  1160     220.216 162.359  -6.209  1.00 74.70      A16S
ATOM  44136  N7  ADE  1160     220.427 163.554  -6.882  1.00 74.70      A16S
ATOM  44137  C8  ADE  1160     221.569 163.369  -7.500  1.00 74.70      A16S
ATOM  44138  C2' ADE  1160     223.191 160.910  -9.157  1.00 80.41      A16S
ATOM  44139  O2' ADE  1160     224.112 159.847  -9.307  1.00 80.41      A16S
ATOM  44140  C3' ADE  1160     223.470 162.051 -10.120  1.00 80.41      A16S
ATOM  44141  O3' ADE  1160     223.828 161.592 -11.406  1.00 80.41      A16S
ATOM  44142  P   ADE  1161     222.707 161.527 -12.554  1.00 82.82      A16S
ATOM  44143  O1P ADE  1161     223.353 161.092 -13.815  1.00 88.46      A16S
ATOM  44144  O2P ADE  1161     221.947 162.798 -12.529  1.00 88.46      A16S
ATOM  44145  O5' ADE  1161     221.741 160.363 -12.059  1.00 82.82      A16S
ATOM  44146  C5' ADE  1161     222.259 159.065 -11.699  1.00 82.82      A16S
ATOM  44147  C4' ADE  1161     221.229 158.292 -10.907  1.00 82.82      A16S
ATOM  44148  O4' ADE  1161     220.996 158.965  -9.644  1.00 82.82      A16S
ATOM  44149  C1' ADE  1161     219.616 158.931  -9.327  1.00 82.82      A16S
ATOM  44150  N9  ADE  1161     219.138 160.314  -9.265  1.00 88.46      A16S
ATOM  44151  C4  ADE  1161     218.089 160.800  -8.522  1.00 88.46      A16S
ATOM  44152  N3  ADE  1161     217.286 160.112  -7.693  1.00 88.46      A16S
ATOM  44153  C2  ADE  1161     216.371 160.914  -7.154  1.00 88.46      A16S
ATOM  44154  N1  ADE  1161     216.181 162.227  -7.335  1.00 88.46      A16S
ATOM  44155  C6  ADE  1161     217.005 162.889  -8.173  1.00 88.46      A16S
ATOM  44156  N6  ADE  1161     216.815 164.198  -8.356  1.00 88.46      A16S
ATOM  44157  C5  ADE  1161     218.020 162.151  -8.807  1.00 88.46      A16S
ATOM  44158  N7  ADE  1161     219.011 162.514  -9.705  1.00 88.46      A16S
ATOM  44159  C8  ADE  1161     219.644 161.394  -9.944  1.00 88.46      A16S
ATOM  44160  C2' ADE  1161     218.908 158.079 -10.388  1.00 82.82      A16S
ATOM  44161  O2' ADE  1161     218.759 156.757  -9.909  1.00 82.82      A16S
ATOM  44162  C3' ADE  1161     219.864 158.192 -11.574  1.00 82.82      A16S
ATOM  44163  O3' ADE  1161     219.821 157.059 -12.442  1.00 82.82      A16S
ATOM  44164  P   GUA  1162     219.151 157.185 -13.899  1.00110.82      A16S
ATOM  44165  O1P GUA  1162     219.715 156.094 -14.718  1.00 96.05      A16S
ATOM  44166  O2P GUA  1162     219.213 158.576 -14.395  1.00 96.05      A16S
ATOM  44167  O5' GUA  1162     217.639 156.810 -13.627  1.00110.82      A16S
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ATOM  44168  C5' GUA  1162     217.335 155.658 -12.845  1.00110.82      A16S
ATOM  44169  C4' GUA  1162     215.857 155.544 -12.654  1.00110.82      A16S
ATOM  44170  O4' GUA  1162     215.376 156.810 -12.139  1.00110.82      A16S
ATOM  44171  C1' GUA  1162     214.084 157.067 -12.650  1.00110.82      A16S
ATOM  44172  N9  GUA  1162     214.136 158.293 -13.435  1.00 96.05      A16S
ATOM  44173  C4  GUA  1162     213.385 159.425 -13.219  1.00 96.05      A16S
ATOM  44174  N3  GUA  1162     212.473 159.599 -12.234  1.00 96.05      A16S
ATOM  44175  C2  GUA  1162     211.912 160.792 -12.285  1.00 96.05      A16S
ATOM  44176  N2  GUA  1162     210.985 161.125 -11.391  1.00 96.05      A16S
ATOM  44177  N1  GUA  1162     212.220 161.742 -13.220  1.00 96.05      A16S
ATOM  44178  C6  GUA  1162     213.149 161.584 -14.245  1.00 96.05      A16S
ATOM  44179  O6  GUA  1162     213.342 162.501 -15.043  1.00 96.05      A16S
ATOM  44180  C5  GUA  1162     213.761 160.304 -14.205  1.00 96.05      A16S
ATOM  44181  N7  GUA  1162     214.729 159.738 -15.028  1.00 96.05      A16S
ATOM  44182  C8  GUA  1162     214.922 158.547 -14.533  1.00 96.05      A16S
ATOM  44183  C2' GUA  1162     213.675 155.872 -13.508  1.00110.82      A16S
ATOM  44184  O2' GUA  1162     212.919 154.966 -12.718  1.00110.82      A16S
ATOM  44185  C3' GUA  1162     215.034 155.322 -13.913  1.00110.82      A16S
ATOM  44186  O3' GUA  1162     214.959 153.960 -14.304  1.00110.82      A16S
ATOM  44187  P   GUA  1163     214.348 153.591 -15.742  1.00120.51      A16S
ATOM  44188  O1P GUA  1163     214.867 152.249 -16.091  1.00113.30      A16S
ATOM  44189  O2P GUA  1163     214.597 154.734 -16.657  1.00113.30      A16S
ATOM  44190  O5' GUA  1163     212.770 153.513 -15.496  1.00120.51      A16S
ATOM  44191  C5' GUA  1163     212.207 152.794 -14.364  1.00120.51      A16S
ATOM  44192  C4' GUA  1163     210.769 153.223 -14.133  1.00120.51      A16S
ATOM  44193  O4' GUA  1163     210.757 154.669 -14.049  1.00120.51      A16S
ATOM  44194  C1' GUA  1163     209.661 155.197 -14.771  1.00120.51      A16S
ATOM  44195  N9  GUA  1163     210.199 156.074 -15.808  1.00113.30      A16S
ATOM  44196  C4  GUA  1163     210.199 157.448 -15.783  1.00113.30      A16S
ATOM  44197  N3  GUA  1163     209.665 158.225 -14.813  1.00113.30      A16S
ATOM  44198  C2  GUA  1163     209.840 159.512 -15.058  1.00113.30      A16S
ATOM  44199  N2  GUA  1163     209.367 160.424 -14.197  1.00113.30      A16S
ATOM  44200  N1  GUA  1163     210.490 159.998 -16.166  1.00113.30      A16S
ATOM  44201  C6  GUA  1163     211.048 159.218 -17.176  1.00113.30      A16S
ATOM  44202  O6  GUA  1163     211.619 159.758 -18.127  1.00113.30      A16S
ATOM  44203  C5  GUA  1163     210.861 157.835 -16.929  1.00113.30      A16S
ATOM  44204  N7  GUA  1163     211.246 156.728 -17.673  1.00113.30      A16S
ATOM  44205  C8  GUA  1163     210.829 155.708 -16.973  1.00113.30      A16S
ATOM  44206  C2' GUA  1163     208.794 154.036 -15.260  1.00120.51      A16S
ATOM  44207  O2' GUA  1163     207.672 153.916 -14.415  1.00120.51      A16S
ATOM  44208  C3' GUA  1163     209.789 152.876 -15.250  1.00120.51      A16S
ATOM  44209  O3' GUA  1163     209.264 151.529 -15.153  1.00120.51      A16S
ATOM  44210  P   ADE  1164     208.307 151.079 -13.921  1.00 98.81      A16S
ATOM  44211  O1P ADE  1164     208.179 149.600 -14.034  1.00 99.35      A16S
ATOM  44212  O2P ADE  1164     207.073 151.903 -13.833  1.00 99.35      A16S
ATOM  44213  O5' ADE  1164     209.191 151.327 -12.626  1.00 98.81      A16S
ATOM  44214  C5' ADE  1164     208.679 152.070 -11.527  1.00 98.81      A16S
ATOM  44215  C4' ADE  1164     209.201 151.503 -10.239  1.00 98.81      A16S
ATOM  44216  O4' ADE  1164     208.573 150.230  -9.976  1.00 98.81      A16S
ATOM  44217  C1' ADE  1164     209.454 149.426  -9.224  1.00 98.81      A16S
ATOM  44218  N9  ADE  1164     209.432 148.070  -9.766  1.00 99.35      A16S
ATOM  44219  C4  ADE  1164     209.178 146.939  -9.033  1.00 99.35      A16S
ATOM  44220  N3  ADE  1164     208.922 146.866  -7.715  1.00 99.35      A16S
ATOM  44221  C2  ADE  1164     208.720 145.609  -7.349  1.00 99.35      A16S
ATOM  44222  N1  ADE  1164     208.742 144.499  -8.091  1.00 99.35      A16S
ATOM  44223  C6  ADE  1164     209.000 144.610  -9.414  1.00 99.35      A16S
ATOM  44224  N6  ADE  1164     209.019 143.501 -10.160  1.00 99.35      A16S
ATOM  44225  C5  ADE  1164     209.233 145.890  -9.927  1.00 99.35      A16S
ATOM  44226  N7  ADE  1164     209.519 146.346 -11.206  1.00 99.35      A16S
ATOM  44227  C8  ADE  1164     209.631 147.644 -11.057  1.00 99.35      A16S
ATOM  44228  C2' ADE  1164     210.813 150.125  -9.126  1.00 98.81      A16S
ATOM  44229  O2' ADE  1164     210.954 150.589  -7.798  1.00 98.81      A16S
ATOM  44230  C3' ADE  1164     210.694 151.222 -10.197  1.00 98.81      A16S
ATOM  44231  O3' ADE  1164     211.368 152.482  -9.986  1.00 98.81      A16S
ATOM  44232  P   GUA  1165     212.584 152.621  -8.936  1.00 72.87      A16S
ATOM  44233  O1P GUA  1165     213.220 151.294  -8.660  1.00 69.88      A16S
ATOM  44234  O2P GUA  1165     212.060 153.426  -7.799  1.00 69.88      A16S
ATOM  44235  O5' GUA  1165     213.650 153.521  -9.712  1.00 72.87      A16S
ATOM  44236  C5' GUA  1165     214.289 153.066 -10.929  1.00 72.87      A16S
ATOM  44237  C4' GUA  1165     215.764 152.804 -10.689  1.00 72.87      A16S
ATOM  44238  O4' GUA  1165     216.319 153.914  -9.936  1.00 72.87      A16S
ATOM  44239  C1' GUA  1165     217.283 153.437  -9.011  1.00 72.87      A16S
ATOM  44240  N9  GUA  1165     216.814 153.730  -7.658  1.00 69.88      A16S
ATOM  44241  C4  GUA  1165     217.525 153.569  -6.490  1.00 69.88      A16S
ATOM  44242  N3  GUA  1165     218.802 153.152  -6.389  1.00 69.88      A16S
ATOM  44243  C2  GUA  1165     219.195 153.077  -5.132  1.00 69.88      A16S
ATOM  44244  N2  GUA  1165     220.435 152.678  -4.845  1.00 69.88      A16S
ATOM  44245  N1  GUA  1165     218.399 153.383  -4.063  1.00 69.88      A16S
ATOM  44246  C6  GUA  1165     217.078 153.804  -4.148  1.00 69.88      A16S
ATOM  44247  O6  GUA  1165     216.434 154.031  -3.123  1.00 69.88      A16S
ATOM  44248  C5  GUA  1165     216.649 153.901  -5.481  1.00 69.88      A16S
ATOM  44249  N7  GUA  1165     215.424 154.293  -5.999  1.00 69.88      A16S
ATOM  44250  C8  GUA  1165     215.570 154.183  -7.291  1.00 69.88      A16S
ATOM  44251  C2' GUA  1165     217.432 151.929  -9.229  1.00 72.87      A16S
ATOM  44252  O2' GUA  1165     218.528 151.663 -10.084  1.00 72.87      A16S
ATOM  44253  C3' GUA  1165     216.088 151.576  -9.849  1.00 72.87      A16S
ATOM  44254  O3' GUA  1165     216.169 150.393 -10.636  1.00 72.87      A16S
ATOM  44255  P   GUA  1166     215.903 148.960  -9.954  1.00 71.89      A16S
ATOM  44256  O1P GUA  1166     215.899 147.981 -11.069  1.00 70.85      A16S
ATOM  44257  O2P GUA  1166     214.723 149.052  -9.049  1.00 70.85      A16S
ATOM  44258  O5' GUA  1166     217.202 148.689  -9.070  1.00 71.89      A16S
ATOM  44259  C5' GUA  1166     218.412 148.202  -9.676  1.00 71.89      A16S
ATOM  44260  C4' GUA  1166     219.418 147.823  -8.618  1.00 71.89      A16S
ATOM  44261  O4' GUA  1166     219.843 149.011  -7.904  1.00 71.89      A16S
ATOM  44262  C1' GUA  1166     220.040 148.703  -6.529  1.00 71.89      A16S
ATOM  44263  N9  GUA  1166     219.047 149.445  -5.751  1.00 70.85      A16S
ATOM  44264  C4  GUA  1166     218.994 149.549  -4.379  1.00 70.85      A16S
ATOM  44265  N3  GUA  1166     219.893 149.045  -3.509  1.00 70.85      A16S
ATOM  44266  C2  GUA  1166     219.547 149.270  -2.258  1.00 70.85      A16S
ATOM  44267  N2  GUA  1166     220.334 148.851  -1.269  1.00 70.85      A16S
ATOM  44268  N1  GUA  1166     218.405 149.926  -1.885  1.00 70.85      A16S
ATOM  44269  C6  GUA  1166     217.464 150.453  -2.764  1.00 70.85      A16S
ATOM  44270  O6  GUA  1166     216.456 151.016  -2.325  1.00 70.85      A16S
ATOM  44271  C5  GUA  1166     217.832 150.237  -4.111  1.00 70.85      A16S
ATOM  44272  N7  GUA  1166     217.194 150.609  -5.288  1.00 70.85      A16S
ATOM  44273  C8  GUA  1166     217.953 150.129  -6.233  1.00 70.85      A16S
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ATOM  44274  C2' GUA  1166     219.834 147.195  -6.364  1.00 71.89      A16S
ATOM  44275  O2' GUA  1166     221.069 146.517  -6.448  1.00 71.89      A16S
ATOM  44276  C3' GUA  1166     218.909 146.890  -7.533  1.00 71.89      A16S
ATOM  44277  O3' GUA  1166     218.968 145.536  -7.923  1.00 71.89      A16S
ATOM  44278  P   GUA  1167     217.901 144.501  -7.325  1.00 53.91      A16S
ATOM  44279  O1P GUA  1167     218.035 143.242  -8.097  1.00 75.28      A16S
ATOM  44280  O2P GUA  1167     216.583 145.186  -7.256  1.00 75.28      A16S
ATOM  44281  O5' GUA  1167     218.431 144.235  -5.851  1.00 53.91      A16S
ATOM  44282  C5' GUA  1167     219.729 143.674  -5.653  1.00 53.91      A16S
ATOM  44283  C4' GUA  1167     220.019 143.514  -4.186  1.00 53.91      A16S
ATOM  44284  O4' GUA  1167     220.233 144.814  -3.578  1.00 53.91      A16S
ATOM  44285  C1' GUA  1167     219.715 144.812  -2.254  1.00 53.91      A16S
ATOM  44286  N9  GUA  1167     218.593 145.747  -2.197  1.00 75.28      A16S
ATOM  44287  C4  GUA  1167     217.983 146.220  -1.061  1.00 75.28      A16S
ATOM  44288  N3  GUA  1167     218.335 145.926   0.208  1.00 75.28      A16S
ATOM  44289  C2  GUA  1167     217.550 146.524   1.085  1.00 75.28      A16S
ATOM  44290  N2  GUA  1167     217.760 146.350   2.397  1.00 75.28      A16S
ATOM  44291  N1  GUA  1167     216.501 147.338   0.743  1.00 75.28      A16S
ATOM  44292  C6  GUA  1167     216.123 147.652  -0.557  1.00 75.28      A16S
ATOM  44293  O6  GUA  1167     215.159 148.401  -0.757  1.00 75.28      A16S
ATOM  44294  C5  GUA  1167     216.956 147.024  -1.506  1.00 75.28      A16S
ATOM  44295  N7  GUA  1167     216.928 147.068  -2.892  1.00 75.28      A16S
ATOM  44296  C8  GUA  1167     217.917 146.303  -3.259  1.00 75.28      A16S
ATOM  44297  C2' GUA  1167     219.226 143.393  -1.961  1.00 53.91      A16S
ATOM  44298  O2' GUA  1167     220.239 142.639  -1.314  1.00 53.91      A16S
ATOM  44299  C3' GUA  1167     218.912 142.889  -3.362  1.00 53.91      A16S
ATOM  44300  O3' GUA  1167     218.888 141.482  -3.432  1.00 53.91      A16S
ATOM  44301  P   GUA  1168     217.682 140.695  -2.734  1.00 65.47      A16S
ATOM  44302  O1P GUA  1168     217.892 139.239  -2.919  1.00 57.89      A16S
ATOM  44303  O2P GUA  1168     216.417 141.329  -3.177  1.00 57.89      A16S
ATOM  44304  O5' GUA  1168     217.881 141.009  -1.190  1.00 65.47      A16S
ATOM  44305  C5' GUA  1168     216.907 140.597  -0.232  1.00 65.47      A16S
ATOM  44306  C4' GUA  1168     217.248 141.145   1.131  1.00 65.47      A16S
ATOM  44307  O4' GUA  1168     217.338 142.594   1.078  1.00 65.47      A16S
ATOM  44308  C1' GUA  1168     216.721 143.159   2.225  1.00 65.47      A16S
ATOM  44309  N9  GUA  1168     215.589 143.972   1.773  1.00 57.89      A16S
ATOM  44310  C4  GUA  1168     214.656 144.603   2.562  1.00 57.89      A16S
ATOM  44311  N3  GUA  1168     214.604 144.565   3.910  1.00 57.89      A16S
ATOM  44312  C2  GUA  1168     213.611 145.297   4.387  1.00 57.89      A16S
ATOM  44313  N2  GUA  1168     213.411 145.367   5.720  1.00 57.89      A16S
ATOM  44314  N1  GUA  1168     212.738 146.012   3.597  1.00 57.89      A16S
ATOM  44315  C6  GUA  1168     212.768 146.059   2.209  1.00 57.89      A16S
ATOM  44316  O6  GUA  1168     211.931 146.730   1.600  1.00 57.89      A16S
ATOM  44317  C5  GUA  1168     213.827 145.276   1.686  1.00 57.89      A16S
ATOM  44318  N7  GUA  1168     214.214 145.054   0.375  1.00 57.89      A16S
ATOM  44319  C8  GUA  1168     215.256 144.276   0.472  1.00 57.89      A16S
ATOM  44320  C2' GUA  1168     216.335 142.004   3.151  1.00 65.47      A16S
ATOM  44321  O2' GUA  1168     217.381 141.759   4.067  1.00 65.47      A16S
ATOM  44322  C3' GUA  1168     216.173 140.864   2.159  1.00 65.47      A16S
ATOM  44323  O3' GUA  1168     216.341 139.580   2.722  1.00 65.47      A16S
ATOM  44324  P   ADE  1169     215.055 138.647   2.921  1.00 67.28      A16S
ATOM  44325  O1P ADE  1169     215.497 137.323   3.454  1.00 57.33      A16S
ATOM  44326  O2P ADE  1169     214.236 138.721   1.670  1.00 57.33      A16S
ATOM  44327  O5' ADE  1169     214.246 139.382   4.076  1.00 67.28      A16S
ATOM  44328  C5' ADE  1169     214.802 139.509   5.390  1.00 67.28      A16S
ATOM  44329  C4' ADE  1169     213.907 140.364   6.238  1.00 67.28      A16S
ATOM  44330  O4' ADE  1169     213.851 141.697   5.690  1.00 67.28      A16S
ATOM  44331  C1' ADE  1169     212.561 142.231   5.879  1.00 67.28      A16S
ATOM  44332  N9  ADE  1169     212.035 142.570   4.568  1.00 57.33      A16S
ATOM  44333  C4  ADE  1169     210.992 143.423   4.302  1.00 57.33      A16S
ATOM  44334  N3  ADE  1169     210.243 144.095   5.192  1.00 57.33      A16S
ATOM  44335  C2  ADE  1169     209.339 144.848   4.565  1.00 57.33      A16S
ATOM  44336  N1  ADE  1169     209.119 145.000   3.248  1.00 57.33      A16S
ATOM  44337  C6  ADE  1169     209.894 144.312   2.382  1.00 57.33      A16S
ATOM  44338  N6  ADE  1169     209.690 144.473   1.069  1.00 57.33      A16S
ATOM  44339  C5  ADE  1169     210.884 143.466   2.921  1.00 57.33      A16S
ATOM  44340  N7  ADE  1169     211.829 142.638   2.329  1.00 57.33      A16S
ATOM  44341  C8  ADE  1169     212.481 142.128   3.347  1.00 57.33      A16S
ATOM  44342  C2' ADE  1169     211.718 141.191   6.612  1.00 67.28      A16S
ATOM  44343  O2' ADE  1169     211.732 141.470   7.997  1.00 67.28      A16S
ATOM  44344  C3' ADE  1169     212.465 139.910   6.287  1.00 67.28      A16S
ATOM  44345  O3' ADE  1169     212.307 138.943   7.303  1.00 67.28      A16S
ATOM  44346  P   CYT  1170     211.422 137.644   7.021  1.00 49.92      A16S
ATOM  44347  O1P CYT  1170     211.058 137.100   8.348  1.00 67.75      A16S
ATOM  44348  O2P CYT  1170     212.131 136.780   6.044  1.00 67.75      A16S
ATOM  44349  O5' CYT  1170     210.107 138.253   6.359  1.00 49.92      A16S
ATOM  44350  C5' CYT  1170     209.197 139.004   7.167  1.00 49.92      A16S
ATOM  44351  C4' CYT  1170     208.143 139.673   6.325  1.00 49.92      A16S
ATOM  44352  O4' CYT  1170     208.747 140.618   5.414  1.00 49.92      A16S
ATOM  44353  C1' CYT  1170     207.940 140.732   4.261  1.00 49.92      A16S
ATOM  44354  N1  CYT  1170     208.730 140.294   3.106  1.00 67.75      A16S
ATOM  44355  C6  CYT  1170     209.724 139.364   3.250  1.00 67.75      A16S
ATOM  44356  C2  CYT  1170     208.439 140.828   1.851  1.00 67.75      A16S
ATOM  44357  O2  CYT  1170     207.538 141.678   1.750  1.00 67.75      A16S
ATOM  44358  N3  CYT  1170     209.142 140.404   0.778  1.00 67.75      A16S
ATOM  44359  C4  CYT  1170     210.099 139.485   0.927  1.00 67.75      A16S
ATOM  44360  N4  CYT  1170     210.758 139.087  -0.161  1.00 67.75      A16S
ATOM  44361  C5  CYT  1170     210.424 138.933   2.198  1.00 67.75      A16S
ATOM  44362  C2' CYT  1170     206.721 139.832   4.462  1.00 49.92      A16S
ATOM  44363  O2' CYT  1170     205.669 140.582   5.048  1.00 49.92      A16S
ATOM  44364  C3' CYT  1170     207.258 138.807   5.446  1.00 49.92      A16S
ATOM  44365  O3' CYT  1170     206.187 138.269   6.186  1.00 49.92      A16S
ATOM  44366  P   GUA  1171     206.057 136.689   6.368  1.00 63.60      A16S
ATOM  44367  O1P GUA  1171     204.969 136.548   7.349  1.00 81.15      A16S
ATOM  44368  O2P GUA  1171     207.380 136.089   6.642  1.00 81.15      A16S
ATOM  44369  O5' GUA  1171     205.521 136.188   4.962  1.00 63.60      A16S
ATOM  44370  C5' GUA  1171     204.169 136.461   4.566  1.00 63.60      A16S
ATOM  44371  C4' GUA  1171     203.764 135.574   3.411  1.00 63.60      A16S
ATOM  44372  O4' GUA  1171     204.727 135.773   2.353  1.00 63.60      A16S
ATOM  44373  C1' GUA  1171     204.933 134.561   1.668  1.00 63.60      A16S
ATOM  44374  N9  GUA  1171     206.361 134.258   1.711  1.00 81.15      A16S
ATOM  44375  C4  GUA  1171     207.113 133.671   0.716  1.00 81.15      A16S
ATOM  44376  N3  GUA  1171     206.654 133.224  -0.473  1.00 81.15      A16S
ATOM  44377  C2  GUA  1171     207.623 132.727  -1.222  1.00 81.15      A16S
ATOM  44378  N2  GUA  1171     207.348 132.239  -2.433  1.00 81.15      A16S
ATOM  44379  N1  GUA  1171     208.937 132.675  -0.839  1.00 81.15      A16S
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ATOM	44380	C6	GUA	1171	209.436	133.136	0.375	1.00	81.15	A16S	ATOM	44433	O2P	GUA	1174	193.930	128.627	5.487	1.00	65.52	A16S
ATOM	44381	O6	GUA	1171	210.652	133.058	0.616	1.00	81.15	A16S	ATOM	44434	O5'	GUA	1174	192.525	127.376	3.819	1.00	46.26	A16S
ATOM	44382	C5	GUA	1171	208.406	133.665	1.193	1.00	81.15	A16S	ATOM	44435	C5'	GUA	1174	193.381	126.220	3.865	1.00	46.26	A16S
ATOM	44383	N7	GUA	1171	208.464	134.213	2.467	1.00	81.15	A16S	ATOM	44436	C4'	GUA	1174	193.642	125.719	2.468	1.00	46.26	A16S
ATOM	44384	C8	GUA	1171	207.231	134.541	2.735	1.00	81.15	A16S	ATOM	44437	O4'	GUA	1174	194.221	126.773	1.647	1.00	46.26	A16S
ATOM	44385	C2'	GUA	1171	203.965	133.520	2.241	1.00	63.60	A16S	ATOM	44438	C1'	GUA	1174	195.200	126.219	0.786	1.00	46.26	A16S
ATOM	44386	O2'	GUA	1171	202.795	133.619	1.458	1.00	63.60	A16S	ATOM	44439	N9	GUA	1174	196.506	126.754	1.173	1.00	65.52	A16S
ATOM	44387	C3'	GUA	1171	203.692	134.061	3.633	1.00	63.60	A16S	ATOM	44440	C4	GUA	1174	197.718	126.461	0.591	1.00	65.52	A16S
ATOM	44388	O3'	GUA	1171	202.402	133.737	4.239	1.00	63.60	A16S	ATOM	44441	N3	GUA	1174	197.915	125.635	-0.455	1.00	65.52	A16S
ATOM	44389	P	ADE	1172	201.318	132.735	3.531	1.00	43.14	A16S	ATOM	44442	C2	GUA	1174	199.188	125.545	-0.780	1.00	65.52	A16S
ATOM	44390	O1P	ADE	1172	201.987	131.671	2.731	1.00	65.73	A16S	ATOM	44443	N2	GUA	1174	199.558	124.762	-1.800	1.00	65.52	A16S
ATOM	44391	O2P	ADE	1172	200.372	132.326	4.603	1.00	65.73	A16S	ATOM	44444	N1	GUA	1174	200.193	126.214	-0.129	1.00	65.52	A16S
ATOM	44392	O5'	ADE	1172	200.471	133.690	2.570	1.00	43.14	A16S	ATOM	44445	C6	GUA	1174	200.017	127.063	0.952	1.00	65.52	A16S
ATOM	44393	C5'	ADE	1172	199.809	134.845	3.110	1.00	43.14	A16S	ATOM	44446	O6	GUA	1174	200.996	127.603	1.473	1.00	65.52	A16S
ATOM	44394	C4'	ADE	1172	198.395	134.968	2.577	1.00	43.14	A16S	ATOM	44447	C5	GUA	1174	198.650	127.172	1.309	1.00	65.52	A16S
ATOM	44395	O4'	ADE	1172	198.440	135.313	1.178	1.00	43.14	A16S	ATOM	44448	N7	GUA	1174	198.042	127.904	2.315	1.00	65.52	A16S
ATOM	44396	C1'	ADE	1172	197.410	134.642	0.487	1.00	43.14	A16S	ATOM	44449	C8	GUA	1174	196.775	127.629	2.195	1.00	65.52	A16S
ATOM	44397	N9	ADE	1172	198.042	133.813	-0.547	1.00	65.73	A16S	ATOM	44450	C2'	GUA	1174	195.140	124.699	0.960	1.00	46.26	A16S
ATOM	44398	C4	ADE	1172	197.444	133.251	-1.650	1.00	65.73	A16S	ATOM	44451	O2'	GUA	1174	194.227	124.188	0.020	1.00	46.26	A16S
ATOM	44399	N3	ADE	1172	196.151	133.312	-1.999	1.00	65.73	A16S	ATOM	44452	C3'	GUA	1174	194.620	124.569	2.382	1.00	46.26	A16S
ATOM	44400	C2	ADE	1172	195.942	132.665	-3.134	1.00	65.73	A16S	ATOM	44453	O3'	GUA	1174	193.938	123.354	2.594	1.00	46.26	A16S
ATOM	44401	N1	ADE	1172	196.807	132.012	-3.906	1.00	65.73	A16S	ATOM	44454	P	URI	1175	194.740	122.074	3.124	1.00	55.68	A16S
ATOM	44402	C6	ADE	1172	198.098	131.964	-3.529	1.00	65.73	A16S	ATOM	44455	O1P	URI	1175	193.780	120.951	3.305	1.00	60.83	A16S
ATOM	44403	N6	ADE	1172	198.964	131.305	-4.302	1.00	65.73	A16S	ATOM	44456	O2P	URI	1175	195.591	122.502	4.257	1.00	60.83	A16S
ATOM	44404	C5	ADE	1172	198.454	132.612	-2.341	1.00	65.73	A16S	ATOM	44457	O5'	URI	1175	195.699	121.714	1.908	1.00	55.68	A16S
ATOM	44405	N7	ADE	1172	199.665	132.747	-1.680	1.00	65.73	A16S	ATOM	44458	C5'	URI	1175	195.173	121.378	0.607	1.00	55.68	A16S
ATOM	44406	C8	ADE	1172	199.368	133.458	-0.625	1.00	65.73	A16S	ATOM	44459	C4'	URI	1175	196.287	120.876	-0.281	1.00	55.68	A16S
ATOM	44407	C2'	ADE	1172	196.542	133.903	1.519	1.00	43.14	A16S	ATOM	44460	O4'	URI	1175	197.178	121.967	-0.630	1.00	55.68	A16S
ATOM	44408	O2'	ADE	1172	195.383	134.666	1.794	1.00	43.14	A16S	ATOM	44461	C1'	URI	1175	198.504	121.484	-0.721	1.00	55.68	A16S
ATOM	44409	C3'	ADE	1172	197.494	133.749	2.707	1.00	43.14	A16S	ATOM	44462	N1	URI	1175	199.350	122.259	0.195	1.00	60.83	A16S
ATOM	44410	O3'	ADE	1172	196.790	133.837	3.952	1.00	43.14	A16S	ATOM	44463	C6	URI	1175	198.825	122.848	1.318	1.00	60.83	A16S
ATOM	44411	P	CYT	1173	196.175	132.519	4.655	1.00	49.27	A16S	ATOM	44464	C2	URI	1175	200.703	122.364	-0.099	1.00	60.83	A16S
ATOM	44412	O1P	CYT	1173	195.473	132.963	5.889	1.00	62.84	A16S	ATOM	44465	O2	URI	1175	201.216	121.883	-1.101	1.00	60.83	A16S
ATOM	44413	O2P	CYT	1173	197.212	131.453	4.745	1.00	62.84	A16S	ATOM	44466	N3	URI	1175	201.438	123.064	0.826	1.00	60.83	A16S
ATOM	44414	O5'	CYT	1173	195.043	132.050	3.643	1.00	49.27	A16S	ATOM	44467	C4	URI	1175	200.972	123.669	1.975	1.00	60.83	A16S
ATOM	44415	C5'	CYT	1173	193.710	132.583	3.711	1.00	49.27	A16S	ATOM	44468	O4	URI	1175	201.749	124.309	2.677	1.00	60.83	A16S
ATOM	44416	C4'	CYT	1173	192.782	131.732	2.883	1.00	49.27	A16S	ATOM	44469	C5	URI	1175	199.569	123.528	2.194	1.00	60.83	A16S
ATOM	44417	O4'	CYT	1173	193.124	131.886	1.480	1.00	49.27	A16S	ATOM	44470	C2'	URI	1175	198.491	119.986	-0.395	1.00	55.68	A16S
ATOM	44418	C1'	CYT	1173	192.979	130.633	0.817	1.00	49.27	A16S	ATOM	44471	O2'	URI	1175	198.492	119.222	-1.576	1.00	55.68	A16S
ATOM	44419	N1	CYT	1173	194.274	130.241	0.209	1.00	62.84	A16S	ATOM	44472	C3'	URI	1175	197.185	119.833	0.362	1.00	55.68	A16S
ATOM	44420	C6	CYT	1173	195.461	130.698	0.710	1.00	62.84	A16S	ATOM	44473	O3'	URI	1175	196.652	118.529	0.204	1.00	55.68	A16S
ATOM	44421	C2	CYT	1173	194.265	129.371	-0.884	1.00	62.84	A16S	ATOM	44474	P	CYT	1176	197.020	117.390	1.271	1.00	54.50	A16S
ATOM	44422	O2	CYT	1173	193.180	129.015	-1.358	1.00	62.84	A16S	ATOM	44475	O1P	CYT	1176	196.231	116.172	0.950	1.00	80.12	A16S
ATOM	44423	N3	CYT	1173	195.438	128.950	-1.402	1.00	62.84	A16S	ATOM	44476	O2P	CYT	1176	196.947	117.980	2.633	1.00	80.12	A16S
ATOM	44424	C4	CYT	1173	196.589	129.384	-0.889	1.00	62.84	A16S	ATOM	44477	O5'	CYT	1176	198.537	117.076	0.946	1.00	54.50	A16S
ATOM	44425	N4	CYT	1173	197.723	128.926	-1.419	1.00	62.84	A16S	ATOM	44478	C5'	CYT	1176	198.906	116.510	-0.312	1.00	54.50	A16S
ATOM	44426	C5	CYT	1173	196.630	130.302	0.192	1.00	62.84	A16S	ATOM	44479	C4'	CYT	1176	200.364	116.202	-0.294	1.00	54.50	A16S
ATOM	44427	C2'	CYT	1173	192.482	129.606	1.838	1.00	49.27	A16S	ATOM	44480	O4'	CYT	1176	201.071	117.456	-0.210	1.00	54.50	A16S
ATOM	44428	O2'	CYT	1173	191.086	129.439	1.736	1.00	49.27	A16S	ATOM	44481	C1'	CYT	1176	202.098	117.355	0.747	1.00	54.50	A16S
ATOM	44429	C3'	CYT	1173	192.914	130.241	3.150	1.00	49.27	A16S	ATOM	44482	N1	CYT	1176	201.910	118.449	1.727	1.00	80.12	A16S
ATOM	44430	O3'	CYT	1173	192.124	129.800	4.234	1.00	49.27	A16S	ATOM	44483	C6	CYT	1176	200.658	118.836	2.121	1.00	80.12	A16S
ATOM	44431	P	GUA	1174	192.531	128.448	4.994	1.00	46.26	A16S	ATOM	44484	C2	CYT	1176	203.038	119.115	2.227	1.00	80.12	A16S
ATOM	44432	O1P	GUA	1174	191.460	128.047	5.947	1.00	65.52	A16S	ATOM	44485	O2	CYT	1176	204.165	118.720	1.899	1.00	80.12	A16S

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ATOM  44486  N3  CYT  1176     202.872 120.169   3.058  1.00 80.12      A16S
ATOM  44487  C4  CYT  1176     201.649 120.555   3.408  1.00 80.12      A16S
ATOM  44488  N4  CYT  1176     201.540 121.610   4.207  1.00 80.12      A16S
ATOM  44489  C5  CYT  1176     200.484 119.876   2.949  1.00 80.12      A16S
ATOM  44490  C2' CYT  1176     202.155 115.903   1.255  1.00 54.50      A16S
ATOM  44491  O2' CYT  1176     203.174 115.233   0.541  1.00 54.50      A16S
ATOM  44492  C3' CYT  1176     200.752 115.388   0.930  1.00 54.50      A16S
ATOM  44493  O3' CYT  1176     200.637 114.011   0.531  1.00 54.50      A16S
ATOM  44494  P   URI  1177     200.996 112.807   1.539  1.00 70.50      A16S
ATOM  44495  O1P URI  1177     202.329 113.069   2.113  1.00103.20      A16S
ATOM  44496  O2P URI  1177     200.765 111.552   0.789  1.00103.20      A16S
ATOM  44497  O5' URI  1177     199.905 112.863   2.703  1.00 70.50      A16S
ATOM  44498  C5' URI  1177     199.802 114.011   3.563  1.00 70.50      A16S
ATOM  44499  C4' URI  1177     199.482 113.610   4.991  1.00 70.50      A16S
ATOM  44500  O4' URI  1177     198.125 113.126   5.106  1.00 70.50      A16S
ATOM  44501  C1' URI  1177     198.001 112.485   6.358  1.00 70.50      A16S
ATOM  44502  N1  URI  1177     196.976 111.433   6.313  1.00103.20      A16S
ATOM  44503  C6  URI  1177     197.257 110.154   5.886  1.00103.20      A16S
ATOM  44504  C2  URI  1177     195.709 111.772   6.757  1.00103.20      A16S
ATOM  44505  O2  URI  1177     195.403 112.901   7.109  1.00103.20      A16S
ATOM  44506  N3  URI  1177     194.809 110.741   6.775  1.00103.20      A16S
ATOM  44507  C4  URI  1177     195.031 109.439   6.393  1.00103.20      A16S
ATOM  44508  O4  URI  1177     194.120 108.616   6.506  1.00103.20      A16S
ATOM  44509  C5  URI  1177     196.354 109.172   5.913  1.00103.20      A16S
ATOM  44510  C2' URI  1177     199.394 112.053   6.828  1.00 70.50      A16S
ATOM  44511  O2' URI  1177     199.675 112.656   8.074  1.00 70.50      A16S
ATOM  44512  C3' URI  1177     200.288 112.505   5.669  1.00 70.50      A16S
ATOM  44513  O3' URI  1177     201.622 112.870   6.083  1.00 70.50      A16S
ATOM  44514  P   GUA  1178     201.917 114.280   6.828  1.00 43.04      A16S
ATOM  44515  O1P GUA  1178     202.951 114.003   7.833  1.00 66.90      A16S
ATOM  44516  O2P GUA  1178     200.673 115.015   7.222  1.00 66.90      A16S
ATOM  44517  O5' GUA  1178     202.641 115.114   5.689  1.00 43.04      A16S
ATOM  44518  C5' GUA  1178     203.243 114.435   4.577  1.00 43.04      A16S
ATOM  44519  C4' GUA  1178     204.597 115.000   4.300  1.00 43.04      A16S
ATOM  44520  O4' GUA  1178     204.445 116.367   3.855  1.00 43.04      A16S
ATOM  44521  C1' GUA  1178     205.450 117.170   4.434  1.00 43.04      A16S
ATOM  44522  N9  GUA  1178     204.779 118.168   5.266  1.00 66.90      A16S
ATOM  44523  C4  GUA  1178     205.363 119.214   5.949  1.00 66.90      A16S
ATOM  44524  N3  GUA  1178     206.681 119.505   5.985  1.00 66.90      A16S
ATOM  44525  C2  GUA  1178     206.929 120.578   6.716  1.00 66.90      A16S
ATOM  44526  N2  GUA  1178     208.187 121.017   6.854  1.00 66.90      A16S
ATOM  44527  N1  GUA  1178     205.966 121.303   7.361  1.00 66.90      A16S
ATOM  44528  C6  GUA  1178     204.607 121.025   7.342  1.00 66.90      A16S
ATOM  44529  O6  GUA  1178     203.824 121.752   7.958  1.00 66.90      A16S
ATOM  44530  C5  GUA  1178     204.321 119.875   6.563  1.00 66.90      A16S
ATOM  44531  N7  GUA  1178     203.109 119.256   6.284  1.00 66.90      A16S
ATOM  44532  C8  GUA  1178     203.429 118.252   5.516  1.00 66.90      A16S
ATOM  44533  C2' GUA  1178     206.403 116.232   5.190  1.00 43.04      A16S
ATOM  44534  O2' GUA  1178     207.443 115.805   4.326  1.00 43.04      A16S
ATOM  44535  C3' GUA  1178     205.487 115.068   5.521  1.00 43.04      A16S
ATOM  44536  O3' GUA  1178     206.196 113.852   5.686  1.00 43.04      A16S
ATOM  44537  P   GUA  1179     206.586 113.361   7.164  1.00 52.87      A16S
ATOM  44538  O1P GUA  1179     207.474 112.166   7.094  1.00 63.15      A16S
ATOM  44539  O2P GUA  1179     205.317 113.282   7.926  1.00 63.15      A16S
ATOM  44540  O5' GUA  1179     207.446 114.577   7.727  1.00 52.87      A16S
ATOM  44541  C5' GUA  1179     208.787 114.805   7.261  1.00 52.87      A16S
ATOM  44542  C4' GUA  1179     209.527 115.727   8.201  1.00 52.87      A16S
ATOM  44543  O4' GUA  1179     209.147 117.111   7.988  1.00 52.87      A16S
ATOM  44544  C1' GUA  1179     209.242 117.816   9.210  1.00 52.87      A16S
ATOM  44545  N9  GUA  1179     207.936 118.371   9.538  1.00 63.15      A16S
ATOM  44546  C4  GUA  1179     207.715 119.471  10.315  1.00 63.15      A16S
ATOM  44547  N3  GUA  1179     208.668 120.247  10.866  1.00 63.15      A16S
ATOM  44548  C2  GUA  1179     208.152 121.227  11.584  1.00 63.15      A16S
ATOM  44549  N2  GUA  1179     208.961 122.103  12.198  1.00 63.15      A16S
ATOM  44550  N1  GUA  1179     206.805 121.425  11.753  1.00 63.15      A16S
ATOM  44551  C6  GUA  1179     205.805 120.635  11.202  1.00 63.15      A16S
ATOM  44552  O6  GUA  1179     204.619 120.893  11.439  1.00 63.15      A16S
ATOM  44553  C5  GUA  1179     206.347 119.583  10.413  1.00 63.15      A16S
ATOM  44554  N7  GUA  1179     205.717 118.585   9.682  1.00 63.15      A16S
ATOM  44555  C8  GUA  1179     206.698 117.894   9.175  1.00 63.15      A16S
ATOM  44556  C2' GUA  1179     209.702 116.830  10.283  1.00 52.87      A16S
ATOM  44557  O2' GUA  1179     211.094 116.959  10.427  1.00 52.87      A16S
ATOM  44558  C3' GUA  1179     209.300 115.497   9.678  1.00 52.87      A16S
ATOM  44559  O3' GUA  1179     210.078 114.426  10.148  1.00 52.87      A16S
ATOM  44560  P   URI  1180     209.503 113.491  11.315  1.00 49.58      A16S
ATOM  44561  O1P URI  1180     210.235 112.201  11.309  1.00 59.03      A16S
ATOM  44562  O2P URI  1180     208.012 113.488  11.227  1.00 59.03      A16S
ATOM  44563  O5' URI  1180     209.910 114.267  12.645  1.00 49.58      A16S
ATOM  44564  C5' URI  1180     211.287 114.562  12.954  1.00 49.58      A16S
ATOM  44565  C4' URI  1180     211.365 115.740  13.903  1.00 49.58      A16S
ATOM  44566  O4' URI  1180     210.715 116.880  13.282  1.00 49.58      A16S
ATOM  44567  C1' URI  1180     210.037 117.637  14.260  1.00 49.58      A16S
ATOM  44568  N1  URI  1180     208.607 117.679  13.915  1.00 59.03      A16S
ATOM  44569  C6  URI  1180     207.964 116.602  13.342  1.00 59.03      A16S
ATOM  44570  C2  URI  1180     207.925 118.846  14.185  1.00 59.03      A16S
ATOM  44571  O2  URI  1180     208.451 119.811  14.697  1.00 59.03      A16S
ATOM  44572  N3  URI  1180     206.599 118.841  13.832  1.00 59.03      A16S
ATOM  44573  C4  URI  1180     205.897 117.808  13.253  1.00 59.03      A16S
ATOM  44574  O4  URI  1180     204.700 117.960  12.996  1.00 59.03      A16S
ATOM  44575  C5  URI  1180     206.669 116.627  13.011  1.00 59.03      A16S
ATOM  44576  C2' URI  1180     210.329 117.009  15.623  1.00 49.58      A16S
ATOM  44577  O2' URI  1180     211.420 117.714  16.177  1.00 49.58      A16S
ATOM  44578  C3' URI  1180     210.670 115.569  15.248  1.00 49.58      A16S
ATOM  44579  O3' URI  1180     211.567 115.004  16.193  1.00 49.58      A16S
ATOM  44580  P   CYT  1181     211.293 113.545  16.789  1.00 86.73      A16S
ATOM  44581  O1P CYT  1181     212.489 113.158  17.570  1.00 80.16      A16S
ATOM  44582  O2P CYT  1181     210.829 112.663  15.703  1.00 80.16      A16S
ATOM  44583  O5' CYT  1181     210.085 113.777  17.791  1.00 86.73      A16S
ATOM  44584  C5' CYT  1181     210.040 113.107  19.063  1.00 86.73      A16S
ATOM  44585  C4' CYT  1181     209.147 113.870  20.005  1.00 86.73      A16S
ATOM  44586  O4' CYT  1181     207.859 114.023  19.377  1.00 86.73      A16S
ATOM  44587  C1' CYT  1181     206.873 114.123  20.373  1.00 86.73      A16S
ATOM  44588  N1  CYT  1181     205.697 113.322  19.991  1.00 80.16      A16S
ATOM  44589  C6  CYT  1181     205.804 112.266  19.131  1.00 80.16      A16S
ATOM  44590  C2  CYT  1181     204.447 113.684  20.509  1.00 80.16      A16S
ATOM  44591  O2  CYT  1181     204.378 114.623  21.320  1.00 80.16      A16S
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ATOM	44592	N3	CYT	1181	203.349	113.006	20.118	1.00	80.16	A16S	ATOM	44645	P	CYT	1184	213.134	118.292	24.980	1.00	59.30	A16S
ATOM	44593	C4	CYT	1181	203.460	111.996	19.262	1.00	80.16	A16S	ATOM	44646	O1P	CYT	1184	213.649	117.841	26.299	1.00	68.61	A16S
ATOM	44594	N4	CYT	1181	202.347	111.368	18.900	1.00	80.16	A16S	ATOM	44647	O2P	CYT	1184	212.389	117.337	24.132	1.00	68.61	A16S
ATOM	44595	C5	CYT	1181	204.720	111.585	18.740	1.00	80.16	A16S	ATOM	44648	O5'	CYT	1184	212.204	119.559	25.241	1.00	59.30	A16S
ATOM	44596	C2'	CYT	1181	207.514	113.853	21.736	1.00	86.73	A16S	ATOM	44649	C5'	CYT	1184	212.696	120.664	26.021	1.00	59.30	A16S
ATOM	44597	O2'	CYT	1181	207.687	115.104	22.388	1.00	86.73	A16S	ATOM	44650	C4'	CYT	1184	211.712	121.809	26.019	1.00	59.30	A16S
ATOM	44598	C3'	CYT	1181	208.860	113.238	21.361	1.00	86.73	A16S	ATOM	44651	O4'	CYT	1184	211.663	122.451	24.718	1.00	59.30	A16S
ATOM	44599	O3'	CYT	1181	209.785	113.731	22.333	1.00	86.73	A16S	ATOM	44652	C1'	CYT	1184	210.344	122.915	24.465	1.00	59.30	A16S
ATOM	44600	P	ADE	1182	211.095	112.891	22.728	1.00	62.98	A16S	ATOM	44653	N1	CYT	1184	209.808	122.189	23.291	1.00	68.61	A16S
ATOM	44601	O1P	ADE	1182	210.949	111.488	22.235	1.00	63.69	A16S	ATOM	44654	C6	CYT	1184	210.391	121.028	22.862	1.00	68.61	A16S
ATOM	44602	O2P	ADE	1182	211.332	113.126	24.172	1.00	63.69	A16S	ATOM	44655	C2	CYT	1184	208.659	122.693	22.630	1.00	68.61	A16S
ATOM	44603	O5'	ADE	1182	212.259	113.639	21.926	1.00	62.98	A16S	ATOM	44656	O2	CYT	1184	208.137	123.760	23.022	1.00	68.61	A16S
ATOM	44604	C5'	ADE	1182	212.397	115.092	21.964	1.00	62.98	A16S	ATOM	44657	N3	CYT	1184	208.146	121.998	21.591	1.00	68.61	A16S
ATOM	44605	C4'	ADE	1182	213.605	115.526	21.161	1.00	62.98	A16S	ATOM	44658	C4	CYT	1184	208.714	120.855	21.205	1.00	68.61	A16S
ATOM	44606	O4'	ADE	1182	214.712	114.751	21.639	1.00	62.98	A16S	ATOM	44659	N4	CYT	1184	208.153	120.192	20.194	1.00	68.61	A16S
ATOM	44607	C1'	ADE	1182	215.526	114.358	20.567	1.00	62.98	A16S	ATOM	44660	C5	CYT	1184	209.880	120.335	21.840	1.00	68.61	A16S
ATOM	44608	N9	ADE	1182	215.899	112.964	20.771	1.00	63.69	A16S	ATOM	44661	C2'	CYT	1184	209.508	122.608	25.714	1.00	59.30	A16S
ATOM	44609	C4	ADE	1182	217.106	112.413	20.427	1.00	63.69	A16S	ATOM	44662	O2'	CYT	1184	209.443	123.727	26.581	1.00	59.30	A16S
ATOM	44610	N3	ADE	1182	218.136	113.028	19.815	1.00	63.69	A16S	ATOM	44663	C3'	CYT	1184	210.273	121.436	26.303	1.00	59.30	A16S
ATOM	44611	C2	ADE	1182	219.145	112.185	19.649	1.00	63.69	A16S	ATOM	44664	O3'	CYT	1184	210.019	121.228	27.673	1.00	59.30	A16S
ATOM	44612	N1	ADE	1182	219.237	110.894	20.000	1.00	63.69	A16S	ATOM	44665	P	ADE	1185	209.047	120.030	28.109	1.00	84.03	A16S
ATOM	44613	C6	ADE	1182	218.183	110.310	20.617	1.00	63.69	A16S	ATOM	44666	O1P	ADE	1185	209.103	119.932	29.588	1.00	75.83	A16S
ATOM	44614	N6	ADE	1182	218.274	109.027	20.972	1.00	63.69	A16S	ATOM	44667	O2P	ADE	1185	209.368	118.826	27.291	1.00	75.83	A16S
ATOM	44615	C5	ADE	1182	217.051	111.096	20.849	1.00	63.69	A16S	ATOM	44668	O5'	ADE	1185	207.619	120.598	27.684	1.00	84.03	A16S
ATOM	44616	N7	ADE	1182	215.824	110.816	21.435	1.00	63.69	A16S	ATOM	44669	C5'	ADE	1185	207.188	121.902	28.132	1.00	84.03	A16S
ATOM	44617	C8	ADE	1182	215.174	111.953	21.357	1.00	63.69	A16S	ATOM	44670	C4'	ADE	1185	205.867	122.275	27.502	1.00	84.03	A16S
ATOM	44618	C2'	ADE	1182	214.862	114.712	19.239	1.00	62.98	A16S	ATOM	44671	O4'	ADE	1185	206.063	122.550	26.091	1.00	84.03	A16S
ATOM	44619	O2'	ADE	1182	215.666	115.569	18.469	1.00	62.98	A16S	ATOM	44672	C1'	ADE	1185	204.940	122.090	25.353	1.00	84.03	A16S
ATOM	44620	C3'	ADE	1182	213.499	115.242	19.671	1.00	62.98	A16S	ATOM	44673	N9	ADE	1185	205.395	121.045	24.423	1.00	75.83	A16S
ATOM	44621	O3'	ADE	1182	212.990	116.383	18.951	1.00	62.98	A16S	ATOM	44674	C4	ADE	1185	204.643	120.424	23.448	1.00	75.83	A16S
ATOM	44622	P	GUA	1183	213.786	117.803	18.940	1.00	59.26	A16S	ATOM	44675	N3	ADE	1185	203.362	120.666	23.124	1.00	75.83	A16S
ATOM	44623	O1P	GUA	1183	212.773	118.770	18.474	1.00	65.88	A16S	ATOM	44676	C2	ADE	1185	202.959	119.844	22.162	1.00	75.83	A16S
ATOM	44624	O2P	GUA	1183	215.089	117.749	18.231	1.00	65.88	A16S	ATOM	44677	N1	ADE	1185	203.635	118.883	21.530	1.00	75.83	A16S
ATOM	44625	O5'	GUA	1183	214.008	118.149	20.483	1.00	59.26	A16S	ATOM	44678	C6	ADE	1185	204.918	118.664	21.874	1.00	75.83	A16S
ATOM	44626	C5'	GUA	1183	215.318	118.435	21.027	1.00	59.26	A16S	ATOM	44679	N6	ADE	1185	205.587	117.696	21.248	1.00	75.83	A16S
ATOM	44627	C4'	GUA	1183	215.258	119.632	21.958	1.00	59.26	A16S	ATOM	44680	C5	ADE	1185	205.470	119.471	22.883	1.00	75.83	A16S
ATOM	44628	O4'	GUA	1183	215.128	120.852	21.182	1.00	59.26	A16S	ATOM	44681	N7	ADE	1185	206.731	119.506	23.464	1.00	75.83	A16S
ATOM	44629	C1'	GUA	1183	214.348	121.792	21.894	1.00	59.26	A16S	ATOM	44682	C8	ADE	1185	206.637	120.457	24.362	1.00	75.83	A16S
ATOM	44630	N9	GUA	1183	213.198	122.179	21.075	1.00	65.88	A16S	ATOM	44683	C2'	ADE	1185	203.905	121.572	26.363	1.00	84.03	A16S
ATOM	44631	C4	GUA	1183	212.448	123.333	21.206	1.00	65.88	A16S	ATOM	44684	O2'	ADE	1185	202.972	122.590	26.666	1.00	84.03	A16S
ATOM	44632	N3	GUA	1183	212.639	124.308	22.117	1.00	65.88	A16S	ATOM	44685	C3'	ADE	1185	204.782	121.209	27.557	1.00	84.03	A16S
ATOM	44633	C2	GUA	1183	211.771	125.294	21.977	1.00	65.88	A16S	ATOM	44686	O3'	ADE	1185	204.063	121.228	28.788	1.00	84.03	A16S
ATOM	44634	N2	GUA	1183	211.825	126.350	22.787	1.00	65.88	A16S	ATOM	44687	P	URI	1186	203.683	119.839	29.516	1.00	74.46	A16S
ATOM	44635	N1	GUA	1183	210.787	125.323	21.031	1.00	65.88	A16S	ATOM	44688	O1P	URI	1186	202.995	120.179	30.786	1.00	74.90	A16S
ATOM	44636	C6	GUA	1183	210.555	124.333	20.091	1.00	65.88	A16S	ATOM	44689	O2P	URI	1186	204.875	118.956	29.548	1.00	74.90	A16S
ATOM	44637	O6	GUA	1183	209.617	124.459	19.294	1.00	65.88	A16S	ATOM	44690	O5'	URI	1186	202.597	119.167	28.560	1.00	74.46	A16S
ATOM	44638	C5	GUA	1183	211.493	123.264	20.215	1.00	65.88	A16S	ATOM	44691	C5'	URI	1186	201.263	119.709	28.460	1.00	74.46	A16S
ATOM	44639	N7	GUA	1183	211.633	122.095	19.481	1.00	65.88	A16S	ATOM	44692	C4'	URI	1186	200.493	119.026	27.357	1.00	74.46	A16S
ATOM	44640	C8	GUA	1183	212.651	121.484	20.028	1.00	65.88	A16S	ATOM	44693	O4'	URI	1186	201.161	119.263	26.093	1.00	74.46	A16S
ATOM	44641	C2'	GUA	1183	213.967	121.165	23.234	1.00	59.26	A16S	ATOM	44694	C1'	URI	1186	201.021	118.126	25.257	1.00	74.46	A16S
ATOM	44642	O2'	GUA	1183	214.883	121.626	24.201	1.00	59.26	A16S	ATOM	44695	N1	URI	1186	202.359	117.588	24.951	1.00	74.90	A16S
ATOM	44643	C3'	GUA	1183	214.103	119.673	22.948	1.00	59.26	A16S	ATOM	44696	C6	URI	1186	203.439	117.870	25.756	1.00	74.90	A16S
ATOM	44644	O3'	GUA	1183	214.365	118.910	24.134	1.00	59.26	A16S	ATOM	44697	C2	URI	1186	202.499	116.766	23.839	1.00	74.90	A16S

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ATOM  44698  O2  URI  1186     201.588 116.523  23.065  1.00 74.90      A16S
ATOM  44699  N3  URI  1186     203.755 116.243  23.664  1.00 74.90      A16S
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ATOM  44702  C5  URI  1186     204.651 117.352  25.548  1.00 74.90      A16S
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ATOM  44704  O2' URI  1186     198.814 117.272  25.575  1.00 74.46      A16S
ATOM  44705  C3' URI  1186     200.376 117.514  27.453  1.00 74.46      A16S
ATOM  44706  O3' URI  1186     199.302 117.117  28.304  1.00 74.46      A16S
ATOM  44707  P   GUA  1187     199.258 115.617  28.902  1.00 67.29      A16S
ATOM  44708  O1P GUA  1187     198.626 115.699  30.241  1.00 75.74      A16S
ATOM  44709  O2P GUA  1187     200.589 114.978  28.761  1.00 75.74      A16S
ATOM  44710  O5' GUA  1187     198.247 114.844  27.942  1.00 67.29      A16S
ATOM  44711  C5' GUA  1187     196.883 115.285  27.787  1.00 67.29      A16S
ATOM  44712  C4' GUA  1187     196.154 114.392  26.816  1.00 67.29      A16S
ATOM  44713  O4' GUA  1187     196.642 114.624  25.472  1.00 67.29      A16S
ATOM  44714  C1' GUA  1187     196.681 113.395  24.756  1.00 67.29      A16S
ATOM  44715  N9  GUA  1187     198.068 113.118  24.379  1.00 75.74      A16S
ATOM  44716  C4  GUA  1187     198.512 112.118  23.537  1.00 75.74      A16S
ATOM  44717  N3  GUA  1187     197.740 111.220  22.886  1.00 75.74      A16S
ATOM  44718  C2  GUA  1187     198.461 110.376  22.166  1.00 75.74      A16S
ATOM  44719  N2  GUA  1187     197.856 109.426  21.442  1.00 75.74      A16S
ATOM  44720  N1  GUA  1187     199.829 110.406  22.100  1.00 75.74      A16S
ATOM  44721  C6  GUA  1187     200.643 111.320  22.759  1.00 75.74      A16S
ATOM  44722  O6  GUA  1187     201.871 111.255  22.633  1.00 75.74      A16S
ATOM  44723  C5  GUA  1187     199.884 112.234  23.527  1.00 75.74      A16S
ATOM  44724  N7  GUA  1187     200.296 113.289  24.328  1.00 75.74      A16S
ATOM  44725  C8  GUA  1187     199.189 113.786  24.807  1.00 75.74      A16S
ATOM  44726  C2' GUA  1187     196.104 112.309  25.669  1.00 67.29      A16S
ATOM  44727  O2' GUA  1187     194.731 112.116  25.382  1.00 67.29      A16S
ATOM  44728  C3' GUA  1187     196.355 112.905  27.048  1.00 67.29      A16S
ATOM  44729  O3' GUA  1187     195.460 112.408  28.020  1.00 67.29      A16S
ATOM  44730  P   GUA  1188     195.975 111.340  29.097  1.00 66.22      A16S
ATOM  44731  O1P GUA  1188     194.869 111.196  30.077  1.00 78.04      A16S
ATOM  44732  O2P GUA  1188     197.328 111.744  29.561  1.00 78.04      A16S
ATOM  44733  O5' GUA  1188     196.102 109.976  28.286  1.00 66.22      A16S
ATOM  44734  C5' GUA  1188     194.978 109.443  27.571  1.00 66.22      A16S
ATOM  44735  C4' GUA  1188     195.438 108.438  26.548  1.00 66.22      A16S
ATOM  44736  O4' GUA  1188     196.189 109.105  25.498  1.00 66.22      A16S
ATOM  44737  C1' GUA  1188     197.207 108.233  25.017  1.00 66.22      A16S
ATOM  44738  N9  GUA  1188     198.516 108.867  25.163  1.00 78.04      A16S
ATOM  44739  C4  GUA  1188     199.698 108.403  24.623  1.00 78.04      A16S
ATOM  44740  N3  GUA  1188     199.844 107.292  23.866  1.00 78.04      A16S
ATOM  44741  C2  GUA  1188     201.100 107.101  23.503  1.00 78.04      A16S
ATOM  44742  N2  GUA  1188     201.425 106.037  22.752  1.00 78.04      A16S
ATOM  44743  N1  GUA  1188     202.129 107.938  23.850  1.00 78.04      A16S
ATOM  44744  C6  GUA  1188     202.005 109.084  24.627  1.00 78.04      A16S
ATOM  44745  O6  GUA  1188     203.000 109.767  24.876  1.00 78.04      A16S
ATOM  44746  C5  GUA  1188     200.663 109.298  25.031  1.00 78.04      A16S
ATOM  44747  N7  GUA  1188     200.104 110.307  25.808  1.00 78.04      A16S
ATOM  44748  C8  GUA  1188     198.832 110.013  25.859  1.00 78.04      A16S
ATOM  44749  C2' GUA  1188     197.135 106.929  25.814  1.00 66.22      A16S
ATOM  44750  O2' GUA  1188     196.478 105.929  25.057  1.00 66.22      A16S
ATOM  44751  C3' GUA  1188     196.387 107.373  27.069  1.00 66.22      A16S
ATOM  44752  O3' GUA  1188     195.724 106.296  27.700  1.00 66.22      A16S
ATOM  44753  P   CYT  1189     196.573 105.284  28.606  1.00 72.38      A16S
ATOM  44754  O1P CYT  1189     195.668 104.204  29.077  1.00 74.99      A16S
ATOM  44755  O2P CYT  1189     197.338 106.090  29.588  1.00 74.99      A16S
ATOM  44756  O5' CYT  1189     197.631 104.647  27.603  1.00 72.38      A16S
ATOM  44757  C5' CYT  1189     197.297 103.515  26.791  1.00 72.38      A16S
ATOM  44758  C4' CYT  1189     198.557 102.883  26.252  1.00 72.38      A16S
ATOM  44759  O4' CYT  1189     199.295 103.886  25.503  1.00 72.38      A16S
ATOM  44760  C1' CYT  1189     200.689 103.679  25.671  1.00 72.38      A16S
ATOM  44761  N1  CYT  1189     201.278 104.897  26.258  1.00 74.99      A16S
ATOM  44762  C6  CYT  1189     200.485 105.874  26.791  1.00 74.99      A16S
ATOM  44763  C2  CYT  1189     202.671 105.037  26.267  1.00 74.99      A16S
ATOM  44764  O2  CYT  1189     203.367 104.140  25.775  1.00 74.99      A16S
ATOM  44765  N3  CYT  1189     203.222 106.145  26.814  1.00 74.99      A16S
ATOM  44766  C4  CYT  1189     202.438 107.088  27.338  1.00 74.99      A16S
ATOM  44767  N4  CYT  1189     203.019 108.161  27.875  1.00 74.99      A16S
ATOM  44768  C5  CYT  1189     201.018 106.972  27.338  1.00 74.99      A16S
ATOM  44769  C2' CYT  1189     200.879 102.442  26.551  1.00 72.38      A16S
ATOM  44770  O2' CYT  1189     201.092 101.302  25.744  1.00 72.38      A16S
ATOM  44771  C3' CYT  1189     199.550 102.383  27.294  1.00 72.38      A16S
ATOM  44772  O3' CYT  1189     199.258 101.065  27.750  1.00 72.38      A16S
ATOM  44773  P   CYT  1190     199.738 100.610  29.221  1.00 89.33      A16S
ATOM  44774  O1P CYT  1190     199.197  99.242  29.493  1.00 70.68      A16S
ATOM  44775  O2P CYT  1190     199.416 101.734  30.153  1.00 70.68      A16S
ATOM  44776  O5' CYT  1190     201.328 100.495  29.107  1.00 89.33      A16S
ATOM  44777  C5' CYT  1190     201.952  99.415  28.374  1.00 89.33      A16S
ATOM  44778  C4' CYT  1190     203.450  99.634  28.274  1.00 89.33      A16S
ATOM  44779  O4' CYT  1190     203.694 100.925  27.656  1.00 89.33      A16S
ATOM  44780  C1' CYT  1190     204.860 101.510  28.210  1.00 89.33      A16S
ATOM  44781  N1  CYT  1190     204.484 102.780  28.859  1.00 70.68      A16S
ATOM  44782  C6  CYT  1190     203.199 103.006  29.260  1.00 70.68      A16S
ATOM  44783  C2  CYT  1190     205.469 103.754  29.074  1.00 70.68      A16S
ATOM  44784  O2  CYT  1190     206.631 103.545  28.680  1.00 70.68      A16S
ATOM  44785  N3  CYT  1190     205.133 104.899  29.701  1.00 70.68      A16S
ATOM  44786  C4  CYT  1190     203.878 105.100  30.095  1.00 70.68      A16S
ATOM  44787  N4  CYT  1190     203.595 106.244  30.711  1.00 70.68      A16S
ATOM  44788  C5  CYT  1190     202.857 104.140  29.874  1.00 70.68      A16S
ATOM  44789  C2' CYT  1190     205.457 100.509  29.199  1.00 89.33      A16S
ATOM  44790  O2' CYT  1190     206.451  99.748  28.543  1.00 89.33      A16S
ATOM  44791  C3' CYT  1190     204.235  99.684  29.580  1.00 89.33      A16S
ATOM  44792  O3' CYT  1190     204.600  98.384  30.054  1.00 89.33      A16S
ATOM  44793  P   CYT  1191     204.797  98.132  31.638  1.00 81.82      A16S
ATOM  44794  O1P CYT  1191     204.932  96.659  31.852  1.00 82.51      A16S
ATOM  44795  O2P CYT  1191     203.741  98.887  32.369  1.00 82.51      A16S
ATOM  44796  O5' CYT  1191     206.195  98.821  31.977  1.00 81.82      A16S
ATOM  44797  C5' CYT  1191     207.426  98.271  31.475  1.00 81.82      A16S
ATOM  44798  C4' CYT  1191     208.601  99.075  31.969  1.00 81.82      A16S
ATOM  44799  O4' CYT  1191     208.531 100.426  31.452  1.00 81.82      A16S
ATOM  44800  C1' CYT  1191     209.097 101.324  32.388  1.00 81.82      A16S
ATOM  44801  N1  CYT  1191     208.121 102.384  32.690  1.00 82.51      A16S
ATOM  44802  C6  CYT  1191     206.791 102.225  32.406  1.00 82.51      A16S
ATOM  44803  C2  CYT  1191     208.581 103.575  33.271  1.00 82.51      A16S
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ATOM	44804	O2	CYT	1191	209.786	103.687	33.535	1.00	82.51	A16S	ATOM	44857	C5'	ADE	1194	216.932	97.160	36.225	1.00	143.85	A16S
ATOM	44805	N3	CYT	1191	207.703	104.568	33.531	1.00	82.51	A16S	ATOM	44858	C4'	ADE	1194	215.592	97.858	36.146	1.00	143.85	A16S
ATOM	44806	C4	CYT	1191	206.410	104.406	33.239	1.00	82.51	A16S	ATOM	44859	O4'	ADE	1194	215.414	98.712	37.288	1.00	143.85	A16S
ATOM	44807	N4	CYT	1191	205.581	105.416	33.505	1.00	82.51	A16S	ATOM	44860	C1'	ADE	1194	214.453	99.685	36.971	1.00	143.85	A16S
ATOM	44808	C5	CYT	1191	205.910	103.201	32.660	1.00	82.51	A16S	ATOM	44861	N9	ADE	1194	214.730	100.911	37.721	1.00	90.97	A16S
ATOM	44809	C2'	CYT	1191	209.543	100.518	33.606	1.00	81.82	A16S	ATOM	44862	C4	ADE	1194	214.073	102.111	37.607	1.00	90.97	A16S
ATOM	44810	O2'	CYT	1191	210.930	100.289	33.486	1.00	81.82	A16S	ATOM	44863	N3	ADE	1194	213.097	102.427	36.740	1.00	90.97	A16S
ATOM	44811	C3'	CYT	1191	208.697	99.255	33.470	1.00	81.82	A16S	ATOM	44864	C2	ADE	1194	212.677	103.674	36.942	1.00	90.97	A16S
ATOM	44812	O3'	CYT	1191	209.296	98.115	34.063	1.00	81.82	A16S	ATOM	44865	N1	ADE	1194	213.087	104.573	37.848	1.00	90.97	A16S
ATOM	44813	P	URI	1192	208.679	97.504	35.418	1.00	106.31	A16S	ATOM	44866	C6	ADE	1194	214.067	104.221	38.707	1.00	90.97	A16S
ATOM	44814	O1P	URI	1192	208.582	96.027	35.221	1.00	63.17	A16S	ATOM	44867	N6	ADE	1194	214.468	105.112	39.622	1.00	90.97	A16S
ATOM	44815	O2P	URI	1192	207.458	98.282	35.785	1.00	63.17	A16S	ATOM	44868	C5	ADE	1194	214.605	102.927	38.589	1.00	90.97	A16S
ATOM	44816	O5'	URI	1192	209.815	97.797	36.496	1.00	106.31	A16S	ATOM	44869	N7	ADE	1194	215.607	102.267	39.283	1.00	90.97	A16S
ATOM	44817	C5'	URI	1192	209.494	98.288	37.802	1.00	106.31	A16S	ATOM	44870	C8	ADE	1194	215.649	101.084	38.724	1.00	90.97	A16S
ATOM	44818	C4'	URI	1192	210.072	99.666	37.987	1.00	106.31	A16S	ATOM	44871	C2'	ADE	1194	214.307	99.761	35.447	1.00	143.85	A16S
ATOM	44819	O4'	URI	1192	209.388	100.592	37.116	1.00	106.31	A16S	ATOM	44872	O2'	ADE	1194	212.992	99.363	35.131	1.00	143.85	A16S
ATOM	44820	C1'	URI	1192	209.548	101.892	37.637	1.00	106.31	A16S	ATOM	44873	C3'	ADE	1194	215.370	98.772	34.949	1.00	143.85	A16S
ATOM	44821	N1	URI	1192	208.361	102.716	37.357	1.00	63.17	A16S	ATOM	44874	O3'	ADE	1194	214.847	98.003	33.864	1.00	143.85	A16S
ATOM	44822	C6	URI	1192	207.268	102.219	36.673	1.00	63.17	A16S	ATOM	44875	P	CYT	1195	215.611	97.963	32.448	1.00	90.58	A16S
ATOM	44823	C2	URI	1192	208.386	104.044	37.796	1.00	63.17	A16S	ATOM	44876	O1P	CYT	1195	215.078	96.781	31.721	1.00	69.84	A16S
ATOM	44824	O2	URI	1192	209.324	104.525	38.417	1.00	63.17	A16S	ATOM	44877	O2P	CYT	1195	217.070	98.073	32.706	1.00	69.84	A16S
ATOM	44825	N3	URI	1192	207.271	104.786	37.479	1.00	63.17	A16S	ATOM	44878	O5'	CYT	1195	215.113	99.274	31.687	1.00	90.58	A16S
ATOM	44826	C4	URI	1192	206.149	104.357	36.791	1.00	63.17	A16S	ATOM	44879	C5'	CYT	1195	216.045	100.202	31.081	1.00	90.58	A16S
ATOM	44827	O4	URI	1192	205.210	105.148	36.606	1.00	63.17	A16S	ATOM	44880	C4'	CYT	1195	215.288	101.328	30.421	1.00	90.58	A16S
ATOM	44828	C5	URI	1192	206.192	102.972	36.380	1.00	63.17	A16S	ATOM	44881	O4'	CYT	1195	214.467	100.761	29.382	1.00	90.58	A16S
ATOM	44829	C2'	URI	1192	209.954	101.776	39.109	1.00	106.31	A16S	ATOM	44882	C1'	CYT	1195	213.230	101.441	29.324	1.00	90.58	A16S
ATOM	44830	O2'	URI	1192	211.263	102.284	39.255	1.00	106.31	A16S	ATOM	44883	N1	CYT	1195	212.150	100.439	29.214	1.00	69.84	A16S
ATOM	44831	C3'	URI	1192	209.878	100.272	39.368	1.00	106.31	A16S	ATOM	44884	C6	CYT	1195	212.397	99.128	29.514	1.00	69.84	A16S
ATOM	44832	O3'	URI	1192	210.961	99.908	40.228	1.00	106.31	A16S	ATOM	44885	C2	CYT	1195	210.877	100.833	28.751	1.00	69.84	A16S
ATOM	44833	P	URI	1193	210.884	98.561	41.100	1.00	141.74	A16S	ATOM	44886	O2	CYT	1195	210.643	102.035	28.549	1.00	69.84	A16S
ATOM	44834	O1P	URI	1193	209.452	98.233	41.328	1.00	165.16	A16S	ATOM	44887	N3	CYT	1195	209.934	99.888	28.547	1.00	69.84	A16S
ATOM	44835	O2P	URI	1193	211.786	98.751	42.261	1.00	165.16	A16S	ATOM	44888	C4	CYT	1195	210.208	98.602	28.807	1.00	69.84	A16S
ATOM	44836	O5'	URI	1193	211.494	97.450	40.135	1.00	141.74	A16S	ATOM	44889	N4	CYT	1195	209.259	97.690	28.564	1.00	69.84	A16S
ATOM	44837	C5'	URI	1193	212.578	96.603	40.557	1.00	141.74	A16S	ATOM	44890	C5	CYT	1195	211.469	98.188	29.324	1.00	69.84	A16S
ATOM	44838	C4'	URI	1193	213.895	97.319	40.371	1.00	141.74	A16S	ATOM	44891	C2'	CYT	1195	213.178	102.486	30.444	1.00	90.58	A16S
ATOM	44839	O4'	URI	1193	214.167	98.156	41.524	1.00	141.74	A16S	ATOM	44892	O2'	CYT	1195	213.350	103.784	29.899	1.00	90.58	A16S
ATOM	44840	C1'	URI	1193	215.562	98.197	41.769	1.00	141.74	A16S	ATOM	44893	C3'	CYT	1195	214.329	102.055	31.357	1.00	90.58	A16S
ATOM	44841	N1	URI	1193	215.806	97.844	43.179	1.00	165.16	A16S	ATOM	44894	O3'	CYT	1195	214.911	103.229	31.953	1.00	90.58	A16S
ATOM	44842	C6	URI	1193	216.009	96.538	43.576	1.00	165.16	A16S	ATOM	44895	P	GUA	1196	216.336	103.797	31.437	1.00	80.32	A16S
ATOM	44843	C2	URI	1193	215.825	98.880	44.109	1.00	165.16	A16S	ATOM	44896	O1P	GUA	1196	216.179	104.115	29.993	1.00	89.39	A16S
ATOM	44844	O2	URI	1193	215.651	100.052	43.812	1.00	165.16	A16S	ATOM	44897	O2P	GUA	1196	217.427	102.888	31.877	1.00	89.39	A16S
ATOM	44845	N3	URI	1193	216.054	98.492	45.404	1.00	165.16	A16S	ATOM	44898	O5'	GUA	1196	216.507	105.182	32.206	1.00	80.32	A16S
ATOM	44846	C4	URI	1193	216.257	97.210	45.864	1.00	165.16	A16S	ATOM	44899	C5'	GUA	1196	215.448	106.157	32.207	1.00	80.32	A16S
ATOM	44847	O4	URI	1193	216.405	97.021	47.072	1.00	165.16	A16S	ATOM	44900	C4'	GUA	1196	215.178	106.638	33.614	1.00	80.32	A16S
ATOM	44848	C5	URI	1193	216.228	96.198	44.850	1.00	165.16	A16S	ATOM	44901	O4'	GUA	1196	214.791	105.514	34.446	1.00	80.32	A16S
ATOM	44849	C2'	URI	1193	216.258	97.322	40.722	1.00	141.74	A16S	ATOM	44902	C1'	GUA	1196	215.320	105.670	35.752	1.00	80.32	A16S
ATOM	44850	O2'	URI	1193	216.781	98.163	39.716	1.00	141.74	A16S	ATOM	44903	N9	GUA	1196	216.154	104.505	36.060	1.00	89.39	A16S
ATOM	44851	C3'	URI	1193	215.114	96.423	40.244	1.00	141.74	A16S	ATOM	44904	C4	GUA	1196	217.004	104.354	37.136	1.00	89.39	A16S
ATOM	44852	O3'	URI	1193	215.199	96.014	38.875	1.00	141.74	A16S	ATOM	44905	N3	GUA	1196	217.225	105.265	38.111	1.00	89.39	A16S
ATOM	44853	P	ADE	1194	216.586	95.478	38.265	1.00	143.85	A16S	ATOM	44906	C2	GUA	1196	218.079	104.820	39.022	1.00	89.39	A16S
ATOM	44854	O1P	ADE	1194	216.222	94.518	37.197	1.00	90.97	A16S	ATOM	44907	N2	GUA	1196	218.388	105.589	40.077	1.00	89.39	A16S
ATOM	44855	O2P	ADE	1194	217.471	95.038	39.374	1.00	90.97	A16S	ATOM	44908	N1	GUA	1196	218.686	103.586	38.969	1.00	89.39	A16S
ATOM	44856	O5'	ADE	1194	217.226	96.778	37.595	1.00	143.85	A16S	ATOM	44909	C6	GUA	1196	218.482	102.634	37.973	1.00	89.39	A16S

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ATOM  44910  O6  GUA  1196     219.089 101.553  38.015  1.00 89.39      A16S
ATOM  44911  C5  GUA  1196     217.549 103.090  36.998  1.00 89.39      A16S
ATOM  44912  N7  GUA  1196     217.051 102.458  35.867  1.00 89.39      A16S
ATOM  44913  C8  GUA  1196     216.236 103.332  35.342  1.00 89.39      A16S
ATOM  44914  C2' GUA  1196     216.029 107.025  35.798  1.00 80.32      A16S
ATOM  44915  O2' GUA  1196     215.106 107.977  36.295  1.00 80.32      A16S
ATOM  44916  C3' GUA  1196     216.368 107.248  34.326  1.00 80.32      A16S
ATOM  44917  O3' GUA  1196     216.500 108.618  33.974  1.00 80.32      A16S
ATOM  44918  P   GUA  1197     217.934 109.184  33.514  1.00 71.28      A16S
ATOM  44919  O1P GUA  1197     217.781 110.639  33.226  1.00 83.34      A16S
ATOM  44920  O2P GUA  1197     218.485 108.276  32.470  1.00 83.34      A16S
ATOM  44921  O5' GUA  1197     218.831 109.029  34.821  1.00 71.28      A16S
ATOM  44922  C5' GUA  1197     218.487 109.722  36.029  1.00 71.28      A16S
ATOM  44923  C4' GUA  1197     219.446 109.365  37.136  1.00 71.28      A16S
ATOM  44924  O4' GUA  1197     219.206 108.014  37.609  1.00 71.28      A16S
ATOM  44925  C1' GUA  1197     220.419 107.464  38.094  1.00 71.28      A16S
ATOM  44926  N9  GUA  1197     220.652 106.164  37.465  1.00 83.34      A16S
ATOM  44927  C4  GUA  1197     221.550 105.209  37.881  1.00 83.34      A16S
ATOM  44928  N3  GUA  1197     222.403 105.325  38.917  1.00 83.34      A16S
ATOM  44929  C2  GUA  1197     223.119 104.228  39.091  1.00 83.34      A16S
ATOM  44930  N2  GUA  1197     224.025 104.174  40.074  1.00 83.34      A16S
ATOM  44931  N1  GUA  1197     222.999 103.104  38.314  1.00 83.34      A16S
ATOM  44932  C6  GUA  1197     222.120 102.962  37.248  1.00 83.34      A16S
ATOM  44933  O6  GUA  1197     222.070 101.894  36.629  1.00 83.34      A16S
ATOM  44934  C5  GUA  1197     221.362 104.137  37.039  1.00 83.34      A16S
ATOM  44935  N7  GUA  1197     220.396 104.421  36.085  1.00 83.34      A16S
ATOM  44936  C8  GUA  1197     220.007 105.634  36.372  1.00 83.34      A16S
ATOM  44937  C2' GUA  1197     221.522 108.498  37.874  1.00 71.28      A16S
ATOM  44938  O2' GUA  1197     221.682 109.221  39.077  1.00 71.28      A16S
ATOM  44939  C3' GUA  1197     220.918 109.369  36.781  1.00 71.28      A16S
ATOM  44940  O3' GUA  1197     221.466 110.673  36.753  1.00 71.28      A16S
ATOM  44941  P   CYT  1198     222.808 110.935  35.910  1.00 93.42      A16S
ATOM  44942  O1P CYT  1198     223.000 112.408  35.773  1.00 74.45      A16S
ATOM  44943  O2P CYT  1198     222.757 110.081  34.696  1.00 74.45      A16S
ATOM  44944  O5' CYT  1198     223.954 110.333  36.837  1.00 93.42      A16S
ATOM  44945  C5' CYT  1198     224.205 110.882  38.142  1.00 93.42      A16S
ATOM  44946  C4' CYT  1198     225.365 110.178  38.798  1.00 93.42      A16S
ATOM  44947  O4' CYT  1198     224.984 108.840  39.206  1.00 93.42      A16S
ATOM  44948  C1' CYT  1198     226.106 107.980  39.115  1.00 93.42      A16S
ATOM  44949  N1  CYT  1198     225.791 106.867  38.198  1.00 74.45      A16S
ATOM  44950  C6  CYT  1198     224.873 107.013  37.192  1.00 74.45      A16S
ATOM  44951  C2  CYT  1198     226.463 105.648  38.366  1.00 74.45      A16S
ATOM  44952  O2  CYT  1198     227.268 105.526  39.305  1.00 74.45      A16S
ATOM  44953  N3  CYT  1198     226.213 104.631  37.506  1.00 74.45      A16S
ATOM  44954  C4  CYT  1198     225.323 104.788  36.523  1.00 74.45      A16S
ATOM  44955  N4  CYT  1198     225.113 103.756  35.698  1.00 74.45      A16S
ATOM  44956  C5  CYT  1198     224.611 106.008  36.341  1.00 74.45      A16S
ATOM  44957  C2' CYT  1198     227.290 108.815  38.631  1.00 93.42      A16S
ATOM  44958  O2' CYT  1198     228.034 109.242  39.752  1.00 93.42      A16S
ATOM  44959  C3' CYT  1198     226.588 109.970  37.932  1.00 93.42      A16S
ATOM  44960  O3' CYT  1198     227.385 111.138  37.863  1.00 93.42      A16S
ATOM  44961  P   CYT  1199     228.322 111.382  36.577  1.00 77.82      A16S
ATOM  44962  O1P CYT  1199     228.978 112.710  36.770  1.00 81.47      A16S
ATOM  44963  O2P CYT  1199     227.523 111.127  35.342  1.00 81.47      A16S
ATOM  44964  O5' CYT  1199     229.428 110.240  36.699  1.00 77.82      A16S
ATOM  44965  C5' CYT  1199     230.244 110.155  37.870  1.00 77.82      A16S
ATOM  44966  C4' CYT  1199     231.066 108.895  37.855  1.00 77.82      A16S
ATOM  44967  O4' CYT  1199     230.214 107.725  37.904  1.00 77.82      A16S
ATOM  44968  C1' CYT  1199     230.893 106.637  37.315  1.00 77.82      A16S
ATOM  44969  N1  CYT  1199     230.012 105.967  36.348  1.00 81.47      A16S
ATOM  44970  C6  CYT  1199     228.958 106.617  35.765  1.00 81.47      A16S
ATOM  44971  C2  CYT  1199     230.282 104.630  36.029  1.00 81.47      A16S
ATOM  44972  O2  CYT  1199     231.249 104.069  36.569  1.00 81.47      A16S
ATOM  44973  N3  CYT  1199     229.492 103.987  35.142  1.00 81.47      A16S
ATOM  44974  C4  CYT  1199     228.468 104.628  34.578  1.00 81.47      A16S
ATOM  44975  N4  CYT  1199     227.718 103.951  33.709  1.00 81.47      A16S
ATOM  44976  C5  CYT  1199     228.169 105.993  34.881  1.00 81.47      A16S
ATOM  44977  C2' CYT  1199     232.187 107.161  36.692  1.00 77.82      A16S
ATOM  44978  O2' CYT  1199     233.244 106.818  37.553  1.00 77.82      A16S
ATOM  44979  C3' CYT  1199     231.933 108.664  36.634  1.00 77.82      A16S
ATOM  44980  O3' CYT  1199     233.133 109.420  36.729  1.00 77.82      A16S
ATOM  44981  P   URI  1200     233.871 109.915  35.392  1.00 64.11      A16S
ATOM  44982  O1P URI  1200     234.781 111.043  35.742  1.00 66.80      A16S
ATOM  44983  O2P URI  1200     232.841 110.112  34.338  1.00 66.80      A16S
ATOM  44984  O5' URI  1200     234.759 108.653  35.007  1.00 64.11      A16S
ATOM  44985  C5' URI  1200     235.782 108.179  35.893  1.00 64.11      A16S
ATOM  44986  C4' URI  1200     236.241 106.803  35.475  1.00 64.11      A16S
ATOM  44987  O4' URI  1200     235.174 105.843  35.691  1.00 64.11      A16S
ATOM  44988  C1' URI  1200     235.193 104.860  34.667  1.00 64.11      A16S
ATOM  44989  N1  URI  1200     233.959 105.002  33.872  1.00 66.80      A16S
ATOM  44990  C6  URI  1200     233.369 106.241  33.676  1.00 66.80      A16S
ATOM  44991  C2  URI  1200     233.403 103.860  33.316  1.00 66.80      A16S
ATOM  44992  O2  URI  1200     233.889 102.751  33.457  1.00 66.80      A16S
ATOM  44993  N3  URI  1200     232.255 104.069  32.585  1.00 66.80      A16S
ATOM  44994  C4  URI  1200     231.617 105.281  32.356  1.00 66.80      A16S
ATOM  44995  O4  URI  1200     230.576 105.306  31.696  1.00 66.80      A16S
ATOM  44996  C5  URI  1200     232.253 106.412  32.957  1.00 66.80      A16S
ATOM  44997  C2' URI  1200     236.435 105.129  33.821  1.00 64.11      A16S
ATOM  44998  O2' URI  1200     237.534 104.415  34.362  1.00 64.11      A16S
ATOM  44999  C3' URI  1200     236.591 106.628  34.008  1.00 64.11      A16S
ATOM  45000  O3' URI  1200     237.876 107.098  33.672  1.00 64.11      A16S
ATOM  45001  P   GUA  1201     238.092 107.825  32.260  1.00 85.24      A16S
ATOM  45002  O1P GUA  1201     239.518 108.240  32.211  1.00 60.97      A16S
ATOM  45003  O2P GUA  1201     237.025 108.857  32.102  1.00 60.97      A16S
ATOM  45004  O5' GUA  1201     237.887 106.634  31.219  1.00 85.24      A16S
ATOM  45005  C5' GUA  1201     238.873 105.596  31.139  1.00 85.24      A16S
ATOM  45006  C4' GUA  1201     238.399 104.436  30.293  1.00 85.24      A16S
ATOM  45007  O4' GUA  1201     237.268 103.769  30.923  1.00 85.24      A16S
ATOM  45008  C1' GUA  1201     236.458 103.161  29.923  1.00 85.24      A16S
ATOM  45009  N9  GUA  1201     235.154 103.828  29.866  1.00 60.97      A16S
ATOM  45010  C4  GUA  1201     234.036 103.333  29.233  1.00 60.97      A16S
ATOM  45011  N3  GUA  1201     233.943 102.134  28.621  1.00 60.97      A16S
ATOM  45012  C2  GUA  1201     232.766 101.958  28.054  1.00 60.97      A16S
ATOM  45013  N2  GUA  1201     232.519 100.822  27.386  1.00 60.97      A16S
ATOM  45014  N1  GUA  1201     231.747 102.881  28.094  1.00 60.97      A16S
ATOM  45015  C6  GUA  1201     231.815 104.123  28.716  1.00 60.97      A16S
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ATOM	45016	O6	GUA	1201	230.839	104.886	28.679	1.00	60.97	A16S
ATOM	45017	C5	GUA	1201	233.088	104.330	29.329	1.00	60.97	A16S
ATOM	45018	N7	GUA	1201	233.586	105.420	30.037	1.00	60.97	A16S
ATOM	45019	C8	GUA	1201	234.807	105.074	30.348	1.00	60.97	A16S
ATOM	45020	C2'	GUA	1201	237.144	103.419	28.584	1.00	85.24	A16S
ATOM	45021	O2'	GUA	1201	238.001	102.342	28.250	1.00	85.24	A16S
ATOM	45022	C3'	GUA	1201	237.899	104.704	28.884	1.00	85.24	A16S
ATOM	45023	O3'	GUA	1201	238.882	104.976	27.903	1.00	85.24	A16S
ATOM	45024	P	GUA	1202	238.465	105.833	26.607	1.00	78.80	A16S
ATOM	45025	O1P	GUA	1202	239.686	106.209	25.869	1.00	61.23	A16S
ATOM	45026	O2P	GUA	1202	237.525	106.908	27.043	1.00	61.23	A16S
ATOM	45027	O5'	GUA	1202	237.650	104.784	25.728	1.00	78.80	A16S
ATOM	45028	C5'	GUA	1202	238.215	103.500	25.408	1.00	78.80	A16S
ATOM	45029	C4'	GUA	1202	237.184	102.609	24.753	1.00	78.80	A16S
ATOM	45030	O4'	GUA	1202	236.111	102.341	25.695	1.00	78.80	A16S
ATOM	45031	C1'	GUA	1202	234.865	102.315	25.013	1.00	78.80	A16S
ATOM	45032	N9	GUA	1202	234.129	103.522	25.374	1.00	61.23	A16S
ATOM	45033	C4	GUA	1202	232.816	103.804	25.079	1.00	61.23	A16S
ATOM	45034	N3	GUA	1202	231.955	102.988	24.440	1.00	61.23	A16S
ATOM	45035	C2	GUA	1202	230.780	103.559	24.254	1.00	61.23	A16S
ATOM	45036	N2	GUA	1202	229.811	102.892	23.616	1.00	61.23	A16S
ATOM	45037	N1	GUA	1202	230.469	104.827	24.674	1.00	61.23	A16S
ATOM	45038	C6	GUA	1202	231.338	105.686	25.338	1.00	61.23	A16S
ATOM	45039	O6	GUA	1202	230.958	106.824	25.670	1.00	61.23	A16S
ATOM	45040	C5	GUA	1202	232.607	105.086	25.536	1.00	61.23	A16S
ATOM	45041	N7	GUA	1202	233.754	105.589	26.132	1.00	61.23	A16S
ATOM	45042	C8	GUA	1202	234.623	104.625	26.025	1.00	61.23	A16S
ATOM	45043	C2'	GUA	1202	235.179	102.382	23.520	1.00	78.80	A16S
ATOM	45044	O2'	GUA	1202	235.320	101.077	22.988	1.00	78.80	A16S
ATOM	45045	C3'	GUA	1202	236.477	103.173	23.530	1.00	78.80	A16S
ATOM	45046	O3'	GUA	1202	237.211	103.024	22.328	1.00	78.80	A16S
ATOM	45047	P	GUA	1203	237.015	104.093	21.140	1.00	67.78	A16S
ATOM	45048	O1P	GUA	1203	237.817	103.543	20.020	1.00	72.03	A16S
ATOM	45049	O2P	GUA	1203	237.269	105.477	21.615	1.00	72.03	A16S
ATOM	45050	O5'	GUA	1203	235.465	104.004	20.774	1.00	67.78	A16S
ATOM	45051	C5'	GUA	1203	234.892	102.775	20.281	1.00	67.78	A16S
ATOM	45052	C4'	GUA	1203	233.430	102.958	19.936	1.00	67.78	A16S
ATOM	45053	O4'	GUA	1203	232.648	103.197	21.141	1.00	67.78	A16S
ATOM	45054	C1'	GUA	1203	231.514	103.993	20.824	1.00	67.78	A16S
ATOM	45055	N9	GUA	1203	231.584	105.255	21.556	1.00	72.03	A16S
ATOM	45056	C4	GUA	1203	230.577	106.193	21.635	1.00	72.03	A16S
ATOM	45057	N3	GUA	1203	229.336	106.074	21.105	1.00	72.03	A16S
ATOM	45058	C2	GUA	1203	228.605	107.163	21.302	1.00	72.03	A16S
ATOM	45059	N2	GUA	1203	227.343	107.219	20.832	1.00	72.03	A16S
ATOM	45060	N1	GUA	1203	229.056	108.275	21.971	1.00	72.03	A16S
ATOM	45061	C6	GUA	1203	230.326	108.418	22.526	1.00	72.03	A16S
ATOM	45062	O6	GUA	1203	230.631	109.468	23.105	1.00	72.03	A16S
ATOM	45063	C5	GUA	1203	231.122	107.257	22.319	1.00	72.03	A16S
ATOM	45064	N7	GUA	1203	232.431	106.981	22.698	1.00	72.03	A16S
ATOM	45065	C8	GUA	1203	232.656	105.779	22.237	1.00	72.03	A16S
ATOM	45066	C2'	GUA	1203	231.579	104.297	19.326	1.00	67.78	A16S
ATOM	45067	O2'	GUA	1203	230.775	103.393	18.599	1.00	67.78	A16S
ATOM	45068	C3'	GUA	1203	233.063	104.129	19.044	1.00	67.78	A16S
ATOM	45069	O3'	GUA	1203	233.299	103.917	17.677	1.00	67.78	A16S
ATOM	45070	P	CYT	1204	233.653	105.174	16.751	1.00	56.68	A16S
ATOM	45071	O1P	CYT	1204	233.870	104.646	15.387	1.00	62.64	A16S
ATOM	45072	O2P	CYT	1204	234.724	105.955	17.417	1.00	62.64	A16S
ATOM	45073	O5'	CYT	1204	232.325	106.058	16.749	1.00	56.68	A16S
ATOM	45074	C5'	CYT	1204	231.086	105.516	16.258	1.00	56.68	A16S
ATOM	45075	C4'	CYT	1204	229.974	106.535	16.351	1.00	56.68	A16S
ATOM	45076	O4'	CYT	1204	229.734	106.880	17.739	1.00	56.68	A16S
ATOM	45077	C1'	CYT	1204	229.223	108.204	17.813	1.00	56.68	A16S
ATOM	45078	N1	CYT	1204	230.058	109.010	18.729	1.00	62.64	A16S
ATOM	45079	C6	CYT	1204	231.381	108.717	18.926	1.00	62.64	A16S
ATOM	45080	C2	CYT	1204	229.473	110.118	19.381	1.00	62.64	A16S
ATOM	45081	O2	CYT	1204	228.264	110.348	19.224	1.00	62.64	A16S
ATOM	45082	N3	CYT	1204	230.243	110.906	20.164	1.00	62.64	A16S
ATOM	45083	C4	CYT	1204	231.539	110.629	20.321	1.00	62.64	A16S
ATOM	45084	N4	CYT	1204	232.264	111.457	21.076	1.00	62.64	A16S
ATOM	45085	C5	CYT	1204	232.151	109.493	19.704	1.00	62.64	A16S
ATOM	45086	C2'	CYT	1204	229.208	108.787	16.396	1.00	56.68	A16S
ATOM	45087	O2'	CYT	1204	227.906	108.766	15.849	1.00	56.68	A16S
ATOM	45088	C3'	CYT	1204	230.185	107.874	15.663	1.00	56.68	A16S
ATOM	45089	O3'	CYT	1204	229.886	107.842	14.275	1.00	56.68	A16S
ATOM	45090	P	GUA	1205	230.399	109.035	13.328	1.00	62.67	A16S
ATOM	45091	O1P	GUA	1205	229.946	110.316	13.915	1.00	74.66	A16S
ATOM	45092	O2P	GUA	1205	230.049	108.713	11.931	1.00	74.66	A16S
ATOM	45093	O5'	GUA	1205	231.978	108.960	13.463	1.00	62.67	A16S
ATOM	45094	C5'	GUA	1205	232.663	107.691	13.546	1.00	62.67	A16S
ATOM	45095	C4'	GUA	1205	234.150	107.899	13.377	1.00	62.67	A16S
ATOM	45096	O4'	GUA	1205	234.584	108.917	14.291	1.00	62.67	A16S
ATOM	45097	C1'	GUA	1205	235.967	108.787	14.471	1.00	62.67	A16S
ATOM	45098	N9	GUA	1205	236.325	109.474	15.707	1.00	74.66	A16S
ATOM	45099	C4	GUA	1205	237.050	110.637	15.781	1.00	74.66	A16S
ATOM	45100	N3	GUA	1205	237.584	111.300	14.734	1.00	74.66	A16S
ATOM	45101	C2	GUA	1205	238.198	112.404	15.109	1.00	74.66	A16S
ATOM	45102	N2	GUA	1205	238.781	113.174	14.192	1.00	74.66	A16S
ATOM	45103	N1	GUA	1205	238.285	112.828	16.409	1.00	74.66	A16S
ATOM	45104	C6	GUA	1205	237.746	112.163	17.506	1.00	74.66	A16S
ATOM	45105	O6	GUA	1205	237.881	112.638	18.640	1.00	74.66	A16S
ATOM	45106	C5	GUA	1205	237.080	110.969	17.117	1.00	74.66	A16S
ATOM	45107	N7	GUA	1205	236.408	110.018	17.875	1.00	74.66	A16S
ATOM	45108	C8	GUA	1205	235.985	109.145	16.998	1.00	74.66	A16S
ATOM	45109	C2'	GUA	1205	236.336	107.309	14.289	1.00	62.67	A16S
ATOM	45110	O2'	GUA	1205	237.516	107.213	13.510	1.00	62.67	A16S
ATOM	45111	C3'	GUA	1205	235.042	106.708	13.691	1.00	62.67	A16S
ATOM	45112	O3'	GUA	1205	235.108	105.798	12.558	1.00	62.67	A16S
ATOM	45113	P	ADE	1206	235.954	106.167	11.218	1.00	70.13	A16S
ATOM	45114	O1P	ADE	1206	236.349	107.601	11.216	1.00	77.91	A16S
ATOM	45115	O2P	ADE	1206	235.197	105.636	10.057	1.00	77.91	A16S
ATOM	45116	O5'	ADE	1206	237.275	105.296	11.404	1.00	70.13	A16S
ATOM	45117	C5'	ADE	1206	237.394	104.001	10.795	1.00	70.13	A16S
ATOM	45118	C4'	ADE	1206	236.908	102.913	11.729	1.00	70.13	A16S
ATOM	45119	O4'	ADE	1206	235.559	103.181	12.163	1.00	70.13	A16S
ATOM	45120	C1'	ADE	1206	234.969	101.957	12.534	1.00	70.13	A16S
ATOM	45121	N9	ADE	1206	233.517	102.027	12.349	1.00	77.91	A16S

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ATOM  45122  C4  ADE  1206     232.745 101.448  11.366  1.00 77.91      A16S
ATOM  45123  N3  ADE  1206     233.160 100.700  10.329  1.00 77.91      A16S
ATOM  45124  C2  ADE  1206     232.124 100.294   9.598  1.00 77.91      A16S
ATOM  45125  N1  ADE  1206     230.822 100.535   9.769  1.00 77.91      A16S
ATOM  45126  C6  ADE  1206     230.438 101.296  10.817  1.00 77.91      A16S
ATOM  45127  N6  ADE  1206     229.138 101.548  10.987  1.00 77.91      A16S
ATOM  45128  C5  ADE  1206     231.438 101.783  11.670  1.00 77.91      A16S
ATOM  45129  N7  ADE  1206     231.384 102.569  12.810  1.00 77.91      A16S
ATOM  45130  C8  ADE  1206     232.638 102.687  13.170  1.00 77.91      A16S
ATOM  45131  C2' ADE  1206     235.700 100.823  11.806  1.00 70.13      A16S
ATOM  45132  O2' ADE  1206     236.140  99.852  12.728  1.00 70.13      A16S
ATOM  45133  C3' ADE  1206     236.839 101.539  11.070  1.00 70.13      A16S
ATOM  45134  O3' ADE  1206     238.063 100.844  11.327  1.00 70.13      A16S
ATOM  45135  P   CYT  1207     239.199 100.753  10.200  1.00 76.38      A16S
ATOM  45136  O1P CYT  1207     240.157  99.709  10.644  1.00 53.19      A16S
ATOM  45137  O2P CYT  1207     239.696 102.108   9.866  1.00 53.19      A16S
ATOM  45138  O5' CYT  1207     238.421 100.172   8.952  1.00 76.38      A16S
ATOM  45139  C5' CYT  1207     238.858 100.439   7.624  1.00 76.38      A16S
ATOM  45140  C4' CYT  1207     238.016  99.655   6.674  1.00 76.38      A16S
ATOM  45141  O4' CYT  1207     236.696  99.557   7.243  1.00 76.38      A16S
ATOM  45142  C1' CYT  1207     235.730  99.753   6.240  1.00 76.38      A16S
ATOM  45143  N1  CYT  1207     234.871 100.882   6.652  1.00 53.19      A16S
ATOM  45144  C6  CYT  1207     235.377 101.943   7.355  1.00 53.19      A16S
ATOM  45145  C2  CYT  1207     233.504 100.831   6.337  1.00 53.19      A16S
ATOM  45146  O2  CYT  1207     233.083  99.879   5.656  1.00 53.19      A16S
ATOM  45147  N3  CYT  1207     232.682 101.820   6.783  1.00 53.19      A16S
ATOM  45148  C4  CYT  1207     233.183 102.828   7.500  1.00 53.19      A16S
ATOM  45149  N4  CYT  1207     232.337 103.756   7.948  1.00 53.19      A16S
ATOM  45150  C5  CYT  1207     234.577 102.924   7.797  1.00 53.19      A16S
ATOM  45151  C2' CYT  1207     236.444  99.863   4.886  1.00 76.38      A16S
ATOM  45152  O2' CYT  1207     236.364  98.619   4.213  1.00 76.38      A16S
ATOM  45153  C3' CYT  1207     237.854 100.271   5.302  1.00 76.38      A16S
ATOM  45154  O3' CYT  1207     238.921  99.888   4.418  1.00 76.38      A16S
ATOM  45155  P   ADE  1208     239.330  98.325   4.211  1.00 52.81      A16S
ATOM  45156  O1P ADE  1208     239.131  97.512   5.441  1.00 65.94      A16S
ATOM  45157  O2P ADE  1208     240.673  98.364   3.580  1.00 65.94      A16S
ATOM  45158  O5' ADE  1208     238.327  97.727   3.123  1.00 52.81      A16S
ATOM  45159  C5' ADE  1208     238.527  96.380   2.651  1.00 52.81      A16S
ATOM  45160  C4' ADE  1208     237.821  96.126   1.331  1.00 52.81      A16S
ATOM  45161  O4' ADE  1208     236.632  95.328   1.557  1.00 52.81      A16S
ATOM  45162  C1' ADE  1208     235.678  95.606   0.558  1.00 52.81      A16S
ATOM  45163  N9  ADE  1208     234.518  96.209   1.209  1.00 65.94      A16S
ATOM  45164  C4  ADE  1208     233.265  95.676   1.294  1.00 65.94      A16S
ATOM  45165  N3  ADE  1208     232.864  94.483   0.833  1.00 65.94      A16S
ATOM  45166  C2  ADE  1208     231.568  94.300   1.090  1.00 65.94      A16S
ATOM  45167  N1  ADE  1208     230.693  95.128   1.705  1.00 65.94      A16S
ATOM  45168  C6  ADE  1208     231.138  96.330   2.143  1.00 65.94      A16S
ATOM  45169  N6  ADE  1208     230.272  97.169   2.724  1.00 65.94      A16S
ATOM  45170  C5  ADE  1208     232.492  96.629   1.946  1.00 65.94      A16S
ATOM  45171  N7  ADE  1208     233.253  97.734   2.286  1.00 65.94      A16S
ATOM  45172  C8  ADE  1208     234.445  97.437   1.836  1.00 65.94      A16S
ATOM  45173  C2' ADE  1208     236.323  96.585  -0.425  1.00 52.81      A16S
ATOM  45174  O2' ADE  1208     236.936  95.877  -1.487  1.00 52.81      A16S
ATOM  45175  C3' ADE  1208     237.350  97.279   0.458  1.00 52.81      A16S
ATOM  45176  O3' ADE  1208     238.358  97.897  -0.335  1.00 52.81      A16S
ATOM  45177  P   CYT  1209     238.046  99.312  -1.037  1.00 53.95      A16S
ATOM  45178  O1P CYT  1209     239.204  99.715  -1.869  1.00 59.92      A16S
ATOM  45179  O2P CYT  1209     237.530 100.242  -0.006  1.00 59.92      A16S
ATOM  45180  O5' CYT  1209     236.850  98.968  -2.023  1.00 53.95      A16S
ATOM  45181  C5' CYT  1209     235.998 100.000  -2.528  1.00 53.95      A16S
ATOM  45182  C4' CYT  1209     234.594  99.475  -2.690  1.00 53.95      A16S
ATOM  45183  O4' CYT  1209     234.130  98.935  -1.424  1.00 53.95      A16S
ATOM  45184  C1' CYT  1209     232.767  99.281  -1.225  1.00 53.95      A16S
ATOM  45185  N1  CYT  1209     232.698 100.196  -0.058  1.00 59.92      A16S
ATOM  45186  C6  CYT  1209     233.812 100.875   0.360  1.00 59.92      A16S
ATOM  45187  C2  CYT  1209     231.471 100.380   0.609  1.00 59.92      A16S
ATOM  45188  O2  CYT  1209     230.473  99.751   0.231  1.00 59.92      A16S
ATOM  45189  N3  CYT  1209     231.408 101.246   1.647  1.00 59.92      A16S
ATOM  45190  C4  CYT  1209     232.499 101.911   2.031  1.00 59.92      A16S
ATOM  45191  N4  CYT  1209     232.386 102.761   3.049  1.00 59.92      A16S
ATOM  45192  C5  CYT  1209     233.757 101.734   1.385  1.00 59.92      A16S
ATOM  45193  C2' CYT  1209     232.279  99.950  -2.519  1.00 53.95      A16S
ATOM  45194  O2' CYT  1209     231.712  99.001  -3.409  1.00 53.95      A16S
ATOM  45195  C3' CYT  1209     233.573 100.533  -3.058  1.00 53.95      A16S
ATOM  45196  O3' CYT  1209     233.537 100.762  -4.445  1.00 53.95      A16S
ATOM  45197  P   ADE  1210     233.522 102.263  -4.981  1.00 56.88      A16S
ATOM  45198  O1P ADE  1210     233.945 102.262  -6.409  1.00 57.27      A16S
ATOM  45199  O2P ADE  1210     234.280 103.069  -3.998  1.00 57.27      A16S
ATOM  45200  O5' ADE  1210     231.988 102.677  -4.880  1.00 56.88      A16S
ATOM  45201  C5' ADE  1210     230.993 102.059  -5.726  1.00 56.88      A16S
ATOM  45202  C4' ADE  1210     229.634 102.679  -5.487  1.00 56.88      A16S
ATOM  45203  O4' ADE  1210     229.085 102.225  -4.220  1.00 56.88      A16S
ATOM  45204  C1' ADE  1210     228.443 103.305  -3.558  1.00 56.88      A16S
ATOM  45205  N9  ADE  1210     229.242 103.642  -2.376  1.00 57.27      A16S
ATOM  45206  C4  ADE  1210     228.897 104.503  -1.364  1.00 57.27      A16S
ATOM  45207  N3  ADE  1210     227.743 105.175  -1.221  1.00 57.27      A16S
ATOM  45208  C2  ADE  1210     227.780 105.935  -0.134  1.00 57.27      A16S
ATOM  45209  N1  ADE  1210     228.766 106.094   0.758  1.00 57.27      A16S
ATOM  45210  C6  ADE  1210     229.910 105.402   0.586  1.00 57.27      A16S
ATOM  45211  N6  ADE  1210     230.896 105.559   1.471  1.00 57.27      A16S
ATOM  45212  C5  ADE  1210     229.996 104.555  -0.524  1.00 57.27      A16S
ATOM  45213  N7  ADE  1210     231.003 103.717  -0.978  1.00 57.27      A16S
ATOM  45214  C8  ADE  1210     230.507 103.195  -2.070  1.00 57.27      A16S
ATOM  45215  C2' ADE  1210     228.413 104.478  -4.541  1.00 56.88      A16S
ATOM  45216  O2' ADE  1210     227.218 104.443  -5.288  1.00 56.88      A16S
ATOM  45217  C3' ADE  1210     229.640 104.191  -5.392  1.00 56.88      A16S
ATOM  45218  O3' ADE  1210     229.580 104.793  -6.664  1.00 56.88      A16S
ATOM  45219  P   CYT  1211     230.157 106.273  -6.856  1.00 40.96      A16S
ATOM  45220  O1P CYT  1211     230.256 106.577  -8.304  1.00 53.07      A16S
ATOM  45221  O2P CYT  1211     231.368 106.368  -5.992  1.00 53.07      A16S
ATOM  45222  O5' CYT  1211     229.019 107.206  -6.247  1.00 40.96      A16S
ATOM  45223  C5' CYT  1211     227.683 107.219  -6.787  1.00 40.96      A16S
ATOM  45224  C4' CYT  1211     226.801 108.122  -5.956  1.00 40.96      A16S
ATOM  45225  O4' CYT  1211     226.682 107.573  -4.619  1.00 40.96      A16S
ATOM  45226  C1' CYT  1211     226.663 108.625  -3.663  1.00 40.96      A16S
ATOM  45227  N1  CYT  1211     227.820 108.471  -2.747  1.00 53.07      A16S
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ATOM	45228	C6	CYT	1211	228.818	107.579	-3.021	1.00	53.07	A16S	ATOM	45281	O3'	URI	1213	227.505	121.537	-2.999	1.00 38.05	A16S
ATOM	45229	C2	CYT	1211	227.889	109.265	-1.588	1.00	53.07	A16S	ATOM	45282	P	GUA	1214	228.561	122.512	-3.694	1.00 44.06	A16S
ATOM	45230	O2	CYT	1211	226.969	110.045	-1.336	1.00	53.07	A16S	ATOM	45283	O1P	GUA	1214	227.907	123.818	-3.938	1.00 59.09	A16S
ATOM	45231	N3	CYT	1211	228.957	109.155	-0.771	1.00	53.07	A16S	ATOM	45284	O2P	GUA	1214	229.177	121.765	-4.820	1.00 59.09	A16S
ATOM	45232	C4	CYT	1211	229.925	108.287	-1.056	1.00	53.07	A16S	ATOM	45285	O5'	GUA	1214	229.650	122.698	-2.549	1.00 44.06	A16S
ATOM	45233	N4	CYT	1211	230.963	108.210	-0.217	1.00	53.07	A16S	ATOM	45286	C5'	GUA	1214	231.040	122.876	-2.851	1.00 44.06	A16S
ATOM	45234	C5	CYT	1211	229.875	107.456	-2.211	1.00	53.07	A16S	ATOM	45287	C4'	GUA	1214	231.874	122.574	-1.631	1.00 44.06	A16S
ATOM	45235	C2'	CYT	1211	226.688	109.946	-4.433	1.00	40.96	A16S	ATOM	45288	O4'	GUA	1214	231.751	121.170	-1.284	1.00 44.06	A16S
ATOM	45236	O2'	CYT	1211	225.369	110.394	-4.626	1.00	40.96	A16S	ATOM	45289	C1'	GUA	1214	232.976	120.704	-0.743	1.00 44.06	A16S
ATOM	45237	C3'	CYT	1211	227.337	109.530	-5.741	1.00	40.96	A16S	ATOM	45290	N9	GUA	1214	233.430	119.565	-1.533	1.00 59.09	A16S
ATOM	45238	O3'	CYT	1211	226.969	110.398	-6.803	1.00	40.96	A16S	ATOM	45291	C4	GUA	1214	234.588	118.843	-1.356	1.00 59.09	A16S
ATOM	45239	P	GUA	1212	227.654	111.846	-6.917	1.00	41.96	A16S	ATOM	45292	N3	GUA	1214	235.540	119.079	-0.431	1.00 59.09	A16S
ATOM	45240	O1P	GUA	1212	227.239	112.473	-8.206	1.00	58.14	A16S	ATOM	45293	C2	GUA	1214	236.521	118.195	-0.501	1.00 59.09	A16S
ATOM	45241	O2P	GUA	1212	229.099	111.707	-6.591	1.00	58.14	A16S	ATOM	45294	N2	GUA	1214	237.555	118.268	0.342	1.00 59.09	A16S
ATOM	45242	O5'	GUA	1212	226.996	112.670	-5.730	1.00	41.96	A16S	ATOM	45295	N1	GUA	1214	236.562	117.169	-1.405	1.00 59.09	A16S
ATOM	45243	C5'	GUA	1212	225.617	113.021	-5.753	1.00	41.96	A16S	ATOM	45296	C6	GUA	1214	235.593	116.909	-2.365	1.00 59.09	A16S
ATOM	45244	C4'	GUA	1212	225.279	113.850	-4.547	1.00	41.96	A16S	ATOM	45297	O6	GUA	1214	235.723	115.946	-3.137	1.00 59.09	A16S
ATOM	45245	O4'	GUA	1212	225.543	113.074	-3.358	1.00	41.96	A16S	ATOM	45298	C5	GUA	1214	234.542	117.843	-2.304	1.00 59.09	A16S
ATOM	45246	C1'	GUA	1212	226.014	113.923	-2.329	1.00	41.96	A16S	ATOM	45299	N7	GUA	1214	233.393	117.945	-3.076	1.00 59.09	A16S
ATOM	45247	N9	GUA	1212	227.354	113.489	-1.947	1.00	58.14	A16S	ATOM	45300	C8	GUA	1214	232.770	118.983	-2.589	1.00 59.09	A16S
ATOM	45248	C4	GUA	1212	228.047	113.887	-0.836	1.00	58.14	A16S	ATOM	45301	C2'	GUA	1214	233.954	121.878	-0.711	1.00 44.06	A16S
ATOM	45249	N3	GUA	1212	227.612	114.755	0.098	1.00	58.14	A16S	ATOM	45302	O2'	GUA	1214	233.906	122.414	0.593	1.00 44.06	A16S
ATOM	45250	C2	GUA	1212	228.502	114.939	1.047	1.00	58.14	A16S	ATOM	45303	C3'	GUA	1214	233.369	122.800	-1.778	1.00 44.06	A16S
ATOM	45251	N2	GUA	1212	228.231	115.782	2.051	1.00	58.14	A16S	ATOM	45304	O3'	GUA	1214	233.678	124.175	-1.585	1.00 44.06	A16S
ATOM	45252	N1	GUA	1212	229.723	114.312	1.080	1.00	58.14	A16S	ATOM	45305	P	CYT	1215	234.812	124.872	-2.486	1.00 52.29	A16S
ATOM	45253	C6	GUA	1212	230.189	113.417	0.124	1.00	58.14	A16S	ATOM	45306	O1P	CYT	1215	234.669	126.341	-2.308	1.00 53.17	A16S
ATOM	45254	O6	GUA	1212	231.308	112.906	0.242	1.00	58.14	A16S	ATOM	45307	O2P	CYT	1215	234.799	124.311	-3.856	1.00 53.17	A16S
ATOM	45255	C5	GUA	1212	229.248	113.219	-0.897	1.00	58.14	A16S	ATOM	45308	O5'	CYT	1215	236.156	124.364	-1.796	1.00 52.29	A16S
ATOM	45256	N7	GUA	1212	229.312	112.423	-2.028	1.00	58.14	A16S	ATOM	45309	C5'	CYT	1215	236.473	124.718	-0.438	1.00 52.29	A16S
ATOM	45257	C8	GUA	1212	228.168	112.614	-2.619	1.00	58.14	A16S	ATOM	45310	C4'	CYT	1215	237.757	124.049	-0.004	1.00 52.29	A16S
ATOM	45258	C2'	GUA	1212	226.000	115.348	-2.868	1.00	41.96	A16S	ATOM	45311	O4'	CYT	1215	237.563	122.614	0.070	1.00 52.29	A16S
ATOM	45259	O2'	GUA	1212	224.770	115.952	-2.535	1.00	41.96	A16S	ATOM	45312	C1'	CYT	1215	238.731	121.945	-0.365	1.00 52.29	A16S
ATOM	45260	C3'	GUA	1212	226.115	115.098	-4.359	1.00	41.96	A16S	ATOM	45313	N1	CYT	1215	238.370	121.090	-1.516	1.00 53.17	A16S
ATOM	45261	O3'	GUA	1212	225.636	116.183	-5.120	1.00	41.96	A16S	ATOM	45314	C6	CYT	1215	237.261	121.358	-2.274	1.00 53.17	A16S
ATOM	45262	P	URI	1213	226.669	117.307	-5.606	1.00	38.05	A16S	ATOM	45315	C2	CYT	1215	239.179	119.982	-1.817	1.00 53.17	A16S
ATOM	45263	O1P	URI	1213	225.966	118.264	-6.518	1.00	59.93	A16S	ATOM	45316	O2	CYT	1215	240.198	119.773	-1.129	1.00 53.17	A16S
ATOM	45264	O2P	URI	1213	227.907	116.620	-6.075	1.00	59.93	A16S	ATOM	45317	N3	CYT	1215	238.828	119.170	-2.850	1.00 53.17	A16S
ATOM	45265	O5'	URI	1213	227.032	118.040	-4.241	1.00	38.05	A16S	ATOM	45318	C4	CYT	1215	237.733	119.435	-3.566	1.00 53.17	A16S
ATOM	45266	C5'	URI	1213	226.036	118.753	-3.486	1.00	38.05	A16S	ATOM	45319	N4	CYT	1215	237.421	118.606	-4.559	1.00 53.17	A16S
ATOM	45267	C4'	URI	1213	226.682	119.402	-2.292	1.00	38.05	A16S	ATOM	45320	C5	CYT	1215	236.909	120.564	-3.293	1.00 53.17	A16S
ATOM	45268	O4'	URI	1213	227.168	118.380	-1.390	1.00	38.05	A16S	ATOM	45321	C2'	CYT	1215	239.790	123.006	-0.678	1.00 52.29	A16S
ATOM	45269	C1'	URI	1213	228.399	118.772	-0.838	1.00	38.05	A16S	ATOM	45322	O2'	CYT	1215	240.654	123.157	0.430	1.00 52.29	A16S
ATOM	45270	N1	URI	1213	229.387	117.745	-1.174	1.00	59.93	A16S	ATOM	45323	C3'	CYT	1215	238.932	124.237	-0.942	1.00 52.29	A16S
ATOM	45271	C6	URI	1213	229.240	116.960	-2.284	1.00	59.93	A16S	ATOM	45324	O3'	CYT	1215	239.615	125.448	-0.680	1.00 52.29	A16S
ATOM	45272	C2	URI	1213	230.469	117.592	-0.335	1.00	59.93	A16S	ATOM	45325	P	URI	1216	240.417	126.162	-1.866	1.00 46.36	A16S
ATOM	45273	O2	URI	1213	230.636	118.273	0.662	1.00	59.93	A16S	ATOM	45326	O1P	URI	1216	241.066	127.379	-1.329	1.00 57.36	A16S
ATOM	45274	N3	URI	1213	231.356	116.612	-0.707	1.00	59.93	A16S	ATOM	45327	O2P	URI	1216	239.509	126.290	-3.030	1.00 57.36	A16S
ATOM	45275	C4	URI	1213	231.267	115.793	-1.807	1.00	59.93	A16S	ATOM	45328	O5'	URI	1216	241.543	125.085	-2.199	1.00 46.36	A16S
ATOM	45276	O4	URI	1213	232.143	114.957	-2.013	1.00	59.93	A16S	ATOM	45329	C5'	URI	1216	242.584	124.798	-1.246	1.00 46.36	A16S
ATOM	45277	C5	URI	1213	230.118	116.016	-2.620	1.00	59.93	A16S	ATOM	45330	C4'	URI	1216	243.515	123.730	-1.774	1.00 46.36	A16S
ATOM	45278	C2'	URI	1213	228.740	120.157	-1.379	1.00	38.05	A16S	ATOM	45331	O4'	URI	1216	242.825	122.451	-1.810	1.00 46.36	A16S
ATOM	45279	O2'	URI	1213	228.331	121.116	-0.441	1.00	38.05	A16S	ATOM	45332	C1'	URI	1216	243.309	121.679	-2.904	1.00 46.36	A16S
ATOM	45280	C3'	URI	1213	227.902	120.220	-2.645	1.00	38.05	A16S	ATOM	45333	N1	URI	1216	242.197	121.397	-3.834	1.00 57.36	A16S

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ATOM  45334  C6  URI  1216     241.048 122.158  -3.834  1.00 57.36      A16S
ATOM  45335  C2  URI  1216     242.347 120.340  -4.730  1.00 57.36      A16S
ATOM  45336  O2  URI  1216     243.337 119.633  -4.765  1.00 57.36      A16S
ATOM  45337  N3  URI  1216     241.292 120.145  -5.585  1.00 57.36      A16S
ATOM  45338  C4  URI  1216     240.123 120.876  -5.645  1.00 57.36      A16S
ATOM  45339  O4  URI  1216     239.280 120.611  -6.513  1.00 57.36      A16S
ATOM  45340  C5  URI  1216     240.037 121.941  -4.682  1.00 57.36      A16S
ATOM  45341  C2' URI  1216     244.421 122.487  -3.573  1.00 46.36      A16S
ATOM  45342  O2' URI  1216     245.664 122.127  -3.011  1.00 46.36      A16S
ATOM  45343  C3' URI  1216     244.037 123.906  -3.192  1.00 46.36      A16S
ATOM  45344  O3' URI  1216     245.133 124.787  -3.313  1.00 46.36      A16S
ATOM  45345  P   ADE  1217     245.277 125.667  -4.650  1.00 59.31      A16S
ATOM  45346  O1P ADE  1217     246.525 126.448  -4.481  1.00 52.97      A16S
ATOM  45347  O2P ADE  1217     244.005 126.393  -4.924  1.00 52.97      A16S
ATOM  45348  O5' ADE  1217     245.482 124.572  -5.799  1.00 59.31      A16S
ATOM  45349  C5' ADE  1217     246.705 123.819  -5.850  1.00 59.31      A16S
ATOM  45350  C4' ADE  1217     246.631 122.633  -6.803  1.00 59.31      A16S
ATOM  45351  O4' ADE  1217     245.478 121.787  -6.544  1.00 59.31      A16S
ATOM  45352  C1' ADE  1217     245.267 120.943  -7.665  1.00 59.31      A16S
ATOM  45353  N9  ADE  1217     243.897 121.093  -8.167  1.00 52.97      A16S
ATOM  45354  C4  ADE  1217     243.153 120.112  -8.789  1.00 52.97      A16S
ATOM  45355  N3  ADE  1217     243.493 118.826  -8.991  1.00 52.97      A16S
ATOM  45356  C2  ADE  1217     242.533 118.186  -9.649  1.00 52.97      A16S
ATOM  45357  N1  ADE  1217     241.366 118.648 -10.103  1.00 52.97      A16S
ATOM  45358  C6  ADE  1217     241.059 119.944  -9.894  1.00 52.97      A16S
ATOM  45359  N6  ADE  1217     239.906 120.417 -10.369  1.00 52.97      A16S
ATOM  45360  C5  ADE  1217     241.981 120.727  -9.193  1.00 52.97      A16S
ATOM  45361  N7  ADE  1217     241.962 122.058  -8.800  1.00 52.97      A16S
ATOM  45362  C8  ADE  1217     243.112 122.222  -8.187  1.00 52.97      A16S
ATOM  45363  C2' ADE  1217     246.265 121.373  -8.740  1.00 59.31      A16S
ATOM  45364  O2' ADE  1217     247.380 120.511  -8.635  1.00 59.31      A16S
ATOM  45365  C3' ADE  1217     246.612 122.798  -8.316  1.00 59.31      A16S
ATOM  45366  O3' ADE  1217     247.889 123.149  -8.857  1.00 59.31      A16S
ATOM  45367  P   CYT  1218     247.987 123.919 -10.280  1.00 60.79      A16S
ATOM  45368  O1P CYT  1218     249.219 124.751 -10.217  1.00 49.32      A16S
ATOM  45369  O2P CYT  1218     246.701 124.557 -10.646  1.00 49.32      A16S
ATOM  45370  O5' CYT  1218     248.220 122.764 -11.351  1.00 60.79      A16S
ATOM  45371  C5' CYT  1218     249.390 121.939 -11.307  1.00 60.79      A16S
ATOM  45372  C4' CYT  1218     249.116 120.621 -11.983  1.00 60.79      A16S
ATOM  45373  O4' CYT  1218     247.974 120.011 -11.338  1.00 60.79      A16S
ATOM  45374  C1' CYT  1218     247.198 119.312 -12.294  1.00 60.79      A16S
ATOM  45375  N1  CYT  1218     245.825 119.863 -12.304  1.00 49.32      A16S
ATOM  45376  C6  CYT  1218     245.587 121.168 -11.981  1.00 49.32      A16S
ATOM  45377  C2  CYT  1218     244.766 119.033 -12.679  1.00 49.32      A16S
ATOM  45378  O2  CYT  1218     244.990 117.833 -12.900  1.00 49.32      A16S
ATOM  45379  N3  CYT  1218     243.521 119.553 -12.782  1.00 49.32      A16S
ATOM  45380  C4  CYT  1218     243.308 120.833 -12.496  1.00 49.32      A16S
ATOM  45381  N4  CYT  1218     242.076 121.308 -12.636  1.00 49.32      A16S
ATOM  45382  C5  CYT  1218     244.354 121.687 -12.059  1.00 49.32      A16S
ATOM  45383  C2' CYT  1218     247.899 119.438 -13.650  1.00 60.79      A16S
ATOM  45384  O2' CYT  1218     248.682 118.291 -13.894  1.00 60.79      A16S
ATOM  45385  C3' CYT  1218     248.749 120.687 -13.456  1.00 60.79      A16S
ATOM  45386  O3' CYT  1218     249.919 120.629 -14.260  1.00 60.79      A16S
ATOM  45387  P   ADE  1219     249.811 120.800 -15.855  1.00 51.74      A16S
ATOM  45388  O1P ADE  1219     248.427 120.489 -16.274  1.00 71.28      A16S
ATOM  45389  O2P ADE  1219     250.947 120.060 -16.477  1.00 71.28      A16S
ATOM  45390  O5' ADE  1219     250.085 122.351 -16.088  1.00 51.74      A16S
ATOM  45391  C5' ADE  1219     249.005 123.264 -16.193  1.00 51.74      A16S
ATOM  45392  C4' ADE  1219     249.251 124.484 -15.338  1.00 51.74      A16S
ATOM  45393  O4' ADE  1219     249.866 124.102 -14.076  1.00 51.74      A16S
ATOM  45394  C1' ADE  1219     250.591 125.204 -13.558  1.00 51.74      A16S
ATOM  45395  N9  ADE  1219     251.986 124.820 -13.339  1.00 71.28      A16S
ATOM  45396  C4  ADE  1219     252.947 125.648 -12.810  1.00 71.28      A16S
ATOM  45397  N3  ADE  1219     252.784 126.905 -12.371  1.00 71.28      A16S
ATOM  45398  C2  ADE  1219     253.935 127.403 -11.947  1.00 71.28      A16S
ATOM  45399  N1  ADE  1219     255.141 126.836 -11.921  1.00 71.28      A16S
ATOM  45400  C6  ADE  1219     255.270 125.576 -12.373  1.00 71.28      A16S
ATOM  45401  N6  ADE  1219     256.474 125.021 -12.362  1.00 71.28      A16S
ATOM  45402  C5  ADE  1219     254.121 124.929 -12.838  1.00 71.28      A16S
ATOM  45403  N7  ADE  1219     253.905 123.657 -13.346  1.00 71.28      A16S
ATOM  45404  C8  ADE  1219     252.624 123.641 -13.622  1.00 71.28      A16S
ATOM  45405  C2' ADE  1219     250.489 126.335 -14.579  1.00 51.74      A16S
ATOM  45406  O2' ADE  1219     249.416 127.165 -14.189  1.00 51.74      A16S
ATOM  45407  C3' ADE  1219     250.165 125.580 -15.859  1.00 51.74      A16S
ATOM  45408  O3' ADE  1219     249.494 126.445 -16.767  1.00 51.74      A16S
ATOM  45409  P   ADE  1220     250.317 127.133 -17.960  1.00 54.97      A16S
ATOM  45410  O1P ADE  1220     249.409 127.970 -18.788  1.00 43.78      A16S
ATOM  45411  O2P ADE  1220     251.124 126.066 -18.600  1.00 43.78      A16S
ATOM  45412  O5' ADE  1220     251.310 128.130 -17.221  1.00 54.97      A16S
ATOM  45413  C5' ADE  1220     250.828 129.373 -16.690  1.00 54.97      A16S
ATOM  45414  C4' ADE  1220     251.840 130.471 -16.917  1.00 54.97      A16S
ATOM  45415  O4' ADE  1220     253.048 130.156 -16.181  1.00 54.97      A16S
ATOM  45416  C1' ADE  1220     254.157 130.229 -17.043  1.00 54.97      A16S
ATOM  45417  N9  ADE  1220     255.145 129.252 -16.610  1.00 43.78      A16S
ATOM  45418  C4  ADE  1220     256.483 129.510 -16.492  1.00 43.78      A16S
ATOM  45419  N3  ADE  1220     257.110 130.661 -16.770  1.00 43.78      A16S
ATOM  45420  C2  ADE  1220     258.413 130.547 -16.540  1.00 43.78      A16S
ATOM  45421  N1  ADE  1220     259.106 129.493 -16.101  1.00 43.78      A16S
ATOM  45422  C6  ADE  1220     258.443 128.347 -15.838  1.00 43.78      A16S
ATOM  45423  N6  ADE  1220     259.138 127.288 -15.420  1.00 43.78      A16S
ATOM  45424  C5  ADE  1220     257.054 128.340 -16.033  1.00 43.78      A16S
ATOM  45425  N7  ADE  1220     256.091 127.354 -15.865  1.00 43.78      A16S
ATOM  45426  C8  ADE  1220     254.976 127.945 -16.224  1.00 43.78      A16S
ATOM  45427  C2' ADE  1220     253.621 130.027 -18.454  1.00 54.97      A16S
ATOM  45428  O2' ADE  1220     254.496 130.626 -19.386  1.00 54.97      A16S
ATOM  45429  C3' ADE  1220     252.267 130.726 -18.361  1.00 54.97      A16S
ATOM  45430  O3' ADE  1220     252.450 132.125 -18.542  1.00 54.97      A16S
ATOM  45431  P   URI  1221     251.393 132.956 -19.410  1.00 59.53      A16S
ATOM  45432  O1P URI  1221     250.647 131.962 -20.230  1.00 56.17      A16S
ATOM  45433  O2P URI  1221     252.085 134.081 -20.077  1.00 56.17      A16S
ATOM  45434  O5' URI  1221     250.379 133.536 -18.325  1.00 59.53      A16S
ATOM  45435  C5' URI  1221     250.717 134.676 -17.507  1.00 59.53      A16S
ATOM  45436  C4' URI  1221     249.494 135.154 -16.755  1.00 59.53      A16S
ATOM  45437  O4' URI  1221     248.511 135.659 -17.699  1.00 59.53      A16S
ATOM  45438  C1' URI  1221     247.294 134.974 -17.516  1.00 59.53      A16S
ATOM  45439  N1  URI  1221     246.583 134.922 -18.802  1.00 56.17      A16S
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ATOM	45440	C6	URI	1221	246.993	134.109	-19.827	1.00	56.17	A16S	ATOM	45493	O3'	CYT	1223	253.250	129.282	-5.371	1.00 57.35	A16S
ATOM	45441	C2	URI	1221	245.469	135.740	-18.948	1.00	56.17	A16S	ATOM	45494	P	CYT	1224	253.387	130.417	-4.248	1.00 65.01	A16S
ATOM	45442	O2	URI	1221	245.051	136.468	-18.064	1.00	56.17	A16S	ATOM	45495	O1P	CYT	1224	252.863	129.844	-2.986	1.00 47.11	A16S
ATOM	45443	N3	URI	1221	244.855	135.672	-20.168	1.00	56.17	A16S	ATOM	45496	O2P	CYT	1224	252.828	131.688	-4.771	1.00 47.11	A16S
ATOM	45444	C4	URI	1221	245.219	134.886	-21.231	1.00	56.17	A16S	ATOM	45497	O5'	CYT	1224	254.964	130.560	-4.084	1.00 65.01	A16S
ATOM	45445	O4	URI	1221	244.571	134.954	-22.275	1.00	56.17	A16S	ATOM	45498	C5'	CYT	1224	255.757	129.441	-3.599	1.00 65.01	A16S
ATOM	45446	C5	URI	1221	246.365	134.062	-21.002	1.00	56.17	A16S	ATOM	45499	C4'	CYT	1224	257.238	129.781	-3.594	1.00 65.01	A16S
ATOM	45447	C2'	URI	1221	247.668	133.638	-16.875	1.00	59.53	A16S	ATOM	45500	O4'	CYT	1224	257.725	129.941	-4.952	1.00 65.01	A16S
ATOM	45448	O2'	URI	1221	246.568	133.068	-16.208	1.00	59.53	A16S	ATOM	45501	C1'	CYT	1224	258.689	130.976	-4.993	1.00 65.01	A16S
ATOM	45449	C3'	URI	1221	248.791	134.074	-15.940	1.00	59.53	A16S	ATOM	45502	N1	CYT	1224	258.173	132.050	-5.850	1.00 47.11	A16S
ATOM	45450	O3'	URI	1221	248.185	134.686	-14.804	1.00	59.53	A16S	ATOM	45503	C6	CYT	1224	256.829	132.259	-5.986	1.00 47.11	A16S
ATOM	45451	P	GUA	1222	248.957	134.733	-13.392	1.00	55.86	A16S	ATOM	45504	C2	CYT	1224	259.084	132.857	-6.532	1.00 47.11	A16S
ATOM	45452	O1P	GUA	1222	247.916	134.842	-12.334	1.00	65.91	A16S	ATOM	45505	O2	CYT	1224	260.305	132.662	-6.358	1.00 47.11	A16S
ATOM	45453	O2P	GUA	1222	250.014	135.767	-13.482	1.00	65.91	A16S	ATOM	45506	N3	CYT	1224	258.619	133.832	-7.356	1.00 47.11	A16S
ATOM	45454	O5'	GUA	1222	249.638	133.301	-13.241	1.00	55.86	A16S	ATOM	45507	C4	CYT	1224	257.304	134.017	-7.491	1.00 47.11	A16S
ATOM	45455	C5'	GUA	1222	248.834	132.125	-13.134	1.00	55.86	A16S	ATOM	45508	N4	CYT	1224	256.885	134.975	-8.321	1.00 47.11	A16S
ATOM	45456	C4'	GUA	1222	249.689	130.943	-12.781	1.00	55.86	A16S	ATOM	45509	C5	CYT	1224	256.356	133.223	-6.784	1.00 47.11	A16S
ATOM	45457	O4'	GUA	1222	250.656	130.740	-13.833	1.00	55.86	A16S	ATOM	45510	C2'	CYT	1224	258.930	131.453	-3.564	1.00 65.01	A16S
ATOM	45458	C1'	GUA	1222	251.893	130.338	-13.275	1.00	55.86	A16S	ATOM	45511	O2'	CYT	1224	260.067	130.779	-3.056	1.00 65.01	A16S
ATOM	45459	N9	GUA	1222	252.897	131.348	-13.616	1.00	65.91	A16S	ATOM	45512	C3'	CYT	1224	257.611	131.076	-2.896	1.00 65.01	A16S
ATOM	45460	C4	GUA	1222	254.258	131.226	-13.469	1.00	65.91	A16S	ATOM	45513	O3'	CYT	1224	257.695	130.899	-1.492	1.00 65.01	A16S
ATOM	45461	N3	GUA	1222	254.903	130.164	-12.948	1.00	65.91	A16S	ATOM	45514	P	CYT	1225	257.420	132.149	-0.524	1.00 92.10	A16S
ATOM	45462	C2	GUA	1222	256.205	130.323	-12.968	1.00	65.91	A16S	ATOM	45515	O1P	CYT	1225	257.442	131.588	0.847	1.00 61.39	A16S
ATOM	45463	N2	GUA	1222	256.989	129.364	-12.482	1.00	65.91	A16S	ATOM	45516	O2P	CYT	1225	256.237	132.912	-0.993	1.00 61.39	A16S
ATOM	45464	N1	GUA	1222	256.833	131.435	-13.464	1.00	65.91	A16S	ATOM	45517	O5'	CYT	1225	258.701	133.068	-0.734	1.00 92.10	A16S
ATOM	45465	C6	GUA	1222	256.191	132.544	-14.004	1.00	65.91	A16S	ATOM	45518	C5'	CYT	1225	260.001	132.592	-0.347	1.00 92.10	A16S
ATOM	45466	O6	GUA	1222	256.856	133.495	-14.430	1.00	65.91	A16S	ATOM	45519	C4'	CYT	1225	261.054	133.630	-0.639	1.00 92.10	A16S
ATOM	45467	C5	GUA	1222	254.788	132.390	-13.981	1.00	65.91	A16S	ATOM	45520	O4'	CYT	1225	261.255	133.749	-2.067	1.00 92.10	A16S
ATOM	45468	N7	GUA	1222	253.783	133.242	-14.414	1.00	65.91	A16S	ATOM	45521	C1'	CYT	1225	261.601	135.082	-2.383	1.00 92.10	A16S
ATOM	45469	C8	GUA	1222	252.679	132.589	-14.172	1.00	65.91	A16S	ATOM	45522	N1	CYT	1225	260.616	135.608	-3.330	1.00 61.39	A16S
ATOM	45470	C2'	GUA	1222	251.681	130.154	-11.775	1.00	55.86	A16S	ATOM	45523	C6	CYT	1225	259.372	135.050	-3.437	1.00 61.39	A16S
ATOM	45471	O2'	GUA	1222	251.319	128.813	-11.533	1.00	55.86	A16S	ATOM	45524	C2	CYT	1225	260.972	136.714	-4.122	1.00 61.39	A16S
ATOM	45472	C3'	GUA	1222	250.516	131.095	-11.521	1.00	55.86	A16S	ATOM	45525	O2	CYT	1225	262.111	137.199	-4.007	1.00 61.39	A16S
ATOM	45473	O3'	GUA	1222	249.778	130.705	-10.384	1.00	55.86	A16S	ATOM	45526	N3	CYT	1225	260.068	137.225	-4.987	1.00 61.39	A16S
ATOM	45474	P	CYT	1223	250.088	131.395	-8.975	1.00	57.35	A16S	ATOM	45527	C4	CYT	1225	258.857	136.673	-5.085	1.00 61.39	A16S
ATOM	45475	O1P	CYT	1223	248.992	131.049	-8.033	1.00	53.54	A16S	ATOM	45528	N4	CYT	1225	258.002	137.207	-5.959	1.00 61.39	A16S
ATOM	45476	O2P	CYT	1223	250.377	132.820	-9.279	1.00	53.54	A16S	ATOM	45529	C5	CYT	1225	258.469	135.546	-4.292	1.00 61.39	A16S
ATOM	45477	O5'	CYT	1223	251.409	130.666	-8.470	1.00	57.35	A16S	ATOM	45530	C2'	CYT	1225	261.624	135.891	-1.086	1.00 92.10	A16S
ATOM	45478	C5'	CYT	1223	251.346	129.322	-7.985	1.00	57.35	A16S	ATOM	45531	O2'	CYT	1225	262.958	136.006	-0.638	1.00 92.10	A16S
ATOM	45479	C4'	CYT	1223	252.731	128.794	-7.698	1.00	57.35	A16S	ATOM	45532	C3'	CYT	1225	260.743	135.042	-0.178	1.00 92.10	A16S
ATOM	45480	O4'	CYT	1223	253.513	128.770	-8.919	1.00	57.35	A16S	ATOM	45533	O3'	CYT	1225	261.038	135.216	1.200	1.00 92.10	A16S
ATOM	45481	C1'	CYT	1223	254.872	129.023	-8.620	1.00	57.35	A16S	ATOM	45534	P	ADE	1226	260.267	136.346	2.039	1.00 94.40	A16S
ATOM	45482	N1	CYT	1223	255.267	130.266	-9.296	1.00	53.54	A16S	ATOM	45535	O1P	ADE	1226	260.772	136.226	3.434	1.00 78.53	A16S
ATOM	45483	C6	CYT	1223	254.325	131.097	-9.836	1.00	53.54	A16S	ATOM	45536	O2P	ADE	1226	258.808	136.253	1.775	1.00 78.53	A16S
ATOM	45484	C2	CYT	1223	256.628	130.596	-9.369	1.00	53.54	A16S	ATOM	45537	O5'	ADE	1226	260.800	137.701	1.398	1.00 94.40	A16S
ATOM	45485	O2	CYT	1223	257.468	129.820	-8.872	1.00	53.54	A16S	ATOM	45538	C5'	ADE	1226	262.186	138.031	1.486	1.00 94.40	A16S
ATOM	45486	N3	CYT	1223	256.990	131.750	-9.971	1.00	53.54	A16S	ATOM	45539	C4'	ADE	1226	262.501	139.229	0.638	1.00 94.40	A16S
ATOM	45487	C4	CYT	1223	256.058	132.559	-10.480	1.00	53.54	A16S	ATOM	45540	O4'	ADE	1226	262.222	138.934	-0.751	1.00 94.40	A16S
ATOM	45488	N4	CYT	1223	256.456	133.694	-11.042	1.00	53.54	A16S	ATOM	45541	C1'	ADE	1226	261.937	140.140	-1.436	1.00 94.40	A16S
ATOM	45489	C5	CYT	1223	254.675	132.240	-10.429	1.00	53.54	A16S	ATOM	45542	N9	ADE	1226	260.675	140.002	-2.157	1.00 78.53	A16S
ATOM	45490	C2'	CYT	1223	254.997	129.141	-7.104	1.00	57.35	A16S	ATOM	45543	C4	ADE	1226	260.274	140.822	-3.181	1.00 78.53	A16S
ATOM	45491	O2'	CYT	1223	255.351	127.867	-6.596	1.00	57.35	A16S	ATOM	45544	N3	ADE	1226	260.957	141.849	-3.715	1.00 78.53	A16S
ATOM	45492	C3'	CYT	1223	253.588	129.584	-6.721	1.00	57.35	A16S	ATOM	45545	C2	ADE	1226	260.248	142.438	-4.676	1.00 78.53	A16S

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ATOM  45546  N1  ADE  1226     259.026 142.143  -5.127  1.00 78.53      A16S
ATOM  45547  C6  ADE  1226     258.364 141.104  -4.565  1.00 78.53      A16S
ATOM  45548  N6  ADE  1226     257.138 140.815  -5.004  1.00 78.53      A16S
ATOM  45549  C5  ADE  1226     259.014 140.390  -3.538  1.00 78.53      A16S
ATOM  45550  N7  ADE  1226     258.633 139.298  -2.768  1.00 78.53      A16S
ATOM  45551  C8  ADE  1226     259.654 139.105  -1.970  1.00 78.53      A16S
ATOM  45552  C2' ADE  1226     261.887 141.268  -0.404  1.00 94.40      A16S
ATOM  45553  O2' ADE  1226     263.089 142.007  -0.474  1.00 94.40      A16S
ATOM  45554  C3' ADE  1226     261.709 140.496   0.902  1.00 94.40      A16S
ATOM  45555  O3' ADE  1226     262.199 141.207   2.034  1.00 94.40      A16S
ATOM  45556  P   CYT  1227     261.189 142.105   2.909  1.00 92.78      A16S
ATOM  45557  O1P CYT  1227     261.916 142.489   4.145  1.00 96.73      A16S
ATOM  45558  O2P CYT  1227     259.893 141.394   3.023  1.00 96.73      A16S
ATOM  45559  O5' CYT  1227     260.968 143.407   2.012  1.00 92.78      A16S
ATOM  45560  C5' CYT  1227     262.078 144.263   1.684  1.00 92.78      A16S
ATOM  45561  C4' CYT  1227     261.706 145.237   0.587  1.00 92.78      A16S
ATOM  45562  O4' CYT  1227     261.479 144.528  -0.659  1.00 92.78      A16S
ATOM  45563  C1' CYT  1227     260.477 145.200  -1.417  1.00 92.78      A16S
ATOM  45564  N1  CYT  1227     259.314 144.298  -1.592  1.00 96.73      A16S
ATOM  45565  C6  CYT  1227     259.063 143.286  -0.704  1.00 96.73      A16S
ATOM  45566  C2  CYT  1227     258.455 144.506  -2.690  1.00 96.73      A16S
ATOM  45567  O2  CYT  1227     258.696 145.433  -3.486  1.00 96.73      A16S
ATOM  45568  N3  CYT  1227     257.387 143.696  -2.850  1.00 96.73      A16S
ATOM  45569  C4  CYT  1227     257.156 142.714  -1.976  1.00 96.73      A16S
ATOM  45570  N4  CYT  1227     256.091 141.939  -2.182  1.00 96.73      A16S
ATOM  45571  C5  CYT  1227     258.007 142.481  -0.856  1.00 96.73      A16S
ATOM  45572  C2' CYT  1227     260.077 146.450  -0.640  1.00 92.78      A16S
ATOM  45573  O2' CYT  1227     260.810 147.564  -1.111  1.00 92.78      A16S
ATOM  45574  C3' CYT  1227     260.430 146.034   0.781  1.00 92.78      A16S
ATOM  45575  O3' CYT  1227     260.557 147.126   1.662  1.00 92.78      A16S
ATOM  45576  P   URI  1228     259.328 147.477   2.635  1.00 94.73      A16S
ATOM  45577  O1P URI  1228     259.769 148.544   3.568  1.00 80.70      A16S
ATOM  45578  O2P URI  1228     258.796 146.190   3.180  1.00 80.70      A16S
ATOM  45579  O5' URI  1228     258.251 148.109   1.650  1.00 94.73      A16S
ATOM  45580  C5' URI  1228     258.550 149.309   0.922  1.00 94.73      A16S
ATOM  45581  C4' URI  1228     257.488 149.568  -0.112  1.00 94.73      A16S
ATOM  45582  O4' URI  1228     257.513 148.501  -1.096  1.00 94.73      A16S
ATOM  45583  C1' URI  1228     256.189 148.206  -1.517  1.00 94.73      A16S
ATOM  45584  N1  URI  1228     255.842 146.852  -1.054  1.00 80.70      A16S
ATOM  45585  C6  URI  1228     256.462 146.292   0.045  1.00 80.70      A16S
ATOM  45586  C2  URI  1228     254.850 146.168  -1.733  1.00 80.70      A16S
ATOM  45587  O2  URI  1228     254.302 146.607  -2.729  1.00 80.70      A16S
ATOM  45588  N3  URI  1228     254.523 144.946  -1.197  1.00 80.70      A16S
ATOM  45589  C4  URI  1228     255.082 144.347  -0.082  1.00 80.70      A16S
ATOM  45590  O4  URI  1228     254.623 143.281   0.331  1.00 80.70      A16S
ATOM  45591  C5  URI  1228     256.125 145.099   0.538  1.00 80.70      A16S
ATOM  45592  C2' URI  1228     255.267 149.228  -0.855  1.00 94.73      A16S
ATOM  45593  O2' URI  1228     255.081 150.332  -1.722  1.00 94.73      A16S
ATOM  45594  C3' URI  1228     256.058 149.568   0.401  1.00 94.73      A16S
ATOM  45595  O3' URI  1228     255.673 150.795   0.995  1.00 94.73      A16S
ATOM  45596  P   ADE  1229     254.421 150.823   2.002  1.00110.03      A16S
ATOM  45597  O1P ADE  1229     254.399 152.183   2.598  1.00 85.12      A16S
ATOM  45598  O2P ADE  1229     254.476 149.626   2.893  1.00 85.12      A16S
ATOM  45599  O5' ADE  1229     253.168 150.693   1.026  1.00110.03      A16S
ATOM  45600  C5' ADE  1229     253.024 151.614  -0.072  1.00110.03      A16S
ATOM  45601  C4' ADE  1229     251.668 151.490  -0.731  1.00110.03      A16S
ATOM  45602  O4' ADE  1229     251.602 150.367  -1.646  1.00110.03      A16S
ATOM  45603  C1' ADE  1229     250.243 150.011  -1.842  1.00110.03      A16S
ATOM  45604  N9  ADE  1229     250.064 148.578  -1.587  1.00 85.12      A16S
ATOM  45605  C4  ADE  1229     249.108 147.772  -2.169  1.00 85.12      A16S
ATOM  45606  N3  ADE  1229     248.191 148.123  -3.091  1.00 85.12      A16S
ATOM  45607  C2  ADE  1229     247.429 147.081  -3.418  1.00 85.12      A16S
ATOM  45608  N1  ADE  1229     247.470 145.821  -2.963  1.00 85.12      A16S
ATOM  45609  C6  ADE  1229     248.398 145.497  -2.033  1.00 85.12      A16S
ATOM  45610  N6  ADE  1229     248.431 144.238  -1.571  1.00 85.12      A16S
ATOM  45611  C5  ADE  1229     249.278 146.517  -1.605  1.00 85.12      A16S
ATOM  45612  N7  ADE  1229     250.329 146.525  -0.697  1.00 85.12      A16S
ATOM  45613  C8  ADE  1229     250.763 147.765  -0.726  1.00 85.12      A16S
ATOM  45614  C2' ADE  1229     249.402 150.869  -0.891  1.00110.03      A16S
ATOM  45615  O2' ADE  1229     248.867 151.972  -1.594  1.00110.03      A16S
ATOM  45616  C3' ADE  1229     250.434 151.325   0.133  1.00110.03      A16S
ATOM  45617  O3' ADE  1229     250.026 152.541   0.735  1.00110.03      A16S
ATOM  45618  P   CYT  1230     248.764 152.545   1.731  1.00 87.45      A16S
ATOM  45619  O1P CYT  1230     248.732 153.834   2.452  1.00 58.04      A16S
ATOM  45620  O2P CYT  1230     248.736 151.274   2.506  1.00 58.04      A16S
ATOM  45621  O5' CYT  1230     247.519 152.577   0.746  1.00 87.45      A16S
ATOM  45622  C5' CYT  1230     246.215 152.328   1.252  1.00 87.45      A16S
ATOM  45623  C4' CYT  1230     245.207 152.287   0.138  1.00 87.45      A16S
ATOM  45624  O4' CYT  1230     245.699 151.475  -0.960  1.00 87.45      A16S
ATOM  45625  C1' CYT  1230     244.705 150.540  -1.346  1.00 87.45      A16S
ATOM  45626  N1  CYT  1230     245.157 149.208  -0.881  1.00 58.04      A16S
ATOM  45627  C6  CYT  1230     246.147 149.106   0.062  1.00 58.04      A16S
ATOM  45628  C2  CYT  1230     244.565 148.045  -1.411  1.00 58.04      A16S
ATOM  45629  O2  CYT  1230     243.658 148.152  -2.274  1.00 58.04      A16S
ATOM  45630  N3  CYT  1230     245.000 146.836  -0.967  1.00 58.04      A16S
ATOM  45631  C4  CYT  1230     245.972 146.764  -0.049  1.00 58.04      A16S
ATOM  45632  N4  CYT  1230     246.372 145.561   0.352  1.00 58.04      A16S
ATOM  45633  C5  CYT  1230     246.577 147.920   0.496  1.00 58.04      A16S
ATOM  45634  C2' CYT  1230     243.399 150.981  -0.676  1.00 87.45      A16S
ATOM  45635  O2' CYT  1230     242.711 151.909  -1.489  1.00 87.45      A16S
ATOM  45636  C3' CYT  1230     243.927 151.618   0.597  1.00 87.45      A16S
ATOM  45637  O3' CYT  1230     243.063 152.547   1.219  1.00 87.45      A16S
ATOM  45638  P   ADE  1231     242.695 152.355   2.769  1.00 94.30      A16S
ATOM  45639  O1P ADE  1231     242.016 153.614   3.153  1.00 61.35      A16S
ATOM  45640  O2P ADE  1231     243.896 151.900   3.523  1.00 61.35      A16S
ATOM  45641  O5' ADE  1231     241.650 151.150   2.766  1.00 94.30      A16S
ATOM  45642  C5' ADE  1231     240.798 150.944   1.628  1.00 94.30      A16S
ATOM  45643  C4' ADE  1231     239.720 149.917   1.908  1.00 94.30      A16S
ATOM  45644  O4' ADE  1231     240.227 148.561   1.822  1.00 94.30      A16S
ATOM  45645  C1' ADE  1231     239.280 147.698   2.422  1.00 94.30      A16S
ATOM  45646  N9  ADE  1231     239.936 146.703   3.274  1.00 61.35      A16S
ATOM  45647  C4  ADE  1231     239.482 145.414   3.438  1.00 61.35      A16S
ATOM  45648  N3  ADE  1231     238.421 144.845   2.840  1.00 61.35      A16S
ATOM  45649  C2  ADE  1231     238.268 143.590   3.255  1.00 61.35      A16S
ATOM  45650  N1  ADE  1231     238.999 142.890   4.136  1.00 61.35      A16S
ATOM  45651  C6  ADE  1231     240.052 143.489   4.719  1.00 61.35      A16S
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ATOM	45652	N6	ADE	1231	240.759	142.789	5.604	1.00	61.35	A16S	ATOM	45705	O1P	GUA	1234	227.630	145.912	11.683	1.00	75.66	A16S
ATOM	45653	C5	ADE	1231	240.329	144.825	4.358	1.00	61.35	A16S	ATOM	45706	O2P	GUA	1234	229.902	147.062	12.082	1.00	75.66	A16S
ATOM	45654	N7	ADE	1231	241.316	145.717	4.750	1.00	61.35	A16S	ATOM	45707	O5'	GUA	1234	229.709	144.574	12.148	1.00	68.90	A16S
ATOM	45655	C8	ADE	1231	241.044	146.811	4.074	1.00	61.35	A16S	ATOM	45708	C5'	GUA	1234	230.298	144.524	13.453	1.00	68.90	A16S
ATOM	45656	C2'	ADE	1231	238.273	148.562	3.182	1.00	94.30	A16S	ATOM	45709	C4'	GUA	1234	231.144	143.287	13.563	1.00	68.90	A16S
ATOM	45657	O2'	ADE	1231	237.106	148.601	2.388	1.00	94.30	A16S	ATOM	45710	O4'	GUA	1234	232.267	143.404	12.657	1.00	68.90	A16S
ATOM	45658	C3'	ADE	1231	238.974	149.921	3.233	1.00	94.30	A16S	ATOM	45711	C1'	GUA	1234	233.400	142.747	13.212	1.00	68.90	A16S
ATOM	45659	O3'	ADE	1231	238.021	150.983	3.345	1.00	94.30	A16S	ATOM	45712	N9	GUA	1234	234.492	143.713	13.365	1.00	75.66	A16S
ATOM	45660	P	ADE	1232	237.437	151.394	4.801	1.00	80.67	A16S	ATOM	45713	C4	GUA	1234	235.733	143.462	13.916	1.00	75.66	A16S
ATOM	45661	O1P	ADE	1232	236.821	152.739	4.652	1.00	62.22	A16S	ATOM	45714	N3	GUA	1234	236.166	142.274	14.397	1.00	75.66	A16S
ATOM	45662	O2P	ADE	1232	238.448	151.156	5.867	1.00	62.22	A16S	ATOM	45715	C2	GUA	1234	237.393	142.353	14.880	1.00	75.66	A16S
ATOM	45663	O5'	ADE	1232	236.265	150.352	5.076	1.00	80.67	A16S	ATOM	45716	N2	GUA	1234	237.977	141.270	15.409	1.00	75.66	A16S
ATOM	45664	C5'	ADE	1232	235.123	150.280	4.208	1.00	80.67	A16S	ATOM	45717	N1	GUA	1234	238.138	143.500	14.886	1.00	75.66	A16S
ATOM	45665	C4'	ADE	1232	234.441	148.945	4.357	1.00	80.67	A16S	ATOM	45718	C6	GUA	1234	237.718	144.733	14.396	1.00	75.66	A16S
ATOM	45666	O4'	ADE	1232	235.394	147.885	4.101	1.00	80.67	A16S	ATOM	45719	O6	GUA	1234	238.473	145.709	14.457	1.00	75.66	A16S
ATOM	45667	C1'	ADE	1232	235.080	146.758	4.888	1.00	80.67	A16S	ATOM	45720	C5	GUA	1234	236.402	144.667	13.875	1.00	75.66	A16S
ATOM	45668	N9	ADE	1232	236.263	146.376	5.662	1.00	62.22	A16S	ATOM	45721	N7	GUA	1234	235.613	145.653	13.295	1.00	75.66	A16S
ATOM	45669	C4	ADE	1232	236.602	145.094	6.033	1.00	62.22	A16S	ATOM	45722	C8	GUA	1234	234.493	145.045	13.007	1.00	75.66	A16S
ATOM	45670	N3	ADE	1232	235.939	143.962	5.752	1.00	62.22	A16S	ATOM	45723	C2'	GUA	1234	232.969	142.137	14.547	1.00	68.90	A16S
ATOM	45671	C2	ADE	1232	236.559	142.909	6.284	1.00	62.22	A16S	ATOM	45724	O2'	GUA	1234	232.609	140.783	14.360	1.00	68.90	A16S
ATOM	45672	N1	ADE	1232	237.677	142.859	7.011	1.00	62.22	A16S	ATOM	45725	C3'	GUA	1234	231.780	143.013	14.911	1.00	68.90	A16S
ATOM	45673	C6	ADE	1232	238.318	144.010	7.281	1.00	62.22	A16S	ATOM	45726	O3'	GUA	1234	230.888	142.342	15.773	1.00	68.90	A16S
ATOM	45674	N6	ADE	1232	239.426	143.953	8.018	1.00	62.22	A16S	ATOM	45727	P	CYT	1235	230.652	142.906	17.254	1.00	78.24	A16S
ATOM	45675	C5	ADE	1232	237.769	145.204	6.766	1.00	62.22	A16S	ATOM	45728	O1P	CYT	1235	229.333	142.397	17.693	1.00	63.13	A16S
ATOM	45676	N7	ADE	1232	238.171	146.529	6.845	1.00	62.22	A16S	ATOM	45729	O2P	CYT	1235	230.904	144.375	17.216	1.00	63.13	A16S
ATOM	45677	C8	ADE	1232	237.249	147.182	6.174	1.00	62.22	A16S	ATOM	45730	O5'	CYT	1235	231.770	142.189	18.134	1.00	78.24	A16S
ATOM	45678	C2'	ADE	1232	233.851	147.110	5.727	1.00	80.67	A16S	ATOM	45731	C5'	CYT	1235	231.817	140.760	18.232	1.00	78.24	A16S
ATOM	45679	O2'	ADE	1232	232.712	146.634	5.044	1.00	80.67	A16S	ATOM	45732	C4'	CYT	1235	233.228	140.304	18.503	1.00	78.24	A16S
ATOM	45680	C3'	ADE	1232	233.896	148.632	5.733	1.00	80.67	A16S	ATOM	45733	O4'	CYT	1235	234.105	140.804	17.459	1.00	78.24	A16S
ATOM	45681	O3'	ADE	1232	232.608	149.216	5.879	1.00	80.67	A16S	ATOM	45734	C1'	CYT	1235	235.382	141.115	18.005	1.00	78.24	A16S
ATOM	45682	P	ADE	1233	232.122	149.735	7.325	1.00	71.74	A16S	ATOM	45735	N1	CYT	1235	235.663	142.550	17.787	1.00	63.13	A16S
ATOM	45683	O1P	ADE	1233	230.922	150.583	7.081	1.00	79.65	A16S	ATOM	45736	C6	CYT	1235	234.686	143.405	17.350	1.00	63.13	A16S
ATOM	45684	O2P	ADE	1233	233.281	150.304	8.055	1.00	79.65	A16S	ATOM	45737	C2	CYT	1235	236.960	143.027	18.022	1.00	63.13	A16S
ATOM	45685	O5'	ADE	1233	231.678	148.404	8.087	1.00	71.74	A16S	ATOM	45738	O2	CYT	1235	237.824	142.238	18.442	1.00	63.13	A16S
ATOM	45686	C5'	ADE	1233	230.632	147.566	7.553	1.00	71.74	A16S	ATOM	45739	N3	CYT	1235	237.236	144.337	17.786	1.00	63.13	A16S
ATOM	45687	C4'	ADE	1233	230.806	146.141	8.016	1.00	71.74	A16S	ATOM	45740	C4	CYT	1235	236.273	145.156	17.342	1.00	63.13	A16S
ATOM	45688	O4'	ADE	1233	232.108	145.658	7.609	1.00	71.74	A16S	ATOM	45741	N4	CYT	1235	236.586	146.434	17.108	1.00	63.13	A16S
ATOM	45689	C1'	ADE	1233	232.606	144.752	8.573	1.00	71.74	A16S	ATOM	45742	C5	CYT	1235	234.946	144.701	17.115	1.00	63.13	A16S
ATOM	45690	N9	ADE	1233	233.904	145.235	9.034	1.00	79.65	A16S	ATOM	45743	C2'	CYT	1235	235.348	140.750	19.483	1.00	78.24	A16S
ATOM	45691	C4	ADE	1233	234.880	144.460	9.612	1.00	79.65	A16S	ATOM	45744	O2'	CYT	1235	235.880	139.450	19.658	1.00	78.24	A16S
ATOM	45692	N3	ADE	1233	234.832	143.139	9.865	1.00	79.65	A16S	ATOM	45745	C3'	CYT	1235	233.857	140.836	19.776	1.00	78.24	A16S
ATOM	45693	C2	ADE	1233	235.969	142.725	10.425	1.00	79.65	A16S	ATOM	45746	O3'	CYT	1235	233.486	140.099	20.923	1.00	78.24	A16S
ATOM	45694	N1	ADE	1233	237.064	143.428	10.736	1.00	79.65	A16S	ATOM	45747	P	GUA	1236	233.330	140.870	22.321	1.00	101.17	A16S
ATOM	45695	C6	ADE	1233	237.078	144.753	10.466	1.00	79.65	A16S	ATOM	45748	O1P	GUA	1236	232.583	139.983	23.261	1.00	67.21	A16S
ATOM	45696	N6	ADE	1233	238.167	145.452	10.765	1.00	79.65	A16S	ATOM	45749	O2P	GUA	1236	232.798	142.229	21.993	1.00	67.21	A16S
ATOM	45697	C5	ADE	1233	235.932	145.316	9.876	1.00	79.65	A16S	ATOM	45750	O5'	GUA	1236	234.826	141.013	22.860	1.00	101.17	A16S
ATOM	45698	N7	ADE	1233	235.624	146.612	9.479	1.00	79.65	A16S	ATOM	45751	C5'	GUA	1236	235.568	139.856	23.306	1.00	101.17	A16S
ATOM	45699	C8	ADE	1233	234.412	146.512	8.990	1.00	79.65	A16S	ATOM	45752	C4'	GUA	1236	236.953	140.260	23.751	1.00	101.17	A16S
ATOM	45700	C2'	ADE	1233	231.574	144.633	9.692	1.00	71.74	A16S	ATOM	45753	O4'	GUA	1236	237.632	140.905	22.644	1.00	101.17	A16S
ATOM	45701	O2'	ADE	1233	230.825	143.448	9.499	1.00	71.74	A16S	ATOM	45754	C1'	GUA	1236	238.463	141.944	23.125	1.00	101.17	A16S
ATOM	45702	C3'	ADE	1233	230.773	145.921	9.514	1.00	71.74	A16S	ATOM	45755	N9	GUA	1236	238.055	143.189	22.481	1.00	67.21	A16S
ATOM	45703	O3'	ADE	1233	229.434	145.803	9.970	1.00	71.74	A16S	ATOM	45756	C4	GUA	1236	238.821	144.323	22.292	1.00	67.21	A16S
ATOM	45704	P	GUA	1234	229.117	145.924	11.542	1.00	68.90	A16S	ATOM	45757	N3	GUA	1236	240.100	144.502	22.695	1.00	67.21	A16S

ATOM	45758	C2	GUA	1236	240.560	145.708	22.368	1.00	67.21	A16S	ATOM	45811	O3'	URI	1238	241.029	134.321	30.997	1.00	193.28	A16S
ATOM	45759	N2	GUA	1236	241.814	146.066	22.700	1.00	67.21	A16S	ATOM	45812	P	GUA	1239	241.847	134.287	29.611	1.00	111.17	A16S
ATOM	45760	N1	GUA	1236	239.825	146.652	21.695	1.00	67.21	A16S	ATOM	45813	O1P	GUA	1239	241.353	133.065	28.916	1.00	104.21	A16S
ATOM	45761	C6	GUA	1236	238.513	146.488	21.270	1.00	67.21	A16S	ATOM	45814	O2P	GUA	1239	243.307	134.434	29.868	1.00	104.21	A16S
ATOM	45762	O6	GUA	1236	237.941	147.406	20.673	1.00	67.21	A16S	ATOM	45815	O5'	GUA	1239	241.309	135.558	28.805	1.00	111.17	A16S
ATOM	45763	C5	GUA	1236	238.005	145.205	21.617	1.00	67.21	A16S	ATOM	45816	C5'	GUA	1239	240.067	135.492	28.068	1.00	111.17	A16S
ATOM	45764	N7	GUA	1236	236.757	144.646	21.392	1.00	67.21	A16S	ATOM	45817	C4'	GUA	1239	239.922	136.679	27.138	1.00	111.17	A16S
ATOM	45765	C8	GUA	1236	236.831	143.457	21.924	1.00	67.21	A16S	ATOM	45818	O4'	GUA	1239	239.674	137.891	27.901	1.00	111.17	A16S
ATOM	45766	C2'	GUA	1236	238.362	141.952	24.649	1.00	101.17	A16S	ATOM	45819	C1'	GUA	1239	240.208	139.010	27.207	1.00	111.17	A16S
ATOM	45767	O2'	GUA	1236	239.441	141.198	25.160	1.00	101.17	A16S	ATOM	45820	N9	GUA	1239	241.222	139.662	28.039	1.00	104.21	A16S
ATOM	45768	C3'	GUA	1236	237.017	141.271	24.884	1.00	101.17	A16S	ATOM	45821	C4	GUA	1239	241.621	140.982	27.962	1.00	104.21	A16S
ATOM	45769	O3'	GUA	1236	236.959	140.625	26.157	1.00	101.17	A16S	ATOM	45822	N3	GUA	1239	241.113	141.920	27.132	1.00	104.21	A16S
ATOM	45770	P	ADE	1237	235.800	141.021	27.200	1.00	112.17	A16S	ATOM	45823	C2	GUA	1239	241.717	143.087	27.269	1.00	104.21	A16S
ATOM	45771	O1P	ADE	1237	234.632	140.164	26.898	1.00	119.27	A16S	ATOM	45824	N2	GUA	1239	241.332	144.130	26.524	1.00	104.21	A16S
ATOM	45772	O2P	ADE	1237	235.640	142.496	27.212	1.00	119.27	A16S	ATOM	45825	N1	GUA	1239	242.743	143.318	28.149	1.00	104.21	A16S
ATOM	45773	O5'	ADE	1237	236.368	140.568	28.618	1.00	112.17	A16S	ATOM	45826	C6	GUA	1239	243.286	142.371	29.013	1.00	104.21	A16S
ATOM	45774	C5'	ADE	1237	237.014	139.292	28.784	1.00	112.17	A16S	ATOM	45827	O6	GUA	1239	244.220	142.687	29.765	1.00	104.21	A16S
ATOM	45775	C4'	ADE	1237	237.740	139.233	30.113	1.00	112.17	A16S	ATOM	45828	C5	GUA	1239	242.641	141.110	28.879	1.00	104.21	A16S
ATOM	45776	O4'	ADE	1237	238.613	140.388	30.225	1.00	112.17	A16S	ATOM	45829	N7	GUA	1239	242.867	139.909	29.539	1.00	104.21	A16S
ATOM	45777	C1'	ADE	1237	238.702	140.795	31.577	1.00	112.17	A16S	ATOM	45830	C8	GUA	1239	241.999	139.083	29.018	1.00	104.21	A16S
ATOM	45778	N9	ADE	1237	238.363	142.215	31.662	1.00	119.27	A16S	ATOM	45831	C2'	GUA	1239	240.825	138.491	25.907	1.00	111.17	A16S
ATOM	45779	C4	ADE	1237	239.033	143.251	31.052	1.00	119.27	A16S	ATOM	45832	O2'	GUA	1239	239.895	138.627	24.855	1.00	111.17	A16S
ATOM	45780	N3	ADE	1237	240.104	143.174	30.242	1.00	119.27	A16S	ATOM	45833	C3'	GUA	1239	241.107	137.035	26.253	1.00	111.17	A16S
ATOM	45781	C2	ADE	1237	240.495	144.389	29.860	1.00	119.27	A16S	ATOM	45834	O3'	GUA	1239	241.218	136.229	25.087	1.00	111.17	A16S
ATOM	45782	N1	ADE	1237	239.981	145.580	30.170	1.00	119.27	A16S	ATOM	45835	P	CYT	1240	242.608	136.207	24.269	1.00	77.06	A16S
ATOM	45783	C6	ADE	1237	238.904	145.624	30.986	1.00	119.27	A16S	ATOM	45836	O1P	CYT	1240	242.524	135.139	23.243	1.00	101.02	A16S
ATOM	45784	N6	ADE	1237	238.389	146.813	31.310	1.00	119.27	A16S	ATOM	45837	O2P	CYT	1240	243.732	136.194	25.243	1.00	101.02	A16S
ATOM	45785	C5	ADE	1237	238.387	144.404	31.455	1.00	119.27	A16S	ATOM	45838	O5'	CYT	1240	242.626	137.616	23.529	1.00	77.06	A16S
ATOM	45786	N7	ADE	1237	237.316	144.104	32.285	1.00	119.27	A16S	ATOM	45839	C5'	CYT	1240	241.673	137.902	22.506	1.00	77.06	A16S
ATOM	45787	C8	ADE	1237	237.344	142.798	32.374	1.00	119.27	A16S	ATOM	45840	C4'	CYT	1240	241.973	139.228	21.859	1.00	77.06	A16S
ATOM	45788	C2'	ADE	1237	237.831	139.865	32.424	1.00	112.17	A16S	ATOM	45841	O4'	CYT	1240	241.696	140.306	22.786	1.00	77.06	A16S
ATOM	45789	O2'	ADE	1237	238.688	138.964	33.087	1.00	112.17	A16S	ATOM	45842	C1'	CYT	1240	242.577	141.387	22.530	1.00	77.06	A16S
ATOM	45790	C3'	ADE	1237	236.886	139.265	31.375	1.00	112.17	A16S	ATOM	45843	N1	CYT	1240	243.348	141.669	23.757	1.00	101.02	A16S
ATOM	45791	O3'	ADE	1237	236.314	137.956	31.613	1.00	112.17	A16S	ATOM	45844	C6	CYT	1240	243.785	140.651	24.561	1.00	101.02	A16S
ATOM	45792	P	URI	1238	236.677	137.103	32.940	1.00	193.28	A16S	ATOM	45845	C2	CYT	1240	243.647	143.003	24.080	1.00	101.02	A16S
ATOM	45793	O1P	URI	1238	235.812	135.895	32.902	1.00	201.09	A16S	ATOM	45846	O2	CYT	1240	243.227	143.914	23.349	1.00	101.02	A16S
ATOM	45794	O2P	URI	1238	236.650	137.980	34.140	1.00	201.09	A16S	ATOM	45847	N3	CYT	1240	244.387	143.263	25.177	1.00	101.02	A16S
ATOM	45795	O5'	URI	1238	238.173	136.613	32.676	1.00	193.28	A16S	ATOM	45848	C4	CYT	1240	244.825	142.260	25.939	1.00	101.02	A16S
ATOM	45796	C5'	URI	1238	238.624	136.371	31.332	1.00	193.28	A16S	ATOM	45849	N4	CYT	1240	245.577	142.565	26.997	1.00	101.02	A16S
ATOM	45797	C4'	URI	1238	240.117	136.570	31.213	1.00	193.28	A16S	ATOM	45850	C5	CYT	1240	244.520	140.899	25.648	1.00	101.02	A16S
ATOM	45798	O4'	URI	1238	240.520	137.788	31.894	1.00	193.28	A16S	ATOM	45851	C2'	CYT	1240	243.477	140.991	21.353	1.00	77.06	A16S
ATOM	45799	C1'	URI	1238	241.830	137.634	32.423	1.00	193.28	A16S	ATOM	45852	O2'	CYT	1240	242.969	141.557	20.157	1.00	77.06	A16S
ATOM	45800	N1	URI	1238	241.801	137.848	33.879	1.00	201.09	A16S	ATOM	45853	C3'	CYT	1240	243.402	139.467	21.401	1.00	77.06	A16S
ATOM	45801	C6	URI	1238	240.726	137.452	34.649	1.00	201.09	A16S	ATOM	45854	O3'	CYT	1240	243.660	138.867	20.140	1.00	77.06	A16S
ATOM	45802	C2	URI	1238	242.905	138.458	34.462	1.00	201.09	A16S	ATOM	45855	P	CYT	1241	245.094	138.212	19.852	1.00	110.54	A16S
ATOM	45803	O2	URI	1238	243.883	138.823	33.823	1.00	201.09	A16S	ATOM	45856	O1P	CYT	1241	245.023	137.529	18.539	1.00	104.40	A16S
ATOM	45804	N3	URI	1238	242.824	138.622	35.822	1.00	201.09	A16S	ATOM	45857	O2P	CYT	1241	245.503	137.445	21.061	1.00	104.40	A16S
ATOM	45805	C4	URI	1238	241.782	138.248	36.645	1.00	201.09	A16S	ATOM	45858	O5'	CYT	1241	246.027	139.486	19.676	1.00	110.54	A16S
ATOM	45806	O4	URI	1238	241.858	138.469	37.854	1.00	201.09	A16S	ATOM	45859	C5'	CYT	1241	247.404	139.473	20.085	1.00	110.54	A16S
ATOM	45807	C5	URI	1238	240.682	137.626	35.973	1.00	201.09	A16S	ATOM	45860	C4'	CYT	1241	247.742	140.769	20.782	1.00	110.54	A16S
ATOM	45808	C2'	URI	1238	242.328	136.240	32.051	1.00	193.28	A16S	ATOM	45861	O4'	CYT	1241	246.958	140.879	21.998	1.00	110.54	A16S
ATOM	45809	O2'	URI	1238	243.174	136.395	30.932	1.00	193.28	A16S	ATOM	45862	C1'	CYT	1241	247.726	141.506	23.011	1.00	110.54	A16S
ATOM	45810	C3'	URI	1238	241.009	135.499	31.814	1.00	193.28	A16S	ATOM	45863	N1	CYT	1241	247.854	140.573	24.153	1.00	104.40	A16S

ATOM	45864	C6	CYT	1241	247.592	139.237	24.001	1.00104.40	A16S	ATOM	45917	P	CYT	1244	260.374	145.910	19.090	1.00 99.83	A16S
ATOM	45865	C2	CYT	1241	248.242	141.077	25.407	1.00104.40	A16S	ATOM	45918	O1P	CYT	1244	261.423	146.707	18.402	1.00106.40	A16S
ATOM	45866	O2	CYT	1241	248.477	142.288	25.525	1.00104.40	A16S	ATOM	45919	O2P	CYT	1244	259.768	144.750	18.400	1.00106.40	A16S
ATOM	45867	N3	CYT	1241	248.346	140.229	26.457	1.00104.40	A16S	ATOM	45920	O5'	CYT	1244	260.942	145.393	20.487	1.00 99.83	A16S
ATOM	45868	C4	CYT	1241	248.076	138.931	26.298	1.00104.40	A16S	ATOM	45921	C5'	CYT	1244	261.851	146.201	21.261	1.00 99.83	A16S
ATOM	45869	N4	CYT	1241	248.180	138.133	27.367	1.00104.40	A16S	ATOM	45922	C4'	CYT	1244	262.383	145.417	22.438	1.00 99.83	A16S
ATOM	45870	C5	CYT	1241	247.686	138.391	25.036	1.00104.40	A16S	ATOM	45923	O4'	CYT	1244	261.312	145.145	23.377	1.00 99.83	A16S
ATOM	45871	C2'	CYT	1241	249.059	141.918	22.389	1.00110.54	A16S	ATOM	45924	C1'	CYT	1244	261.540	143.895	24.005	1.00 99.83	A16S
ATOM	45872	O2'	CYT	1241	248.931	143.255	21.944	1.00110.54	A16S	ATOM	45925	N1	CYT	1244	260.377	143.017	23.789	1.00106.40	A16S
ATOM	45873	C3'	CYT	1241	249.182	140.924	21.238	1.00110.54	A16S	ATOM	45926	C6	CYT	1244	259.527	143.206	22.733	1.00106.40	A16S
ATOM	45874	O3'	CYT	1241	249.976	141.412	20.168	1.00110.54	A16S	ATOM	45927	C2	CYT	1244	260.156	141.963	24.695	1.00106.40	A16S
ATOM	45875	P	ADE	1242	251.561	141.569	20.355	1.00 84.79	A16S	ATOM	45928	O2	CYT	1244	260.947	141.802	25.642	1.00106.40	A16S
ATOM	45876	O1P	ADE	1242	252.208	141.001	19.145	1.00105.61	A16S	ATOM	45929	N3	CYT	1244	259.096	141.148	24.513	1.00106.40	A16S
ATOM	45877	O2P	ADE	1242	251.934	141.049	21.696	1.00105.61	A16S	ATOM	45930	C4	CYT	1244	258.277	141.341	23.480	1.00106.40	A16S
ATOM	45878	O5'	ADE	1242	251.770	143.150	20.308	1.00 84.79	A16S	ATOM	45931	N4	CYT	1244	257.245	140.508	23.346	1.00106.40	A16S
ATOM	45879	C5'	ADE	1242	251.047	143.953	19.348	1.00 84.79	A16S	ATOM	45932	C5	CYT	1244	258.479	142.398	22.539	1.00106.40	A16S
ATOM	45880	C4'	ADE	1242	251.262	145.429	19.608	1.00 84.79	A16S	ATOM	45933	C2'	CYT	1244	262.828	143.301	23.435	1.00 99.83	A16S
ATOM	45881	O4'	ADE	1242	250.778	145.762	20.932	1.00 84.79	A16S	ATOM	45934	O2'	CYT	1244	263.895	143.548	24.324	1.00 99.83	A16S
ATOM	45882	C1'	ADE	1242	251.628	146.726	21.529	1.00 84.79	A16S	ATOM	45935	C3'	CYT	1244	262.961	144.049	22.117	1.00 99.83	A16S
ATOM	45883	N9	ADE	1242	252.202	146.134	22.741	1.00105.61	A16S	ATOM	45936	O3'	CYT	1244	264.311	144.123	21.692	1.00 99.83	A16S
ATOM	45884	C4	ADE	1242	253.063	146.735	23.629	1.00105.61	A16S	ATOM	45937	P	CYT	1245	264.927	142.929	20.811	1.00 79.37	A16S
ATOM	45885	N3	ADE	1242	253.561	147.983	23.569	1.00105.61	A16S	ATOM	45938	O1P	CYT	1245	266.293	143.331	20.379	1.00107.57	A16S
ATOM	45886	C2	ADE	1242	254.362	148.217	24.608	1.00105.61	A16S	ATOM	45939	O2P	CYT	1245	263.909	142.574	19.787	1.00107.57	A16S
ATOM	45887	N1	ADE	1242	254.695	147.407	25.624	1.00105.61	A16S	ATOM	45940	O5'	CYT	1245	265.058	141.713	21.837	1.00 79.37	A16S
ATOM	45888	C6	ADE	1242	254.177	146.160	25.654	1.00105.61	A16S	ATOM	45941	C5'	CYT	1245	266.015	141.757	22.904	1.00 79.37	A16S
ATOM	45889	N6	ADE	1242	254.504	145.351	26.666	1.00105.61	A16S	ATOM	45942	C4'	CYT	1245	265.786	140.626	23.874	1.00 79.37	A16S
ATOM	45890	C5	ADE	1242	253.315	145.788	24.608	1.00105.61	A16S	ATOM	45943	O4'	CYT	1245	264.432	140.688	24.390	1.00 79.37	A16S
ATOM	45891	N7	ADE	1242	252.633	144.611	24.340	1.00105.61	A16S	ATOM	45944	C1'	CYT	1245	263.983	139.376	24.698	1.00 79.37	A16S
ATOM	45892	C8	ADE	1242	251.990	144.866	23.229	1.00105.61	A16S	ATOM	45945	N1	CYT	1245	262.718	139.105	23.980	1.00107.57	A16S
ATOM	45893	C2'	ADE	1242	252.674	147.130	20.489	1.00 84.79	A16S	ATOM	45946	C6	CYT	1245	262.320	139.882	22.925	1.00107.57	A16S
ATOM	45894	O2'	ADE	1242	252.234	148.304	19.831	1.00 84.79	A16S	ATOM	45947	C2	CYT	1245	261.928	138.009	24.389	1.00107.57	A16S
ATOM	45895	C3'	ADE	1242	252.706	145.898	19.588	1.00 84.79	A16S	ATOM	45948	O2	CYT	1245	262.288	137.332	25.371	1.00107.57	A16S
ATOM	45896	O3'	ADE	1242	253.128	146.196	18.261	1.00 84.79	A16S	ATOM	45949	N3	CYT	1245	260.795	137.719	23.705	1.00107.57	A16S
ATOM	45897	P	CYT	1243	254.489	145.551	17.699	1.00114.52	A16S	ATOM	45950	C4	CYT	1245	260.432	138.471	22.664	1.00107.57	A16S
ATOM	45898	O1P	CYT	1243	254.807	146.224	16.407	1.00 87.31	A16S	ATOM	45951	N4	CYT	1245	259.324	138.132	22.006	1.00107.57	A16S
ATOM	45899	O2P	CYT	1243	254.361	144.070	17.747	1.00 87.31	A16S	ATOM	45952	C5	CYT	1245	261.196	139.603	22.246	1.00107.57	A16S
ATOM	45900	O5'	CYT	1243	255.583	145.960	18.783	1.00114.52	A16S	ATOM	45953	C2'	CYT	1245	265.097	138.396	24.319	1.00 79.37	A16S
ATOM	45901	C5'	CYT	1243	256.021	147.328	18.929	1.00114.52	A16S	ATOM	45954	O2'	CYT	1245	265.810	138.005	25.477	1.00 79.37	A16S
ATOM	45902	C4'	CYT	1243	256.912	147.460	20.143	1.00114.52	A16S	ATOM	45955	C3'	CYT	1245	265.914	139.218	23.326	1.00 79.37	A16S
ATOM	45903	O4'	CYT	1243	256.132	147.211	21.339	1.00114.52	A16S	ATOM	45956	O3'	CYT	1245	267.270	138.799	23.279	1.00 79.37	A16S
ATOM	45904	C1'	CYT	1243	256.929	146.532	22.294	1.00114.52	A16S	ATOM	45957	P	GUA	1246	267.732	137.711	22.185	1.00100.77	A16S
ATOM	45905	N1	CYT	1243	256.274	145.258	22.647	1.00 87.31	A16S	ATOM	45958	O1P	GUA	1246	269.225	137.648	22.214	1.00 90.02	A16S
ATOM	45906	C6	CYT	1243	255.321	144.704	21.836	1.00 87.31	A16S	ATOM	45959	O2P	GUA	1246	267.033	138.009	20.901	1.00 90.02	A16S
ATOM	45907	C2	CYT	1243	256.648	144.614	23.842	1.00 87.31	A16S	ATOM	45960	O5'	GUA	1246	267.176	136.333	22.762	1.00100.77	A16S
ATOM	45908	O2	CYT	1243	257.533	145.121	24.556	1.00 87.31	A16S	ATOM	45961	C5'	GUA	1246	267.865	135.661	23.826	1.00100.77	A16S
ATOM	45909	N3	CYT	1243	256.044	143.455	24.182	1.00 87.31	A16S	ATOM	45962	C4'	GUA	1246	267.221	134.333	24.113	1.00100.77	A16S
ATOM	45910	C4	CYT	1243	255.116	142.926	23.382	1.00 87.31	A16S	ATOM	45963	O4'	GUA	1246	265.903	134.552	24.677	1.00100.77	A16S
ATOM	45911	N4	CYT	1243	254.551	141.779	23.759	1.00 87.31	A16S	ATOM	45964	C1'	GUA	1246	265.020	133.527	24.243	1.00100.77	A16S
ATOM	45912	C5	CYT	1243	254.725	143.550	22.160	1.00 87.31	A16S	ATOM	45965	N9	GUA	1246	263.955	134.138	23.445	1.00 90.02	A16S
ATOM	45913	C2'	CYT	1243	258.332	146.349	21.709	1.00114.52	A16S	ATOM	45966	C4	GUA	1246	262.753	133.556	23.092	1.00 90.02	A16S
ATOM	45914	O2'	CYT	1243	259.186	147.356	22.212	1.00114.52	A16S	ATOM	45967	N3	GUA	1246	262.342	132.312	23.423	1.00 90.02	A16S
ATOM	45915	C3'	CYT	1243	258.067	146.468	20.212	1.00114.52	A16S	ATOM	45968	C2	GUA	1246	261.145	132.041	22.932	1.00 90.02	A16S
ATOM	45916	O3'	CYT	1243	259.207	146.938	19.496	1.00114.52	A16S	ATOM	45969	N2	GUA	1246	260.592	130.842	23.155	1.00 90.02	A16S

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ATOM  45970  N1  GUA  1246     260.405 132.923  22.184  1.00 90.02      A16S
ATOM  45971  C6  GUA  1246     260.804 134.210  21.835  1.00 90.02      A16S
ATOM  45972  O6  GUA  1246     260.054 134.930  21.164  1.00 90.02      A16S
ATOM  45973  C5  GUA  1246     262.092 134.510  22.343  1.00 90.02      A16S
ATOM  45974  N7  GUA  1246     262.860 135.661  22.220  1.00 90.02      A16S
ATOM  45975  C8  GUA  1246     263.951 135.397  22.888  1.00 90.02      A16S
ATOM  45976  C2' GUA  1246     265.846 132.539  23.419  1.00100.77      A16S
ATOM  45977  O2' GUA  1246     266.306 131.492  24.254  1.00100.77      A16S
ATOM  45978  C3' GUA  1246     266.967 133.437  22.914  1.00100.77      A16S
ATOM  45979  O3' GUA  1246     268.110 132.717  22.483  1.00100.77      A16S
ATOM  45980  P   GUA  1247     268.366 132.519  20.903  1.00115.92      A16S
ATOM  45981  O1P GUA  1247     269.643 131.776  20.751  1.00 84.35      A16S
ATOM  45982  O2P GUA  1247     268.193 133.833  20.221  1.00 84.35      A16S
ATOM  45983  O5' GUA  1247     267.187 131.554  20.432  1.00115.92      A16S
ATOM  45984  C5' GUA  1247     267.182 130.161  20.807  1.00115.92      A16S
ATOM  45985  C4' GUA  1247     265.949 129.462  20.272  1.00115.92      A16S
ATOM  45986  O4' GUA  1247     264.762 130.054  20.859  1.00115.92      A16S
ATOM  45987  C1' GUA  1247     263.686 129.961  19.943  1.00115.92      A16S
ATOM  45988  N9  GUA  1247     263.235 131.303  19.591  1.00 84.35      A16S
ATOM  45989  C4  GUA  1247     261.966 131.632  19.189  1.00 84.35      A16S
ATOM  45990  N3  GUA  1247     260.920 130.782  19.111  1.00 84.35      A16S
ATOM  45991  C2  GUA  1247     259.835 131.372  18.647  1.00 84.35      A16S
ATOM  45992  N2  GUA  1247     258.706 130.657  18.503  1.00 84.35      A16S
ATOM  45993  N1  GUA  1247     259.779 132.701  18.288  1.00 84.35      A16S
ATOM  45994  C6  GUA  1247     260.844 133.597  18.362  1.00 84.35      A16S
ATOM  45995  O6  GUA  1247     260.687 134.772  18.007  1.00 84.35      A16S
ATOM  45996  C5  GUA  1247     262.019 132.971  18.863  1.00 84.35      A16S
ATOM  45997  N7  GUA  1247     263.290 133.484  19.093  1.00 84.35      A16S
ATOM  45998  C8  GUA  1247     263.975 132.463  19.534  1.00 84.35      A16S
ATOM  45999  C2' GUA  1247     264.197 129.249  18.692  1.00115.92      A16S
ATOM  46000  O2' GUA  1247     263.892 127.872  18.778  1.00115.92      A16S
ATOM  46001  C3' GUA  1247     265.692 129.526  18.772  1.00115.92      A16S
ATOM  46002  O3' GUA  1247     266.426 128.555  18.040  1.00115.92      A16S
ATOM  46003  P   CYT  1248     267.233 128.996  16.719  1.00103.32      A16S
ATOM  46004  O1P CYT  1248     267.943 127.769  16.264  1.00 66.26      A16S
ATOM  46005  O2P CYT  1248     268.007 130.237  17.006  1.00 66.26      A16S
ATOM  46006  O5' CYT  1248     266.117 129.394  15.647  1.00103.32      A16S
ATOM  46007  C5' CYT  1248     266.394 130.384  14.614  1.00103.32      A16S
ATOM  46008  C4' CYT  1248     265.406 130.258  13.472  1.00103.32      A16S
ATOM  46009  O4' CYT  1248     265.557 128.957  12.859  1.00103.32      A16S
ATOM  46010  C1' CYT  1248     264.287 128.434  12.527  1.00103.32      A16S
ATOM  46011  N1  CYT  1248     264.123 127.170  13.266  1.00 66.26      A16S
ATOM  46012  C6  CYT  1248     264.436 127.090  14.596  1.00 66.26      A16S
ATOM  46013  C2  CYT  1248     263.674 126.034  12.578  1.00 66.26      A16S
ATOM  46014  O2  CYT  1248     263.342 126.140  11.379  1.00 66.26      A16S
ATOM  46015  N3  CYT  1248     263.609 124.850  13.234  1.00 66.26      A16S
ATOM  46016  C4  CYT  1248     263.956 124.779  14.520  1.00 66.26      A16S
ATOM  46017  N4  CYT  1248     263.912 123.587  15.111  1.00 66.26      A16S
ATOM  46018  C5  CYT  1248     264.372 125.927  15.253  1.00 66.26      A16S
ATOM  46019  C2' CYT  1248     263.237 129.506  12.819  1.00103.32      A16S
ATOM  46020  O2' CYT  1248     262.981 130.227  11.632  1.00103.32      A16S
ATOM  46021  C3' CYT  1248     263.942 130.352  13.871  1.00103.32      A16S
ATOM  46022  O3' CYT  1248     263.510 131.707  13.820  1.00103.32      A16S
ATOM  46023  P   ADE  1249     262.590 132.295  14.996  1.00 84.37      A16S
ATOM  46024  O1P ADE  1249     262.325 133.722  14.666  1.00 70.68      A16S
ATOM  46025  O2P ADE  1249     263.230 131.946  16.291  1.00 70.68      A16S
ATOM  46026  O5' ADE  1249     261.232 131.462  14.881  1.00 84.37      A16S
ATOM  46027  C5' ADE  1249     260.405 131.532  13.693  1.00 84.37      A16S
ATOM  46028  C4' ADE  1249     259.404 130.393  13.670  1.00 84.37      A16S
ATOM  46029  O4' ADE  1249     260.117 129.134  13.671  1.00 84.37      A16S
ATOM  46030  C1' ADE  1249     259.376 128.169  14.388  1.00 84.37      A16S
ATOM  46031  N9  ADE  1249     260.245 127.618  15.421  1.00 70.68      A16S
ATOM  46032  C4  ADE  1249     260.274 126.315  15.858  1.00 70.68      A16S
ATOM  46033  N3  ADE  1249     259.495 125.300  15.451  1.00 70.68      A16S
ATOM  46034  C2  ADE  1249     259.827 124.170  16.071  1.00 70.68      A16S
ATOM  46035  N1  ADE  1249     260.779 123.953  16.986  1.00 70.68      A16S
ATOM  46036  C6  ADE  1249     261.546 124.993  17.377  1.00 70.68      A16S
ATOM  46037  N6  ADE  1249     262.501 124.774  18.287  1.00 70.68      A16S
ATOM  46038  C5  ADE  1249     261.290 126.252  16.791  1.00 70.68      A16S
ATOM  46039  N7  ADE  1249     261.879 127.500  16.956  1.00 70.68      A16S
ATOM  46040  C8  ADE  1249     261.220 128.273  16.129  1.00 70.68      A16S
ATOM  46041  C2' ADE  1249     258.084 128.819  14.888  1.00 84.37      A16S
ATOM  46042  O2' ADE  1249     257.041 128.473  14.002  1.00 84.37      A16S
ATOM  46043  C3' ADE  1249     258.431 130.306  14.839  1.00 84.37      A16S
ATOM  46044  O3' ADE  1249     257.277 131.107  14.569  1.00 84.37      A16S
ATOM  46045  P   ADE  1250     256.408 131.714  15.784  1.00 61.73      A16S
ATOM  46046  O1P ADE  1250     255.565 132.807  15.218  1.00 84.97      A16S
ATOM  46047  O2P ADE  1250     257.320 132.016  16.911  1.00 84.97      A16S
ATOM  46048  O5' ADE  1250     255.463 130.509  16.238  1.00 61.73      A16S
ATOM  46049  C5' ADE  1250     254.306 130.124  15.455  1.00 61.73      A16S
ATOM  46050  C4' ADE  1250     253.785 128.783  15.917  1.00 61.73      A16S
ATOM  46051  O4' ADE  1250     254.859 127.819  15.826  1.00 61.73      A16S
ATOM  46052  C1' ADE  1250     254.794 126.919  16.912  1.00 61.73      A16S
ATOM  46053  N9  ADE  1250     256.049 127.016  17.650  1.00 84.97      A16S
ATOM  46054  C4  ADE  1250     256.757 125.967  18.177  1.00 84.97      A16S
ATOM  46055  N3  ADE  1250     256.450 124.661  18.103  1.00 84.97      A16S
ATOM  46056  C2  ADE  1250     257.362 123.932  18.732  1.00 84.97      A16S
ATOM  46057  N1  ADE  1250     258.462 124.327  19.384  1.00 84.97      A16S
ATOM  46058  C6  ADE  1250     258.740 125.648  19.440  1.00 84.97      A16S
ATOM  46059  N6  ADE  1250     259.838 126.047  20.093  1.00 84.97      A16S
ATOM  46060  C5  ADE  1250     257.850 126.528  18.804  1.00 84.97      A16S
ATOM  46061  N7  ADE  1250     257.839 127.910  18.667  1.00 84.97      A16S
ATOM  46062  C8  ADE  1250     256.756 128.148  17.974  1.00 84.97      A16S
ATOM  46063  C2' ADE  1250     253.579 127.278  17.768  1.00 61.73      A16S
ATOM  46064  O2' ADE  1250     252.521 126.374  17.515  1.00 61.73      A16S
ATOM  46065  C3' ADE  1250     253.327 128.733  17.366  1.00 61.73      A16S
ATOM  46066  O3' ADE  1250     251.949 129.081  17.466  1.00 61.73      A16S
ATOM  46067  P   CYT  1251     251.511 130.391  18.277  1.00 93.30      A16S
ATOM  46068  O1P CYT  1251     250.038 130.304  18.449  1.00 71.36      A16S
ATOM  46069  O2P CYT  1251     252.104 131.571  17.593  1.00 71.36      A16S
ATOM  46070  O5' CYT  1251     252.195 130.207  19.705  1.00 93.30      A16S
ATOM  46071  C5' CYT  1251     252.009 128.991  20.453  1.00 93.30      A16S
ATOM  46072  C4' CYT  1251     253.225 128.694  21.302  1.00 93.30      A16S
ATOM  46073  O4' CYT  1251     254.415 128.861  20.483  1.00 93.30      A16S
ATOM  46074  C1' CYT  1251     255.491 129.319  21.285  1.00 93.30      A16S
ATOM  46075  N1  CYT  1251     255.879 130.671  20.840  1.00 71.36      A16S
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ATOM	46076	C6	CYT	1251	254.990	131.490	20.197	1.00	71.36	A16S	ATOM	46129	C2'	GUA	1253	258.986	135.753	30.954	1.00112.02	A16S
ATOM	46077	C2	CYT	1251	257.180	131.120	21.114	1.00	71.36	A16S	ATOM	46130	O2'	GUA	1253	260.110	135.888	31.797	1.00112.02	A16S
ATOM	46078	O2	CYT	1251	257.977	130.348	21.680	1.00	71.36	A16S	ATOM	46131	C3'	GUA	1253	257.930	134.804	31.509	1.00112.02	A16S
ATOM	46079	N3	CYT	1251	257.536	132.382	20.755	1.00	71.36	A16S	ATOM	46132	O3'	GUA	1253	257.776	134.942	32.917	1.00112.02	A16S
ATOM	46080	C4	CYT	1251	256.656	133.175	20.137	1.00	71.36	A16S	ATOM	46133	P	GUA	1254	256.721	136.011	33.502	1.00115.36	A16S
ATOM	46081	N4	CYT	1251	257.051	134.409	19.800	1.00	71.36	A16S	ATOM	46134	O1P	GUA	1254	256.932	135.999	34.970	1.00 84.06	A16S
ATOM	46082	C5	CYT	1251	255.331	132.738	19.835	1.00	71.36	A16S	ATOM	46135	O2P	GUA	1254	255.367	135.738	32.961	1.00 84.06	A16S
ATOM	46083	C2'	CYT	1251	254.989	129.367	22.724	1.00	93.30	A16S	ATOM	46136	O5'	GUA	1254	257.203	137.410	32.903	1.00115.36	A16S
ATOM	46084	O2'	CYT	1251	255.267	128.130	23.355	1.00	93.30	A16S	ATOM	46137	C5'	GUA	1254	258.439	137.999	33.329	1.00115.36	A16S
ATOM	46085	C3'	CYT	1251	253.498	129.583	22.511	1.00	93.30	A16S	ATOM	46138	C4'	GUA	1254	258.739	139.258	32.548	1.00115.36	A16S
ATOM	46086	O3'	CYT	1251	252.754	129.228	23.671	1.00	93.30	A16S	ATOM	46139	O4'	GUA	1254	258.865	138.950	31.135	1.00115.36	A16S
ATOM	46087	P	GUA	1252	252.458	130.344	24.797	1.00	97.90	A16S	ATOM	46140	C1'	GUA	1254	258.542	140.104	30.374	1.00115.36	A16S
ATOM	46088	O1P	GUA	1252	251.424	129.764	25.687	1.00	75.30	A16S	ATOM	46141	N9	GUA	1254	257.471	139.796	29.431	1.00 84.06	A16S
ATOM	46089	O2P	GUA	1252	252.219	131.661	24.147	1.00	75.30	A16S	ATOM	46142	C4	GUA	1254	257.114	140.579	28.360	1.00 84.06	A16S
ATOM	46090	O5'	GUA	1252	253.823	130.457	25.615	1.00	97.90	A16S	ATOM	46143	N3	GUA	1254	257.709	141.736	27.994	1.00 84.06	A16S
ATOM	46091	C5'	GUA	1252	254.373	129.312	26.300	1.00	97.90	A16S	ATOM	46144	C2	GUA	1254	257.129	142.279	26.939	1.00 84.06	A16S
ATOM	46092	C4'	GUA	1252	255.780	129.598	26.783	1.00	97.90	A16S	ATOM	46145	N2	GUA	1254	257.588	143.432	26.452	1.00 84.06	A16S
ATOM	46093	O4'	GUA	1252	256.648	129.871	25.650	1.00	97.90	A16S	ATOM	46146	N1	GUA	1254	256.055	141.729	26.286	1.00 84.06	A16S
ATOM	46094	C1'	GUA	1252	257.624	130.835	26.010	1.00	97.90	A16S	ATOM	46147	C6	GUA	1254	255.429	140.536	26.638	1.00 84.06	A16S
ATOM	46095	N9	GUA	1252	257.384	132.046	25.233	1.00	75.30	A16S	ATOM	46148	O6	GUA	1254	254.470	140.124	25.971	1.00 84.06	A16S
ATOM	46096	C4	GUA	1252	258.226	133.126	25.119	1.00	75.30	A16S	ATOM	46149	C5	GUA	1254	256.037	139.944	27.783	1.00 84.06	A16S
ATOM	46097	N3	GUA	1252	259.439	133.253	25.699	1.00	75.30	A16S	ATOM	46150	N7	GUA	1254	255.730	138.775	28.469	1.00 84.06	A16S
ATOM	46098	C2	GUA	1252	260.002	134.421	25.419	1.00	75.30	A16S	ATOM	46151	C8	GUA	1254	256.609	138.724	29.434	1.00 84.06	A16S
ATOM	46099	N2	GUA	1252	261.212	134.725	25.929	1.00	75.30	A16S	ATOM	46152	C2'	GUA	1254	258.089	141.199	31.340	1.00115.36	A16S
ATOM	46100	N1	GUA	1252	259.419	135.380	24.625	1.00	75.30	A16S	ATOM	46153	O2'	GUA	1254	259.132	142.138	31.518	1.00115.36	A16S
ATOM	46101	C6	GUA	1252	258.170	135.270	24.023	1.00	75.30	A16S	ATOM	46154	C3'	GUA	1254	257.721	140.389	32.583	1.00115.36	A16S
ATOM	46102	O6	GUA	1252	257.730	136.202	23.339	1.00	75.30	A16S	ATOM	46155	O3'	GUA	1254	257.795	141.181	33.766	1.00115.36	A16S
ATOM	46103	C5	GUA	1252	257.557	134.028	24.319	1.00	75.30	A16S	ATOM	46156	P	GUA	1255	256.447	141.806	34.393	1.00101.78	A16S
ATOM	46104	N7	GUA	1252	256.326	133.523	23.931	1.00	75.30	A16S	ATOM	46157	O1P	GUA	1255	256.833	142.480	35.659	1.00107.67	A16S
ATOM	46105	C8	GUA	1252	256.268	132.346	24.491	1.00	75.30	A16S	ATOM	46158	O2P	GUA	1255	255.398	140.748	34.414	1.00107.67	A16S
ATOM	46106	C2'	GUA	1252	257.439	131.131	27.493	1.00	97.90	A16S	ATOM	46159	O5'	GUA	1255	256.007	142.934	33.358	1.00101.78	A16S
ATOM	46107	O2'	GUA	1252	258.292	130.279	28.234	1.00	97.90	A16S	ATOM	46160	C5'	GUA	1255	256.836	144.084	33.120	1.00101.78	A16S
ATOM	46108	C3'	GUA	1252	255.962	130.812	27.676	1.00	97.90	A16S	ATOM	46161	C4'	GUA	1255	256.421	144.765	31.839	1.00101.78	A16S
ATOM	46109	O3'	GUA	1252	255.629	130.554	29.028	1.00	97.90	A16S	ATOM	46162	O4'	GUA	1255	256.569	143.819	30.744	1.00101.78	A16S
ATOM	46110	P	GUA	1253	255.093	131.759	29.948	1.00	112.02	A16S	ATOM	46163	C1'	GUA	1255	255.494	143.970	29.825	1.00101.78	A16S
ATOM	46111	O1P	GUA	1253	254.717	131.132	31.245	1.00	70.99	A16S	ATOM	46164	N9	GUA	1255	254.694	142.742	29.849	1.00107.67	A16S
ATOM	46112	O2P	GUA	1253	254.084	132.560	29.193	1.00	70.99	A16S	ATOM	46165	C4	GUA	1255	253.668	142.406	28.987	1.00107.67	A16S
ATOM	46113	O5'	GUA	1253	256.372	132.697	30.135	1.00	112.02	A16S	ATOM	46166	N3	GUA	1255	253.233	143.142	27.940	1.00107.67	A16S
ATOM	46114	C5'	GUA	1253	257.462	132.314	30.998	1.00	112.02	A16S	ATOM	46167	C2	GUA	1255	252.221	142.562	27.316	1.00107.67	A16S
ATOM	46115	C4'	GUA	1253	258.470	133.438	31.108	1.00	112.02	A16S	ATOM	46168	N2	GUA	1255	251.669	143.154	26.257	1.00107.67	A16S
ATOM	46116	O4'	GUA	1253	259.090	133.665	29.815	1.00	112.02	A16S	ATOM	46169	N1	GUA	1255	251.676	141.357	27.688	1.00107.67	A16S
ATOM	46117	C1'	GUA	1253	259.397	135.041	29.666	1.00	112.02	A16S	ATOM	46170	C6	GUA	1255	252.102	140.581	28.762	1.00107.67	A16S
ATOM	46118	N9	GUA	1253	258.639	135.561	28.537	1.00	70.99	A16S	ATOM	46171	O6	GUA	1255	251.532	139.511	29.018	1.00107.67	A16S
ATOM	46119	C4	GUA	1253	258.907	136.714	27.831	1.00	70.99	A16S	ATOM	46172	C5	GUA	1255	253.194	141.188	29.440	1.00107.67	A16S
ATOM	46120	N3	GUA	1253	259.947	137.554	28.039	1.00	70.99	A16S	ATOM	46173	N7	GUA	1255	253.915	140.757	30.546	1.00107.67	A16S
ATOM	46121	C2	GUA	1253	259.914	138.593	27.212	1.00	70.99	A16S	ATOM	46174	C8	GUA	1255	254.792	141.704	30.751	1.00107.67	A16S
ATOM	46122	N2	GUA	1253	260.864	139.532	27.273	1.00	70.99	A16S	ATOM	46175	C2'	GUA	1255	254.676	145.183	30.277	1.00101.78	A16S
ATOM	46123	N1	GUA	1253	258.945	138.790	26.261	1.00	70.99	A16S	ATOM	46176	O2'	GUA	1255	255.125	146.357	29.620	1.00101.78	A16S
ATOM	46124	C6	GUA	1253	257.872	137.939	26.026	1.00	70.99	A16S	ATOM	46177	C3'	GUA	1255	254.961	145.198	31.774	1.00101.78	A16S
ATOM	46125	O6	GUA	1253	257.060	138.208	25.137	1.00	70.99	A16S	ATOM	46178	O3'	GUA	1255	254.721	146.471	32.374	1.00101.78	A16S
ATOM	46126	C5	GUA	1253	257.887	136.821	26.906	1.00	70.99	A16S	ATOM	46179	P	ADE	1256	253.205	146.948	32.663	1.00100.85	A16S
ATOM	46127	N7	GUA	1253	257.010	135.750	27.015	1.00	70.99	A16S	ATOM	46180	O1P	ADE	1256	253.207	147.729	33.929	1.00106.58	A16S
ATOM	46128	C8	GUA	1253	257.499	135.027	27.988	1.00	70.99	A16S	ATOM	46181	O2P	ADE	1256	252.289	145.779	32.526	1.00106.58	A16S

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ATOM  46182  O5' ADE  1256     252.908 147.955  31.467  1.00100.85      A16S
ATOM  46183  C5' ADE  1256     253.776 149.074  31.236  1.00100.85      A16S
ATOM  46184  C4' ADE  1256     253.375 149.805  29.984  1.00100.85      A16S
ATOM  46185  O4' ADE  1256     253.664 148.987  28.820  1.00100.85      A16S
ATOM  46186  C1' ADE  1256     252.684 149.221  27.817  1.00100.85      A16S
ATOM  46187  N9  ADE  1256     251.952 147.972  27.562  1.00106.58      A16S
ATOM  46188  C4  ADE  1256     251.124 147.728  26.488  1.00106.58      A16S
ATOM  46189  N3  ADE  1256     250.854 148.551  25.458  1.00106.58      A16S
ATOM  46190  C2  ADE  1256     249.987 147.987  24.617  1.00106.58      A16S
ATOM  46191  N1  ADE  1256     249.399 146.788  24.688  1.00106.58      A16S
ATOM  46192  C6  ADE  1256     249.687 145.989  25.740  1.00106.58      A16S
ATOM  46193  N6  ADE  1256     249.086 144.803  25.827  1.00106.58      A16S
ATOM  46194  C5  ADE  1256     250.602 146.464  26.695  1.00106.58      A16S
ATOM  46195  N7  ADE  1256     251.110 145.905  27.859  1.00106.58      A16S
ATOM  46196  C8  ADE  1256     251.908 146.831  28.332  1.00106.58      A16S
ATOM  46197  C2' ADE  1256     251.741 150.302  28.347  1.00100.85      A16S
ATOM  46198  O2' ADE  1256     252.158 151.575  27.893  1.00100.85      A16S
ATOM  46199  C3' ADE  1256     251.898 150.127  29.851  1.00100.85      A16S
ATOM  46200  O3' ADE  1256     251.499 151.269  30.587  1.00100.85      A16S
ATOM  46201  P   GUA  1257     250.018 151.322  31.211  1.00119.21      A16S
ATOM  46202  O1P GUA  1257     249.903 152.551  32.036  1.00 95.15      A16S
ATOM  46203  O2P GUA  1257     249.743 149.995  31.829  1.00 95.15      A16S
ATOM  46204  O5' GUA  1257     249.082 151.511  29.933  1.00119.21      A16S
ATOM  46205  C5' GUA  1257     249.269 152.638  29.044  1.00119.21      A16S
ATOM  46206  C4' GUA  1257     248.535 152.422  27.735  1.00119.21      A16S
ATOM  46207  O4' GUA  1257     249.054 151.236  27.077  1.00119.21      A16S
ATOM  46208  C1' GUA  1257     248.004 150.559  26.406  1.00119.21      A16S
ATOM  46209  N9  GUA  1257     247.807 149.264  27.053  1.00 95.15      A16S
ATOM  46210  C4  GUA  1257     247.116 148.188  26.540  1.00 95.15      A16S
ATOM  46211  N3  GUA  1257     246.487 148.143  25.345  1.00 95.15      A16S
ATOM  46212  C2  GUA  1257     245.918 146.972  25.132  1.00 95.15      A16S
ATOM  46213  N2  GUA  1257     245.244 146.758  23.997  1.00 95.15      A16S
ATOM  46214  N1  GUA  1257     245.966 145.923  26.016  1.00 95.15      A16S
ATOM  46215  C6  GUA  1257     246.608 145.944  27.250  1.00 95.15      A16S
ATOM  46216  O6  GUA  1257     246.597 144.939  27.970  1.00 95.15      A16S
ATOM  46217  C5  GUA  1257     247.216 147.201  27.498  1.00 95.15      A16S
ATOM  46218  N7  GUA  1257     247.940 147.649  28.594  1.00 95.15      A16S
ATOM  46219  C8  GUA  1257     248.268 148.874  28.288  1.00 95.15      A16S
ATOM  46220  C2' GUA  1257     246.755 151.425  26.531  1.00119.21      A16S
ATOM  46221  O2' GUA  1257     246.674 152.297  25.420  1.00119.21      A16S
ATOM  46222  C3' GUA  1257     247.038 152.170  27.825  1.00119.21      A16S
ATOM  46223  O3' GUA  1257     246.269 153.355  27.920  1.00119.21      A16S
ATOM  46224  P   CYT  1258     244.822 153.293  28.611  1.00166.28      A16S
ATOM  46225  O1P CYT  1258     244.239 154.656  28.588  1.00 81.79      A16S
ATOM  46226  O2P CYT  1258     244.946 152.558  29.903  1.00 81.79      A16S
ATOM  46227  O5' CYT  1258     243.969 152.383  27.625  1.00166.28      A16S
ATOM  46228  C5' CYT  1258     243.710 152.793  26.271  1.00166.28      A16S
ATOM  46229  C4' CYT  1258     242.800 151.796  25.605  1.00166.28      A16S
ATOM  46230  O4' CYT  1258     243.470 150.511  25.554  1.00166.28      A16S
ATOM  46231  C1' CYT  1258     242.525 149.476  25.745  1.00166.28      A16S
ATOM  46232  N1  CYT  1258     242.985 148.588  26.835  1.00 81.79      A16S
ATOM  46233  C6  CYT  1258     243.832 149.041  27.806  1.00 81.79      A16S
ATOM  46234  C2  CYT  1258     242.546 147.249  26.850  1.00 81.79      A16S
ATOM  46235  O2  CYT  1258     241.755 146.860  25.977  1.00 81.79      A16S
ATOM  46236  N3  CYT  1258     242.991 146.415  27.818  1.00 81.79      A16S
ATOM  46237  C4  CYT  1258     243.829 146.864  28.750  1.00 81.79      A16S
ATOM  46238  N4  CYT  1258     244.255 145.996  29.676  1.00 81.79      A16S
ATOM  46239  C5  CYT  1258     244.275 148.222  28.773  1.00 81.79      A16S
ATOM  46240  C2' CYT  1258     241.145 150.113  25.923  1.00166.28      A16S
ATOM  46241  O2' CYT  1258     240.476 150.076  24.679  1.00166.28      A16S
ATOM  46242  C3' CYT  1258     241.499 151.535  26.349  1.00166.28      A16S
ATOM  46243  O3' CYT  1258     240.505 152.482  25.953  1.00166.28      A16S
ATOM  46244  P   URI  1259     239.669 153.291  27.068  1.00147.04      A16S
ATOM  46245  O1P URI  1259     238.930 154.366  26.353  1.00156.43      A16S
ATOM  46246  O2P URI  1259     240.577 153.646  28.186  1.00156.43      A16S
ATOM  46247  O5' URI  1259     238.609 152.238  27.620  1.00147.04      A16S
ATOM  46248  C5' URI  1259     237.838 151.428  26.716  1.00147.04      A16S
ATOM  46249  C4' URI  1259     237.577 150.067  27.318  1.00147.04      A16S
ATOM  46250  O4' URI  1259     238.858 149.521  27.702  1.00147.04      A16S
ATOM  46251  C1' URI  1259     238.810 149.052  29.025  1.00147.04      A16S
ATOM  46252  N1  URI  1259     239.818 149.821  29.776  1.00156.43      A16S
ATOM  46253  C6  URI  1259     239.638 151.159  30.058  1.00156.43      A16S
ATOM  46254  C2  URI  1259     240.989 149.165  30.158  1.00156.43      A16S
ATOM  46255  O2  URI  1259     241.185 147.972  29.974  1.00156.43      A16S
ATOM  46256  N3  URI  1259     241.924 149.963  30.768  1.00156.43      A16S
ATOM  46257  C4  URI  1259     241.816 151.312  31.046  1.00156.43      A16S
ATOM  46258  O4  URI  1259     242.775 151.906  31.544  1.00156.43      A16S
ATOM  46259  C5  URI  1259     240.571 151.904  30.659  1.00156.43      A16S
ATOM  46260  C2' URI  1259     237.343 149.071  29.489  1.00147.04      A16S
ATOM  46261  O2' URI  1259     236.765 147.791  29.311  1.00147.04      A16S
ATOM  46262  C3' URI  1259     236.711 150.115  28.568  1.00147.04      A16S
ATOM  46263  O3' URI  1259     235.385 149.683  28.220  1.00147.04      A16S
ATOM  46264  P   ADE  1260     234.379 150.668  27.428  1.00134.33      A16S
ATOM  46265  O1P ADE  1260     233.055 149.992  27.439  1.00103.82      A16S
ATOM  46266  O2P ADE  1260     234.509 152.048  27.970  1.00103.82      A16S
ATOM  46267  O5' ADE  1260     234.883 150.669  25.915  1.00134.33      A16S
ATOM  46268  C5' ADE  1260     235.195 151.904  25.232  1.00134.33      A16S
ATOM  46269  C4' ADE  1260     236.046 151.625  24.015  1.00134.33      A16S
ATOM  46270  O4' ADE  1260     237.129 150.739  24.390  1.00134.33      A16S
ATOM  46271  C1' ADE  1260     237.403 149.826  23.350  1.00134.33      A16S
ATOM  46272  N9  ADE  1260     237.455 148.475  23.914  1.00103.82      A16S
ATOM  46273  C4  ADE  1260     236.442 147.552  24.015  1.00103.82      A16S
ATOM  46274  N3  ADE  1260     235.172 147.680  23.591  1.00103.82      A16S
ATOM  46275  C2  ADE  1260     234.466 146.581  23.877  1.00103.82      A16S
ATOM  46276  N1  ADE  1260     234.860 145.454  24.491  1.00103.82      A16S
ATOM  46277  C6  ADE  1260     236.148 145.358  24.900  1.00103.82      A16S
ATOM  46278  N6  ADE  1260     236.548 144.239  25.507  1.00103.82      A16S
ATOM  46279  C5  ADE  1260     236.995 146.456  24.657  1.00103.82      A16S
ATOM  46280  N7  ADE  1260     238.333 146.677  24.941  1.00103.82      A16S
ATOM  46281  C8  ADE  1260     238.556 147.880  24.477  1.00103.82      A16S
ATOM  46282  C2' ADE  1260     236.434 150.086  22.196  1.00134.33      A16S
ATOM  46283  O2' ADE  1260     237.162 150.708  21.173  1.00134.33      A16S
ATOM  46284  C3' ADE  1260     235.340 150.928  22.863  1.00134.33      A16S
ATOM  46285  O3' ADE  1260     234.646 151.876  22.009  1.00134.33      A16S
ATOM  46286  P   ADE  1261     235.340 153.289  21.594  1.00118.60      A16S
ATOM  46287  O1P ADE  1261     236.671 153.368  22.248  1.00 83.70      A16S
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ATOM  46288  O2P ADE  1261     234.346 154.369  21.838  1.00 83.70      A16S
ATOM  46289  O5' ADE  1261     235.568 153.224  20.011  1.00118.60      A16S
ATOM  46290  C5' ADE  1261     236.307 152.133  19.400  1.00118.60      A16S
ATOM  46291  C4' ADE  1261     237.395 152.657  18.488  1.00118.60      A16S
ATOM  46292  O4' ADE  1261     236.770 153.301  17.362  1.00118.60      A16S
ATOM  46293  C1' ADE  1261     237.499 154.448  17.002  1.00118.60      A16S
ATOM  46294  N9  ADE  1261     236.557 155.562  17.029  1.00 83.70      A16S
ATOM  46295  C4  ADE  1261     236.146 156.297  15.939  1.00 83.70      A16S
ATOM  46296  N3  ADE  1261     236.542 156.162  14.661  1.00 83.70      A16S
ATOM  46297  C2  ADE  1261     235.910 157.038  13.869  1.00 83.70      A16S
ATOM  46298  N1  ADE  1261     235.005 157.967  14.186  1.00 83.70      A16S
ATOM  46299  C6  ADE  1261     234.634 158.083  15.477  1.00 83.70      A16S
ATOM  46300  N6  ADE  1261     233.749 159.022  15.794  1.00 83.70      A16S
ATOM  46301  C5  ADE  1261     235.220 157.198  16.419  1.00 83.70      A16S
ATOM  46302  N7  ADE  1261     235.049 157.035  17.789  1.00 83.70      A16S
ATOM  46303  C8  ADE  1261     235.869 156.062  18.101  1.00 83.70      A16S
ATOM  46304  C2' ADE  1261     238.741 154.533  17.894  1.00118.60      A16S
ATOM  46305  O2' ADE  1261     239.825 153.952  17.205  1.00118.60      A16S
ATOM  46306  C3' ADE  1261     238.338 153.683  19.094  1.00118.60      A16S
ATOM  46307  O3' ADE  1261     239.481 153.015  19.631  1.00118.60      A16S
ATOM  46308  P   URI  1262     239.698 152.936  21.229  1.00201.09      A16S
ATOM  46309  O1P URI  1262     239.172 151.630  21.684  1.00143.10      A16S
ATOM  46310  O2P URI  1262     239.207 154.190  21.866  1.00143.10      A16S
ATOM  46311  O5' URI  1262     241.279 152.857  21.415  1.00201.09      A16S
ATOM  46312  C5' URI  1262     242.045 153.982  21.873  1.00201.09      A16S
ATOM  46313  C4' URI  1262     242.258 154.946  20.738  1.00201.09      A16S
ATOM  46314  O4' URI  1262     240.986 155.540  20.381  1.00201.09      A16S
ATOM  46315  C1' URI  1262     241.157 156.913  20.081  1.00201.09      A16S
ATOM  46316  N1  URI  1262     240.269 157.685  20.970  1.00143.10      A16S
ATOM  46317  C6  URI  1262     239.941 157.229  22.234  1.00143.10      A16S
ATOM  46318  C2  URI  1262     239.735 158.870  20.485  1.00143.10      A16S
ATOM  46319  O2  URI  1262     240.045 159.349  19.403  1.00143.10      A16S
ATOM  46320  N3  URI  1262     238.827 159.477  21.320  1.00143.10      A16S
ATOM  46321  C4  URI  1262     238.419 159.043  22.566  1.00143.10      A16S
ATOM  46322  O4  URI  1262     237.480 159.613  23.122  1.00143.10      A16S
ATOM  46323  C5  URI  1262     239.060 157.850  23.023  1.00143.10      A16S
ATOM  46324  C2' URI  1262     242.655 157.233  20.140  1.00201.09      A16S
ATOM  46325  O2' URI  1262     243.186 157.228  18.830  1.00201.09      A16S
ATOM  46326  C3' URI  1262     243.179 156.113  21.037  1.00201.09      A16S
ATOM  46327  O3' URI  1262     244.554 155.742  20.850  1.00201.09      A16S
ATOM  46328  P   CYT  1263     245.016 154.894  19.548  1.00 91.94      A16S
ATOM  46329  O1P CYT  1263     246.297 155.484  19.084  1.00143.96      A16S
ATOM  46330  O2P CYT  1263     243.901 154.733  18.583  1.00143.96      A16S
ATOM  46331  O5' CYT  1263     245.348 153.460  20.157  1.00 91.94      A16S
ATOM  46332  C5' CYT  1263     246.353 153.333  21.170  1.00 91.94      A16S
ATOM  46333  C4' CYT  1263     246.305 151.973  21.815  1.00 91.94      A16S
ATOM  46334  O4' CYT  1263     245.032 151.781  22.490  1.00 91.94      A16S
ATOM  46335  C1' CYT  1263     244.698 150.398  22.492  1.00 91.94      A16S
ATOM  46336  N1  CYT  1263     243.436 150.198  21.746  1.00143.96      A16S
ATOM  46337  C6  CYT  1263     243.152 150.938  20.630  1.00143.96      A16S
ATOM  46338  C2  CYT  1263     242.535 149.211  22.184  1.00143.96      A16S
ATOM  46339  O2  CYT  1263     242.813 148.545  23.192  1.00143.96      A16S
ATOM  46340  N3  CYT  1263     241.391 149.004  21.489  1.00143.96      A16S
ATOM  46341  C4  CYT  1263     241.133 149.725  20.395  1.00143.96      A16S
ATOM  46342  N4  CYT  1263     239.997 149.482  19.735  1.00143.96      A16S
ATOM  46343  C5  CYT  1263     242.028 150.730  19.926  1.00143.96      A16S
ATOM  46344  C2' CYT  1263     245.839 149.658  21.794  1.00 91.94      A16S
ATOM  46345  O2' CYT  1263     246.755 149.175  22.760  1.00 91.94      A16S
ATOM  46346  C3' CYT  1263     246.414 150.759  20.909  1.00 91.94      A16S
ATOM  46347  O3' CYT  1263     247.732 150.478  20.452  1.00 91.94      A16S
ATOM  46348  P   GUA  1264     247.933 149.819  18.993  1.00111.47      A16S
ATOM  46349  O1P GUA  1264     249.390 149.733  18.712  1.00 69.11      A16S
ATOM  46350  O2P GUA  1264     247.048 150.549  18.042  1.00 69.11      A16S
ATOM  46351  O5' GUA  1264     247.386 148.335  19.184  1.00111.47      A16S
ATOM  46352  C5' GUA  1264     248.010 147.452  20.131  1.00111.47      A16S
ATOM  46353  C4' GUA  1264     247.250 146.153  20.240  1.00111.47      A16S
ATOM  46354  O4' GUA  1264     245.979 146.362  20.914  1.00111.47      A16S
ATOM  46355  C1' GUA  1264     245.012 145.449  20.408  1.00111.47      A16S
ATOM  46356  N9  GUA  1264     243.974 146.197  19.699  1.00 69.11      A16S
ATOM  46357  C4  GUA  1264     242.709 145.749  19.391  1.00 69.11      A16S
ATOM  46358  N3  GUA  1264     242.184 144.550  19.735  1.00 69.11      A16S
ATOM  46359  C2  GUA  1264     240.951 144.403  19.274  1.00 69.11      A16S
ATOM  46360  N2  GUA  1264     240.279 143.276  19.531  1.00 69.11      A16S
ATOM  46361  N1  GUA  1264     240.287 145.353  18.529  1.00 69.11      A16S
ATOM  46362  C6  GUA  1264     240.810 146.591  18.160  1.00 69.11      A16S
ATOM  46363  O6  GUA  1264     240.134 147.375  17.479  1.00 69.11      A16S
ATOM  46364  C5  GUA  1264     242.128 146.766  18.655  1.00 69.11      A16S
ATOM  46365  N7  GUA  1264     242.998 147.840  18.525  1.00 69.11      A16S
ATOM  46366  C8  GUA  1264     244.073 147.463  19.165  1.00 69.11      A16S
ATOM  46367  C2' GUA  1264     245.733 144.549  19.409  1.00111.47      A16S
ATOM  46368  O2' GUA  1264     246.210 143.397  20.074  1.00111.47      A16S
ATOM  46369  C3' GUA  1264     246.857 145.465  18.944  1.00111.47      A16S
ATOM  46370  O3' GUA  1264     247.911 144.760  18.312  1.00111.47      A16S
ATOM  46371  P   CYT  1265     247.800 144.428  16.742  1.00 86.21      A16S
ATOM  46372  O1P CYT  1265     249.086 143.820  16.330  1.00 66.73      A16S
ATOM  46373  O2P CYT  1265     247.285 145.628  16.022  1.00 66.73      A16S
ATOM  46374  O5' CYT  1265     246.717 143.265  16.696  1.00 86.21      A16S
ATOM  46375  C5' CYT  1265     246.874 142.091  17.528  1.00 86.21      A16S
ATOM  46376  C4' CYT  1265     245.703 141.153  17.347  1.00 86.21      A16S
ATOM  46377  O4' CYT  1265     244.488 141.767  17.846  1.00 86.21      A16S
ATOM  46378  C1' CYT  1265     243.402 141.417  17.014  1.00 86.21      A16S
ATOM  46379  N1  CYT  1265     242.870 142.650  16.408  1.00 66.73      A16S
ATOM  46380  C6  CYT  1265     243.688 143.715  16.148  1.00 66.73      A16S
ATOM  46381  C2  CYT  1265     241.508 142.715  16.089  1.00 66.73      A16S
ATOM  46382  O2  CYT  1265     240.780 141.733  16.333  1.00 66.73      A16S
ATOM  46383  N3  CYT  1265     241.016 143.842  15.518  1.00 66.73      A16S
ATOM  46384  C4  CYT  1265     241.826 144.871  15.262  1.00 66.73      A16S
ATOM  46385  N4  CYT  1265     241.298 145.958  14.692  1.00 66.73      A16S
ATOM  46386  C5  CYT  1265     243.214 144.832  15.579  1.00 66.73      A16S
ATOM  46387  C2' CYT  1265     243.918 140.430  15.964  1.00 86.21      A16S
ATOM  46388  O2' CYT  1265     243.699 139.114  16.429  1.00 86.21      A16S
ATOM  46389  C3' CYT  1265     245.395 140.787  15.906  1.00 86.21      A16S
ATOM  46390  O3' CYT  1265     246.213 139.706  15.486  1.00 86.21      A16S
ATOM  46391  P   ADE  1266     246.920 139.756  14.045  1.00 97.97      A16S
ATOM  46392  O1P ADE  1266     245.832 139.829  13.046  1.00 67.78      A16S
ATOM  46393  O2P ADE  1266     247.923 138.655  13.978  1.00 67.78      A16S
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ATOM	46394	O5'	ADE	1266	247.679	141.154	13.996	1.00	97.97	A16S	ATOM	46447	N1	ADE	1268	240.547	142.686	0.663	1.00	75.39	A16S
ATOM	46395	C5'	ADE	1266	248.424	141.541	12.829	1.00	97.97	A16S	ATOM	46448	C6	ADE	1268	241.110	143.910	0.707	1.00	75.39	A16S
ATOM	46396	C4'	ADE	1266	247.768	142.724	12.167	1.00	97.97	A16S	ATOM	46449	N6	ADE	1268	240.577	144.884	-0.041	1.00	75.39	A16S
ATOM	46397	O4'	ADE	1266	246.433	142.348	11.778	1.00	97.97	A16S	ATOM	46450	C5	ADE	1268	242.236	144.082	1.540	1.00	75.39	A16S
ATOM	46398	C1'	ADE	1266	245.603	143.488	11.781	1.00	97.97	A16S	ATOM	46451	N7	ADE	1268	243.039	145.182	1.815	1.00	75.39	A16S
ATOM	46399	N9	ADE	1266	244.266	143.102	12.236	1.00	67.78	A16S	ATOM	46452	C8	ADE	1268	243.926	144.722	2.664	1.00	75.39	A16S
ATOM	46400	C4	ADE	1266	243.096	143.716	11.860	1.00	67.78	A16S	ATOM	46453	C2'	ADE	1268	245.709	141.817	3.245	1.00	110.93	A16S
ATOM	46401	N3	ADE	1266	242.960	144.790	11.062	1.00	67.78	A16S	ATOM	46454	O2'	ADE	1268	245.580	140.452	3.589	1.00	110.93	A16S
ATOM	46402	C2	ADE	1266	241.680	145.094	10.903	1.00	67.78	A16S	ATOM	46455	C3'	ADE	1268	246.932	142.478	3.891	1.00	110.93	A16S
ATOM	46403	N1	ADE	1266	240.598	144.491	11.404	1.00	67.78	A16S	ATOM	46456	O3'	ADE	1268	247.971	141.511	4.017	1.00	110.93	A16S
ATOM	46404	C6	ADE	1266	240.766	143.408	12.196	1.00	67.78	A16S	ATOM	46457	P	ADE	1269	248.877	141.129	2.738	1.00	78.84	A16S
ATOM	46405	N6	ADE	1266	239.681	142.790	12.674	1.00	67.78	A16S	ATOM	46458	O1P	ADE	1269	249.994	140.281	3.258	1.00	58.16	A16S
ATOM	46406	C5	ADE	1266	242.080	142.991	12.457	1.00	67.78	A16S	ATOM	46459	O2P	ADE	1269	249.173	142.355	1.939	1.00	58.16	A16S
ATOM	46407	N7	ADE	1266	242.598	141.952	13.219	1.00	67.78	A16S	ATOM	46460	O5'	ADE	1269	247.923	140.243	1.823	1.00	78.84	A16S
ATOM	46408	C8	ADE	1266	243.896	142.066	13.064	1.00	67.78	A16S	ATOM	46461	C5'	ADE	1269	248.042	138.809	1.763	1.00	78.84	A16S
ATOM	46409	C2'	ADE	1266	246.309	144.632	12.515	1.00	97.97	A16S	ATOM	46462	C4'	ADE	1269	247.140	138.272	0.681	1.00	78.84	A16S
ATOM	46410	O2'	ADE	1266	246.474	145.728	11.641	1.00	97.97	A16S	ATOM	46463	O4'	ADE	1269	245.810	138.816	0.906	1.00	78.84	A16S
ATOM	46411	C3'	ADE	1266	247.578	143.950	13.047	1.00	97.97	A16S	ATOM	46464	C1'	ADE	1269	245.179	139.067	-0.335	1.00	78.84	A16S
ATOM	46412	O3'	ADE	1266	248.786	144.739	13.121	1.00	97.97	A16S	ATOM	46465	N9	ADE	1269	244.937	140.503	-0.464	1.00	58.16	A16S
ATOM	46413	P	ADE	1267	249.443	145.411	11.792	1.00	113.81	A16S	ATOM	46466	C4	ADE	1269	243.847	141.089	-1.053	1.00	58.16	A16S
ATOM	46414	O1P	ADE	1267	250.844	145.725	12.177	1.00	118.08	A16S	ATOM	46467	N3	ADE	1269	242.776	140.473	-1.565	1.00	58.16	A16S
ATOM	46415	O2P	ADE	1267	248.586	146.496	11.246	1.00	118.08	A16S	ATOM	46468	C2	ADE	1269	241.942	141.356	-2.102	1.00	58.16	A16S
ATOM	46416	O5'	ADE	1267	249.535	144.245	10.707	1.00	113.81	A16S	ATOM	46469	N1	ADE	1269	242.047	142.687	-2.178	1.00	58.16	A16S
ATOM	46417	C5'	ADE	1267	250.768	144.014	10.013	1.00	113.81	A16S	ATOM	46470	C6	ADE	1269	243.133	143.277	-1.648	1.00	58.16	A16S
ATOM	46418	C4'	ADE	1267	250.564	143.183	8.764	1.00	113.81	A16S	ATOM	46471	N6	ADE	1269	243.231	144.605	-1.725	1.00	58.16	A16S
ATOM	46419	O4'	ADE	1267	250.103	141.849	9.119	1.00	113.81	A16S	ATOM	46472	C5	ADE	1269	244.095	142.448	-1.047	1.00	58.16	A16S
ATOM	46420	C1'	ADE	1267	249.332	141.311	8.053	1.00	113.81	A16S	ATOM	46473	N7	ADE	1269	245.302	142.719	-0.428	1.00	58.16	A16S
ATOM	46421	N9	ADE	1267	247.940	141.162	8.509	1.00	118.08	A16S	ATOM	46474	C8	ADE	1269	245.755	141.536	-0.090	1.00	58.16	A16S
ATOM	46422	C4	ADE	1267	247.295	140.010	8.890	1.00	118.08	A16S	ATOM	46475	C2'	ADE	1269	246.128	138.599	-1.437	1.00	78.84	A16S
ATOM	46423	N3	ADE	1267	247.802	138.768	8.953	1.00	118.08	A16S	ATOM	46476	O2'	ADE	1269	245.824	137.270	-1.807	1.00	78.84	A16S
ATOM	46424	C2	ADE	1267	246.875	137.907	9.372	1.00	118.08	A16S	ATOM	46477	C3'	ADE	1269	247.475	138.700	-0.743	1.00	78.84	A16S
ATOM	46425	N1	ADE	1267	245.597	138.129	9.708	1.00	118.08	A16S	ATOM	46478	O3'	ADE	1269	248.447	137.874	-1.383	1.00	78.84	A16S
ATOM	46426	C6	ADE	1267	245.120	139.388	9.629	1.00	118.08	A16S	ATOM	46479	P	ADE	1270	249.258	138.442	-2.656	1.00	86.08	A16S
ATOM	46427	N6	ADE	1267	243.847	139.615	9.958	1.00	118.08	A16S	ATOM	46480	O1P	ADE	1270	250.201	137.383	-3.095	1.00	83.76	A16S
ATOM	46428	C5	ADE	1267	245.997	140.391	9.202	1.00	118.08	A16S	ATOM	46481	O2P	ADE	1270	249.771	139.804	-2.335	1.00	83.76	A16S
ATOM	46429	N7	ADE	1267	245.826	141.752	9.024	1.00	118.08	A16S	ATOM	46482	O5'	ADE	1270	248.155	138.629	-3.793	1.00	86.08	A16S
ATOM	46430	C8	ADE	1267	246.999	142.164	8.624	1.00	118.08	A16S	ATOM	46483	C5'	ADE	1270	247.603	137.497	-4.488	1.00	86.08	A16S
ATOM	46431	C2'	ADE	1267	249.413	142.323	6.909	1.00	113.81	A16S	ATOM	46484	C4'	ADE	1270	246.436	137.920	-5.353	1.00	86.08	A16S
ATOM	46432	O2'	ADE	1267	250.525	142.025	6.086	1.00	113.81	A16S	ATOM	46485	O4'	ADE	1270	245.427	138.566	-4.532	1.00	86.08	A16S
ATOM	46433	C3'	ADE	1267	249.587	143.630	7.680	1.00	113.81	A16S	ATOM	46486	C1'	ADE	1270	244.723	139.523	-5.304	1.00	86.08	A16S
ATOM	46434	O3'	ADE	1267	250.043	144.751	6.910	1.00	113.81	A16S	ATOM	46487	N9	ADE	1270	244.922	140.853	-4.731	1.00	83.76	A16S
ATOM	46435	P	ADE	1268	249.440	145.069	5.429	1.00	110.93	A16S	ATOM	46488	C4	ADE	1270	244.161	141.957	-5.034	1.00	83.76	A16S
ATOM	46436	O1P	ADE	1268	250.048	144.061	4.530	1.00	75.39	A16S	ATOM	46489	N3	ADE	1270	243.076	142.004	-5.824	1.00	83.76	A16S
ATOM	46437	O2P	ADE	1268	249.707	146.511	5.187	1.00	75.39	A16S	ATOM	46490	C2	ADE	1270	242.631	143.251	-5.938	1.00	83.76	A16S
ATOM	46438	O5'	ADE	1268	247.837	144.910	5.408	1.00	110.93	A16S	ATOM	46491	N1	ADE	1270	243.110	144.373	-5.400	1.00	83.76	A16S
ATOM	46439	C5'	ADE	1268	247.139	143.888	6.153	1.00	110.93	A16S	ATOM	46492	C6	ADE	1270	244.198	144.294	-4.611	1.00	83.76	A16S
ATOM	46440	C4'	ADE	1268	246.389	142.906	5.248	1.00	110.93	A16S	ATOM	46493	N6	ADE	1270	244.678	145.418	-4.088	1.00	83.76	A16S
ATOM	46441	O4'	ADE	1268	245.047	143.349	4.948	1.00	110.93	A16S	ATOM	46494	C5	ADE	1270	244.763	143.021	-4.396	1.00	83.76	A16S
ATOM	46442	C1'	ADE	1268	244.540	142.563	3.888	1.00	110.93	A16S	ATOM	46495	N7	ADE	1270	245.852	142.590	-3.650	1.00	83.76	A16S
ATOM	46443	N9	ADE	1268	243.761	143.396	2.972	1.00	75.39	A16S	ATOM	46496	C8	ADE	1270	245.895	141.297	-3.872	1.00	83.76	A16S
ATOM	46444	C4	ADE	1268	242.674	142.974	2.239	1.00	75.39	A16S	ATOM	46497	C2'	ADE	1270	245.313	139.496	-6.712	1.00	86.08	A16S
ATOM	46445	N3	ADE	1268	242.138	141.741	2.208	1.00	75.39	A16S	ATOM	46498	O2'	ADE	1270	244.527	138.662	-7.545	1.00	86.08	A16S
ATOM	46446	C2	ADE	1268	241.086	141.706	1.396	1.00	75.39	A16S	ATOM	46499	C3'	ADE	1270	246.705	138.940	-6.448	1.00	86.08	A16S

ATOM	46500	O3'	ADE	1270	247.251	138.370	-7.627	1.00	86.08	A16S	ATOM	46553	O4'	URI	1273	257.434	147.669	-9.140	1.00	88.88	A16S
ATOM	46501	P	GUA	1271	248.517	139.065	-8.329	1.00	68.24	A16S	ATOM	46554	C1'	URI	1273	258.369	146.775	-8.555	1.00	88.88	A16S
ATOM	46502	O1P	GUA	1271	248.509	138.739	-9.777	1.00	87.58	A16S	ATOM	46555	N1	URI	1273	257.687	145.504	-8.270	1.00	90.83	A16S
ATOM	46503	O2P	GUA	1271	249.697	138.712	-7.505	1.00	87.58	A16S	ATOM	46556	C6	URI	1273	256.596	145.102	-9.013	1.00	90.83	A16S
ATOM	46504	O5'	GUA	1271	248.243	140.628	-8.199	1.00	68.24	A16S	ATOM	46557	C2	URI	1273	258.183	144.707	-7.239	1.00	90.83	A16S
ATOM	46505	C5'	GUA	1271	247.229	141.277	-8.987	1.00	68.24	A16S	ATOM	46558	O2	URI	1273	259.136	145.023	-6.542	1.00	90.83	A16S
ATOM	46506	C4'	GUA	1271	247.249	142.769	-8.736	1.00	68.24	A16S	ATOM	46559	N3	URI	1273	257.518	143.521	-7.060	1.00	90.83	A16S
ATOM	46507	O4'	GUA	1271	247.064	143.002	-7.315	1.00	68.24	A16S	ATOM	46560	C4	URI	1273	256.435	143.058	-7.780	1.00	90.83	A16S
ATOM	46508	C1'	GUA	1271	247.854	144.103	-6.902	1.00	68.24	A16S	ATOM	46561	O4	URI	1273	255.952	141.961	-7.503	1.00	90.83	A16S
ATOM	46509	N9	GUA	1271	248.818	143.636	-5.908	1.00	87.58	A16S	ATOM	46562	C5	URI	1273	255.975	143.940	-8.810	1.00	90.83	A16S
ATOM	46510	C4	GUA	1271	249.731	144.416	-5.241	1.00	87.58	A16S	ATOM	46563	C2'	URI	1273	259.506	146.576	-9.556	1.00	88.88	A16S
ATOM	46511	N3	GUA	1271	249.900	145.743	-5.404	1.00	87.58	A16S	ATOM	46564	O2'	URI	1273	260.568	147.455	-9.251	1.00	88.88	A16S
ATOM	46512	C2	GUA	1271	250.845	146.219	-4.622	1.00	87.58	A16S	ATOM	46565	C3'	URI	1273	258.820	146.916	-10.871	1.00	88.88	A16S
ATOM	46513	N2	GUA	1271	251.138	147.523	-4.669	1.00	87.58	A16S	ATOM	46566	O3'	URI	1273	259.736	147.292	-11.889	1.00	88.88	A16S
ATOM	46514	N1	GUA	1271	251.571	145.453	-3.739	1.00	87.58	A16S	ATOM	46567	P	GUA	1274	260.290	146.168	-12.901	1.00	86.05	A16S
ATOM	46515	C6	GUA	1271	251.414	144.081	-3.551	1.00	87.58	A16S	ATOM	46568	O1P	GUA	1274	261.009	146.881	-13.994	1.00	89.80	A16S
ATOM	46516	O6	GUA	1271	252.114	143.483	-2.720	1.00	87.58	A16S	ATOM	46569	O2P	GUA	1274	259.161	145.260	-13.247	1.00	89.80	A16S
ATOM	46517	C5	GUA	1271	250.404	143.556	-4.396	1.00	87.58	A16S	ATOM	46570	O5'	GUA	1274	261.337	145.348	-12.014	1.00	86.05	A16S
ATOM	46518	N7	GUA	1271	249.934	142.255	-4.537	1.00	87.58	A16S	ATOM	46571	C5'	GUA	1274	262.541	145.977	-11.547	1.00	86.05	A16S
ATOM	46519	C8	GUA	1271	248.997	142.349	-5.444	1.00	87.58	A16S	ATOM	46572	C4'	GUA	1274	263.278	145.087	-10.573	1.00	86.05	A16S
ATOM	46520	C2'	GUA	1271	248.526	144.691	-8.143	1.00	68.24	A16S	ATOM	46573	O4'	GUA	1274	262.511	144.938	-9.349	1.00	86.05	A16S
ATOM	46521	O2'	GUA	1271	247.755	145.780	-8.625	1.00	68.24	A16S	ATOM	46574	C1'	GUA	1274	262.763	143.661	-8.778	1.00	86.05	A16S
ATOM	46522	C3'	GUA	1271	248.552	143.484	-9.078	1.00	68.24	A16S	ATOM	46575	N9	GUA	1274	261.518	142.893	-8.771	1.00	89.80	A16S
ATOM	46523	O3'	GUA	1271	248.613	143.863	-10.457	1.00	68.24	A16S	ATOM	46576	C4	GUA	1274	261.244	141.764	-8.021	1.00	89.80	A16S
ATOM	46524	P	GUA	1272	249.995	143.706	-11.273	1.00	84.42	A16S	ATOM	46577	N3	GUA	1274	262.054	141.203	-7.096	1.00	89.80	A16S
ATOM	46525	O1P	GUA	1272	249.655	143.941	-12.705	1.00	79.50	A16S	ATOM	46578	C2	GUA	1274	261.531	140.101	-6.581	1.00	89.80	A16S
ATOM	46526	O2P	GUA	1272	250.674	142.440	-10.874	1.00	79.50	A16S	ATOM	46579	N2	GUA	1274	262.194	139.420	-5.637	1.00	89.80	A16S
ATOM	46527	O5'	GUA	1272	250.897	144.916	-10.756	1.00	84.42	A16S	ATOM	46580	N1	GUA	1274	260.318	139.587	-6.950	1.00	89.80	A16S
ATOM	46528	C5'	GUA	1272	250.621	146.282	-11.147	1.00	84.42	A16S	ATOM	46581	C6	GUA	1274	259.471	140.142	-7.902	1.00	89.80	A16S
ATOM	46529	C4'	GUA	1272	251.588	147.224	-10.468	1.00	84.42	A16S	ATOM	46582	O6	GUA	1274	258.405	139.583	-8.178	1.00	89.80	A16S
ATOM	46530	O4'	GUA	1272	251.408	147.113	-9.036	1.00	84.42	A16S	ATOM	46583	C5	GUA	1274	260.010	141.333	-8.450	1.00	89.80	A16S
ATOM	46531	C1'	GUA	1272	252.661	147.186	-8.384	1.00	84.42	A16S	ATOM	46584	N7	GUA	1274	259.494	142.193	-9.409	1.00	89.80	A16S
ATOM	46532	N9	GUA	1272	252.863	145.941	-7.650	1.00	79.50	A16S	ATOM	46585	C8	GUA	1274	260.412	143.107	-9.557	1.00	89.80	A16S
ATOM	46533	C4	GUA	1272	253.856	145.677	-6.742	1.00	79.50	A16S	ATOM	46586	C2'	GUA	1274	263.793	142.965	-9.672	1.00	86.05	A16S
ATOM	46534	N3	GUA	1272	254.833	146.525	-6.368	1.00	79.50	A16S	ATOM	46587	O2'	GUA	1274	265.098	143.177	-9.176	1.00	86.05	A16S
ATOM	46535	C2	GUA	1272	255.646	145.979	-5.475	1.00	79.50	A16S	ATOM	46588	C3'	GUA	1274	263.559	143.659	-11.006	1.00	86.05	A16S
ATOM	46536	N2	GUA	1272	256.685	146.682	-4.997	1.00	79.50	A16S	ATOM	46589	O3'	GUA	1274	264.667	143.528	-11.883	1.00	86.05	A16S
ATOM	46537	N1	GUA	1272	255.504	144.701	-4.986	1.00	79.50	A16S	ATOM	46590	P	GUA	1275	264.711	142.292	-12.918	1.00	95.28	A16S
ATOM	46538	C6	GUA	1272	254.501	143.812	-5.355	1.00	79.50	A16S	ATOM	46591	O1P	GUA	1275	265.878	142.519	-13.810	1.00	77.57	A16S
ATOM	46539	O6	GUA	1272	254.459	142.683	-4.850	1.00	79.50	A16S	ATOM	46592	O2P	GUA	1275	263.365	142.117	-13.518	1.00	77.57	A16S
ATOM	46540	C5	GUA	1272	253.627	144.385	-6.316	1.00	79.50	A16S	ATOM	46593	O5'	GUA	1275	265.010	141.036	-11.979	1.00	95.28	A16S
ATOM	46541	N7	GUA	1272	252.514	143.850	-6.945	1.00	79.50	A16S	ATOM	46594	C5'	GUA	1275	266.198	141.018	-11.171	1.00	95.28	A16S
ATOM	46542	C8	GUA	1272	252.096	144.805	-7.726	1.00	79.50	A16S	ATOM	46595	C4'	GUA	1275	266.259	139.784	-10.300	1.00	95.28	A16S
ATOM	46543	C2'	GUA	1272	253.727	147.456	-9.444	1.00	84.42	A16S	ATOM	46596	O4'	GUA	1275	265.272	139.842	-9.238	1.00	95.28	A16S
ATOM	46544	O2'	GUA	1272	253.952	148.849	-9.495	1.00	84.42	A16S	ATOM	46597	C1'	GUA	1275	264.939	138.520	-8.832	1.00	95.28	A16S
ATOM	46545	C3'	GUA	1272	253.059	146.916	-10.702	1.00	84.42	A16S	ATOM	46598	N9	GUA	1275	263.506	138.288	-9.020	1.00	77.57	A16S
ATOM	46546	O3'	GUA	1272	253.530	147.558	-11.883	1.00	84.42	A16S	ATOM	46599	C4	GUA	1275	262.762	137.295	-8.413	1.00	77.57	A16S
ATOM	46547	P	URI	1273	254.793	146.949	-12.672	1.00	88.88	A16S	ATOM	46600	N3	GUA	1275	263.214	136.413	-7.492	1.00	77.57	A16S
ATOM	46548	O1P	URI	1273	255.087	147.873	-13.803	1.00	90.83	A16S	ATOM	46601	C2	GUA	1275	262.279	135.556	-7.126	1.00	77.57	A16S
ATOM	46549	O2P	URI	1273	254.528	145.518	-12.948	1.00	90.83	A16S	ATOM	46602	N2	GUA	1275	262.557	134.624	-6.208	1.00	77.57	A16S
ATOM	46550	O5'	URI	1273	255.984	147.023	-11.613	1.00	88.88	A16S	ATOM	46603	N1	GUA	1275	261.002	135.556	-7.632	1.00	77.57	A16S
ATOM	46551	C5'	URI	1273	256.684	148.259	-11.377	1.00	88.88	A16S	ATOM	46604	C6	GUA	1275	260.514	136.454	-8.578	1.00	77.57	A16S
ATOM	46552	C4'	URI	1273	257.876	148.035	-10.473	1.00	88.88	A16S	ATOM	46605	O6	GUA	1275	259.348	136.361	-8.975	1.00	77.57	A16S

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ATOM  46606  C5  GUA  1275     261.503 137.391  -8.968  1.00 77.57      A16S
ATOM  46607  N7  GUA  1275     261.439 138.448  -9.870  1.00 77.57      A16S
ATOM  46608  C8  GUA  1275     262.643 138.956  -9.863  1.00 77.57      A16S
ATOM  46609  C2' GUA  1275     265.733 137.557  -9.715  1.00 95.28      A16S
ATOM  46610  O2' GUA  1275     266.899 137.134  -9.034  1.00 95.28      A16S
ATOM  46611  C3' GUA  1275     266.023 138.425 -10.934  1.00 95.28      A16S
ATOM  46612  O3' GUA  1275     267.129 137.934 -11.667  1.00 95.28      A16S
ATOM  46613  P   GUA  1276     266.886 136.836 -12.820  1.00 81.25      A16S
ATOM  46614  O1P GUA  1276     268.195 136.650 -13.507  1.00 68.47      A16S
ATOM  46615  O2P GUA  1276     265.684 137.237 -13.611  1.00 68.47      A16S
ATOM  46616  O5' GUA  1276     266.564 135.498 -12.014  1.00 81.25      A16S
ATOM  46617  C5' GUA  1276     267.527 134.969 -11.090  1.00 81.25      A16S
ATOM  46618  C4' GUA  1276     266.929 133.863 -10.256  1.00 81.25      A16S
ATOM  46619  O4' GUA  1276     265.837 134.379  -9.456  1.00 81.25      A16S
ATOM  46620  C1' GUA  1276     264.847 133.376  -9.290  1.00 81.25      A16S
ATOM  46621  N9  GUA  1276     263.621 133.810  -9.959  1.00 68.47      A16S
ATOM  46622  C4  GUA  1276     262.381 133.229  -9.826  1.00 68.47      A16S
ATOM  46623  N3  GUA  1276     262.084 132.172  -9.041  1.00 68.47      A16S
ATOM  46624  C2  GUA  1276     260.817 131.820  -9.149  1.00 68.47      A16S
ATOM  46625  N2  GUA  1276     260.360 130.768  -8.449  1.00 68.47      A16S
ATOM  46626  N1  GUA  1276     259.908 132.464  -9.954  1.00 68.47      A16S
ATOM  46627  C6  GUA  1276     260.192 133.550 -10.769  1.00 68.47      A16S
ATOM  46628  O6  GUA  1276     259.303 134.042 -11.463  1.00 68.47      A16S
ATOM  46629  C5  GUA  1276     261.552 133.936 -10.670  1.00 68.47      A16S
ATOM  46630  N7  GUA  1276     262.250 134.951 -11.312  1.00 68.47      A16S
ATOM  46631  C8  GUA  1276     263.469 134.843 -10.856  1.00 68.47      A16S
ATOM  46632  C2' GUA  1276     265.383 132.109  -9.946  1.00 81.25      A16S
ATOM  46633  O2' GUA  1276     266.058 131.351  -8.964  1.00 81.25      A16S
ATOM  46634  C3' GUA  1276     266.315 132.693 -10.998  1.00 81.25      A16S
ATOM  46635  O3' GUA  1276     267.277 131.768 -11.469  1.00 81.25      A16S
ATOM  46636  P   CYT  1277     267.087 131.118 -12.926  1.00 88.97      A16S
ATOM  46637  O1P CYT  1277     268.251 130.226 -13.144  1.00 57.02      A16S
ATOM  46638  O2P CYT  1277     266.763 132.186 -13.916  1.00 57.02      A16S
ATOM  46639  O5' CYT  1277     265.797 130.200 -12.773  1.00 88.97      A16S
ATOM  46640  C5' CYT  1277     265.774 129.137 -11.807  1.00 88.97      A16S
ATOM  46641  C4' CYT  1277     264.461 128.389 -11.863  1.00 88.97      A16S
ATOM  46642  O4' CYT  1277     263.377 129.225 -11.398  1.00 88.97      A16S
ATOM  46643  C1' CYT  1277     262.193 128.880 -12.087  1.00 88.97      A16S
ATOM  46644  N1  CYT  1277     261.649 130.094 -12.722  1.00 57.02      A16S
ATOM  46645  C6  CYT  1277     262.457 131.154 -13.020  1.00 57.02      A16S
ATOM  46646  C2  CYT  1277     260.277 130.149 -13.014  1.00 57.02      A16S
ATOM  46647  O2  CYT  1277     259.564 129.172 -12.744  1.00 57.02      A16S
ATOM  46648  N3  CYT  1277     259.765 131.265 -13.582  1.00 57.02      A16S
ATOM  46649  C4  CYT  1277     260.562 132.297 -13.858  1.00 57.02      A16S
ATOM  46650  N4  CYT  1277     260.011 133.385 -14.403  1.00 57.02      A16S
ATOM  46651  C5  CYT  1277     261.960 132.263 -13.584  1.00 57.02      A16S
ATOM  46652  C2' CYT  1277     262.518 127.742 -13.060  1.00 88.97      A16S
ATOM  46653  O2' CYT  1277     262.174 126.511 -12.454  1.00 88.97      A16S
ATOM  46654  C3' CYT  1277     264.026 127.888 -13.228  1.00 88.97      A16S
ATOM  46655  O3' CYT  1277     264.639 126.633 -13.473  1.00 88.97      A16S
ATOM  46656  P   CYT  1278     265.607 126.445 -14.740  1.00 55.62      A16S
ATOM  46657  O1P CYT  1278     266.225 125.111 -14.549  1.00 68.58      A16S
ATOM  46658  O2P CYT  1278     266.475 127.637 -14.917  1.00 68.58      A16S
ATOM  46659  O5' CYT  1278     264.602 126.374 -15.968  1.00 55.62      A16S
ATOM  46660  C5' CYT  1278     263.713 125.267 -16.107  1.00 55.62      A16S
ATOM  46661  C4' CYT  1278     262.728 125.545 -17.195  1.00 55.62      A16S
ATOM  46662  O4' CYT  1278     262.137 126.838 -16.921  1.00 55.62      A16S
ATOM  46663  C1' CYT  1278     262.254 127.663 -18.059  1.00 55.62      A16S
ATOM  46664  N1  CYT  1278     262.476 129.045 -17.608  1.00 68.58      A16S
ATOM  46665  C6  CYT  1278     263.421 129.326 -16.661  1.00 68.58      A16S
ATOM  46666  C2  CYT  1278     261.694 130.078 -18.161  1.00 68.58      A16S
ATOM  46667  O2  CYT  1278     260.832 129.801 -19.016  1.00 68.58      A16S
ATOM  46668  N3  CYT  1278     261.894 131.345 -17.744  1.00 68.58      A16S
ATOM  46669  C4  CYT  1278     262.819 131.604 -16.816  1.00 68.58      A16S
ATOM  46670  N4  CYT  1278     262.980 132.871 -16.430  1.00 68.58      A16S
ATOM  46671  C5  CYT  1278     263.621 130.575 -16.239  1.00 68.58      A16S
ATOM  46672  C2' CYT  1278     263.390 127.095 -18.908  1.00 55.62      A16S
ATOM  46673  O2' CYT  1278     263.157 127.367 -20.278  1.00 55.62      A16S
ATOM  46674  C3' CYT  1278     263.283 125.603 -18.617  1.00 55.62      A16S
ATOM  46675  O3' CYT  1278     262.337 125.044 -19.512  1.00 55.62      A16S
ATOM  46676  P   CYT  1279     262.734 123.775 -20.400  1.00 78.06      A16S
ATOM  46677  O1P CYT  1279     263.705 122.956 -19.614  1.00 56.27      A16S
ATOM  46678  O2P CYT  1279     263.096 124.273 -21.753  1.00 56.27      A16S
ATOM  46679  O5' CYT  1279     261.367 122.966 -20.522  1.00 78.06      A16S
ATOM  46680  C5' CYT  1279     260.924 122.074 -19.474  1.00 78.06      A16S
ATOM  46681  C4' CYT  1279     259.418 121.946 -19.498  1.00 78.06      A16S
ATOM  46682  O4' CYT  1279     258.805 123.070 -18.809  1.00 78.06      A16S
ATOM  46683  C1' CYT  1279     257.786 123.598 -19.622  1.00 78.06      A16S
ATOM  46684  N1  CYT  1279     257.645 125.037 -19.387  1.00 56.27      A16S
ATOM  46685  C6  CYT  1279     258.722 125.829 -19.123  1.00 56.27      A16S
ATOM  46686  C2  CYT  1279     256.371 125.595 -19.489  1.00 56.27      A16S
ATOM  46687  O2  CYT  1279     255.402 124.845 -19.642  1.00 56.27      A16S
ATOM  46688  N3  CYT  1279     256.220 126.929 -19.409  1.00 56.27      A16S
ATOM  46689  C4  CYT  1279     257.280 127.703 -19.209  1.00 56.27      A16S
ATOM  46690  N4  CYT  1279     257.089 129.023 -19.190  1.00 56.27      A16S
ATOM  46691  C5  CYT  1279     258.587 127.158 -19.030  1.00 56.27      A16S
ATOM  46692  C2' CYT  1279     258.197 123.275 -21.056  1.00 78.06      A16S
ATOM  46693  O2' CYT  1279     257.080 123.312 -21.918  1.00 78.06      A16S
ATOM  46694  C3' CYT  1279     258.780 121.880 -20.890  1.00 78.06      A16S
ATOM  46695  O3' CYT  1279     257.679 120.981 -20.917  1.00 78.06      A16S
ATOM  46696  P   ADE  1280     257.937 119.410 -21.086  1.00 54.92      A16S
ATOM  46697  O1P ADE  1280     256.601 118.760 -21.074  1.00 75.52      A16S
ATOM  46698  O2P ADE  1280     258.863 119.177 -22.231  1.00 75.52      A16S
ATOM  46699  O5' ADE  1280     258.669 119.032 -19.729  1.00 54.92      A16S
ATOM  46700  C5' ADE  1280     259.844 118.227 -19.724  1.00 54.92      A16S
ATOM  46701  C4' ADE  1280     260.188 117.865 -18.311  1.00 54.92      A16S
ATOM  46702  O4' ADE  1280     260.571 119.060 -17.606  1.00 54.92      A16S
ATOM  46703  C1' ADE  1280     260.101 119.006 -16.277  1.00 54.92      A16S
ATOM  46704  N9  ADE  1280     259.562 120.337 -15.961  1.00 75.52      A16S
ATOM  46705  C4  ADE  1280     258.308 120.872 -16.142  1.00 75.52      A16S
ATOM  46706  N3  ADE  1280     257.204 120.246 -16.570  1.00 75.52      A16S
ATOM  46707  C2  ADE  1280     256.192 121.109 -16.680  1.00 75.52      A16S
ATOM  46708  N1  ADE  1280     256.167 122.432 -16.437  1.00 75.52      A16S
ATOM  46709  C6  ADE  1280     257.297 123.030 -16.013  1.00 75.52      A16S
ATOM  46710  N6  ADE  1280     257.284 124.346 -15.796  1.00 75.52      A16S
ATOM  46711  C5  ADE  1280     258.429 122.225 -15.839  1.00 75.52      A16S
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ATOM	46712	N7	ADE	1280	259.712	122.521	-15.412	1.00	75.52	A16S	ATOM	46765	C5'	URI	1283	261.036	122.281	-7.801	1.00	67.66	A16S
ATOM	46713	C8	ADE	1280	260.337	121.372	-15.483	1.00	75.52	A16S	ATOM	46766	C4'	URI	1283	260.499	123.613	-7.308	1.00	67.66	A16S
ATOM	46714	C2'	ADE	1280	259.333	117.686	-16.079	1.00	54.92	A16S	ATOM	46767	O4'	URI	1283	261.605	124.499	-7.066	1.00	67.66	A16S
ATOM	46715	O2'	ADE	1280	260.214	116.809	-15.400	1.00	54.92	A16S	ATOM	46768	C1'	URI	1283	261.179	125.825	-7.260	1.00	67.66	A16S
ATOM	46716	C3'	ADE	1280	259.034	117.263	-17.531	1.00	54.92	A16S	ATOM	46769	N1	URI	1283	262.304	126.612	-7.780	1.00	80.01	A16S
ATOM	46717	O3'	ADE	1280	259.078	115.861	-17.849	1.00	54.92	A16S	ATOM	46770	C6	URI	1283	263.235	126.060	-8.628	1.00	80.01	A16S
ATOM	46718	P	GUA	1281	258.089	114.825	-17.141	1.00	74.04	A16S	ATOM	46771	C2	URI	1283	262.411	127.929	-7.362	1.00	80.01	A16S
ATOM	46719	O1P	GUA	1281	258.119	113.572	-17.913	1.00	64.83	A16S	ATOM	46772	O2	URI	1283	261.590	128.475	-6.641	1.00	80.01	A16S
ATOM	46720	O2P	GUA	1281	256.800	115.520	-16.921	1.00	64.83	A16S	ATOM	46773	N3	URI	1283	263.520	128.588	-7.821	1.00	80.01	A16S
ATOM	46721	O5'	GUA	1281	258.810	114.549	-15.747	1.00	74.04	A16S	ATOM	46774	C4	URI	1283	264.504	128.084	-8.642	1.00	80.01	A16S
ATOM	46722	C5'	GUA	1281	258.123	113.938	-14.629	1.00	74.04	A16S	ATOM	46775	O4	URI	1283	265.490	128.777	-8.888	1.00	80.01	A16S
ATOM	46723	C4'	GUA	1281	257.630	115.006	-13.683	1.00	74.04	A16S	ATOM	46776	C5	URI	1283	264.302	126.731	-9.060	1.00	80.01	A16S
ATOM	46724	O4'	GUA	1281	256.286	115.352	-14.072	1.00	74.04	A16S	ATOM	46777	C2'	URI	1283	259.894	125.824	-8.096	1.00	67.66	A16S
ATOM	46725	C1'	GUA	1281	255.539	115.688	-12.929	1.00	74.04	A16S	ATOM	46778	O2'	URI	1283	258.836	126.494	-7.429	1.00	67.66	A16S
ATOM	46726	N9	GUA	1281	254.269	114.964	-12.949	1.00	64.83	A16S	ATOM	46779	C3'	URI	1283	259.647	124.334	-8.341	1.00	67.66	A16S
ATOM	46727	C4	GUA	1281	253.042	115.550	-13.129	1.00	64.83	A16S	ATOM	46780	O3'	URI	1283	258.235	124.053	-8.281	1.00	67.66	A16S
ATOM	46728	N3	GUA	1281	252.816	116.874	-13.244	1.00	64.83	A16S	ATOM	46781	P	CYT	1284	257.492	123.621	-6.892	1.00	60.87	A16S
ATOM	46729	C2	GUA	1281	251.548	117.148	-13.423	1.00	64.83	A16S	ATOM	46782	O1P	CYT	1284	257.772	124.633	-5.843	1.00	44.20	A16S
ATOM	46730	N2	GUA	1281	251.165	118.426	-13.518	1.00	64.83	A16S	ATOM	46783	O2P	CYT	1284	257.646	122.156	-6.574	1.00	44.20	A16S
ATOM	46731	N1	GUA	1281	250.566	116.195	-13.514	1.00	64.83	A16S	ATOM	46784	O5'	CYT	1284	255.981	123.870	-7.311	1.00	60.87	A16S
ATOM	46732	C6	GUA	1281	250.769	114.821	-13.411	1.00	64.83	A16S	ATOM	46785	C5'	CYT	1284	255.692	124.878	-8.296	1.00	60.87	A16S
ATOM	46733	O6	GUA	1281	249.806	114.043	-13.537	1.00	64.83	A16S	ATOM	46786	C4'	CYT	1284	254.608	124.420	-9.232	1.00	60.87	A16S
ATOM	46734	C5	GUA	1281	252.141	114.515	-13.179	1.00	64.83	A16S	ATOM	46787	O4'	CYT	1284	255.052	123.340	-10.091	1.00	60.87	A16S
ATOM	46735	N7	GUA	1281	252.781	113.296	-12.981	1.00	64.83	A16S	ATOM	46788	C1'	CYT	1284	253.949	122.502	-10.398	1.00	60.87	A16S
ATOM	46736	C8	GUA	1281	254.042	113.612	-12.841	1.00	64.83	A16S	ATOM	46789	N1	CYT	1284	254.281	121.108	-10.030	1.00	44.20	A16S
ATOM	46737	C2'	GUA	1281	256.430	115.555	-11.697	1.00	74.04	A16S	ATOM	46790	C6	CYT	1284	255.497	120.795	-9.499	1.00	44.20	A16S
ATOM	46738	O2'	GUA	1281	256.912	116.846	-11.379	1.00	74.04	A16S	ATOM	46791	C2	CYT	1284	253.333	120.088	-10.264	1.00	44.20	A16S
ATOM	46739	C3'	GUA	1281	257.541	114.645	-12.204	1.00	74.04	A16S	ATOM	46792	O2	CYT	1284	252.219	120.387	-10.702	1.00	44.20	A16S
ATOM	46740	O3'	GUA	1281	258.839	114.872	-11.599	1.00	74.04	A16S	ATOM	46793	N3	CYT	1284	253.658	118.804	-10.004	1.00	44.20	A16S
ATOM	46741	P	URI	1282	258.994	115.577	-10.141	1.00	72.15	A16S	ATOM	46794	C4	CYT	1284	254.857	118.510	-9.518	1.00	44.20	A16S
ATOM	46742	O1P	URI	1282	260.175	114.910	-9.542	1.00	62.71	A16S	ATOM	46795	N4	CYT	1284	255.139	117.227	-9.296	1.00	44.20	A16S
ATOM	46743	O2P	URI	1282	257.731	115.628	-9.357	1.00	62.71	A16S	ATOM	46796	C5	CYT	1284	255.825	119.520	-9.236	1.00	44.20	A16S
ATOM	46744	O5'	URI	1282	259.415	117.074	-10.509	1.00	72.15	A16S	ATOM	46797	C2'	CYT	1284	252.724	123.064	-9.677	1.00	60.87	A16S
ATOM	46745	C5'	URI	1282	260.662	117.333	-11.188	1.00	72.15	A16S	ATOM	46798	O2'	CYT	1284	251.981	123.868	-10.574	1.00	60.87	A16S
ATOM	46746	C4'	URI	1282	260.745	118.774	-11.639	1.00	72.15	A16S	ATOM	46799	C3'	CYT	1284	253.374	123.867	-8.558	1.00	60.87	A16S
ATOM	46747	O4'	URI	1282	259.676	119.023	-12.562	1.00	72.15	A16S	ATOM	46800	O3'	CYT	1284	252.573	124.908	-8.031	1.00	60.87	A16S
ATOM	46748	C1'	URI	1282	259.285	120.370	-12.467	1.00	72.15	A16S	ATOM	46801	P	GUA	1285	252.251	124.921	-6.457	1.00	61.03	A16S
ATOM	46749	N1	URI	1282	257.821	120.451	-12.584	1.00	62.71	A16S	ATOM	46802	O1P	GUA	1285	251.199	125.956	-6.273	1.00	72.01	A16S
ATOM	46750	C6	URI	1282	257.042	119.329	-12.476	1.00	62.71	A16S	ATOM	46803	O2P	GUA	1285	253.519	125.007	-5.674	1.00	72.01	A16S
ATOM	46751	C2	URI	1282	257.255	121.675	-12.865	1.00	62.71	A16S	ATOM	46804	O5'	GUA	1285	251.586	123.492	-6.220	1.00	61.03	A16S
ATOM	46752	O2	URI	1282	257.896	122.708	-12.895	1.00	62.71	A16S	ATOM	46805	C5'	GUA	1285	250.320	123.178	-6.827	1.00	61.03	A16S
ATOM	46753	N3	URI	1282	255.907	121.644	-13.109	1.00	62.71	A16S	ATOM	46806	C4'	GUA	1285	249.953	121.747	-6.567	1.00	61.03	A16S
ATOM	46754	C4	URI	1282	255.085	120.539	-13.083	1.00	62.71	A16S	ATOM	46807	O4'	GUA	1285	250.755	120.868	-7.385	1.00	61.03	A16S
ATOM	46755	O4	URI	1282	253.939	120.627	-13.520	1.00	62.71	A16S	ATOM	46808	C1'	GUA	1285	250.975	119.649	-6.693	1.00	61.03	A16S
ATOM	46756	C5	URI	1282	255.733	119.332	-12.710	1.00	62.71	A16S	ATOM	46809	N9	GUA	1285	252.413	119.431	-6.569	1.00	72.01	A16S
ATOM	46757	C2'	URI	1282	260.020	121.049	-11.305	1.00	72.15	A16S	ATOM	46810	C4	GUA	1285	253.064	118.216	-6.520	1.00	72.01	A16S
ATOM	46758	O2'	URI	1282	260.942	121.959	-11.859	1.00	72.15	A16S	ATOM	46811	N3	GUA	1285	252.485	116.997	-6.575	1.00	72.01	A16S
ATOM	46759	C3'	URI	1282	260.649	119.858	-10.568	1.00	72.15	A16S	ATOM	46812	C2	GUA	1285	253.378	116.021	-6.495	1.00	72.01	A16S
ATOM	46760	O3'	URI	1282	261.988	120.017	-10.001	1.00	72.15	A16S	ATOM	46813	N2	GUA	1285	252.976	114.740	-6.507	1.00	72.01	A16S
ATOM	46761	P	URI	1283	262.663	121.473	-9.758	1.00	67.66	A16S	ATOM	46814	N1	GUA	1285	254.731	116.229	-6.392	1.00	72.01	A16S
ATOM	46762	O1P	URI	1283	263.129	122.007	-11.063	1.00	80.01	A16S	ATOM	46815	C6	GUA	1285	255.347	117.475	-6.343	1.00	72.01	A16S
ATOM	46763	O2P	URI	1283	263.644	121.277	-8.673	1.00	80.01	A16S	ATOM	46816	O6	GUA	1285	256.579	117.556	-6.263	1.00	72.01	A16S
ATOM	46764	O5'	URI	1283	261.511	122.409	-9.172	1.00	67.66	A16S	ATOM	46817	C5	GUA	1285	254.402	118.526	-6.403	1.00	72.01	A16S

ATOM	46818	N7	GUA	1285	254.591	119.900	-6.371	1.00	72.01	A16S	ATOM	46871	O2P	URI	1288	247.635	113.690	5.024	1.00	58.41	A16S
ATOM	46819	C8	GUA	1285	253.388	120.395	-6.474	1.00	72.01	A16S	ATOM	46872	O5'	URI	1288	247.971	111.321	4.333	1.00	50.48	A16S
ATOM	46820	C2'	GUA	1285	250.274	119.752	-5.339	1.00	61.03	A16S	ATOM	46873	C5'	URI	1288	247.682	110.169	3.536	1.00	50.48	A16S
ATOM	46821	O2'	GUA	1285	249.008	119.144	-5.459	1.00	61.03	A16S	ATOM	46874	C4'	URI	1288	248.943	109.391	3.268	1.00	50.48	A16S
ATOM	46822	C3'	GUA	1285	250.174	121.260	-5.151	1.00	61.03	A16S	ATOM	46875	O4'	URI	1288	249.791	110.099	2.329	1.00	50.48	A16S
ATOM	46823	O3'	GUA	1285	249.079	121.610	-4.331	1.00	61.03	A16S	ATOM	46876	C1'	URI	1288	251.151	109.851	2.642	1.00	50.48	A16S
ATOM	46824	P	GUA	1286	249.310	122.513	-3.019	1.00	52.38	A16S	ATOM	46877	N1	URI	1288	251.823	111.135	2.887	1.00	58.41	A16S
ATOM	46825	O1P	GUA	1286	248.774	123.865	-3.307	1.00	79.14	A16S	ATOM	46878	C6	URI	1288	251.111	112.275	3.155	1.00	58.41	A16S
ATOM	46826	O2P	GUA	1286	250.687	122.368	-2.526	1.00	79.14	A16S	ATOM	46879	C2	URI	1288	253.204	111.159	2.841	1.00	58.41	A16S
ATOM	46827	O5'	GUA	1286	248.322	121.852	-1.969	1.00	52.38	A16S	ATOM	46880	O2	URI	1288	253.877	110.168	2.597	1.00	58.41	A16S
ATOM	46828	C5'	GUA	1286	248.797	121.338	-0.738	1.00	52.38	A16S	ATOM	46881	N3	URI	1288	253.772	112.385	3.088	1.00	58.41	A16S
ATOM	46829	C4'	GUA	1286	249.064	119.879	-0.869	1.00	52.38	A16S	ATOM	46882	C4	URI	1288	253.116	113.561	3.364	1.00	58.41	A16S
ATOM	46830	O4'	GUA	1286	249.981	119.716	-1.953	1.00	52.38	A16S	ATOM	46883	O4	URI	1288	253.764	114.587	3.575	1.00	58.41	A16S
ATOM	46831	C1'	GUA	1286	250.949	118.760	-1.605	1.00	52.38	A16S	ATOM	46884	C5	URI	1288	251.694	113.453	3.387	1.00	58.41	A16S
ATOM	46832	N9	GUA	1286	252.262	119.342	-1.867	1.00	79.14	A16S	ATOM	46885	C2'	URI	1288	251.196	108.935	3.864	1.00	50.48	A16S
ATOM	46833	C4	GUA	1286	253.366	118.706	-2.391	1.00	79.14	A16S	ATOM	46886	O2'	URI	1288	251.403	107.598	3.465	1.00	50.48	A16S
ATOM	46834	N3	GUA	1286	253.471	117.393	-2.661	1.00	79.14	A16S	ATOM	46887	C3'	URI	1288	249.824	109.173	4.478	1.00	50.48	A16S
ATOM	46835	C2	GUA	1286	254.627	117.102	-3.222	1.00	79.14	A16S	ATOM	46888	O3'	URI	1288	249.372	108.105	5.291	1.00	50.48	A16S
ATOM	46836	N2	GUA	1286	254.891	115.862	-3.582	1.00	79.14	A16S	ATOM	46889	P	URI	1289	249.487	108.239	6.885	1.00	72.87	A16S
ATOM	46837	N1	GUA	1286	255.609	118.016	-3.484	1.00	79.14	A16S	ATOM	46890	O1P	URI	1289	248.710	107.115	7.477	1.00	60.52	A16S
ATOM	46838	C6	GUA	1286	255.525	119.372	-3.219	1.00	79.14	A16S	ATOM	46891	O2P	URI	1289	249.145	109.650	7.236	1.00	60.52	A16S
ATOM	46839	O6	GUA	1286	256.465	120.122	-3.523	1.00	79.14	A16S	ATOM	46892	O5'	URI	1289	251.038	107.989	7.165	1.00	72.87	A16S
ATOM	46840	C5	GUA	1286	254.290	119.703	-2.617	1.00	79.14	A16S	ATOM	46893	C5'	URI	1289	251.628	106.696	6.903	1.00	72.87	A16S
ATOM	46841	N7	GUA	1286	253.806	120.927	-2.187	1.00	79.14	A16S	ATOM	46894	C4'	URI	1289	253.142	106.782	6.852	1.00	72.87	A16S
ATOM	46842	C8	GUA	1286	252.614	120.660	-1.727	1.00	79.14	A16S	ATOM	46895	O4'	URI	1289	253.560	107.694	5.800	1.00	72.87	A16S
ATOM	46843	C2'	GUA	1286	250.618	118.205	-0.213	1.00	52.38	A16S	ATOM	46896	C1'	URI	1289	254.785	108.313	6.162	1.00	72.87	A16S
ATOM	46844	O2'	GUA	1286	249.851	117.040	-0.388	1.00	52.38	A16S	ATOM	46897	N1	URI	1289	254.572	109.766	6.230	1.00	60.52	A16S
ATOM	46845	C3'	GUA	1286	249.706	119.269	0.365	1.00	52.38	A16S	ATOM	46898	C6	URI	1289	253.318	110.287	6.456	1.00	60.52	A16S
ATOM	46846	O3'	GUA	1286	248.620	118.666	1.094	1.00	52.38	A16S	ATOM	46899	C2	URI	1289	255.678	110.607	6.065	1.00	60.52	A16S
ATOM	46847	P	ADE	1287	248.893	117.780	2.420	1.00	49.16	A16S	ATOM	46900	O2	URI	1289	256.823	110.193	5.869	1.00	60.52	A16S
ATOM	46848	O1P	ADE	1287	247.894	118.233	3.436	1.00	45.44	A16S	ATOM	46901	N3	URI	1289	255.393	111.952	6.144	1.00	60.52	A16S
ATOM	46849	O2P	ADE	1287	250.342	117.799	2.753	1.00	45.44	A16S	ATOM	46902	C4	URI	1289	254.157	112.529	6.369	1.00	60.52	A16S
ATOM	46850	O5'	ADE	1287	248.516	116.280	2.020	1.00	49.16	A16S	ATOM	46903	O4	URI	1289	254.061	113.753	6.417	1.00	60.52	A16S
ATOM	46851	C5'	ADE	1287	247.146	115.886	1.789	1.00	49.16	A16S	ATOM	46904	C5	URI	1289	253.082	111.600	6.529	1.00	60.52	A16S
ATOM	46852	C4'	ADE	1287	247.099	114.506	1.178	1.00	49.16	A16S	ATOM	46905	C2'	URI	1289	255.207	107.742	7.513	1.00	72.87	A16S
ATOM	46853	O4'	ADE	1287	247.926	114.495	-0.010	1.00	49.16	A16S	ATOM	46906	O2'	URI	1289	256.084	106.658	7.291	1.00	72.87	A16S
ATOM	46854	C1'	ADE	1287	248.614	113.260	-0.107	1.00	49.16	A16S	ATOM	46907	C3'	URI	1289	253.872	107.287	8.087	1.00	72.87	A16S
ATOM	46855	N9	ADE	1287	250.050	113.532	-0.066	1.00	45.44	A16S	ATOM	46908	O3'	URI	1289	254.047	106.283	9.078	1.00	72.87	A16S
ATOM	46856	C4	ADE	1287	251.070	112.616	-0.161	1.00	45.44	A16S	ATOM	46909	P	GUA	1290	254.414	106.719	10.580	1.00	91.77	A16S
ATOM	46857	N3	ADE	1287	250.965	111.287	-0.323	1.00	45.44	A16S	ATOM	46910	O1P	GUA	1290	254.218	105.517	11.427	1.00	68.45	A16S
ATOM	46858	C2	ADE	1287	252.164	110.723	-0.345	1.00	45.44	A16S	ATOM	46911	O2P	GUA	1290	253.705	107.985	10.921	1.00	68.45	A16S
ATOM	46859	N1	ADE	1287	253.370	111.288	-0.232	1.00	45.44	A16S	ATOM	46912	O5'	GUA	1290	255.970	107.058	10.506	1.00	91.77	A16S
ATOM	46860	C6	ADE	1287	253.439	112.626	-0.065	1.00	45.44	A16S	ATOM	46913	C5'	GUA	1290	256.957	106.012	10.395	1.00	91.77	A16S
ATOM	46861	N6	ADE	1287	254.640	113.197	0.066	1.00	45.44	A16S	ATOM	46914	C4'	GUA	1290	258.349	106.591	10.506	1.00	91.77	A16S
ATOM	46862	C5	ADE	1287	252.233	113.341	-0.031	1.00	45.44	A16S	ATOM	46915	O4'	GUA	1290	258.571	107.495	9.395	1.00	91.77	A16S
ATOM	46863	N7	ADE	1287	251.953	114.689	0.130	1.00	45.44	A16S	ATOM	46916	C1'	GUA	1290	259.365	108.590	9.817	1.00	91.77	A16S
ATOM	46864	C8	ADE	1287	250.652	114.742	0.098	1.00	45.44	A16S	ATOM	46917	N9	GUA	1290	258.560	109.798	9.718	1.00	68.45	A16S
ATOM	46865	C2'	ADE	1287	248.154	112.368	1.048	1.00	49.16	A16S	ATOM	46918	C4	GUA	1290	259.019	111.088	9.757	1.00	68.45	A16S
ATOM	46866	O2'	ADE	1287	247.165	111.481	0.573	1.00	49.16	A16S	ATOM	46919	N3	GUA	1290	260.304	111.466	9.886	1.00	68.45	A16S
ATOM	46867	C3'	ADE	1287	247.653	113.397	2.056	1.00	49.16	A16S	ATOM	46920	C2	GUA	1290	260.431	112.781	9.896	1.00	68.45	A16S
ATOM	46868	O3'	ADE	1287	246.627	112.872	2.885	1.00	49.16	A16S	ATOM	46921	N2	GUA	1290	261.641	113.336	10.019	1.00	68.45	A16S
ATOM	46869	P	URI	1288	246.938	112.525	4.419	1.00	50.48	A16S	ATOM	46922	N1	GUA	1290	259.380	113.650	9.784	1.00	68.45	A16S
ATOM	46870	O1P	URI	1288	245.686	112.016	5.032	1.00	58.41	A16S	ATOM	46923	C6	GUA	1290	258.048	113.279	9.645	1.00	68.45	A16S

ATOM	46924	O6	GUA	1290	257.174	114.146	9.536	1.00	68.45	A16S	ATOM	46977	O3'	GUA	1292	262.586	115.694	20.233	1.00	78.59	A16S
ATOM	46925	C5	GUA	1290	257.899	111.878	9.642	1.00	68.45	A16S	ATOM	46978	P	GUA	1293	261.691	115.731	21.564	1.00	95.18	A16S
ATOM	46926	N7	GUA	1290	256.758	111.101	9.536	1.00	68.45	A16S	ATOM	46979	O1P	GUA	1293	262.632	116.052	22.666	1.00	60.08	A16S
ATOM	46927	C8	GUA	1290	257.198	109.875	9.582	1.00	68.45	A16S	ATOM	46980	O2P	GUA	1293	260.892	114.469	21.623	1.00	60.08	A16S
ATOM	46928	C2'	GUA	1290	259.760	108.343	11.268	1.00	91.77	A16S	ATOM	46981	O5'	GUA	1293	260.734	116.992	21.334	1.00	95.18	A16S
ATOM	46929	O2'	GUA	1290	261.026	107.718	11.301	1.00	91.77	A16S	ATOM	46982	C5'	GUA	1293	261.316	118.304	21.294	1.00	95.18	A16S
ATOM	46930	C3'	GUA	1290	258.626	107.443	11.736	1.00	91.77	A16S	ATOM	46983	C4'	GUA	1293	260.351	119.356	20.787	1.00	95.18	A16S
ATOM	46931	O3'	GUA	1290	258.978	106.685	12.885	1.00	91.77	A16S	ATOM	46984	O4'	GUA	1293	259.805	118.998	19.491	1.00	95.18	A16S
ATOM	46932	P	GUA	1291	258.694	107.292	14.350	1.00	72.77	A16S	ATOM	46985	C1'	GUA	1293	258.644	119.782	19.253	1.00	95.18	A16S
ATOM	46933	O1P	GUA	1291	259.218	106.282	15.321	1.00	66.47	A16S	ATOM	46986	N9	GUA	1293	257.495	118.934	18.936	1.00	60.08	A16S
ATOM	46934	O2P	GUA	1291	257.273	107.716	14.429	1.00	66.47	A16S	ATOM	46987	C4	GUA	1293	256.284	119.404	18.485	1.00	60.08	A16S
ATOM	46935	O5'	GUA	1291	259.577	108.624	14.404	1.00	72.77	A16S	ATOM	46988	N3	GUA	1293	255.989	120.695	18.234	1.00	60.08	A16S
ATOM	46936	C5'	GUA	1291	261.015	108.553	14.423	1.00	72.77	A16S	ATOM	46989	C2	GUA	1293	254.744	120.855	17.845	1.00	60.08	A16S
ATOM	46937	C4'	GUA	1291	261.636	109.933	14.530	1.00	72.77	A16S	ATOM	46990	N2	GUA	1293	254.296	122.091	17.572	1.00	60.08	A16S
ATOM	46938	O4'	GUA	1291	261.364	110.716	13.334	1.00	72.77	A16S	ATOM	46991	N1	GUA	1293	253.851	119.823	17.700	1.00	60.08	A16S
ATOM	46939	C1'	GUA	1291	261.388	112.099	13.659	1.00	72.77	A16S	ATOM	46992	C6	GUA	1293	254.132	118.482	17.947	1.00	60.08	A16S
ATOM	46940	N9	GUA	1291	260.121	112.717	13.271	1.00	66.47	A16S	ATOM	46993	O6	GUA	1293	253.253	117.627	17.781	1.00	60.08	A16S
ATOM	46941	C4	GUA	1291	259.898	114.059	13.044	1.00	66.47	A16S	ATOM	46994	C5	GUA	1293	255.476	118.300	18.379	1.00	60.08	A16S
ATOM	46942	N3	GUA	1291	260.825	115.042	13.096	1.00	66.47	A16S	ATOM	46995	N7	GUA	1293	256.168	117.146	18.734	1.00	60.08	A16S
ATOM	46943	C2	GUA	1291	260.296	116.232	12.847	1.00	66.47	A16S	ATOM	46996	C8	GUA	1293	257.364	117.569	19.050	1.00	60.08	A16S
ATOM	46944	N2	GUA	1291	261.067	117.325	12.858	1.00	66.47	A16S	ATOM	46997	C2'	GUA	1293	258.351	120.560	20.534	1.00	95.18	A16S
ATOM	46945	N1	GUA	1291	258.966	116.438	12.571	1.00	66.47	A16S	ATOM	46998	O2'	GUA	1293	258.845	121.877	20.387	1.00	95.18	A16S
ATOM	46946	C6	GUA	1291	257.996	115.442	12.518	1.00	66.47	A16S	ATOM	46999	C3'	GUA	1293	259.113	119.751	21.578	1.00	95.18	A16S
ATOM	46947	O6	GUA	1291	256.820	115.737	12.275	1.00	66.47	A16S	ATOM	47000	O3'	GUA	1293	259.371	120.571	22.713	1.00	95.18	A16S
ATOM	46948	C5	GUA	1291	258.549	114.164	12.776	1.00	66.47	A16S	ATOM	47001	P	URI	1294	258.232	120.747	23.845	1.00	84.40	A16S
ATOM	46949	N7	GUA	1291	257.942	112.918	12.806	1.00	66.47	A16S	ATOM	47002	O1P	URI	1294	258.887	121.351	25.025	1.00	64.99	A16S
ATOM	46950	C8	GUA	1291	258.910	112.092	13.095	1.00	66.47	A16S	ATOM	47003	O2P	URI	1294	257.501	119.465	23.998	1.00	64.99	A16S
ATOM	46951	C2'	GUA	1291	261.636	112.216	15.164	1.00	72.77	A16S	ATOM	47004	O5'	URI	1294	257.233	121.831	23.239	1.00	84.40	A16S
ATOM	46952	O2'	GUA	1291	263.009	112.453	15.371	1.00	72.77	A16S	ATOM	47005	C5'	URI	1294	257.691	123.161	22.963	1.00	84.40	A16S
ATOM	46953	C3'	GUA	1291	261.208	110.841	15.673	1.00	72.77	A16S	ATOM	47006	C4'	URI	1294	256.573	124.014	22.403	1.00	84.40	A16S
ATOM	46954	O3'	GUA	1291	261.843	110.517	16.914	1.00	72.77	A16S	ATOM	47007	O4'	URI	1294	256.063	123.417	21.183	1.00	84.40	A16S
ATOM	46955	P	GUA	1292	261.212	111.058	18.303	1.00	78.59	A16S	ATOM	47008	C1'	URI	1294	254.688	123.738	21.032	1.00	84.40	A16S
ATOM	46956	O1P	GUA	1292	262.051	110.502	19.404	1.00	67.75	A16S	ATOM	47009	N1	URI	1294	253.910	122.491	20.953	1.00	64.99	A16S
ATOM	46957	O2P	GUA	1292	259.749	110.789	18.300	1.00	67.75	A16S	ATOM	47010	C6	URI	1294	254.420	121.293	21.413	1.00	64.99	A16S
ATOM	46958	O5'	GUA	1292	261.430	112.643	18.241	1.00	78.59	A16S	ATOM	47011	C2	URI	1294	252.636	122.555	20.395	1.00	64.99	A16S
ATOM	46959	C5'	GUA	1292	262.763	113.192	18.176	1.00	78.59	A16S	ATOM	47012	O2	URI	1294	252.126	123.596	19.990	1.00	64.99	A16S
ATOM	46960	C4'	GUA	1292	262.742	114.699	17.997	1.00	78.59	A16S	ATOM	47013	N3	URI	1294	251.977	121.355	20.336	1.00	64.99	A16S
ATOM	46961	O4'	GUA	1292	262.168	115.074	16.714	1.00	78.59	A16S	ATOM	47014	C4	URI	1294	252.435	120.134	20.770	1.00	64.99	A16S
ATOM	46962	C1'	GUA	1292	261.572	116.366	16.819	1.00	78.59	A16S	ATOM	47015	O4	URI	1294	251.709	119.159	20.662	1.00	64.99	A16S
ATOM	46963	N9	GUA	1292	260.146	116.291	16.480	1.00	67.75	A16S	ATOM	47016	C5	URI	1294	253.742	120.146	21.341	1.00	64.99	A16S
ATOM	46964	C4	GUA	1292	259.355	117.360	16.133	1.00	67.75	A16S	ATOM	47017	C2'	URI	1294	254.280	124.605	22.220	1.00	84.40	A16S
ATOM	46965	N3	GUA	1292	259.762	118.642	16.041	1.00	67.75	A16S	ATOM	47018	O2'	URI	1294	254.337	125.970	21.846	1.00	84.40	A16S
ATOM	46966	C2	GUA	1292	258.779	119.450	15.692	1.00	67.75	A16S	ATOM	47019	C3'	URI	1294	255.331	124.221	23.256	1.00	84.40	A16S
ATOM	46967	N2	GUA	1292	259.012	120.772	15.574	1.00	67.75	A16S	ATOM	47020	O3'	URI	1294	255.486	125.244	24.229	1.00	84.40	A16S
ATOM	46968	N1	GUA	1292	257.499	119.030	15.439	1.00	67.75	A16S	ATOM	47021	P	CYT	1295	254.658	125.154	25.599	1.00	103.71	A16S
ATOM	46969	C6	GUA	1292	257.056	117.718	15.523	1.00	67.75	A16S	ATOM	47022	O1P	CYT	1295	254.948	126.384	26.365	1.00	52.31	A16S
ATOM	46970	O6	GUA	1292	255.881	117.455	15.265	1.00	67.75	A16S	ATOM	47023	O2P	CYT	1295	254.933	123.817	26.207	1.00	52.31	A16S
ATOM	46971	C5	GUA	1292	258.101	116.837	15.915	1.00	67.75	A16S	ATOM	47024	O5'	CYT	1295	253.138	125.233	25.124	1.00	103.71	A16S
ATOM	46972	N7	GUA	1292	258.095	115.464	16.129	1.00	67.75	A16S	ATOM	47025	C5'	CYT	1295	252.634	126.421	24.478	1.00	103.71	A16S
ATOM	46973	C8	GUA	1292	259.326	115.181	16.457	1.00	67.75	A16S	ATOM	47026	C4'	CYT	1295	251.192	126.234	24.039	1.00	103.71	A16S
ATOM	46974	C2'	GUA	1292	261.758	116.841	18.260	1.00	78.59	A16S	ATOM	47027	O4'	CYT	1295	251.097	125.300	22.926	1.00	103.71	A16S
ATOM	46975	O2'	GUA	1292	262.870	117.711	18.357	1.00	78.59	A16S	ATOM	47028	C1'	CYT	1295	249.854	124.612	22.987	1.00	103.71	A16S
ATOM	46976	C3'	GUA	1292	261.947	115.519	18.992	1.00	78.59	A16S	ATOM	47029	N1	CYT	1295	250.096	123.160	23.133	1.00	52.31	A16S

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ATOM  47030  C6  CYT  1295     251.277 122.683  23.635  1.00 52.31      A16S
ATOM  47031  C2  CYT  1295     249.078 122.264  22.765  1.00 52.31      A16S
ATOM  47032  O2  CYT  1295     248.012 122.715  22.310  1.00 52.31      A16S
ATOM  47033  N3  CYT  1295     249.275 120.932  22.924  1.00 52.31      A16S
ATOM  47034  C4  CYT  1295     250.422 120.482  23.433  1.00 52.31      A16S
ATOM  47035  N4  CYT  1295     250.563 119.159  23.596  1.00 52.31      A16S
ATOM  47036  C5  CYT  1295     251.477 121.366  23.804  1.00 52.31      A16S
ATOM  47037  C2' CYT  1295     249.085 125.162  24.187  1.00103.71      A16S
ATOM  47038  O2' CYT  1295     248.219 126.192  23.748  1.00103.71      A16S
ATOM  47039  C3' CYT  1295     250.218 125.680  25.064  1.00103.71      A16S
ATOM  47040  O3' CYT  1295     249.774 126.651  25.993  1.00103.71      A16S
ATOM  47041  P   URI  1296     249.301 126.182  27.454  1.00 91.12      A16S
ATOM  47042  O1P URI  1296     249.294 127.404  28.285  1.00 70.05      A16S
ATOM  47043  O2P URI  1296     250.091 125.006  27.880  1.00 70.05      A16S
ATOM  47044  O5' URI  1296     247.802 125.679  27.242  1.00 91.12      A16S
ATOM  47045  C5' URI  1296     246.776 126.561  26.724  1.00 91.12      A16S
ATOM  47046  C4' URI  1296     245.527 125.776  26.369  1.00 91.12      A16S
ATOM  47047  O4' URI  1296     245.802 124.880  25.263  1.00 91.12      A16S
ATOM  47048  C1' URI  1296     244.999 123.723  25.383  1.00 91.12      A16S
ATOM  47049  N1  URI  1296     245.845 122.522  25.288  1.00 70.05      A16S
ATOM  47050  C6  URI  1296     247.168 122.531  25.662  1.00 70.05      A16S
ATOM  47051  C2  URI  1296     245.255 121.360  24.799  1.00 70.05      A16S
ATOM  47052  O2  URI  1296     244.087 121.301  24.450  1.00 70.05      A16S
ATOM  47053  N3  URI  1296     246.082 120.268  24.729  1.00 70.05      A16S
ATOM  47054  C4  URI  1296     247.407 120.210  25.078  1.00 70.05      A16S
ATOM  47055  O4  URI  1296     248.030 119.158  24.906  1.00 70.05      A16S
ATOM  47056  C5  URI  1296     247.949 121.445  25.578  1.00 70.05      A16S
ATOM  47057  C2' URI  1296     244.181 123.831  26.672  1.00 91.12      A16S
ATOM  47058  O2' URI  1296     242.878 124.263  26.346  1.00 91.12      A16S
ATOM  47059  C3' URI  1296     244.952 124.883  27.462  1.00 91.12      A16S
ATOM  47060  O3' URI  1296     244.061 125.625  28.293  1.00 91.12      A16S
ATOM  47061  P   GUA  1297     244.129 125.476  29.897  1.00 87.70      A16S
ATOM  47062  O1P GUA  1297     243.195 126.513  30.418  1.00 85.33      A16S
ATOM  47063  O2P GUA  1297     245.550 125.464  30.351  1.00 85.33      A16S
ATOM  47064  O5' GUA  1297     243.519 124.038  30.212  1.00 87.70      A16S
ATOM  47065  C5' GUA  1297     242.117 123.792  30.089  1.00 87.70      A16S
ATOM  47066  C4' GUA  1297     241.887 122.340  29.807  1.00 87.70      A16S
ATOM  47067  O4' GUA  1297     242.657 121.979  28.635  1.00 87.70      A16S
ATOM  47068  C1' GUA  1297     243.111 120.646  28.757  1.00 87.70      A16S
ATOM  47069  N9  GUA  1297     244.565 120.624  28.627  1.00 85.33      A16S
ATOM  47070  C4  GUA  1297     245.324 119.524  28.299  1.00 85.33      A16S
ATOM  47071  N3  GUA  1297     244.850 118.294  28.005  1.00 85.33      A16S
ATOM  47072  C2  GUA  1297     245.822 117.436  27.758  1.00 85.33      A16S
ATOM  47073  N2  GUA  1297     245.529 116.168  27.457  1.00 85.33      A16S
ATOM  47074  N1  GUA  1297     247.155 117.756  27.792  1.00 85.33      A16S
ATOM  47075  C6  GUA  1297     247.668 119.013  28.093  1.00 85.33      A16S
ATOM  47076  O6  GUA  1297     248.891 119.189  28.105  1.00 85.33      A16S
ATOM  47077  C5  GUA  1297     246.632 119.951  28.360  1.00 85.33      A16S
ATOM  47078  N7  GUA  1297     246.696 121.299  28.693  1.00 85.33      A16S
ATOM  47079  C8  GUA  1297     245.448 121.658  28.833  1.00 85.33      A16S
ATOM  47080  C2' GUA  1297     242.636 120.102  30.107  1.00 87.70      A16S
ATOM  47081  O2' GUA  1297     241.479 119.310  29.936  1.00 87.70      A16S
ATOM  47082  C3' GUA  1297     242.370 121.386  30.887  1.00 87.70      A16S
ATOM  47083  O3' GUA  1297     241.375 121.193  31.892  1.00 87.70      A16S
ATOM  47084  P   CYT  1298     241.794 121.179  33.447  1.00 75.46      A16S
ATOM  47085  O1P CYT  1298     242.714 122.341  33.627  1.00 65.03      A16S
ATOM  47086  O2P CYT  1298     240.556 121.075  34.273  1.00 65.03      A16S
ATOM  47087  O5' CYT  1298     242.590 119.812  33.644  1.00 75.46      A16S
ATOM  47088  C5' CYT  1298     243.493 119.664  34.740  1.00 75.46      A16S
ATOM  47089  C4' CYT  1298     243.923 118.225  34.896  1.00 75.46      A16S
ATOM  47090  O4' CYT  1298     242.784 117.403  35.251  1.00 75.46      A16S
ATOM  47091  C1' CYT  1298     243.058 116.061  34.895  1.00 75.46      A16S
ATOM  47092  N1  CYT  1298     241.894 115.487  34.196  1.00 65.03      A16S
ATOM  47093  C6  CYT  1298     241.038 116.273  33.472  1.00 65.03      A16S
ATOM  47094  C2  CYT  1298     241.680 114.101  34.285  1.00 65.03      A16S
ATOM  47095  O2  CYT  1298     242.474 113.409  34.942  1.00 65.03      A16S
ATOM  47096  N3  CYT  1298     240.618 113.551  33.652  1.00 65.03      A16S
ATOM  47097  C4  CYT  1298     239.783 114.327  32.950  1.00 65.03      A16S
ATOM  47098  N4  CYT  1298     238.736 113.736  32.343  1.00 65.03      A16S
ATOM  47099  C5  CYT  1298     239.980 115.743  32.839  1.00 65.03      A16S
ATOM  47100  C2' CYT  1298     244.351 116.039  34.074  1.00 75.46      A16S
ATOM  47101  O2' CYT  1298     245.397 115.539  34.879  1.00 75.46      A16S
ATOM  47102  C3' CYT  1298     244.522 117.511  33.694  1.00 75.46      A16S
ATOM  47103  O3' CYT  1298     245.898 117.841  33.482  1.00 75.46      A16S
ATOM  47104  P   ADE  1299     246.423 118.180  31.991  1.00 98.33      A16S
ATOM  47105  O1P ADE  1299     247.895 118.415  32.070  1.00 71.04      A16S
ATOM  47106  O2P ADE  1299     245.550 119.235  31.412  1.00 71.04      A16S
ATOM  47107  O5' ADE  1299     246.204 116.821  31.187  1.00 98.33      A16S
ATOM  47108  C5' ADE  1299     246.845 115.618  31.629  1.00 98.33      A16S
ATOM  47109  C4' ADE  1299     246.087 114.399  31.162  1.00 98.33      A16S
ATOM  47110  O4' ADE  1299     244.697 114.506  31.545  1.00 98.33      A16S
ATOM  47111  C1' ADE  1299     243.882 113.877  30.573  1.00 98.33      A16S
ATOM  47112  N9  ADE  1299     242.915 114.862  30.080  1.00 71.04      A16S
ATOM  47113  C4  ADE  1299     241.740 114.609  29.409  1.00 71.04      A16S
ATOM  47114  N3  ADE  1299     241.244 113.413  29.045  1.00 71.04      A16S
ATOM  47115  C2  ADE  1299     240.078 113.560  28.413  1.00 71.04      A16S
ATOM  47116  N1  ADE  1299     239.399 114.681  28.129  1.00 71.04      A16S
ATOM  47117  C6  ADE  1299     239.922 115.866  28.515  1.00 71.04      A16S
ATOM  47118  N6  ADE  1299     239.244 116.986  28.245  1.00 71.04      A16S
ATOM  47119  C5  ADE  1299     241.160 115.848  29.188  1.00 71.04      A16S
ATOM  47120  N7  ADE  1299     241.957 116.862  29.699  1.00 71.04      A16S
ATOM  47121  C8  ADE  1299     242.982 116.231  30.209  1.00 71.04      A16S
ATOM  47122  C2' ADE  1299     244.805 113.276  29.507  1.00 98.33      A16S
ATOM  47123  O2' ADE  1299     245.032 111.914  29.830  1.00 98.33      A16S
ATOM  47124  C3' ADE  1299     246.068 114.120  29.669  1.00 98.33      A16S
ATOM  47125  O3' ADE  1299     247.230 113.371  29.324  1.00 98.33      A16S
ATOM  47126  P   ADE  1300     248.035 113.702  27.975  1.00 91.69      A16S
ATOM  47127  O1P ADE  1300     249.267 112.882  28.043  1.00 59.73      A16S
ATOM  47128  O2P ADE  1300     248.137 115.174  27.779  1.00 59.73      A16S
ATOM  47129  O5' ADE  1300     247.119 113.099  26.821  1.00 91.69      A16S
ATOM  47130  C5' ADE  1300     247.648 112.865  25.497  1.00 91.69      A16S
ATOM  47131  C4' ADE  1300     246.549 112.996  24.471  1.00 91.69      A16S
ATOM  47132  O4' ADE  1300     245.935 114.285  24.586  1.00 91.69      A16S
ATOM  47133  C1' ADE  1300     245.160 114.461  23.439  1.00 91.69      A16S
ATOM  47134  N9  ADE  1300     244.800 115.867  23.325  1.00 59.73      A16S
ATOM  47135  C4  ADE  1300     243.590 116.321  22.861  1.00 59.73      A16S
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ATOM	47136	N3	ADE	1300	242.560	115.576	22.417	1.00	59.73	A16S	ATOM	47189	O1P	CYT	1303	240.513	106.562	14.662	1.00	86.35	A16S
ATOM	47137	C2	ADE	1300	241.547	116.355	22.045	1.00	59.73	A16S	ATOM	47190	O2P	CYT	1303	239.061	107.061	16.705	1.00	86.35	A16S
ATOM	47138	N1	ADE	1300	241.453	117.693	22.065	1.00	59.73	A16S	ATOM	47191	O5'	CYT	1303	241.293	108.117	16.437	1.00	78.34	A16S
ATOM	47139	C6	ADE	1300	242.505	118.413	22.517	1.00	59.73	A16S	ATOM	47192	C5'	CYT	1303	241.151	109.318	15.670	1.00	78.34	A16S
ATOM	47140	N6	ADE	1300	242.408	119.748	22.527	1.00	59.73	A16S	ATOM	47193	C4'	CYT	1303	241.248	110.532	16.565	1.00	78.34	A16S
ATOM	47141	C5	ADE	1300	243.645	117.702	22.946	1.00	59.73	A16S	ATOM	47194	O4'	CYT	1303	240.194	110.467	17.559	1.00	78.34	A16S
ATOM	47142	N7	ADE	1300	244.872	118.112	23.453	1.00	59.73	A16S	ATOM	47195	C1'	CYT	1303	240.752	110.625	18.848	1.00	78.34	A16S
ATOM	47143	C8	ADE	1300	245.521	116.987	23.655	1.00	59.73	A16S	ATOM	47196	N1	CYT	1303	239.940	109.868	19.820	1.00	86.35	A16S
ATOM	47144	C2'	ADE	1300	245.958	113.853	22.282	1.00	91.69	A16S	ATOM	47197	C6	CYT	1303	239.370	108.670	19.485	1.00	86.35	A16S
ATOM	47145	O2'	ADE	1300	245.077	113.187	21.394	1.00	91.69	A16S	ATOM	47198	C2	CYT	1303	239.748	110.409	21.102	1.00	86.35	A16S
ATOM	47146	C3'	ADE	1300	246.965	112.931	23.004	1.00	91.69	A16S	ATOM	47199	O2	CYT	1303	240.295	111.490	21.398	1.00	86.35	A16S
ATOM	47147	O3'	ADE	1300	246.867	111.582	22.548	1.00	91.69	A16S	ATOM	47200	N3	CYT	1303	238.975	109.741	21.984	1.00	86.35	A16S
ATOM	47148	P	CYT	1301	248.065	110.554	22.834	1.00	77.88	A16S	ATOM	47201	C4	CYT	1303	238.411	108.581	21.638	1.00	86.35	A16S
ATOM	47149	O1P	CYT	1301	248.070	110.313	24.295	1.00	82.57	A16S	ATOM	47202	N4	CYT	1303	237.644	107.968	22.540	1.00	86.35	A16S
ATOM	47150	O2P	CYT	1301	249.286	111.067	22.170	1.00	82.57	A16S	ATOM	47203	C5	CYT	1303	238.605	108.002	20.354	1.00	86.35	A16S
ATOM	47151	O5'	CYT	1301	247.616	109.193	22.134	1.00	77.88	A16S	ATOM	47204	C2'	CYT	1303	242.220	110.216	18.727	1.00	78.34	A16S
ATOM	47152	C5'	CYT	1301	248.570	108.376	21.424	1.00	77.88	A16S	ATOM	47205	O2'	CYT	1303	242.979	110.829	19.752	1.00	78.34	A16S
ATOM	47153	C4'	CYT	1301	247.947	107.057	21.018	1.00	77.88	A16S	ATOM	47206	C3'	CYT	1303	242.557	110.739	17.331	1.00	78.34	A16S
ATOM	47154	O4'	CYT	1301	247.784	106.215	22.187	1.00	77.88	A16S	ATOM	47207	O3'	CYT	1303	242.772	112.146	17.441	1.00	78.34	A16S
ATOM	47155	C1'	CYT	1301	246.560	105.502	22.098	1.00	77.88	A16S	ATOM	47208	P	GUA	1304	243.941	112.867	16.602	1.00	61.22	A16S
ATOM	47156	N1	CYT	1301	245.683	106.005	23.169	1.00	82.57	A16S	ATOM	47209	O1P	GUA	1304	243.713	112.612	15.162	1.00	83.15	A16S
ATOM	47157	C6	CYT	1301	245.799	107.303	23.595	1.00	82.57	A16S	ATOM	47210	O2P	GUA	1304	245.249	112.510	17.217	1.00	83.15	A16S
ATOM	47158	C2	CYT	1301	244.720	105.150	23.744	1.00	82.57	A16S	ATOM	47211	O5'	GUA	1304	243.628	114.411	16.837	1.00	61.22	A16S
ATOM	47159	O2	CYT	1301	244.629	103.966	23.357	1.00	82.57	A16S	ATOM	47212	C5'	GUA	1304	242.269	114.867	16.798	1.00	61.22	A16S
ATOM	47160	N3	CYT	1301	243.916	105.642	24.708	1.00	82.57	A16S	ATOM	47213	C4'	GUA	1304	242.155	116.294	17.261	1.00	61.22	A16S
ATOM	47161	C4	CYT	1301	244.036	106.917	25.102	1.00	82.57	A16S	ATOM	47214	O4'	GUA	1304	242.494	116.401	18.663	1.00	61.22	A16S
ATOM	47162	N4	CYT	1301	243.207	107.362	26.044	1.00	82.57	A16S	ATOM	47215	C1'	GUA	1304	243.034	117.691	18.919	1.00	61.22	A16S
ATOM	47163	C5	CYT	1301	245.006	107.793	24.545	1.00	82.57	A16S	ATOM	47216	N9	GUA	1304	244.354	117.545	19.535	1.00	83.15	A16S
ATOM	47164	C2'	CYT	1301	245.962	105.777	20.716	1.00	77.88	A16S	ATOM	47217	C4	GUA	1304	245.120	118.563	20.062	1.00	83.15	A16S
ATOM	47165	O2'	CYT	1301	246.343	104.763	19.805	1.00	77.88	A16S	ATOM	47218	N3	GUA	1304	244.794	119.873	20.084	1.00	83.15	A16S
ATOM	47166	C3'	CYT	1301	246.560	107.141	20.395	1.00	77.88	A16S	ATOM	47219	C2	GUA	1304	245.732	120.605	20.655	1.00	83.15	A16S
ATOM	47167	O3'	CYT	1301	246.594	107.422	19.002	1.00	77.88	A16S	ATOM	47220	N2	GUA	1304	245.584	121.932	20.738	1.00	83.15	A16S
ATOM	47168	P	CYT	1302	245.444	108.340	18.359	1.00	80.22	A16S	ATOM	47221	N1	GUA	1304	246.889	120.092	21.179	1.00	83.15	A16S
ATOM	47169	O1P	CYT	1302	245.791	108.583	16.937	1.00	65.92	A16S	ATOM	47222	C6	GUA	1304	247.244	118.749	21.173	1.00	83.15	A16S
ATOM	47170	O2P	CYT	1302	245.189	109.495	19.255	1.00	65.92	A16S	ATOM	47223	O6	GUA	1304	248.313	118.394	21.678	1.00	83.15	A16S
ATOM	47171	O5'	CYT	1302	244.168	107.398	18.408	1.00	80.22	A16S	ATOM	47224	C5	GUA	1304	246.256	117.951	20.548	1.00	83.15	A16S
ATOM	47172	C5'	CYT	1302	244.207	106.104	17.807	1.00	80.22	A16S	ATOM	47225	N7	GUA	1304	246.215	116.581	20.323	1.00	83.15	A16S
ATOM	47173	C4'	CYT	1302	243.077	105.258	18.322	1.00	80.22	A16S	ATOM	47226	C8	GUA	1304	245.074	116.385	19.719	1.00	83.15	A16S
ATOM	47174	O4'	CYT	1302	243.242	105.070	19.750	1.00	80.22	A16S	ATOM	47227	C2'	GUA	1304	243.069	118.459	17.594	1.00	61.22	A16S
ATOM	47175	C1'	CYT	1302	241.969	104.988	20.367	1.00	80.22	A16S	ATOM	47228	O2'	GUA	1304	241.952	119.331	17.528	1.00	61.22	A16S
ATOM	47176	N1	CYT	1302	241.837	106.082	21.351	1.00	65.92	A16S	ATOM	47229	C3'	GUA	1304	243.044	117.317	16.578	1.00	61.22	A16S
ATOM	47177	C6	CYT	1302	242.374	107.319	21.114	1.00	65.92	A16S	ATOM	47230	O3'	GUA	1304	242.530	117.695	15.309	1.00	61.22	A16S
ATOM	47178	C2	CYT	1302	241.125	105.839	22.534	1.00	65.92	A16S	ATOM	47231	P	ADE	1305	243.481	117.623	14.011	1.00	70.19	A16S
ATOM	47179	O2	CYT	1302	240.676	104.705	22.738	1.00	65.92	A16S	ATOM	47232	O1P	ADE	1305	242.605	117.497	12.812	1.00	58.10	A16S
ATOM	47180	N3	CYT	1302	240.949	106.845	23.423	1.00	65.92	A16S	ATOM	47233	O2P	ADE	1305	244.538	116.595	14.258	1.00	58.10	A16S
ATOM	47181	C4	CYT	1302	241.459	108.049	23.176	1.00	65.92	A16S	ATOM	47234	O5'	ADE	1305	244.119	119.077	13.952	1.00	70.19	A16S
ATOM	47182	N4	CYT	1302	241.249	109.010	24.073	1.00	65.92	A16S	ATOM	47235	C5'	ADE	1305	243.268	120.208	13.736	1.00	70.19	A16S
ATOM	47183	C5	CYT	1302	242.209	108.322	21.991	1.00	65.92	A16S	ATOM	47236	C4'	ADE	1305	243.833	121.433	14.398	1.00	70.19	A16S
ATOM	47184	C2'	CYT	1302	240.914	105.083	19.265	1.00	80.22	A16S	ATOM	47237	O4'	ADE	1305	244.011	121.193	15.818	1.00	70.19	A16S
ATOM	47185	O2'	CYT	1302	240.551	103.773	18.874	1.00	80.22	A16S	ATOM	47238	C1'	ADE	1305	245.177	121.861	16.273	1.00	70.19	A16S
ATOM	47186	C3'	CYT	1302	241.674	105.833	18.178	1.00	80.22	A16S	ATOM	47239	N9	ADE	1305	246.118	120.846	16.745	1.00	58.10	A16S
ATOM	47187	O3'	CYT	1302	241.126	105.625	16.878	1.00	80.22	A16S	ATOM	47240	C4	ADE	1305	247.219	121.038	17.555	1.00	58.10	A16S
ATOM	47188	P	CYT	1303	240.398	106.843	16.113	1.00	78.34	A16S	ATOM	47241	N3	ADE	1305	247.673	122.199	18.075	1.00	58.10	A16S

ATOM	47242	C2	ADE	1305	248.752	121.988	18.829	1.00	58.10	A16S	ATOM	47295	O2P	CYT	1308	255.746	125.417	9.305	1.00	54.80	A16S
ATOM	47243	N1	ADE	1305	249.383	120.837	19.103	1.00	58.10	A16S	ATOM	47296	O5'	CYT	1308	258.075	125.262	10.207	1.00	71.97	A16S
ATOM	47244	C6	ADE	1305	248.906	119.692	18.568	1.00	58.10	A16S	ATOM	47297	C5'	CYT	1308	259.294	125.809	10.752	1.00	71.97	A16S
ATOM	47245	N6	ADE	1305	249.532	118.548	18.845	1.00	58.10	A16S	ATOM	47298	C4'	CYT	1308	260.277	124.710	11.093	1.00	71.97	A16S
ATOM	47246	C5	ADE	1305	247.765	119.779	17.747	1.00	58.10	A16S	ATOM	47299	O4'	CYT	1308	259.786	123.910	12.199	1.00	71.97	A16S
ATOM	47247	N7	ADE	1305	247.033	118.820	17.060	1.00	58.10	A16S	ATOM	47300	C1'	CYT	1308	260.305	122.593	12.093	1.00	71.97	A16S
ATOM	47248	C8	ADE	1305	246.076	119.503	16.482	1.00	58.10	A16S	ATOM	47301	N1	CYT	1308	259.200	121.623	12.089	1.00	54.80	A16S
ATOM	47249	C2'	ADE	1305	245.737	122.652	15.094	1.00	70.19	A16S	ATOM	47302	C6	CYT	1308	257.964	121.946	11.591	1.00	54.80	A16S
ATOM	47250	O2'	ADE	1305	245.218	123.973	15.106	1.00	70.19	A16S	ATOM	47303	C2	CYT	1308	259.447	120.333	12.591	1.00	54.80	A16S
ATOM	47251	C3'	ADE	1305	245.210	121.840	13.922	1.00	70.19	A16S	ATOM	47304	O2	CYT	1308	260.568	120.071	13.050	1.00	54.80	A16S
ATOM	47252	O3'	ADE	1305	245.170	122.573	12.718	1.00	70.19	A16S	ATOM	47305	N3	CYT	1308	258.462	119.408	12.559	1.00	54.80	A16S
ATOM	47253	P	CYT	1306	246.429	122.507	11.736	1.00	66.45	A16S	ATOM	47306	C4	CYT	1308	257.268	119.724	12.050	1.00	54.80	A16S
ATOM	47254	O1P	CYT	1306	246.104	123.301	10.525	1.00	54.38	A16S	ATOM	47307	N4	CYT	1308	256.345	118.773	12.015	1.00	54.80	A16S
ATOM	47255	O2P	CYT	1306	246.850	121.074	11.612	1.00	54.38	A16S	ATOM	47308	C5	CYT	1308	256.979	121.034	11.548	1.00	54.80	A16S
ATOM	47256	O5'	CYT	1306	247.561	123.281	12.541	1.00	66.45	A16S	ATOM	47309	C2'	CYT	1308	261.119	122.504	10.802	1.00	71.97	A16S
ATOM	47257	C5'	CYT	1306	247.401	124.666	12.898	1.00	66.45	A16S	ATOM	47310	O2'	CYT	1308	262.500	122.587	11.103	1.00	71.97	A16S
ATOM	47258	C4'	CYT	1306	248.594	125.132	13.691	1.00	66.45	A16S	ATOM	47311	C3'	CYT	1308	260.573	123.688	10.010	1.00	71.97	A16S
ATOM	47259	O4'	CYT	1306	248.631	124.433	14.962	1.00	66.45	A16S	ATOM	47312	O3'	CYT	1308	261.492	124.163	9.047	1.00	71.97	A16S
ATOM	47260	C1'	CYT	1306	249.973	124.183	15.332	1.00	66.45	A16S	ATOM	47313	P	CYT	1309	261.529	123.477	7.596	1.00	67.50	A16S
ATOM	47261	N1	CYT	1306	250.172	122.733	15.439	1.00	54.38	A16S	ATOM	47314	O1P	CYT	1309	262.468	124.282	6.772	1.00	80.37	A16S
ATOM	47262	C6	CYT	1306	249.344	121.857	14.798	1.00	54.38	A16S	ATOM	47315	O2P	CYT	1309	260.134	123.272	7.122	1.00	80.37	A16S
ATOM	47263	C2	CYT	1306	251.236	122.258	16.211	1.00	54.38	A16S	ATOM	47316	O5'	CYT	1309	262.183	122.049	7.881	1.00	67.50	A16S
ATOM	47264	O2	CYT	1306	251.976	123.075	16.785	1.00	54.38	A16S	ATOM	47317	C5'	CYT	1309	263.523	121.964	8.388	1.00	67.50	A16S
ATOM	47265	N3	CYT	1306	251.435	120.926	16.317	1.00	54.38	A16S	ATOM	47318	C4'	CYT	1309	263.974	120.531	8.490	1.00	67.50	A16S
ATOM	47266	C4	CYT	1306	250.622	120.081	15.688	1.00	54.38	A16S	ATOM	47319	O4'	CYT	1309	263.322	119.856	9.595	1.00	67.50	A16S
ATOM	47267	N4	CYT	1306	250.857	118.774	15.825	1.00	54.38	A16S	ATOM	47320	C1'	CYT	1309	263.185	118.477	9.291	1.00	67.50	A16S
ATOM	47268	C5	CYT	1306	249.531	120.537	14.894	1.00	54.38	A16S	ATOM	47321	N1	CYT	1309	261.760	118.106	9.375	1.00	80.37	A16S
ATOM	47269	C2'	CYT	1306	250.870	124.800	14.267	1.00	66.45	A16S	ATOM	47322	C6	CYT	1309	260.774	119.045	9.229	1.00	80.37	A16S
ATOM	47270	O2'	CYT	1306	251.211	126.098	14.691	1.00	66.45	A16S	ATOM	47323	C2	CYT	1309	261.427	116.761	9.597	1.00	80.37	A16S
ATOM	47271	C3'	CYT	1306	249.941	124.820	13.066	1.00	66.45	A16S	ATOM	47324	O2	CYT	1309	262.338	115.930	9.724	1.00	80.37	A16S
ATOM	47272	O3'	CYT	1306	250.324	125.772	12.092	1.00	66.45	A16S	ATOM	47325	N3	CYT	1309	260.124	116.403	9.663	1.00	80.37	A16S
ATOM	47273	P	CYT	1307	251.343	125.329	10.936	1.00	65.80	A16S	ATOM	47326	C4	CYT	1309	259.170	117.326	9.514	1.00	80.37	A16S
ATOM	47274	O1P	CYT	1307	251.326	126.390	9.909	1.00	51.22	A16S	ATOM	47327	N4	CYT	1309	257.895	116.928	9.584	1.00	80.37	A16S
ATOM	47275	O2P	CYT	1307	251.048	123.928	10.556	1.00	51.22	A16S	ATOM	47328	C5	CYT	1309	259.480	118.702	9.288	1.00	80.37	A16S
ATOM	47276	O5'	CYT	1307	252.756	125.308	11.663	1.00	65.80	A16S	ATOM	47329	C2'	CYT	1309	263.759	118.242	7.890	1.00	67.50	A16S
ATOM	47277	C5'	CYT	1307	253.234	126.465	12.364	1.00	65.80	A16S	ATOM	47330	O2'	CYT	1309	265.048	117.666	7.993	1.00	67.50	A16S
ATOM	47278	C4'	CYT	1307	254.537	126.157	13.060	1.00	65.80	A16S	ATOM	47331	C3'	CYT	1309	263.706	119.648	7.290	1.00	67.50	A16S
ATOM	47279	O4'	CYT	1307	254.321	125.213	14.136	1.00	65.80	A16S	ATOM	47332	O3'	CYT	1309	264.648	119.871	6.250	1.00	67.50	A16S
ATOM	47280	C1'	CYT	1307	255.471	124.407	14.292	1.00	65.80	A16S	ATOM	47333	P	ADE	1310	264.187	119.706	4.718	1.00	63.31	A16S
ATOM	47281	N1	CYT	1307	255.077	122.992	14.244	1.00	51.22	A16S	ATOM	47334	O1P	ADE	1310	265.334	120.114	3.867	1.00	71.52	A16S
ATOM	47282	C6	CYT	1307	253.915	122.596	13.639	1.00	51.22	A16S	ATOM	47335	O2P	ADE	1310	262.876	120.386	4.539	1.00	71.52	A16S
ATOM	47283	C2	CYT	1307	255.918	122.045	14.854	1.00	51.22	A16S	ATOM	47336	O5'	ADE	1310	263.962	118.129	4.591	1.00	63.31	A16S
ATOM	47284	O2	CYT	1307	256.984	122.426	15.368	1.00	51.22	A16S	ATOM	47337	C5'	ADE	1310	265.058	117.232	4.811	1.00	63.31	A16S
ATOM	47285	N3	CYT	1307	255.549	120.742	14.865	1.00	51.22	A16S	ATOM	47338	C4'	ADE	1310	264.582	115.810	5.022	1.00	63.31	A16S
ATOM	47286	C4	CYT	1307	254.404	120.369	14.294	1.00	51.22	A16S	ATOM	47339	O4'	ADE	1310	263.820	115.701	6.251	1.00	63.31	A16S
ATOM	47287	N4	CYT	1307	254.074	119.077	14.356	1.00	51.22	A16S	ATOM	47340	C1'	ADE	1310	262.904	114.617	6.142	1.00	63.31	A16S
ATOM	47288	C5	CYT	1307	253.542	121.308	13.641	1.00	51.22	A16S	ATOM	47341	N9	ADE	1310	261.537	115.126	6.278	1.00	71.52	A16S
ATOM	47289	C2'	CYT	1307	256.496	124.822	13.238	1.00	65.80	A16S	ATOM	47342	C4	ADE	1310	260.414	114.346	6.427	1.00	71.52	A16S
ATOM	47290	O2'	CYT	1307	257.398	125.699	13.873	1.00	65.80	A16S	ATOM	47343	N3	ADE	1310	260.359	113.006	6.537	1.00	71.52	A16S
ATOM	47291	C3'	CYT	1307	255.618	125.521	12.204	1.00	65.80	A16S	ATOM	47344	C2	ADE	1310	259.096	112.592	6.616	1.00	71.52	A16S
ATOM	47292	O3'	CYT	1307	256.311	126.520	11.464	1.00	65.80	A16S	ATOM	47345	N1	ADE	1310	257.969	113.311	6.596	1.00	71.52	A16S
ATOM	47293	P	CYT	1308	256.807	126.199	9.974	1.00	71.97	A16S	ATOM	47346	C6	ADE	1310	258.064	114.655	6.485	1.00	71.52	A16S
ATOM	47294	O1P	CYT	1308	257.268	127.473	9.368	1.00	54.80	A16S	ATOM	47347	N6	ADE	1310	256.944	115.376	6.448	1.00	71.52	A16S

ATOM	47348	C5	ADE	1310	259.345	115.218	6.404	1.00	71.52	A16S	ATOM	47401	O5'	ADE	1313	254.800	111.266	-5.249	1.00	57.10	A16S
ATOM	47349	N7	ADE	1310	259.782	116.531	6.288	1.00	71.52	A16S	ATOM	47402	C5'	ADE	1313	254.935	109.869	-4.880	1.00	57.10	A16S
ATOM	47350	C8	ADE	1310	261.086	116.424	6.228	1.00	71.52	A16S	ATOM	47403	C4'	ADE	1313	253.578	109.258	-4.626	1.00	57.10	A16S
ATOM	47351	C2'	ADE	1310	263.078	114.001	4.752	1.00	63.31	A16S	ATOM	47404	O4'	ADE	1313	253.028	109.809	-3.409	1.00	57.10	A16S
ATOM	47352	O2'	ADE	1310	263.905	112.855	4.818	1.00	63.31	A16S	ATOM	47405	C1'	ADE	1313	251.652	110.093	-3.584	1.00	57.10	A16S
ATOM	47353	C3'	ADE	1310	263.688	115.163	3.976	1.00	63.31	A16S	ATOM	47406	N9	ADE	1313	251.480	111.547	-3.466	1.00	52.06	A16S
ATOM	47354	O3'	ADE	1310	264.374	114.716	2.816	1.00	63.31	A16S	ATOM	47407	C4	ADE	1313	250.306	112.259	-3.477	1.00	52.06	A16S
ATOM	47355	P	URI	1311	263.633	114.802	1.393	1.00	71.93	A16S	ATOM	47408	N3	ADE	1313	249.056	111.777	-3.594	1.00	52.06	A16S
ATOM	47356	O1P	URI	1311	264.555	114.363	0.302	1.00	71.60	A16S	ATOM	47409	C2	ADE	1313	248.172	112.770	-3.575	1.00	52.06	A16S
ATOM	47357	O2P	URI	1311	263.010	116.152	1.311	1.00	71.60	A16S	ATOM	47410	N1	ADE	1313	248.381	114.090	-3.466	1.00	52.06	A16S
ATOM	47358	O5'	URI	1311	262.464	113.727	1.540	1.00	71.93	A16S	ATOM	47411	C6	ADE	1313	249.649	114.535	-3.354	1.00	52.06	A16S
ATOM	47359	C5'	URI	1311	262.739	112.382	1.985	1.00	71.93	A16S	ATOM	47412	N6	ADE	1313	249.862	115.849	-3.256	1.00	52.06	A16S
ATOM	47360	C4'	URI	1311	261.451	111.593	2.124	1.00	71.93	A16S	ATOM	47413	C5	ADE	1313	250.672	113.586	-3.352	1.00	52.06	A16S
ATOM	47361	O4'	URI	1311	260.643	112.156	3.187	1.00	71.93	A16S	ATOM	47414	N7	ADE	1313	252.044	113.709	-3.253	1.00	52.06	A16S
ATOM	47362	C1'	URI	1311	259.268	112.041	2.860	1.00	71.93	A16S	ATOM	47415	C8	ADE	1313	252.474	112.479	-3.324	1.00	52.06	A16S
ATOM	47363	N1	URI	1311	258.678	113.392	2.850	1.00	71.60	A16S	ATOM	47416	C2'	ADE	1313	251.236	109.510	-4.936	1.00	57.10	A16S
ATOM	47364	C6	URI	1311	259.448	114.502	2.585	1.00	71.60	A16S	ATOM	47417	O2'	ADE	1313	250.800	108.183	-4.735	1.00	57.10	A16S
ATOM	47365	C2	URI	1311	257.326	113.521	3.139	1.00	71.60	A16S	ATOM	47418	C3'	ADE	1313	252.548	109.553	-5.703	1.00	57.10	A16S
ATOM	47366	O2	URI	1311	256.591	112.570	3.346	1.00	71.60	A16S	ATOM	47419	O3'	ADE	1313	252.620	108.574	-6.729	1.00	57.10	A16S
ATOM	47367	N3	URI	1311	256.866	114.812	3.173	1.00	71.60	A16S	ATOM	47420	P	ADE	1314	252.443	109.014	-8.264	1.00	63.45	A16S
ATOM	47368	C4	URI	1311	257.593	115.960	2.947	1.00	71.60	A16S	ATOM	47421	O1P	ADE	1314	252.769	107.807	-9.070	1.00	49.57	A16S
ATOM	47369	O4	URI	1311	257.059	117.053	3.108	1.00	71.60	A16S	ATOM	47422	O2P	ADE	1314	253.169	110.289	-8.519	1.00	49.57	A16S
ATOM	47370	C5	URI	1311	258.963	115.743	2.623	1.00	71.60	A16S	ATOM	47423	O5'	ADE	1314	250.886	109.326	-8.384	1.00	63.45	A16S
ATOM	47371	C2'	URI	1311	259.169	111.287	1.534	1.00	71.93	A16S	ATOM	47424	C5'	ADE	1314	249.910	108.275	-8.259	1.00	63.45	A16S
ATOM	47372	O2'	URI	1311	259.006	109.913	1.820	1.00	71.93	A16S	ATOM	47425	C4'	ADE	1314	248.522	108.858	-8.176	1.00	63.45	A16S
ATOM	47373	C3'	URI	1311	260.530	111.573	0.912	1.00	71.93	A16S	ATOM	47426	O4'	ADE	1314	248.426	109.688	-6.991	1.00	63.45	A16S
ATOM	47374	O3'	URI	1311	260.907	110.554	0.003	1.00	71.93	A16S	ATOM	47427	C1'	ADE	1314	247.565	110.783	-7.246	1.00	63.45	A16S
ATOM	47375	P	GUA	1312	261.327	110.948	-1.494	1.00	77.75	A16S	ATOM	47428	N9	ADE	1314	248.311	112.022	-7.041	1.00	49.57	A16S
ATOM	47376	O1P	GUA	1312	261.633	109.661	-2.174	1.00	71.71	A16S	ATOM	47429	C4	ADE	1314	247.774	113.279	-6.888	1.00	49.57	A16S
ATOM	47377	O2P	GUA	1312	262.326	112.046	-1.487	1.00	71.71	A16S	ATOM	47430	N3	ADE	1314	246.475	113.622	-6.908	1.00	49.57	A16S
ATOM	47378	O5'	GUA	1312	260.015	111.569	-2.121	1.00	77.75	A16S	ATOM	47431	C2	ADE	1314	246.330	114.930	-6.732	1.00	49.57	A16S
ATOM	47379	C5'	GUA	1312	258.771	110.918	-1.951	1.00	77.75	A16S	ATOM	47432	N1	ADE	1314	247.260	115.864	-6.551	1.00	49.57	A16S
ATOM	47380	C4'	GUA	1312	257.654	111.894	-2.144	1.00	77.75	A16S	ATOM	47433	C6	ADE	1314	248.555	115.490	-6.538	1.00	49.57	A16S
ATOM	47381	O4'	GUA	1312	257.758	112.946	-1.166	1.00	77.75	A16S	ATOM	47434	N6	ADE	1314	249.487	116.429	-6.367	1.00	49.57	A16S
ATOM	47382	C1'	GUA	1312	256.995	114.028	-1.619	1.00	77.75	A16S	ATOM	47435	C5	ADE	1314	248.844	114.129	-6.712	1.00	49.57	A16S
ATOM	47383	N9	GUA	1312	257.519	115.286	-1.094	1.00	71.71	A16S	ATOM	47436	N7	ADE	1314	250.037	113.428	-6.756	1.00	49.57	A16S
ATOM	47384	C4	GUA	1312	256.776	116.237	-0.421	1.00	71.71	A16S	ATOM	47437	C8	ADE	1314	249.666	112.185	-6.955	1.00	49.57	A16S
ATOM	47385	N3	GUA	1312	255.458	116.149	-0.109	1.00	71.71	A16S	ATOM	47438	C2'	ADE	1314	247.039	110.634	-8.671	1.00	63.45	A16S
ATOM	47386	C2	GUA	1312	255.018	117.237	0.501	1.00	71.71	A16S	ATOM	47439	O2'	ADE	1314	245.812	109.938	-8.638	1.00	63.45	A16S
ATOM	47387	N2	GUA	1312	253.732	117.320	0.882	1.00	71.71	A16S	ATOM	47440	C3'	ADE	1314	248.117	109.780	-9.312	1.00	63.45	A16S
ATOM	47388	N1	GUA	1312	255.804	118.324	0.781	1.00	71.71	A16S	ATOM	47441	O3'	ADE	1314	247.595	109.075	-10.420	1.00	63.45	A16S
ATOM	47389	C6	GUA	1312	257.156	118.440	0.473	1.00	71.71	A16S	ATOM	47442	P	GUA	1315	247.830	109.650	-11.903	1.00	45.26	A16S
ATOM	47390	O6	GUA	1312	257.762	119.475	0.760	1.00	71.71	A16S	ATOM	47443	O1P	GUA	1315	246.966	108.856	-12.831	1.00	53.18	A16S
ATOM	47391	C5	GUA	1312	257.648	117.273	-0.174	1.00	71.71	A16S	ATOM	47444	O2P	GUA	1315	249.302	109.719	-12.142	1.00	53.18	A16S
ATOM	47392	N7	GUA	1312	258.919	116.968	-0.643	1.00	71.71	A16S	ATOM	47445	O5'	GUA	1315	247.299	111.155	-11.863	1.00	45.26	A16S
ATOM	47393	C8	GUA	1312	258.796	115.779	-1.175	1.00	71.71	A16S	ATOM	47446	C5'	GUA	1315	245.911	111.450	-11.669	1.00	45.26	A16S
ATOM	47394	C2'	GUA	1312	256.765	113.869	-3.127	1.00	77.75	A16S	ATOM	47447	C4'	GUA	1315	245.731	112.909	-11.340	1.00	45.26	A16S
ATOM	47395	O2'	GUA	1312	255.393	113.586	-3.259	1.00	77.75	A16S	ATOM	47448	O4'	GUA	1315	246.483	113.222	-10.141	1.00	45.26	A16S
ATOM	47396	C3'	GUA	1312	257.616	112.642	-3.466	1.00	77.75	A16S	ATOM	47449	C1'	GUA	1315	247.044	114.519	-10.248	1.00	45.26	A16S
ATOM	47397	O3'	GUA	1312	257.099	111.695	-4.428	1.00	77.75	A16S	ATOM	47450	N9	GUA	1315	248.500	114.405	-10.149	1.00	53.18	A16S
ATOM	47398	P	ADE	1313	256.089	112.128	-5.619	1.00	57.10	A16S	ATOM	47451	C4	GUA	1315	249.395	115.446	-10.079	1.00	53.18	A16S
ATOM	47399	O1P	ADE	1313	256.631	111.538	-6.875	1.00	52.06	A16S	ATOM	47452	N3	GUA	1315	249.083	116.756	-10.059	1.00	53.18	A16S
ATOM	47400	O2P	ADE	1313	255.746	113.576	-5.603	1.00	52.06	A16S	ATOM	47453	C2	GUA	1315	250.154	117.518	-10.000	1.00	53.18	A16S

ATOM	47454	N2	GUA	1315	250.023	118.843	-9.951	1.00	53.18	A16S	ATOM	47507	O2P	GUA	1318	237.767	119.220	-19.009	1.00	49.03	A16S
ATOM	47455	N1	GUA	1315	251.433	117.040	-9.983	1.00	53.18	A16S	ATOM	47508	O5'	GUA	1318	238.044	116.749	-19.067	1.00	41.41	A16S
ATOM	47456	C6	GUA	1315	251.786	115.698	-10.021	1.00	53.18	A16S	ATOM	47509	C5'	GUA	1318	238.542	115.521	-19.616	1.00	41.41	A16S
ATOM	47457	O6	GUA	1315	252.989	115.374	-10.042	1.00	53.18	A16S	ATOM	47510	C4'	GUA	1318	238.285	114.411	-18.642	1.00	41.41	A16S
ATOM	47458	C5	GUA	1315	250.637	114.860	-10.054	1.00	53.18	A16S	ATOM	47511	O4'	GUA	1318	239.130	114.656	-17.500	1.00	41.41	A16S
ATOM	47459	N7	GUA	1315	250.530	113.476	-10.082	1.00	53.18	A16S	ATOM	47512	C1'	GUA	1318	238.397	114.518	-16.309	1.00	41.41	A16S
ATOM	47460	C8	GUA	1315	249.247	113.252	-10.132	1.00	53.18	A16S	ATOM	47513	N9	GUA	1318	238.421	115.831	-15.672	1.00	49.03	A16S
ATOM	47461	C2'	GUA	1315	246.577	115.120	-11.578	1.00	45.26	A16S	ATOM	47514	C4	GUA	1318	239.510	116.416	-15.066	1.00	49.03	A16S
ATOM	47462	O2'	GUA	1315	245.456	115.945	-11.349	1.00	45.26	A16S	ATOM	47515	N3	GUA	1318	240.733	115.866	-14.929	1.00	49.03	A16S
ATOM	47463	C3'	GUA	1315	246.249	113.872	-12.392	1.00	45.26	A16S	ATOM	47516	C2	GUA	1318	241.571	116.681	-14.318	1.00	49.03	A16S
ATOM	47464	O3'	GUA	1315	245.255	114.113	-13.377	1.00	45.26	A16S	ATOM	47517	N2	GUA	1318	242.833	116.298	-14.089	1.00	49.03	A16S
ATOM	47465	P	CYT	1316	245.560	113.764	-14.911	1.00	57.51	A16S	ATOM	47518	N1	GUA	1318	241.237	117.929	-13.884	1.00	49.03	A16S
ATOM	47466	O1P	CYT	1316	244.363	114.094	-15.713	1.00	54.59	A16S	ATOM	47519	C6	GUA	1318	239.989	118.511	-14.017	1.00	49.03	A16S
ATOM	47467	O2P	CYT	1316	246.139	112.390	-14.963	1.00	54.59	A16S	ATOM	47520	O6	GUA	1318	239.796	119.652	-13.592	1.00	49.03	A16S
ATOM	47468	O5'	CYT	1316	246.660	114.825	-15.332	1.00	57.51	A16S	ATOM	47521	C5	GUA	1318	239.082	117.654	-14.662	1.00	49.03	A16S
ATOM	47469	C5'	CYT	1316	246.335	116.212	-15.394	1.00	57.51	A16S	ATOM	47522	N7	GUA	1318	237.753	117.847	-14.992	1.00	49.03	A16S
ATOM	47470	C4'	CYT	1316	247.162	116.888	-16.453	1.00	57.51	A16S	ATOM	47523	C8	GUA	1318	237.402	116.741	-15.585	1.00	49.03	A16S
ATOM	47471	O4'	CYT	1316	248.557	116.812	-16.118	1.00	57.51	A16S	ATOM	47524	C2'	GUA	1318	237.032	113.925	-16.676	1.00	41.41	A16S
ATOM	47472	C1'	CYT	1316	249.318	116.825	-17.302	1.00	57.51	A16S	ATOM	47525	O2'	GUA	1318	237.137	112.525	-16.598	1.00	41.41	A16S
ATOM	47473	N1	CYT	1316	250.428	115.882	-17.126	1.00	54.59	A16S	ATOM	47526	C3'	GUA	1318	236.859	114.391	-18.118	1.00	41.41	A16S
ATOM	47474	C6	CYT	1316	250.190	114.584	-16.771	1.00	54.59	A16S	ATOM	47527	O3'	GUA	1318	236.074	113.484	-18.900	1.00	41.41	A16S
ATOM	47475	C2	CYT	1316	251.751	116.346	-17.281	1.00	54.59	A16S	ATOM	47528	P	GUA	1319	235.200	114.033	-20.143	1.00	40.60	A16S
ATOM	47476	O2	CYT	1316	251.950	117.524	-17.656	1.00	54.59	A16S	ATOM	47529	O1P	GUA	1319	233.952	114.651	-19.610	1.00	62.80	A16S
ATOM	47477	N3	CYT	1316	252.775	115.505	-17.018	1.00	54.59	A16S	ATOM	47530	O2P	GUA	1319	236.077	114.825	-21.042	1.00	62.80	A16S
ATOM	47478	C4	CYT	1316	252.527	114.249	-16.628	1.00	54.59	A16S	ATOM	47531	O5'	GUA	1319	234.782	112.722	-20.958	1.00	40.60	A16S
ATOM	47479	N4	CYT	1316	253.571	113.460	-16.337	1.00	54.59	A16S	ATOM	47532	C5'	GUA	1319	234.941	111.422	-20.385	1.00	40.60	A16S
ATOM	47480	C5	CYT	1316	251.197	113.744	-16.509	1.00	54.59	A16S	ATOM	47533	C4'	GUA	1319	234.077	110.395	-21.087	1.00	40.60	A16S
ATOM	47481	C2'	CYT	1316	248.379	116.672	-18.507	1.00	57.51	A16S	ATOM	47534	O4'	GUA	1319	234.219	109.201	-20.277	1.00	40.60	A16S
ATOM	47482	O2'	CYT	1316	248.321	117.898	-19.209	1.00	57.51	A16S	ATOM	47535	C1'	GUA	1319	232.965	108.801	-19.780	1.00	40.60	A16S
ATOM	47483	C3'	CYT	1316	247.042	116.316	-17.852	1.00	57.51	A16S	ATOM	47536	N9	GUA	1319	232.869	109.242	-18.389	1.00	62.80	A16S
ATOM	47484	O3'	CYT	1316	245.989	117.088	-18.397	1.00	57.51	A16S	ATOM	47537	C4	GUA	1319	232.226	108.587	-17.375	1.00	62.80	A16S
ATOM	47485	P	CYT	1317	245.339	116.717	-19.809	1.00	52.03	A16S	ATOM	47538	N3	GUA	1319	231.562	107.422	-17.485	1.00	62.80	A16S
ATOM	47486	O1P	CYT	1317	245.504	115.257	-20.069	1.00	72.09	A16S	ATOM	47539	C2	GUA	1319	231.055	107.031	-16.330	1.00	62.80	A16S
ATOM	47487	O2P	CYT	1317	245.851	117.710	-20.792	1.00	72.09	A16S	ATOM	47540	N2	GUA	1319	230.365	105.886	-16.254	1.00	62.80	A16S
ATOM	47488	O5'	CYT	1317	243.797	117.028	-19.542	1.00	52.03	A16S	ATOM	47541	N1	GUA	1319	231.187	107.730	-15.163	1.00	62.80	A16S
ATOM	47489	C5'	CYT	1317	243.063	116.319	-18.501	1.00	52.03	A16S	ATOM	47542	C6	GUA	1319	231.866	108.933	-15.028	1.00	62.80	A16S
ATOM	47490	C4'	CYT	1317	242.018	117.215	-17.859	1.00	52.03	A16S	ATOM	47543	O6	GUA	1319	231.926	109.479	-13.926	1.00	62.80	A16S
ATOM	47491	O4'	CYT	1317	242.589	118.026	-16.802	1.00	52.03	A16S	ATOM	47544	C5	GUA	1319	232.415	109.365	-16.258	1.00	62.80	A16S
ATOM	47492	C1'	CYT	1317	242.232	119.374	-17.002	1.00	52.03	A16S	ATOM	47545	N7	GUA	1319	233.158	110.494	-16.563	1.00	62.80	A16S
ATOM	47493	N1	CYT	1317	243.294	120.254	-16.472	1.00	72.09	A16S	ATOM	47546	C8	GUA	1319	233.405	110.379	-17.836	1.00	62.80	A16S
ATOM	47494	C6	CYT	1317	244.606	119.870	-16.489	1.00	72.09	A16S	ATOM	47547	C2'	GUA	1319	231.916	109.397	-20.717	1.00	40.60	A16S
ATOM	47495	C2	CYT	1317	242.935	121.505	-15.942	1.00	72.09	A16S	ATOM	47548	O2'	GUA	1319	231.716	108.478	-21.771	1.00	40.60	A16S
ATOM	47496	O2	CYT	1317	241.736	121.838	-15.925	1.00	72.09	A16S	ATOM	47549	C3'	GUA	1319	232.579	110.709	-21.140	1.00	40.60	A16S
ATOM	47497	N3	CYT	1317	243.901	122.319	-15.461	1.00	72.09	A16S	ATOM	47550	O3'	GUA	1319	232.190	111.056	-22.473	1.00	40.60	A16S
ATOM	47498	C4	CYT	1317	245.176	121.928	-15.486	1.00	72.09	A16S	ATOM	47551	P	ADE	1320	230.933	112.033	-22.727	1.00	46.98	A16S
ATOM	47499	N4	CYT	1317	246.096	122.764	-15.002	1.00	72.09	A16S	ATOM	47552	O1P	ADE	1320	230.737	112.215	-24.194	1.00	50.28	A16S
ATOM	47500	C5	CYT	1317	245.566	120.666	-16.008	1.00	72.09	A16S	ATOM	47553	O2P	ADE	1320	231.138	113.222	-21.870	1.00	50.28	A16S
ATOM	47501	C2'	CYT	1317	241.962	119.501	-18.495	1.00	52.03	A16S	ATOM	47554	O5'	ADE	1320	229.679	111.227	-22.158	1.00	46.98	A16S
ATOM	47502	O2'	CYT	1317	241.139	120.612	-18.739	1.00	52.03	A16S	ATOM	47555	C5'	ADE	1320	229.102	110.143	-22.900	1.00	46.98	A16S
ATOM	47503	C3'	CYT	1317	241.282	118.169	-18.783	1.00	52.03	A16S	ATOM	47556	C4'	ADE	1320	228.099	109.396	-22.056	1.00	46.98	A16S
ATOM	47504	O3'	CYT	1317	239.932	118.231	-18.341	1.00	52.03	A16S	ATOM	47557	O4'	ADE	1320	228.770	108.814	-20.911	1.00	46.98	A16S
ATOM	47505	P	GUA	1318	238.723	118.148	-19.401	1.00	41.41	A16S	ATOM	47558	C1'	ADE	1320	227.886	108.778	-19.805	1.00	46.98	A16S
ATOM	47506	O1P	GUA	1318	239.254	118.118	-20.797	1.00	49.03	A16S	ATOM	47559	N9	ADE	1320	228.456	109.570	-18.717	1.00	50.28	A16S

ATOM	47560	C4	ADE	1320	228.355	109.315	-17.371	1.00	50.28	A16S	ATOM	47613	C3'	URI	1322	222.838	117.588	-14.740	1.00	53.19	A16S
ATOM	47561	N3	ADE	1320	227.753	108.275	-16.780	1.00	50.28	A16S	ATOM	47614	O3'	URI	1322	221.734	118.094	-14.017	1.00	53.19	A16S
ATOM	47562	C2	ADE	1320	227.846	108.367	-15.460	1.00	50.28	A16S	ATOM	47615	P	CYT	1323	221.295	119.628	-14.221	1.00	46.75	A16S
ATOM	47563	N1	ADE	1320	228.422	109.309	-14.719	1.00	50.28	A16S	ATOM	47616	O1P	CYT	1323	219.879	119.755	-13.775	1.00	64.73	A16S
ATOM	47564	C6	ADE	1320	229.009	110.346	-15.346	1.00	50.28	A16S	ATOM	47617	O2P	CYT	1323	221.668	120.058	-15.590	1.00	64.73	A16S
ATOM	47565	N6	ADE	1320	229.569	111.304	-14.608	1.00	50.28	A16S	ATOM	47618	O5'	CYT	1323	222.214	120.432	-13.201	1.00	46.75	A16S
ATOM	47566	C5	ADE	1320	228.988	110.359	-16.744	1.00	50.28	A16S	ATOM	47619	C5'	CYT	1323	222.010	120.346	-11.777	1.00	46.75	A16S
ATOM	47567	N7	ADE	1320	229.497	111.251	-17.672	1.00	50.28	A16S	ATOM	47620	C4'	CYT	1323	222.886	121.354	-11.065	1.00	46.75	A16S
ATOM	47568	C8	ADE	1320	229.162	110.733	-18.823	1.00	50.28	A16S	ATOM	47621	O4'	CYT	1323	224.274	121.058	-11.377	1.00	46.75	A16S
ATOM	47569	C2'	ADE	1320	226.552	109.374	-20.254	1.00	46.98	A16S	ATOM	47622	C1'	CYT	1323	225.009	122.262	-11.468	1.00	46.75	A16S
ATOM	47570	O2'	ADE	1320	225.643	108.325	-20.518	1.00	46.98	A16S	ATOM	47623	N1	CYT	1323	225.520	122.434	-12.842	1.00	64.73	A16S
ATOM	47571	C3'	ADE	1320	226.968	110.218	-21.459	1.00	46.98	A16S	ATOM	47624	C6	CYT	1323	224.962	121.779	-13.904	1.00	64.73	A16S
ATOM	47572	O3'	ADE	1320	225.900	110.423	-22.385	1.00	46.98	A16S	ATOM	47625	C2	CYT	1323	226.583	123.318	-13.044	1.00	64.73	A16S
ATOM	47573	P	ADE	1321	225.310	111.904	-22.618	1.00	50.82	A16S	ATOM	47626	O2	CYT	1323	227.090	123.880	-12.059	1.00	64.73	A16S
ATOM	47574	O1P	ADE	1321	224.131	111.779	-23.504	1.00	53.89	A16S	ATOM	47627	N3	CYT	1323	227.029	123.544	-14.297	1.00	64.73	A16S
ATOM	47575	O2P	ADE	1321	226.430	112.784	-23.028	1.00	53.89	A16S	ATOM	47628	C4	CYT	1323	226.460	122.926	-15.326	1.00	64.73	A16S
ATOM	47576	O5'	ADE	1321	224.821	112.360	-21.164	1.00	50.82	A16S	ATOM	47629	N4	CYT	1323	226.916	123.207	-16.541	1.00	64.73	A16S
ATOM	47577	C5'	ADE	1321	223.847	111.581	-20.428	1.00	50.82	A16S	ATOM	47630	C5	CYT	1323	225.394	121.997	-15.153	1.00	64.73	A16S
ATOM	47578	C4'	ADE	1321	223.983	111.794	-18.924	1.00	50.82	A16S	ATOM	47631	C2'	CYT	1323	224.069	123.407	-11.104	1.00	46.75	A16S
ATOM	47579	O4'	ADE	1321	225.332	111.458	-18.484	1.00	50.82	A16S	ATOM	47632	O2'	CYT	1323	224.239	123.671	-9.728	1.00	46.75	A16S
ATOM	47580	C1'	ADE	1321	225.693	112.266	-17.375	1.00	50.82	A16S	ATOM	47633	C3'	CYT	1323	222.712	122.818	-11.465	1.00	46.75	A16S
ATOM	47581	N9	ADE	1321	226.805	113.144	-17.770	1.00	53.89	A16S	ATOM	47634	O3'	CYT	1323	221.637	123.456	-10.775	1.00	46.75	A16S
ATOM	47582	C4	ADE	1321	227.576	113.908	-16.920	1.00	53.89	A16S	ATOM	47635	P	GUA	1324	221.012	124.830	-11.345	1.00	55.31	A16S
ATOM	47583	N3	ADE	1321	227.524	113.942	-15.578	1.00	53.89	A16S	ATOM	47636	O1P	GUA	1324	219.800	125.105	-10.552	1.00	65.05	A16S
ATOM	47584	C2	ADE	1321	228.384	114.833	-15.098	1.00	53.89	A16S	ATOM	47637	O2P	GUA	1324	220.915	124.788	-12.826	1.00	65.05	A16S
ATOM	47585	N1	ADE	1321	229.224	115.635	-15.751	1.00	53.89	A16S	ATOM	47638	O5'	GUA	1324	222.079	125.935	-10.934	1.00	55.31	A16S
ATOM	47586	C6	ADE	1321	229.255	115.580	-17.094	1.00	53.89	A16S	ATOM	47639	C5'	GUA	1324	222.529	126.063	-9.560	1.00	55.31	A16S
ATOM	47587	N6	ADE	1321	230.089	116.390	-17.738	1.00	53.89	A16S	ATOM	47640	C4'	GUA	1324	223.618	127.108	-9.458	1.00	55.31	A16S
ATOM	47588	C5	ADE	1321	228.396	114.668	-17.733	1.00	53.89	A16S	ATOM	47641	O4'	GUA	1324	224.821	126.636	-10.124	1.00	55.31	A16S
ATOM	47589	N7	ADE	1321	228.191	114.353	-19.070	1.00	53.89	A16S	ATOM	47642	C1'	GUA	1324	225.441	127.715	-10.811	1.00	55.31	A16S
ATOM	47590	C8	ADE	1321	227.253	113.438	-19.039	1.00	53.89	A16S	ATOM	47643	N9	GUA	1324	225.498	127.382	-12.233	1.00	65.05	A16S
ATOM	47591	C2'	ADE	1321	224.461	113.106	-17.017	1.00	50.82	A16S	ATOM	47644	C4	GUA	1324	226.319	127.943	-13.188	1.00	65.05	A16S
ATOM	47592	O2'	ADE	1321	223.693	112.438	-16.031	1.00	50.82	A16S	ATOM	47645	N3	GUA	1324	227.235	128.915	-12.984	1.00	65.05	A16S
ATOM	47593	C3'	ADE	1321	223.735	113.185	-18.355	1.00	50.82	A16S	ATOM	47646	C2	GUA	1324	227.862	129.247	-14.103	1.00	65.05	A16S
ATOM	47594	O3'	ADE	1321	222.350	113.465	-18.162	1.00	50.82	A16S	ATOM	47647	N2	GUA	1324	228.798	130.204	-14.089	1.00	65.05	A16S
ATOM	47595	P	URI	1322	221.813	114.981	-18.275	1.00	53.19	A16S	ATOM	47648	N1	GUA	1324	227.616	128.667	-15.318	1.00	65.05	A16S
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ATOM	47600	C4'	URI	1322	222.960	116.071	-14.671	1.00	53.19	A16S	ATOM	47653	C8	GUA	1324	224.736	126.447	-12.883	1.00	65.05	A16S
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ATOM	47602	C1'	URI	1322	225.122	116.993	-14.607	1.00	53.19	A16S	ATOM	47655	O2'	GUA	1324	225.235	129.709	-9.457	1.00	55.31	A16S
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ATOM	47608	C4	URI	1322	227.004	118.292	-18.195	1.00	57.87	A16S	ATOM	47661	O5'	CYT	1325	221.985	131.434	-10.468	1.00	42.95	A16S
ATOM	47609	O4	URI	1322	227.516	118.821	-19.171	1.00	57.87	A16S	ATOM	47662	C5'	CYT	1325	222.716	132.336	-9.601	1.00	42.95	A16S
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ATOM	47611	C2'	URI	1322	224.138	118.055	-14.109	1.00	53.19	A16S	ATOM	47664	O4'	CYT	1325	224.683	132.257	-10.993	1.00	42.95	A16S
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ATOM  47766  O5' ADE  1330     228.344 135.591  -8.727  1.00 54.53      A16S
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ATOM  47780  C8  ADE  1330     230.146 137.443 -11.419  1.00 64.56      A16S
ATOM  47781  C2' ADE  1330     230.296 133.890 -11.948  1.00 54.53      A16S
ATOM  47782  O2' ADE  1330     229.983 132.847 -12.845  1.00 54.53      A16S
ATOM  47783  C3' ADE  1330     229.712 133.684 -10.556  1.00 54.53      A16S
ATOM  47784  O3' ADE  1330     229.723 132.318 -10.177  1.00 54.53      A16S
ATOM  47785  P   ADE  1331     230.858 131.786  -9.172  1.00 49.02      A16S
ATOM  47786  O1P ADE  1331     230.774 130.310  -9.029  1.00 56.49      A16S
ATOM  47787  O2P ADE  1331     230.806 132.628  -7.961  1.00 56.49      A16S
ATOM  47788  O5' ADE  1331     232.217 132.149  -9.919  1.00 49.02      A16S
ATOM  47789  C5' ADE  1331     232.637 131.468 -11.117  1.00 49.02      A16S
ATOM  47790  C4' ADE  1331     233.911 132.094 -11.645  1.00 49.02      A16S
ATOM  47791  O4' ADE  1331     233.616 133.417 -12.170  1.00 49.02      A16S
ATOM  47792  C1' ADE  1331     234.656 134.314 -11.813  1.00 49.02      A16S
ATOM  47793  N9  ADE  1331     234.095 135.296 -10.881  1.00 56.49      A16S
ATOM  47794  C4  ADE  1331     234.676 136.466 -10.446  1.00 56.49      A16S
ATOM  47795  N3  ADE  1331     235.870 136.968 -10.797  1.00 56.49      A16S
ATOM  47796  C2  ADE  1331     236.099 138.115 -10.174  1.00 56.49      A16S
ATOM  47797  N1  ADE  1331     235.336 138.769  -9.298  1.00 56.49      A16S
ATOM  47798  C6  ADE  1331     234.148 138.240  -8.958  1.00 56.49      A16S
ATOM  47799  N6  ADE  1331     233.395 138.890  -8.070  1.00 56.49      A16S
ATOM  47800  C5  ADE  1331     233.778 137.025  -9.560  1.00 56.49      A16S
ATOM  47801  N7  ADE  1331     232.645 136.232  -9.446  1.00 56.49      A16S
ATOM  47802  C8  ADE  1331     232.881 135.227 -10.246  1.00 56.49      A16S
ATOM  47803  C2' ADE  1331     235.774 133.485 -11.173  1.00 49.02      A16S
ATOM  47804  O2' ADE  1331     236.673 133.050 -12.172  1.00 49.02      A16S
ATOM  47805  C3' ADE  1331     234.997 132.316 -10.600  1.00 49.02      A16S
ATOM  47806  O3' ADE  1331     235.820 131.179 -10.447  1.00 49.02      A16S
ATOM  47807  P   URI  1332     236.229 130.694  -8.975  1.00 49.65      A16S
ATOM  47808  O1P URI  1332     236.859 129.352  -9.079  1.00 80.40      A16S
ATOM  47809  O2P URI  1332     235.064 130.887  -8.080  1.00 80.40      A16S
ATOM  47810  O5' URI  1332     237.337 131.738  -8.523  1.00 49.65      A16S
ATOM  47811  C5' URI  1332     238.559 131.885  -9.265  1.00 49.65      A16S
ATOM  47812  C4' URI  1332     239.271 133.163  -8.875  1.00 49.65      A16S
ATOM  47813  O4' URI  1332     238.439 134.309  -9.210  1.00 49.65      A16S
ATOM  47814  C1' URI  1332     238.618 135.328  -8.243  1.00 49.65      A16S
ATOM  47815  N1  URI  1332     237.308 135.598  -7.616  1.00 80.40      A16S
ATOM  47816  C6  URI  1332     236.429 134.579  -7.308  1.00 80.40      A16S
ATOM  47817  C2  URI  1332     236.973 136.913  -7.353  1.00 80.40      A16S
ATOM  47818  O2  URI  1332     237.713 137.847  -7.589  1.00 80.40      A16S
ATOM  47819  N3  URI  1332     235.733 137.098  -6.800  1.00 80.40      A16S
ATOM  47820  C4  URI  1332     234.814 136.134  -6.482  1.00 80.40      A16S
ATOM  47821  O4  URI  1332     233.740 136.472  -5.995  1.00 80.40      A16S
ATOM  47822  C5  URI  1332     235.227 134.799  -6.767  1.00 80.40      A16S
ATOM  47823  C2' URI  1332     239.720 134.863  -7.283  1.00 49.65      A16S
ATOM  47824  O2' URI  1332     240.969 135.333  -7.747  1.00 49.65      A16S
ATOM  47825  C3' URI  1332     239.629 133.348  -7.410  1.00 49.65      A16S
ATOM  47826  O3' URI  1332     240.866 132.723  -7.113  1.00 49.65      A16S
ATOM  47827  P   CYT  1333     241.202 132.306  -5.598  1.00 51.88      A16S
ATOM  47828  O1P CYT  1333     242.469 131.525  -5.660  1.00 90.90      A16S
ATOM  47829  O2P CYT  1333     240.008 131.704  -4.959  1.00 90.90      A16S
ATOM  47830  O5' CYT  1333     241.474 133.710  -4.889  1.00 51.88      A16S
ATOM  47831  C5' CYT  1333     242.616 134.520  -5.258  1.00 51.88      A16S
ATOM  47832  C4' CYT  1333     242.714 135.743  -4.374  1.00 51.88      A16S
ATOM  47833  O4' CYT  1333     241.772 136.760  -4.802  1.00 51.88      A16S
ATOM  47834  C1' CYT  1333     241.274 137.456  -3.670  1.00 51.88      A16S
ATOM  47835  N1  CYT  1333     239.807 137.265  -3.592  1.00 90.90      A16S
ATOM  47836  C6  CYT  1333     239.163 136.405  -4.439  1.00 90.90      A16S
ATOM  47837  C2  CYT  1333     239.078 137.966  -2.612  1.00 90.90      A16S
ATOM  47838  O2  CYT  1333     239.671 138.759  -1.865  1.00 90.90      A16S
ATOM  47839  N3  CYT  1333     237.747 137.758  -2.507  1.00 90.90      A16S
ATOM  47840  C4  CYT  1333     237.138 136.901  -3.327  1.00 90.90      A16S
ATOM  47841  N4  CYT  1333     235.825 136.716  -3.170  1.00 90.90      A16S
ATOM  47842  C5  CYT  1333     237.845 136.193  -4.340  1.00 90.90      A16S
ATOM  47843  C2' CYT  1333     241.991 136.898  -2.434  1.00 51.88      A16S
ATOM  47844  O2' CYT  1333     243.085 137.726  -2.109  1.00 51.88      A16S
ATOM  47845  C3' CYT  1333     242.412 135.512  -2.905  1.00 51.88      A16S
ATOM  47846  O3' CYT  1333     243.546 135.021  -2.201  1.00 51.88      A16S
ATOM  47847  P   GUA  1334     243.358 133.883  -1.084  1.00 55.09      A16S
ATOM  47848  O1P GUA  1334     244.655 133.170  -0.946  1.00 76.06      A16S
ATOM  47849  O2P GUA  1334     242.127 133.119  -1.412  1.00 76.06      A16S
ATOM  47850  O5' GUA  1334     243.089 134.678   0.269  1.00 55.09      A16S
ATOM  47851  C5' GUA  1334     244.164 135.354   0.946  1.00 55.09      A16S
ATOM  47852  C4' GUA  1334     243.687 136.677   1.511  1.00 55.09      A16S
ATOM  47853  O4' GUA  1334     242.760 137.280   0.569  1.00 55.09      A16S
ATOM  47854  C1' GUA  1334     241.777 138.011   1.273  1.00 55.09      A16S
ATOM  47855  N9  GUA  1334     240.465 137.450   0.956  1.00 76.06      A16S
ATOM  47856  C4  GUA  1334     239.250 138.005   1.276  1.00 76.06      A16S
ATOM  47857  N3  GUA  1334     239.060 139.154   1.952  1.00 76.06      A16S
ATOM  47858  C2  GUA  1334     237.782 139.425   2.117  1.00 76.06      A16S
ATOM  47859  N2  GUA  1334     237.416 140.521   2.786  1.00 76.06      A16S
ATOM  47860  N1  GUA  1334     236.766 138.642   1.644  1.00 76.06      A16S
ATOM  47861  C6  GUA  1334     236.931 137.459   0.943  1.00 76.06      A16S
ATOM  47862  O6  GUA  1334     235.939 136.834   0.559  1.00 76.06      A16S
ATOM  47863  C5  GUA  1334     238.307 137.143   0.768  1.00 76.06      A16S
ATOM  47864  N7  GUA  1334     238.915 136.060   0.145  1.00 76.06      A16S
ATOM  47865  C8  GUA  1334     240.193 136.283   0.283  1.00 76.06      A16S
ATOM  47866  C2' GUA  1334     242.122 137.939   2.761  1.00 55.09      A16S
ATOM  47867  O2' GUA  1334     242.918 139.061   3.085  1.00 55.09      A16S
ATOM  47868  C3' GUA  1334     242.932 136.656   2.833  1.00 55.09      A16S
ATOM  47869  O3' GUA  1334     243.840 136.731   3.917  1.00 55.09      A16S
ATOM  47870  P   CYT  1335     243.383 136.242   5.374  1.00 49.32      A16S
ATOM  47871  O1P CYT  1335     244.577 136.322   6.261  1.00 81.16      A16S
ATOM  47872  O2P CYT  1335     242.679 134.950   5.219  1.00 81.16      A16S
ATOM  47873  O5' CYT  1335     242.315 137.332   5.843  1.00 49.32      A16S
ATOM  47874  C5' CYT  1335     242.725 138.679   6.200  1.00 49.32      A16S
ATOM  47875  C4' CYT  1335     241.550 139.494   6.714  1.00 49.32      A16S
ATOM  47876  O4' CYT  1335     240.682 139.921   5.625  1.00 49.32      A16S
ATOM  47877  C1' CYT  1335     239.329 139.883   6.057  1.00 49.32      A16S
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ATOM  47878  N1  CYT  1335     238.645 138.755   5.377  1.00 81.16      A16S
ATOM  47879  C6  CYT  1335     239.372 137.748   4.803  1.00 81.16      A16S
ATOM  47880  C2  CYT  1335     237.228 138.706   5.355  1.00 81.16      A16S
ATOM  47881  O2  CYT  1335     236.569 139.634   5.861  1.00 81.16      A16S
ATOM  47882  N3  CYT  1335     236.624 137.641   4.784  1.00 81.16      A16S
ATOM  47883  C4  CYT  1335     237.356 136.660   4.249  1.00 81.16      A16S
ATOM  47884  N4  CYT  1335     236.716 135.621   3.714  1.00 81.16      A16S
ATOM  47885  C5  CYT  1335     238.776 136.697   4.241  1.00 81.16      A16S
ATOM  47886  C2' CYT  1335     239.353 139.607   7.562  1.00 49.32      A16S
ATOM  47887  O2' CYT  1335     239.413 140.837   8.257  1.00 49.32      A16S
ATOM  47888  C3' CYT  1335     240.629 138.798   7.699  1.00 49.32      A16S
ATOM  47889  O3' CYT  1335     241.131 138.823   9.015  1.00 49.32      A16S
ATOM  47890  P   GUA  1336     240.733 137.650  10.034  1.00 65.93      A16S
ATOM  47891  O1P GUA  1336     241.701 137.650  11.165  1.00 77.81      A16S
ATOM  47892  O2P GUA  1336     240.534 136.411   9.247  1.00 77.81      A16S
ATOM  47893  O5' GUA  1336     239.319 138.107  10.596  1.00 65.93      A16S
ATOM  47894  C5' GUA  1336     239.154 139.393  11.214  1.00 65.93      A16S
ATOM  47895  C4' GUA  1336     237.694 139.654  11.497  1.00 65.93      A16S
ATOM  47896  O4' GUA  1336     236.962 139.682  10.243  1.00 65.93      A16S
ATOM  47897  C1' GUA  1336     235.680 139.100  10.421  1.00 65.93      A16S
ATOM  47898  N9  GUA  1336     235.604 137.886   9.602  1.00 77.81      A16S
ATOM  47899  C4  GUA  1336     234.483 137.114   9.369  1.00 77.81      A16S
ATOM  47900  N3  GUA  1336     233.238 137.362   9.823  1.00 77.81      A16S
ATOM  47901  C2  GUA  1336     232.385 136.425   9.457  1.00 77.81      A16S
ATOM  47902  N2  GUA  1336     231.110 136.509   9.824  1.00 77.81      A16S
ATOM  47903  N1  GUA  1336     232.717 135.335   8.705  1.00 77.81      A16S
ATOM  47904  C6  GUA  1336     233.985 135.057   8.221  1.00 77.81      A16S
ATOM  47905  O6  GUA  1336     234.174 134.039   7.547  1.00 77.81      A16S
ATOM  47906  C5  GUA  1336     234.920 136.055   8.605  1.00 77.81      A16S
ATOM  47907  N7  GUA  1336     236.278 136.166   8.339  1.00 77.81      A16S
ATOM  47908  C8  GUA  1336     236.639 137.266   8.941  1.00 77.81      A16S
ATOM  47909  C2' GUA  1336     235.531 138.796  11.914  1.00 65.93      A16S
ATOM  47910  O2' GUA  1336     234.946 139.904  12.572  1.00 65.93      A16S
ATOM  47911  C3' GUA  1336     236.979 138.602  12.331  1.00 65.93      A16S
ATOM  47912  O3' GUA  1336     237.157 138.798  13.724  1.00 65.93      A16S
ATOM  47913  P   GUA  1337     237.027 137.548  14.723  1.00 68.42      A16S
ATOM  47914  O1P GUA  1337     237.458 137.999  16.065  1.00 79.41      A16S
ATOM  47915  O2P GUA  1337     237.687 136.372  14.101  1.00 79.41      A16S
ATOM  47916  O5' GUA  1337     235.457 137.277  14.791  1.00 68.42      A16S
ATOM  47917  C5' GUA  1337     234.537 138.326  15.182  1.00 68.42      A16S
ATOM  47918  C4' GUA  1337     233.102 137.861  15.036  1.00 68.42      A16S
ATOM  47919  O4' GUA  1337     232.835 137.584  13.638  1.00 68.42      A16S
ATOM  47920  C1' GUA  1337     231.973 136.463  13.529  1.00 68.42      A16S
ATOM  47921  N9  GUA  1337     232.675 135.412  12.793  1.00 79.41      A16S
ATOM  47922  C4  GUA  1337     232.105 134.322  12.167  1.00 79.41      A16S
ATOM  47923  N3  GUA  1337     230.786 134.029  12.120  1.00 79.41      A16S
ATOM  47924  C2  GUA  1337     230.555 132.909  11.459  1.00 79.41      A16S
ATOM  47925  N2  GUA  1337     229.307 132.465  11.320  1.00 79.41      A16S
ATOM  47926  N1  GUA  1337     231.535 132.143  10.889  1.00 79.41      A16S
ATOM  47927  C6  GUA  1337     232.894 132.425  10.920  1.00 79.41      A16S
ATOM  47928  O6  GUA  1337     233.692 131.665  10.372  1.00 79.41      A16S
ATOM  47929  C5  GUA  1337     233.161 133.618  11.625  1.00 79.41      A16S
ATOM  47930  N7  GUA  1337     234.367 134.249  11.897  1.00 79.41      A16S
ATOM  47931  C8  GUA  1337     234.033 135.305  12.589  1.00 79.41      A16S
ATOM  47932  C2' GUA  1337     231.579 136.036  14.944  1.00 68.42      A16S
ATOM  47933  O2' GUA  1337     230.347 136.631  15.293  1.00 68.42      A16S
ATOM  47934  C3' GUA  1337     232.738 136.578  15.771  1.00 68.42      A16S
ATOM  47935  O3' GUA  1337     232.345 136.828  17.119  1.00 68.42      A16S
ATOM  47936  P   ADE  1338     232.705 135.761  18.272  1.00 62.77      A16S
ATOM  47937  O1P ADE  1338     232.860 136.567  19.508  1.00 91.25      A16S
ATOM  47938  O2P ADE  1338     233.812 134.876  17.825  1.00 91.25      A16S
ATOM  47939  O5' ADE  1338     231.401 134.857  18.430  1.00 62.77      A16S
ATOM  47940  C5' ADE  1338     230.087 135.448  18.594  1.00 62.77      A16S
ATOM  47941  C4' ADE  1338     229.022 134.550  17.992  1.00 62.77      A16S
ATOM  47942  O4' ADE  1338     229.216 134.466  16.558  1.00 62.77      A16S
ATOM  47943  C1' ADE  1338     228.914 133.158  16.109  1.00 62.77      A16S
ATOM  47944  N9  ADE  1338     230.116 132.592  15.493  1.00 91.25      A16S
ATOM  47945  C4  ADE  1338     230.161 131.534  14.617  1.00 91.25      A16S
ATOM  47946  N3  ADE  1338     229.126 130.825  14.141  1.00 91.25      A16S
ATOM  47947  C2  ADE  1338     229.551 129.862  13.331  1.00 91.25      A16S
ATOM  47948  N1  ADE  1338     230.796 129.549  12.970  1.00 91.25      A16S
ATOM  47949  C6  ADE  1338     231.813 130.282  13.464  1.00 91.25      A16S
ATOM  47950  N6  ADE  1338     233.054 129.967  13.105  1.00 91.25      A16S
ATOM  47951  C5  ADE  1338     231.497 131.335  14.332  1.00 91.25      A16S
ATOM  47952  N7  ADE  1338     232.285 132.261  15.001  1.00 91.25      A16S
ATOM  47953  C8  ADE  1338     231.421 132.982  15.671  1.00 91.25      A16S
ATOM  47954  C2' ADE  1338     228.415 132.349  17.311  1.00 62.77      A16S
ATOM  47955  O2' ADE  1338     227.003 132.382  17.349  1.00 62.77      A16S
ATOM  47956  C3' ADE  1338     229.027 133.108  18.480  1.00 62.77      A16S
ATOM  47957  O3' ADE  1338     228.207 132.971  19.628  1.00 62.77      A16S
ATOM  47958  P   URI  1339     228.864 132.614  21.044  1.00 59.44      A16S
ATOM  47959  O1P URI  1339     227.845 132.966  22.068  1.00 79.10      A16S
ATOM  47960  O2P URI  1339     230.217 133.222  21.103  1.00 79.10      A16S
ATOM  47961  O5' URI  1339     229.045 131.035  21.032  1.00 59.44      A16S
ATOM  47962  C5' URI  1339     227.919 130.162  20.862  1.00 59.44      A16S
ATOM  47963  C4' URI  1339     228.371 128.864  20.250  1.00 59.44      A16S
ATOM  47964  O4' URI  1339     228.944 129.124  18.951  1.00 59.44      A16S
ATOM  47965  C1' URI  1339     229.864 128.094  18.650  1.00 59.44      A16S
ATOM  47966  N1  URI  1339     231.006 128.656  17.914  1.00 79.10      A16S
ATOM  47967  C6  URI  1339     231.482 129.914  18.170  1.00 79.10      A16S
ATOM  47968  C2  URI  1339     231.590 127.861  16.944  1.00 79.10      A16S
ATOM  47969  O2  URI  1339     231.191 126.745  16.673  1.00 79.10      A16S
ATOM  47970  N3  URI  1339     232.661 128.419  16.302  1.00 79.10      A16S
ATOM  47971  C4  URI  1339     233.196 129.661  16.520  1.00 79.10      A16S
ATOM  47972  O4  URI  1339     234.202 130.000  15.904  1.00 79.10      A16S
ATOM  47973  C5  URI  1339     232.528 130.431  17.523  1.00 79.10      A16S
ATOM  47974  C2' URI  1339     230.191 127.335  19.943  1.00 59.44      A16S
ATOM  47975  O2' URI  1339     229.701 126.009  19.915  1.00 59.44      A16S
ATOM  47976  C3' URI  1339     229.491 128.174  21.006  1.00 59.44      A16S
ATOM  47977  O3' URI  1339     228.938 127.328  21.995  1.00 59.44      A16S
ATOM  47978  P   CYT  1340     229.435 127.463  23.508  1.00 69.98      A16S
ATOM  47979  O1P CYT  1340     228.880 126.332  24.316  1.00 50.28      A16S
ATOM  47980  O2P CYT  1340     229.152 128.871  23.902  1.00 50.28      A16S
ATOM  47981  O5' CYT  1340     231.008 127.286  23.385  1.00 69.98      A16S
ATOM  47982  C5' CYT  1340     231.585 126.046  22.950  1.00 69.98      A16S
ATOM  47983  C4' CYT  1340     233.033 126.255  22.586  1.00 69.98      A16S
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ATOM	47984	O4'	CYT	1340	233.112	127.097	21.412	1.00	69.98	A16S	ATOM	48037	N7	GUA	1342	237.738	123.809	22.957	1.00	75.23	A16S
ATOM	47985	C1'	CYT	1340	234.270	127.897	21.480	1.00	69.98	A16S	ATOM	48038	C8	GUA	1342	238.965	124.247	22.903	1.00	75.23	A16S
ATOM	47986	N1	CYT	1340	233.901	129.304	21.259	1.00	50.28	A16S	ATOM	48039	C2'	GUA	1342	241.715	123.648	21.032	1.00	64.14	A16S
ATOM	47987	C6	CYT	1340	232.745	129.835	21.768	1.00	50.28	A16S	ATOM	48040	O2'	GUA	1342	242.929	123.000	20.713	1.00	64.14	A16S
ATOM	47988	C2	CYT	1340	234.756	130.093	20.484	1.00	50.28	A16S	ATOM	48041	C3'	GUA	1342	241.795	125.169	21.006	1.00	64.14	A16S
ATOM	47989	O2	CYT	1340	235.827	129.593	20.069	1.00	50.28	A16S	ATOM	48042	O3'	GUA	1342	242.666	125.655	20.000	1.00	64.14	A16S
ATOM	47990	N3	CYT	1340	234.406	131.376	20.200	1.00	50.28	A16S	ATOM	48043	P	CYT	1343	242.056	126.422	18.731	1.00	72.07	A16S
ATOM	47991	C4	CYT	1340	233.255	131.873	20.663	1.00	50.28	A16S	ATOM	48044	O1P	CYT	1343	243.191	126.990	17.950	1.00	69.09	A16S
ATOM	47992	N4	CYT	1340	232.924	133.127	20.299	1.00	50.28	A16S	ATOM	48045	O2P	CYT	1343	240.971	127.324	19.202	1.00	69.09	A16S
ATOM	47993	C5	CYT	1340	232.385	131.104	21.499	1.00	50.28	A16S	ATOM	48046	O5'	CYT	1343	241.396	125.238	17.892	1.00	72.07	A16S
ATOM	47994	C2'	CYT	1340	234.993	127.591	22.785	1.00	69.98	A16S	ATOM	48047	C5'	CYT	1343	242.212	124.173	17.372	1.00	72.07	A16S
ATOM	47995	O2'	CYT	1340	236.006	126.660	22.479	1.00	69.98	A16S	ATOM	48048	C4'	CYT	1343	241.361	122.997	16.946	1.00	72.07	A16S
ATOM	47996	C3'	CYT	1340	233.875	126.980	23.623	1.00	69.98	A16S	ATOM	48049	O4'	CYT	1343	240.699	122.417	18.102	1.00	72.07	A16S
ATOM	47997	O3'	CYT	1340	234.342	126.079	24.627	1.00	69.98	A16S	ATOM	48050	C1'	CYT	1343	239.459	121.858	17.707	1.00	72.07	A16S
ATOM	47998	P	ADE	1341	234.902	126.659	26.025	1.00	66.68	A16S	ATOM	48051	N1	CYT	1343	238.363	122.505	18.459	1.00	69.09	A16S
ATOM	47999	O1P	ADE	1341	234.102	127.856	26.404	1.00	63.34	A16S	ATOM	48052	C6	CYT	1343	238.402	123.839	18.758	1.00	69.09	A16S
ATOM	48000	O2P	ADE	1341	235.012	125.506	26.972	1.00	63.34	A16S	ATOM	48053	C2	CYT	1343	237.260	121.725	18.858	1.00	69.09	A16S
ATOM	48001	O5'	ADE	1341	236.363	127.172	25.641	1.00	66.68	A16S	ATOM	48054	O2	CYT	1343	237.237	120.513	18.568	1.00	69.09	A16S
ATOM	48002	C5'	ADE	1341	237.145	127.968	26.545	1.00	66.68	A16S	ATOM	48055	N3	CYT	1343	236.246	122.312	19.543	1.00	69.09	A16S
ATOM	48003	C4'	ADE	1341	238.543	127.406	26.650	1.00	66.68	A16S	ATOM	48056	C4	CYT	1343	236.300	123.616	19.827	1.00	69.09	A16S
ATOM	48004	O4'	ADE	1341	238.510	126.129	27.334	1.00	66.68	A16S	ATOM	48057	N4	CYT	1343	235.282	124.153	20.503	1.00	69.09	A16S
ATOM	48005	C1'	ADE	1341	239.502	125.275	26.795	1.00	66.68	A16S	ATOM	48058	C5	CYT	1343	237.402	124.430	19.430	1.00	69.09	A16S
ATOM	48006	N9	ADE	1341	238.882	123.984	26.475	1.00	63.34	A16S	ATOM	48059	C2'	CYT	1343	239.327	122.054	16.199	1.00	72.07	A16S
ATOM	48007	C4	ADE	1341	239.513	122.814	26.119	1.00	63.34	A16S	ATOM	48060	O2'	CYT	1343	239.798	120.864	15.610	1.00	72.07	A16S
ATOM	48008	N3	ADE	1341	240.822	122.625	25.903	1.00	63.34	A16S	ATOM	48061	C3'	CYT	1343	240.239	123.255	15.953	1.00	72.07	A16S
ATOM	48009	C2	ADE	1341	241.075	121.343	25.649	1.00	63.34	A16S	ATOM	48062	O3'	CYT	1343	240.724	123.347	14.607	1.00	72.07	A16S
ATOM	48010	N1	ADE	1341	240.231	120.304	25.594	1.00	63.34	A16S	ATOM	48063	P	CYT	1344	239.741	123.848	13.416	1.00	59.12	A16S
ATOM	48011	C6	ADE	1341	238.920	120.530	25.810	1.00	63.34	A16S	ATOM	48064	O1P	CYT	1344	240.516	124.742	12.501	1.00	64.63	A16S
ATOM	48012	N6	ADE	1341	238.077	119.493	25.768	1.00	63.34	A16S	ATOM	48065	O2P	CYT	1344	238.483	124.348	14.013	1.00	64.63	A16S
ATOM	48013	C5	ADE	1341	238.522	121.848	26.078	1.00	63.34	A16S	ATOM	48066	O5'	CYT	1344	239.421	122.493	12.642	1.00	59.12	A16S
ATOM	48014	N7	ADE	1341	237.281	122.406	26.339	1.00	63.34	A16S	ATOM	48067	C5'	CYT	1344	239.958	121.274	13.151	1.00	59.12	A16S
ATOM	48015	C8	ADE	1341	237.545	123.674	26.551	1.00	63.34	A16S	ATOM	48068	C4'	CYT	1344	239.501	120.067	12.380	1.00	59.12	A16S
ATOM	48016	C2'	ADE	1341	240.223	126.025	25.675	1.00	66.68	A16S	ATOM	48069	O4'	CYT	1344	239.957	118.964	13.186	1.00	59.12	A16S
ATOM	48017	O2'	ADE	1341	241.413	126.568	26.204	1.00	66.68	A16S	ATOM	48070	C1'	CYT	1344	239.021	117.935	13.153	1.00	59.12	A16S
ATOM	48018	C3'	ADE	1341	239.222	127.120	25.326	1.00	66.68	A16S	ATOM	48071	N1	CYT	1344	238.781	117.490	14.529	1.00	64.63	A16S
ATOM	48019	O3'	ADE	1341	239.872	128.283	24.852	1.00	66.68	A16S	ATOM	48072	C6	CYT	1344	238.101	118.257	15.436	1.00	64.63	A16S
ATOM	48020	P	GUA	1342	239.948	128.549	23.277	1.00	64.14	A16S	ATOM	48073	C2	CYT	1344	239.266	116.242	14.891	1.00	64.63	A16S
ATOM	48021	O1P	GUA	1342	240.921	129.643	23.012	1.00	75.23	A16S	ATOM	48074	O2	CYT	1344	239.928	115.595	14.051	1.00	64.63	A16S
ATOM	48022	O2P	GUA	1342	238.545	128.699	22.810	1.00	75.23	A16S	ATOM	48075	N3	CYT	1344	239.021	115.767	16.140	1.00	64.63	A16S
ATOM	48023	O5'	GUA	1342	240.567	127.187	22.721	1.00	64.14	A16S	ATOM	48076	C4	CYT	1344	238.339	116.507	17.013	1.00	64.63	A16S
ATOM	48024	C5'	GUA	1342	241.966	126.889	22.917	1.00	64.14	A16S	ATOM	48077	N4	CYT	1344	238.106	115.986	18.219	1.00	64.63	A16S
ATOM	48025	C4'	GUA	1342	242.307	125.506	22.395	1.00	64.14	A16S	ATOM	48078	C5	CYT	1344	237.862	117.809	16.682	1.00	64.63	A16S
ATOM	48026	O4'	GUA	1342	241.746	124.494	23.263	1.00	64.14	A16S	ATOM	48079	C2'	CYT	1344	237.833	118.346	12.280	1.00	59.12	A16S
ATOM	48027	C1'	GUA	1342	241.327	123.385	22.490	1.00	64.14	A16S	ATOM	48080	O2'	CYT	1344	237.958	117.689	11.033	1.00	59.12	A16S
ATOM	48028	N9	GUA	1342	239.882	123.250	22.649	1.00	75.23	A16S	ATOM	48081	C3'	CYT	1344	238.001	119.864	12.181	1.00	59.12	A16S
ATOM	48029	C4	GUA	1342	239.169	122.085	22.549	1.00	75.23	A16S	ATOM	48082	O3'	CYT	1344	237.722	120.250	10.823	1.00	59.12	A16S
ATOM	48030	N3	GUA	1342	239.686	120.865	22.307	1.00	75.23	A16S	ATOM	48083	P	ADE	1345	236.296	120.867	10.405	1.00	64.49	A16S
ATOM	48031	C2	GUA	1342	238.753	119.939	22.259	1.00	75.23	A16S	ATOM	48084	O1P	ADE	1345	235.416	120.979	11.597	1.00	93.60	A16S
ATOM	48032	N2	GUA	1342	239.090	118.660	22.041	1.00	75.23	A16S	ATOM	48085	O2P	ADE	1345	235.833	120.104	9.227	1.00	93.60	A16S
ATOM	48033	N1	GUA	1342	237.416	120.192	22.424	1.00	75.23	A16S	ATOM	48086	O5'	ADE	1345	236.681	122.329	9.912	1.00	64.49	A16S
ATOM	48034	C6	GUA	1342	236.861	121.438	22.663	1.00	75.23	A16S	ATOM	48087	C5'	ADE	1345	237.227	122.549	8.597	1.00	64.49	A16S
ATOM	48035	O6	GUA	1342	235.640	121.550	22.779	1.00	75.23	A16S	ATOM	48088	C4'	ADE	1345	237.181	124.022	8.271	1.00	64.49	A16S
ATOM	48036	C5	GUA	1342	237.852	122.443	22.732	1.00	75.23	A16S	ATOM	48089	O4'	ADE	1345	235.868	124.506	8.650	1.00	64.49	A16S

ATOM	48090	C1'	ADE	1345	235.976	125.458	9.688	1.00	64.49	A16S
ATOM	48091	N9	ADE	1345	234.923	125.162	10.662	1.00	93.60	A16S
ATOM	48092	C4	ADE	1345	234.648	125.841	11.824	1.00	93.60	A16S
ATOM	48093	N3	ADE	1345	235.276	126.927	12.305	1.00	93.60	A16S
ATOM	48094	C2	ADE	1345	234.744	127.300	13.464	1.00	93.60	A16S
ATOM	48095	N1	ADE	1345	233.734	126.751	14.149	1.00	93.60	A16S
ATOM	48096	C6	ADE	1345	233.127	125.656	13.639	1.00	93.60	A16S
ATOM	48097	N6	ADE	1345	232.128	125.095	14.324	1.00	93.60	A16S
ATOM	48098	C5	ADE	1345	233.593	125.167	12.411	1.00	93.60	A16S
ATOM	48099	N7	ADE	1345	233.197	124.095	11.628	1.00	93.60	A16S
ATOM	48100	C8	ADE	1345	234.011	124.136	10.606	1.00	93.60	A16S
ATOM	48101	C2'	ADE	1345	237.395	125.344	10.250	1.00	64.49	A16S
ATOM	48102	O2'	ADE	1345	237.840	126.590	10.755	1.00	64.49	A16S
ATOM	48103	C3'	ADE	1345	238.183	124.886	9.025	1.00	64.49	A16S
ATOM	48104	O3'	ADE	1345	238.481	126.027	8.215	1.00	64.49	A16S
ATOM	48105	P	URI	1346	239.568	125.917	7.035	1.00	61.68	A16S
ATOM	48106	O1P	URI	1346	240.001	127.304	6.667	1.00	68.67	A16S
ATOM	48107	O2P	URI	1346	240.572	124.913	7.494	1.00	68.67	A16S
ATOM	48108	O5'	URI	1346	238.771	125.278	5.811	1.00	61.68	A16S
ATOM	48109	C5'	URI	1346	238.419	126.037	4.626	1.00	61.68	A16S
ATOM	48110	C4'	URI	1346	237.646	125.143	3.690	1.00	61.68	A16S
ATOM	48111	O4'	URI	1346	238.545	124.122	3.213	1.00	61.68	A16S
ATOM	48112	C1'	URI	1346	237.947	122.848	3.321	1.00	61.68	A16S
ATOM	48113	N1	URI	1346	238.899	121.961	3.997	1.00	68.67	A16S
ATOM	48114	C6	URI	1346	239.704	122.418	5.008	1.00	68.67	A16S
ATOM	48115	C2	URI	1346	238.967	120.652	3.568	1.00	68.67	A16S
ATOM	48116	O2	URI	1346	238.260	120.212	2.673	1.00	68.67	A16S
ATOM	48117	N3	URI	1346	239.894	119.877	4.222	1.00	68.67	A16S
ATOM	48118	C4	URI	1346	240.739	120.277	5.238	1.00	68.67	A16S
ATOM	48119	O4	URI	1346	241.532	119.467	5.727	1.00	68.67	A16S
ATOM	48120	C5	URI	1346	240.597	121.645	5.623	1.00	68.67	A16S
ATOM	48121	C2'	URI	1346	236.557	122.973	3.953	1.00	61.68	A16S
ATOM	48122	O2'	URI	1346	235.510	122.547	3.111	1.00	61.68	A16S
ATOM	48123	C3'	URI	1346	236.542	124.420	4.440	1.00	61.68	A16S
ATOM	48124	O3'	URI	1346	235.316	125.159	4.381	1.00	61.68	A16S
ATOM	48125	P	GUA	1347	234.621	125.524	2.964	1.00	44.80	A16S
ATOM	48126	O1P	GUA	1347	235.096	124.618	1.913	1.00	71.34	A16S
ATOM	48127	O2P	GUA	1347	234.694	126.991	2.735	1.00	71.34	A16S
ATOM	48128	O5'	GUA	1347	233.096	125.184	3.269	1.00	44.80	A16S
ATOM	48129	C5'	GUA	1347	232.689	123.822	3.533	1.00	44.80	A16S
ATOM	48130	C4'	GUA	1347	231.569	123.779	4.547	1.00	44.80	A16S
ATOM	48131	O4'	GUA	1347	232.079	123.552	5.884	1.00	44.80	A16S
ATOM	48132	C1'	GUA	1347	231.227	124.188	6.825	1.00	44.80	A16S
ATOM	48133	N9	GUA	1347	232.006	125.168	7.586	1.00	71.34	A16S
ATOM	48134	C4	GUA	1347	231.589	125.867	8.703	1.00	71.34	A16S
ATOM	48135	N3	GUA	1347	230.387	125.756	9.312	1.00	71.34	A16S
ATOM	48136	C2	GUA	1347	230.278	126.579	10.342	1.00	71.34	A16S
ATOM	48137	N2	GUA	1347	229.149	126.604	11.065	1.00	71.34	A16S
ATOM	48138	N1	GUA	1347	231.268	127.439	10.739	1.00	71.34	A16S
ATOM	48139	C6	GUA	1347	232.511	127.570	10.124	1.00	71.34	A16S
ATOM	48140	O6	GUA	1347	233.332	128.388	10.555	1.00	71.34	A16S
ATOM	48141	C5	GUA	1347	232.642	126.695	9.026	1.00	71.34	A16S
ATOM	48142	N7	GUA	1347	233.701	126.512	8.151	1.00	71.34	A16S
ATOM	48143	C8	GUA	1347	233.284	125.597	7.321	1.00	71.34	A16S
ATOM	48144	C2'	GUA	1347	230.086	124.854	6.044	1.00	44.80	A16S
ATOM	48145	O2'	GUA	1347	228.949	124.018	6.025	1.00	44.80	A16S
ATOM	48146	C3'	GUA	1347	230.697	125.016	4.662	1.00	44.80	A16S
ATOM	48147	O3'	GUA	1347	229.693	125.061	3.671	1.00	44.80	A16S
ATOM	48148	P	CYT	1348	229.120	126.478	3.201	1.00	48.46	A16S
ATOM	48149	O1P	CYT	1348	228.055	126.256	2.191	1.00	78.93	A16S
ATOM	48150	O2P	CYT	1348	230.272	127.359	2.871	1.00	78.93	A16S
ATOM	48151	O5'	CYT	1348	228.420	127.024	4.520	1.00	48.46	A16S
ATOM	48152	C5'	CYT	1348	227.298	126.326	5.112	1.00	48.46	A16S
ATOM	48153	C4'	CYT	1348	226.776	127.095	6.301	1.00	48.46	A16S
ATOM	48154	O4'	CYT	1348	227.726	126.995	7.388	1.00	48.46	A16S
ATOM	48155	C1'	CYT	1348	227.806	128.240	8.062	1.00	48.46	A16S
ATOM	48156	N1	CYT	1348	229.199	128.744	7.966	1.00	78.93	A16S
ATOM	48157	C6	CYT	1348	230.026	128.334	6.957	1.00	78.93	A16S
ATOM	48158	C2	CYT	1348	229.666	129.657	8.931	1.00	78.93	A16S
ATOM	48159	O2	CYT	1348	228.902	130.033	9.834	1.00	78.93	A16S
ATOM	48160	N3	CYT	1348	230.936	130.110	8.848	1.00	78.93	A16S
ATOM	48161	C4	CYT	1348	231.730	129.695	7.864	1.00	78.93	A16S
ATOM	48162	N4	CYT	1348	232.976	130.160	7.836	1.00	78.93	A16S
ATOM	48163	C5	CYT	1348	231.284	128.781	6.870	1.00	78.93	A16S
ATOM	48164	C2'	CYT	1348	226.772	129.182	7.435	1.00	48.46	A16S
ATOM	48165	O2'	CYT	1348	225.561	129.147	8.157	1.00	48.46	A16S
ATOM	48166	C3'	CYT	1348	226.606	128.583	6.054	1.00	48.46	A16S
ATOM	48167	O3'	CYT	1348	225.336	128.890	5.525	1.00	48.46	A16S
ATOM	48168	P	CYT	1349	225.152	130.218	4.648	1.00	49.17	A16S
ATOM	48169	O1P	CYT	1349	223.785	130.203	4.081	1.00	73.65	A16S
ATOM	48170	O2P	CYT	1349	226.326	130.329	3.745	1.00	73.65	A16S
ATOM	48171	O5'	CYT	1349	225.230	131.407	5.704	1.00	49.17	A16S
ATOM	48172	C5'	CYT	1349	224.173	131.625	6.664	1.00	49.17	A16S
ATOM	48173	C4'	CYT	1349	224.514	132.786	7.568	1.00	49.17	A16S
ATOM	48174	O4'	CYT	1349	225.643	132.450	8.417	1.00	49.17	A16S
ATOM	48175	C1'	CYT	1349	226.453	133.597	8.608	1.00	49.17	A16S
ATOM	48176	N1	CYT	1349	227.808	133.329	8.088	1.00	73.65	A16S
ATOM	48177	C6	CYT	1349	228.113	132.148	7.472	1.00	73.65	A16S
ATOM	48178	C2	CYT	1349	228.786	134.322	8.232	1.00	73.65	A16S
ATOM	48179	O2	CYT	1349	228.480	135.396	8.776	1.00	73.65	A16S
ATOM	48180	N3	CYT	1349	230.034	134.091	7.766	1.00	73.65	A16S
ATOM	48181	C4	CYT	1349	230.319	132.935	7.167	1.00	73.65	A16S
ATOM	48182	N4	CYT	1349	231.564	132.754	6.725	1.00	73.65	A16S
ATOM	48183	C5	CYT	1349	229.342	131.915	6.997	1.00	73.65	A16S
ATOM	48184	C2'	CYT	1349	225.803	134.763	7.866	1.00	49.17	A16S
ATOM	48185	O2'	CYT	1349	225.068	135.542	8.778	1.00	49.17	A16S
ATOM	48186	C3'	CYT	1349	224.944	134.043	6.842	1.00	49.17	A16S
ATOM	48187	O3'	CYT	1349	223.848	134.826	6.454	1.00	49.17	A16S
ATOM	48188	P	GUA	1350	223.964	135.705	5.133	1.00	54.35	A16S
ATOM	48189	O1P	GUA	1350	222.724	136.528	5.010	1.00	67.51	A16S
ATOM	48190	O2P	GUA	1350	224.316	134.753	4.062	1.00	67.51	A16S
ATOM	48191	O5'	GUA	1350	225.231	136.652	5.395	1.00	54.35	A16S
ATOM	48192	C5'	GUA	1350	225.088	137.860	6.170	1.00	54.35	A16S
ATOM	48193	C4'	GUA	1350	226.426	138.521	6.483	1.00	54.35	A16S
ATOM	48194	O4'	GUA	1350	227.377	137.580	7.055	1.00	54.35	A16S
ATOM	48195	C1'	GUA	1350	228.688	138.113	6.922	1.00	54.35	A16S

ATOM	48196	N9	GUA	1350	229.564	137.155	6.247	1.00	67.51	A16S	ATOM	48249	C8	GUA	1352	233.447	142.618	0.723	1.00	91.25	A16S
ATOM	48197	C4	GUA	1350	230.939	137.265	6.117	1.00	67.51	A16S	ATOM	48250	C2'	GUA	1352	235.554	145.402	0.065	1.00	62.24	A16S
ATOM	48198	N3	GUA	1350	231.712	138.265	6.606	1.00	67.51	A16S	ATOM	48251	O2'	GUA	1352	236.640	146.177	0.515	1.00	62.24	A16S
ATOM	48199	C2	GUA	1350	232.989	138.100	6.299	1.00	67.51	A16S	ATOM	48252	C3'	GUA	1352	234.298	146.246	-0.107	1.00	62.24	A16S
ATOM	48200	N2	GUA	1350	233.898	138.999	6.688	1.00	67.51	A16S	ATOM	48253	O3'	GUA	1352	234.647	147.540	-0.602	1.00	62.24	A16S
ATOM	48201	N1	GUA	1350	233.470	137.043	5.582	1.00	67.51	A16S	ATOM	48254	P	GUA	1353	234.911	147.762	-2.175	1.00	53.22	A16S
ATOM	48202	C6	GUA	1350	232.702	136.001	5.076	1.00	67.51	A16S	ATOM	48255	O1P	GUA	1353	235.333	149.167	-2.373	1.00	77.02	A16S
ATOM	48203	O6	GUA	1350	233.248	135.089	4.450	1.00	67.51	A16S	ATOM	48256	O2P	GUA	1353	233.748	147.245	-2.938	1.00	77.02	A16S
ATOM	48204	C5	GUA	1350	231.324	136.165	5.388	1.00	67.51	A16S	ATOM	48257	O5'	GUA	1353	236.180	146.842	-2.472	1.00	53.22	A16S
ATOM	48205	N7	GUA	1350	230.228	135.371	5.073	1.00	67.51	A16S	ATOM	48258	C5'	GUA	1353	237.493	147.219	-1.997	1.00	53.22	A16S
ATOM	48206	C8	GUA	1350	229.209	135.994	5.603	1.00	67.51	A16S	ATOM	48259	C4'	GUA	1353	238.581	146.412	-2.682	1.00	53.22	A16S
ATOM	48207	C2'	GUA	1350	228.579	139.408	6.116	1.00	54.35	A16S	ATOM	48260	O4'	GUA	1353	238.593	145.039	-2.214	1.00	53.22	A16S
ATOM	48208	O2'	GUA	1350	228.596	140.494	7.028	1.00	54.35	A16S	ATOM	48261	C1'	GUA	1353	239.019	144.191	-3.269	1.00	53.22	A16S
ATOM	48209	C3'	GUA	1350	227.234	139.242	5.411	1.00	54.35	A16S	ATOM	48262	N9	GUA	1353	237.981	143.196	-3.525	1.00	77.02	A16S
ATOM	48210	O3'	GUA	1350	226.709	140.530	5.086	1.00	54.35	A16S	ATOM	48263	C4	GUA	1353	238.150	141.991	-4.166	1.00	77.02	A16S
ATOM	48211	P	CYT	1351	227.322	141.359	3.840	1.00	53.75	A16S	ATOM	48264	N3	GUA	1353	239.313	141.503	-4.646	1.00	77.02	A16S
ATOM	48212	O1P	CYT	1351	226.633	142.674	3.742	1.00	76.91	A16S	ATOM	48265	C2	GUA	1353	239.157	140.322	-5.214	1.00	77.02	A16S
ATOM	48213	O2P	CYT	1351	227.339	140.455	2.662	1.00	76.91	A16S	ATOM	48266	N2	GUA	1353	240.220	139.679	-5.714	1.00	77.02	A16S
ATOM	48214	O5'	CYT	1351	228.835	141.640	4.262	1.00	53.75	A16S	ATOM	48267	N1	GUA	1353	237.951	139.680	-5.327	1.00	77.02	A16S
ATOM	48215	C5'	CYT	1351	229.154	142.569	5.322	1.00	53.75	A16S	ATOM	48268	C6	GUA	1353	236.738	140.166	-4.851	1.00	77.02	A16S
ATOM	48216	C4'	CYT	1351	230.620	142.949	5.280	1.00	53.75	A16S	ATOM	48269	O6	GUA	1353	235.702	139.509	-5.014	1.00	77.02	A16S
ATOM	48217	O4'	CYT	1351	231.459	141.810	5.607	1.00	53.75	A16S	ATOM	48270	C5	GUA	1353	236.896	141.425	-4.215	1.00	77.02	A16S
ATOM	48218	C1'	CYT	1351	232.661	141.877	4.857	1.00	53.75	A16S	ATOM	48271	N7	GUA	1353	235.961	142.247	-3.602	1.00	77.02	A16S
ATOM	48219	N1	CYT	1351	232.758	140.674	4.002	1.00	76.91	A16S	ATOM	48272	C8	GUA	1353	236.649	143.282	-3.207	1.00	77.02	A16S
ATOM	48220	C6	CYT	1351	231.700	139.815	3.865	1.00	76.91	A16S	ATOM	48273	C2'	GUA	1353	239.297	145.063	-4.501	1.00	53.22	A16S
ATOM	48221	C2	CYT	1351	233.958	140.426	3.318	1.00	76.91	A16S	ATOM	48274	O2'	GUA	1353	240.673	145.344	-4.605	1.00	53.22	A16S
ATOM	48222	O2	CYT	1351	234.908	141.212	3.460	1.00	76.91	A16S	ATOM	48275	C3'	GUA	1353	238.506	146.320	-4.194	1.00	53.22	A16S
ATOM	48223	N3	CYT	1351	234.050	139.335	2.520	1.00	76.91	A16S	ATOM	48276	O3'	GUA	1353	239.150	147.424	-4.774	1.00	53.22	A16S
ATOM	48224	C4	CYT	1351	233.011	138.506	2.396	1.00	76.91	A16S	ATOM	48277	P	URI	1354	238.556	148.073	-6.105	1.00	55.15	A16S
ATOM	48225	N4	CYT	1351	233.149	137.446	1.601	1.00	76.91	A16S	ATOM	48278	O1P	URI	1354	239.320	149.311	-6.383	1.00	94.23	A16S
ATOM	48226	C5	CYT	1351	231.784	138.729	3.081	1.00	76.91	A16S	ATOM	48279	O2P	URI	1354	237.078	148.141	-5.969	1.00	94.23	A16S
ATOM	48227	C2'	CYT	1351	232.627	143.168	4.034	1.00	53.75	A16S	ATOM	48280	O5'	URI	1354	238.910	147.012	-7.227	1.00	55.15	A16S
ATOM	48228	O2'	CYT	1351	233.315	144.182	4.729	1.00	53.75	A16S	ATOM	48281	C5'	URI	1354	240.259	146.827	-7.652	1.00	55.15	A16S
ATOM	48229	C3'	CYT	1351	231.135	143.442	3.941	1.00	53.75	A16S	ATOM	48282	C4'	URI	1354	240.352	145.677	-8.624	1.00	55.15	A16S
ATOM	48230	O3'	CYT	1351	230.871	144.818	3.780	1.00	53.75	A16S	ATOM	48283	O4'	URI	1354	240.102	144.421	-7.940	1.00	55.15	A16S
ATOM	48231	P	GUA	1352	230.230	145.343	2.412	1.00	62.24	A16S	ATOM	48284	C1'	URI	1354	239.526	143.504	-8.850	1.00	55.15	A16S
ATOM	48232	O1P	GUA	1352	229.643	146.687	2.670	1.00	91.25	A16S	ATOM	48285	N1	URI	1354	238.252	143.010	-8.298	1.00	94.23	A16S
ATOM	48233	O2P	GUA	1352	229.367	144.253	1.882	1.00	91.25	A16S	ATOM	48286	C6	URI	1354	237.606	143.659	-7.273	1.00	94.23	A16S
ATOM	48234	O5'	GUA	1352	231.487	145.530	1.447	1.00	62.24	A16S	ATOM	48287	C2	URI	1354	237.706	141.872	-8.866	1.00	94.23	A16S
ATOM	48235	C5'	GUA	1352	232.325	146.692	1.562	1.00	62.24	A16S	ATOM	48288	O2	URI	1354	238.260	141.239	-9.750	1.00	94.23	A16S
ATOM	48236	C4'	GUA	1352	233.785	146.343	1.325	1.00	62.24	A16S	ATOM	48289	N3	URI	1354	236.483	141.502	-8.363	1.00	94.23	A16S
ATOM	48237	O4'	GUA	1352	234.097	145.053	1.917	1.00	62.24	A16S	ATOM	48290	C4	URI	1354	235.769	142.128	-7.370	1.00	94.23	A16S
ATOM	48238	C1'	GUA	1352	235.155	144.450	1.196	1.00	62.24	A16S	ATOM	48291	O4	URI	1354	234.628	141.745	-7.115	1.00	94.23	A16S
ATOM	48239	N9	GUA	1352	234.716	143.150	0.694	1.00	91.25	A16S	ATOM	48292	C5	URI	1354	236.417	143.268	-6.805	1.00	94.23	A16S
ATOM	48240	C4	GUA	1352	235.515	142.212	0.077	1.00	91.25	A16S	ATOM	48293	C2'	URI	1354	239.378	144.215	-10.205	1.00	55.15	A16S
ATOM	48241	N3	GUA	1352	236.838	142.331	-0.161	1.00	91.25	A16S	ATOM	48294	O2'	URI	1354	240.479	143.894	-11.038	1.00	55.15	A16S
ATOM	48242	C2	GUA	1352	237.326	141.275	-0.780	1.00	91.25	A16S	ATOM	48295	C3'	URI	1354	239.397	145.685	-9.808	1.00	55.15	A16S
ATOM	48243	N2	GUA	1352	238.620	141.237	-1.102	1.00	91.25	A16S	ATOM	48296	O3'	URI	1354	239.909	146.485	-10.865	1.00	55.15	A16S
ATOM	48244	N1	GUA	1352	236.582	140.181	-1.131	1.00	91.25	A16S	ATOM	48297	P	GUA	1355	238.916	147.054	-11.996	1.00	52.51	A16S
ATOM	48245	C6	GUA	1352	235.219	140.030	-0.898	1.00	91.25	A16S	ATOM	48298	O1P	GUA	1355	239.700	147.436	-13.206	1.00	76.99	A16S
ATOM	48246	O6	GUA	1352	234.642	138.994	-1.261	1.00	91.25	A16S	ATOM	48299	O2P	GUA	1355	238.019	148.054	-11.373	1.00	76.99	A16S
ATOM	48247	C5	GUA	1352	234.675	141.166	-0.237	1.00	91.25	A16S	ATOM	48300	O5'	GUA	1355	238.029	145.791	-12.391	1.00	52.51	A16S
ATOM	48248	N7	GUA	1352	233.375	141.435	0.176	1.00	91.25	A16S	ATOM	48301	C5'	GUA	1355	238.574	144.706	-13.177	1.00	52.51	A16S

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ATOM  48302  C4' GUA  1355     237.522 143.644 -13.413  1.00 52.51      A16S
ATOM  48303  O4' GUA  1355     237.214 142.941 -12.177  1.00 52.51      A16S
ATOM  48304  C1' GUA  1355     235.835 142.624 -12.142  1.00 52.51      A16S
ATOM  48305  N9  GUA  1355     235.220 143.384 -11.058  1.00 76.99      A16S
ATOM  48306  C4  GUA  1355     234.097 143.037 -10.344  1.00 76.99      A16S
ATOM  48307  N3  GUA  1355     233.381 141.906 -10.495  1.00 76.99      A16S
ATOM  48308  C2  GUA  1355     232.350 141.862  -9.674  1.00 76.99      A16S
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ATOM  48312  O6  GUA  1355     232.365 144.860  -7.772  1.00 76.99      A16S
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ATOM  48315  C8  GUA  1355     235.623 144.604 -10.574  1.00 76.99      A16S
ATOM  48316  C2' GUA  1355     235.236 143.053 -13.483  1.00 52.51      A16S
ATOM  48317  O2' GUA  1355     235.261 141.993 -14.413  1.00 52.51      A16S
ATOM  48318  C3' GUA  1355     236.182 144.164 -13.896  1.00 52.51      A16S
ATOM  48319  O3' GUA  1355     236.154 144.396 -15.286  1.00 52.51      A16S
ATOM  48320  P   ADE  1356     234.852 145.057 -15.940  1.00 48.42      A16S
ATOM  48321  O1P ADE  1356     235.173 145.502 -17.335  1.00 68.57      A16S
ATOM  48322  O2P ADE  1356     234.308 146.035 -14.970  1.00 68.57      A16S
ATOM  48323  O5' ADE  1356     233.831 143.838 -15.987  1.00 48.42      A16S
ATOM  48324  C5' ADE  1356     233.157 143.465 -17.213  1.00 48.42      A16S
ATOM  48325  C4' ADE  1356     233.784 142.216 -17.789  1.00 48.42      A16S
ATOM  48326  O4' ADE  1356     233.911 141.200 -16.760  1.00 48.42      A16S
ATOM  48327  C1' ADE  1356     233.655 139.926 -17.313  1.00 48.42      A16S
ATOM  48328  N9  ADE  1356     232.475 139.382 -16.636  1.00 68.57      A16S
ATOM  48329  C4  ADE  1356     231.827 138.199 -16.903  1.00 68.57      A16S
ATOM  48330  N3  ADE  1356     232.133 137.297 -17.847  1.00 68.57      A16S
ATOM  48331  C2  ADE  1356     231.285 136.279 -17.810  1.00 68.57      A16S
ATOM  48332  N1  ADE  1356     230.242 136.073 -17.002  1.00 68.57      A16S
ATOM  48333  C6  ADE  1356     229.959 136.997 -16.066  1.00 68.57      A16S
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ATOM  48336  N7  ADE  1356     230.773 139.243 -15.179  1.00 68.57      A16S
ATOM  48337  C8  ADE  1356     231.788 139.953 -15.596  1.00 68.57      A16S
ATOM  48338  C2' ADE  1356     233.481 140.112 -18.824  1.00 48.42      A16S
ATOM  48339  O2' ADE  1356     234.742 139.961 -19.442  1.00 48.42      A16S
ATOM  48340  C3' ADE  1356     233.009 141.554 -18.909  1.00 48.42      A16S
ATOM  48341  O3' ADE  1356     233.345 142.138 -20.151  1.00 48.42      A16S
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ATOM  48343  O1P ADE  1357     232.924 142.746 -22.528  1.00 61.81      A16S
ATOM  48344  O2P ADE  1357     231.010 142.780 -20.817  1.00 61.81      A16S
ATOM  48345  O5' ADE  1357     231.953 140.627 -21.601  1.00 53.26      A16S
ATOM  48346  C5' ADE  1357     232.958 139.756 -22.169  1.00 53.26      A16S
ATOM  48347  C4' ADE  1357     232.389 138.378 -22.407  1.00 53.26      A16S
ATOM  48348  O4' ADE  1357     232.111 137.727 -21.141  1.00 53.26      A16S
ATOM  48349  C1' ADE  1357     230.916 136.970 -21.243  1.00 53.26      A16S
ATOM  48350  N9  ADE  1357     229.933 137.556 -20.332  1.00 61.81      A16S
ATOM  48351  C4  ADE  1357     228.809 136.963 -19.799  1.00 61.81      A16S
ATOM  48352  N3  ADE  1357     228.360 135.710 -20.000  1.00 61.81      A16S
ATOM  48353  C2  ADE  1357     227.253 135.486 -19.292  1.00 61.81      A16S
ATOM  48354  N1  ADE  1357     226.591 136.310 -18.477  1.00 61.81      A16S
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ATOM  48356  N6  ADE  1357     226.392 138.398 -17.522  1.00 61.81      A16S
ATOM  48357  C5  ADE  1357     228.228 137.920 -18.996  1.00 61.81      A16S
ATOM  48358  N7  ADE  1357     228.959 139.094 -19.029  1.00 61.81      A16S
ATOM  48359  C8  ADE  1357     229.954 138.828 -19.834  1.00 61.81      A16S
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ATOM  48361  O2' ADE  1357     230.946 135.932 -23.410  1.00 53.26      A16S
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ATOM  48370  O4' URI  1358     227.562 136.422 -23.693  1.00 52.97      A16S
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ATOM  48377  C4  URI  1358     225.869 139.953 -20.679  1.00 58.24      A16S
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ATOM  48379  C5  URI  1358     226.681 139.986 -21.850  1.00 58.24      A16S
ATOM  48380  C2' URI  1358     225.295 136.702 -24.373  1.00 52.97      A16S
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ATOM  48382  C3' URI  1358     226.231 137.256 -25.435  1.00 52.97      A16S
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ATOM  48384  P   ADE  1359     224.754 138.028 -27.421  1.00 54.82      A16S
ATOM  48385  O1P ADE  1359     224.720 137.722 -28.879  1.00 59.08      A16S
ATOM  48386  O2P ADE  1359     225.120 139.393 -26.957  1.00 59.08      A16S
ATOM  48387  O5' ADE  1359     223.340 137.658 -26.791  1.00 54.82      A16S
ATOM  48388  C5' ADE  1359     222.624 136.491 -27.221  1.00 54.82      A16S
ATOM  48389  C4' ADE  1359     221.393 136.282 -26.372  1.00 54.82      A16S
ATOM  48390  O4' ADE  1359     221.791 136.037 -24.999  1.00 54.82      A16S
ATOM  48391  C1' ADE  1359     220.818 136.576 -24.111  1.00 54.82      A16S
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ATOM  48394  N3  ADE  1359     219.965 137.627 -21.364  1.00 59.08      A16S
ATOM  48395  C2  ADE  1359     219.819 138.342 -20.254  1.00 59.08      A16S
ATOM  48396  N1  ADE  1359     220.533 139.380 -19.816  1.00 59.08      A16S
ATOM  48397  C6  ADE  1359     221.566 139.808 -20.567  1.00 59.08      A16S
ATOM  48398  N6  ADE  1359     222.278 140.850 -20.146  1.00 59.08      A16S
ATOM  48399  C5  ADE  1359     221.830 139.132 -21.756  1.00 59.08      A16S
ATOM  48400  N7  ADE  1359     222.800 139.311 -22.726  1.00 59.08      A16S
ATOM  48401  C8  ADE  1359     222.528 138.393 -23.616  1.00 59.08      A16S
ATOM  48402  C2' ADE  1359     219.699 137.170 -24.963  1.00 54.82      A16S
ATOM  48403  O2' ADE  1359     218.647 136.227 -25.050  1.00 54.82      A16S
ATOM  48404  C3' ADE  1359     220.426 137.447 -26.274  1.00 54.82      A16S
ATOM  48405  O3' ADE  1359     219.542 137.516 -27.368  1.00 54.82      A16S
ATOM  48406  P   CYT  1360     218.583 138.793 -27.518  1.00 52.46      A16S
ATOM  48407  O1P CYT  1360     219.407 140.015 -27.385  1.00 45.13      A16S
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ATOM	48408	O2P	CYT	1360	217.407	138.599	-26.621	1.00	45.13	A16S	ATOM	48461	N3	URI	1362	212.528	131.544	-24.066	1.00	57.94	A16S
ATOM	48409	O5'	CYT	1360	218.079	138.722	-29.024	1.00	52.46	A16S	ATOM	48462	C4	URI	1362	212.892	132.842	-24.316	1.00	57.94	A16S
ATOM	48410	C5'	CYT	1360	218.916	139.156	-30.107	1.00	52.46	A16S	ATOM	48463	O4	URI	1362	213.440	133.490	-23.423	1.00	57.94	A16S
ATOM	48411	C4'	CYT	1360	218.756	138.231	-31.286	1.00	52.46	A16S	ATOM	48464	C5	URI	1362	212.475	133.347	-25.592	1.00	57.94	A16S
ATOM	48412	O4'	CYT	1360	219.491	137.000	-31.077	1.00	52.46	A16S	ATOM	48465	C2'	URI	1362	209.156	130.375	-26.961	1.00	82.95	A16S
ATOM	48413	C1'	CYT	1360	218.764	135.915	-31.629	1.00	52.46	A16S	ATOM	48466	O2'	URI	1362	208.769	129.029	-26.806	1.00	82.95	A16S
ATOM	48414	N1	CYT	1360	218.599	134.865	-30.593	1.00	45.13	A16S	ATOM	48467	C3'	URI	1362	208.740	131.066	-28.264	1.00	82.95	A16S
ATOM	48415	C6	CYT	1360	218.760	135.157	-29.262	1.00	45.13	A16S	ATOM	48468	O3'	URI	1362	207.500	130.762	-28.944	1.00	82.95	A16S
ATOM	48416	C2	CYT	1360	218.316	133.539	-30.994	1.00	45.13	A16S	ATOM	48469	P	URI	1363	206.946	129.242	-29.118	1.00	60.83	A16S
ATOM	48417	O2	CYT	1360	218.086	133.299	-32.193	1.00	45.13	A16S	ATOM	48470	O1P	URI	1363	205.790	129.466	-30.022	1.00	74.19	A16S
ATOM	48418	N3	CYT	1360	218.290	132.556	-30.055	1.00	45.13	A16S	ATOM	48471	O2P	URI	1363	206.729	128.542	-27.830	1.00	74.19	A16S
ATOM	48419	C4	CYT	1360	218.510	132.852	-28.767	1.00	45.13	A16S	ATOM	48472	O5'	URI	1363	208.029	128.413	-29.951	1.00	60.83	A16S
ATOM	48420	N4	CYT	1360	218.535	131.846	-27.888	1.00	45.13	A16S	ATOM	48473	C5'	URI	1363	207.589	127.492	-30.992	1.00	60.83	A16S
ATOM	48421	C5	CYT	1360	218.728	134.191	-28.326	1.00	45.13	A16S	ATOM	48474	C4'	URI	1363	208.431	126.224	-31.039	1.00	60.83	A16S
ATOM	48422	C2'	CYT	1360	217.483	136.474	-32.258	1.00	52.46	A16S	ATOM	48475	O4'	URI	1363	209.779	126.522	-31.487	1.00	60.83	A16S
ATOM	48423	O2'	CYT	1360	217.700	136.703	-33.633	1.00	52.46	A16S	ATOM	48476	C1'	URI	1363	210.673	125.548	-30.971	1.00	60.83	A16S
ATOM	48424	C3'	CYT	1360	217.326	137.796	-31.527	1.00	52.46	A16S	ATOM	48477	N1	URI	1363	211.795	126.208	-30.280	1.00	74.19	A16S
ATOM	48425	O3'	CYT	1360	216.627	138.757	-32.294	1.00	52.46	A16S	ATOM	48478	C6	URI	1363	211.867	127.575	-30.137	1.00	74.19	A16S
ATOM	48426	P	GUA	1361	215.079	139.023	-31.985	1.00	69.93	A16S	ATOM	48479	C2	URI	1363	212.795	125.392	-29.776	1.00	74.19	A16S
ATOM	48427	O1P	GUA	1361	214.522	139.837	-33.095	1.00	48.87	A16S	ATOM	48480	O2	URI	1363	212.765	124.176	-29.862	1.00	74.19	A16S
ATOM	48428	O2P	GUA	1361	214.959	139.503	-30.579	1.00	48.87	A16S	ATOM	48481	N3	URI	1363	213.829	126.052	-29.161	1.00	74.19	A16S
ATOM	48429	O5'	GUA	1361	214.445	137.568	-32.067	1.00	69.93	A16S	ATOM	48482	C4	URI	1363	213.965	127.411	-28.993	1.00	74.19	A16S
ATOM	48430	C5'	GUA	1361	213.700	137.018	-30.971	1.00	69.93	A16S	ATOM	48483	O4	URI	1363	214.981	127.854	-28.454	1.00	74.19	A16S
ATOM	48431	C4'	GUA	1361	213.856	135.523	-30.956	1.00	69.93	A16S	ATOM	48484	C5	URI	1363	212.889	128.186	-29.525	1.00	74.19	A16S
ATOM	48432	O4'	GUA	1361	215.118	135.172	-30.334	1.00	69.93	A16S	ATOM	48485	C2'	URI	1363	209.874	124.596	-30.081	1.00	60.83	A16S
ATOM	48433	C1'	GUA	1361	214.977	133.946	-29.637	1.00	69.93	A16S	ATOM	48486	O2'	URI	1363	209.583	123.434	-30.817	1.00	60.83	A16S
ATOM	48434	N9	GUA	1361	215.326	134.147	-28.234	1.00	48.87	A16S	ATOM	48487	C3'	URI	1363	208.620	125.404	-29.770	1.00	60.83	A16S
ATOM	48435	C4	GUA	1361	215.427	133.162	-27.288	1.00	48.87	A16S	ATOM	48488	O3'	URI	1363	207.543	124.509	-29.531	1.00	60.83	A16S
ATOM	48436	N3	GUA	1361	215.199	131.853	-27.490	1.00	48.87	A16S	ATOM	48489	P	CYT	1364	207.319	123.905	-28.050	1.00	51.84	A16S
ATOM	48437	C2	GUA	1361	215.404	131.150	-26.398	1.00	48.87	A16S	ATOM	48490	O1P	CYT	1364	206.159	122.972	-28.097	1.00	79.09	A16S
ATOM	48438	N2	GUA	1361	215.235	129.829	-26.419	1.00	48.87	A16S	ATOM	48491	O2P	CYT	1364	207.286	125.074	-27.124	1.00	79.09	A16S
ATOM	48439	N1	GUA	1361	215.795	131.688	-25.202	1.00	48.87	A16S	ATOM	48492	O5'	CYT	1364	208.629	123.046	-27.739	1.00	51.84	A16S
ATOM	48440	C6	GUA	1361	216.029	133.037	-24.973	1.00	48.87	A16S	ATOM	48493	C5'	CYT	1364	208.958	121.899	-28.530	1.00	51.84	A16S
ATOM	48441	O6	GUA	1361	216.379	133.420	-23.854	1.00	48.87	A16S	ATOM	48494	C4'	CYT	1364	210.247	121.278	-28.056	1.00	51.84	A16S
ATOM	48442	C5	GUA	1361	215.815	133.802	-26.131	1.00	48.87	A16S	ATOM	48495	O4'	CYT	1364	211.372	122.146	-28.328	1.00	51.84	A16S
ATOM	48443	N7	GUA	1361	215.931	135.167	-26.337	1.00	48.87	A16S	ATOM	48496	C1'	CYT	1364	212.333	122.012	-27.297	1.00	51.84	A16S
ATOM	48444	C8	GUA	1361	215.630	135.328	-27.597	1.00	48.87	A16S	ATOM	48497	N1	CYT	1364	212.605	123.343	-26.724	1.00	79.09	A16S
ATOM	48445	C2'	GUA	1361	213.538	133.468	-29.812	1.00	69.93	A16S	ATOM	48498	C6	CYT	1364	211.697	124.360	-26.846	1.00	79.09	A16S
ATOM	48446	O2'	GUA	1361	213.508	132.508	-30.847	1.00	69.93	A16S	ATOM	48499	C2	CYT	1364	213.818	123.558	-26.055	1.00	79.09	A16S
ATOM	48447	C3'	GUA	1361	212.822	134.771	-30.148	1.00	69.93	A16S	ATOM	48500	O2	CYT	1364	214.622	122.615	-25.933	1.00	79.09	A16S
ATOM	48448	O3'	GUA	1361	211.639	134.583	-30.906	1.00	69.93	A16S	ATOM	48501	N3	CYT	1364	214.081	124.783	-25.551	1.00	79.09	A16S
ATOM	48449	P	URI	1362	210.212	134.644	-30.170	1.00	82.95	A16S	ATOM	48502	C4	CYT	1364	213.189	125.766	-25.682	1.00	79.09	A16S
ATOM	48450	O1P	URI	1362	209.175	134.707	-31.232	1.00	57.94	A16S	ATOM	48503	N4	CYT	1364	213.491	126.953	-25.164	1.00	79.09	A16S
ATOM	48451	O2P	URI	1362	210.247	135.700	-29.123	1.00	57.94	A16S	ATOM	48504	C5	CYT	1364	211.947	125.573	-26.346	1.00	79.09	A16S
ATOM	48452	O5'	URI	1362	210.120	133.241	-29.423	1.00	82.95	A16S	ATOM	48505	C2'	CYT	1364	211.807	120.995	-26.281	1.00	51.84	A16S
ATOM	48453	C5'	URI	1362	210.098	132.007	-30.159	1.00	82.95	A16S	ATOM	48506	O2'	CYT	1364	212.411	119.746	-26.519	1.00	51.84	A16S
ATOM	48454	C4'	URI	1362	209.907	130.860	-29.208	1.00	82.95	A16S	ATOM	48507	C3'	CYT	1364	210.313	120.998	-26.573	1.00	51.84	A16S
ATOM	48455	O4'	URI	1362	211.071	130.770	-28.359	1.00	82.95	A16S	ATOM	48508	O3'	CYT	1364	209.728	119.743	-26.312	1.00	51.84	A16S
ATOM	48456	C1'	URI	1362	210.686	130.427	-27.046	1.00	82.95	A16S	ATOM	48509	P	CYT	1365	208.880	119.536	-24.974	1.00	48.46	A16S
ATOM	48457	N1	URI	1362	211.435	131.271	-26.101	1.00	57.94	A16S	ATOM	48510	O1P	CYT	1365	208.288	118.173	-25.022	1.00	47.70	A16S
ATOM	48458	C6	URI	1362	211.775	132.565	-26.416	1.00	57.94	A16S	ATOM	48511	O2P	CYT	1365	207.975	120.725	-24.848	1.00	47.70	A16S
ATOM	48459	C2	URI	1362	211.811	130.714	-24.881	1.00	57.94	A16S	ATOM	48512	O5'	CYT	1365	210.004	119.542	-23.840	1.00	48.46	A16S
ATOM	48460	O2	URI	1362	211.531	129.575	-24.541	1.00	57.94	A16S	ATOM	48513	C5'	CYT	1365	210.921	118.442	-23.729	1.00	48.46	A16S

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ATOM  48514  C4' CYT  1365     211.907 118.671 -22.614  1.00 48.46      A16S
ATOM  48515  O4' CYT  1365     212.750 119.795 -22.956  1.00 48.46      A16S
ATOM  48516  C1' CYT  1365     213.140 120.475 -21.770  1.00 48.46      A16S
ATOM  48517  N1  CYT  1365     212.778 121.908 -21.875  1.00 47.70      A16S
ATOM  48518  C6  CYT  1365     211.925 122.360 -22.845  1.00 47.70      A16S
ATOM  48519  C2  CYT  1365     213.347 122.811 -20.963  1.00 47.70      A16S
ATOM  48520  O2  CYT  1365     214.082 122.373 -20.059  1.00 47.70      A16S
ATOM  48521  N3  CYT  1365     213.077 124.130 -21.083  1.00 47.70      A16S
ATOM  48522  C4  CYT  1365     212.266 124.560 -22.045  1.00 47.70      A16S
ATOM  48523  N4  CYT  1365     212.047 125.874 -22.133  1.00 47.70      A16S
ATOM  48524  C5  CYT  1365     211.644 123.664 -22.964  1.00 47.70      A16S
ATOM  48525  C2' CYT  1365     212.490 119.769 -20.586  1.00 48.46      A16S
ATOM  48526  O2' CYT  1365     213.412 118.898 -19.968  1.00 48.46      A16S
ATOM  48527  C3' CYT  1365     211.335 119.048 -21.262  1.00 48.46      A16S
ATOM  48528  O3' CYT  1365     210.870 117.962 -20.490  1.00 48.46      A16S
ATOM  48529  P   CYT  1366     209.548 118.160 -19.600  1.00 60.87      A16S
ATOM  48530  O1P CYT  1366     209.195 116.867 -18.962  1.00 34.46      A16S
ATOM  48531  O2P CYT  1366     208.575 118.851 -20.475  1.00 34.46      A16S
ATOM  48532  O5' CYT  1366     209.994 119.129 -18.420  1.00 60.87      A16S
ATOM  48533  C5' CYT  1366     210.843 118.628 -17.374  1.00 60.87      A16S
ATOM  48534  C4' CYT  1366     211.108 119.689 -16.339  1.00 60.87      A16S
ATOM  48535  O4' CYT  1366     211.874 120.769 -16.921  1.00 60.87      A16S
ATOM  48536  C1' CYT  1366     211.525 121.989 -16.293  1.00 60.87      A16S
ATOM  48537  N1  CYT  1366     210.948 122.890 -17.298  1.00 34.46      A16S
ATOM  48538  C6  CYT  1366     210.534 122.429 -18.513  1.00 34.46      A16S
ATOM  48539  C2  CYT  1366     210.822 124.242 -16.978  1.00 34.46      A16S
ATOM  48540  O2  CYT  1366     211.200 124.630 -15.857  1.00 34.46      A16S
ATOM  48541  N3  CYT  1366     210.293 125.090 -17.884  1.00 34.46      A16S
ATOM  48542  C4  CYT  1366     209.899 124.631 -19.066  1.00 34.46      A16S
ATOM  48543  N4  CYT  1366     209.401 125.505 -19.932  1.00 34.46      A16S
ATOM  48544  C5  CYT  1366     210.006 123.256 -19.417  1.00 34.46      A16S
ATOM  48545  C2' CYT  1366     210.502 121.672 -15.210  1.00 60.87      A16S
ATOM  48546  O2' CYT  1366     211.168 121.490 -13.976  1.00 60.87      A16S
ATOM  48547  C3' CYT  1366     209.901 120.387 -15.749  1.00 60.87      A16S
ATOM  48548  O3' CYT  1366     209.271 119.632 -14.745  1.00 60.87      A16S
ATOM  48549  P   GUA  1367     207.672 119.666 -14.636  1.00 54.30      A16S
ATOM  48550  O1P GUA  1367     207.353 118.544 -13.715  1.00 35.51      A16S
ATOM  48551  O2P GUA  1367     207.071 119.717 -15.993  1.00 35.51      A16S
ATOM  48552  O5' GUA  1367     207.362 121.048 -13.914  1.00 54.30      A16S
ATOM  48553  C5' GUA  1367     207.753 121.237 -12.556  1.00 54.30      A16S
ATOM  48554  C4' GUA  1367     207.594 122.671 -12.161  1.00 54.30      A16S
ATOM  48555  O4' GUA  1367     208.512 123.510 -12.907  1.00 54.30      A16S
ATOM  48556  C1' GUA  1367     207.939 124.796 -13.088  1.00 54.30      A16S
ATOM  48557  N9  GUA  1367     207.726 125.010 -14.511  1.00 35.51      A16S
ATOM  48558  C4  GUA  1367     207.527 126.216 -15.132  1.00 35.51      A16S
ATOM  48559  N3  GUA  1367     207.546 127.423 -14.540  1.00 35.51      A16S
ATOM  48560  C2  GUA  1367     207.334 128.401 -15.409  1.00 35.51      A16S
ATOM  48561  N2  GUA  1367     207.389 129.678 -15.007  1.00 35.51      A16S
ATOM  48562  N1  GUA  1367     207.070 128.200 -16.740  1.00 35.51      A16S
ATOM  48563  C6  GUA  1367     207.017 126.958 -17.359  1.00 35.51      A16S
ATOM  48564  O6  GUA  1367     206.724 126.878 -18.548  1.00 35.51      A16S
ATOM  48565  C5  GUA  1367     207.301 125.912 -16.454  1.00 35.51      A16S
ATOM  48566  N7  GUA  1367     207.387 124.545 -16.667  1.00 35.51      A16S
ATOM  48567  C8  GUA  1367     207.644 124.050 -15.486  1.00 35.51      A16S
ATOM  48568  C2' GUA  1367     206.579 124.779 -12.401  1.00 54.30      A16S
ATOM  48569  O2' GUA  1367     206.696 125.273 -11.077  1.00 54.30      A16S
ATOM  48570  C3' GUA  1367     206.252 123.298 -12.450  1.00 54.30      A16S
ATOM  48571  O3' GUA  1367     205.256 122.935 -11.539  1.00 54.30      A16S
ATOM  48572  P   GUA  1368     203.740 122.880 -12.047  1.00 61.25      A16S
ATOM  48573  O1P GUA  1368     203.016 122.244 -10.914  1.00 42.14      A16S
ATOM  48574  O2P GUA  1368     203.667 122.267 -13.414  1.00 42.14      A16S
ATOM  48575  O5' GUA  1368     203.336 124.417 -12.216  1.00 61.25      A16S
ATOM  48576  C5' GUA  1368     203.490 125.335 -11.124  1.00 61.25      A16S
ATOM  48577  C4' GUA  1368     203.320 126.761 -11.589  1.00 61.25      A16S
ATOM  48578  O4' GUA  1368     204.331 127.096 -12.574  1.00 61.25      A16S
ATOM  48579  C1' GUA  1368     203.866 128.164 -13.380  1.00 61.25      A16S
ATOM  48580  N9  GUA  1368     203.914 127.790 -14.790  1.00 42.14      A16S
ATOM  48581  C4  GUA  1368     203.745 128.659 -15.845  1.00 42.14      A16S
ATOM  48582  N3  GUA  1368     203.557 129.989 -15.747  1.00 42.14      A16S
ATOM  48583  C2  GUA  1368     203.387 130.553 -16.926  1.00 42.14      A16S
ATOM  48584  N2  GUA  1368     203.177 131.868 -17.003  1.00 42.14      A16S
ATOM  48585  N1  GUA  1368     203.404 129.871 -18.109  1.00 42.14      A16S
ATOM  48586  C6  GUA  1368     203.591 128.503 -18.239  1.00 42.14      A16S
ATOM  48587  O6  GUA  1368     203.570 127.990 -19.356  1.00 42.14      A16S
ATOM  48588  C5  GUA  1368     203.778 127.878 -16.975  1.00 42.14      A16S
ATOM  48589  N7  GUA  1368     203.996 126.545 -16.647  1.00 42.14      A16S
ATOM  48590  C8  GUA  1368     204.080 126.541 -15.341  1.00 42.14      A16S
ATOM  48591  C2' GUA  1368     202.421 128.445 -12.979  1.00 61.25      A16S
ATOM  48592  O2' GUA  1368     202.369 129.582 -12.134  1.00 61.25      A16S
ATOM  48593  C3' GUA  1368     202.030 127.145 -12.289  1.00 61.25      A16S
ATOM  48594  O3' GUA  1368     200.941 127.359 -11.410  1.00 61.25      A16S
ATOM  48595  P   GUA  1369     199.437 127.317 -11.986  1.00 57.97      A16S
ATOM  48596  O1P GUA  1369     198.591 127.128 -10.786  1.00 40.92      A16S
ATOM  48597  O2P GUA  1369     199.347 126.346 -13.102  1.00 40.92      A16S
ATOM  48598  O5' GUA  1369     199.189 128.764 -12.610  1.00 57.97      A16S
ATOM  48599  C5' GUA  1369     199.301 129.935 -11.795  1.00 57.97      A16S
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ATOM  48767  C5' CYT  1377     188.339 107.717 -14.895  1.00 35.03      A16S
ATOM  48768  C4' CYT  1377     189.400 108.618 -14.350  1.00 35.03      A16S
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ATOM  48780  O2' CYT  1377     191.045 110.587 -12.589  1.00 35.03      A16S
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ATOM  48809  C5' CYT  1379     191.471 111.340  -5.577  1.00 58.40      A16S
ATOM  48810  C4' CYT  1379     192.768 110.699  -5.149  1.00 58.40      A16S
ATOM  48811  O4' CYT  1379     192.912 110.884  -3.725  1.00 58.40      A16S
ATOM  48812  C1' CYT  1379     193.457 109.717  -3.137  1.00 58.40      A16S
ATOM  48813  N1  CYT  1379     192.577 109.276  -2.035  1.00104.52      A16S
ATOM  48814  C6  CYT  1379     191.568 108.373  -2.248  1.00104.52      A16S
ATOM  48815  C2  CYT  1379     192.795 109.806  -0.746  1.00104.52      A16S
ATOM  48816  O2  CYT  1379     193.723 110.625  -0.571  1.00104.52      A16S
ATOM  48817  N3  CYT  1379     191.992 109.413   0.272  1.00104.52      A16S
ATOM  48818  C4  CYT  1379     191.010 108.535   0.049  1.00104.52      A16S
ATOM  48819  N4  CYT  1379     190.240 108.185   1.084  1.00104.52      A16S
ATOM  48820  C5  CYT  1379     190.771 107.978  -1.246  1.00104.52      A16S
ATOM  48821  C2' CYT  1379     193.722 108.682  -4.231  1.00 58.40      A16S
ATOM  48822  O2' CYT  1379     195.105 108.636  -4.508  1.00 58.40      A16S
ATOM  48823  C3' CYT  1379     192.840 109.189  -5.364  1.00 58.40      A16S
ATOM  48824  O3' CYT  1379     193.298 108.850  -6.685  1.00 58.40      A16S
ATOM  48825  P   ADE  1380     194.773 109.305  -7.201  1.00 51.31      A16S
ATOM  48826  O1P ADE  1380     195.623 108.078  -7.292  1.00 51.78      A16S
ATOM  48827  O2P ADE  1380     195.279 110.507  -6.447  1.00 51.78      A16S
ATOM  48828  O5' ADE  1380     194.467 109.799  -8.677  1.00 51.31      A16S
ATOM  48829  C5' ADE  1380     194.842 111.098  -9.089  1.00 51.31      A16S
ATOM  48830  C4' ADE  1380     193.793 111.660  -9.986  1.00 51.31      A16S
ATOM  48831  O4' ADE  1380     192.655 112.107  -9.214  1.00 51.31      A16S
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ATOM  48832  C1' ADE  1380     192.126 113.295  -9.792  1.00 51.31      A16S
ATOM  48833  N9  ADE  1380     192.255 114.381  -8.820  1.00 51.78      A16S
ATOM  48834  C4  ADE  1380     191.613 115.595  -8.880  1.00 51.78      A16S
ATOM  48835  N3  ADE  1380     190.744 116.012  -9.814  1.00 51.78      A16S
ATOM  48836  C2  ADE  1380     190.334 117.244  -9.552  1.00 51.78      A16S
ATOM  48837  N1  ADE  1380     190.670 118.051  -8.548  1.00 51.78      A16S
ATOM  48838  C6  ADE  1380     191.549 117.606  -7.628  1.00 51.78      A16S
ATOM  48839  N6  ADE  1380     191.893 118.416  -6.627  1.00 51.78      A16S
ATOM  48840  C5  ADE  1380     192.054 116.310  -7.783  1.00 51.78      A16S
ATOM  48841  N7  ADE  1380     192.950 115.560  -7.031  1.00 51.78      A16S
ATOM  48842  C8  ADE  1380     193.036 114.426  -7.685  1.00 51.78      A16S
ATOM  48843  C2' ADE  1380     192.950 113.607 -11.036  1.00 51.31      A16S
ATOM  48844  O2' ADE  1380     192.326 113.105 -12.205  1.00 51.31      A16S
ATOM  48845  C3' ADE  1380     194.250 112.905 -10.695  1.00 51.31      A16S
ATOM  48846  O3' ADE  1380     195.001 112.553 -11.805  1.00 51.31      A16S
ATOM  48847  P   CYT  1381     196.182 113.503 -12.259  1.00 38.25      A16S
ATOM  48848  O1P CYT  1381     197.000 113.880 -11.071  1.00 58.50      A16S
ATOM  48849  O2P CYT  1381     195.565 114.555 -13.098  1.00 58.50      A16S
ATOM  48850  O5' CYT  1381     197.045 112.552 -13.185  1.00 38.25      A16S
ATOM  48851  C5' CYT  1381     197.650 111.344 -12.674  1.00 38.25      A16S
ATOM  48852  C4' CYT  1381     198.288 110.594 -13.813  1.00 38.25      A16S
ATOM  48853  O4' CYT  1381     197.229 110.066 -14.644  1.00 38.25      A16S
ATOM  48854  C1' CYT  1381     197.337 110.600 -15.944  1.00 38.25      A16S
ATOM  48855  N1  CYT  1381     195.978 110.745 -16.488  1.00 58.50      A16S
ATOM  48856  C6  CYT  1381     195.077 111.596 -15.918  1.00 58.50      A16S
ATOM  48857  C2  CYT  1381     195.621 109.987 -17.604  1.00 58.50      A16S
ATOM  48858  O2  CYT  1381     196.446 109.210 -18.090  1.00 58.50      A16S
ATOM  48859  N3  CYT  1381     194.384 110.117 -18.125  1.00 58.50      A16S
ATOM  48860  C4  CYT  1381     193.517 110.965 -17.575  1.00 58.50      A16S
ATOM  48861  N4  CYT  1381     192.317 111.092 -18.146  1.00 58.50      A16S
ATOM  48862  C5  CYT  1381     193.845 111.733 -16.422  1.00 58.50      A16S
ATOM  48863  C2' CYT  1381     198.166 111.879 -15.815  1.00 38.25      A16S
ATOM  48864  O2' CYT  1381     198.852 112.209 -16.994  1.00 38.25      A16S
ATOM  48865  C3' CYT  1381     199.137 111.492 -14.711  1.00 38.25      A16S
ATOM  48866  O3' CYT  1381     200.198 110.756 -15.299  1.00 38.25      A16S
ATOM  48867  P   CYT  1382     201.618 110.647 -14.557  1.00 36.84      A16S
ATOM  48868  O1P CYT  1382     201.879 111.916 -13.831  1.00 60.02      A16S
ATOM  48869  O2P CYT  1382     202.577 110.184 -15.588  1.00 60.02      A16S
ATOM  48870  O5' CYT  1382     201.418 109.474 -13.502  1.00 36.84      A16S
ATOM  48871  C5' CYT  1382     201.064 108.152 -13.935  1.00 36.84      A16S
ATOM  48872  C4' CYT  1382     201.090 107.206 -12.763  1.00 36.84      A16S
ATOM  48873  O4' CYT  1382     202.385 107.350 -12.126  1.00 36.84      A16S
ATOM  48874  C1' CYT  1382     202.224 107.734 -10.784  1.00 36.84      A16S
ATOM  48875  N1  CYT  1382     203.307 108.668 -10.454  1.00 60.02      A16S
ATOM  48876  C6  CYT  1382     203.536 109.777 -11.224  1.00 60.02      A16S
ATOM  48877  C2  CYT  1382     204.118 108.397  -9.346  1.00 60.02      A16S
ATOM  48878  O2  CYT  1382     203.887 107.392  -8.659  1.00 60.02      A16S
ATOM  48879  N3  CYT  1382     205.135 109.236  -9.055  1.00 60.02      A16S
ATOM  48880  C4  CYT  1382     205.362 110.305  -9.825  1.00 60.02      A16S
ATOM  48881  N4  CYT  1382     206.398 111.091  -9.514  1.00 60.02      A16S
ATOM  48882  C5  CYT  1382     204.544 110.613 -10.950  1.00 60.02      A16S
ATOM  48883  C2' CYT  1382     200.812 108.307 -10.661  1.00 36.84      A16S
ATOM  48884  O2' CYT  1382     200.317 108.123  -9.349  1.00 36.84      A16S
ATOM  48885  C3' CYT  1382     200.047 107.469 -11.682  1.00 36.84      A16S
ATOM  48886  O3' CYT  1382     199.690 106.237 -11.064  1.00 36.84      A16S
ATOM  48887  P   GUA  1383     198.404 105.428 -11.568  1.00 49.51      A16S
ATOM  48888  O1P GUA  1383     197.952 104.547 -10.455  1.00 55.64      A16S
ATOM  48889  O2P GUA  1383     198.761 104.823 -12.885  1.00 55.64      A16S
ATOM  48890  O5' GUA  1383     197.312 106.563 -11.829  1.00 49.51      A16S
ATOM  48891  C5' GUA  1383     196.621 107.211 -10.750  1.00 49.51      A16S
ATOM  48892  C4' GUA  1383     195.236 107.659 -11.192  1.00 49.51      A16S
ATOM  48893  O4' GUA  1383     195.342 108.598 -12.301  1.00 49.51      A16S
ATOM  48894  C1' GUA  1383     194.253 108.415 -13.194  1.00 49.51      A16S
ATOM  48895  N9  GUA  1383     194.778 107.867 -14.442  1.00 55.64      A16S
ATOM  48896  C4  GUA  1383     194.077 107.642 -15.602  1.00 55.64      A16S
ATOM  48897  N3  GUA  1383     192.792 107.966 -15.826  1.00 55.64      A16S
ATOM  48898  C2  GUA  1383     192.384 107.568 -17.012  1.00 55.64      A16S
ATOM  48899  N2  GUA  1383     191.133 107.806 -17.392  1.00 55.64      A16S
ATOM  48900  N1  GUA  1383     193.172 106.907 -17.909  1.00 55.64      A16S
ATOM  48901  C6  GUA  1383     194.499 106.563 -17.701  1.00 55.64      A16S
ATOM  48902  O6  GUA  1383     195.120 105.953 -18.571  1.00 55.64      A16S
ATOM  48903  C5  GUA  1383     194.953 106.990 -16.435  1.00 55.64      A16S
ATOM  48904  N7  GUA  1383     196.195 106.856 -15.837  1.00 55.64      A16S
ATOM  48905  C8  GUA  1383     196.049 107.404 -14.666  1.00 55.64      A16S
ATOM  48906  C2' GUA  1383     193.320 107.388 -12.548  1.00 49.51      A16S
ATOM  48907  O2' GUA  1383     192.366 108.043 -11.739  1.00 49.51      A16S
ATOM  48908  C3' GUA  1383     194.287 106.584 -11.697  1.00 49.51      A16S
ATOM  48909  O3' GUA  1383     193.590 105.943 -10.645  1.00 49.51      A16S
ATOM  48910  P   CYT  1384     193.268 104.371 -10.749  1.00 43.36      A16S
ATOM  48911  O1P CYT  1384     192.445 104.025  -9.570  1.00 46.64      A16S
ATOM  48912  O2P CYT  1384     194.538 103.650 -11.000  1.00 46.64      A16S
ATOM  48913  O5' CYT  1384     192.327 104.231 -12.023  1.00 43.36      A16S
ATOM  48914  C5' CYT  1384     191.036 104.838 -12.022  1.00 43.36      A16S
ATOM  48915  C4' CYT  1384     190.437 104.820 -13.398  1.00 43.36      A16S
ATOM  48916  O4' CYT  1384     191.375 105.400 -14.344  1.00 43.36      A16S
ATOM  48917  C1' CYT  1384     191.188 104.810 -15.621  1.00 43.36      A16S
ATOM  48918  N1  CYT  1384     192.462 104.215 -16.089  1.00 46.64      A16S
ATOM  48919  C6  CYT  1384     193.516 104.007 -15.242  1.00 46.64      A16S
ATOM  48920  C2  CYT  1384     192.562 103.856 -17.434  1.00 46.64      A16S
ATOM  48921  O2  CYT  1384     191.602 104.064 -18.174  1.00 46.64      A16S
ATOM  48922  N3  CYT  1384     193.698 103.290 -17.893  1.00 46.64      A16S
ATOM  48923  C4  CYT  1384     194.718 103.077 -17.063  1.00 46.64      A16S
ATOM  48924  N4  CYT  1384     195.817 102.493 -17.567  1.00 46.64      A16S
ATOM  48925  C5  CYT  1384     194.655 103.446 -15.682  1.00 46.64      A16S
ATOM  48926  C2' CYT  1384     190.068 103.775 -15.488  1.00 43.36      A16S
ATOM  48927  O2' CYT  1384     188.841 104.347 -15.918  1.00 43.36      A16S
ATOM  48928  C3' CYT  1384     190.111 103.466 -13.993  1.00 43.36      A16S
ATOM  48929  O3' CYT  1384     188.887 102.944 -13.509  1.00 43.36      A16S
ATOM  48930  P   CYT  1385     188.765 101.368 -13.233  1.00 62.70      A16S
ATOM  48931  O1P CYT  1385     187.443 101.082 -12.638  1.00 58.54      A16S
ATOM  48932  O2P CYT  1385     189.992 100.945 -12.510  1.00 58.54      A16S
ATOM  48933  O5' CYT  1385     188.802 100.726 -14.693  1.00 62.70      A16S
ATOM  48934  C5' CYT  1385     187.984 101.240 -15.763  1.00 62.70      A16S
ATOM  48935  C4' CYT  1385     188.573 100.864 -17.111  1.00 62.70      A16S
ATOM  48936  O4' CYT  1385     189.868 101.499 -17.279  1.00 62.70      A16S
ATOM  48937  C1' CYT  1385     190.740 100.636 -17.990  1.00 62.70      A16S
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ATOM  48938  N1  CYT  1385     191.925 100.366 -17.149  1.00 58.54      A16S
ATOM  48939  C6  CYT  1385     192.060 100.944 -15.916  1.00 58.54      A16S
ATOM  48940  C2  CYT  1385     192.913  99.508 -17.631  1.00 58.54      A16S
ATOM  48941  O2  CYT  1385     192.762  98.991 -18.744  1.00 58.54      A16S
ATOM  48942  N3  CYT  1385     194.006  99.262 -16.871  1.00 58.54      A16S
ATOM  48943  C4  CYT  1385     194.125  99.829 -15.669  1.00 58.54      A16S
ATOM  48944  N4  CYT  1385     195.214  99.554 -14.945  1.00 58.54      A16S
ATOM  48945  C5  CYT  1385     193.132 100.703 -15.151  1.00 58.54      A16S
ATOM  48946  C2' CYT  1385     189.956  99.377 -18.376  1.00 62.70      A16S
ATOM  48947  O2' CYT  1385     189.532  99.491 -19.721  1.00 62.70      A16S
ATOM  48948  C3' CYT  1385     188.825  99.379 -17.347  1.00 62.70      A16S
ATOM  48949  O3' CYT  1385     187.644  98.716 -17.813  1.00 62.70      A16S
ATOM  48950  P   CYT  1386     187.407  97.160 -17.465  1.00 51.71      A16S
ATOM  48951  O1P CYT  1386     185.946  96.960 -17.236  1.00 57.67      A16S
ATOM  48952  O2P CYT  1386     188.377  96.751 -16.406  1.00 57.67      A16S
ATOM  48953  O5' CYT  1386     187.826  96.417 -18.809  1.00 51.71      A16S
ATOM  48954  C5' CYT  1386     187.217  96.764 -20.058  1.00 51.71      A16S
ATOM  48955  C4' CYT  1386     187.961  96.119 -21.198  1.00 51.71      A16S
ATOM  48956  O4' CYT  1386     189.273  96.721 -21.325  1.00 51.71      A16S
ATOM  48957  C1' CYT  1386     190.217  95.738 -21.722  1.00 51.71      A16S
ATOM  48958  N1  CYT  1386     191.249  95.634 -20.669  1.00 57.67      A16S
ATOM  48959  C6  CYT  1386     190.960  95.965 -19.370  1.00 57.67      A16S
ATOM  48960  C2  CYT  1386     192.547  95.199 -21.019  1.00 57.67      A16S
ATOM  48961  O2  CYT  1386     192.782  94.853 -22.193  1.00 57.67      A16S
ATOM  48962  N3  CYT  1386     193.503  95.161 -20.062  1.00 57.67      A16S
ATOM  48963  C4  CYT  1386     193.209  95.515 -18.808  1.00 57.67      A16S
ATOM  48964  N4  CYT  1386     194.189  95.493 -17.916  1.00 57.67      A16S
ATOM  48965  C5  CYT  1386     191.898  95.917 -18.419  1.00 57.67      A16S
ATOM  48966  C2' CYT  1386     189.458  94.431 -21.937  1.00 51.71      A16S
ATOM  48967  O2' CYT  1386     189.130  94.278 -23.308  1.00 51.71      A16S
ATOM  48968  C3' CYT  1386     188.248  94.639 -21.036  1.00 51.71      A16S
ATOM  48969  O3' CYT  1386     187.152  93.813 -21.366  1.00 51.71      A16S
ATOM  48970  P   GUA  1387     186.939  92.444 -20.557  1.00 57.86      A16S
ATOM  48971  O1P GUA  1387     185.522  92.042 -20.764  1.00 69.34      A16S
ATOM  48972  O2P GUA  1387     187.462  92.601 -19.174  1.00 69.34      A16S
ATOM  48973  O5' GUA  1387     187.881  91.421 -21.328  1.00 57.86      A16S
ATOM  48974  C5' GUA  1387     187.639  91.136 -22.709  1.00 57.86      A16S
ATOM  48975  C4' GUA  1387     188.849  90.512 -23.354  1.00 57.86      A16S
ATOM  48976  O4' GUA  1387     189.952  91.460 -23.379  1.00 57.86      A16S
ATOM  48977  C1' GUA  1387     191.182  90.758 -23.301  1.00 57.86      A16S
ATOM  48978  N9  GUA  1387     191.857  91.111 -22.054  1.00 69.34      A16S
ATOM  48979  C4  GUA  1387     193.214  91.060 -21.814  1.00 69.34      A16S
ATOM  48980  N3  GUA  1387     194.171  90.716 -22.709  1.00 69.34      A16S
ATOM  48981  C2  GUA  1387     195.384  90.729 -22.173  1.00 69.34      A16S
ATOM  48982  N2  GUA  1387     196.451  90.412 -22.927  1.00 69.34      A16S
ATOM  48983  N1  GUA  1387     195.640  91.054 -20.857  1.00 69.34      A16S
ATOM  48984  C6  GUA  1387     194.675  91.412 -19.917  1.00 69.34      A16S
ATOM  48985  O6  GUA  1387     195.016  91.682 -18.755  1.00 69.34      A16S
ATOM  48986  C5  GUA  1387     193.363  91.404 -20.485  1.00 69.34      A16S
ATOM  48987  N7  GUA  1387     192.131  91.687 -19.909  1.00 69.34      A16S
ATOM  48988  C8  GUA  1387     191.272  91.508 -20.876  1.00 69.34      A16S
ATOM  48989  C2' GUA  1387     190.841  89.267 -23.289  1.00 57.86      A16S
ATOM  48990  O2' GUA  1387     190.842  88.752 -24.614  1.00 57.86      A16S
ATOM  48991  C3' GUA  1387     189.442  89.283 -22.690  1.00 57.86      A16S
ATOM  48992  O3' GUA  1387     188.737  88.073 -22.951  1.00 57.86      A16S
ATOM  48993  P   URI  1388     188.910  86.825 -21.945  1.00 75.14      A16S
ATOM  48994  O1P URI  1388     187.735  85.936 -22.098  1.00 64.50      A16S
ATOM  48995  O2P URI  1388     189.279  87.336 -20.600  1.00 64.50      A16S
ATOM  48996  O5' URI  1388     190.189  86.050 -22.488  1.00 75.14      A16S
ATOM  48997  C5' URI  1388     190.361  85.756 -23.891  1.00 75.14      A16S
ATOM  48998  C4' URI  1388     191.772  85.265 -24.147  1.00 75.14      A16S
ATOM  48999  O4' URI  1388     192.723  86.340 -23.914  1.00 75.14      A16S
ATOM  49000  C1' URI  1388     193.920  85.811 -23.359  1.00 75.14      A16S
ATOM  49001  N1  URI  1388     194.178  86.473 -22.068  1.00 64.50      A16S
ATOM  49002  C6  URI  1388     193.164  87.080 -21.361  1.00 64.50      A16S
ATOM  49003  C2  URI  1388     195.485  86.479 -21.587  1.00 64.50      A16S
ATOM  49004  O2  URI  1388     196.411  85.946 -22.171  1.00 64.50      A16S
ATOM  49005  N3  URI  1388     195.665  87.137 -20.395  1.00 64.50      A16S
ATOM  49006  C4  URI  1388     194.694  87.780 -19.646  1.00 64.50      A16S
ATOM  49007  O4  URI  1388     195.013  88.358 -18.597  1.00 64.50      A16S
ATOM  49008  C5  URI  1388     193.368  87.716 -20.204  1.00 64.50      A16S
ATOM  49009  C2' URI  1388     193.764  84.291 -23.269  1.00 75.14      A16S
ATOM  49010  O2' URI  1388     194.353  83.689 -24.411  1.00 75.14      A16S
ATOM  49011  C3' URI  1388     192.248  84.139 -23.240  1.00 75.14      A16S
ATOM  49012  O3' URI  1388     191.819  82.871 -23.700  1.00 75.14      A16S
ATOM  49013  P   CYT  1389     191.290  81.793 -22.641  1.00 79.49      A16S
ATOM  49014  O1P CYT  1389     190.849  80.612 -23.432  1.00 83.21      A16S
ATOM  49015  O2P CYT  1389     190.333  82.454 -21.711  1.00 83.21      A16S
ATOM  49016  O5' CYT  1389     192.594  81.408 -21.814  1.00 79.49      A16S
ATOM  49017  C5' CYT  1389     193.680  80.708 -22.441  1.00 79.49      A16S
ATOM  49018  C4' CYT  1389     194.894  80.716 -21.548  1.00 79.49      A16S
ATOM  49019  O4' CYT  1389     195.320  82.084 -21.339  1.00 79.49      A16S
ATOM  49020  C1' CYT  1389     195.848  82.223 -20.032  1.00 79.49      A16S
ATOM  49021  N1  CYT  1389     195.080  83.259 -19.319  1.00 83.21      A16S
ATOM  49022  C6  CYT  1389     193.788  83.553 -19.668  1.00 83.21      A16S
ATOM  49023  C2  CYT  1389     195.694  83.927 -18.255  1.00 83.21      A16S
ATOM  49024  O2  CYT  1389     196.875  83.660 -17.978  1.00 83.21      A16S
ATOM  49025  N3  CYT  1389     194.989  84.842 -17.556  1.00 83.21      A16S
ATOM  49026  C4  CYT  1389     193.722  85.103 -17.887  1.00 83.21      A16S
ATOM  49027  N4  CYT  1389     193.057  85.995 -17.147  1.00 83.21      A16S
ATOM  49028  C5  CYT  1389     193.079  84.457 -18.986  1.00 83.21      A16S
ATOM  49029  C2' CYT  1389     195.774  80.859 -19.337  1.00 79.49      A16S
ATOM  49030  O2' CYT  1389     197.026  80.202 -19.383  1.00 79.49      A16S
ATOM  49031  C3' CYT  1389     194.696  80.153 -20.150  1.00 79.49      A16S
ATOM  49032  O3' CYT  1389     194.863  78.743 -20.127  1.00 79.49      A16S
ATOM  49033  P   ADE  1390     194.289  77.893 -18.890  1.00 79.86      A16S
ATOM  49034  O1P ADE  1390     194.712  76.487 -19.142  1.00 85.66      A16S
ATOM  49035  O2P ADE  1390     192.843  78.198 -18.702  1.00 85.66      A16S
ATOM  49036  O5' ADE  1390     195.098  78.454 -17.633  1.00 79.86      A16S
ATOM  49037  C5' ADE  1390     196.367  77.881 -17.265  1.00 79.86      A16S
ATOM  49038  C4' ADE  1390     196.755  78.301 -15.868  1.00 79.86      A16S
ATOM  49039  O4' ADE  1390     196.979  79.729 -15.853  1.00 79.86      A16S
ATOM  49040  C1' ADE  1390     196.648  80.246 -14.575  1.00 79.86      A16S
ATOM  49041  N9  ADE  1390     195.627  81.274 -14.734  1.00 85.66      A16S
ATOM  49042  C4  ADE  1390     195.294  82.200 -13.780  1.00 85.66      A16S
ATOM  49043  N3  ADE  1390     195.842  82.341 -12.561  1.00 85.66      A16S
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ATOM  49044  C2  ADE  1390     195.265  83.340 -11.905  1.00 85.66      A16S
ATOM  49045  N1  ADE  1390     194.272  84.154 -12.300  1.00 85.66      A16S
ATOM  49046  C6  ADE  1390     193.742  83.978 -13.534  1.00 85.66      A16S
ATOM  49047  N6  ADE  1390     192.749  84.781 -13.930  1.00 85.66      A16S
ATOM  49048  C5  ADE  1390     194.273  82.952 -14.328  1.00 85.66      A16S
ATOM  49049  N7  ADE  1390     193.972  82.513 -15.609  1.00 85.66      A16S
ATOM  49050  C8  ADE  1390     194.803  81.520 -15.804  1.00 85.66      A16S
ATOM  49051  C2' ADE  1390     196.135  79.098 -13.708  1.00 79.86      A16S
ATOM  49052  O2' ADE  1390     197.148  78.675 -12.821  1.00 79.86      A16S
ATOM  49053  C3' ADE  1390     195.740  78.065 -14.757  1.00 79.86      A16S
ATOM  49054  O3' ADE  1390     195.788  76.748 -14.222  1.00 79.86      A16S
ATOM  49055  P   CYT  1391     194.562  76.211 -13.326  1.00 90.04      A16S
ATOM  49056  O1P CYT  1391     194.909  74.826 -12.903  1.00 97.40      A16S
ATOM  49057  O2P CYT  1391     193.293  76.457 -14.063  1.00 97.40      A16S
ATOM  49058  O5' CYT  1391     194.571  77.158 -12.042  1.00 90.04      A16S
ATOM  49059  C5' CYT  1391     195.551  76.978 -11.002  1.00 90.04      A16S
ATOM  49060  C4' CYT  1391     195.132  77.704  -9.747  1.00 90.04      A16S
ATOM  49061  O4' CYT  1391     195.178  79.135  -9.974  1.00 90.04      A16S
ATOM  49062  C1' CYT  1391     194.145  79.770  -9.233  1.00 90.04      A16S
ATOM  49063  N1  CYT  1391     193.253  80.487 -10.170  1.00 97.40      A16S
ATOM  49064  C6  CYT  1391     193.122  80.082 -11.471  1.00 97.40      A16S
ATOM  49065  C2  CYT  1391     192.522  81.587  -9.699  1.00 97.40      A16S
ATOM  49066  O2  CYT  1391     192.665  81.948  -8.519  1.00 97.40      A16S
ATOM  49067  N3  CYT  1391     191.677  82.229 -10.540  1.00 97.40      A16S
ATOM  49068  C4  CYT  1391     191.548  81.816 -11.802  1.00 97.40      A16S
ATOM  49069  N4  CYT  1391     190.695  82.477 -12.592  1.00 97.40      A16S
ATOM  49070  C5  CYT  1391     192.287  80.709 -12.311  1.00 97.40      A16S
ATOM  49071  C2' CYT  1391     193.398  78.689  -8.446  1.00 90.04      A16S
ATOM  49072  O2' CYT  1391     193.859  78.634  -7.108  1.00 90.04      A16S
ATOM  49073  C3' CYT  1391     193.715  77.441  -9.263  1.00 90.04      A16S
ATOM  49074  O3' CYT  1391     193.592  76.243  -8.510  1.00 90.04      A16S
ATOM  49075  P   GUA  1392     192.174  75.487  -8.454  1.00 96.56      A16S
ATOM  49076  O1P GUA  1392     192.359  74.292  -7.593  1.00105.82      A16S
ATOM  49077  O2P GUA  1392     191.675  75.314  -9.843  1.00105.82      A16S
ATOM  49078  O5' GUA  1392     191.232  76.524  -7.688  1.00 96.56      A16S
ATOM  49079  C5' GUA  1392     191.451  76.817  -6.290  1.00 96.56      A16S
ATOM  49080  C4' GUA  1392     190.352  77.700  -5.734  1.00 96.56      A16S
ATOM  49081  O4' GUA  1392     190.496  79.057  -6.228  1.00 96.56      A16S
ATOM  49082  C1' GUA  1392     189.215  79.659  -6.337  1.00 96.56      A16S
ATOM  49083  N9  GUA  1392     188.985  80.022  -7.734  1.00105.82      A16S
ATOM  49084  C4  GUA  1392     187.990  80.846  -8.209  1.00105.82      A16S
ATOM  49085  N3  GUA  1392     187.063  81.481  -7.463  1.00105.82      A16S
ATOM  49086  C2  GUA  1392     186.237  82.195  -8.207  1.00105.82      A16S
ATOM  49087  N2  GUA  1392     185.252  82.898  -7.627  1.00105.82      A16S
ATOM  49088  N1  GUA  1392     186.314  82.276  -9.574  1.00105.82      A16S
ATOM  49089  C6  GUA  1392     187.258  81.629 -10.362  1.00105.82      A16S
ATOM  49090  O6  GUA  1392     187.234  81.766 -11.588  1.00105.82      A16S
ATOM  49091  C5  GUA  1392     188.153  80.864  -9.578  1.00105.82      A16S
ATOM  49092  N7  GUA  1392     189.230  80.076  -9.957  1.00105.82      A16S
ATOM  49093  C8  GUA  1392     189.695  79.600  -8.834  1.00105.82      A16S
ATOM  49094  C2' GUA  1392     188.178  78.648  -5.844  1.00 96.56      A16S
ATOM  49095  O2' GUA  1392     187.875  78.912  -4.490  1.00 96.56      A16S
ATOM  49096  C3' GUA  1392     188.909  77.325  -6.047  1.00 96.56      A16S
ATOM  49097  O3' GUA  1392     188.397  76.301  -5.199  1.00 96.56      A16S
ATOM  49098  P   CYT  1393     187.241  75.323  -5.744  1.00158.41      A16S
ATOM  49099  O1P CYT  1393     187.040  74.257  -4.736  1.00107.99      A16S
ATOM  49100  O2P CYT  1393     187.565  74.950  -7.146  1.00107.99      A16S
ATOM  49101  O5' CYT  1393     185.937  76.240  -5.746  1.00158.41      A16S
ATOM  49102  C5' CYT  1393     185.352  76.694  -4.504  1.00158.41      A16S
ATOM  49103  C4' CYT  1393     184.149  77.580  -4.764  1.00158.41      A16S
ATOM  49104  O4' CYT  1393     184.570  78.793  -5.442  1.00158.41      A16S
ATOM  49105  C1' CYT  1393     183.552  79.219  -6.334  1.00158.41      A16S
ATOM  49106  N1  CYT  1393     184.094  79.228  -7.708  1.00107.99      A16S
ATOM  49107  C6  CYT  1393     185.138  78.416  -8.059  1.00107.99      A16S
ATOM  49108  C2  CYT  1393     183.511  80.078  -8.662  1.00107.99      A16S
ATOM  49109  O2  CYT  1393     182.570  80.817  -8.319  1.00107.99      A16S
ATOM  49110  N3  CYT  1393     183.988  80.072  -9.932  1.00107.99      A16S
ATOM  49111  C4  CYT  1393     185.004  79.269 -10.260  1.00107.99      A16S
ATOM  49112  N4  CYT  1393     185.442  79.293 -11.522  1.00107.99      A16S
ATOM  49113  C5  CYT  1393     185.618  78.404  -9.310  1.00107.99      A16S
ATOM  49114  C2' CYT  1393     182.368  78.262  -6.184  1.00158.41      A16S
ATOM  49115  O2' CYT  1393     181.431  78.809  -5.279  1.00158.41      A16S
ATOM  49116  C3' CYT  1393     183.045  77.007  -5.644  1.00158.41      A16S
ATOM  49117  O3' CYT  1393     182.135  76.186  -4.913  1.00158.41      A16S
ATOM  49118  P   CYT  1394     181.164  75.168  -5.702  1.00160.30      A16S
ATOM  49119  O1P CYT  1394     180.518  74.293  -4.687  1.00123.76      A16S
ATOM  49120  O2P CYT  1394     181.909  74.553  -6.834  1.00123.76      A16S
ATOM  49121  O5' CYT  1394     180.041  76.115  -6.314  1.00160.30      A16S
ATOM  49122  C5' CYT  1394     179.105  76.802  -5.461  1.00160.30      A16S
ATOM  49123  C4' CYT  1394     178.222  77.706  -6.285  1.00160.30      A16S
ATOM  49124  O4' CYT  1394     179.053  78.710  -6.925  1.00160.30      A16S
ATOM  49125  C1' CYT  1394     178.574  78.966  -8.235  1.00160.30      A16S
ATOM  49126  N1  CYT  1394     179.627  78.585  -9.204  1.00123.76      A16S
ATOM  49127  C6  CYT  1394     180.587  77.663  -8.876  1.00123.76      A16S
ATOM  49128  C2  CYT  1394     179.624  79.176 -10.476  1.00123.76      A16S
ATOM  49129  O2  CYT  1394     178.749  80.016 -10.750  1.00123.76      A16S
ATOM  49130  N3  CYT  1394     180.574  78.816 -11.373  1.00123.76      A16S
ATOM  49131  C4  CYT  1394     181.498  77.910 -11.041  1.00123.76      A16S
ATOM  49132  N4  CYT  1394     182.407  77.581 -11.957  1.00123.76      A16S
ATOM  49133  C5  CYT  1394     181.530  77.301  -9.755  1.00123.76      A16S
ATOM  49134  C2' CYT  1394     177.286  78.161  -8.423  1.00160.30      A16S
ATOM  49135  O2' CYT  1394     176.161  78.964  -8.123  1.00160.30      A16S
ATOM  49136  C3' CYT  1394     177.490  77.024  -7.431  1.00160.30      A16S
ATOM  49137  O3' CYT  1394     176.268  76.423  -7.020  1.00160.30      A16S
ATOM  49138  P   ADE  1395     175.768  75.066  -7.731  1.00106.48      A16S
ATOM  49139  O1P ADE  1395     174.766  74.449  -6.820  1.00123.56      A16S
ATOM  49140  O2P ADE  1395     176.941  74.268  -8.181  1.00123.56      A16S
ATOM  49141  O5' ADE  1395     174.996  75.572  -9.028  1.00106.48      A16S
ATOM  49142  C5' ADE  1395     173.783  76.335  -8.906  1.00106.48      A16S
ATOM  49143  C4' ADE  1395     173.486  77.051 -10.196  1.00106.48      A16S
ATOM  49144  O4' ADE  1395     174.593  77.927 -10.518  1.00106.48      A16S
ATOM  49145  C1' ADE  1395     174.773  77.970 -11.919  1.00106.48      A16S
ATOM  49146  N9  ADE  1395     176.128  77.519 -12.229  1.00123.56      A16S
ATOM  49147  C4  ADE  1395     176.704  77.535 -13.472  1.00123.56      A16S
ATOM  49148  N3  ADE  1395     176.149  77.960 -14.617  1.00123.56      A16S
ATOM  49149  C2  ADE  1395     176.995  77.814 -15.626  1.00123.56      A16S
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ATOM  49150  N1  ADE  1395     178.241  77.330 -15.624  1.00123.56      A16S
ATOM  49151  C6  ADE  1395     178.772  76.917 -14.455  1.00123.56      A16S
ATOM  49152  N6  ADE  1395     180.021  76.444 -14.451  1.00123.56      A16S
ATOM  49153  C5  ADE  1395     177.971  77.015 -13.307  1.00123.56      A16S
ATOM  49154  N7  ADE  1395     178.195  76.682 -11.980  1.00123.56      A16S
ATOM  49155  C8  ADE  1395     177.074  77.000 -11.385  1.00123.56      A16S
ATOM  49156  C2' ADE  1395     173.698  77.092 -12.560  1.00106.48      A16S
ATOM  49157  O2' ADE  1395     172.631  77.917 -12.974  1.00106.48      A16S
ATOM  49158  C3' ADE  1395     173.329  76.161 -11.413  1.00106.48      A16S
ATOM  49159  O3' ADE  1395     171.993  75.699 -11.512  1.00106.48      A16S
ATOM  49160  P   URI  1396     171.672  74.344 -12.312  1.00 84.70      A16S
ATOM  49161  O1P URI  1396     170.213  74.089 -12.180  1.00112.17      A16S
ATOM  49162  O2P URI  1396     172.645  73.308 -11.876  1.00112.17      A16S
ATOM  49163  O5' URI  1396     171.956  74.712 -13.836  1.00 84.70      A16S
ATOM  49164  C5' URI  1396     171.254  75.788 -14.468  1.00 84.70      A16S
ATOM  49165  C4' URI  1396     171.887  76.129 -15.793  1.00 84.70      A16S
ATOM  49166  O4' URI  1396     173.270  76.537 -15.607  1.00 84.70      A16S
ATOM  49167  C1' URI  1396     174.022  76.204 -16.768  1.00 84.70      A16S
ATOM  49168  N1  URI  1396     175.197  75.389 -16.400  1.00112.17      A16S
ATOM  49169  C6  URI  1396     175.292  74.751 -15.181  1.00112.17      A16S
ATOM  49170  C2  URI  1396     176.217  75.262 -17.343  1.00112.17      A16S
ATOM  49171  O2  URI  1396     176.207  75.836 -18.419  1.00112.17      A16S
ATOM  49172  N3  URI  1396     177.253  74.441 -16.974  1.00112.17      A16S
ATOM  49173  C4  URI  1396     177.391  73.757 -15.788  1.00112.17      A16S
ATOM  49174  O4  URI  1396     178.340  72.981 -15.646  1.00112.17      A16S
ATOM  49175  C5  URI  1396     176.326  73.964 -14.853  1.00112.17      A16S
ATOM  49176  C2' URI  1396     173.081  75.487 -17.740  1.00 84.70      A16S
ATOM  49177  O2' URI  1396     172.607  76.410 -18.700  1.00 84.70      A16S
ATOM  49178  C3' URI  1396     171.972  75.007 -16.811  1.00 84.70      A16S
ATOM  49179  O3' URI  1396     170.747  74.826 -17.509  1.00 84.70      A16S
ATOM  49180  P   GUA  1397     170.516  73.486 -18.368  1.00 81.76      A16S
ATOM  49181  O1P GUA  1397     169.067  73.390 -18.697  1.00 94.84      A16S
ATOM  49182  O2P GUA  1397     171.192  72.363 -17.666  1.00 94.84      A16S
ATOM  49183  O5' GUA  1397     171.312  73.773 -19.713  1.00 81.76      A16S
ATOM  49184  C5' GUA  1397     170.971  74.900 -20.528  1.00 81.76      A16S
ATOM  49185  C4' GUA  1397     171.759  74.879 -21.813  1.00 81.76      A16S
ATOM  49186  O4' GUA  1397     173.131  75.295 -21.586  1.00 81.76      A16S
ATOM  49187  C1' GUA  1397     173.986  74.613 -22.491  1.00 81.76      A16S
ATOM  49188  N9  GUA  1397     174.971  73.850 -21.726  1.00 94.84      A16S
ATOM  49189  C4  GUA  1397     176.072  73.197 -22.239  1.00 94.84      A16S
ATOM  49190  N3  GUA  1397     176.445  73.163 -23.543  1.00 94.84      A16S
ATOM  49191  C2  GUA  1397     177.532  72.431 -23.730  1.00 94.84      A16S
ATOM  49192  N2  GUA  1397     178.032  72.275 -24.970  1.00 94.84      A16S
ATOM  49193  N1  GUA  1397     178.206  71.793 -22.717  1.00 94.84      A16S
ATOM  49194  C6  GUA  1397     177.846  71.817 -21.368  1.00 94.84      A16S
ATOM  49195  O6  GUA  1397     178.530  71.205 -20.533  1.00 94.84      A16S
ATOM  49196  C5  GUA  1397     176.675  72.592 -21.155  1.00 94.84      A16S
ATOM  49197  N7  GUA  1397     175.980  72.870 -19.984  1.00 94.84      A16S
ATOM  49198  C8  GUA  1397     174.984  73.621 -20.368  1.00 94.84      A16S
ATOM  49199  C2' GUA  1397     173.108  73.715 -23.369  1.00 81.76      A16S
ATOM  49200  O2' GUA  1397     172.795  74.385 -24.573  1.00 81.76      A16S
ATOM  49201  C3' GUA  1397     171.881  73.529 -22.490  1.00 81.76      A16S
ATOM  49202  O3' GUA  1397     170.726  73.190 -23.228  1.00 81.76      A16S
ATOM  49203  P   GUA  1398     170.345  71.650 -23.407  1.00 89.40      A16S
ATOM  49204  O1P GUA  1398     169.047  71.570 -24.117  1.00 87.97      A16S
ATOM  49205  O2P GUA  1398     170.494  70.989 -22.092  1.00 87.97      A16S
ATOM  49206  O5' GUA  1398     171.494  71.123 -24.372  1.00 89.40      A16S
ATOM  49207  C5' GUA  1398     171.695  71.728 -25.660  1.00 89.40      A16S
ATOM  49208  C4' GUA  1398     172.856  71.081 -26.378  1.00 89.40      A16S
ATOM  49209  O4' GUA  1398     174.105  71.444 -25.732  1.00 89.40      A16S
ATOM  49210  C1' GUA  1398     175.033  70.377 -25.856  1.00 89.40      A16S
ATOM  49211  N9  GUA  1398     175.449  69.948 -24.520  1.00 87.97      A16S
ATOM  49212  C4  GUA  1398     176.493  69.098 -24.237  1.00 87.97      A16S
ATOM  49213  N3  GUA  1398     177.312  68.520 -25.144  1.00 87.97      A16S
ATOM  49214  C2  GUA  1398     178.212  67.744 -24.572  1.00 87.97      A16S
ATOM  49215  N2  GUA  1398     179.100  67.096 -25.328  1.00 87.97      A16S
ATOM  49216  N1  GUA  1398     178.307  67.549 -23.214  1.00 87.97      A16S
ATOM  49217  C6  GUA  1398     177.480  68.139 -22.260  1.00 87.97      A16S
ATOM  49218  O6  GUA  1398     177.659  67.903 -21.059  1.00 87.97      A16S
ATOM  49219  C5  GUA  1398     176.502  68.974 -22.862  1.00 87.97      A16S
ATOM  49220  N7  GUA  1398     175.490  69.733 -22.289  1.00 87.97      A16S
ATOM  49221  C8  GUA  1398     174.892  70.291 -23.307  1.00 87.97      A16S
ATOM  49222  C2' GUA  1398     174.355  69.261 -26.656  1.00 89.40      A16S
ATOM  49223  O2' GUA  1398     174.724  69.369 -28.019  1.00 89.40      A16S
ATOM  49224  C3' GUA  1398     172.877  69.560 -26.421  1.00 89.40      A16S
ATOM  49225  O3' GUA  1398     172.052  69.033 -27.456  1.00 89.40      A16S
ATOM  49226  P   GUA  1399     171.143  67.740 -27.166  1.00119.27      A16S
ATOM  49227  O1P GUA  1399     170.455  67.404 -28.438  1.00105.54      A16S
ATOM  49228  O2P GUA  1399     170.344  67.980 -25.940  1.00105.54      A16S
ATOM  49229  O5' GUA  1399     172.195  66.596 -26.824  1.00119.27      A16S
ATOM  49230  C5' GUA  1399     173.241  66.242 -27.752  1.00119.27      A16S
ATOM  49231  C4' GUA  1399     174.308  65.434 -27.050  1.00119.27      A16S
ATOM  49232  O4' GUA  1399     174.965  66.261 -26.059  1.00119.27      A16S
ATOM  49233  C1' GUA  1399     175.283  65.482 -24.920  1.00119.27      A16S
ATOM  49234  N9  GUA  1399     174.637  66.082 -23.755  1.00105.54      A16S
ATOM  49235  C4  GUA  1399     174.999  65.894 -22.445  1.00105.54      A16S
ATOM  49236  N3  GUA  1399     176.006  65.111 -22.008  1.00105.54      A16S
ATOM  49237  C2  GUA  1399     176.114  65.133 -20.692  1.00105.54      A16S
ATOM  49238  N2  GUA  1399     177.058  64.397 -20.091  1.00105.54      A16S
ATOM  49239  N1  GUA  1399     175.304  65.875 -19.867  1.00105.54      A16S
ATOM  49240  C6  GUA  1399     174.262  66.692 -20.291  1.00105.54      A16S
ATOM  49241  O6  GUA  1399     173.596  67.322 -19.458  1.00105.54      A16S
ATOM  49242  C5  GUA  1399     174.127  66.670 -21.707  1.00105.54      A16S
ATOM  49243  N7  GUA  1399     173.227  67.326 -22.539  1.00105.54      A16S
ATOM  49244  C8  GUA  1399     173.564  66.946 -23.742  1.00105.54      A16S
ATOM  49245  C2' GUA  1399     174.856  64.039 -25.195  1.00119.27      A16S
ATOM  49246  O2' GUA  1399     175.971  63.305 -25.653  1.00119.27      A16S
ATOM  49247  C3' GUA  1399     173.801  64.225 -26.279  1.00119.27      A16S
ATOM  49248  O3' GUA  1399     173.712  63.090 -27.131  1.00119.27      A16S
ATOM  49249  P   ADE  1400     172.762  61.860 -26.730  1.00147.67      A16S
ATOM  49250  O1P ADE  1400     171.688  61.776 -27.753  1.00138.33      A16S
ATOM  49251  O2P ADE  1400     172.401  61.972 -25.289  1.00138.33      A16S
ATOM  49252  O5' ADE  1400     173.713  60.593 -26.899  1.00147.67      A16S
ATOM  49253  C5' ADE  1400     174.338  60.280 -28.165  1.00147.67      A16S
ATOM  49254  C4' ADE  1400     175.229  59.070 -28.007  1.00147.67      A16S
ATOM  49255  O4' ADE  1400     176.328  59.411 -27.123  1.00147.67      A16S
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ATOM  49256  C1' ADE  1400     176.593  58.330 -26.244  1.00147.67      A16S
ATOM  49257  N9  ADE  1400     176.371  58.792 -24.871  1.00138.33      A16S
ATOM  49258  C4  ADE  1400     176.741  58.146 -23.713  1.00138.33      A16S
ATOM  49259  N3  ADE  1400     177.369  56.963 -23.601  1.00138.33      A16S
ATOM  49260  C2  ADE  1400     177.568  56.655 -22.320  1.00138.33      A16S
ATOM  49261  N1  ADE  1400     177.240  57.343 -21.221  1.00138.33      A16S
ATOM  49262  C6  ADE  1400     176.611  58.530 -21.367  1.00138.33      A16S
ATOM  49263  N6  ADE  1400     176.290  59.221 -20.270  1.00138.33      A16S
ATOM  49264  C5  ADE  1400     176.335  58.967 -22.677  1.00138.33      A16S
ATOM  49265  N7  ADE  1400     175.712  60.106 -23.168  1.00138.33      A16S
ATOM  49266  C8  ADE  1400     175.758  59.953 -24.469  1.00138.33      A16S
ATOM  49267  C2' ADE  1400     175.685  57.165 -26.643  1.00147.67      A16S
ATOM  49268  O2' ADE  1400     176.379  56.274 -27.491  1.00147.67      A16S
ATOM  49269  C3' ADE  1400     174.540  57.887 -27.342  1.00147.67      A16S
ATOM  49270  O3' ADE  1400     173.862  57.062 -28.288  1.00147.67      A16S
ATOM  49271  P   GUA  1401     172.476  56.350 -27.880  1.00196.14      A16S
ATOM  49272  O1P GUA  1401     172.109  55.446 -29.001  1.00129.28      A16S
ATOM  49273  O2P GUA  1401     171.509  57.387 -27.431  1.00129.28      A16S
ATOM  49274  O5' GUA  1401     172.850  55.452 -26.616  1.00196.14      A16S
ATOM  49275  C5' GUA  1401     173.832  54.401 -26.711  1.00196.14      A16S
ATOM  49276  C4' GUA  1401     174.268  53.971 -25.331  1.00196.14      A16S
ATOM  49277  O4' GUA  1401     174.866  55.106 -24.651  1.00196.14      A16S
ATOM  49278  C1' GUA  1401     174.529  55.077 -23.272  1.00196.14      A16S
ATOM  49279  N9  GUA  1401     173.766  56.283 -22.956  1.00129.28      A16S
ATOM  49280  C4  GUA  1401     173.584  56.837 -21.707  1.00129.28      A16S
ATOM  49281  N3  GUA  1401     174.107  56.378 -20.547  1.00129.28      A16S
ATOM  49282  C2  GUA  1401     173.734  57.114 -19.509  1.00129.28      A16S
ATOM  49283  N2  GUA  1401     174.164  56.803 -18.275  1.00129.28      A16S
ATOM  49284  N1  GUA  1401     172.913  58.210 -19.604  1.00129.28      A16S
ATOM  49285  C6  GUA  1401     172.364  58.701 -20.785  1.00129.28      A16S
ATOM  49286  O6  GUA  1401     171.627  59.697 -20.757  1.00129.28      A16S
ATOM  49287  C5  GUA  1401     172.760  57.925 -21.907  1.00129.28      A16S
ATOM  49288  N7  GUA  1401     172.444  58.064 -23.252  1.00129.28      A16S
ATOM  49289  C8  GUA  1401     173.065  57.076 -23.835  1.00129.28      A16S
ATOM  49290  C2' GUA  1401     173.720  53.802 -23.021  1.00196.14      A16S
ATOM  49291  O2' GUA  1401     174.573  52.774 -22.557  1.00196.14      A16S
ATOM  49292  C3' GUA  1401     173.149  53.519 -24.405  1.00196.14      A16S
ATOM  49293  O3' GUA  1401     172.819  52.147 -24.586  1.00196.14      A16S
ATOM  49294  P   CYT  1402     171.304  51.656 -24.352  1.00154.29      A16S
ATOM  49295  O1P CYT  1402     171.228  50.231 -24.762  1.00191.68      A16S
ATOM  49296  O2P CYT  1402     170.388  52.646 -24.976  1.00191.68      A16S
ATOM  49297  O5' CYT  1402     171.106  51.731 -22.773  1.00154.29      A16S
ATOM  49298  C5' CYT  1402     171.829  50.854 -21.887  1.00154.29      A16S
ATOM  49299  C4' CYT  1402     171.676  51.317 -20.458  1.00154.29      A16S
ATOM  49300  O4' CYT  1402     172.233  52.653 -20.342  1.00154.29      A16S
ATOM  49301  C1' CYT  1402     171.433  53.439 -19.471  1.00154.29      A16S
ATOM  49302  N1  CYT  1402     170.853  54.557 -20.251  1.00191.68      A16S
ATOM  49303  C6  CYT  1402     170.533  54.395 -21.574  1.00191.68      A16S
ATOM  49304  C2  CYT  1402     170.620  55.792 -19.617  1.00191.68      A16S
ATOM  49305  O2  CYT  1402     170.931  55.930 -18.421  1.00191.68      A16S
ATOM  49306  N3  CYT  1402     170.064  56.803 -20.329  1.00191.68      A16S
ATOM  49307  C4  CYT  1402     169.753  56.625 -21.617  1.00191.68      A16S
ATOM  49308  N4  CYT  1402     169.207  57.649 -22.279  1.00191.68      A16S
ATOM  49309  C5  CYT  1402     169.987  55.390 -22.285  1.00191.68      A16S
ATOM  49310  C2' CYT  1402     170.358  52.520 -18.882  1.00154.29      A16S
ATOM  49311  O2' CYT  1402     170.790  52.001 -17.638  1.00154.29      A16S
ATOM  49312  C3' CYT  1402     170.241  51.455 -19.967  1.00154.29      A16S
ATOM  49313  O3' CYT  1402     169.699  50.230 -19.482  1.00154.29      A16S
ATOM  49314  P   GUA  1403     168.113  49.962 -19.593  1.00158.74      A16S
ATOM  49315  O1P GUA  1403     167.887  48.528 -19.271  1.00186.90      A16S
ATOM  49316  O2P GUA  1403     167.624  50.506 -20.888  1.00186.90      A16S
ATOM  49317  O5' GUA  1403     167.487  50.843 -18.421  1.00158.74      A16S
ATOM  49318  C5' GUA  1403     167.645  50.457 -17.040  1.00158.74      A16S
ATOM  49319  C4' GUA  1403     167.004  51.477 -16.127  1.00158.74      A16S
ATOM  49320  O4' GUA  1403     167.696  52.746 -16.263  1.00158.74      A16S
ATOM  49321  C1' GUA  1403     166.773  53.813 -16.114  1.00158.74      A16S
ATOM  49322  N9  GUA  1403     166.743  54.587 -17.355  1.00186.90      A16S
ATOM  49323  C4  GUA  1403     166.223  55.854 -17.517  1.00186.90      A16S
ATOM  49324  N3  GUA  1403     165.673  56.618 -16.547  1.00186.90      A16S
ATOM  49325  C2  GUA  1403     165.243  57.779 -17.015  1.00186.90      A16S
ATOM  49326  N2  GUA  1403     164.671  58.664 -16.183  1.00186.90      A16S
ATOM  49327  N1  GUA  1403     165.342  58.158 -18.331  1.00186.90      A16S
ATOM  49328  C6  GUA  1403     165.902  57.389 -19.347  1.00186.90      A16S
ATOM  49329  O6  GUA  1403     165.935  57.826 -20.503  1.00186.90      A16S
ATOM  49330  C5  GUA  1403     166.373  56.142 -18.857  1.00186.90      A16S
ATOM  49331  N7  GUA  1403     166.990  55.090 -19.522  1.00186.90      A16S
ATOM  49332  C8  GUA  1403     167.196  54.195 -18.594  1.00186.90      A16S
ATOM  49333  C2' GUA  1403     165.404  53.203 -15.805  1.00158.74      A16S
ATOM  49334  O2' GUA  1403     165.184  53.194 -14.408  1.00158.74      A16S
ATOM  49335  C3' GUA  1403     165.545  51.809 -16.403  1.00158.74      A16S
ATOM  49336  O3' GUA  1403     164.640  50.880 -15.817  1.00158.74      A16S
ATOM  49337  P   GUA  1404     163.181  50.674 -16.467  1.00156.48      A16S
ATOM  49338  O1P GUA  1404     162.544  49.521 -15.776  1.00159.57      A16S
ATOM  49339  O2P GUA  1404     163.318  50.659 -17.948  1.00159.57      A16S
ATOM  49340  O5' GUA  1404     162.380  51.989 -16.060  1.00156.48      A16S
ATOM  49341  C5' GUA  1404     161.872  52.152 -14.724  1.00156.48      A16S
ATOM  49342  C4' GUA  1404     161.102  53.446 -14.601  1.00156.48      A16S
ATOM  49343  O4' GUA  1404     162.005  54.572 -14.777  1.00156.48      A16S
ATOM  49344  C1' GUA  1404     161.321  55.638 -15.422  1.00156.48      A16S
ATOM  49345  N9  GUA  1404     161.919  55.852 -16.738  1.00159.57      A16S
ATOM  49346  C4  GUA  1404     161.635  56.888 -17.600  1.00159.57      A16S
ATOM  49347  N3  GUA  1404     160.778  57.904 -17.362  1.00159.57      A16S
ATOM  49348  C2  GUA  1404     160.701  58.736 -18.386  1.00159.57      A16S
ATOM  49349  N2  GUA  1404     159.896  59.803 -18.313  1.00159.57      A16S
ATOM  49350  N1  GUA  1404     161.407  58.585 -19.555  1.00159.57      A16S
ATOM  49351  C6  GUA  1404     162.295  57.549 -19.824  1.00159.57      A16S
ATOM  49352  O6  GUA  1404     162.882  57.507 -20.914  1.00159.57      A16S
ATOM  49353  C5  GUA  1404     162.389  56.645 -18.728  1.00159.57      A16S
ATOM  49354  N7  GUA  1404     163.144  55.489 -18.575  1.00159.57      A16S
ATOM  49355  C8  GUA  1404     162.839  55.058 -17.381  1.00159.57      A16S
ATOM  49356  C2' GUA  1404     159.867  55.206 -15.592  1.00156.48      A16S
ATOM  49357  O2' GUA  1404     159.095  55.669 -14.500  1.00156.48      A16S
ATOM  49358  C3' GUA  1404     160.009  53.690 -15.631  1.00156.48      A16S
ATOM  49359  O3' GUA  1404     158.785  53.019 -15.367  1.00156.48      A16S
ATOM  49360  P   GUA  1405     157.760  52.746 -16.581  1.00154.95      A16S
ATOM  49361  O1P GUA  1405     156.790  51.709 -16.139  1.00128.04      A16S
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ATOM	49362	O2P	GUA	1405	158.554	52.527	-17.821	1.00128.04	A16S	ATOM	49415	N3	URI	1407	153.261	56.851	-26.654	1.00139.29	A16S
ATOM	49363	O5'	GUA	1405	156.978	54.126	-16.742	1.00154.95	A16S	ATOM	49416	C4	URI	1407	153.187	55.937	-25.626	1.00139.29	A16S
ATOM	49364	C5'	GUA	1405	156.343	54.752	-15.610	1.00154.95	A16S	ATOM	49417	O4	URI	1407	153.828	54.885	-25.707	1.00139.29	A16S
ATOM	49365	C4'	GUA	1405	155.891	56.150	-15.962	1.00154.95	A16S	ATOM	49418	C5	URI	1407	152.319	56.318	-24.549	1.00139.29	A16S
ATOM	49366	O4'	GUA	1405	157.042	56.936	-16.369	1.00154.95	A16S	ATOM	49419	C2'	URI	1407	149.701	59.509	-26.489	1.00119.70	A16S
ATOM	49367	C1'	GUA	1405	156.671	57.837	-17.401	1.00154.95	A16S	ATOM	49420	O2'	URI	1407	149.544	60.643	-27.317	1.00119.70	A16S
ATOM	49368	N9	GUA	1405	157.403	57.484	-18.617	1.00128.04	A16S	ATOM	49421	C3'	URI	1407	148.694	59.454	-25.344	1.00119.70	A16S
ATOM	49369	C4	GUA	1405	157.525	58.262	-19.744	1.00128.04	A16S	ATOM	49422	O3'	URI	1407	147.410	59.932	-25.709	1.00119.70	A16S
ATOM	49370	N3	GUA	1405	157.005	59.497	-19.914	1.00128.04	A16S	ATOM	49423	P	CYT	1408	146.372	58.939	-26.420	1.00 89.62	A16S
ATOM	49371	C2	GUA	1405	157.287	59.991	-21.107	1.00128.04	A16S	ATOM	49424	O1P	CYT	1408	145.051	59.618	-26.436	1.00119.18	A16S
ATOM	49372	N2	GUA	1405	156.850	61.216	-21.440	1.00128.04	A16S	ATOM	49425	O2P	CYT	1408	146.501	57.592	-25.813	1.00119.18	A16S
ATOM	49373	N1	GUA	1405	158.019	59.322	-22.061	1.00128.04	A16S	ATOM	49426	O5'	CYT	1408	146.912	58.877	-27.914	1.00 89.62	A16S
ATOM	49374	C6	GUA	1405	158.561	58.048	-21.908	1.00128.04	A16S	ATOM	49427	C5'	CYT	1408	146.987	60.078	-28.693	1.00 89.62	A16S
ATOM	49375	O6	GUA	1405	159.200	57.533	-22.833	1.00128.04	A16S	ATOM	49428	C4'	CYT	1408	147.676	59.818	-30.004	1.00 89.62	A16S
ATOM	49376	C5	GUA	1405	158.270	57.510	-20.630	1.00128.04	A16S	ATOM	49429	O4'	CYT	1408	149.076	59.511	-29.782	1.00 89.62	A16S
ATOM	49377	N7	GUA	1405	158.617	56.288	-20.069	1.00128.04	A16S	ATOM	49430	C1'	CYT	1408	149.525	58.609	-30.783	1.00 89.62	A16S
ATOM	49378	C8	GUA	1405	158.086	56.317	-18.877	1.00128.04	A16S	ATOM	49431	N1	CYT	1408	150.027	57.386	-30.135	1.00119.18	A16S
ATOM	49379	C2'	GUA	1405	155.167	57.693	-17.614	1.00154.95	A16S	ATOM	49432	C6	CYT	1408	149.654	57.059	-28.860	1.00119.18	A16S
ATOM	49380	O2'	GUA	1405	154.492	58.660	-16.835	1.00154.95	A16S	ATOM	49433	C2	CYT	1408	150.894	56.548	-30.857	1.00119.18	A16S
ATOM	49381	C3'	GUA	1405	154.933	56.266	-17.136	1.00154.95	A16S	ATOM	49434	O2	CYT	1408	151.220	56.865	-32.014	1.00119.18	A16S
ATOM	49382	O3'	GUA	1405	153.582	56.021	-16.777	1.00154.95	A16S	ATOM	49435	N3	CYT	1408	151.349	55.415	-30.277	1.00119.18	A16S
ATOM	49383	P	CYT	1406	152.531	55.585	-17.915	1.00176.11	A16S	ATOM	49436	C4	CYT	1408	150.975	55.104	-29.032	1.00119.18	A16S
ATOM	49384	O1P	CYT	1406	151.259	55.232	-17.230	1.00135.32	A16S	ATOM	49437	N4	CYT	1408	151.449	53.973	-28.501	1.00119.18	A16S
ATOM	49385	O2P	CYT	1406	153.175	54.599	-18.825	1.00135.32	A16S	ATOM	49438	C5	CYT	1408	150.098	55.939	-28.277	1.00119.18	A16S
ATOM	49386	O5'	CYT	1406	152.302	56.926	-18.742	1.00176.11	A16S	ATOM	49439	C2'	CYT	1408	148.345	58.308	-31.709	1.00 89.62	A16S
ATOM	49387	C5'	CYT	1406	151.878	58.130	-18.080	1.00176.11	A16S	ATOM	49440	O2'	CYT	1408	148.432	59.111	-32.873	1.00 89.62	A16S
ATOM	49388	C4'	CYT	1406	151.808	59.273	-19.059	1.00176.11	A16S	ATOM	49441	C3'	CYT	1408	147.157	58.643	-30.811	1.00 89.62	A16S
ATOM	49389	O4'	CYT	1406	153.142	59.627	-19.513	1.00176.11	A16S	ATOM	49442	O3'	CYT	1408	145.976	58.954	-31.538	1.00 89.62	A16S
ATOM	49390	C1'	CYT	1406	153.085	60.058	-20.866	1.00176.11	A16S	ATOM	49443	P	URI	1409	144.942	57.779	-31.896	1.00110.48	A16S
ATOM	49391	N1	CYT	1406	153.920	59.165	-21.695	1.00135.32	A16S	ATOM	49444	O1P	URI	1409	143.689	58.409	-32.381	1.00 87.55	A16S
ATOM	49392	C6	CYT	1406	154.349	57.954	-21.222	1.00135.32	A16S	ATOM	49445	O2P	URI	1409	144.895	56.841	-30.742	1.00 87.55	A16S
ATOM	49393	C2	CYT	1406	154.257	59.575	-22.996	1.00135.32	A16S	ATOM	49446	O5'	URI	1409	145.642	57.029	-33.113	1.00110.48	A16S
ATOM	49394	O2	CYT	1406	153.867	60.684	-23.402	1.00135.32	A16S	ATOM	49447	C5'	URI	1409	145.962	57.736	-34.327	1.00110.48	A16S
ATOM	49395	N3	CYT	1406	154.997	58.753	-23.777	1.00135.32	A16S	ATOM	49448	C4'	URI	1409	146.712	56.833	-35.274	1.00110.48	A16S
ATOM	49396	C4	CYT	1406	155.400	57.569	-23.307	1.00135.32	A16S	ATOM	49449	O4'	URI	1409	148.071	56.636	-34.807	1.00110.48	A16S
ATOM	49397	N4	CYT	1406	156.119	56.788	-24.118	1.00135.32	A16S	ATOM	49450	C1'	URI	1409	148.486	55.306	-35.084	1.00110.48	A16S
ATOM	49398	C5	CYT	1406	155.082	57.133	-21.987	1.00135.32	A16S	ATOM	49451	N1	URI	1409	148.779	54.627	-33.811	1.00 87.55	A16S
ATOM	49399	C2'	CYT	1406	151.621	60.014	-21.304	1.00176.11	A16S	ATOM	49452	C6	URI	1409	148.259	55.078	-32.617	1.00 87.55	A16S
ATOM	49400	O2'	CYT	1406	151.044	61.297	-21.169	1.00176.11	A16S	ATOM	49453	C2	URI	1409	149.593	53.508	-33.850	1.00 87.55	A16S
ATOM	49401	C3'	CYT	1406	151.042	58.989	-20.338	1.00176.11	A16S	ATOM	49454	O2	URI	1409	150.076	53.070	-34.884	1.00 87.55	A16S
ATOM	49402	O3'	CYT	1406	149.638	59.106	-20.175	1.00176.11	A16S	ATOM	49455	N3	URI	1409	149.822	52.916	-32.632	1.00 87.55	A16S
ATOM	49403	P	URI	1407	148.668	58.192	-21.071	1.00119.70	A16S	ATOM	49456	C4	URI	1409	149.335	53.316	-31.409	1.00 87.55	A16S
ATOM	49404	O1P	URI	1407	147.266	58.532	-20.718	1.00139.29	A16S	ATOM	49457	O4	URI	1409	149.657	52.694	-30.398	1.00 87.55	A16S
ATOM	49405	O2P	URI	1407	149.131	56.787	-20.969	1.00139.29	A16S	ATOM	49458	C5	URI	1409	148.501	54.476	-31.450	1.00 87.55	A16S
ATOM	49406	O5'	URI	1407	148.951	58.694	-22.555	1.00119.70	A16S	ATOM	49459	C2'	URI	1409	147.353	54.615	-35.840	1.00110.48	A16S
ATOM	49407	C5'	URI	1407	148.877	60.093	-22.875	1.00119.70	A16S	ATOM	49460	O2'	URI	1409	147.583	54.691	-37.232	1.00110.48	A16S
ATOM	49408	C4'	URI	1407	149.333	60.337	-24.291	1.00119.70	A16S	ATOM	49461	C3'	URI	1409	146.152	55.428	-35.383	1.00110.48	A16S
ATOM	49409	O4'	URI	1407	150.755	60.081	-24.423	1.00119.70	A16S	ATOM	49462	O3'	URI	1409	145.040	55.334	-36.250	1.00110.48	A16S
ATOM	49410	C1'	URI	1407	151.028	59.621	-25.736	1.00119.70	A16S	ATOM	49463	P	ADE	1410	143.931	54.208	-35.971	1.00130.32	A16S
ATOM	49411	N1	URI	1407	151.771	58.352	-25.672	1.00139.29	A16S	ATOM	49464	O1P	ADE	1410	142.744	54.522	-36.807	1.00 93.15	A16S
ATOM	49412	C6	URI	1407	151.657	57.483	-24.607	1.00139.29	A16S	ATOM	49465	O2P	ADE	1410	143.772	54.092	-34.490	1.00 93.15	A16S
ATOM	49413	C2	URI	1407	152.599	58.052	-26.744	1.00139.29	A16S	ATOM	49466	O5'	ADE	1410	144.619	52.877	-36.518	1.00130.32	A16S
ATOM	49414	O2	URI	1407	152.736	58.795	-27.703	1.00139.29	A16S	ATOM	49467	C5'	ADE	1410	145.106	52.802	-37.874	1.00130.32	A16S

ATOM	49468	C4'	ADE	1410	145.887	51.527	-38.085	1.00130.32	A16S	ATOM	49521	C2'	CYT	1412	144.805	40.367	-31.631	1.00103.23	A16S
ATOM	49469	O4'	ADE	1410	147.157	51.590	-37.391	1.00130.32	A16S	ATOM	49522	O2'	CYT	1412	145.559	39.188	-31.430	1.00103.23	A16S
ATOM	49470	C1'	ADE	1410	147.516	50.295	-36.937	1.00130.32	A16S	ATOM	49523	C3'	CYT	1412	143.871	40.309	-32.832	1.00103.23	A16S
ATOM	49471	N9	ADE	1410	147.755	50.350	-35.492	1.00 93.15	A16S	ATOM	49524	O3'	CYT	1412	143.224	39.058	-32.949	1.00103.23	A16S
ATOM	49472	C4	ADE	1410	148.556	49.495	-34.771	1.00 93.15	A16S	ATOM	49525	P	CYT	1413	141.810	38.847	-32.220	1.00 92.60	A16S
ATOM	49473	N3	ADE	1410	149.250	48.440	-35.232	1.00 93.15	A16S	ATOM	49526	O1P	CYT	1413	141.297	37.497	-32.572	1.00 60.58	A16S
ATOM	49474	C2	ADE	1410	149.923	47.850	-34.243	1.00 93.15	A16S	ATOM	49527	O2P	CYT	1413	140.974	40.048	-32.511	1.00 60.58	A16S
ATOM	49475	N1	ADE	1410	149.978	48.170	-32.946	1.00 93.15	A16S	ATOM	49528	O5'	CYT	1413	142.190	38.839	-30.672	1.00 92.60	A16S
ATOM	49476	C6	ADE	1410	149.268	49.234	-32.514	1.00 93.15	A16S	ATOM	49529	C5'	CYT	1413	142.958	37.758	-30.106	1.00 92.60	A16S
ATOM	49477	N6	ADE	1410	149.323	49.552	-31.222	1.00 93.15	A16S	ATOM	49530	C4'	CYT	1413	143.113	37.942	-28.613	1.00 92.60	A16S
ATOM	49478	C5	ADE	1410	148.509	49.946	-33.464	1.00 93.15	A16S	ATOM	49531	O4'	CYT	1413	143.928	39.113	-28.345	1.00 92.60	A16S
ATOM	49479	N7	ADE	1410	147.682	51.055	-33.357	1.00 93.15	A16S	ATOM	49532	C1'	CYT	1413	143.466	39.763	-27.170	1.00 92.60	A16S
ATOM	49480	C8	ADE	1410	147.257	51.252	-34.582	1.00 93.15	A16S	ATOM	49533	N1	CYT	1413	142.992	41.114	-27.531	1.00 60.58	A16S
ATOM	49481	C2'	ADE	1410	146.408	49.321	-37.346	1.00130.32	A16S	ATOM	49534	C6	CYT	1413	142.594	41.403	-28.806	1.00 60.58	A16S
ATOM	49482	O2'	ADE	1410	146.793	48.628	-38.515	1.00130.32	A16S	ATOM	49535	C2	CYT	1413	142.958	42.101	-26.544	1.00 60.58	A16S
ATOM	49483	C3'	ADE	1410	145.228	50.261	-37.568	1.00130.32	A16S	ATOM	49536	O2	CYT	1413	143.308	41.809	-25.392	1.00 60.58	A16S
ATOM	49484	O3'	ADE	1410	144.296	49.744	-38.503	1.00130.32	A16S	ATOM	49537	N3	CYT	1413	142.545	43.347	-26.869	1.00 60.58	A16S
ATOM	49485	P	CYT	1411	142.989	48.982	-37.970	1.00104.68	A16S	ATOM	49538	C4	CYT	1413	142.169	43.620	-28.119	1.00 60.58	A16S
ATOM	49486	O1P	CYT	1411	142.117	48.698	-39.147	1.00 83.44	A16S	ATOM	49539	N4	CYT	1413	141.775	44.862	-28.400	1.00 60.58	A16S
ATOM	49487	O2P	CYT	1411	142.449	49.776	-36.831	1.00 83.44	A16S	ATOM	49540	C5	CYT	1413	142.181	42.631	-29.140	1.00 60.58	A16S
ATOM	49488	O5'	CYT	1411	143.565	47.599	-37.427	1.00104.68	A16S	ATOM	49541	C2'	CYT	1413	142.345	38.909	-26.588	1.00 92.60	A16S
ATOM	49489	C5'	CYT	1411	144.077	46.629	-38.349	1.00104.68	A16S	ATOM	49542	O2'	CYT	1413	142.887	38.019	-25.633	1.00 92.60	A16S
ATOM	49490	C4'	CYT	1411	144.983	45.645	-37.653	1.00104.68	A16S	ATOM	49543	C3'	CYT	1413	141.836	38.200	-27.832	1.00 92.60	A16S
ATOM	49491	O4'	CYT	1411	146.076	46.345	-37.006	1.00104.68	A16S	ATOM	49544	O3'	CYT	1413	141.117	37.027	-27.523	1.00 92.60	A16S
ATOM	49492	C1'	CYT	1411	146.522	45.590	-35.889	1.00104.68	A16S	ATOM	49545	P	GUA	1414	139.517	37.102	-27.423	1.00 79.57	A16S
ATOM	49493	N1	CYT	1411	146.427	46.410	-34.666	1.00 83.44	A16S	ATOM	49546	O1P	GUA	1414	139.040	35.727	-27.108	1.00 62.01	A16S
ATOM	49494	C6	CYT	1411	145.609	47.509	-34.602	1.00 83.44	A16S	ATOM	49547	O2P	GUA	1414	138.993	37.817	-28.622	1.00 62.01	A16S
ATOM	49495	C2	CYT	1411	147.191	46.028	-33.543	1.00 83.44	A16S	ATOM	49548	O5'	GUA	1414	139.251	38.035	-26.162	1.00 79.57	A16S
ATOM	49496	O2	CYT	1411	147.938	45.033	-33.628	1.00 83.44	A16S	ATOM	49549	C5'	GUA	1414	139.770	37.685	-24.872	1.00 79.57	A16S
ATOM	49497	N3	CYT	1411	147.092	46.750	-32.401	1.00 83.44	A16S	ATOM	49550	C4'	GUA	1414	139.652	38.851	-23.927	1.00 79.57	A16S
ATOM	49498	C4	CYT	1411	146.283	47.812	-32.348	1.00 83.44	A16S	ATOM	49551	O4'	GUA	1414	140.415	39.966	-24.448	1.00 79.57	A16S
ATOM	49499	N4	CYT	1411	146.216	48.485	-31.197	1.00 83.44	A16S	ATOM	49552	C1'	GUA	1414	139.744	41.182	-24.176	1.00 79.57	A16S
ATOM	49500	C5	CYT	1411	145.506	48.230	-33.475	1.00 83.44	A16S	ATOM	49553	N9	GUA	1414	139.401	41.790	-25.457	1.00 62.01	A16S
ATOM	49501	C2'	CYT	1411	145.642	44.347	-35.789	1.00104.68	A16S	ATOM	49554	C4	GUA	1414	139.178	43.123	-25.716	1.00 62.01	A16S
ATOM	49502	O2'	CYT	1411	146.292	43.258	-36.417	1.00104.68	A16S	ATOM	49555	N3	GUA	1414	139.256	44.133	-24.824	1.00 62.01	A16S
ATOM	49503	C3'	CYT	1411	144.397	44.796	-36.541	1.00104.68	A16S	ATOM	49556	C2	GUA	1414	138.968	45.302	-25.377	1.00 62.01	A16S
ATOM	49504	O3'	CYT	1411	143.669	43.683	-37.019	1.00104.68	A16S	ATOM	49557	N2	GUA	1414	139.001	46.422	-24.639	1.00 62.01	A16S
ATOM	49505	P	CYT	1412	142.515	43.049	-36.100	1.00103.23	A16S	ATOM	49558	N1	GUA	1414	138.627	45.462	-26.697	1.00 62.01	A16S
ATOM	49506	O1P	CYT	1412	141.797	42.040	-36.919	1.00 80.76	A16S	ATOM	49559	C6	GUA	1414	138.543	44.436	-27.634	1.00 62.01	A16S
ATOM	49507	O2P	CYT	1412	141.760	44.185	-35.504	1.00 80.76	A16S	ATOM	49560	O6	GUA	1414	138.223	44.688	-28.810	1.00 62.01	A16S
ATOM	49508	O5'	CYT	1412	143.304	42.289	-34.940	1.00103.23	A16S	ATOM	49561	C5	GUA	1414	138.854	43.183	-27.056	1.00 62.01	A16S
ATOM	49509	C5'	CYT	1412	144.146	41.162	-35.244	1.00103.23	A16S	ATOM	49562	N7	GUA	1414	138.888	41.922	-27.629	1.00 62.01	A16S
ATOM	49510	C4'	CYT	1412	144.798	40.626	-33.991	1.00103.23	A16S	ATOM	49563	C8	GUA	1414	139.219	41.130	-26.648	1.00 62.01	A16S
ATOM	49511	O4'	CYT	1412	145.715	41.609	-33.445	1.00103.23	A16S	ATOM	49564	C2'	GUA	1414	138.515	40.840	-23.335	1.00 79.57	A16S
ATOM	49512	C1'	CYT	1412	145.735	41.510	-32.027	1.00103.23	A16S	ATOM	49565	O2'	GUA	1414	138.876	40.935	-21.973	1.00 79.57	A16S
ATOM	49513	N1	CYT	1412	145.280	42.788	-31.439	1.00 80.76	A16S	ATOM	49566	C3'	GUA	1414	138.251	39.397	-23.745	1.00 79.57	A16S
ATOM	49514	C6	CYT	1412	144.510	43.665	-32.155	1.00 80.76	A16S	ATOM	49567	O3'	GUA	1414	137.570	38.658	-22.745	1.00 79.57	A16S
ATOM	49515	C2	CYT	1412	145.640	43.083	-30.119	1.00 80.76	A16S	ATOM	49568	P	ADE	1415	135.989	38.858	-22.537	1.00 61.39	A16S
ATOM	49516	O2	CYT	1412	146.344	42.276	-29.492	1.00 80.76	A16S	ATOM	49569	O1P	ADE	1415	135.290	37.597	-22.882	1.00 60.74	A16S
ATOM	49517	N3	CYT	1412	145.212	44.236	-29.560	1.00 80.76	A16S	ATOM	49570	O2P	ADE	1415	135.579	40.125	-23.200	1.00 60.74	A16S
ATOM	49518	C4	CYT	1412	144.455	45.080	-30.266	1.00 80.76	A16S	ATOM	49571	O5'	ADE	1415	135.863	39.026	-20.960	1.00 61.39	A16S
ATOM	49519	N4	CYT	1412	144.050	46.203	-29.670	1.00 80.76	A16S	ATOM	49572	C5'	ADE	1415	136.489	38.079	-20.071	1.00 61.39	A16S
ATOM	49520	C5	CYT	1412	144.079	44.810	-31.612	1.00 80.76	A16S	ATOM	49573	C4'	ADE	1415	136.467	38.599	-18.658	1.00 61.39	A16S

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ATOM  49574  O4' ADE  1415     137.337  39.754 -18.548  1.00 61.39      A16S
ATOM  49575  C1' ADE  1415     136.757  40.715 -17.680  1.00 61.39      A16S
ATOM  49576  N9  ADE  1415     136.518  41.944 -18.449  1.00 60.74      A16S
ATOM  49577  C4  ADE  1415     136.283  43.212 -17.956  1.00 60.74      A16S
ATOM  49578  N3  ADE  1415     136.244  43.604 -16.670  1.00 60.74      A16S
ATOM  49579  C2  ADE  1415     135.974  44.904 -16.580  1.00 60.74      A16S
ATOM  49580  N1  ADE  1415     135.748  45.792 -17.552  1.00 60.74      A16S
ATOM  49581  C6  ADE  1415     135.788  45.368 -18.833  1.00 60.74      A16S
ATOM  49582  N6  ADE  1415     135.546  46.246 -19.805  1.00 60.74      A16S
ATOM  49583  C5  ADE  1415     136.079  44.013 -19.065  1.00 60.74      A16S
ATOM  49584  N7  ADE  1415     136.207  43.277 -20.233  1.00 60.74      A16S
ATOM  49585  C8  ADE  1415     136.465  42.063 -19.816  1.00 60.74      A16S
ATOM  49586  C2' ADE  1415     135.474  40.102 -17.117  1.00 61.39      A16S
ATOM  49587  O2' ADE  1415     135.755  39.487 -15.875  1.00 61.39      A16S
ATOM  49588  C3' ADE  1415     135.113  39.097 -18.203  1.00 61.39      A16S
ATOM  49589  O3' ADE  1415     134.283  38.035 -17.763  1.00 61.39      A16S
ATOM  49590  P   ADE  1416     132.695  38.139 -17.983  1.00 52.47      A16S
ATOM  49591  O1P ADE  1416     132.058  36.942 -17.388  1.00 59.47      A16S
ATOM  49592  O2P ADE  1416     132.421  38.489 -19.401  1.00 59.47      A16S
ATOM  49593  O5' ADE  1416     132.282  39.366 -17.063  1.00 52.47      A16S
ATOM  49594  C5' ADE  1416     132.491  39.307 -15.639  1.00 52.47      A16S
ATOM  49595  C4' ADE  1416     132.049  40.593 -14.995  1.00 52.47      A16S
ATOM  49596  O4' ADE  1416     132.947  41.667 -15.375  1.00 52.47      A16S
ATOM  49597  C1' ADE  1416     132.210  42.863 -15.533  1.00 52.47      A16S
ATOM  49598  N9  ADE  1416     132.344  43.314 -16.918  1.00 59.47      A16S
ATOM  49599  C4  ADE  1416     132.260  44.616 -17.349  1.00 59.47      A16S
ATOM  49600  N3  ADE  1416     132.102  45.714 -16.592  1.00 59.47      A16S
ATOM  49601  C2  ADE  1416     132.025  46.805 -17.357  1.00 59.47      A16S
ATOM  49602  N1  ADE  1416     132.076  46.914 -18.693  1.00 59.47      A16S
ATOM  49603  C6  ADE  1416     132.233  45.789 -19.424  1.00 59.47      A16S
ATOM  49604  N6  ADE  1416     132.261  45.896 -20.753  1.00 59.47      A16S
ATOM  49605  C5  ADE  1416     132.345  44.564 -18.728  1.00 59.47      A16S
ATOM  49606  N7  ADE  1416     132.524  43.256 -19.157  1.00 59.47      A16S
ATOM  49607  C8  ADE  1416     132.524  42.558 -18.049  1.00 59.47      A16S
ATOM  49608  C2' ADE  1416     130.747  42.561 -15.187  1.00 52.47      A16S
ATOM  49609  O2' ADE  1416     130.465  42.892 -13.842  1.00 52.47      A16S
ATOM  49610  C3' ADE  1416     130.674  41.064 -15.427  1.00 52.47      A16S
ATOM  49611  O3' ADE  1416     129.632  40.443 -14.691  1.00 52.47      A16S
ATOM  49612  P   GUA  1417     128.224  40.157 -15.412  1.00 48.96      A16S
ATOM  49613  O1P GUA  1417     127.256  39.680 -14.388  1.00 57.19      A16S
ATOM  49614  O2P GUA  1417     128.470  39.340 -16.626  1.00 57.19      A16S
ATOM  49615  O5' GUA  1417     127.756  41.596 -15.904  1.00 48.96      A16S
ATOM  49616  C5' GUA  1417     127.423  42.638 -14.963  1.00 48.96      A16S
ATOM  49617  C4' GUA  1417     127.136  43.916 -15.700  1.00 48.96      A16S
ATOM  49618  O4' GUA  1417     128.342  44.307 -16.399  1.00 48.96      A16S
ATOM  49619  C1' GUA  1417     128.009  44.825 -17.676  1.00 48.96      A16S
ATOM  49620  N9  GUA  1417     128.572  43.937 -18.691  1.00 57.19      A16S
ATOM  49621  C4  GUA  1417     128.931  44.279 -19.977  1.00 57.19      A16S
ATOM  49622  N3  GUA  1417     128.848  45.508 -20.522  1.00 57.19      A16S
ATOM  49623  C2  GUA  1417     129.250  45.520 -21.779  1.00 57.19      A16S
ATOM  49624  N2  GUA  1417     129.225  46.669 -22.472  1.00 57.19      A16S
ATOM  49625  N1  GUA  1417     129.703  44.413 -22.452  1.00 57.19      A16S
ATOM  49626  C6  GUA  1417     129.805  43.135 -21.915  1.00 57.19      A16S
ATOM  49627  O6  GUA  1417     130.237  42.200 -22.614  1.00 57.19      A16S
ATOM  49628  C5  GUA  1417     129.369  43.107 -20.559  1.00 57.19      A16S
ATOM  49629  N7  GUA  1417     129.298  42.053 -19.657  1.00 57.19      A16S
ATOM  49630  C8  GUA  1417     128.827  42.591 -18.565  1.00 57.19      A16S
ATOM  49631  C2' GUA  1417     126.483  44.881 -17.765  1.00 48.96      A16S
ATOM  49632  O2' GUA  1417     126.020  46.153 -17.364  1.00 48.96      A16S
ATOM  49633  C3' GUA  1417     126.082  43.790 -16.790  1.00 48.96      A16S
ATOM  49634  O3' GUA  1417     124.762  43.968 -16.296  1.00 48.96      A16S
ATOM  49635  P   URI  1418     123.552  43.080 -16.890  1.00 52.42      A16S
ATOM  49636  O1P URI  1418     122.611  42.831 -15.754  1.00 64.86      A16S
ATOM  49637  O2P URI  1418     124.095  41.936 -17.667  1.00 64.86      A16S
ATOM  49638  O5' URI  1418     122.826  44.057 -17.912  1.00 52.42      A16S
ATOM  49639  C5' URI  1418     122.284  45.289 -17.450  1.00 52.42      A16S
ATOM  49640  C4' URI  1418     122.305  46.312 -18.546  1.00 52.42      A16S
ATOM  49641  O4' URI  1418     123.674  46.562 -18.961  1.00 52.42      A16S
ATOM  49642  C1' URI  1418     123.699  46.867 -20.349  1.00 52.42      A16S
ATOM  49643  N1  URI  1418     124.577  45.898 -21.041  1.00 64.86      A16S
ATOM  49644  C6  URI  1418     124.943  44.709 -20.453  1.00 64.86      A16S
ATOM  49645  C2  URI  1418     125.018  46.214 -22.321  1.00 64.86      A16S
ATOM  49646  O2  URI  1418     124.742  47.257 -22.883  1.00 64.86      A16S
ATOM  49647  N3  URI  1418     125.799  45.261 -22.920  1.00 64.86      A16S
ATOM  49648  C4  URI  1418     126.186  44.055 -22.391  1.00 64.86      A16S
ATOM  49649  O4  URI  1418     126.878  43.294 -23.068  1.00 64.86      A16S
ATOM  49650  C5  URI  1418     125.709  43.804 -21.066  1.00 64.86      A16S
ATOM  49651  C2' URI  1418     122.247  46.839 -20.851  1.00 52.42      A16S
ATOM  49652  O2' URI  1418     121.683  48.140 -20.825  1.00 52.42      A16S
ATOM  49653  C3' URI  1418     121.582  45.933 -19.825  1.00 52.42      A16S
ATOM  49654  O3' URI  1418     120.184  46.163 -19.747  1.00 52.42      A16S
ATOM  49655  P   CYT  1419     119.197  45.311 -20.679  1.00 49.75      A16S
ATOM  49656  O1P CYT  1419     117.825  45.863 -20.544  1.00 70.21      A16S
ATOM  49657  O2P CYT  1419     119.440  43.874 -20.410  1.00 70.21      A16S
ATOM  49658  O5' CYT  1419     119.713  45.625 -22.151  1.00 49.75      A16S
ATOM  49659  C5' CYT  1419     119.530  46.930 -22.745  1.00 49.75      A16S
ATOM  49660  C4' CYT  1419     120.059  46.933 -24.157  1.00 49.75      A16S
ATOM  49661  O4' CYT  1419     121.490  46.712 -24.109  1.00 49.75      A16S
ATOM  49662  C1' CYT  1419     121.890  45.929 -25.218  1.00 49.75      A16S
ATOM  49663  N1  CYT  1419     122.561  44.702 -24.741  1.00 70.21      A16S
ATOM  49664  C6  CYT  1419     122.390  44.246 -23.465  1.00 70.21      A16S
ATOM  49665  C2  CYT  1419     123.375  43.997 -25.635  1.00 70.21      A16S
ATOM  49666  O2  CYT  1419     123.532  44.441 -26.781  1.00 70.21      A16S
ATOM  49667  N3  CYT  1419     123.968  42.859 -25.232  1.00 70.21      A16S
ATOM  49668  C4  CYT  1419     123.787  42.419 -23.991  1.00 70.21      A16S
ATOM  49669  N4  CYT  1419     124.392  41.288 -23.643  1.00 70.21      A16S
ATOM  49670  C5  CYT  1419     122.979  43.119 -23.053  1.00 70.21      A16S
ATOM  49671  C2' CYT  1419     120.651  45.625 -26.056  1.00 49.75      A16S
ATOM  49672  O2' CYT  1419     120.570  46.530 -27.134  1.00 49.75      A16S
ATOM  49673  C3' CYT  1419     119.538  45.813 -25.042  1.00 49.75      A16S
ATOM  49674  O3' CYT  1419     118.309  46.112 -25.678  1.00 49.75      A16S
ATOM  49675  P   GUA  1420     117.390  44.904 -26.190  1.00 58.27      A16S
ATOM  49676  O1P GUA  1420     116.101  45.449 -26.714  1.00 65.95      A16S
ATOM  49677  O2P GUA  1420     117.379  43.895 -25.099  1.00 65.95      A16S
ATOM  49678  O5' GUA  1420     118.202  44.281 -27.408  1.00 58.27      A16S
ATOM  49679  C5' GUA  1420     118.244  44.950 -28.668  1.00 58.27      A16S
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ATOM	49680	C4'	GUA	1420	119.010	44.130	-29.670	1.00	58.27	A16S	ATOM	49733	C5	CYT	1422	117.818	34.763	-28.432	1.00 62.52	A16S
ATOM	49681	O4'	GUA	1420	120.377	43.977	-29.219	1.00	58.27	A16S	ATOM	49734	C2'	CYT	1422	118.050	31.195	-31.158	1.00 70.41	A16S
ATOM	49682	C1'	GUA	1420	120.884	42.730	-29.659	1.00	58.27	A16S	ATOM	49735	O2'	CYT	1422	118.672	30.196	-31.943	1.00 70.41	A16S
ATOM	49683	N9	GUA	1420	121.321	41.967	-28.497	1.00	65.95	A16S	ATOM	49736	C3'	CYT	1422	116.890	31.865	-31.873	1.00 70.41	A16S
ATOM	49684	C4	GUA	1420	122.105	40.843	-28.517	1.00	65.95	A16S	ATOM	49737	O3'	CYT	1422	116.047	30.929	-32.518	1.00 70.41	A16S
ATOM	49685	N3	GUA	1420	122.615	40.255	-29.615	1.00	65.95	A16S	ATOM	49738	P	GUA	1423	114.698	30.456	-31.784	1.00 71.31	A16S
ATOM	49686	C2	GUA	1420	123.329	39.182	-29.312	1.00	65.95	A16S	ATOM	49739	O1P	GUA	1423	114.241	29.219	-32.464	1.00 69.79	A16S
ATOM	49687	N2	GUA	1420	123.919	38.466	-30.285	1.00	65.95	A16S	ATOM	49740	O2P	GUA	1423	113.779	31.622	-31.689	1.00 69.79	A16S
ATOM	49688	N1	GUA	1420	123.521	38.725	-28.035	1.00	65.95	A16S	ATOM	49741	O5'	GUA	1423	115.192	30.060	-30.323	1.00 71.31	A16S
ATOM	49689	C6	GUA	1420	123.008	39.315	-26.893	1.00	65.95	A16S	ATOM	49742	C5'	GUA	1423	116.106	28.967	-30.136	1.00 71.31	A16S
ATOM	49690	O6	GUA	1420	123.244	38.822	-25.793	1.00	65.95	A16S	ATOM	49743	C4'	GUA	1423	116.336	28.710	-28.665	1.00 71.31	A16S
ATOM	49691	C5	GUA	1420	122.243	40.468	-27.199	1.00	65.95	A16S	ATOM	49744	O4'	GUA	1423	117.006	29.847	-28.068	1.00 71.31	A16S
ATOM	49692	N7	GUA	1420	121.563	41.344	-26.363	1.00	65.95	A16S	ATOM	49745	C1'	GUA	1423	116.508	30.066	-26.760	1.00 71.31	A16S
ATOM	49693	C8	GUA	1420	121.032	42.216	-27.177	1.00	65.95	A16S	ATOM	49746	N9	GUA	1423	115.883	31.388	-26.738	1.00 69.79	A16S
ATOM	49694	C2'	GUA	1420	119.778	42.020	-30.438	1.00	58.27	A16S	ATOM	49747	C4	GUA	1423	115.867	32.276	-25.689	1.00 69.79	A16S
ATOM	49695	O2'	GUA	1420	119.973	42.249	-31.815	1.00	58.27	A16S	ATOM	49748	N3	GUA	1423	116.408	32.074	-24.472	1.00 69.79	A16S
ATOM	49696	C3'	GUA	1420	118.528	42.707	-29.898	1.00	58.27	A16S	ATOM	49749	C2	GUA	1423	116.252	33.122	-23.684	1.00 69.79	A16S
ATOM	49697	O3'	GUA	1420	117.435	42.650	-30.814	1.00	58.27	A16S	ATOM	49750	N2	GUA	1423	116.725	33.088	-22.434	1.00 69.79	A16S
ATOM	49698	P	CYT	1421	116.303	41.510	-30.646	1.00	60.75	A16S	ATOM	49751	N1	GUA	1423	115.619	34.282	-24.062	1.00 69.79	A16S
ATOM	49699	O1P	CYT	1421	115.169	41.887	-31.536	1.00	65.43	A16S	ATOM	49752	C6	GUA	1423	115.054	34.516	-25.313	1.00 69.79	A16S
ATOM	49700	O2P	CYT	1421	116.053	41.258	-29.199	1.00	65.43	A16S	ATOM	49753	O6	GUA	1423	114.515	35.611	-25.559	1.00 69.79	A16S
ATOM	49701	O5'	CYT	1421	116.994	40.212	-31.250	1.00	60.75	A16S	ATOM	49754	C5	GUA	1423	115.205	33.392	-26.165	1.00 69.79	A16S
ATOM	49702	C5'	CYT	1421	117.252	40.122	-32.650	1.00	60.75	A16S	ATOM	49755	N7	GUA	1423	114.790	33.199	-27.475	1.00 69.79	A16S
ATOM	49703	C4'	CYT	1421	118.081	38.905	-32.944	1.00	60.75	A16S	ATOM	49756	C8	GUA	1423	115.210	32.000	-27.772	1.00 69.79	A16S
ATOM	49704	O4'	CYT	1421	119.361	39.035	-32.277	1.00	60.75	A16S	ATOM	49757	C2'	GUA	1423	115.542	28.922	-26.439	1.00 71.31	A16S
ATOM	49705	C1'	CYT	1421	119.817	37.756	-31.875	1.00	60.75	A16S	ATOM	49758	O2'	GUA	1423	116.244	27.892	-25.770	1.00 71.31	A16S
ATOM	49706	N1	CYT	1421	119.966	37.734	-30.408	1.00	65.43	A16S	ATOM	49759	C3'	GUA	1423	115.081	28.507	-27.834	1.00 71.31	A16S
ATOM	49707	C6	CYT	1421	119.323	38.641	-29.609	1.00	65.43	A16S	ATOM	49760	O3'	GUA	1423	114.643	27.154	-27.898	1.00 71.31	A16S
ATOM	49708	C2	CYT	1421	120.788	36.755	-29.842	1.00	65.43	A16S	ATOM	49761	P	GUA	1424	113.142	26.812	-28.375	1.00110.57	A16S
ATOM	49709	O2	CYT	1421	121.349	35.935	-30.594	1.00	65.43	A16S	ATOM	49762	O1P	GUA	1424	112.717	27.777	-29.423	1.00114.04	A16S
ATOM	49710	N3	CYT	1421	120.950	36.723	-28.498	1.00	65.43	A16S	ATOM	49763	O2P	GUA	1424	112.311	26.643	-27.158	1.00114.04	A16S
ATOM	49711	C4	CYT	1421	120.329	37.618	-27.731	1.00	65.43	A16S	ATOM	49764	O5'	GUA	1424	113.311	25.375	-29.039	1.00110.57	A16S
ATOM	49712	N4	CYT	1421	120.533	37.556	-26.418	1.00	65.43	A16S	ATOM	49765	C5'	GUA	1424	112.950	25.121	-30.410	1.00110.57	A16S
ATOM	49713	C5	CYT	1421	119.475	38.619	-28.278	1.00	65.43	A16S	ATOM	49766	C4'	GUA	1424	113.957	24.189	-31.049	1.00110.57	A16S
ATOM	49714	C2'	CYT	1421	118.792	36.729	-32.341	1.00	60.75	A16S	ATOM	49767	O4'	GUA	1424	115.131	24.936	-31.464	1.00110.57	A16S
ATOM	49715	O2'	CYT	1421	119.199	36.200	-33.587	1.00	60.75	A16S	ATOM	49768	C1'	GUA	1424	116.293	24.137	-31.302	1.00110.57	A16S
ATOM	49716	C3'	CYT	1421	117.538	37.584	-32.428	1.00	60.75	A16S	ATOM	49769	N9	GUA	1424	117.214	24.854	-30.420	1.00114.04	A16S
ATOM	49717	O3'	CYT	1421	116.533	37.007	-33.243	1.00	60.75	A16S	ATOM	49770	C4	GUA	1424	118.036	24.332	-29.438	1.00114.04	A16S
ATOM	49718	P	CYT	1422	115.434	36.050	-32.562	1.00	70.41	A16S	ATOM	49771	N3	GUA	1424	118.184	23.022	-29.127	1.00114.04	A16S
ATOM	49719	O1P	CYT	1422	114.378	35.767	-33.572	1.00	62.52	A16S	ATOM	49772	C2	GUA	1424	119.028	22.841	-28.122	1.00114.04	A16S
ATOM	49720	O2P	CYT	1422	115.059	36.629	-31.242	1.00	62.52	A16S	ATOM	49773	N2	GUA	1424	119.293	21.598	-27.691	1.00114.04	A16S
ATOM	49721	O5'	CYT	1422	116.235	34.705	-32.275	1.00	70.41	A16S	ATOM	49774	N1	GUA	1424	119.671	23.867	-27.469	1.00114.04	A16S
ATOM	49722	C5'	CYT	1422	116.820	33.972	-33.350	1.00	70.41	A16S	ATOM	49775	C6	GUA	1424	119.526	25.223	-27.770	1.00114.04	A16S
ATOM	49723	C4'	CYT	1422	117.611	32.806	-32.822	1.00	70.41	A16S	ATOM	49776	O6	GUA	1424	120.130	26.075	-27.105	1.00114.04	A16S
ATOM	49724	O4'	CYT	1422	118.734	33.286	-32.039	1.00	70.41	A16S	ATOM	49777	C5	GUA	1424	118.640	25.425	-28.853	1.00114.04	A16S
ATOM	49725	C1'	CYT	1422	119.008	32.367	-30.996	1.00	70.41	A16S	ATOM	49778	N7	GUA	1424	118.243	26.597	-29.473	1.00114.04	A16S
ATOM	49726	N1	CYT	1422	118.765	33.022	-29.702	1.00	62.52	A16S	ATOM	49779	C8	GUA	1424	117.408	26.210	-30.397	1.00114.04	A16S
ATOM	49727	C6	CYT	1422	118.028	34.171	-29.611	1.00	62.52	A16S	ATOM	49780	C2'	GUA	1424	115.841	22.760	-30.801	1.00110.57	A16S
ATOM	49728	C2	CYT	1422	119.304	32.440	-28.554	1.00	62.52	A16S	ATOM	49781	O2'	GUA	1424	115.728	21.889	-31.908	1.00110.57	A16S
ATOM	49729	O2	CYT	1422	119.953	31.387	-28.663	1.00	62.52	A16S	ATOM	49782	C3'	GUA	1424	114.493	23.078	-30.157	1.00110.57	A16S
ATOM	49730	N3	CYT	1422	119.103	33.030	-27.359	1.00	62.52	A16S	ATOM	49783	O3'	GUA	1424	113.627	21.939	-30.107	1.00110.57	A16S
ATOM	49731	C4	CYT	1422	118.389	34.151	-27.282	1.00	62.52	A16S	ATOM	49784	P	GUA	1425	113.257	21.271	-28.684	1.00117.13	A16S
ATOM	49732	N4	CYT	1422	118.219	34.694	-26.081	1.00	62.52	A16S	ATOM	49785	O1P	GUA	1425	111.866	21.674	-28.357	1.00 97.76	A16S

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ATOM  49786  O2P GUA  1425     114.354  21.536 -27.705  1.00 97.76      A16S
ATOM  49787  O5' GUA  1425     113.212  19.711 -28.991  1.00117.13      A16S
ATOM  49788  C5' GUA  1425     114.041  18.781 -28.268  1.00117.13      A16S
ATOM  49789  C4' GUA  1425     114.089  17.468 -29.004  1.00117.13      A16S
ATOM  49790  O4' GUA  1425     112.747  16.946 -29.062  1.00117.13      A16S
ATOM  49791  C1' GUA  1425     112.502  16.390 -30.332  1.00117.13      A16S
ATOM  49792  N9  GUA  1425     111.298  17.019 -30.855  1.00 97.76      A16S
ATOM  49793  C4  GUA  1425     110.185  16.364 -31.296  1.00 97.76      A16S
ATOM  49794  N3  GUA  1425     110.045  15.027 -31.384  1.00 97.76      A16S
ATOM  49795  C2  GUA  1425     108.845  14.686 -31.818  1.00 97.76      A16S
ATOM  49796  N2  GUA  1425     108.536  13.386 -31.978  1.00 97.76      A16S
ATOM  49797  N1  GUA  1425     107.856  15.594 -32.131  1.00 97.76      A16S
ATOM  49798  C6  GUA  1425     107.981  16.979 -32.040  1.00 97.76      A16S
ATOM  49799  O6  GUA  1425     107.024  17.707 -32.330  1.00 97.76      A16S
ATOM  49800  C5  GUA  1425     109.269  17.354 -31.591  1.00 97.76      A16S
ATOM  49801  N7  GUA  1425     109.814  18.612 -31.376  1.00 97.76      A16S
ATOM  49802  C8  GUA  1425     111.023  18.366 -30.951  1.00 97.76      A16S
ATOM  49803  C2' GUA  1425     113.777  16.493 -31.170  1.00117.13      A16S
ATOM  49804  O2' GUA  1425     114.422  15.239 -31.138  1.00117.13      A16S
ATOM  49805  C3' GUA  1425     114.549  17.595 -30.446  1.00117.13      A16S
ATOM  49806  O3' GUA  1425     115.958  17.375 -30.491  1.00117.13      A16S
ATOM  49807  P   ADE  1426     116.911  18.410 -31.263  1.00138.75      A16S
ATOM  49808  O1P ADE  1426     116.052  19.394 -31.966  1.00201.09      A16S
ATOM  49809  O2P ADE  1426     117.893  17.613 -32.040  1.00201.09      A16S
ATOM  49810  O5' ADE  1426     117.709  19.161 -30.106  1.00138.75      A16S
ATOM  49811  C5' ADE  1426     117.115  19.425 -28.819  1.00138.75      A16S
ATOM  49812  C4' ADE  1426     117.790  18.581 -27.770  1.00138.75      A16S
ATOM  49813  O4' ADE  1426     119.207  18.571 -28.025  1.00138.75      A16S
ATOM  49814  C1' ADE  1426     119.892  18.350 -26.815  1.00138.75      A16S
ATOM  49815  N9  ADE  1426     121.096  19.187 -26.799  1.00201.09      A16S
ATOM  49816  C4  ADE  1426     122.242  18.909 -27.510  1.00201.09      A16S
ATOM  49817  N3  ADE  1426     122.467  17.856 -28.318  1.00201.09      A16S
ATOM  49818  C2  ADE  1426     123.690  17.915 -28.840  1.00201.09      A16S
ATOM  49819  N1  ADE  1426     124.645  18.836 -28.661  1.00201.09      A16S
ATOM  49820  C6  ADE  1426     124.390  19.882 -27.843  1.00201.09      A16S
ATOM  49821  N6  ADE  1426     125.343  20.799 -27.665  1.00201.09      A16S
ATOM  49822  C5  ADE  1426     123.123  19.937 -27.225  1.00201.09      A16S
ATOM  49823  N7  ADE  1426     122.547  20.848 -26.348  1.00201.09      A16S
ATOM  49824  C8  ADE  1426     121.349  20.359 -26.125  1.00201.09      A16S
ATOM  49825  C2' ADE  1426     118.897  18.446 -25.649  1.00138.75      A16S
ATOM  49826  O2' ADE  1426     118.695  17.153 -25.112  1.00138.75      A16S
ATOM  49827  C3' ADE  1426     117.643  19.020 -26.320  1.00138.75      A16S
ATOM  49828  O3' ADE  1426     116.469  18.411 -25.776  1.00138.75      A16S
ATOM  49829  P   GUA  1427     115.595  19.174 -24.658  1.00 80.30      A16S
ATOM  49830  O1P GUA  1427     114.319  18.415 -24.504  1.00 74.76      A16S
ATOM  49831  O2P GUA  1427     115.547  20.628 -25.006  1.00 74.76      A16S
ATOM  49832  O5' GUA  1427     116.410  18.985 -23.299  1.00 80.30      A16S
ATOM  49833  C5' GUA  1427     115.727  19.089 -22.040  1.00 80.30      A16S
ATOM  49834  C4' GUA  1427     116.644  19.626 -20.972  1.00 80.30      A16S
ATOM  49835  O4' GUA  1427     117.531  20.624 -21.530  1.00 80.30      A16S
ATOM  49836  C1' GUA  1427     117.624  21.734 -20.649  1.00 80.30      A16S
ATOM  49837  N9  GUA  1427     117.034  22.883 -21.337  1.00 74.76      A16S
ATOM  49838  C4  GUA  1427     116.628  24.074 -20.781  1.00 74.76      A16S
ATOM  49839  N3  GUA  1427     116.711  24.409 -19.479  1.00 74.76      A16S
ATOM  49840  C2  GUA  1427     116.221  25.615 -19.252  1.00 74.76      A16S
ATOM  49841  N2  GUA  1427     116.215  26.104 -18.008  1.00 74.76      A16S
ATOM  49842  N1  GUA  1427     115.699  26.431 -20.228  1.00 74.76      A16S
ATOM  49843  C6  GUA  1427     115.611  26.107 -21.578  1.00 74.76      A16S
ATOM  49844  O6  GUA  1427     115.134  26.918 -22.383  1.00 74.76      A16S
ATOM  49845  C5  GUA  1427     116.121  24.814 -21.832  1.00 74.76      A16S
ATOM  49846  N7  GUA  1427     116.211  24.109 -23.020  1.00 74.76      A16S
ATOM  49847  C8  GUA  1427     116.761  22.977 -22.682  1.00 74.76      A16S
ATOM  49848  C2' GUA  1427     116.897  21.351 -19.357  1.00 80.30      A16S
ATOM  49849  O2' GUA  1427     117.812  20.776 -18.453  1.00 80.30      A16S
ATOM  49850  C3' GUA  1427     115.884  20.339 -19.869  1.00 80.30      A16S
ATOM  49851  O3' GUA  1427     115.418  19.428 -18.888  1.00 80.30      A16S
ATOM  49852  P   CYT  1428     113.837  19.253 -18.666  1.00 69.79      A16S
ATOM  49853  O1P CYT  1428     113.614  17.970 -17.963  1.00 61.61      A16S
ATOM  49854  O2P CYT  1428     113.162  19.501 -19.964  1.00 61.61      A16S
ATOM  49855  O5' CYT  1428     113.464  20.439 -17.673  1.00 69.79      A16S
ATOM  49856  C5' CYT  1428     114.075  20.526 -16.374  1.00 69.79      A16S
ATOM  49857  C4' CYT  1428     113.694  21.821 -15.692  1.00 69.79      A16S
ATOM  49858  O4' CYT  1428     114.399  22.941 -16.293  1.00 69.79      A16S
ATOM  49859  C1' CYT  1428     113.560  24.086 -16.304  1.00 69.79      A16S
ATOM  49860  N1  CYT  1428     113.287  24.445 -17.714  1.00 61.61      A16S
ATOM  49861  C6  CYT  1428     113.450  23.523 -18.709  1.00 61.61      A16S
ATOM  49862  C2  CYT  1428     112.841  25.741 -18.022  1.00 61.61      A16S
ATOM  49863  O2  CYT  1428     112.708  26.569 -17.108  1.00 61.61      A16S
ATOM  49864  N3  CYT  1428     112.563  26.056 -19.312  1.00 61.61      A16S
ATOM  49865  C4  CYT  1428     112.715  25.138 -20.272  1.00 61.61      A16S
ATOM  49866  N4  CYT  1428     112.421  25.481 -21.532  1.00 61.61      A16S
ATOM  49867  C5  CYT  1428     113.177  23.823 -19.986  1.00 61.61      A16S
ATOM  49868  C2' CYT  1428     112.275  23.709 -15.563  1.00 69.79      A16S
ATOM  49869  O2' CYT  1428     112.379  24.019 -14.186  1.00 69.79      A16S
ATOM  49870  C3' CYT  1428     112.230  22.208 -15.782  1.00 69.79      A16S
ATOM  49871  O3' CYT  1428     111.411  21.556 -14.831  1.00 69.79      A16S
ATOM  49872  P   CYT  1429     109.874  21.273 -15.193  1.00 67.08      A16S
ATOM  49873  O1P CYT  1429     109.297  20.427 -14.114  1.00 73.63      A16S
ATOM  49874  O2P CYT  1429     109.801  20.813 -16.609  1.00 73.63      A16S
ATOM  49875  O5' CYT  1429     109.207  22.716 -15.126  1.00 67.08      A16S
ATOM  49876  C5' CYT  1429     109.136  23.453 -13.890  1.00 67.08      A16S
ATOM  49877  C4' CYT  1429     108.349  24.731 -14.088  1.00 67.08      A16S
ATOM  49878  O4' CYT  1429     109.133  25.681 -14.855  1.00 67.08      A16S
ATOM  49879  C1' CYT  1429     108.282  26.434 -15.701  1.00 67.08      A16S
ATOM  49880  N1  CYT  1429     108.641  26.155 -17.100  1.00 73.63      A16S
ATOM  49881  C6  CYT  1429     109.381  25.055 -17.432  1.00 73.63      A16S
ATOM  49882  C2  CYT  1429     108.193  27.031 -18.096  1.00 73.63      A16S
ATOM  49883  O2  CYT  1429     107.530  28.022 -17.769  1.00 73.63      A16S
ATOM  49884  N3  CYT  1429     108.491  26.769 -19.390  1.00 73.63      A16S
ATOM  49885  C4  CYT  1429     109.203  25.683 -19.703  1.00 73.63      A16S
ATOM  49886  N4  CYT  1429     109.462  25.454 -20.992  1.00 73.63      A16S
ATOM  49887  C5  CYT  1429     109.678  24.780 -18.707  1.00 73.63      A16S
ATOM  49888  C2' CYT  1429     106.850  25.996 -15.421  1.00 67.08      A16S
ATOM  49889  O2' CYT  1429     106.284  26.866 -14.472  1.00 67.08      A16S
ATOM  49890  C3' CYT  1429     107.065  24.591 -14.885  1.00 67.08      A16S
ATOM  49891  O3' CYT  1429     105.974  24.118 -14.119  1.00 67.08      A16S
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ATOM	49892	P	URI	1430	104.846	23.225	-14.836	1.00	59.54	A16S	ATOM	49945	O2	CYT	1432	103.095	25.440	-25.178	1.00	58.24	A16S
ATOM	49893	O1P	URI	1430	103.839	22.851	-13.802	1.00	62.58	A16S	ATOM	49946	N3	CYT	1432	102.936	24.488	-23.122	1.00	58.24	A16S
ATOM	49894	O2P	URI	1430	105.527	22.165	-15.631	1.00	62.58	A16S	ATOM	49947	C4	CYT	1432	102.274	24.399	-21.966	1.00	58.24	A16S
ATOM	49895	O5'	URI	1430	104.155	24.244	-15.847	1.00	59.54	A16S	ATOM	49948	N4	CYT	1432	102.742	23.567	-21.041	1.00	58.24	A16S
ATOM	49896	C5'	URI	1430	103.502	25.428	-15.356	1.00	59.54	A16S	ATOM	49949	C5	CYT	1432	101.106	25.164	-21.707	1.00	58.24	A16S
ATOM	49897	C4'	URI	1430	103.005	26.281	-16.501	1.00	59.54	A16S	ATOM	49950	C2'	CYT	1432	99.926	26.568	-25.859	1.00	60.84	A16S
ATOM	49898	O4'	URI	1430	104.127	26.819	-17.247	1.00	59.54	A16S	ATOM	49951	O2'	CYT	1432	100.565	25.808	-26.867	1.00	60.84	A16S
ATOM	49899	C1'	URI	1430	103.747	27.019	-18.596	1.00	59.54	A16S	ATOM	49952	C3'	CYT	1432	99.345	27.876	-26.375	1.00	60.84	A16S
ATOM	49900	N1	URI	1430	104.621	26.221	-19.473	1.00	62.58	A16S	ATOM	49953	O3'	CYT	1432	100.258	28.398	-27.322	1.00	60.84	A16S
ATOM	49901	C6	URI	1430	105.341	25.151	-18.990	1.00	62.58	A16S	ATOM	49954	P	GUA	1433	99.716	29.204	-28.596	1.00	56.21	A16S
ATOM	49902	C2	URI	1430	104.676	26.562	-20.819	1.00	62.58	A16S	ATOM	49955	O1P	GUA	1433	98.228	29.080	-28.686	1.00	56.05	A16S
ATOM	49903	O2	URI	1430	104.102	27.531	-21.290	1.00	62.58	A16S	ATOM	49956	O2P	GUA	1433	100.570	28.811	-29.753	1.00	56.05	A16S
ATOM	49904	N3	URI	1430	105.437	25.725	-21.594	1.00	62.58	A16S	ATOM	49957	O5'	GUA	1433	100.009	30.719	-28.230	1.00	56.21	A16S
ATOM	49905	C4	URI	1430	106.146	24.618	-21.177	1.00	62.58	A16S	ATOM	49958	C5'	GUA	1433	101.313	31.146	-27.850	1.00	56.21	A16S
ATOM	49906	O4	URI	1430	106.688	23.899	-22.016	1.00	62.58	A16S	ATOM	49959	C4'	GUA	1433	101.209	32.474	-27.169	1.00	56.21	A16S
ATOM	49907	C5	URI	1430	106.081	24.362	-19.775	1.00	62.58	A16S	ATOM	49960	O4'	GUA	1433	100.259	32.348	-26.087	1.00	56.21	A16S
ATOM	49908	C2'	URI	1430	102.282	26.601	-18.723	1.00	59.54	A16S	ATOM	49961	C1'	GUA	1433	100.634	33.214	-25.040	1.00	56.21	A16S
ATOM	49909	O2'	URI	1430	101.496	27.763	-18.557	1.00	59.54	A16S	ATOM	49962	N9	GUA	1433	100.580	32.473	-23.784	1.00	56.05	A16S
ATOM	49910	C3'	URI	1430	102.126	25.628	-17.558	1.00	59.54	A16S	ATOM	49963	C4	GUA	1433	101.357	31.400	-23.406	1.00	56.05	A16S
ATOM	49911	O3'	URI	1430	100.768	25.503	-17.118	1.00	59.54	A16S	ATOM	49964	N3	GUA	1433	102.340	30.830	-24.134	1.00	56.05	A16S
ATOM	49912	P	ADE	1431	99.705	24.638	-17.978	1.00	53.97	A16S	ATOM	49965	C2	GUA	1433	102.881	29.796	-23.509	1.00	56.05	A16S
ATOM	49913	O1P	ADE	1431	98.971	23.739	-17.047	1.00	100.51	A16S	ATOM	49966	N2	GUA	1433	103.861	29.103	-24.093	1.00	56.05	A16S
ATOM	49914	O2P	ADE	1431	100.381	24.062	-19.168	1.00	100.51	A16S	ATOM	49967	N1	GUA	1433	102.495	29.361	-22.269	1.00	56.05	A16S
ATOM	49915	O5'	ADE	1431	98.681	25.754	-18.456	1.00	53.97	A16S	ATOM	49968	C6	GUA	1433	101.482	29.925	-21.504	1.00	56.05	A16S
ATOM	49916	C5'	ADE	1431	97.634	25.482	-19.400	1.00	53.97	A16S	ATOM	49969	O6	GUA	1433	101.189	29.434	-20.407	1.00	56.05	A16S
ATOM	49917	C4'	ADE	1431	96.994	26.787	-19.811	1.00	53.97	A16S	ATOM	49970	C5	GUA	1433	100.895	31.041	-22.159	1.00	56.05	A16S
ATOM	49918	O4'	ADE	1431	96.528	27.448	-18.609	1.00	53.97	A16S	ATOM	49971	N7	GUA	1433	99.865	31.878	-21.756	1.00	56.05	A16S
ATOM	49919	C1'	ADE	1431	96.911	28.806	-18.616	1.00	53.97	A16S	ATOM	49972	C8	GUA	1433	99.714	32.709	-22.747	1.00	56.05	A16S
ATOM	49920	N9	ADE	1431	97.730	29.032	-17.431	1.00	100.51	A16S	ATOM	49973	C2'	GUA	1433	101.962	33.896	-25.408	1.00	56.21	A16S
ATOM	49921	C4	ADE	1431	97.397	29.837	-16.371	1.00	100.51	A16S	ATOM	49974	O2'	GUA	1433	101.703	35.228	-25.814	1.00	56.21	A16S
ATOM	49922	N3	ADE	1431	96.279	30.564	-16.224	1.00	100.51	A16S	ATOM	49975	C3'	GUA	1433	102.485	33.006	-26.539	1.00	56.21	A16S
ATOM	49923	C2	ADE	1431	96.299	31.223	-15.070	1.00	100.51	A16S	ATOM	49976	O3'	GUA	1433	103.224	33.752	-27.510	1.00	56.21	A16S
ATOM	49924	N1	ADE	1431	97.239	31.238	-14.118	1.00	100.51	A16S	ATOM	49977	P	GUA	1434	104.749	33.358	-27.842	1.00	60.30	A16S
ATOM	49925	C6	ADE	1431	98.353	30.497	-14.298	1.00	100.51	A16S	ATOM	49978	O1P	GUA	1434	105.161	34.246	-28.957	1.00	55.97	A16S
ATOM	49926	N6	ADE	1431	99.296	30.520	-13.352	1.00	100.51	A16S	ATOM	49979	O2P	GUA	1434	104.861	31.881	-28.007	1.00	55.97	A16S
ATOM	49927	C5	ADE	1431	98.451	29.746	-15.483	1.00	100.51	A16S	ATOM	49980	O5'	GUA	1434	105.566	33.777	-26.536	1.00	60.30	A16S
ATOM	49928	N7	ADE	1431	99.431	28.894	-15.972	1.00	100.51	A16S	ATOM	49981	C5'	GUA	1434	105.435	35.096	-25.983	1.00	60.30	A16S
ATOM	49929	C8	ADE	1431	98.957	28.500	-17.127	1.00	100.51	A16S	ATOM	49982	C4'	GUA	1434	105.507	35.051	-24.473	1.00	60.30	A16S
ATOM	49930	C2'	ADE	1431	97.590	29.126	-19.950	1.00	53.97	A16S	ATOM	49983	O4'	GUA	1434	104.672	33.957	-23.992	1.00	60.30	A16S
ATOM	49931	O2'	ADE	1431	96.731	29.846	-20.801	1.00	53.97	A16S	ATOM	49984	C1'	GUA	1434	105.251	33.376	-22.830	1.00	60.30	A16S
ATOM	49932	C3'	ADE	1431	97.993	27.743	-20.439	1.00	53.97	A16S	ATOM	49985	N9	GUA	1434	105.739	32.032	-23.155	1.00	55.97	A16S
ATOM	49933	O3'	ADE	1431	98.078	27.556	-21.857	1.00	53.97	A16S	ATOM	49986	C4	GUA	1434	106.231	31.118	-22.249	1.00	55.97	A16S
ATOM	49934	P	CYT	1432	96.742	27.514	-22.782	1.00	60.84	A16S	ATOM	49987	N3	GUA	1434	106.269	31.278	-20.911	1.00	55.97	A16S
ATOM	49935	O1P	CYT	1432	95.788	28.595	-22.440	1.00	58.24	A16S	ATOM	49988	C2	GUA	1434	106.824	30.245	-20.301	1.00	55.97	A16S
ATOM	49936	O2P	CYT	1432	96.254	26.106	-22.825	1.00	58.24	A16S	ATOM	49989	N2	GUA	1434	106.932	30.243	-18.960	1.00	55.97	A16S
ATOM	49937	O5'	CYT	1432	97.339	27.844	-24.224	1.00	60.84	A16S	ATOM	49990	N1	GUA	1434	107.314	29.143	-20.955	1.00	55.97	A16S
ATOM	49938	C5'	CYT	1432	98.084	29.061	-24.445	1.00	60.84	A16S	ATOM	49991	C6	GUA	1434	107.297	28.958	-22.333	1.00	55.97	A16S
ATOM	49939	C4'	CYT	1432	99.391	28.780	-25.152	1.00	60.84	A16S	ATOM	49992	O6	GUA	1434	107.795	27.932	-22.820	1.00	55.97	A16S
ATOM	49940	O4'	CYT	1432	100.365	28.207	-24.251	1.00	60.84	A16S	ATOM	49993	C5	GUA	1434	106.682	30.061	-23.002	1.00	55.97	A16S
ATOM	49941	C1'	CYT	1432	100.958	27.089	-24.868	1.00	60.84	A16S	ATOM	49994	N7	GUA	1434	106.439	30.279	-24.352	1.00	55.97	A16S
ATOM	49942	N1	CYT	1432	101.378	26.128	-23.839	1.00	58.24	A16S	ATOM	49995	C8	GUA	1434	105.868	31.452	-24.395	1.00	55.97	A16S
ATOM	49943	C6	CYT	1432	100.696	26.008	-22.660	1.00	58.24	A16S	ATOM	49996	C2'	GUA	1434	106.459	34.234	-22.469	1.00	60.30	A16S
ATOM	49944	C2	CYT	1432	102.511	25.340	-24.083	1.00	58.24	A16S	ATOM	49997	O2'	GUA	1434	106.065	35.228	-21.542	1.00	60.30	A16S

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ATOM  49998  C3' GUA  1434     106.860  34.762 -23.843  1.00 60.30      A16S
ATOM  49999  O3' GUA  1434     107.724  35.884 -23.780  1.00 60.30      A16S
ATOM  50000  P   GUA  1435     109.318  35.650 -23.697  1.00 59.12      A16S
ATOM  50001  O1P GUA  1435     109.981  36.961 -23.910  1.00 68.19      A16S
ATOM  50002  O2P GUA  1435     109.702  34.490 -24.546  1.00 68.19      A16S
ATOM  50003  O5' GUA  1435     109.560  35.278 -22.171  1.00 59.12      A16S
ATOM  50004  C5' GUA  1435     109.185  36.204 -21.141  1.00 59.12      A16S
ATOM  50005  C4' GUA  1435     109.325  35.563 -19.792  1.00 59.12      A16S
ATOM  50006  O4' GUA  1435     108.481  34.381 -19.740  1.00 59.12      A16S
ATOM  50007  C1' GUA  1435     109.152  33.340 -19.042  1.00 59.12      A16S
ATOM  50008  N9  GUA  1435     109.491  32.296 -20.012  1.00 68.19      A16S
ATOM  50009  C4  GUA  1435     110.097  31.079 -19.752  1.00 68.19      A16S
ATOM  50010  N3  GUA  1435     110.453  30.608 -18.539  1.00 68.19      A16S
ATOM  50011  C2  GUA  1435     111.013  29.419 -18.619  1.00 68.19      A16S
ATOM  50012  N2  GUA  1435     111.398  28.797 -17.506  1.00 68.19      A16S
ATOM  50013  N1  GUA  1435     111.228  28.752 -19.796  1.00 68.19      A16S
ATOM  50014  C6  GUA  1435     110.874  29.221 -21.056  1.00 68.19      A16S
ATOM  50015  O6  GUA  1435     111.116  28.544 -22.064  1.00 68.19      A16S
ATOM  50016  C5  GUA  1435     110.256  30.482 -20.984  1.00 68.19      A16S
ATOM  50017  N7  GUA  1435     109.744  31.286 -21.993  1.00 68.19      A16S
ATOM  50018  C8  GUA  1435     109.300  32.345 -21.373  1.00 68.19      A16S
ATOM  50019  C2' GUA  1435     110.425  33.953 -18.460  1.00 59.12      A16S
ATOM  50020  O2' GUA  1435     110.165  34.468 -17.164  1.00 59.12      A16S
ATOM  50021  C3' GUA  1435     110.712  35.038 -19.484  1.00 59.12      A16S
ATOM  50022  O3' GUA  1435     111.602  36.038 -19.033  1.00 59.12      A16S
ATOM  50023  P   CYT  1436     113.127  36.002 -19.531  1.00 54.86      A16S
ATOM  50024  O1P CYT  1436     113.722  37.325 -19.241  1.00 55.85      A16S
ATOM  50025  O2P CYT  1436     113.170  35.453 -20.921  1.00 55.85      A16S
ATOM  50026  O5' CYT  1436     113.814  34.918 -18.596  1.00 54.86      A16S
ATOM  50027  C5' CYT  1436     113.687  34.988 -17.174  1.00 54.86      A16S
ATOM  50028  C4' CYT  1436     114.185  33.712 -16.554  1.00 54.86      A16S
ATOM  50029  O4' CYT  1436     113.341  32.610 -16.977  1.00 54.86      A16S
ATOM  50030  C1' CYT  1436     114.120  31.431 -17.106  1.00 54.86      A16S
ATOM  50031  N1  CYT  1436     114.063  30.957 -18.503  1.00 55.85      A16S
ATOM  50032  C6  CYT  1436     113.473  31.703 -19.481  1.00 55.85      A16S
ATOM  50033  C2  CYT  1436     114.645  29.721 -18.817  1.00 55.85      A16S
ATOM  50034  O2  CYT  1436     115.166  29.052 -17.908  1.00 55.85      A16S
ATOM  50035  N3  CYT  1436     114.627  29.288 -20.099  1.00 55.85      A16S
ATOM  50036  C4  CYT  1436     114.056  30.030 -21.044  1.00 55.85      A16S
ATOM  50037  N4  CYT  1436     114.063  29.566 -22.293  1.00 55.85      A16S
ATOM  50038  C5  CYT  1436     113.449  31.281 -20.752  1.00 55.85      A16S
ATOM  50039  C2' CYT  1436     115.546  31.789 -16.703  1.00 54.86      A16S
ATOM  50040  O2' CYT  1436     115.727  31.505 -15.332  1.00 54.86      A16S
ATOM  50041  C3' CYT  1436     115.571  33.279 -16.987  1.00 54.86      A16S
ATOM  50042  O3' CYT  1436     116.610  33.940 -16.297  1.00 54.86      A16S
ATOM  50043  P   ADE  1437     118.043  34.105 -17.011  1.00 78.04      A16S
ATOM  50044  O1P ADE  1437     118.844  34.998 -16.131  1.00 51.85      A16S
ATOM  50045  O2P ADE  1437     117.830  34.468 -18.455  1.00 51.85      A16S
ATOM  50046  O5' ADE  1437     118.677  32.637 -16.996  1.00 78.04      A16S
ATOM  50047  C5' ADE  1437     118.861  31.904 -15.762  1.00 78.04      A16S
ATOM  50048  C4' ADE  1437     119.296  30.483 -16.053  1.00 78.04      A16S
ATOM  50049  O4' ADE  1437     118.252  29.791 -16.780  1.00 78.04      A16S
ATOM  50050  C1' ADE  1437     118.828  28.892 -17.710  1.00 78.04      A16S
ATOM  50051  N9  ADE  1437     118.399  29.285 -19.048  1.00 51.85      A16S
ATOM  50052  C4  ADE  1437     118.495  28.527 -20.189  1.00 51.85      A16S
ATOM  50053  N3  ADE  1437     119.014  27.290 -20.308  1.00 51.85      A16S
ATOM  50054  C2  ADE  1437     118.915  26.861 -21.565  1.00 51.85      A16S
ATOM  50055  N1  ADE  1437     118.391  27.481 -22.636  1.00 51.85      A16S
ATOM  50056  C6  ADE  1437     117.879  28.726 -22.477  1.00 51.85      A16S
ATOM  50057  N6  ADE  1437     117.346  29.348 -23.536  1.00 51.85      A16S
ATOM  50058  C5  ADE  1437     117.932  29.292 -21.196  1.00 51.85      A16S
ATOM  50059  N7  ADE  1437     117.508  30.515 -20.705  1.00 51.85      A16S
ATOM  50060  C8  ADE  1437     117.812  30.462 -19.431  1.00 51.85      A16S
ATOM  50061  C2' ADE  1437     120.341  28.966 -17.559  1.00 78.04      A16S
ATOM  50062  O2' ADE  1437     120.790  27.923 -16.723  1.00 78.04      A16S
ATOM  50063  C3' ADE  1437     120.514  30.344 -16.944  1.00 78.04      A16S
ATOM  50064  O3' ADE  1437     121.721  30.444 -16.228  1.00 78.04      A16S
ATOM  50065  P   GUA  1438     122.969  31.165 -16.919  1.00 70.59      A16S
ATOM  50066  O1P GUA  1438     124.156  30.941 -16.051  1.00 64.05      A16S
ATOM  50067  O2P GUA  1438     122.546  32.551 -17.262  1.00 64.05      A16S
ATOM  50068  O5' GUA  1438     123.164  30.363 -18.282  1.00 70.59      A16S
ATOM  50069  C5' GUA  1438     123.510  28.971 -18.276  1.00 70.59      A16S
ATOM  50070  C4' GUA  1438     123.408  28.399 -19.668  1.00 70.59      A16S
ATOM  50071  O4' GUA  1438     122.026  28.435 -20.115  1.00 70.59      A16S
ATOM  50072  C1' GUA  1438     121.981  28.647 -21.517  1.00 70.59      A16S
ATOM  50073  N9  GUA  1438     121.352  29.937 -21.771  1.00 64.05      A16S
ATOM  50074  C4  GUA  1438     120.929  30.403 -22.993  1.00 64.05      A16S
ATOM  50075  N3  GUA  1438     120.968  29.723 -24.156  1.00 64.05      A16S
ATOM  50076  C2  GUA  1438     120.529  30.450 -25.171  1.00 64.05      A16S
ATOM  50077  N2  GUA  1438     120.487  29.923 -26.405  1.00 64.05      A16S
ATOM  50078  N1  GUA  1438     120.095  31.745 -25.055  1.00 64.05      A16S
ATOM  50079  C6  GUA  1438     120.046  32.470 -23.870  1.00 64.05      A16S
ATOM  50080  O6  GUA  1438     119.643  33.640 -23.882  1.00 64.05      A16S
ATOM  50081  C5  GUA  1438     120.506  31.695 -22.765  1.00 64.05      A16S
ATOM  50082  N7  GUA  1438     120.624  32.022 -21.418  1.00 64.05      A16S
ATOM  50083  C8  GUA  1438     121.119  30.947 -20.867  1.00 64.05      A16S
ATOM  50084  C2' GUA  1438     123.424  28.705 -22.014  1.00 70.59      A16S
ATOM  50085  O2' GUA  1438     123.838  27.437 -22.466  1.00 70.59      A16S
ATOM  50086  C3' GUA  1438     124.160  29.141 -20.759  1.00 70.59      A16S
ATOM  50087  O3' GUA  1438     125.545  28.839 -20.820  1.00 70.59      A16S
ATOM  50088  P   GUA  1439     126.552  29.918 -21.460  1.00 81.85      A16S
ATOM  50089  O1P GUA  1439     127.957  29.453 -21.250  1.00 63.65      A16S
ATOM  50090  O2P GUA  1439     126.146  31.271 -20.977  1.00 63.65      A16S
ATOM  50091  O5' GUA  1439     126.206  29.858 -23.011  1.00 81.85      A16S
ATOM  50092  C5' GUA  1439     126.350  28.641 -23.750  1.00 81.85      A16S
ATOM  50093  C4' GUA  1439     126.084  28.892 -25.211  1.00 81.85      A16S
ATOM  50094  O4' GUA  1439     124.678  29.187 -25.409  1.00 81.85      A16S
ATOM  50095  C1' GUA  1439     124.533  30.177 -26.412  1.00 81.85      A16S
ATOM  50096  N9  GUA  1439     123.949  31.362 -25.796  1.00 63.65      A16S
ATOM  50097  C4  GUA  1439     123.275  32.362 -26.448  1.00 63.65      A16S
ATOM  50098  N3  GUA  1439     123.006  32.402 -27.768  1.00 63.65      A16S
ATOM  50099  C2  GUA  1439     122.350  33.496 -28.106  1.00 63.65      A16S
ATOM  50100  N2  GUA  1439     121.998  33.684 -29.383  1.00 63.65      A16S
ATOM  50101  N1  GUA  1439     121.990  34.480 -27.220  1.00 63.65      A16S
ATOM  50102  C6  GUA  1439     122.255  34.462 -25.859  1.00 63.65      A16S
ATOM  50103  O6  GUA  1439     121.884  35.401 -25.152  1.00 63.65      A16S
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ATOM  50104  C5  GUA  1439     122.958  33.286 -25.478  1.00 63.65      A16S
ATOM  50105  N7  GUA  1439     123.413  32.867 -24.234  1.00 63.65      A16S
ATOM  50106  C8  GUA  1439     123.989  31.721 -24.469  1.00 63.65      A16S
ATOM  50107  C2' GUA  1439     125.926  30.495 -26.957  1.00 81.85      A16S
ATOM  50108  O2' GUA  1439     126.184  29.762 -28.136  1.00 81.85      A16S
ATOM  50109  C3' GUA  1439     126.805  30.097 -25.781  1.00 81.85      A16S
ATOM  50110  O3' GUA  1439     128.136  29.812 -26.149  1.00 81.85      A16S
ATOM  50111  P   CYT  1440     129.211  30.999 -26.166  1.00 63.90      A16S
ATOM  50112  O1P CYT  1440     130.525  30.375 -26.475  1.00 71.28      A16S
ATOM  50113  O2P CYT  1440     129.054  31.812 -24.931  1.00 71.28      A16S
ATOM  50114  O5' CYT  1440     128.774  31.870 -27.425  1.00 63.90      A16S
ATOM  50115  C5' CYT  1440     128.836  31.299 -28.730  1.00 63.90      A16S
ATOM  50116  C4' CYT  1440     128.158  32.183 -29.740  1.00 63.90      A16S
ATOM  50117  O4' CYT  1440     126.754  32.335 -29.408  1.00 63.90      A16S
ATOM  50118  C1' CYT  1440     126.297  33.596 -29.871  1.00 63.90      A16S
ATOM  50119  N1  CYT  1440     125.887  34.405 -28.713  1.00 71.28      A16S
ATOM  50120  C6  CYT  1440     126.309  34.090 -27.452  1.00 71.28      A16S
ATOM  50121  C2  CYT  1440     125.081  35.534 -28.929  1.00 71.28      A16S
ATOM  50122  O2  CYT  1440     124.681  35.785 -30.086  1.00 71.28      A16S
ATOM  50123  N3  CYT  1440     124.763  36.322 -27.876  1.00 71.28      A16S
ATOM  50124  C4  CYT  1440     125.216  36.024 -26.657  1.00 71.28      A16S
ATOM  50125  N4  CYT  1440     124.921  36.854 -25.660  1.00 71.28      A16S
ATOM  50126  C5  CYT  1440     126.004  34.866 -26.409  1.00 71.28      A16S
ATOM  50127  C2' CYT  1440     127.472  34.278 -30.572  1.00 63.90      A16S
ATOM  50128  O2' CYT  1440     127.419  34.015 -31.962  1.00 63.90      A16S
ATOM  50129  C3' CYT  1440     128.658  33.609 -29.892  1.00 63.90      A16S
ATOM  50130  O3' CYT  1440     129.832  33.705 -30.681  1.00 63.90      A16S
ATOM  50131  P   GUA  1441     130.901  34.872 -30.376  1.00 77.89      A16S
ATOM  50132  O1P GUA  1441     132.001  34.689 -31.362  1.00 62.85      A16S
ATOM  50133  O2P GUA  1441     131.220  34.890 -28.920  1.00 62.85      A16S
ATOM  50134  O5' GUA  1441     130.125  36.218 -30.742  1.00 77.89      A16S
ATOM  50135  C5' GUA  1441     129.773  36.499 -32.106  1.00 77.89      A16S
ATOM  50136  C4' GUA  1441     128.998  37.793 -32.217  1.00 77.89      A16S
ATOM  50137  O4' GUA  1441     127.745  37.693 -31.493  1.00 77.89      A16S
ATOM  50138  C1' GUA  1441     127.368  38.973 -31.021  1.00 77.89      A16S
ATOM  50139  N9  GUA  1441     127.304  38.934 -29.564  1.00 62.85      A16S
ATOM  50140  C4  GUA  1441     126.682  39.857 -28.757  1.00 62.85      A16S
ATOM  50141  N3  GUA  1441     125.991  40.932 -29.176  1.00 62.85      A16S
ATOM  50142  C2  GUA  1441     125.533  41.647 -28.170  1.00 62.85      A16S
ATOM  50143  N2  GUA  1441     124.823  42.741 -28.414  1.00 62.85      A16S
ATOM  50144  N1  GUA  1441     125.737  41.339 -26.854  1.00 62.85      A16S
ATOM  50145  C6  GUA  1441     126.444  40.238 -26.393  1.00 62.85      A16S
ATOM  50146  O6  GUA  1441     126.574  40.057 -25.178  1.00 62.85      A16S
ATOM  50147  C5  GUA  1441     126.941  39.451 -27.468  1.00 62.85      A16S
ATOM  50148  N7  GUA  1441     127.690  38.279 -27.461  1.00 62.85      A16S
ATOM  50149  C8  GUA  1441     127.875  38.007 -28.725  1.00 62.85      A16S
ATOM  50150  C2' GUA  1441     128.432  39.967 -31.488  1.00 77.89      A16S
ATOM  50151  O2' GUA  1441     128.009  40.564 -32.696  1.00 77.89      A16S
ATOM  50152  C3' GUA  1441     129.639  39.061 -31.685  1.00 77.89      A16S
ATOM  50153  O3' GUA  1441     130.542  39.620 -32.620  1.00 77.89      A16S
ATOM  50154  P   CYT  1442     131.610  40.720 -32.137  1.00 66.91      A16S
ATOM  50155  O1P CYT  1442     132.481  40.979 -33.309  1.00 71.28      A16S
ATOM  50156  O2P CYT  1442     132.221  40.293 -30.849  1.00 71.28      A16S
ATOM  50157  O5' CYT  1442     130.735  42.032 -31.901  1.00 66.91      A16S
ATOM  50158  C5' CYT  1442     130.174  42.752 -33.021  1.00 66.91      A16S
ATOM  50159  C4' CYT  1442     129.567  44.061 -32.569  1.00 66.91      A16S
ATOM  50160  O4' CYT  1442     128.392  43.800 -31.758  1.00 66.91      A16S
ATOM  50161  C1' CYT  1442     128.282  44.790 -30.743  1.00 66.91      A16S
ATOM  50162  N1  CYT  1442     128.364  44.133 -29.413  1.00 71.28      A16S
ATOM  50163  C6  CYT  1442     129.147  43.025 -29.228  1.00 71.28      A16S
ATOM  50164  C2  CYT  1442     127.636  44.677 -28.321  1.00 71.28      A16S
ATOM  50165  O2  CYT  1442     126.902  45.672 -28.501  1.00 71.28      A16S
ATOM  50166  N3  CYT  1442     127.754  44.099 -27.101  1.00 71.28      A16S
ATOM  50167  C4  CYT  1442     128.539  43.029 -26.938  1.00 71.28      A16S
ATOM  50168  N4  CYT  1442     128.639  42.508 -25.710  1.00 71.28      A16S
ATOM  50169  C5  CYT  1442     129.262  42.449 -28.024  1.00 71.28      A16S
ATOM  50170  C2' CYT  1442     129.419  45.793 -30.961  1.00 66.91      A16S
ATOM  50171  O2' CYT  1442     128.980  46.876 -31.760  1.00 66.91      A16S
ATOM  50172  C3' CYT  1442     130.442  44.941 -31.693  1.00 66.91      A16S
ATOM  50173  O3' CYT  1442     131.360  45.737 -32.419  1.00 66.91      A16S
ATOM  50174  P   CYT  1443     132.787  46.083 -31.762  1.00 66.93      A16S
ATOM  50175  O1P CYT  1443     133.572  46.846 -32.766  1.00 72.50      A16S
ATOM  50176  O2P CYT  1443     133.350  44.834 -31.180  1.00 72.50      A16S
ATOM  50177  O5' CYT  1443     132.436  47.080 -30.571  1.00 66.93      A16S
ATOM  50178  C5' CYT  1443     131.810  48.346 -30.839  1.00 66.93      A16S
ATOM  50179  C4' CYT  1443     131.228  48.932 -29.573  1.00 66.93      A16S
ATOM  50180  O4' CYT  1443     130.253  48.016 -29.010  1.00 66.93      A16S
ATOM  50181  C1' CYT  1443     130.255  48.123 -27.597  1.00 66.93      A16S
ATOM  50182  N1  CYT  1443     130.580  46.808 -27.011  1.00 72.50      A16S
ATOM  50183  C6  CYT  1443     131.371  45.913 -27.681  1.00 72.50      A16S
ATOM  50184  C2  CYT  1443     130.079  46.492 -25.735  1.00 72.50      A16S
ATOM  50185  O2  CYT  1443     129.321  47.295 -25.160  1.00 72.50      A16S
ATOM  50186  N3  CYT  1443     130.428  45.314 -25.165  1.00 72.50      A16S
ATOM  50187  C4  CYT  1443     131.218  44.461 -25.819  1.00 72.50      A16S
ATOM  50188  N4  CYT  1443     131.543  43.321 -25.208  1.00 72.50      A16S
ATOM  50189  C5  CYT  1443     131.712  44.740 -27.128  1.00 72.50      A16S
ATOM  50190  C2' CYT  1443     131.284  49.185 -27.214  1.00 66.93      A16S
ATOM  50191  O2' CYT  1443     130.626  50.422 -27.022  1.00 66.93      A16S
ATOM  50192  C3' CYT  1443     132.197  49.188 -28.433  1.00 66.93      A16S
ATOM  50193  O3' CYT  1443     132.870  50.429 -28.575  1.00 66.93      A16S
ATOM  50194  P   GUA  1444     134.425  50.532 -28.185  1.00 75.35      A16S
ATOM  50195  O1P GUA  1444     134.780  51.974 -28.243  1.00 92.44      A16S
ATOM  50196  O2P GUA  1444     135.173  49.548 -29.017  1.00 92.44      A16S
ATOM  50197  O5' GUA  1444     134.499  50.036 -26.671  1.00 75.35      A16S
ATOM  50198  C5' GUA  1444     133.867  50.780 -25.611  1.00 75.35      A16S
ATOM  50199  C4' GUA  1444     133.925  50.005 -24.315  1.00 75.35      A16S
ATOM  50200  O4' GUA  1444     133.231  48.743 -24.487  1.00 75.35      A16S
ATOM  50201  C1' GUA  1444     133.874  47.735 -23.726  1.00 75.35      A16S
ATOM  50202  N9  GUA  1444     134.343  46.693 -24.637  1.00 92.44      A16S
ATOM  50203  C4  GUA  1444     134.535  45.364 -24.335  1.00 92.44      A16S
ATOM  50204  N3  GUA  1444     134.289  44.778 -23.147  1.00 92.44      A16S
ATOM  50205  C2  GUA  1444     134.581  43.490 -23.162  1.00 92.44      A16S
ATOM  50206  N2  GUA  1444     134.369  42.750 -22.071  1.00 92.44      A16S
ATOM  50207  N1  GUA  1444     135.093  42.829 -24.251  1.00 92.44      A16S
ATOM  50208  C6  GUA  1444     135.353  43.408 -25.486  1.00 92.44      A16S
ATOM  50209  O6  GUA  1444     135.810  42.716 -26.406  1.00 92.44      A16S
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ATOM	50210	C5	GUA	1444	135.029	44.792	-25.489	1.00	92.44	A16S
ATOM	50211	N7	GUA	1444	135.127	45.735	-26.502	1.00	92.44	A16S
ATOM	50212	C8	GUA	1444	134.707	46.844	-25.954	1.00	92.44	A16S
ATOM	50213	C2'	GUA	1444	135.025	48.393	-22.963	1.00	75.35	A16S
ATOM	50214	O2'	GUA	1444	134.592	48.747	-21.667	1.00	75.35	A16S
ATOM	50215	C3'	GUA	1444	135.312	49.614	-23.826	1.00	75.35	A16S
ATOM	50216	O3'	GUA	1444	135.936	50.651	-23.075	1.00	75.35	A16S
ATOM	50217	P	ADE	1445	137.518	50.908	-23.230	1.00	68.53	A16S
ATOM	50218	O1P	ADE	1445	137.683	52.335	-23.613	1.00	54.67	A16S
ATOM	50219	O2P	ADE	1445	138.114	49.843	-24.085	1.00	54.67	A16S
ATOM	50220	O5'	ADE	1445	138.101	50.704	-21.759	1.00	68.53	A16S
ATOM	50221	C5'	ADE	1445	137.698	51.559	-20.674	1.00	68.53	A16S
ATOM	50222	C4'	ADE	1445	138.080	50.944	-19.349	1.00	68.53	A16S
ATOM	50223	O4'	ADE	1445	137.376	49.690	-19.179	1.00	68.53	A16S
ATOM	50224	C1'	ADE	1445	138.212	48.756	-18.518	1.00	68.53	A16S
ATOM	50225	N9	ADE	1445	138.478	47.654	-19.433	1.00	54.67	A16S
ATOM	50226	C4	ADE	1445	138.878	46.385	-19.088	1.00	54.67	A16S
ATOM	50227	N3	ADE	1445	139.116	45.909	-17.851	1.00	54.67	A16S
ATOM	50228	C2	ADE	1445	139.455	44.622	-17.905	1.00	54.67	A16S
ATOM	50229	N1	ADE	1445	139.570	43.816	-18.977	1.00	54.67	A16S
ATOM	50230	C6	ADE	1445	139.321	44.332	-20.203	1.00	54.67	A16S
ATOM	50231	N6	ADE	1445	139.416	43.541	-21.271	1.00	54.67	A16S
ATOM	50232	C5	ADE	1445	138.963	45.683	-20.280	1.00	54.67	A16S
ATOM	50233	N7	ADE	1445	138.650	46.500	-21.356	1.00	54.67	A16S
ATOM	50234	C8	ADE	1445	138.375	47.656	-20.803	1.00	54.67	A16S
ATOM	50235	C2'	ADE	1445	139.506	49.466	-18.157	1.00	68.53	A16S
ATOM	50236	O2'	ADE	1445	139.401	49.912	-16.824	1.00	68.53	A16S
ATOM	50237	C3'	ADE	1445	139.543	50.572	-19.204	1.00	68.53	A16S
ATOM	50238	O3'	ADE	1445	140.350	51.672	-18.824	1.00	68.53	A16S
ATOM	50239	P	GUA	1446	141.735	51.930	-19.594	1.00	67.26	A16S
ATOM	50240	O1P	GUA	1446	142.459	52.998	-18.854	1.00	64.17	A16S
ATOM	50241	O2P	GUA	1446	141.393	52.119	-21.029	1.00	64.17	A16S
ATOM	50242	O5'	GUA	1446	142.547	50.567	-19.432	1.00	67.26	A16S
ATOM	50243	C5'	GUA	1446	142.860	50.058	-18.130	1.00	67.26	A16S
ATOM	50244	C4'	GUA	1446	143.144	48.578	-18.192	1.00	67.26	A16S
ATOM	50245	O4'	GUA	1446	142.029	47.905	-18.829	1.00	67.26	A16S
ATOM	50246	C1'	GUA	1446	142.497	46.765	-19.534	1.00	67.26	A16S
ATOM	50247	N9	GUA	1446	142.230	46.935	-20.958	1.00	64.17	A16S
ATOM	50248	C4	GUA	1446	142.396	45.963	-21.913	1.00	64.17	A16S
ATOM	50249	N3	GUA	1446	142.807	44.697	-21.683	1.00	64.17	A16S
ATOM	50250	C2	GUA	1446	142.885	43.994	-22.793	1.00	64.17	A16S
ATOM	50251	N2	GUA	1446	143.283	42.710	-22.729	1.00	64.17	A16S
ATOM	50252	N1	GUA	1446	142.581	44.498	-24.039	1.00	64.17	A16S
ATOM	50253	C6	GUA	1446	142.163	45.803	-24.296	1.00	64.17	A16S
ATOM	50254	O6	GUA	1446	141.929	46.161	-25.454	1.00	64.17	A16S
ATOM	50255	C5	GUA	1446	142.074	46.563	-23.109	1.00	64.17	A16S
ATOM	50256	N7	GUA	1446	141.704	47.887	-22.911	1.00	64.17	A16S
ATOM	50257	C8	GUA	1446	141.806	48.063	-21.621	1.00	64.17	A16S
ATOM	50258	C2'	GUA	1446	144.004	46.686	-19.334	1.00	67.26	A16S
ATOM	50259	O2'	GUA	1446	144.319	45.803	-18.277	1.00	67.26	A16S
ATOM	50260	C3'	GUA	1446	144.333	48.137	-19.029	1.00	67.26	A16S
ATOM	50261	O3'	GUA	1446	145.586	48.252	-18.386	1.00	67.26	A16S
ATOM	50262	P	GUA	1447	146.886	48.520	-19.278	1.00	81.05	A16S
ATOM	50263	O1P	GUA	1447	147.952	48.945	-18.346	1.00	61.34	A16S
ATOM	50264	O2P	GUA	1447	146.490	49.404	-20.398	1.00	61.34	A16S
ATOM	50265	O5'	GUA	1447	147.221	47.095	-19.906	1.00	81.05	A16S
ATOM	50266	C5'	GUA	1447	147.629	45.990	-19.074	1.00	81.05	A16S
ATOM	50267	C4'	GUA	1447	147.822	44.739	-19.909	1.00	81.05	A16S
ATOM	50268	O4'	GUA	1447	146.544	44.336	-20.487	1.00	81.05	A16S
ATOM	50269	C1'	GUA	1447	146.739	43.844	-21.806	1.00	81.05	A16S
ATOM	50270	N9	GUA	1447	146.227	44.845	-22.733	1.00	61.34	A16S
ATOM	50271	C4	GUA	1447	145.968	44.669	-24.067	1.00	61.34	A16S
ATOM	50272	N3	GUA	1447	146.113	43.518	-24.758	1.00	61.34	A16S
ATOM	50273	C2	GUA	1447	145.799	43.666	-26.038	1.00	61.34	A16S
ATOM	50274	N2	GUA	1447	145.888	42.616	-26.868	1.00	61.34	A16S
ATOM	50275	N1	GUA	1447	145.375	44.851	-26.595	1.00	61.34	A16S
ATOM	50276	C6	GUA	1447	145.218	46.049	-25.898	1.00	61.34	A16S
ATOM	50277	O6	GUA	1447	144.824	47.068	-26.491	1.00	61.34	A16S
ATOM	50278	C5	GUA	1447	145.554	45.903	-24.526	1.00	61.34	A16S
ATOM	50279	N7	GUA	1447	145.546	46.834	-23.497	1.00	61.34	A16S
ATOM	50280	C8	GUA	1447	145.945	46.163	-22.453	1.00	61.34	A16S
ATOM	50281	C2'	GUA	1447	148.245	43.746	-22.020	1.00	81.05	A16S
ATOM	50282	O2'	GUA	1447	148.720	42.469	-21.637	1.00	81.05	A16S
ATOM	50283	C3'	GUA	1447	148.740	44.864	-21.114	1.00	81.05	A16S
ATOM	50284	O3'	GUA	1447	150.124	44.772	-20.834	1.00	81.05	A16S
ATOM	50285	P	GUA	1448	151.171	45.398	-21.884	1.00	89.81	A16S
ATOM	50286	O1P	GUA	1448	152.518	45.284	-21.275	1.00	83.09	A16S
ATOM	50287	O2P	GUA	1448	150.679	46.727	-22.334	1.00	83.09	A16S
ATOM	50288	O5'	GUA	1448	151.088	44.417	-23.138	1.00	89.81	A16S
ATOM	50289	C5'	GUA	1448	151.294	42.997	-22.980	1.00	89.81	A16S
ATOM	50290	C4'	GUA	1448	151.222	42.295	-24.317	1.00	89.81	A16S
ATOM	50291	O4'	GUA	1448	149.884	42.414	-24.865	1.00	89.81	A16S
ATOM	50292	C1'	GUA	1448	149.956	42.516	-26.277	1.00	89.81	A16S
ATOM	50293	N9	GUA	1448	149.360	43.787	-26.684	1.00	83.09	A16S
ATOM	50294	C4	GUA	1448	148.984	44.135	-27.962	1.00	83.09	A16S
ATOM	50295	N3	GUA	1448	149.130	43.370	-29.066	1.00	83.09	A16S
ATOM	50296	C2	GUA	1448	148.664	43.970	-30.148	1.00	83.09	A16S
ATOM	50297	N2	GUA	1448	148.750	43.356	-31.344	1.00	83.09	A16S
ATOM	50298	N1	GUA	1448	148.083	45.217	-30.142	1.00	83.09	A16S
ATOM	50299	C6	GUA	1448	147.919	46.021	-29.016	1.00	83.09	A16S
ATOM	50300	O6	GUA	1448	147.375	47.126	-29.122	1.00	83.09	A16S
ATOM	50301	C5	GUA	1448	148.434	45.397	-27.853	1.00	83.09	A16S
ATOM	50302	N7	GUA	1448	148.486	45.846	-26.540	1.00	83.09	A16S
ATOM	50303	C8	GUA	1448	149.045	44.863	-25.884	1.00	83.09	A16S
ATOM	50304	C2'	GUA	1448	151.425	42.397	-26.678	1.00	89.81	A16S
ATOM	50305	O2'	GUA	1448	151.730	41.054	-26.998	1.00	89.81	A16S
ATOM	50306	C3'	GUA	1448	152.120	42.851	-25.406	1.00	89.81	A16S
ATOM	50307	O3'	GUA	1448	153.447	42.370	-25.326	1.00	89.81	A16S
ATOM	50308	P	URI	1449	154.645	43.297	-25.858	1.00	115.80	A16S
ATOM	50309	O1P	URI	1449	155.912	42.623	-25.475	1.00	85.93	A16S
ATOM	50310	O2P	URI	1449	154.399	44.700	-25.427	1.00	85.93	A16S
ATOM	50311	O5'	URI	1449	154.477	43.262	-27.441	1.00	115.80	A16S
ATOM	50312	C5'	URI	1449	154.732	42.061	-28.192	1.00	115.80	A16S
ATOM	50313	C4'	URI	1449	154.593	42.333	-29.671	1.00	115.80	A16S
ATOM	50314	O4'	URI	1449	153.198	42.593	-29.985	1.00	115.80	A16S
ATOM	50315	C1'	URI	1449	153.109	43.590	-30.996	1.00	115.80	A16S

ATOM	50316	N1	URI	1449	152.422	44.765	-30.434	1.00	85.93	A16S	ATOM	50369	C2'	GUA	1451	157.151	53.470	-35.920	1.00	148.75	A16S
ATOM	50317	C6	URI	1449	152.634	45.153	-29.123	1.00	85.93	A16S	ATOM	50370	O2'	GUA	1451	157.027	54.078	-37.193	1.00	148.75	A16S
ATOM	50318	C2	URI	1449	151.573	45.485	-31.260	1.00	85.93	A16S	ATOM	50371	C3'	GUA	1451	158.459	52.708	-35.739	1.00	148.75	A16S
ATOM	50319	O2	URI	1449	151.335	45.167	-32.413	1.00	85.93	A16S	ATOM	50372	O3'	GUA	1451	159.568	53.416	-36.279	1.00	148.75	A16S
ATOM	50320	N3	URI	1449	151.009	46.595	-30.676	1.00	85.93	A16S	ATOM	50373	P	GUA	1452	160.331	54.503	-35.366	1.00	152.94	A16S
ATOM	50321	C4	URI	1449	151.192	47.041	-29.374	1.00	85.93	A16S	ATOM	50374	O1P	GUA	1452	161.450	55.041	-36.177	1.00	140.14	A16S
ATOM	50322	O4	URI	1449	150.603	48.053	-28.986	1.00	85.93	A16S	ATOM	50375	O2P	GUA	1452	160.613	53.903	-34.033	1.00	140.14	A16S
ATOM	50323	C5	URI	1449	152.066	46.234	-28.585	1.00	85.93	A16S	ATOM	50376	O5'	GUA	1452	159.254	55.663	-35.173	1.00	152.94	A16S
ATOM	50324	C2'	URI	1449	154.535	43.946	-31.423	1.00	115.80	A16S	ATOM	50377	C5'	GUA	1452	158.794	56.436	-36.301	1.00	152.94	A16S
ATOM	50325	O2'	URI	1449	154.898	43.212	-32.575	1.00	115.80	A16S	ATOM	50378	C4'	GUA	1452	157.793	57.481	-35.862	1.00	152.94	A16S
ATOM	50326	C3'	URI	1449	155.331	43.564	-30.179	1.00	115.80	A16S	ATOM	50379	O4'	GUA	1452	156.577	56.838	-35.395	1.00	152.94	A16S
ATOM	50327	O3'	URI	1449	156.710	43.334	-30.445	1.00	115.80	A16S	ATOM	50380	C1'	GUA	1452	156.004	57.603	-34.345	1.00	152.94	A16S
ATOM	50328	P	ADE	1450	157.721	44.587	-30.527	1.00	129.48	A16S	ATOM	50381	N9	GUA	1452	155.932	56.773	-33.142	1.00	140.14	A16S
ATOM	50329	O1P	ADE	1450	159.065	44.025	-30.824	1.00	111.24	A16S	ATOM	50382	C4	GUA	1452	155.181	57.032	-32.017	1.00	140.14	A16S
ATOM	50330	O2P	ADE	1450	157.542	45.457	-29.330	1.00	111.24	A16S	ATOM	50383	N3	GUA	1452	154.356	58.086	-31.841	1.00	140.14	A16S
ATOM	50331	O5'	ADE	1450	157.209	45.399	-31.802	1.00	129.48	A16S	ATOM	50384	C2	GUA	1452	153.787	58.074	-30.650	1.00	140.14	A16S
ATOM	50332	C5'	ADE	1450	157.333	44.841	-33.124	1.00	129.48	A16S	ATOM	50385	N2	GUA	1452	152.932	59.051	-30.316	1.00	140.14	A16S
ATOM	50333	C4'	ADE	1450	156.781	45.791	-34.164	1.00	129.48	A16S	ATOM	50386	N1	GUA	1452	154.013	57.104	-29.700	1.00	140.14	A16S
ATOM	50334	O4'	ADE	1450	155.337	45.880	-34.043	1.00	129.48	A16S	ATOM	50387	C6	GUA	1452	154.861	56.010	-29.856	1.00	140.14	A16S
ATOM	50335	C1'	ADE	1450	154.910	47.188	-34.395	1.00	129.48	A16S	ATOM	50388	O6	GUA	1452	155.002	55.197	-28.930	1.00	140.14	A16S
ATOM	50336	N9	ADE	1450	154.322	47.818	-33.213	1.00	111.24	A16S	ATOM	50389	C5	GUA	1452	155.472	56.008	-31.137	1.00	140.14	A16S
ATOM	50337	C4	ADE	1450	153.490	48.910	-33.220	1.00	111.24	A16S	ATOM	50390	N7	GUA	1452	156.369	55.113	-31.703	1.00	140.14	A16S
ATOM	50338	N3	ADE	1450	153.041	49.583	-34.292	1.00	111.24	A16S	ATOM	50391	C8	GUA	1452	156.610	55.602	-32.890	1.00	140.14	A16S
ATOM	50339	C2	ADE	1450	152.267	50.596	-33.918	1.00	111.24	A16S	ATOM	50392	C2'	GUA	1452	156.878	58.845	-34.141	1.00	152.94	A16S
ATOM	50340	N1	ADE	1450	151.918	50.985	-32.687	1.00	111.24	A16S	ATOM	50393	O2'	GUA	1452	156.330	59.948	-34.838	1.00	152.94	A16S
ATOM	50341	C6	ADE	1450	152.389	50.288	-31.630	1.00	111.24	A16S	ATOM	50394	C3'	GUA	1452	158.215	58.382	-34.711	1.00	152.94	A16S
ATOM	50342	N6	ADE	1450	152.044	50.682	-30.403	1.00	111.24	A16S	ATOM	50395	O3'	GUA	1452	159.031	59.466	-35.140	1.00	152.94	A16S
ATOM	50343	C5	ADE	1450	153.220	49.187	-31.893	1.00	111.24	A16S	ATOM	50396	P	GUA	1453	160.051	60.153	-34.101	1.00	148.76	A16S
ATOM	50344	N7	ADE	1450	153.861	48.278	-31.061	1.00	111.24	A16S	ATOM	50397	O1P	GUA	1453	160.917	61.074	-34.880	1.00	147.66	A16S
ATOM	50345	C8	ADE	1450	154.495	47.486	-31.889	1.00	111.24	A16S	ATOM	50398	O2P	GUA	1453	160.676	59.094	-33.259	1.00	147.66	A16S
ATOM	50346	C2'	ADE	1450	156.145	47.972	-34.835	1.00	129.48	A16S	ATOM	50399	O5'	GUA	1453	159.106	61.033	-33.169	1.00	148.76	A16S
ATOM	50347	O2'	ADE	1450	156.281	47.917	-36.241	1.00	129.48	A16S	ATOM	50400	C5'	GUA	1453	158.329	62.116	-33.719	1.00	148.76	A16S
ATOM	50348	C3'	ADE	1450	157.249	47.235	-34.091	1.00	129.48	A16S	ATOM	50401	C4'	GUA	1453	157.375	62.654	-32.682	1.00	148.76	A16S
ATOM	50349	O3'	ADE	1450	158.531	47.455	-34.656	1.00	129.48	A16S	ATOM	50402	O4'	GUA	1453	156.417	61.622	-32.335	1.00	148.76	A16S
ATOM	50350	P	GUA	1451	159.483	48.588	-34.026	1.00	148.75	A16S	ATOM	50403	C1'	GUA	1453	156.100	61.709	-30.956	1.00	148.76	A16S
ATOM	50351	O1P	GUA	1451	160.841	48.342	-34.567	1.00	128.58	A16S	ATOM	50404	N9	GUA	1453	156.466	60.449	-30.314	1.00	147.66	A16S
ATOM	50352	O2P	GUA	1451	159.277	48.633	-32.555	1.00	128.58	A16S	ATOM	50405	C4	GUA	1453	156.153	60.069	-29.029	1.00	147.66	A16S
ATOM	50353	O5'	GUA	1451	158.923	49.947	-34.642	1.00	148.75	A16S	ATOM	50406	N3	GUA	1453	155.459	60.804	-28.132	1.00	147.66	A16S
ATOM	50354	C5'	GUA	1451	159.001	50.193	-36.056	1.00	148.75	A16S	ATOM	50407	C2	GUA	1453	155.317	60.172	-26.981	1.00	147.66	A16S
ATOM	50355	C4'	GUA	1451	158.162	51.391	-36.440	1.00	148.75	A16S	ATOM	50408	N2	GUA	1453	154.657	60.766	-25.977	1.00	147.66	A16S
ATOM	50356	O4'	GUA	1451	156.767	51.132	-36.121	1.00	148.75	A16S	ATOM	50409	N1	GUA	1453	155.811	58.914	-26.729	1.00	147.66	A16S
ATOM	50357	C1'	GUA	1451	156.123	52.349	-35.772	1.00	148.75	A16S	ATOM	50410	C6	GUA	1453	156.525	58.136	-27.637	1.00	147.66	A16S
ATOM	50358	N9	GUA	1451	155.686	52.271	-34.380	1.00	128.58	A16S	ATOM	50411	O6	GUA	1453	156.919	57.005	-27.311	1.00	147.66	A16S
ATOM	50359	C4	GUA	1451	154.659	52.987	-33.812	1.00	128.58	A16S	ATOM	50412	C5	GUA	1453	156.693	58.809	-28.877	1.00	147.66	A16S
ATOM	50360	N3	GUA	1451	153.846	53.851	-34.454	1.00	128.58	A16S	ATOM	50413	N7	GUA	1453	157.339	58.406	-30.039	1.00	147.66	A16S
ATOM	50361	C2	GUA	1451	152.977	54.411	-33.633	1.00	128.58	A16S	ATOM	50414	C8	GUA	1453	157.180	59.408	-30.861	1.00	147.66	A16S
ATOM	50362	N2	GUA	1451	152.099	55.307	-34.103	1.00	128.58	A16S	ATOM	50415	C2'	GUA	1453	156.854	62.906	-30.373	1.00	148.76	A16S
ATOM	50363	N1	GUA	1451	152.905	54.138	-32.291	1.00	128.58	A16S	ATOM	50416	O2'	GUA	1453	156.007	64.038	-30.344	1.00	148.76	A16S
ATOM	50364	C6	GUA	1451	153.730	53.251	-31.609	1.00	128.58	A16S	ATOM	50417	C3'	GUA	1453	158.007	63.054	-31.357	1.00	148.76	A16S
ATOM	50365	O6	GUA	1451	153.584	53.084	-30.395	1.00	128.58	A16S	ATOM	50418	O3'	GUA	1453	158.519	64.380	-31.386	1.00	148.76	A16S
ATOM	50366	C5	GUA	1451	154.671	52.646	-32.476	1.00	128.58	A16S	ATOM	50419	P	CYT	1454	159.775	64.767	-30.458	1.00	140.60	A16S
ATOM	50367	N7	GUA	1451	155.667	51.717	-32.212	1.00	128.58	A16S	ATOM	50420	O1P	CYT	1454	160.192	66.142	-30.838	1.00	148.79	A16S
ATOM	50368	C8	GUA	1451	156.237	51.516	-33.370	1.00	128.58	A16S	ATOM	50421	O2P	CYT	1454	160.764	63.656	-30.517	1.00	148.79	A16S

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ATOM  50422  O5' CYT  1454     159.172  64.811 -28.982  1.00140.60      A16S
ATOM  50423  C5' CYT  1454     158.214  65.817 -28.602  1.00140.60      A16S
ATOM  50424  C4' CYT  1454     157.718  65.569 -27.197  1.00140.60      A16S
ATOM  50425  O4' CYT  1454     157.039  64.288 -27.151  1.00140.60      A16S
ATOM  50426  C1' CYT  1454     157.280  63.664 -25.901  1.00140.60      A16S
ATOM  50427  N1  CYT  1454     157.999  62.395 -26.136  1.00148.79      A16S
ATOM  50428  C6  CYT  1454     158.754  62.211 -27.264  1.00148.79      A16S
ATOM  50429  C2  CYT  1454     157.911  61.375 -25.171  1.00148.79      A16S
ATOM  50430  O2  CYT  1454     157.210  61.557 -24.160  1.00148.79      A16S
ATOM  50431  N3  CYT  1454     158.591  60.221 -25.368  1.00148.79      A16S
ATOM  50432  C4  CYT  1454     159.331  60.060 -26.469  1.00148.79      A16S
ATOM  50433  N4  CYT  1454     159.990  58.908 -26.617  1.00148.79      A16S
ATOM  50434  C5  CYT  1454     159.429  61.073 -27.468  1.00148.79      A16S
ATOM  50435  C2' CYT  1454     158.103  64.630 -25.049  1.00140.60      A16S
ATOM  50436  O2' CYT  1454     157.245  65.379 -24.210  1.00140.60      A16S
ATOM  50437  C3' CYT  1454     158.785  65.475 -26.117  1.00140.60      A16S
ATOM  50438  O3' CYT  1454     159.177  66.749 -25.624  1.00140.60      A16S
ATOM  50439  P   CYT  1455     160.570  66.904 -24.833  1.00143.76      A16S
ATOM  50440  O1P CYT  1455     160.950  68.339 -24.898  1.00129.71      A16S
ATOM  50441  O2P CYT  1455     161.520  65.872 -25.328  1.00129.71      A16S
ATOM  50442  O5' CYT  1455     160.200  66.559 -23.320  1.00143.76      A16S
ATOM  50443  C5' CYT  1455     159.282  67.387 -22.579  1.00143.76      A16S
ATOM  50444  C4' CYT  1455     158.934  66.740 -21.260  1.00143.76      A16S
ATOM  50445  O4' CYT  1455     158.321  65.451 -21.512  1.00143.76      A16S
ATOM  50446  C1' CYT  1455     158.683  64.540 -20.486  1.00143.76      A16S
ATOM  50447  N1  CYT  1455     159.399  63.398 -21.085  1.00129.71      A16S
ATOM  50448  C6  CYT  1455     159.887  63.454 -22.362  1.00129.71      A16S
ATOM  50449  C2  CYT  1455     159.584  62.247 -20.309  1.00129.71      A16S
ATOM  50450  O2  CYT  1455     159.123  62.219 -19.156  1.00129.71      A16S
ATOM  50451  N3  CYT  1455     160.258  61.198 -20.833  1.00129.71      A16S
ATOM  50452  C4  CYT  1455     160.735  61.266 -22.078  1.00129.71      A16S
ATOM  50453  N4  CYT  1455     161.398  60.208 -22.550  1.00129.71      A16S
ATOM  50454  C5  CYT  1455     160.555  62.421 -22.892  1.00129.71      A16S
ATOM  50455  C2' CYT  1455     159.560  65.286 -19.483  1.00143.76      A16S
ATOM  50456  O2' CYT  1455     158.772  65.722 -18.393  1.00143.76      A16S
ATOM  50457  C3' CYT  1455     160.100  66.425 -20.335  1.00143.76      A16S
ATOM  50458  O3' CYT  1455     160.474  67.533 -19.535  1.00143.76      A16S
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ATOM  50460  O1P CYT  1456     162.132  68.942 -18.328  1.00111.96      A16S
ATOM  50461  O2P CYT  1456     162.899  67.151 -19.995  1.00111.96      A16S
ATOM  50462  O5' CYT  1456     161.970  66.527 -17.765  1.00177.63      A16S
ATOM  50463  C5' CYT  1456     161.304  66.792 -16.517  1.00177.63      A16S
ATOM  50464  C4' CYT  1456     161.478  65.627 -15.572  1.00177.63      A16S
ATOM  50465  O4' CYT  1456     160.944  64.434 -16.203  1.00177.63      A16S
ATOM  50466  C1' CYT  1456     161.729  63.309 -15.846  1.00177.63      A16S
ATOM  50467  N1  CYT  1456     162.347  62.762 -17.068  1.00111.96      A16S
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ATOM  50469  C2  CYT  1456     162.550  61.379 -17.163  1.00111.96      A16S
ATOM  50470  O2  CYT  1456     162.173  60.648 -16.234  1.00111.96      A16S
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ATOM  50472  C4  CYT  1456     163.537  61.690 -19.250  1.00111.96      A16S
ATOM  50473  N4  CYT  1456     164.137  61.149 -20.314  1.00111.96      A16S
ATOM  50474  C5  CYT  1456     163.329  63.099 -19.185  1.00111.96      A16S
ATOM  50475  C2' CYT  1456     162.789  63.781 -14.851  1.00177.63      A16S
ATOM  50476  O2' CYT  1456     162.334  63.581 -13.527  1.00177.63      A16S
ATOM  50477  C3' CYT  1456     162.911  65.254 -15.217  1.00177.63      A16S
ATOM  50478  O3' CYT  1456     163.438  66.020 -14.144  1.00177.63      A16S
ATOM  50479  P   GUA  1457     165.032  66.169 -13.989  1.00136.58      A16S
ATOM  50480  O1P GUA  1457     165.272  67.056 -12.822  1.00125.65      A16S
ATOM  50481  O2P GUA  1457     165.596  66.532 -15.318  1.00125.65      A16S
ATOM  50482  O5' GUA  1457     165.530  64.697 -13.616  1.00136.58      A16S
ATOM  50483  C5' GUA  1457     165.277  64.130 -12.307  1.00136.58      A16S
ATOM  50484  C4' GUA  1457     166.019  62.817 -12.136  1.00136.58      A16S
ATOM  50485  O4' GUA  1457     165.491  61.831 -13.063  1.00136.58      A16S
ATOM  50486  C1' GUA  1457     166.534  60.972 -13.499  1.00136.58      A16S
ATOM  50487  N9  GUA  1457     166.657  61.084 -14.951  1.00125.65      A16S
ATOM  50488  C4  GUA  1457     167.301  60.201 -15.785  1.00125.65      A16S
ATOM  50489  N3  GUA  1457     167.916  59.058 -15.411  1.00125.65      A16S
ATOM  50490  C2  GUA  1457     168.456  58.426 -16.442  1.00125.65      A16S
ATOM  50491  N2  GUA  1457     169.106  57.269 -16.253  1.00125.65      A16S
ATOM  50492  N1  GUA  1457     168.398  58.883 -17.737  1.00125.65      A16S
ATOM  50493  C6  GUA  1457     167.775  60.059 -18.145  1.00125.65      A16S
ATOM  50494  O6  GUA  1457     167.793  60.386 -19.339  1.00125.65      A16S
ATOM  50495  C5  GUA  1457     167.185  60.743 -17.050  1.00125.65      A16S
ATOM  50496  N7  GUA  1457     166.474  61.934 -17.013  1.00125.65      A16S
ATOM  50497  C8  GUA  1457     166.179  62.094 -15.752  1.00125.65      A16S
ATOM  50498  C2' GUA  1457     167.818  61.390 -12.779  1.00136.58      A16S
ATOM  50499  O2' GUA  1457     168.030  60.554 -11.659  1.00136.58      A16S
ATOM  50500  C3' GUA  1457     167.517  62.841 -12.412  1.00136.58      A16S
ATOM  50501  O3' GUA  1457     168.272  63.283 -11.283  1.00136.58      A16S
ATOM  50502  P   URI  1458     169.738  63.923 -11.501  1.00133.24      A16S
ATOM  50503  O1P URI  1458     170.226  64.367 -10.169  1.00136.28      A16S
ATOM  50504  O2P URI  1458     169.688  64.897 -12.626  1.00136.28      A16S
ATOM  50505  O5' URI  1458     170.634  62.691 -11.970  1.00133.24      A16S
ATOM  50506  C5' URI  1458     170.831  61.548 -11.114  1.00133.24      A16S
ATOM  50507  C4' URI  1458     171.622  60.489 -11.838  1.00133.24      A16S
ATOM  50508  O4' URI  1458     170.832  59.936 -12.922  1.00133.24      A16S
ATOM  50509  C1' URI  1458     171.682  59.608 -14.011  1.00133.24      A16S
ATOM  50510  N1  URI  1458     171.239  60.332 -15.214  1.00136.28      A16S
ATOM  50511  C6  URI  1458     170.500  61.495 -15.130  1.00136.28      A16S
ATOM  50512  C2  URI  1458     171.599  59.807 -16.451  1.00136.28      A16S
ATOM  50513  O2  URI  1458     172.253  58.780 -16.577  1.00136.28      A16S
ATOM  50514  N3  URI  1458     171.168  60.530 -17.535  1.00136.28      A16S
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ATOM  50516  O4  URI  1458     170.103  62.218 -18.587  1.00136.28      A16S
ATOM  50517  C5  URI  1458     170.097  62.176 -16.209  1.00136.28      A16S
ATOM  50518  C2' URI  1458     173.115  59.966 -13.616  1.00133.24      A16S
ATOM  50519  O2' URI  1458     173.800  58.812 -13.175  1.00133.24      A16S
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ATOM  50521  O3' URI  1458     173.981  61.054 -11.616  1.00133.24      A16S
ATOM  50522  P   GUA  1459     175.173  62.089 -11.906  1.00127.14      A16S
ATOM  50523  O1P GUA  1459     176.237  61.818 -10.902  1.00148.53      A16S
ATOM  50524  O2P GUA  1459     174.591  63.455 -12.012  1.00148.53      A16S
ATOM  50525  O5' GUA  1459     175.707  61.660 -13.346  1.00127.14      A16S
ATOM  50526  C5' GUA  1459     176.275  60.356 -13.563  1.00127.14      A16S
ATOM  50527  C4' GUA  1459     176.498  60.113 -15.037  1.00127.14      A16S
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ATOM  50528  O4' GUA  1459     175.228  60.079 -15.736  1.00127.14      A16S
ATOM  50529  C1' GUA  1459     175.389  60.610 -17.045  1.00127.14      A16S
ATOM  50530  N9  GUA  1459     174.491  61.752 -17.199  1.00148.53      A16S
ATOM  50531  C4  GUA  1459     174.063  62.312 -18.386  1.00148.53      A16S
ATOM  50532  N3  GUA  1459     174.395  61.896 -19.631  1.00148.53      A16S
ATOM  50533  C2  GUA  1459     173.822  62.638 -20.570  1.00148.53      A16S
ATOM  50534  N2  GUA  1459     174.038  62.366 -21.867  1.00148.53      A16S
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ATOM  50537  O6  GUA  1459     171.890  65.125 -18.910  1.00148.53      A16S
ATOM  50538  C5  GUA  1459     173.247  63.362 -18.020  1.00148.53      A16S
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ATOM  50540  C8  GUA  1459     173.910  62.490 -16.194  1.00148.53      A16S
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ATOM  50542  O2' GUA  1459     177.562  59.980 -17.911  1.00127.14      A16S
ATOM  50543  C3' GUA  1459     177.312  61.166 -15.772  1.00127.14      A16S
ATOM  50544  O3' GUA  1459     178.708  60.947 -15.625  1.00127.14      A16S
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ATOM  50546  O1P ADE  1460     180.466  62.409 -14.634  1.00161.96      A16S
ATOM  50547  O2P ADE  1460     179.023  63.263 -16.582  1.00161.96      A16S
ATOM  50548  O5' ADE  1460     180.761  61.516 -16.949  1.00130.70      A16S
ATOM  50549  C5' ADE  1460     181.471  60.308 -16.639  1.00130.70      A16S
ATOM  50550  C4' ADE  1460     181.959  59.649 -17.903  1.00130.70      A16S
ATOM  50551  O4' ADE  1460     180.830  59.195 -18.690  1.00130.70      A16S
ATOM  50552  C1' ADE  1460     181.160  59.262 -20.068  1.00130.70      A16S
ATOM  50553  N9  ADE  1460     180.169  60.083 -20.759  1.00161.96      A16S
ATOM  50554  C4  ADE  1460     180.058  60.197 -22.124  1.00161.96      A16S
ATOM  50555  N3  ADE  1460     180.806  59.580 -23.056  1.00161.96      A16S
ATOM  50556  C2  ADE  1460     180.423  59.937 -24.277  1.00161.96      A16S
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ATOM  50562  C8  ADE  1460     179.193  60.893 -20.235  1.00161.96      A16S
ATOM  50563  C2' ADE  1460     182.570  59.842 -20.197  1.00130.70      A16S
ATOM  50564  O2' ADE  1460     183.498  58.803 -20.447  1.00130.70      A16S
ATOM  50565  C3' ADE  1460     182.745  60.538 -18.851  1.00130.70      A16S
ATOM  50566  O3' ADE  1460     184.107  60.645 -18.469  1.00130.70      A16S
ATOM  50567  P   CYT  1461     184.796  62.093 -18.394  1.00117.39      A16S
ATOM  50568  O1P CYT  1461     186.253  61.883 -18.219  1.00143.83      A16S
ATOM  50569  O2P CYT  1461     184.044  62.893 -17.394  1.00143.83      A16S
ATOM  50570  O5' CYT  1461     184.551  62.720 -19.843  1.00117.39      A16S
ATOM  50571  C5' CYT  1461     185.015  62.046 -21.035  1.00117.39      A16S
ATOM  50572  C4' CYT  1461     184.284  62.563 -22.253  1.00117.39      A16S
ATOM  50573  O4' CYT  1461     182.862  62.310 -22.102  1.00117.39      A16S
ATOM  50574  C1' CYT  1461     182.121  63.389 -22.653  1.00117.39      A16S
ATOM  50575  N1  CYT  1461     181.316  64.012 -21.580  1.00143.83      A16S
ATOM  50576  C6  CYT  1461     181.566  63.738 -20.262  1.00143.83      A16S
ATOM  50577  C2  CYT  1461     180.287  64.908 -21.932  1.00143.83      A16S
ATOM  50578  O2  CYT  1461     180.068  65.141 -23.134  1.00143.83      A16S
ATOM  50579  N3  CYT  1461     179.563  65.497 -20.949  1.00143.83      A16S
ATOM  50580  C4  CYT  1461     179.827  65.225 -19.668  1.00143.83      A16S
ATOM  50581  N4  CYT  1461     179.095  65.837 -18.735  1.00143.83      A16S
ATOM  50582  C5  CYT  1461     180.855  64.316 -19.286  1.00143.83      A16S
ATOM  50583  C2' CYT  1461     183.118  64.370 -23.273  1.00117.39      A16S
ATOM  50584  O2' CYT  1461     183.249  64.113 -24.656  1.00117.39      A16S
ATOM  50585  C3' CYT  1461     184.386  64.060 -22.490  1.00117.39      A16S
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ATOM  50592  C4' URI  1462     183.880  68.105 -25.224  1.00111.93      A16S
ATOM  50593  O4' URI  1462     182.667  67.579 -24.622  1.00111.93      A16S
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ATOM  50604  O2' URI  1462     182.019  70.440 -25.708  1.00111.93      A16S
ATOM  50605  C3' URI  1462     184.017  69.505 -24.631  1.00111.93      A16S
ATOM  50606  O3' URI  1462     184.763  70.411 -25.444  1.00111.93      A16S
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ATOM  50608  O1P GUA  1463     186.549  72.152 -25.629  1.00106.51      A16S
ATOM  50609  O2P GUA  1463     185.604  71.512 -23.326  1.00106.51      A16S
ATOM  50610  O5' GUA  1463     184.258  72.853 -24.948  1.00102.53      A16S
ATOM  50611  C5' GUA  1463     183.938  73.403 -26.245  1.00102.53      A16S
ATOM  50612  C4' GUA  1463     182.899  74.498 -26.124  1.00102.53      A16S
ATOM  50613  O4' GUA  1463     181.655  73.947 -25.608  1.00102.53      A16S
ATOM  50614  C1' GUA  1463     180.998  74.915 -24.800  1.00102.53      A16S
ATOM  50615  N9  GUA  1463     180.920  74.413 -23.430  1.00106.51      A16S
ATOM  50616  C4  GUA  1463     179.989  74.772 -22.481  1.00106.51      A16S
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ATOM  50620  N1  GUA  1463     178.530  75.157 -20.369  1.00106.51      A16S
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ATOM  50629  O3' GUA  1463     184.085  76.614 -25.715  1.00102.53      A16S
ATOM  50630  P   GUA  1464     185.022  77.471 -24.727  1.00124.73      A16S
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ATOM  50632  O2P GUA  1464     185.516  76.549 -23.669  1.00104.99      A16S
ATOM  50633  O5' GUA  1464     184.033  78.529 -24.046  1.00124.73      A16S
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ATOM  50634  C5' GUA  1464     183.372  79.547 -24.838  1.00124.73      A16S
ATOM  50635  C4' GUA  1464     182.106  80.040 -24.156  1.00124.73      A16S
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ATOM  50639  C4  GUA  1464     180.385  78.258 -20.248  1.00104.99      A16S
ATOM  50640  N3  GUA  1464     179.309  78.958 -19.838  1.00104.99      A16S
ATOM  50641  C2  GUA  1464     178.985  78.675 -18.592  1.00104.99      A16S
ATOM  50642  N2  GUA  1464     177.932  79.276 -18.029  1.00104.99      A16S
ATOM  50643  N1  GUA  1464     179.666  77.783 -17.805  1.00104.99      A16S
ATOM  50644  C6  GUA  1464     180.779  77.055 -18.202  1.00104.99      A16S
ATOM  50645  O6  GUA  1464     181.325  76.283 -17.407  1.00104.99      A16S
ATOM  50646  C5  GUA  1464     181.134  77.340 -19.544  1.00104.99      A16S
ATOM  50647  N7  GUA  1464     182.163  76.840 -20.329  1.00104.99      A16S
ATOM  50648  C8  GUA  1464     182.028  77.456 -21.473  1.00104.99      A16S
ATOM  50649  C2' GUA  1464     180.886  80.675 -22.225  1.00124.73      A16S
ATOM  50650  O2' GUA  1464     179.900  81.524 -22.776  1.00124.73      A16S
ATOM  50651  C3' GUA  1464     182.248  80.857 -22.879  1.00124.73      A16S
ATOM  50652  O3' GUA  1464     182.501  82.234 -23.109  1.00124.73      A16S
ATOM  50653  P   GUA  1465     182.992  83.159 -21.887  1.00 72.32      A16S
ATOM  50654  O1P GUA  1465     183.144  84.555 -22.379  1.00102.74      A16S
ATOM  50655  O2P GUA  1465     184.134  82.483 -21.229  1.00102.74      A16S
ATOM  50656  O5' GUA  1465     181.782  83.130 -20.861  1.00 72.32      A16S
ATOM  50657  C5' GUA  1465     180.531  83.746 -21.184  1.00 72.32      A16S
ATOM  50658  C4' GUA  1465     179.624  83.737 -19.982  1.00 72.32      A16S
ATOM  50659  O4' GUA  1465     179.377  82.365 -19.572  1.00 72.32      A16S
ATOM  50660  C1' GUA  1465     179.227  82.311 -18.161  1.00 72.32      A16S
ATOM  50661  N9  GUA  1465     180.234  81.408 -17.608  1.00102.74      A16S
ATOM  50662  C4  GUA  1465     180.180  80.793 -16.380  1.00102.74      A16S
ATOM  50663  N3  GUA  1465     179.170  80.890 -15.489  1.00102.74      A16S
ATOM  50664  C2  GUA  1465     179.405  80.188 -14.394  1.00102.74      A16S
ATOM  50665  N2  GUA  1465     178.490  80.154 -13.415  1.00102.74      A16S
ATOM  50666  N1  GUA  1465     180.552  79.462 -14.183  1.00102.74      A16S
ATOM  50667  C6  GUA  1465     181.608  79.354 -15.083  1.00102.74      A16S
ATOM  50668  O6  GUA  1465     182.603  78.680 -14.789  1.00102.74      A16S
ATOM  50669  C5  GUA  1465     181.358  80.089 -16.271  1.00102.74      A16S
ATOM  50670  N7  GUA  1465     182.129  80.240 -17.415  1.00102.74      A16S
ATOM  50671  C8  GUA  1465     181.423  81.024 -18.181  1.00102.74      A16S
ATOM  50672  C2' GUA  1465     179.383  83.735 -17.620  1.00 72.32      A16S
ATOM  50673  O2' GUA  1465     178.104  84.307 -17.432  1.00 72.32      A16S
ATOM  50674  C3' GUA  1465     180.179  84.403 -18.734  1.00 72.32      A16S
ATOM  50675  O3' GUA  1465     180.014  85.811 -18.767  1.00 72.32      A16S
ATOM  50676  P   GUA  1466     181.051  86.752 -17.979  1.00 89.33      A16S
ATOM  50677  O1P GUA  1466     180.957  88.108 -18.579  1.00113.74      A16S
ATOM  50678  O2P GUA  1466     182.368  86.072 -17.919  1.00113.74      A16S
ATOM  50679  O5' GUA  1466     180.448  86.806 -16.508  1.00 89.33      A16S
ATOM  50680  C5' GUA  1466     179.117  87.308 -16.283  1.00 89.33      A16S
ATOM  50681  C4' GUA  1466     178.634  86.918 -14.907  1.00 89.33      A16S
ATOM  50682  O4' GUA  1466     178.545  85.472 -14.821  1.00 89.33      A16S
ATOM  50683  C1' GUA  1466     178.924  85.047 -13.525  1.00 89.33      A16S
ATOM  50684  N9  GUA  1466     180.074  84.154 -13.654  1.00113.74      A16S
ATOM  50685  C4  GUA  1466     180.562  83.311 -12.683  1.00113.74      A16S
ATOM  50686  N3  GUA  1466     180.064  83.165 -11.435  1.00113.74      A16S
ATOM  50687  C2  GUA  1466     180.742  82.276 -10.732  1.00113.74      A16S
ATOM  50688  N2  GUA  1466     180.376  82.007  -9.472  1.00113.74      A16S
ATOM  50689  N1  GUA  1466     181.827  81.584 -11.212  1.00113.74      A16S
ATOM  50690  C6  GUA  1466     182.361  81.715 -12.491  1.00113.74      A16S
ATOM  50691  O6  GUA  1466     183.345  81.041 -12.820  1.00113.74      A16S
ATOM  50692  C5  GUA  1466     181.638  82.669 -13.261  1.00113.74      A16S
ATOM  50693  N7  GUA  1466     181.826  83.102 -14.568  1.00113.74      A16S
ATOM  50694  C8  GUA  1466     180.880  83.981 -14.757  1.00113.74      A16S
ATOM  50695  C2' GUA  1466     179.215  86.296 -12.686  1.00 89.33      A16S
ATOM  50696  O2' GUA  1466     178.070  86.645 -11.932  1.00 89.33      A16S
ATOM  50697  C3' GUA  1466     179.548  87.320 -13.762  1.00 89.33      A16S
ATOM  50698  O3' GUA  1466     179.315  88.657 -13.343  1.00 89.33      A16S
ATOM  50699  P   CYT  1467     180.541  89.533 -12.794  1.00135.60      A16S
ATOM  50700  O1P CYT  1467     180.051  90.920 -12.622  1.00102.40      A16S
ATOM  50701  O2P CYT  1467     181.730  89.278 -13.642  1.00102.40      A16S
ATOM  50702  O5' CYT  1467     180.817  88.911 -11.356  1.00135.60      A16S
ATOM  50703  C5' CYT  1467     179.794  88.935 -10.340  1.00135.60      A16S
ATOM  50704  C4' CYT  1467     180.228  88.147  -9.126  1.00135.60      A16S
ATOM  50705  O4' CYT  1467     180.195  86.723  -9.416  1.00135.60      A16S
ATOM  50706  C1' CYT  1467     181.272  86.074  -8.753  1.00135.60      A16S
ATOM  50707  N1  CYT  1467     182.184  85.519  -9.781  1.00102.40      A16S
ATOM  50708  C6  CYT  1467     182.404  86.190 -10.955  1.00102.40      A16S
ATOM  50709  C2  CYT  1467     182.835  84.294  -9.536  1.00102.40      A16S
ATOM  50710  O2  CYT  1467     182.629  83.695  -8.467  1.00102.40      A16S
ATOM  50711  N3  CYT  1467     183.673  83.795 -10.475  1.00102.40      A16S
ATOM  50712  C4  CYT  1467     183.879  84.463 -11.613  1.00102.40      A16S
ATOM  50713  N4  CYT  1467     184.714  83.931 -12.506  1.00102.40      A16S
ATOM  50714  C5  CYT  1467     183.235  85.705 -11.885  1.00102.40      A16S
ATOM  50715  C2' CYT  1467     181.969  87.125  -7.887  1.00135.60      A16S
ATOM  50716  O2' CYT  1467     181.420  87.128  -6.579  1.00135.60      A16S
ATOM  50717  C3' CYT  1467     181.650  88.400  -8.654  1.00135.60      A16S
ATOM  50718  O3' CYT  1467     181.795  89.576  -7.881  1.00135.60      A16S
ATOM  50719  P   GUA  1468     183.188  90.372  -7.932  1.00180.21      A16S
ATOM  50720  O1P GUA  1468     183.009  91.616  -7.150  1.00112.76      A16S
ATOM  50721  O2P GUA  1468     183.634  90.453  -9.351  1.00112.76      A16S
ATOM  50722  O5' GUA  1468     184.187  89.424  -7.131  1.00180.21      A16S
ATOM  50723  C5' GUA  1468     183.875  89.004  -5.783  1.00180.21      A16S
ATOM  50724  C4' GUA  1468     184.888  87.996  -5.285  1.00180.21      A16S
ATOM  50725  O4' GUA  1468     184.806  86.783  -6.075  1.00180.21      A16S
ATOM  50726  C1' GUA  1468     186.097  86.214  -6.208  1.00180.21      A16S
ATOM  50727  N9  GUA  1468     186.428  86.140  -7.629  1.00112.76      A16S
ATOM  50728  C4  GUA  1468     187.435  85.387  -8.185  1.00112.76      A16S
ATOM  50729  N3  GUA  1468     188.283  84.579  -7.513  1.00112.76      A16S
ATOM  50730  C2  GUA  1468     189.146  83.991  -8.317  1.00112.76      A16S
ATOM  50731  N2  GUA  1468     190.061  83.154  -7.811  1.00112.76      A16S
ATOM  50732  N1  GUA  1468     189.177  84.179  -9.677  1.00112.76      A16S
ATOM  50733  C6  GUA  1468     188.316  85.006 -10.392  1.00112.76      A16S
ATOM  50734  O6  GUA  1468     188.436  85.106 -11.620  1.00112.76      A16S
ATOM  50735  C5  GUA  1468     187.380  85.645  -9.538  1.00112.76      A16S
ATOM  50736  N7  GUA  1468     186.356  86.536  -9.828  1.00112.76      A16S
ATOM  50737  C8  GUA  1468     185.819  86.802  -8.669  1.00112.76      A16S
ATOM  50738  C2' GUA  1468     187.081  87.082  -5.420  1.00180.21      A16S
ATOM  50739  O2' GUA  1468     187.297  86.520  -4.140  1.00180.21      A16S
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ATOM  50740  C3' GUA  1468     186.346  88.416  -5.370  1.00180.21      A16S
ATOM  50741  O3' GUA  1468     186.731  89.196  -4.247  1.00180.21      A16S
ATOM  50742  P   ADE  1469     187.361  90.655  -4.474  1.00157.24      A16S
ATOM  50743  O1P ADE  1469     186.594  91.581  -3.603  1.00176.88      A16S
ATOM  50744  O2P ADE  1469     187.447  90.925  -5.937  1.00176.88      A16S
ATOM  50745  O5' ADE  1469     188.837  90.533  -3.882  1.00157.24      A16S
ATOM  50746  C5' ADE  1469     190.003  90.624  -4.735  1.00157.24      A16S
ATOM  50747  C4' ADE  1469     191.250  90.256  -3.958  1.00157.24      A16S
ATOM  50748  O4' ADE  1469     191.070  88.946  -3.362  1.00157.24      A16S
ATOM  50749  C1' ADE  1469     192.291  88.230  -3.393  1.00157.24      A16S
ATOM  50750  N9  ADE  1469     192.081  87.009  -4.174  1.00176.88      A16S
ATOM  50751  C4  ADE  1469     192.915  85.917  -4.216  1.00176.88      A16S
ATOM  50752  N3  ADE  1469     194.085  85.757  -3.570  1.00176.88      A16S
ATOM  50753  C2  ADE  1469     194.612  84.563  -3.842  1.00176.88      A16S
ATOM  50754  N1  ADE  1469     194.138  83.583  -4.625  1.00176.88      A16S
ATOM  50755  C6  ADE  1469     192.958  83.774  -5.257  1.00176.88      A16S
ATOM  50756  N6  ADE  1469     192.481  82.793  -6.026  1.00176.88      A16S
ATOM  50757  C5  ADE  1469     192.299  85.004  -5.057  1.00176.88      A16S
ATOM  50758  N7  ADE  1469     191.105  85.517  -5.549  1.00176.88      A16S
ATOM  50759  C8  ADE  1469     191.023  86.704  -5.001  1.00176.88      A16S
ATOM  50760  C2' ADE  1469     193.364  89.152  -3.973  1.00157.24      A16S
ATOM  50761  O2' ADE  1469     194.084  89.769  -2.924  1.00157.24      A16S
ATOM  50762  C3' ADE  1469     192.525  90.137  -4.779  1.00157.24      A16S
ATOM  50763  O3' ADE  1469     193.175  91.392  -4.919  1.00157.24      A16S
ATOM  50764  P   ADE  1470     194.332  91.567  -6.020  1.00201.09      A16S
ATOM  50765  O1P ADE  1470     194.875  92.944  -5.884  1.00201.03      A16S
ATOM  50766  O2P ADE  1470     193.817  91.105  -7.336  1.00201.03      A16S
ATOM  50767  O5' ADE  1470     195.451  90.538  -5.550  1.00201.09      A16S
ATOM  50768  C5' ADE  1470     196.376  90.869  -4.496  1.00201.09      A16S
ATOM  50769  C4' ADE  1470     197.582  89.962  -4.569  1.00201.09      A16S
ATOM  50770  O4' ADE  1470     197.150  88.600  -4.279  1.00201.09      A16S
ATOM  50771  C1' ADE  1470     197.775  87.682  -5.170  1.00201.09      A16S
ATOM  50772  N9  ADE  1470     196.740  87.076  -6.015  1.00201.03      A16S
ATOM  50773  C4  ADE  1470     196.852  85.909  -6.738  1.00201.03      A16S
ATOM  50774  N3  ADE  1470     197.912  85.083  -6.801  1.00201.03      A16S
ATOM  50775  C2  ADE  1470     197.660  84.055  -7.611  1.00201.03      A16S
ATOM  50776  N1  ADE  1470     196.552  83.779  -8.312  1.00201.03      A16S
ATOM  50777  C6  ADE  1470     195.505  84.629  -8.226  1.00201.03      A16S
ATOM  50778  N6  ADE  1470     194.400  84.355  -8.924  1.00201.03      A16S
ATOM  50779  C5  ADE  1470     195.645  85.759  -7.400  1.00201.03      A16S
ATOM  50780  N7  ADE  1470     194.784  86.804  -7.096  1.00201.03      A16S
ATOM  50781  C8  ADE  1470     195.475  87.552  -6.272  1.00201.03      A16S
ATOM  50782  C2' ADE  1470     198.800  88.453  -6.001  1.00201.09      A16S
ATOM  50783  O2' ADE  1470     200.084  88.339  -5.420  1.00201.09      A16S
ATOM  50784  C3' ADE  1470     198.234  89.866  -5.944  1.00201.09      A16S
ATOM  50785  O3' ADE  1470     197.704  90.613  -7.049  1.00201.09      A16S
ATOM  50786  P   GUA  1471     198.574  90.841  -8.391  1.00114.93      A16S
ATOM  50787  O1P GUA  1471     199.878  91.437  -7.993  1.00 90.58      A16S
ATOM  50788  O2P GUA  1471     197.704  91.565  -9.354  1.00 90.58      A16S
ATOM  50789  O5' GUA  1471     198.852  89.386  -8.979  1.00114.93      A16S
ATOM  50790  C5' GUA  1471     199.993  88.631  -8.541  1.00114.93      A16S
ATOM  50791  C4' GUA  1471     200.274  87.497  -9.485  1.00114.93      A16S
ATOM  50792  O4' GUA  1471     199.076  86.701  -9.671  1.00114.93      A16S
ATOM  50793  C1' GUA  1471     199.067  86.158 -10.980  1.00114.93      A16S
ATOM  50794  N9  GUA  1471     197.849  86.579 -11.670  1.00 90.58      A16S
ATOM  50795  C4  GUA  1471     197.399  86.084 -12.872  1.00 90.58      A16S
ATOM  50796  N3  GUA  1471     197.989  85.108 -13.599  1.00 90.58      A16S
ATOM  50797  C2  GUA  1471     197.336  84.861 -14.724  1.00 90.58      A16S
ATOM  50798  N2  GUA  1471     197.783  83.914 -15.558  1.00 90.58      A16S
ATOM  50799  N1  GUA  1471     196.197  85.523 -15.113  1.00 90.58      A16S
ATOM  50800  C6  GUA  1471     195.569  86.532 -14.387  1.00 90.58      A16S
ATOM  50801  O6  GUA  1471     194.551  87.070 -14.840  1.00 90.58      A16S
ATOM  50802  C5  GUA  1471     196.257  86.803 -13.161  1.00 90.58      A16S
ATOM  50803  N7  GUA  1471     195.980  87.715 -12.149  1.00 90.58      A16S
ATOM  50804  C8  GUA  1471     196.946  87.544 -11.285  1.00 90.58      A16S
ATOM  50805  C2' GUA  1471     200.329  86.648 -11.695  1.00114.93      A16S
ATOM  50806  O2' GUA  1471     201.330  85.650 -11.623  1.00114.93      A16S
ATOM  50807  C3' GUA  1471     200.679  87.893 -10.890  1.00114.93      A16S
ATOM  50808  O3' GUA  1471     202.061  88.214 -10.954  1.00114.93      A16S
ATOM  50809  P   URI  1472     202.586  89.231 -12.081  1.00 78.65      A16S
ATOM  50810  O1P URI  1472     204.045  89.412 -11.876  1.00 85.51      A16S
ATOM  50811  O2P URI  1472     201.693  90.420 -12.085  1.00 85.51      A16S
ATOM  50812  O5' URI  1472     202.382  88.417 -13.437  1.00 78.65      A16S
ATOM  50813  C5' URI  1472     202.989  87.121 -13.607  1.00 78.65      A16S
ATOM  50814  C4' URI  1472     202.679  86.565 -14.975  1.00 78.65      A16S
ATOM  50815  O4' URI  1472     201.309  86.093 -15.046  1.00 78.65      A16S
ATOM  50816  C1' URI  1472     200.805  86.286 -16.363  1.00 78.65      A16S
ATOM  50817  N1  URI  1472     199.587  87.114 -16.296  1.00 85.51      A16S
ATOM  50818  C6  URI  1472     199.313  87.903 -15.190  1.00 85.51      A16S
ATOM  50819  C2  URI  1472     198.705  87.081 -17.383  1.00 85.51      A16S
ATOM  50820  O2  URI  1472     198.904  86.421 -18.398  1.00 85.51      A16S
ATOM  50821  N3  URI  1472     197.580  87.860 -17.237  1.00 85.51      A16S
ATOM  50822  C4  URI  1472     197.249  88.662 -16.156  1.00 85.51      A16S
ATOM  50823  O4  URI  1472     196.187  89.292 -16.171  1.00 85.51      A16S
ATOM  50824  C5  URI  1472     198.209  88.656 -15.090  1.00 85.51      A16S
ATOM  50825  C2' URI  1472     201.923  86.913 -17.199  1.00 78.65      A16S
ATOM  50826  O2' URI  1472     202.587  85.908 -17.946  1.00 78.65      A16S
ATOM  50827  C3' URI  1472     202.798  87.547 -16.123  1.00 78.65      A16S
ATOM  50828  O3' URI  1472     204.141  87.737 -16.528  1.00 78.65      A16S
ATOM  50829  P   CYT  1473     204.614  89.191 -17.021  1.00 76.23      A16S
ATOM  50830  O1P CYT  1473     206.098  89.154 -17.136  1.00 68.20      A16S
ATOM  50831  O2P CYT  1473     203.966  90.220 -16.151  1.00 68.20      A16S
ATOM  50832  O5' CYT  1473     204.029  89.276 -18.499  1.00 76.23      A16S
ATOM  50833  C5' CYT  1473     204.536  88.392 -19.518  1.00 76.23      A16S
ATOM  50834  C4' CYT  1473     203.670  88.447 -20.745  1.00 76.23      A16S
ATOM  50835  O4' CYT  1473     202.356  87.929 -20.427  1.00 76.23      A16S
ATOM  50836  C1' CYT  1473     201.368  88.688 -21.096  1.00 76.23      A16S
ATOM  50837  N1  CYT  1473     200.550  89.375 -20.070  1.00 68.20      A16S
ATOM  50838  C6  CYT  1473     201.014  89.518 -18.788  1.00 68.20      A16S
ATOM  50839  C2  CYT  1473     199.284  89.886 -20.425  1.00 68.20      A16S
ATOM  50840  O2  CYT  1473     198.881  89.761 -21.597  1.00 68.20      A16S
ATOM  50841  N3  CYT  1473     198.537  90.505 -19.479  1.00 68.20      A16S
ATOM  50842  C4  CYT  1473     199.002  90.630 -18.231  1.00 68.20      A16S
ATOM  50843  N4  CYT  1473     198.224  91.245 -17.331  1.00 68.20      A16S
ATOM  50844  C5  CYT  1473     200.283  90.130 -17.849  1.00 68.20      A16S
ATOM  50845  C2' CYT  1473     202.099  89.657 -22.027  1.00 76.23      A16S
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ATOM  50846  O2' CYT  1473     202.275  89.045 -23.291  1.00 76.23      A16S
ATOM  50847  C3' CYT  1473     203.418  89.837 -21.291  1.00 76.23      A16S
ATOM  50848  O3' CYT  1473     204.484  90.280 -22.119  1.00 76.23      A16S
ATOM  50849  P   GUA  1474     205.195  91.689 -21.802  1.00 64.87      A16S
ATOM  50850  O1P GUA  1474     206.487  91.679 -22.518  1.00 68.66      A16S
ATOM  50851  O2P GUA  1474     205.171  91.928 -20.335  1.00 68.66      A16S
ATOM  50852  O5' GUA  1474     204.244  92.765 -22.490  1.00 64.87      A16S
ATOM  50853  C5' GUA  1474     204.156  92.822 -23.914  1.00 64.87      A16S
ATOM  50854  C4' GUA  1474     202.725  93.021 -24.374  1.00 64.87      A16S
ATOM  50855  O4' GUA  1474     201.784  92.280 -23.545  1.00 64.87      A16S
ATOM  50856  C1' GUA  1474     200.492  92.836 -23.708  1.00 64.87      A16S
ATOM  50857  N9  GUA  1474     199.897  93.121 -22.408  1.00 68.66      A16S
ATOM  50858  C4  GUA  1474     198.587  93.500 -22.195  1.00 68.66      A16S
ATOM  50859  N3  GUA  1474     197.635  93.640 -23.147  1.00 68.66      A16S
ATOM  50860  C2  GUA  1474     196.479  94.035 -22.643  1.00 68.66      A16S
ATOM  50861  N2  GUA  1474     195.431  94.229 -23.457  1.00 68.66      A16S
ATOM  50862  N1  GUA  1474     196.268  94.270 -21.307  1.00 68.66      A16S
ATOM  50863  C6  GUA  1474     197.227  94.133 -20.312  1.00 68.66      A16S
ATOM  50864  O6  GUA  1474     196.929  94.374 -19.142  1.00 68.66      A16S
ATOM  50865  C5  GUA  1474     198.481  93.710 -20.843  1.00 68.66      A16S
ATOM  50866  N7  GUA  1474     199.692  93.458 -20.211  1.00 68.66      A16S
ATOM  50867  C8  GUA  1474     200.498  93.105 -21.177  1.00 68.66      A16S
ATOM  50868  C2' GUA  1474     200.658  94.130 -24.503  1.00 64.87      A16S
ATOM  50869  O2' GUA  1474     200.321  93.876 -25.851  1.00 64.87      A16S
ATOM  50870  C3' GUA  1474     202.142  94.419 -24.343  1.00 64.87      A16S
ATOM  50871  O3' GUA  1474     202.595  95.216 -25.418  1.00 64.87      A16S
ATOM  50872  P   URI  1475     202.586  96.809 -25.266  1.00 55.77      A16S
ATOM  50873  O1P URI  1475     203.046  97.436 -26.538  1.00 42.49      A16S
ATOM  50874  O2P URI  1475     203.288  97.132 -24.004  1.00 42.49      A16S
ATOM  50875  O5' URI  1475     201.043  97.129 -25.061  1.00 55.77      A16S
ATOM  50876  C5' URI  1475     200.050  96.601 -25.956  1.00 55.77      A16S
ATOM  50877  C4' URI  1475     198.721  97.269 -25.708  1.00 55.77      A16S
ATOM  50878  O4' URI  1475     198.221  96.931 -24.386  1.00 55.77      A16S
ATOM  50879  C1' URI  1475     197.952  98.108 -23.641  1.00 55.77      A16S
ATOM  50880  N1  URI  1475     198.309  97.834 -22.239  1.00 42.49      A16S
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ATOM  50882  C2  URI  1475     197.347  98.045 -21.278  1.00 42.49      A16S
ATOM  50883  O2  URI  1475     196.247  98.490 -21.533  1.00 42.49      A16S
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ATOM  50887  C5  URI  1475     199.885  97.045 -20.641  1.00 42.49      A16S
ATOM  50888  C2' URI  1475     198.703  99.268 -24.300  1.00 55.77      A16S
ATOM  50889  O2' URI  1475     197.969 100.459 -24.101  1.00 55.77      A16S
ATOM  50890  C3' URI  1475     198.785  98.778 -25.748  1.00 55.77      A16S
ATOM  50891  O3' URI  1475     198.567  99.468 -26.985  1.00 55.77      A16S
ATOM  50892  P   ADE  1476     197.105 100.010 -27.370  1.00 40.38      A16S
ATOM  50893  O1P ADE  1476     197.277 100.862 -28.594  1.00 50.14      A16S
ATOM  50894  O2P ADE  1476     196.492 100.611 -26.137  1.00 50.14      A16S
ATOM  50895  O5' ADE  1476     196.266  98.704 -27.744  1.00 40.38      A16S
ATOM  50896  C5' ADE  1476     195.556  98.621 -29.004  1.00 40.38      A16S
ATOM  50897  C4' ADE  1476     194.049  98.591 -28.792  1.00 40.38      A16S
ATOM  50898  O4' ADE  1476     193.711  97.488 -27.909  1.00 40.38      A16S
ATOM  50899  C1' ADE  1476     192.615  97.845 -27.089  1.00 40.38      A16S
ATOM  50900  N9  ADE  1476     193.086  97.884 -25.709  1.00 50.14      A16S
ATOM  50901  C4  ADE  1476     192.333  98.160 -24.594  1.00 50.14      A16S
ATOM  50902  N3  ADE  1476     191.020  98.426 -24.542  1.00 50.14      A16S
ATOM  50903  C2  ADE  1476     190.643  98.677 -23.293  1.00 50.14      A16S
ATOM  50904  N1  ADE  1476     191.370  98.687 -22.174  1.00 50.14      A16S
ATOM  50905  C6  ADE  1476     192.683  98.405 -22.262  1.00 50.14      A16S
ATOM  50906  N6  ADE  1476     193.409  98.400 -21.150  1.00 50.14      A16S
ATOM  50907  C5  ADE  1476     193.209  98.128 -23.533  1.00 50.14      A16S
ATOM  50908  N7  ADE  1476     194.490  97.820 -23.965  1.00 50.14      A16S
ATOM  50909  C8  ADE  1476     194.362  97.681 -25.258  1.00 50.14      A16S
ATOM  50910  C2' ADE  1476     192.129  99.217 -27.548  1.00 40.38      A16S
ATOM  50911  O2' ADE  1476     191.098  99.026 -28.491  1.00 40.38      A16S
ATOM  50912  C3' ADE  1476     193.398  99.807 -28.147  1.00 40.38      A16S
ATOM  50913  O3' ADE  1476     193.115 100.849 -29.073  1.00 40.38      A16S
ATOM  50914  P   ADE  1477     193.146 102.379 -28.570  1.00 38.19      A16S
ATOM  50915  O1P ADE  1477     193.105 103.337 -29.759  1.00 51.07      A16S
ATOM  50916  O2P ADE  1477     194.249 102.501 -27.573  1.00 51.07      A16S
ATOM  50917  O5' ADE  1477     191.802 102.479 -27.725  1.00 38.19      A16S
ATOM  50918  C5' ADE  1477     190.544 102.085 -28.284  1.00 38.19      A16S
ATOM  50919  C4' ADE  1477     189.435 102.347 -27.305  1.00 38.19      A16S
ATOM  50920  O4' ADE  1477     189.532 101.412 -26.206  1.00 38.19      A16S
ATOM  50921  C1' ADE  1477     189.179 102.051 -24.992  1.00 38.19      A16S
ATOM  50922  N9  ADE  1477     190.369 102.066 -24.123  1.00 51.07      A16S
ATOM  50923  C4  ADE  1477     190.446 102.418 -22.792  1.00 51.07      A16S
ATOM  50924  N3  ADE  1477     189.448 102.833 -21.990  1.00 51.07      A16S
ATOM  50925  C2  ADE  1477     189.905 103.087 -20.764  1.00 51.07      A16S
ATOM  50926  N1  ADE  1477     191.145 102.976 -20.285  1.00 51.07      A16S
ATOM  50927  C6  ADE  1477     192.122 102.551 -21.108  1.00 51.07      A16S
ATOM  50928  N6  ADE  1477     193.357 102.423 -20.618  1.00 51.07      A16S
ATOM  50929  C5  ADE  1477     191.774 102.258 -22.435  1.00 51.07      A16S
ATOM  50930  N7  ADE  1477     192.522 101.818 -23.514  1.00 51.07      A16S
ATOM  50931  C8  ADE  1477     191.649 101.721 -24.484  1.00 51.07      A16S
ATOM  50932  C2' ADE  1477     188.679 103.444 -25.371  1.00 38.19      A16S
ATOM  50933  O2' ADE  1477     187.306 103.372 -25.701  1.00 38.19      A16S
ATOM  50934  C3' ADE  1477     189.461 103.706 -26.639  1.00 38.19      A16S
ATOM  50935  O3' ADE  1477     188.875 104.725 -27.430  1.00 38.19      A16S
ATOM  50936  P   CYT  1478     189.504 106.203 -27.386  1.00 27.85      A16S
ATOM  50937  O1P CYT  1478     188.772 107.058 -28.355  1.00 45.88      A16S
ATOM  50938  O2P CYT  1478     190.988 106.076 -27.475  1.00 45.88      A16S
ATOM  50939  O5' CYT  1478     189.142 106.698 -25.925  1.00 27.85      A16S
ATOM  50940  C5' CYT  1478     187.795 106.656 -25.478  1.00 27.85      A16S
ATOM  50941  C4' CYT  1478     187.697 107.201 -24.085  1.00 27.85      A16S
ATOM  50942  O4' CYT  1478     188.268 106.280 -23.137  1.00 27.85      A16S
ATOM  50943  C1' CYT  1478     188.774 107.007 -22.041  1.00 27.85      A16S
ATOM  50944  N1  CYT  1478     190.156 106.588 -21.798  1.00 45.88      A16S
ATOM  50945  C6  CYT  1478     190.908 106.019 -22.783  1.00 45.88      A16S
ATOM  50946  C2  CYT  1478     190.690 106.791 -20.537  1.00 45.88      A16S
ATOM  50947  O2  CYT  1478     189.977 107.304 -19.661  1.00 45.88      A16S
ATOM  50948  N3  CYT  1478     191.963 106.436 -20.298  1.00 45.88      A16S
ATOM  50949  C4  CYT  1478     192.696 105.902 -21.268  1.00 45.88      A16S
ATOM  50950  N4  CYT  1478     193.957 105.604 -20.996  1.00 45.88      A16S
ATOM  50951  C5  CYT  1478     192.170 105.663 -22.563  1.00 45.88      A16S
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ATOM	50952	C2'	CYT	1478	188.609	108.503	-22.329	1.00	27.85	A16S	ATOM	51005	C4'	GUA	1481	195.194	108.452	-27.447	1.00	40.98	A16S
ATOM	50953	O2'	CYT	1478	187.489	108.986	-21.619	1.00	27.85	A16S	ATOM	51006	O4'	GUA	1481	194.847	108.860	-26.116	1.00	40.98	A16S
ATOM	50954	C3'	CYT	1478	188.402	108.514	-23.837	1.00	27.85	A16S	ATOM	51007	C1'	GUA	1481	194.303	107.773	-25.415	1.00	40.98	A16S
ATOM	50955	O3'	CYT	1478	187.529	109.543	-24.225	1.00	27.85	A16S	ATOM	51008	N9	GUA	1481	193.413	108.304	-24.383	1.00	53.19	A16S
ATOM	50956	P	ADE	1479	187.992	110.589	-25.322	1.00	38.34	A16S	ATOM	51009	C4	GUA	1481	193.752	108.528	-23.069	1.00	53.19	A16S
ATOM	50957	O1P	ADE	1479	186.856	111.465	-25.661	1.00	56.89	A16S	ATOM	51010	N3	GUA	1481	194.952	108.284	-22.510	1.00	53.19	A16S
ATOM	50958	O2P	ADE	1479	188.696	109.859	-26.394	1.00	56.89	A16S	ATOM	51011	C2	GUA	1481	194.974	108.600	-21.234	1.00	53.19	A16S
ATOM	50959	O5'	ADE	1479	189.066	111.435	-24.532	1.00	38.34	A16S	ATOM	51012	N2	GUA	1481	196.080	108.416	-20.528	1.00	53.19	A16S
ATOM	50960	C5'	ADE	1479	188.858	112.817	-24.353	1.00	38.34	A16S	ATOM	51013	N1	GUA	1481	193.913	109.119	-20.556	1.00	53.19	A16S
ATOM	50961	C4'	ADE	1479	190.144	113.577	-24.514	1.00	38.34	A16S	ATOM	51014	C6	GUA	1481	192.669	109.383	-21.103	1.00	53.19	A16S
ATOM	50962	O4'	ADE	1479	190.910	113.484	-23.298	1.00	38.34	A16S	ATOM	51015	O6	GUA	1481	191.775	109.857	-20.391	1.00	53.19	A16S
ATOM	50963	C1'	ADE	1479	192.258	113.528	-23.630	1.00	38.34	A16S	ATOM	51016	C5	GUA	1481	192.623	109.043	-22.481	1.00	53.19	A16S
ATOM	50964	N9	ADE	1479	193.025	113.155	-22.444	1.00	56.89	A16S	ATOM	51017	N7	GUA	1481	191.588	109.139	-23.401	1.00	53.19	A16S
ATOM	50965	C4	ADE	1479	194.240	112.544	-22.369	1.00	56.89	A16S	ATOM	51018	C8	GUA	1481	192.102	108.691	-24.513	1.00	53.19	A16S
ATOM	50966	N3	ADE	1479	194.952	112.059	-23.382	1.00	56.89	A16S	ATOM	51019	C2'	GUA	1481	193.708	106.788	-26.424	1.00	40.98	A16S
ATOM	50967	C2	ADE	1479	196.090	111.582	-22.937	1.00	56.89	A16S	ATOM	51020	O2'	GUA	1481	194.020	105.455	-26.085	1.00	40.98	A16S
ATOM	50968	N1	ADE	1479	196.572	111.547	-21.680	1.00	56.89	A16S	ATOM	51021	C3'	GUA	1481	194.240	107.309	-27.768	1.00	40.98	A16S
ATOM	50969	C6	ADE	1479	195.824	112.058	-20.689	1.00	56.89	A16S	ATOM	51022	O3'	GUA	1481	194.749	106.383	-28.783	1.00	40.98	A16S
ATOM	50970	N6	ADE	1479	196.309	112.063	-19.452	1.00	56.89	A16S	ATOM	51023	P	GUA	1482	195.990	105.378	-28.476	1.00	45.53	A16S
ATOM	50971	C5	ADE	1479	194.592	112.566	-21.025	1.00	56.89	A16S	ATOM	51024	O1P	GUA	1482	195.689	104.175	-29.280	1.00	39.37	A16S
ATOM	50972	N7	ADE	1479	193.589	113.122	-20.258	1.00	56.89	A16S	ATOM	51025	O2P	GUA	1482	196.187	105.244	-27.026	1.00	39.37	A16S
ATOM	50973	C8	ADE	1479	192.674	113.440	-21.139	1.00	56.89	A16S	ATOM	51026	O5'	GUA	1482	197.296	106.090	-29.070	1.00	45.53	A16S
ATOM	50974	C2'	ADE	1479	192.351	112.757	-24.944	1.00	38.34	A16S	ATOM	51027	C5'	GUA	1482	197.322	106.697	-30.388	1.00	45.53	A16S
ATOM	50975	O2'	ADE	1479	193.518	113.169	-25.628	1.00	38.34	A16S	ATOM	51028	C4'	GUA	1482	198.535	107.608	-30.522	1.00	45.53	A16S
ATOM	50976	C3'	ADE	1479	191.092	113.257	-25.670	1.00	38.34	A16S	ATOM	51029	O4'	GUA	1482	198.437	108.610	-29.483	1.00	45.53	A16S
ATOM	50977	O3'	ADE	1479	191.396	114.484	-26.323	1.00	38.34	A16S	ATOM	51030	C1'	GUA	1482	199.646	108.694	-28.772	1.00	45.53	A16S
ATOM	50978	P	ADE	1480	190.442	115.033	-27.492	1.00	60.81	A16S	ATOM	51031	N9	GUA	1482	199.377	108.240	-27.419	1.00	39.37	A16S
ATOM	50979	O1P	ADE	1480	190.613	116.497	-27.535	1.00	72.03	A16S	ATOM	51032	C4	GUA	1482	198.870	109.014	-26.420	1.00	39.37	A16S
ATOM	50980	O2P	ADE	1480	189.083	114.461	-27.350	1.00	72.03	A16S	ATOM	51033	N3	GUA	1482	198.585	110.324	-26.515	1.00	39.37	A16S
ATOM	50981	O5'	ADE	1480	191.103	114.466	-28.822	1.00	60.81	A16S	ATOM	51034	C2	GUA	1482	198.107	110.803	-25.394	1.00	39.37	A16S
ATOM	50982	C5'	ADE	1480	190.600	113.280	-29.488	1.00	60.81	A16S	ATOM	51035	N2	GUA	1482	197.780	112.100	-25.320	1.00	39.37	A16S
ATOM	50983	C4'	ADE	1480	191.691	112.685	-30.344	1.00	60.81	A16S	ATOM	51036	N1	GUA	1482	197.917	110.049	-24.265	1.00	39.37	A16S
ATOM	50984	O4'	ADE	1480	192.152	113.724	-31.229	1.00	60.81	A16S	ATOM	51037	C6	GUA	1482	198.199	108.696	-24.146	1.00	39.37	A16S
ATOM	50985	C1'	ADE	1480	193.554	113.699	-31.314	1.00	60.81	A16S	ATOM	51038	O6	GUA	1482	197.983	108.112	-23.082	1.00	39.37	A16S
ATOM	50986	N9	ADE	1480	194.034	115.074	-31.223	1.00	72.03	A16S	ATOM	51039	C5	GUA	1482	198.719	108.174	-25.341	1.00	39.37	A16S
ATOM	50987	C4	ADE	1480	194.758	115.733	-32.185	1.00	72.03	A16S	ATOM	51040	N7	GUA	1482	199.144	106.894	-25.652	1.00	39.37	A16S
ATOM	50988	N3	ADE	1480	195.174	115.248	-33.367	1.00	72.03	A16S	ATOM	51041	C8	GUA	1482	199.532	106.981	-26.895	1.00	39.37	A16S
ATOM	50989	C2	ADE	1480	195.859	116.169	-34.034	1.00	72.03	A16S	ATOM	51042	C2'	GUA	1482	200.713	107.927	-29.542	1.00	45.53	A16S
ATOM	50990	N1	ADE	1480	196.152	117.429	-33.682	1.00	72.03	A16S	ATOM	51043	O2'	GUA	1482	201.386	108.865	-30.349	1.00	45.53	A16S
ATOM	50991	C6	ADE	1480	195.713	117.885	-32.489	1.00	72.03	A16S	ATOM	51044	C3'	GUA	1482	199.885	106.913	-30.336	1.00	45.53	A16S
ATOM	50992	N6	ADE	1480	195.998	119.142	-32.139	1.00	72.03	A16S	ATOM	51045	O3'	GUA	1482	200.551	106.773	-31.602	1.00	45.53	A16S
ATOM	50993	C5	ADE	1480	194.977	117.002	-31.686	1.00	72.03	A16S	ATOM	51046	P	URI	1483	200.225	105.533	-32.577	1.00	47.67	A16S
ATOM	50994	N7	ADE	1480	194.401	117.142	-30.433	1.00	72.03	A16S	ATOM	51047	O1P	URI	1483	200.018	104.282	-31.747	1.00	40.76	A16S
ATOM	50995	C8	ADE	1480	193.857	115.973	-30.205	1.00	72.03	A16S	ATOM	51048	O2P	URI	1483	201.288	105.560	-33.621	1.00	40.76	A16S
ATOM	50996	C2'	ADE	1480	194.121	112.680	-30.319	1.00	60.81	A16S	ATOM	51049	O5'	URI	1483	198.890	105.985	-33.318	1.00	47.67	A16S
ATOM	50997	O2'	ADE	1480	194.831	111.651	-30.970	1.00	60.81	A16S	ATOM	51050	C5'	URI	1483	198.887	107.169	-34.139	1.00	47.67	A16S
ATOM	50998	C3'	ADE	1480	192.889	112.271	-29.512	1.00	60.81	A16S	ATOM	51051	C4'	URI	1483	197.908	107.011	-35.275	1.00	47.67	A16S
ATOM	50999	O3'	ADE	1480	192.713	110.889	-29.128	1.00	60.81	A16S	ATOM	51052	O4'	URI	1483	198.102	105.691	-35.844	1.00	47.67	A16S
ATOM	51000	P	GUA	1481	193.155	109.664	-30.104	1.00	40.98	A16S	ATOM	51053	C1'	URI	1483	196.886	104.994	-35.839	1.00	47.67	A16S
ATOM	51001	O1P	GUA	1481	193.168	110.110	-31.519	1.00	53.19	A16S	ATOM	51054	N1	URI	1483	197.162	103.565	-35.660	1.00	40.76	A16S
ATOM	51002	O2P	GUA	1481	192.315	108.495	-29.733	1.00	53.19	A16S	ATOM	51055	C6	URI	1483	197.699	103.068	-34.500	1.00	40.76	A16S
ATOM	51003	O5'	GUA	1481	194.641	109.358	-29.629	1.00	40.98	A16S	ATOM	51056	C2	URI	1483	196.834	102.729	-36.712	1.00	40.76	A16S
ATOM	51004	C5'	GUA	1481	195.052	109.692	-28.294	1.00	40.98	A16S	ATOM	51057	O2	URI	1483	196.425	103.150	-37.786	1.00	40.76	A16S

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ATOM  51220  C5' CYT  1491     187.016  84.924 -44.498  1.00 38.12      A16S
ATOM  51221  C4' CYT  1491     188.385  85.571 -44.443  1.00 38.12      A16S
ATOM  51222  O4' CYT  1491     188.253  87.015 -44.367  1.00 38.12      A16S
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ATOM  51240  C5' CYT  1492     192.820  84.110 -42.162  1.00 40.43      A16S
ATOM  51241  C4' CYT  1492     193.726  85.023 -41.351  1.00 40.43      A16S
ATOM  51242  O4' CYT  1492     193.184  86.373 -41.328  1.00 40.43      A16S
ATOM  51243  C1' CYT  1492     193.456  86.977 -40.076  1.00 40.43      A16S
ATOM  51244  N1  CYT  1492     192.166  87.237 -39.401  1.00 54.16      A16S
ATOM  51245  C6  CYT  1492     191.013  86.672 -39.869  1.00 54.16      A16S
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ATOM  51247  O2  CYT  1492     193.184  88.586 -37.857  1.00 54.16      A16S
ATOM  51248  N3  CYT  1492     190.962  88.238 -37.613  1.00 54.16      A16S
ATOM  51249  C4  CYT  1492     189.853  87.657 -38.068  1.00 54.16      A16S
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ATOM  51251  C5  CYT  1492     189.850  86.851 -39.237  1.00 54.16      A16S
ATOM  51252  C2' CYT  1492     194.340  86.007 -39.287  1.00 40.43      A16S
ATOM  51253  O2' CYT  1492     195.680  86.340 -39.548  1.00 40.43      A16S
ATOM  51254  C3' CYT  1492     193.954  84.659 -39.888  1.00 40.43      A16S
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ATOM  51259  O5' GUA  1493     195.680  83.685 -37.343  1.00 62.64      A16S
ATOM  51260  C5' GUA  1493     196.945  84.352 -37.595  1.00 62.64      A16S
ATOM  51261  C4' GUA  1493     197.265  85.344 -36.490  1.00 62.64      A16S
ATOM  51262  O4' GUA  1493     196.389  86.499 -36.573  1.00 62.64      A16S
ATOM  51263  C1' GUA  1493     196.029  86.911 -35.270  1.00 62.64      A16S
ATOM  51264  N9  GUA  1493     194.585  86.730 -35.114  1.00 69.97      A16S
ATOM  51265  C4  GUA  1493     193.792  87.337 -34.170  1.00 69.97      A16S
ATOM  51266  N3  GUA  1493     194.212  88.219 -33.235  1.00 69.97      A16S
ATOM  51267  C2  GUA  1493     193.223  88.632 -32.467  1.00 69.97      A16S
ATOM  51268  N2  GUA  1493     193.479  89.517 -31.488  1.00 69.97      A16S
ATOM  51269  N1  GUA  1493     191.916  88.206 -32.602  1.00 69.97      A16S
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ATOM  51270  C6  GUA  1493     191.462  87.292 -33.552  1.00 69.97      A16S
ATOM  51271  O6  GUA  1493     190.265  86.963 -33.577  1.00 69.97      A16S
ATOM  51272  C5  GUA  1493     192.518  86.849 -34.391  1.00 69.97      A16S
ATOM  51273  N7  GUA  1493     192.507  85.961 -35.457  1.00 69.97      A16S
ATOM  51274  C8  GUA  1493     193.750  85.922 -35.855  1.00 69.97      A16S
ATOM  51275  C2' GUA  1493     196.831  86.070 -34.274  1.00 62.64      A16S
ATOM  51276  O2' GUA  1493     198.019  86.750 -33.939  1.00 62.64      A16S
ATOM  51277  C3' GUA  1493     197.103  84.809 -35.078  1.00 62.64      A16S
ATOM  51278  O3' GUA  1493     198.286  84.143 -34.653  1.00 62.64      A16S
ATOM  51279  P   GUA  1494     198.177  82.867 -33.681  1.00 66.55      A16S
ATOM  51280  O1P GUA  1494     197.030  82.047 -34.157  1.00 83.06      A16S
ATOM  51281  O2P GUA  1494     199.523  82.237 -33.537  1.00 83.06      A16S
ATOM  51282  O5' GUA  1494     197.761  83.511 -32.287  1.00 66.55      A16S
ATOM  51283  C5' GUA  1494     198.748  83.992 -31.358  1.00 66.55      A16S
ATOM  51284  C4' GUA  1494     198.244  83.817 -29.947  1.00 66.55      A16S
ATOM  51285  O4' GUA  1494     199.313  84.072 -29.008  1.00 66.55      A16S
ATOM  51286  C1' GUA  1494     198.789  84.676 -27.841  1.00 66.55      A16S
ATOM  51287  N9  GUA  1494     199.412  85.990 -27.700  1.00 83.06      A16S
ATOM  51288  C4  GUA  1494     199.417  86.776 -26.571  1.00 83.06      A16S
ATOM  51289  N3  GUA  1494     198.827  86.477 -25.391  1.00 83.06      A16S
ATOM  51290  C2  GUA  1494     199.023  87.420 -24.485  1.00 83.06      A16S
ATOM  51291  N2  GUA  1494     198.503  87.280 -23.257  1.00 83.06      A16S
ATOM  51292  N1  GUA  1494     199.744  88.566 -24.716  1.00 83.06      A16S
ATOM  51293  C6  GUA  1494     200.362  88.897 -25.919  1.00 83.06      A16S
ATOM  51294  O6  GUA  1494     201.001  89.957 -26.017  1.00 83.06      A16S
ATOM  51295  C5  GUA  1494     200.151  87.892 -26.907  1.00 83.06      A16S
ATOM  51296  N7  GUA  1494     200.582  87.821 -28.226  1.00 83.06      A16S
ATOM  51297  C8  GUA  1494     200.119  86.681 -28.655  1.00 83.06      A16S
ATOM  51298  C2' GUA  1494     197.271  84.747 -28.002  1.00 66.55      A16S
ATOM  51299  O2' GUA  1494     196.649  83.615 -27.419  1.00 66.55      A16S
ATOM  51300  C3' GUA  1494     197.138  84.757 -29.513  1.00 66.55      A16S
ATOM  51301  O3' GUA  1494     195.856  84.350 -29.946  1.00 66.55      A16S
ATOM  51302  P   ADE  1495     194.875  85.443 -30.596  1.00 59.54      A16S
ATOM  51303  O1P ADE  1495     193.671  84.728 -31.110  1.00 72.31      A16S
ATOM  51304  O2P ADE  1495     195.678  86.303 -31.515  1.00 72.31      A16S
ATOM  51305  O5' ADE  1495     194.468  86.374 -29.372  1.00 59.54      A16S
ATOM  51306  C5' ADE  1495     193.705  85.866 -28.276  1.00 59.54      A16S
ATOM  51307  C4' ADE  1495     193.802  86.814 -27.124  1.00 59.54      A16S
ATOM  51308  O4' ADE  1495     195.204  86.954 -26.790  1.00 59.54      A16S
ATOM  51309  C1' ADE  1495     195.492  88.302 -26.477  1.00 59.54      A16S
ATOM  51310  N9  ADE  1495     196.464  88.802 -27.454  1.00 72.31      A16S
ATOM  51311  C4  ADE  1495     197.241  89.925 -27.303  1.00 72.31      A16S
ATOM  51312  N3  ADE  1495     197.272  90.755 -26.244  1.00 72.31      A16S
ATOM  51313  C2  ADE  1495     198.147  91.738 -26.440  1.00 72.31      A16S
ATOM  51314  N1  ADE  1495     198.938  91.973 -27.497  1.00 72.31      A16S
ATOM  51315  C6  ADE  1495     198.884  91.124 -28.550  1.00 72.31      A16S
ATOM  51316  N6  ADE  1495     199.675  91.367 -29.602  1.00 72.31      A16S
ATOM  51317  C5  ADE  1495     197.986  90.029 -28.463  1.00 72.31      A16S
ATOM  51318  N7  ADE  1495     197.686  88.985 -29.333  1.00 72.31      A16S
ATOM  51319  C8  ADE  1495     196.784  88.288 -28.690  1.00 72.31      A16S
ATOM  51320  C2' ADE  1495     194.172  89.079 -26.508  1.00 59.54      A16S
ATOM  51321  O2' ADE  1495     193.647  89.173 -25.197  1.00 59.54      A16S
ATOM  51322  C3' ADE  1495     193.334  88.222 -27.452  1.00 59.54      A16S
ATOM  51323  O3' ADE  1495     191.926  88.360 -27.259  1.00 59.54      A16S
ATOM  51324  P   ADE  1496     191.001  88.908 -28.462  1.00 64.65      A16S
ATOM  51325  O1P ADE  1496     189.630  88.336 -28.264  1.00 66.25      A16S
ATOM  51326  O2P ADE  1496     191.707  88.700 -29.742  1.00 66.25      A16S
ATOM  51327  O5' ADE  1496     190.933  90.481 -28.226  1.00 64.65      A16S
ATOM  51328  C5' ADE  1496     190.104  91.017 -27.190  1.00 64.65      A16S
ATOM  51329  C4' ADE  1496     190.878  92.007 -26.371  1.00 64.65      A16S
ATOM  51330  O4' ADE  1496     192.237  91.520 -26.193  1.00 64.65      A16S
ATOM  51331  C1' ADE  1496     193.126  92.617 -26.088  1.00 64.65      A16S
ATOM  51332  N9  ADE  1496     194.066  92.603 -27.212  1.00 66.25      A16S
ATOM  51333  C4  ADE  1496     195.123  93.475 -27.343  1.00 66.25      A16S
ATOM  51334  N3  ADE  1496     195.516  94.411 -26.461  1.00 66.25      A16S
ATOM  51335  C2  ADE  1496     196.548  95.107 -26.939  1.00 66.25      A16S
ATOM  51336  N1  ADE  1496     197.185  94.991 -28.116  1.00 66.25      A16S
ATOM  51337  C6  ADE  1496     196.769  94.043 -28.985  1.00 66.25      A16S
ATOM  51338  N6  ADE  1496     197.399  93.946 -30.162  1.00 66.25      A16S
ATOM  51339  C5  ADE  1496     195.679  93.217 -28.587  1.00 66.25      A16S
ATOM  51340  N7  ADE  1496     195.020  92.159 -29.207  1.00 66.25      A16S
ATOM  51341  C8  ADE  1496     194.081  91.825 -28.349  1.00 66.25      A16S
ATOM  51342  C2' ADE  1496     192.271  93.876 -26.178  1.00 64.65      A16S
ATOM  51343  O2' ADE  1496     191.871  94.242 -24.872  1.00 64.65      A16S
ATOM  51344  C3' ADE  1496     191.086  93.377 -26.979  1.00 64.65      A16S
ATOM  51345  O3' ADE  1496     189.978  94.217 -26.782  1.00 64.65      A16S
ATOM  51346  P   GUA  1497     189.196  94.821 -28.050  1.00 43.72      A16S
ATOM  51347  O1P GUA  1497     188.767  96.195 -27.665  1.00 49.71      A16S
ATOM  51348  O2P GUA  1497     188.179  93.815 -28.470  1.00 49.71      A16S
ATOM  51349  O5' GUA  1497     190.235  94.916 -29.255  1.00 43.72      A16S
ATOM  51350  C5' GUA  1497     191.387  95.774 -29.210  1.00 43.72      A16S
ATOM  51351  C4' GUA  1497     192.448  95.275 -30.185  1.00 43.72      A16S
ATOM  51352  O4' GUA  1497     192.391  93.819 -30.247  1.00 43.72      A16S
ATOM  51353  C1' GUA  1497     192.759  93.375 -31.535  1.00 43.72      A16S
ATOM  51354  N9  GUA  1497     191.656  92.599 -32.096  1.00 49.71      A16S
ATOM  51355  C4  GUA  1497     191.687  91.831 -33.247  1.00 49.71      A16S
ATOM  51356  N3  GUA  1497     192.748  91.665 -34.070  1.00 49.71      A16S
ATOM  51357  C2  GUA  1497     192.460  90.873 -35.092  1.00 49.71      A16S
ATOM  51358  N2  GUA  1497     193.390  90.609 -36.021  1.00 49.71      A16S
ATOM  51359  N1  GUA  1497     191.242  90.283 -35.285  1.00 49.71      A16S
ATOM  51360  C6  GUA  1497     190.145  90.428 -34.457  1.00 49.71      A16S
ATOM  51361  O6  GUA  1497     189.096  89.833 -34.725  1.00 49.71      A16S
ATOM  51362  C5  GUA  1497     190.428  91.290 -33.357  1.00 49.71      A16S
ATOM  51363  N7  GUA  1497     189.621  91.708 -32.308  1.00 49.71      A16S
ATOM  51364  C8  GUA  1497     190.390  92.479 -31.589  1.00 49.71      A16S
ATOM  51365  C2' GUA  1497     193.135  94.606 -32.353  1.00 43.72      A16S
ATOM  51366  O2' GUA  1497     194.529  94.754 -32.215  1.00 43.72      A16S
ATOM  51367  C3' GUA  1497     192.362  95.712 -31.642  1.00 43.72      A16S
ATOM  51368  O3' GUA  1497     192.996  96.973 -31.824  1.00 43.72      A16S
ATOM  51369  P   GUA  1498     192.681  97.850 -33.137  1.00 43.02      A16S
ATOM  51370  O1P GUA  1498     193.427  99.135 -33.030  1.00 55.85      A16S
ATOM  51371  O2P GUA  1498     191.214  97.872 -33.388  1.00 55.85      A16S
ATOM  51372  O5' GUA  1498     193.346  97.029 -34.322  1.00 43.02      A16S
ATOM  51373  C5' GUA  1498     194.769  96.907 -34.429  1.00 43.02      A16S
ATOM  51374  C4' GUA  1498     195.126  96.201 -35.709  1.00 43.02      A16S
ATOM  51375  O4' GUA  1498     194.672  94.824 -35.667  1.00 43.02      A16S
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ATOM	51376	C1'	GUA	1498	194.238	94.422	-36.956	1.00	43.02	A16S	ATOM	51429	N7	GUA	1500	188.038	96.108	-42.810	1.00	39.61	A16S
ATOM	51377	N9	GUA	1498	192.857	93.943	-36.860	1.00	55.85	A16S	ATOM	51430	C8	GUA	1500	188.921	96.204	-43.762	1.00	39.61	A16S
ATOM	51378	C4	GUA	1498	192.208	93.073	-37.723	1.00	55.85	A16S	ATOM	51431	C2'	GUA	1500	188.887	96.473	-47.225	1.00	36.35	A16S
ATOM	51379	N3	GUA	1498	192.732	92.491	-38.825	1.00	55.85	A16S	ATOM	51432	O2'	GUA	1500	189.087	95.888	-48.497	1.00	36.35	A16S
ATOM	51380	C2	GUA	1498	191.849	91.715	-39.442	1.00	55.85	A16S	ATOM	51433	C3'	GUA	1500	189.864	97.610	-47.006	1.00	36.35	A16S
ATOM	51381	N2	GUA	1498	192.191	91.063	-40.547	1.00	55.85	A16S	ATOM	51434	O3'	GUA	1500	190.061	98.342	-48.182	1.00	36.35	A16S
ATOM	51382	N1	GUA	1498	190.563	91.522	-39.020	1.00	55.85	A16S	ATOM	51435	P	CYT	1501	189.521	99.840	-48.260	1.00	34.05	A16S
ATOM	51383	C6	GUA	1498	190.002	92.101	-37.891	1.00	55.85	A16S	ATOM	51436	O1P	CYT	1501	190.040	100.500	-49.482	1.00	53.73	A16S
ATOM	51384	O6	GUA	1498	188.831	91.853	-37.594	1.00	55.85	A16S	ATOM	51437	O2P	CYT	1501	189.772	100.449	-46.925	1.00	53.73	A16S
ATOM	51385	C5	GUA	1498	190.932	92.940	-37.212	1.00	55.85	A16S	ATOM	51438	O5'	CYT	1501	187.966	99.636	-48.461	1.00	34.05	A16S
ATOM	51386	N7	GUA	1498	190.782	93.693	-36.057	1.00	55.85	A16S	ATOM	51439	C5'	CYT	1501	187.507	98.948	-49.605	1.00	34.05	A16S
ATOM	51387	C8	GUA	1498	191.942	94.270	-35.889	1.00	55.85	A16S	ATOM	51440	C4'	CYT	1501	186.051	98.617	-49.475	1.00	34.05	A16S
ATOM	51388	C2'	GUA	1498	194.436	95.614	-37.899	1.00	43.02	A16S	ATOM	51441	O4'	CYT	1501	185.859	97.609	-48.460	1.00	34.05	A16S
ATOM	51389	O2'	GUA	1498	195.681	95.512	-38.560	1.00	43.02	A16S	ATOM	51442	C1'	CYT	1501	184.567	97.742	-47.918	1.00	34.05	A16S
ATOM	51390	C3'	GUA	1498	194.450	96.782	-36.930	1.00	43.02	A16S	ATOM	51443	N1	CYT	1501	184.691	97.861	-46.462	1.00	53.73	A16S
ATOM	51391	O3'	GUA	1498	195.159	97.896	-37.435	1.00	43.02	A16S	ATOM	51444	C6	CYT	1501	185.786	98.443	-45.901	1.00	53.73	A16S
ATOM	51392	P	URI	1499	194.369	98.992	-38.286	1.00	41.22	A16S	ATOM	51445	C2	CYT	1501	183.669	97.365	-45.656	1.00	53.73	A16S
ATOM	51393	O1P	URI	1499	195.260	100.158	-38.514	1.00	47.34	A16S	ATOM	51446	O2	CYT	1501	182.676	96.858	-46.187	1.00	53.73	A16S
ATOM	51394	O2P	URI	1499	193.065	99.190	-37.617	1.00	47.34	A16S	ATOM	51447	N3	CYT	1501	183.780	97.452	-44.320	1.00	53.73	A16S
ATOM	51395	O5'	URI	1499	194.072	98.260	-39.669	1.00	41.22	A16S	ATOM	51448	C4	CYT	1501	184.851	98.018	-43.780	1.00	53.73	A16S
ATOM	51396	C5'	URI	1499	195.141	97.947	-40.579	1.00	41.22	A16S	ATOM	51449	N4	CYT	1501	184.919	98.084	-42.451	1.00	53.73	A16S
ATOM	51397	C4'	URI	1499	194.651	97.045	-41.685	1.00	41.22	A16S	ATOM	51450	C5	CYT	1501	185.904	98.544	-44.576	1.00	53.73	A16S
ATOM	51398	O4'	URI	1499	194.238	95.769	-41.130	1.00	41.22	A16S	ATOM	51451	C2'	CYT	1501	183.900	98.946	-48.590	1.00	34.05	A16S
ATOM	51399	C1'	URI	1499	193.160	95.249	-41.889	1.00	41.22	A16S	ATOM	51452	O2'	CYT	1501	183.125	98.491	-49.683	1.00	34.05	A16S
ATOM	51400	N1	URI	1499	191.979	95.174	-41.027	1.00	47.34	A16S	ATOM	51453	C3'	CYT	1501	185.104	99.732	-49.083	1.00	34.05	A16S
ATOM	51401	C6	URI	1499	191.817	96.010	-39.957	1.00	47.34	A16S	ATOM	51454	O3'	CYT	1501	184.794	100.594	-50.170	1.00	34.05	A16S
ATOM	51402	C2	URI	1499	191.022	94.252	-41.353	1.00	47.34	A16S	ATOM	51455	P	GUA	1502	184.619	102.170	-49.892	1.00	41.26	A16S
ATOM	51403	O2	URI	1499	191.160	93.458	-42.254	1.00	47.34	A16S	ATOM	51456	O1P	GUA	1502	184.426	102.895	-51.175	1.00	35.29	A16S
ATOM	51404	N3	URI	1499	189.897	94.285	-40.577	1.00	47.34	A16S	ATOM	51457	O2P	GUA	1502	185.672	102.637	-48.947	1.00	35.29	A16S
ATOM	51405	C4	URI	1499	189.654	95.117	-39.519	1.00	47.34	A16S	ATOM	51458	O5'	GUA	1502	183.235	102.226	-49.119	1.00	41.26	A16S
ATOM	51406	O4	URI	1499	188.552	95.104	-38.991	1.00	47.34	A16S	ATOM	51459	C5'	GUA	1502	182.025	102.059	-49.841	1.00	41.26	A16S
ATOM	51407	C5	URI	1499	190.718	96.011	-39.209	1.00	47.34	A16S	ATOM	51460	C4'	GUA	1502	180.864	101.936	-48.907	1.00	41.26	A16S
ATOM	51408	C2'	URI	1499	192.884	96.220	-43.035	1.00	41.22	A16S	ATOM	51461	O4'	GUA	1502	181.009	100.746	-48.092	1.00	41.26	A16S
ATOM	51409	O2'	URI	1499	193.562	95.793	-44.202	1.00	41.22	A16S	ATOM	51462	C1'	GUA	1502	180.337	100.933	-46.864	1.00	41.26	A16S
ATOM	51410	C3'	URI	1499	193.435	97.518	-42.464	1.00	41.22	A16S	ATOM	51463	N9	GUA	1502	181.303	100.868	-45.776	1.00	35.29	A16S
ATOM	51411	O3'	URI	1499	193.755	98.438	-43.485	1.00	41.22	A16S	ATOM	51464	C4	GUA	1502	181.018	100.573	-44.475	1.00	35.29	A16S
ATOM	51412	P	GUA	1500	192.618	99.423	-44.022	1.00	36.35	A16S	ATOM	51465	N3	GUA	1502	179.817	100.214	-44.002	1.00	35.29	A16S
ATOM	51413	O1P	GUA	1500	193.209	100.453	-44.924	1.00	39.61	A16S	ATOM	51466	C2	GUA	1502	179.837	100.035	-42.710	1.00	35.29	A16S
ATOM	51414	O2P	GUA	1500	191.882	99.838	-42.817	1.00	39.61	A16S	ATOM	51467	N2	GUA	1502	178.731	99.649	-42.087	1.00	35.29	A16S
ATOM	51415	O5'	GUA	1500	191.666	98.475	-44.875	1.00	36.35	A16S	ATOM	51468	N1	GUA	1502	180.948	100.217	-41.930	1.00	35.29	A16S
ATOM	51416	C5'	GUA	1500	192.209	97.672	-45.934	1.00	36.35	A16S	ATOM	51469	C6	GUA	1502	182.195	100.601	-42.394	1.00	35.29	A16S
ATOM	51417	C4'	GUA	1500	191.126	96.876	-46.630	1.00	36.35	A16S	ATOM	51470	O6	GUA	1502	183.125	100.771	-41.599	1.00	35.29	A16S
ATOM	51418	O4'	GUA	1500	190.669	95.759	-45.832	1.00	36.35	A16S	ATOM	51471	C5	GUA	1502	182.191	100.764	-43.789	1.00	35.29	A16S
ATOM	51419	C1'	GUA	1500	189.319	95.477	-46.147	1.00	36.35	A16S	ATOM	51472	N7	GUA	1502	183.211	101.115	-44.652	1.00	35.29	A16S
ATOM	51420	N9	GUA	1500	188.539	95.576	-44.918	1.00	39.61	A16S	ATOM	51473	C8	GUA	1502	182.640	101.153	-45.824	1.00	35.29	A16S
ATOM	51421	C4	GUA	1500	187.290	95.050	-44.675	1.00	39.61	A16S	ATOM	51474	C2'	GUA	1502	179.737	102.335	-46.900	1.00	41.26	A16S
ATOM	51422	N3	GUA	1500	186.537	94.355	-45.545	1.00	39.61	A16S	ATOM	51475	O2'	GUA	1502	178.392	102.239	-47.355	1.00	41.26	A16S
ATOM	51423	C2	GUA	1500	185.398	93.956	-45.004	1.00	39.61	A16S	ATOM	51476	C3'	GUA	1502	180.669	103.027	-47.883	1.00	41.26	A16S
ATOM	51424	N2	GUA	1500	184.532	93.216	-45.723	1.00	39.61	A16S	ATOM	51477	O3'	GUA	1502	180.144	104.218	-48.433	1.00	41.26	A16S
ATOM	51425	N1	GUA	1500	185.022	94.240	-43.723	1.00	39.61	A16S	ATOM	51478	P	GUA	1503	180.442	105.620	-47.698	1.00	38.37	A16S
ATOM	51426	C6	GUA	1500	185.775	94.966	-42.817	1.00	39.61	A16S	ATOM	51479	O1P	GUA	1503	179.834	106.667	-48.560	1.00	46.07	A16S
ATOM	51427	O6	GUA	1500	185.338	95.176	-41.681	1.00	39.61	A16S	ATOM	51480	O2P	GUA	1503	181.875	105.719	-47.311	1.00	46.07	A16S
ATOM	51428	C5	GUA	1500	187.003	95.381	-43.374	1.00	39.61	A16S	ATOM	51481	O5'	GUA	1503	179.590	105.508	-46.365	1.00	38.37	A16S

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ATOM  51482  C5' GUA  1503     178.204 105.182 -46.448  1.00 38.37      A16S
ATOM  51483  C4' GUA  1503     177.637 104.908 -45.084  1.00 38.37      A16S
ATOM  51484  O4' GUA  1503     178.302 103.772 -44.481  1.00 38.37      A16S
ATOM  51485  C1' GUA  1503     178.302 103.921 -43.074  1.00 38.37      A16S
ATOM  51486  N9  GUA  1503     179.686 103.969 -42.617  1.00 46.07      A16S
ATOM  51487  C4  GUA  1503     180.127 103.826 -41.327  1.00 46.07      A16S
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ATOM  51493  O6  GUA  1503     183.469 103.843 -40.091  1.00 46.07      A16S
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ATOM  51496  C8  GUA  1503     180.804 104.163 -43.388  1.00 46.07      A16S
ATOM  51497  C2' GUA  1503     177.551 105.212 -42.759  1.00 38.37      A16S
ATOM  51498  O2' GUA  1503     176.180 104.900 -42.578  1.00 38.37      A16S
ATOM  51499  C3' GUA  1503     177.759 105.997 -44.039  1.00 38.37      A16S
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ATOM  51501  P   CYT  1504     177.087 108.481 -43.677  1.00 39.50      A16S
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ATOM  51504  O5' CYT  1504     177.027 108.347 -42.095  1.00 39.50      A16S
ATOM  51505  C5' CYT  1504     175.785 108.099 -41.439  1.00 39.50      A16S
ATOM  51506  C4' CYT  1504     175.979 108.109 -39.954  1.00 39.50      A16S
ATOM  51507  O4' CYT  1504     176.826 106.994 -39.596  1.00 39.50      A16S
ATOM  51508  C1' CYT  1504     177.689 107.373 -38.537  1.00 39.50      A16S
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ATOM  51512  O2  CYT  1504     179.804 107.106 -36.867  1.00 31.28      A16S
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ATOM  51526  C4' URI  1505     177.239 112.204 -35.239  1.00 46.90      A16S
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ATOM  51545  C5' GUA  1506     176.891 113.342 -31.208  1.00 39.13      A16S
ATOM  51546  C4' GUA  1506     177.897 112.438 -30.547  1.00 39.13      A16S
ATOM  51547  O4' GUA  1506     177.269 111.196 -30.136  1.00 39.13      A16S
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ATOM  51569  C4' GUA  1507     183.528 113.736 -32.206  1.00 48.35      A16S
ATOM  51570  O4' GUA  1507     184.135 112.739 -33.048  1.00 48.35      A16S
ATOM  51571  C1' GUA  1507     185.302 113.260 -33.634  1.00 48.35      A16S
ATOM  51572  N9  GUA  1507     185.123 113.245 -35.076  1.00 75.49      A16S
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ATOM  51584  O2' GUA  1507     186.456 114.438 -31.940  1.00 48.35      A16S
ATOM  51585  C3' GUA  1507     184.189 115.066 -32.582  1.00 48.35      A16S
ATOM  51586  O3' GUA  1507     184.298 115.954 -31.453  1.00 48.35      A16S
ATOM  51587  P   ADE  1508     184.673 117.508 -31.679  1.00 85.83      A16S
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ATOM  51589  O2P ADE  1508     184.643 117.813 -33.141  1.00 80.30      A16S
ATOM  51590  O5' ADE  1508     186.185 117.635 -31.187  1.00 85.83      A16S
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ATOM  51631  O2P CYT  1510     192.484 126.388 -32.685  1.00193.44      A16S
ATOM  51632  O5' CYT  1510     192.046 125.227 -34.851  1.00122.57      A16S
ATOM  51633  C5' CYT  1510     191.025 125.550 -35.831  1.00122.57      A16S
ATOM  51634  C4' CYT  1510     191.670 125.862 -37.171  1.00122.57      A16S
ATOM  51635  O4' CYT  1510     192.514 127.035 -37.003  1.00122.57      A16S
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ATOM  51637  N1  CYT  1510     194.812 126.779 -36.608  1.00193.44      A16S
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ATOM  51644  C5  CYT  1510     195.466 127.140 -34.370  1.00193.44      A16S
ATOM  51645  C2' CYT  1510     193.640 125.558 -38.495  1.00122.57      A16S
ATOM  51646  O2' CYT  1510     193.257 125.871 -39.821  1.00122.57      A16S
ATOM  51647  C3' CYT  1510     192.592 124.772 -37.715  1.00122.57      A16S
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ATOM  51649  P   ADE  1511     192.584 122.377 -38.804  0.00 98.11      A16S
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ATOM  51652  O5' ADE  1511     193.790 122.690 -39.798  0.00 98.11      A16S
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ATOM  51655  O4' ADE  1511     195.677 124.417 -41.006  0.00 98.11      A16S
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ATOM  51666  C8  ADE  1511     197.089 122.937 -38.868  0.00 98.11      A16S
ATOM  51667  C2' ADE  1511     197.153 122.903 -42.117  0.00 98.11      A16S
ATOM  51668  O2' ADE  1511     197.428 123.400 -43.411  0.00 98.11      A16S
ATOM  51669  C3' ADE  1511     195.761 122.297 -42.001  0.00 98.11      A16S
ATOM  51670  O3' ADE  1511     195.330 121.305 -42.941  0.00 98.11      A16S
ATOM  51671 CO+3 CO3     1     225.510  97.310 -73.117  0.85 49.93      UION
ATOM  51672 CO+3 CO3     2     124.293  22.508   5.126  0.82 49.93      UION
ATOM  51673 CO+3 CO3     3     116.658  63.261 -34.726  0.84 49.93      UION
ATOM  51674 CO+3 CO3     4     101.739  21.889  30.300  0.82 49.93      UION
ATOM  51675 CO+3 CO3     5     142.393  76.209 -24.241  0.52 49.93      UION
ATOM  51676 CO+3 CO3     6     170.642 111.397 -46.430  0.71 49.93      UION
ATOM  51677 CO+3 CO3     7     238.715 122.791 -17.178  0.77 49.93      UION
ATOM  51678 CO+3 CO3     8     226.622 164.051   4.676  0.58 49.93      UION
ATOM  51679 CO+3 CO3     9     162.440  93.498 -40.926  0.63 49.93      UION
ATOM  51680 CO+3 CO3    10     190.702  87.401  19.758  0.83 49.93      UION
ATOM  51681 CO+3 CO3    11     199.876  97.711 -48.333  0.98 49.93      UION
ATOM  51682 CO+3 CO3    12     160.997 108.087  -9.663  0.70 49.93      UION
ATOM  51683 CO+3 CO3    13     169.957 119.803 -47.684  0.51 49.93      UION
ATOM  51684 CO+3 CO3    14     106.932  23.491   9.227  0.50 49.93      UION
ATOM  51685 CO+3 CO3    15     148.953 105.031 -46.519  0.95 49.93      UION
ATOM  51686 CO+3 CO3    16     135.164  91.969  52.164  0.45 49.93      UION
ATOM  51687 CO+3 CO3    17     211.888 132.225   2.887  0.42 49.93      UION
ATOM  51688 CO+3 CO3    18     133.488  74.509   0.947  0.59 49.93      UION
ATOM  51689 CO+3 CO3    19     192.350 140.765 -18.918  0.59 49.93      UION
ATOM  51690 CO+3 CO3    20     123.661  66.219  -7.666  0.57 49.93      UION
ATOM  51691 CO+3 CO3    21     120.330 112.633 -36.904  0.35 49.93      UION
ATOM  51692 CO+3 CO3    22     149.379 118.429 -65.156  0.53 49.93      UION
ATOM  51693 CO+3 CO3    23     211.023 116.573  29.316  0.69 49.93      UION
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ATOM	51694	CO+3	CO3	24	213.517	115.808	66.962	0.40	49.93	UION	ATOM	51747	CO+3	CO3	77	212.254	109.022	17.689	0.47	49.93	UION
ATOM	51695	CO+3	CO3	25	112.471	61.617	-28.294	0.34	49.93	UION	ATOM	51748	CO+3	CO3	78	237.743	131.515	8.094	0.31	49.93	UION
ATOM	51696	CO+3	CO3	26	127.079	55.781	19.881	0.54	49.93	UION	ATOM	51749	CO+3	CO3	79	232.658	139.365	-2.834	0.63	49.93	UION
ATOM	51697	CO+3	CO3	27	164.020	107.052	-4.770	0.63	49.93	UION	ATOM	51750	CO+3	CO3	80	121.000	91.404	9.711	0.41	49.93	UION
ATOM	51698	CO+3	CO3	28	97.953	71.652	25.123	0.62	49.93	UION	ATOM	51751	CO+3	CO3	81	166.656	131.832	-7.282	0.65	49.93	UION
ATOM	51699	CO+3	CO3	29	167.176	113.973	-64.548	0.44	49.93	UION	ATOM	51752	CO+3	CO3	82	124.918	96.504	26.317	0.62	49.93	UION
ATOM	51700	CO+3	CO3	30	162.522	93.168	-29.961	0.65	49.93	UION	ATOM	51753	CO+3	CO3	83	116.653	97.072	-13.983	0.41	49.93	UION
ATOM	51701	CO+3	CO3	31	140.416	71.719	5.810	0.74	49.93	UION	ATOM	51754	CO+3	CO3	84	114.665	92.980	-3.199	0.26	49.93	UION
ATOM	51702	CO+3	CO3	32	158.053	113.747	-65.044	0.40	49.93	UION	ATOM	51755	CO+3	CO3	85	208.971	102.629	-75.378	0.47	49.93	UION
ATOM	51703	CO+3	CO3	33	200.483	161.817	-18.979	0.47	49.93	UION	ATOM	51756	CO+3	CO3	86	130.275	111.795	-37.162	0.57	49.93	UION
ATOM	51704	CO+3	CO3	34	171.470	111.773	-2.545	0.56	49.93	UION	ATOM	51757	CO+3	CO3	87	126.397	118.747	-56.803	0.44	49.93	UION
ATOM	51705	CO+3	CO3	35	138.756	98.837	3.692	0.34	49.93	UION	ATOM	51758	CO+3	CO3	88	235.783	113.754	-7.199	0.71	49.93	UION
ATOM	51706	CO+3	CO3	36	166.809	100.208	-33.993	0.57	49.93	UION	ATOM	51759	CO+3	CO3	89	237.902	126.033	-6.589	0.35	49.93	UION
ATOM	51707	CO+3	CO3	37	139.220	99.683	-43.371	0.59	49.93	UION	ATOM	51760	CO+3	CO3	90	209.515	110.511	10.517	0.71	49.93	UION
ATOM	51708	CO+3	CO3	38	136.950	41.939	-30.202	0.36	49.93	UION	ATOM	51761	CO+3	CO3	91	230.983	110.264	25.349	0.51	49.93	UION
ATOM	51709	CO+3	CO3	39	161.724	114.972	-48.467	0.34	49.93	UION	ATOM	51762	CO+3	CO3	92	233.335	121.967	26.400	0.60	49.93	UION
ATOM	51710	CO+3	CO3	40	195.457	81.572	-33.328	0.38	49.93	UION	ATOM	51763	CO+3	CO3	93	214.391	126.842	82.200	0.23	49.93	UION
ATOM	51711	CO+3	CO3	41	237.660	129.574	17.377	0.49	49.93	UION	ATOM	51764	CO+3	CO3	94	243.857	105.664	47.628	0.36	49.93	UION
ATOM	51712	CO+3	CO3	42	114.130	64.770	18.137	0.65	49.93	UION	ATOM	51765	CO+3	CO3	95	202.316	115.973	10.199	0.72	49.93	UION
ATOM	51713	CO+3	CO3	43	231.424	124.338	-20.434	0.47	49.93	UION	ATOM	51766	CO+3	CO3	96	203.714	111.648	7.790	0.63	49.93	UION
ATOM	51714	CO+3	CO3	44	145.909	92.718	56.306	0.41	49.93	UION	ATOM	51767	CO+3	CO3	97	252.927	173.304	7.891	0.30	49.93	UION
ATOM	51715	CO+3	CO3	45	133.783	124.030	-57.968	0.61	49.93	UION	ATOM	51768	CO+3	CO3	98	260.086	139.387	-11.160	0.24	49.93	UION
ATOM	51716	CO+3	CO3	46	217.411	103.508	-78.485	0.42	49.93	UION	ATOM	51769	CO+3	CO3	99	162.890	53.335	-23.966	0.31	49.93	UION
ATOM	51717	CO+3	CO3	47	132.384	102.678	-38.661	0.57	49.93	UION	ATOM	51770	CO+3	CO3	100	112.563	36.260	-26.742	0.47	49.93	UION
ATOM	51718	CO+3	CO3	48	171.010	94.399	-49.834	0.86	49.93	UION	ATOM	51771	CO+3	CO3	101	120.953	35.444	-20.904	0.33	49.93	UION
ATOM	51719	CO+3	CO3	49	177.906	94.653	-53.133	0.78	49.93	UION	ATOM	51772	CO+3	CO3	102	128.509	40.125	-21.897	0.35	49.93	UION
ATOM	51720	CO+3	CO3	50	180.138	86.866	-56.929	0.69	49.93	UION	ATOM	51773	CO+3	CO3	103	141.210	49.206	-24.818	0.27	49.93	UION
ATOM	51721	CO+3	CO3	51	183.665	85.642	-60.731	0.38	49.93	UION	ATOM	51774	CO+3	CO3	104	171.587	67.035	-14.550	0.40	49.93	UION
ATOM	51722	CO+3	CO3	52	193.526	94.088	-70.396	0.36	49.93	UION	ATOM	51775	CO+3	CO3	107	177.941	106.398	-12.763	0.60	49.93	UION
ATOM	51723	CO+3	CO3	53	198.868	98.031	-54.675	0.53	49.93	UION	ATOM	51776	CO+3	CO3	108	98.701	25.921	-0.995	0.18	49.93	UION
ATOM	51724	CO+3	CO3	54	162.597	105.910	-38.822	0.81	49.93	UION	ATOM	51777	CO+3	CO3	109	86.428	44.664	-21.125	0.20	49.93	UION
ATOM	51725	CO+3	CO3	55	159.427	127.717	-45.150	0.65	49.93	UION	ATOM	51778	CO+3	CO3	110	129.990	57.474	-41.900	0.10	49.93	UION
ATOM	51726	CO+3	CO3	56	158.981	63.796	11.414	0.52	49.93	UION	ATOM	51779	CO+3	CO3	111	138.185	69.411	-43.171	0.28	49.93	UION
ATOM	51727	CO+3	CO3	57	111.447	63.057	25.276	0.38	49.93	UION	ATOM	51780	CO+3	CO3	112	138.606	95.111	-3.885	0.35	49.93	UION
ATOM	51728	CO+3	CO3	58	89.147	61.978	25.967	0.58	49.93	UION	ATOM	51781	CO+3	CO3	113	147.694	102.805	-3.972	0.54	49.93	UION
ATOM	51729	CO+3	CO3	59	166.821	109.189	17.060	0.71	49.93	UION	ATOM	51782	CO+3	CO3	114	114.212	51.772	-12.537	0.64	49.93	UION
ATOM	51730	CO+3	CO3	60	150.610	99.717	-8.807	0.69	49.93	UION	ATOM	51783	CO+3	CO3	115	138.573	49.038	9.987	0.50	49.93	UION
ATOM	51731	CO+3	CO3	61	179.874	108.850	-2.382	0.61	49.93	UION	ATOM	51784	CO+3	CO3	116	155.253	93.282	46.388	0.29	49.93	UION
ATOM	51732	CO+3	CO3	62	173.932	104.934	-25.312	0.57	49.93	UION	ATOM	51785	CO+3	CO3	117	186.908	101.314	22.601	0.54	49.93	UION
ATOM	51733	CO+3	CO3	63	159.181	105.991	-16.478	0.78	49.93	UION	ATOM	51786	CO+3	CO3	118	168.915	104.913	-25.911	0.75	49.93	UION
ATOM	51734	CO+3	CO3	64	144.235	68.008	3.206	0.41	49.93	UION	ATOM	51787	CO+3	CO3	119	125.400	110.966	-46.823	0.56	49.93	UION
ATOM	51735	CO+3	CO3	65	118.148	102.392	-26.542	0.65	49.93	UION	ATOM	51788	CO+3	CO3	120	112.151	109.944	-32.074	0.45	49.93	UION
ATOM	51736	CO+3	CO3	66	158.782	135.761	-59.522	0.39	49.93	UION	ATOM	51789	CO+3	CO3	121	122.564	90.091	2.035	0.47	49.93	UION
ATOM	51737	CO+3	CO3	67	152.241	118.432	-35.155	0.33	49.93	UION	ATOM	51790	CO+3	CO3	122	218.778	95.098	-58.860	0.55	49.93	UION
ATOM	51738	CO+3	CO3	68	165.824	127.340	-32.003	0.86	49.93	UION	ATOM	51791	CO+3	CO3	123	97.334	38.538	13.633	0.24	49.93	UION
ATOM	51739	CO+3	CO3	69	160.661	113.746	-25.879	0.33	49.93	UION	ATOM	51792	CO+3	CO3	124	168.160	92.079	-20.348	0.29	49.93	UION
ATOM	51740	CO+3	CO3	70	157.559	116.176	-16.180	0.40	49.93	UION	ATOM	51793	CO+3	CO3	125	168.019	78.251	-33.240	0.44	49.93	UION
ATOM	51741	CO+3	CO3	71	160.774	131.683	-23.075	0.49	49.93	UION	ATOM	51794	CO+3	CO3	126	167.213	74.605	-43.369	0.32	49.93	UION
ATOM	51742	CO+3	CO3	72	113.979	99.096	-21.219	0.36	49.93	UION	ATOM	51795	CO+3	CO3	127	143.687	56.842	0.974	0.43	49.93	UION
ATOM	51743	CO+3	CO3	73	168.165	90.638	-12.496	0.56	49.93	UION	ATOM	51796	CO+3	CO3	128	214.296	128.278	-1.556	0.26	49.93	UION
ATOM	51744	CO+3	CO3	74	204.860	123.730	-19.541	0.62	49.93	UION	ATOM	51797	CO+3	CO3	129	205.227	139.919	-7.094	0.34	49.93	UION
ATOM	51745	CO+3	CO3	75	222.570	126.803	-21.385	0.75	49.93	UION	ATOM	51798	CO+3	CO3	130	204.501	143.900	0.062	0.57	49.93	UION
ATOM	51746	CO+3	CO3	76	217.164	136.234	-12.409	0.62	49.93	UION	ATOM	51799	CO+3	CO3	131	165.233	126.450	-18.495	0.40	49.93	UION

ATOM	51800	CO+3	CO3	132	170.992	125.033	-16.533	0.60	49.93	UION
ATOM	51801	CO+3	CO3	133	197.383	136.804	-14.655	0.68	49.93	UION
ATOM	51802	CO+3	CO3	134	194.608	144.006	-5.548	0.51	49.93	UION
ATOM	51803	CO+3	CO3	135	183.984	133.453	-16.584	0.38	49.93	UION
ATOM	51804	CO+3	CO3	136	144.102	73.389	-21.540	0.43	49.93	UION
ATOM	51805	CO+3	CO3	137	228.753	111.701	13.443	0.63	49.93	UION
ATOM	51806	CO+3	CO3	138	263.987	135.499	17.651	0.37	49.93	UION
ATOM	51807	CO+3	CO3	139	125.858	69.034	-17.434	0.32	49.93	UION
ATOM	51808	CO+3	CO3	140	89.920	47.873	8.791	0.29	49.93	UION
ATOM	51809	CO+3	CO3	141	109.249	74.451	-15.908	0.34	49.93	UION
ATOM	51810	CO+3	CO3	142	173.414	89.399	-34.988	0.52	49.93	UION
ATOM	51811	CO+3	CO3	143	223.488	108.774	0.543	0.41	49.93	UION
ATOM	51812	CO+3	CO3	144	222.785	108.033	10.857	0.40	49.93	UION
ATOM	51813	CO+3	CO3	145	187.884	104.374	13.727	0.37	49.93	UION
ATOM	51814	CO+3	CO3	146	193.482	122.613	-19.821	0.55	49.93	UION
ATOM	51815	CO+3	CO3	147	203.425	105.707	-30.464	0.51	49.93	UION
ATOM	51816	CO+3	CO3	148	187.885	125.187	-17.581	0.34	49.93	UION
ATOM	51817	CO+3	CO3	149	186.374	103.747	-43.065	0.63	49.93	UION
ATOM	51818	CO+3	CO3	150	188.686	108.241	30.251	0.23	49.93	UION
ATOM	51819	CO+3	CO3	151	165.186	88.373	4.568	0.29	49.93	UION
ATOM	51820	CO+3	CO3	152	196.074	103.013	-26.824	0.77	49.93	UION
ATOM	51821	CO+3	CO3	153	112.670	41.286	13.572	0.53	49.93	UION
ATOM	51822	CO+3	CO3	154	139.007	77.254	23.771	0.56	49.93	UION
ATOM	51823	CO+3	CO3	155	157.997	76.310	26.748	0.49	49.93	UION
ATOM	51824	CO+3	CO3	156	148.803	104.217	4.779	0.32	49.93	UION
ATOM	51825	CO+3	CO3	157	177.311	98.154	22.180	0.39	49.93	UION
ATOM	51826	CO+3	CO3	158	96.097	63.765	-1.802	0.40	49.93	UION
ATOM	51827	CO+3	CO3	159	95.607	32.867	-0.182	0.46	49.93	UION
ATOM	51828	CO+3	CO3	160	112.048	24.749	-3.434	0.53	49.93	UION
ATOM	51829	CO+3	CO3	161	91.969	45.413	-15.082	0.56	49.93	UION
ATOM	51830	CO+3	CO3	162	84.370	54.967	-18.909	0.18	49.93	UION
ATOM	51831	CO+3	CO3	163	89.554	59.974	-26.225	0.35	49.93	UION
ATOM	51832	CO+3	CO3	164	94.937	66.260	-28.035	0.32	49.93	UION
ATOM	51833	CO+3	CO3	165	98.691	71.799	-31.553	0.26	49.93	UION
ATOM	51834	CO+3	CO3	166	172.185	93.311	17.557	0.56	49.93	UION
ATOM	51835	CO+3	CO3	167	144.258	70.486	-7.629	0.73	49.93	UION
ATOM	51836	CO+3	CO3	168	136.932	88.530	-6.094	0.46	49.93	UION
ATOM	51837	CO+3	CO3	169	134.725	54.534	5.418	0.72	49.93	UION
ATOM	51838	CO+3	CO3	170	118.526	64.140	20.211	0.43	49.93	UION
ATOM	51839	CO+3	CO3	171	153.796	102.963	45.709	0.55	49.93	UION
ATOM	51840	CO+3	CO3	172	171.745	99.004	14.955	0.45	49.93	UION
ATOM	51841	CO+3	CO3	173	126.226	66.159	1.399	0.42	49.93	UION
ATOM	51842	CO+3	CO3	174	205.054	104.714	-67.604	0.30	49.93	UION
ATOM	51843	CO+3	CO3	175	201.977	108.050	-74.278	0.37	49.93	UION
ATOM	51844	CO+3	CO3	176	190.539	86.390	-66.144	0.44	49.93	UION
ATOM	51845	CO+3	CO3	177	172.768	91.757	-57.334	0.53	49.93	UION
ATOM	51846	CO+3	CO3	178	196.668	91.530	-40.732	0.70	49.93	UION
ATOM	51847	CO+3	CO3	179	178.446	112.017	-18.622	0.43	49.93	UION
ATOM	51848	CO+3	CO3	180	106.761	72.430	-9.156	0.48	49.93	UION
ATOM	51849	CO+3	CO3	181	222.609	98.357	11.653	0.44	49.93	UION
ATOM	51850	CO+3	CO3	182	205.808	110.455	33.297	0.27	49.93	UION
ATOM	51851	CO+3	CO3	183	202.758	119.704	13.280	0.49	49.93	UION
ATOM	51852	CO+3	CO3	184	190.747	130.245	-13.625	0.30	49.93	UION
ATOM	51853	CO+3	CO3	185	193.195	126.163	-16.330	0.09	49.93	UION
ATOM	51854	CO+3	CO3	186	255.175	124.260	-4.375	0.60	49.93	UION
ATOM	51855	CO+3	CO3	187	188.033	109.248	-29.700	0.44	49.93	UION
ATOM	51856	CO+3	CO3	188	186.076	96.260	-29.703	0.31	49.93	UION
END										

TABLE 2 - ANTIBIOTICS COORDINATES

```
REMARK coordinates from individual occupancy refinement
REMARK refinement resolution: 99 - 3.0 A
REMARK starting r= 0.2442 free_r= 0.2822
REMARK final    r= 0.2442 free_r= 0.2822
REMARK wa= 3.4035
REMARK target= mlf  steps= 30
REMARK sg= P4(1)2(1)2 a= 401.375 b= 401.375 c= 175.887 alpha= 90 beta= 90 gamma=
90
REMARK parameter file 1  : CNS_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNS_TOPPAR:dna-rna_rep.param
REMARK parameter file 3  : CNS_TOPPAR:ion.param
REMARK molecular structure file: generate.mtf
REMARK input coordinates: b2.pdb
REMARK reflection file= cns_refine.hkl
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 3.0
REMARK initial B-factor correction applied to fobs :
REMARK   B11=   5.527 B22=   5.527 B33= -11.054
REMARK   B12=   0.000 B13=   0.000 B23=   0.000
REMARK B-factor correction applied to coordinate array B:    0.659
REMARK bulk solvent: density level= 0.393539 e/A^3, B-factor= 122.339 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:    283454 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):  24238 (   8.6 % )
REMARK number of reflections rejected:                            0 (   0.0 % )
REMARK total number of reflections used:                     259216 (  91.4 % )
REMARK number of reflections in working set:                 246012 (  86.8 % )
REMARK number of reflections in test set:                     13204 (   4.7 % )
CRYST1  401.375  401.375  175.887  90.00  90.00  90.00 P 41 21 2
REMARK FILENAME="/ramakgrp0/ribo/cnsrefine/23Jun00/bo/occmetals2.pdb"
REMARK DATE:24-Jun-00  06:59:52       created by user: root
REMARK VERSION:1.0
ATOM      1  CB  ALA     1     216.901 118.999  27.956  1.00 35.93      NS14
ATOM      2  C   ALA     1     217.253 117.339  29.777  1.00 88.25      NS14
ATOM      3  O   ALA     1     216.348 117.920  30.381  1.00 88.25      NS14
ATOM      4  N   ALA     1     217.992 116.788  27.546  1.00 88.25      NS14
ATOM      5  CA  ALA     1     217.834 117.912  28.511  1.00 88.25      NS14
ATOM      6  N   ARG     2     217.759 116.176  30.163  1.00 86.03      NS14
ATOM      7  CA  ARG     2     217.291 115.555  31.381  1.00 86.03      NS14
ATOM      8  CB  ARG     2     218.058 114.261  31.656  1.00 77.55      NS14
ATOM      9  CG  ARG     2     217.789 113.157  30.654  1.00 77.55      NS14
ATOM     10  CD  ARG     2     218.899 113.023  29.621  1.00 77.55      NS14
ATOM     11  NE  ARG     2     220.004 112.174  30.068  1.00 77.55      NS14
ATOM     12  CZ  ARG     2     220.921 112.529  30.964  1.00 77.55      NS14
ATOM     13  NH1 ARG     2     220.882 113.724  31.527  1.00 77.55      NS14
ATOM     14  NH2 ARG     2     221.887 111.687  31.298  1.00 77.55      NS14
ATOM     15  C   ARG     2     217.529 116.556  32.508  1.00 86.03      NS14
ATOM     16  O   ARG     2     218.612 117.130  32.614  1.00 86.03      NS14
ATOM     17  N   LYS     3     216.499 116.793  33.318  1.00 72.53      NS14
ATOM     18  CA  LYS     3     216.598 117.702  34.449  1.00 72.53      NS14
ATOM     19  CB  LYS     3     215.440 117.435  35.409  1.00109.78      NS14
ATOM     20  CG  LYS     3     215.235 118.476  36.488  1.00109.78      NS14
ATOM     21  CD  LYS     3     214.015 118.120  37.327  1.00109.78      NS14
ATOM     22  CE  LYS     3     213.649 119.229  38.302  1.00109.78      NS14
ATOM     23  NZ  LYS     3     212.468 118.871  39.150  1.00109.78      NS14
ATOM     24  C   LYS     3     217.915 117.303  35.088  1.00 72.53      NS14
ATOM     25  O   LYS     3     218.760 118.140  35.416  1.00 72.53      NS14
ATOM     26  N   ALA     4     218.084 115.992  35.204  1.00 73.22      NS14
ATOM     27  CA  ALA     4     219.269 115.385  35.785  1.00 73.22      NS14
ATOM     28  CB  ALA     4     219.273 113.895  35.486  1.00 96.23      NS14
ATOM     29  C   ALA     4     220.593 115.997  35.347  1.00 73.22      NS14
ATOM     30  O   ALA     4     221.456 116.238  36.192  1.00 73.22      NS14
ATOM     31  N   LEU     5     220.771 116.236  34.046  1.00 84.81      NS14
ATOM     32  CA  LEU     5     222.032 116.804  33.573  1.00 84.81      NS14
ATOM     33  CB  LEU     5     222.457 116.215  32.213  1.00 79.33      NS14
ATOM     34  CG  LEU     5     221.704 116.384  30.891  1.00 79.33      NS14
ATOM     35  CD1 LEU     5     221.474 117.845  30.563  1.00 79.33      NS14
ATOM     36  CD2 LEU     5     222.523 115.725  29.804  1.00 79.33      NS14
ATOM     37  C   LEU     5     222.074 118.323  33.526  1.00 84.81      NS14
ATOM     38  O   LEU     5     222.961 118.911  32.906  1.00 84.81      NS14
ATOM     39  N   ILE     6     221.102 118.961  34.165  1.00 88.34      NS14
ATOM     40  CA  ILE     6     221.114 120.412  34.255  1.00 88.34      NS14
ATOM     41  CB  ILE     6     219.716 120.993  34.513  1.00 80.48      NS14
ATOM     42  CG2 ILE     6     219.809 122.511  34.597  1.00 80.48      NS14
ATOM     43  CG1 ILE     6     218.761 120.611  33.378  1.00 80.48      NS14
ATOM     44  CD1 ILE     6     218.898 121.470  32.143  1.00 80.48      NS14
ATOM     45  C   ILE     6     221.973 120.558  35.514  1.00 88.34      NS14
ATOM     46  O   ILE     6     221.601 121.214  36.491  1.00 88.34      NS14
ATOM     47  N   GLU     7     223.112 119.869  35.470  1.00138.63      NS14
ATOM     48  CA  GLU     7     224.100 119.829  36.542  1.00138.63      NS14
ATOM     49  CB  GLU     7     224.722 118.434  36.627  1.00104.71      NS14
ATOM     50  CG  GLU     7     225.674 118.143  35.463  1.00104.71      NS14
ATOM     51  CD  GLU     7     226.153 116.699  35.410  1.00104.71      NS14
ATOM     52  OE1 GLU     7     225.302 115.790  35.348  1.00104.71      NS14
ATOM     53  OE2 GLU     7     227.382 116.469  35.420  1.00104.71      NS14
ATOM     54  C   GLU     7     225.199 120.824  36.205  1.00138.63      NS14
ATOM     55  O   GLU     7     226.238 120.850  36.856  1.00138.63      NS14
ATOM     56  N   LYS     8     224.979 121.620  35.166  1.00124.96      NS14
ATOM     57  CA  LYS     8     225.963 122.611  34.764  1.00124.96      NS14
ATOM     58  CB  LYS     8     225.371 123.548  33.709  1.00120.52      NS14
ATOM     59  CG  LYS     8     226.405 124.322  32.897  1.00120.52      NS14
ATOM     60  CD  LYS     8     227.266 125.237  33.758  1.00120.52      NS14
ATOM     61  CE  LYS     8     228.383 125.856  32.944  1.00120.52      NS14
ATOM     62  NZ  LYS     8     227.834 126.668  31.830  1.00120.52      NS14
ATOM     63  C   LYS     8     226.323 123.406  36.012  1.00124.96      NS14
ATOM     64  O   LYS     8     227.440 123.910  36.150  1.00124.96      NS14
ATOM     65  N   ALA     9     225.366 123.492  36.928  1.00120.73      NS14
ATOM     66  CA  ALA     9     225.548 124.230  38.168  1.00120.73      NS14
ATOM     67  CB  ALA     9     224.191 124.541  38.778  1.00 90.23      NS14
ATOM     68  C   ALA     9     226.433 123.528  39.198  1.00120.73      NS14
ATOM     69  O   ALA     9     226.962 124.179  40.101  1.00120.73      NS14
ATOM     70  N   LYS    10     226.598 122.212  39.067  1.00152.57      NS14
ATOM     71  CA  LYS    10     227.419 121.449  40.012  1.00152.57      NS14
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ATOM	72	CB	LYS	10	227.482	119.969	39.615	1.00136.55	NS14	ATOM	125	CA	LYS	16	237.241	123.470	34.999	1.00 70.49	NS14
ATOM	73	CG	LYS	10	226.161	119.233	39.784	1.00136.55	NS14	ATOM	126	CB	LYS	16	238.105	124.719	35.209	1.00 86.81	NS14
ATOM	74	CD	LYS	10	226.337	117.913	40.515	1.00136.55	NS14	ATOM	127	CG	LYS	16	238.383	125.552	33.965	1.00 86.81	NS14
ATOM	75	CE	LYS	10	224.997	117.209	40.661	1.00136.55	NS14	ATOM	128	CD	LYS	16	237.265	126.537	33.676	1.00 86.81	NS14
ATOM	76	NZ	LYS	10	225.101	115.910	41.383	1.00136.55	NS14	ATOM	129	CE	LYS	16	237.158	127.587	34.769	1.00 86.81	NS14
ATOM	77	C	LYS	10	228.832	121.998	40.144	1.00152.57	NS14	ATOM	130	NZ	LYS	16	236.152	128.636	34.441	1.00 86.81	NS14
ATOM	78	O	LYS	10	229.681	121.415	40.823	1.00152.57	NS14	ATOM	131	C	LYS	16	237.017	123.221	33.509	1.00 70.49	NS14
ATOM	79	N	ARG	11	229.076	123.123	39.485	1.00100.65	NS14	ATOM	132	O	LYS	16	236.133	123.820	32.890	1.00 70.49	NS14
ATOM	80	CA	ARG	11	230.367	123.783	39.535	1.00100.65	NS14	ATOM	133	N	VAL	17	237.815	122.330	32.935	1.00110.36	NS14
ATOM	81	CB	ARG	11	230.514	124.541	40.858	1.00163.88	NS14	ATOM	134	CA	VAL	17	237.702	122.031	31.518	1.00110.36	NS14
ATOM	82	CG	ARG	11	230.272	126.031	40.716	1.00163.88	NS14	ATOM	135	CB	VAL	17	238.842	121.076	31.070	1.00 65.17	NS14
ATOM	83	CD	ARG	11	231.362	126.674	39.859	1.00163.88	NS14	ATOM	136	CG1	VAL	17	238.544	119.651	31.512	1.00 65.17	NS14
ATOM	84	NE	ARG	11	230.847	127.790	39.073	1.00163.88	NS14	ATOM	137	CG2	VAL	17	239.047	121.176	29.562	1.00 65.17	NS14
ATOM	85	CZ	ARG	11	230.014	127.654	38.045	1.00163.88	NS14	ATOM	138	C	VAL	17	236.323	121.456	31.158	1.00110.36	NS14
ATOM	86	NH1	ARG	11	229.605	126.446	37.675	1.00163.88	NS14	ATOM	139	O	VAL	17	235.865	121.620	30.031	1.00110.36	NS14
ATOM	87	NH2	ARG	11	229.580	128.724	37.393	1.00163.88	NS14	ATOM	140	N	ARG	18	235.664	120.789	32.108	1.00 74.81	NS14
ATOM	88	C	ARG	11	231.595	122.911	39.315	1.00100.65	NS14	ATOM	141	CA	ARG	18	234.319	120.241	31.876	1.00 74.81	NS14
ATOM	89	O	ARG	11	231.976	122.097	40.165	1.00100.65	NS14	ATOM	142	CB	ARG	18	234.033	119.034	32.778	1.00 48.60	NS14
ATOM	90	N	THR	12	232.198	123.102	38.145	1.00 89.90	NS14	ATOM	143	CG	ARG	18	235.117	117.971	32.801	1.00 48.60	NS14
ATOM	91	CA	THR	12	233.417	122.417	37.752	1.00 89.90	NS14	ATOM	144	CD	ARG	18	234.740	116.746	33.655	1.00 48.60	NS14
ATOM	92	CB	THR	12	234.643	123.183	38.319	1.00142.75	NS14	ATOM	145	NE	ARG	18	235.789	115.719	33.613	1.00 48.60	NS14
ATOM	93	OG1	THR	12	234.626	124.535	37.838	1.00142.75	NS14	ATOM	146	CZ	ARG	18	235.762	114.564	34.283	1.00 48.60	NS14
ATOM	94	CG2	THR	12	235.947	122.511	37.913	1.00142.75	NS14	ATOM	147	NH1	ARG	18	234.736	114.248	35.062	1.00 48.60	NS14
ATOM	95	C	THR	12	233.504	120.957	38.185	1.00 89.90	NS14	ATOM	148	NH2	ARG	18	236.780	113.722	34.196	1.00 48.60	NS14
ATOM	96	O	THR	12	234.281	120.623	39.080	1.00 89.90	NS14	ATOM	149	C	ARG	18	233.360	121.361	32.268	1.00 74.81	NS14
ATOM	97	N	PRO	13	232.707	120.070	37.560	1.00176.76	NS14	ATOM	150	O	ARG	18	233.366	121.797	33.413	1.00 74.81	NS14
ATOM	98	CD	PRO	13	231.830	120.276	36.396	1.00139.67	NS14	ATOM	151	N	ALA	19	232.539	121.836	31.341	1.00 77.43	NS14
ATOM	99	CA	PRO	13	232.754	118.651	37.931	1.00176.76	NS14	ATOM	152	CA	ALA	19	231.619	122.921	31.668	1.00 77.43	NS14
ATOM	100	CB	PRO	13	231.840	117.984	36.897	1.00139.67	NS14	ATOM	153	CB	ALA	19	232.404	124.113	32.141	1.00 24.70	NS14
ATOM	101	CG	PRO	13	231.886	118.923	35.729	1.00139.67	NS14	ATOM	154	C	ALA	19	230.773	123.325	30.476	1.00 77.43	NS14
ATOM	102	C	PRO	13	234.198	118.159	37.861	1.00176.76	NS14	ATOM	155	O	ALA	19	231.079	124.326	29.839	1.00 77.43	NS14
ATOM	103	O	PRO	13	234.618	117.541	36.880	1.00176.76	NS14	ATOM	156	N	TYR	20	229.705	122.574	30.201	1.00107.02	NS14
ATOM	104	N	LYS	14	234.936	118.464	38.926	1.00111.74	NS14	ATOM	157	CA	TYR	20	228.848	122.858	29.054	1.00107.02	NS14
ATOM	105	CA	LYS	14	236.344	118.134	39.080	1.00111.74	NS14	ATOM	158	CB	TYR	20	227.448	122.214	29.157	1.00 99.35	NS14
ATOM	106	CB	LYS	14	236.655	116.748	38.506	1.00121.24	NS14	ATOM	159	CG	TYR	20	227.278	120.955	29.971	1.00 99.35	NS14
ATOM	107	CG	LYS	14	235.966	115.589	39.212	1.00121.24	NS14	ATOM	160	CD1	TYR	20	228.359	120.325	30.576	1.00 99.35	NS14
ATOM	108	CD	LYS	14	236.529	114.257	38.719	1.00121.24	NS14	ATOM	161	CE1	TYR	20	228.178	119.204	31.385	1.00 99.35	NS14
ATOM	109	CE	LYS	14	235.839	113.052	39.359	1.00121.24	NS14	ATOM	162	CD2	TYR	20	226.001	120.426	30.184	1.00 99.35	NS14
ATOM	110	NZ	LYS	14	234.428	112.886	38.899	1.00121.24	NS14	ATOM	163	CE2	TYR	20	225.804	119.304	30.987	1.00 99.35	NS14
ATOM	111	C	LYS	14	237.214	119.198	38.403	1.00111.74	NS14	ATOM	164	CZ	TYR	20	226.900	118.699	31.590	1.00 99.35	NS14
ATOM	112	O	LYS	14	237.717	120.105	39.063	1.00111.74	NS14	ATOM	165	OH	TYR	20	226.734	117.599	32.406	1.00 99.35	NS14
ATOM	113	N	PHE	15	237.366	119.112	37.087	1.00 71.93	NS14	ATOM	166	C	TYR	20	228.622	124.349	28.846	1.00107.02	NS14
ATOM	114	CA	PHE	15	238.204	120.061	36.372	1.00 71.93	NS14	ATOM	167	O	TYR	20	229.512	125.081	28.417	1.00107.02	NS14
ATOM	115	CB	PHE	15	239.122	119.293	35.444	1.00 70.68	NS14	ATOM	168	N	THR	21	227.402	124.767	29.164	1.00 81.80	NS14
ATOM	116	CG	PHE	15	239.460	117.934	35.953	1.00 70.68	NS14	ATOM	169	CA	THR	21	226.907	126.126	29.011	1.00 81.80	NS14
ATOM	117	CD1	PHE	15	238.541	116.899	35.859	1.00 70.68	NS14	ATOM	170	CB	THR	21	227.807	126.973	28.090	1.00 55.06	NS14
ATOM	118	CD2	PHE	15	240.684	117.688	36.551	1.00 70.68	NS14	ATOM	171	OG1	THR	21	228.802	127.604	28.889	1.00 55.06	NS14
ATOM	119	CE1	PHE	15	238.837	115.633	36.355	1.00 70.68	NS14	ATOM	172	CG2	THR	21	227.027	128.040	27.337	1.00 55.06	NS14
ATOM	120	CE2	PHE	15	240.994	116.429	37.050	1.00 70.68	NS14	ATOM	173	C	THR	21	225.566	125.908	28.343	1.00 81.80	NS14
ATOM	121	CZ	PHE	15	240.067	115.398	36.951	1.00 70.68	NS14	ATOM	174	O	THR	21	225.500	125.707	27.130	1.00 81.80	NS14
ATOM	122	C	PHE	15	237.416	121.102	35.597	1.00 71.93	NS14	ATOM	175	N	ARG	22	224.499	125.911	29.134	1.00 60.77	NS14
ATOM	123	O	PHE	15	236.420	120.790	34.958	1.00 71.93	NS14	ATOM	176	CA	ARG	22	223.172	125.702	28.586	1.00 60.77	NS14
ATOM	124	N	LYS	16	237.876	122.344	35.672	1.00 70.49	NS14	ATOM	177	CB	ARG	22	222.436	124.645	29.385	1.00 50.52	NS14

ATOM	178	CG	ARG	22	223.144	123.328	29.391	1.00	50.52	NS14	ATOM	231	N	ALA	29	221.716	124.064	25.287	1.00	58.03	NS14
ATOM	179	CD	ARG	22	222.368	122.291	30.137	1.00	50.52	NS14	ATOM	232	CA	ALA	29	223.125	123.664	25.333	1.00	58.03	NS14
ATOM	180	NE	ARG	22	222.953	120.990	29.881	1.00	50.52	NS14	ATOM	233	CB	ALA	29	223.325	122.584	26.377	1.00	73.69	NS14
ATOM	181	CZ	ARG	22	222.644	120.239	28.836	1.00	50.52	NS14	ATOM	234	C	ALA	29	223.707	123.175	24.013	1.00	58.03	NS14
ATOM	182	NH1	ARG	22	221.737	120.669	27.962	1.00	50.52	NS14	ATOM	235	O	ALA	29	224.594	122.335	24.021	1.00	58.03	NS14
ATOM	183	NH2	ARG	22	223.260	119.072	28.661	1.00	50.52	NS14	ATOM	236	N	ARG	30	223.221	123.680	22.886	1.00	76.78	NS14
ATOM	184	C	ARG	22	222.362	126.973	28.568	1.00	60.77	NS14	ATOM	237	CA	ARG	30	223.755	123.225	21.614	1.00	76.78	NS14
ATOM	185	O	ARG	22	222.767	127.990	29.125	1.00	60.77	NS14	ATOM	238	CB	ARG	30	222.796	122.236	20.949	1.00	47.30	NS14
ATOM	186	N	CYS	23	221.207	126.900	27.922	1.00	82.26	NS14	ATOM	239	CG	ARG	30	223.274	121.692	19.595	1.00	47.30	NS14
ATOM	187	CA	CYS	23	220.326	128.043	27.803	1.00	82.26	NS14	ATOM	240	CD	ARG	30	224.507	120.788	19.688	1.00	47.30	NS14
ATOM	188	CB	CYS	23	219.326	127.821	26.654	1.00	56.71	NS14	ATOM	241	NE	ARG	30	224.155	119.381	19.835	1.00	47.30	NS14
ATOM	189	SG	CYS	23	218.233	129.245	26.281	1.00	56.71	NS14	ATOM	242	CZ	ARG	30	224.932	118.374	19.448	1.00	47.30	NS14
ATOM	190	C	CYS	23	219.561	128.297	29.091	1.00	82.26	NS14	ATOM	243	NH1	ARG	30	226.111	118.616	18.888	1.00	47.30	NS14
ATOM	191	O	CYS	23	218.999	127.376	29.690	1.00	82.26	NS14	ATOM	244	NH2	ARG	30	224.530	117.121	19.616	1.00	47.30	NS14
ATOM	192	N	VAL	24	219.582	129.545	29.539	1.00	93.15	NS14	ATOM	245	C	ARG	30	224.047	124.371	20.667	1.00	76.78	NS14
ATOM	193	CA	VAL	24	218.809	129.924	30.704	1.00	93.15	NS14	ATOM	246	O	ARG	30	224.692	124.176	19.638	1.00	76.78	NS14
ATOM	194	CB	VAL	24	219.065	131.372	31.095	1.00	93.79	NS14	ATOM	247	N	SER	31	223.580	125.566	21.001	1.00	47.03	NS14
ATOM	195	CG1	VAL	24	218.278	131.699	32.333	1.00	93.79	NS14	ATOM	248	CA	SER	31	223.860	126.713	20.148	1.00	47.03	NS14
ATOM	196	CG2	VAL	24	220.538	131.604	31.302	1.00	93.79	NS14	ATOM	249	CB	SER	31	223.081	126.589	18.839	1.00	50.44	NS14
ATOM	197	C	VAL	24	217.468	129.862	30.000	1.00	93.15	NS14	ATOM	250	OG	SER	31	223.704	127.333	17.802	1.00	50.44	NS14
ATOM	198	O	VAL	24	217.288	130.548	28.993	1.00	93.15	NS14	ATOM	251	C	SER	31	223.458	127.971	20.903	1.00	47.03	NS14
ATOM	199	N	ARG	25	216.539	129.050	30.493	1.00	93.08	NS14	ATOM	252	O	SER	31	222.812	128.870	20.358	1.00	47.03	NS14
ATOM	200	CA	ARG	25	215.244	128.901	29.819	1.00	93.08	NS14	ATOM	253	N	VAL	32	223.880	128.018	22.164	1.00	89.06	NS14
ATOM	201	CB	ARG	25	214.777	130.225	29.212	1.00	67.15	NS14	ATOM	254	CA	VAL	32	223.565	129.089	23.107	1.00	89.06	NS14
ATOM	202	CG	ARG	25	213.984	130.060	27.937	1.00	67.15	NS14	ATOM	255	CB	VAL	32	224.292	128.843	24.419	1.00	57.89	NS14
ATOM	203	CD	ARG	25	213.407	131.377	27.448	1.00	67.15	NS14	ATOM	256	CG1	VAL	32	223.650	127.676	25.155	1.00	57.89	NS14
ATOM	204	NE	ARG	25	212.333	131.130	26.484	1.00	67.15	NS14	ATOM	257	CG2	VAL	32	225.755	128.558	24.127	1.00	57.89	NS14
ATOM	205	CZ	ARG	25	211.491	132.058	26.044	1.00	67.15	NS14	ATOM	258	C	VAL	32	223.724	130.572	22.775	1.00	89.06	NS14
ATOM	206	NH1	ARG	25	211.599	133.298	26.486	1.00	67.15	NS14	ATOM	259	O	VAL	32	222.748	131.228	22.435	1.00	89.06	NS14
ATOM	207	NH2	ARG	25	210.546	131.747	25.166	1.00	67.15	NS14	ATOM	260	N	TYR	33	224.938	131.096	22.913	1.00	66.64	NS14
ATOM	208	C	ARG	25	215.470	127.910	28.693	1.00	93.08	NS14	ATOM	261	CA	TYR	33	225.269	132.519	22.686	1.00	66.64	NS14
ATOM	209	O	ARG	25	216.278	128.172	27.805	1.00	93.08	NS14	ATOM	262	CB	TYR	33	224.104	133.337	22.109	1.00	62.91	NS14
ATOM	210	N	CYS	26	214.762	126.784	28.724	1.00	49.90	NS14	ATOM	263	CG	TYR	33	223.934	133.234	20.605	1.00	62.91	NS14
ATOM	211	CA	CYS	26	214.916	125.748	27.692	1.00	49.90	NS14	ATOM	264	CD1	TYR	33	223.482	132.059	20.007	1.00	62.91	NS14
ATOM	212	CB	CYS	26	215.248	126.393	26.338	1.00	49.88	NS14	ATOM	265	CE1	TYR	33	223.326	131.961	18.636	1.00	62.91	NS14
ATOM	213	SG	CYS	26	216.233	125.418	25.207	1.00	49.88	NS14	ATOM	266	CD2	TYR	33	224.225	134.312	19.780	1.00	62.91	NS14
ATOM	214	C	CYS	26	215.995	124.746	28.107	1.00	49.90	NS14	ATOM	267	CE2	TYR	33	224.072	134.223	18.404	1.00	62.91	NS14
ATOM	215	O	CYS	26	215.735	123.544	28.187	1.00	49.90	NS14	ATOM	268	CZ	TYR	33	223.623	133.045	17.839	1.00	62.91	NS14
ATOM	216	N	GLY	27	217.201	125.243	28.382	1.00	57.15	NS14	ATOM	269	OH	TYR	33	223.481	132.946	16.472	1.00	62.91	NS14
ATOM	217	CA	GLY	27	218.284	124.374	28.827	1.00	57.15	NS14	ATOM	270	C	TYR	33	225.611	133.081	24.053	1.00	66.64	NS14
ATOM	218	C	GLY	27	219.030	123.726	27.687	1.00	57.15	NS14	ATOM	271	O	TYR	33	224.819	132.988	24.977	1.00	66.64	NS14
ATOM	219	O	GLY	27	219.857	122.834	27.896	1.00	57.15	NS14	ATOM	272	N	ARG	34	226.791	133.667	24.183	1.00	59.94	NS14
ATOM	220	N	ARG	28	218.735	124.212	26.484	1.00	135.54	NS14	ATOM	273	CA	ARG	34	227.227	134.194	25.459	1.00	59.94	NS14
ATOM	221	CA	ARG	28	219.309	123.731	25.232	1.00	135.54	NS14	ATOM	274	CB	ARG	34	228.732	134.437	25.427	1.00	64.73	NS14
ATOM	222	CB	ARG	28	219.250	124.841	24.176	1.00	61.14	NS14	ATOM	275	CG	ARG	34	229.579	133.181	25.292	1.00	64.73	NS14
ATOM	223	CG	ARG	28	219.659	124.362	22.808	1.00	61.14	NS14	ATOM	276	CD	ARG	34	231.013	133.580	24.967	1.00	64.73	NS14
ATOM	224	CD	ARG	28	218.725	123.251	22.355	1.00	61.14	NS14	ATOM	277	NE	ARG	34	231.986	132.496	25.110	1.00	64.73	NS14
ATOM	225	NE	ARG	28	219.203	122.619	21.133	1.00	61.14	NS14	ATOM	278	CZ	ARG	34	233.274	132.616	24.792	1.00	64.73	NS14
ATOM	226	CZ	ARG	28	219.323	123.238	19.965	1.00	61.14	NS14	ATOM	279	NH1	ARG	34	233.728	133.767	24.314	1.00	64.73	NS14
ATOM	227	NH1	ARG	28	218.999	124.514	19.853	1.00	61.14	NS14	ATOM	280	NH2	ARG	34	234.111	131.596	24.954	1.00	64.73	NS14
ATOM	228	NH2	ARG	28	219.768	122.572	18.914	1.00	61.14	NS14	ATOM	281	C	ARG	34	226.515	135.467	25.880	1.00	59.94	NS14
ATOM	229	C	ARG	28	220.730	123.173	25.291	1.00	135.54	NS14	ATOM	282	O	ARG	34	226.040	135.571	27.009	1.00	59.94	NS14
ATOM	230	O	ARG	28	220.926	121.957	25.312	1.00	135.54	NS14	ATOM	283	N	PHE	35	226.433	136.436	24.980	1.00	59.71	NS14

ATOM	284	CA	PHE	35	225.793	137.696	25.317	1.00	59.71	NS14	ATOM	337	CG2	ILE	41	213.796	128.000	19.967	1.00	26.22	NS14
ATOM	285	CB	PHE	35	225.503	138.496	24.072	1.00	44.20	NS14	ATOM	338	CG1	ILE	41	215.776	127.301	18.616	1.00	26.22	NS14
ATOM	286	CG	PHE	35	225.367	139.948	24.325	1.00	44.20	NS14	ATOM	339	CD1	ILE	41	215.516	125.834	18.974	1.00	26.22	NS14
ATOM	287	CD1	PHE	35	224.113	140.546	24.355	1.00	44.20	NS14	ATOM	340	C	ILE	41	214.900	130.636	20.302	1.00	51.17	NS14
ATOM	288	CD2	PHE	35	226.499	140.734	24.511	1.00	44.20	NS14	ATOM	341	O	ILE	41	214.078	131.529	20.118	1.00	51.17	NS14
ATOM	289	CE1	PHE	35	223.986	141.914	24.558	1.00	44.20	NS14	ATOM	342	N	CYS	42	215.426	130.351	21.496	1.00	45.49	NS14
ATOM	290	CE2	PHE	35	226.389	142.104	24.716	1.00	44.20	NS14	ATOM	343	CA	CYS	42	215.093	131.113	22.692	1.00	45.49	NS14
ATOM	291	CZ	PHE	35	225.132	142.698	24.738	1.00	44.20	NS14	ATOM	344	CB	CYS	42	215.929	130.614	23.866	1.00	40.13	NS14
ATOM	292	C	PHE	35	224.517	137.504	26.113	1.00	59.71	NS14	ATOM	345	SG	CYS	42	215.265	129.085	24.499	1.00	40.13	NS14
ATOM	293	O	PHE	35	224.228	138.308	26.987	1.00	59.71	NS14	ATOM	346	C	CYS	42	215.342	132.581	22.416	1.00	45.49	NS14
ATOM	294	N	PHE	36	223.741	136.465	25.802	1.00	46.82	NS14	ATOM	347	O	CYS	42	214.511	133.429	22.724	1.00	45.49	NS14
ATOM	295	CA	PHE	36	222.525	136.161	26.565	1.00	46.82	NS14	ATOM	348	N	LEU	43	216.489	132.870	21.811	1.00	47.84	NS14
ATOM	296	CB	PHE	36	221.240	136.236	25.733	1.00	45.91	NS14	ATOM	349	CA	LEU	43	216.826	134.233	21.447	1.00	47.84	NS14
ATOM	297	CG	PHE	36	221.297	137.178	24.569	1.00	45.91	NS14	ATOM	350	CB	LEU	43	218.296	134.307	20.999	1.00	53.49	NS14
ATOM	298	CD1	PHE	36	221.943	136.816	23.400	1.00	45.91	NS14	ATOM	351	CG	LEU	43	218.834	135.209	19.870	1.00	53.49	NS14
ATOM	299	CD2	PHE	36	220.632	138.401	24.614	1.00	45.91	NS14	ATOM	352	CD1	LEU	43	218.035	136.483	19.693	1.00	53.49	NS14
ATOM	300	CE1	PHE	36	221.918	137.649	22.293	1.00	45.91	NS14	ATOM	353	CD2	LEU	43	220.298	135.527	20.189	1.00	53.49	NS14
ATOM	301	CE2	PHE	36	220.601	139.249	23.504	1.00	45.91	NS14	ATOM	354	C	LEU	43	215.863	134.751	20.368	1.00	47.84	NS14
ATOM	302	CZ	PHE	36	221.243	138.869	22.343	1.00	45.91	NS14	ATOM	355	O	LEU	43	215.382	135.867	20.489	1.00	47.84	NS14
ATOM	303	C	PHE	36	222.709	134.712	26.952	1.00	46.82	NS14	ATOM	356	N	ARG	44	215.563	133.954	19.334	1.00	67.30	NS14
ATOM	304	O	PHE	36	223.268	133.950	26.182	1.00	46.82	NS14	ATOM	357	CA	ARG	44	214.626	134.391	18.274	1.00	67.30	NS14
ATOM	305	N	GLY	37	222.252	134.310	28.128	1.00	46.66	NS14	ATOM	358	CB	ARG	44	214.521	133.336	17.160	1.00	88.45	NS14
ATOM	306	CA	GLY	37	222.404	132.910	28.496	1.00	46.66	NS14	ATOM	359	CG	ARG	44	213.549	133.682	16.019	1.00	88.45	NS14
ATOM	307	C	GLY	37	221.458	132.104	27.628	1.00	46.66	NS14	ATOM	360	CD	ARG	44	214.009	134.874	15.168	1.00	88.45	NS14
ATOM	308	O	GLY	37	221.288	130.898	27.792	1.00	46.66	NS14	ATOM	361	NE	ARG	44	213.046	135.256	14.119	1.00	88.45	NS14
ATOM	309	N	LEU	38	220.829	132.816	26.700	1.00	60.02	NS14	ATOM	362	CZ	ARG	44	213.267	136.142	13.136	1.00	88.45	NS14
ATOM	310	CA	LEU	38	219.880	132.255	25.759	1.00	60.02	NS14	ATOM	363	NH1	ARG	44	214.424	136.779	13.020	1.00	88.45	NS14
ATOM	311	CB	LEU	38	219.111	133.387	25.077	1.00	46.05	NS14	ATOM	364	NH2	ARG	44	212.322	136.379	12.238	1.00	88.45	NS14
ATOM	312	CG	LEU	38	218.157	134.148	25.991	1.00	46.05	NS14	ATOM	365	C	ARG	44	213.224	134.692	18.829	1.00	67.30	NS14
ATOM	313	CD1	LEU	38	217.360	135.190	25.212	1.00	46.05	NS14	ATOM	366	O	ARG	44	212.588	135.662	18.413	1.00	67.30	NS14
ATOM	314	CD2	LEU	38	217.229	133.143	26.630	1.00	46.05	NS14	ATOM	367	N	GLU	45	212.752	133.865	19.765	1.00	63.23	NS14
ATOM	315	C	LEU	38	220.562	131.407	24.702	1.00	60.02	NS14	ATOM	368	CA	GLU	45	211.438	134.050	20.387	1.00	63.23	NS14
ATOM	316	O	LEU	38	221.777	131.355	24.626	1.00	60.02	NS14	ATOM	369	CB	GLU	45	211.117	132.887	21.328	1.00	80.42	NS14
ATOM	317	N	CYS	39	219.757	130.742	23.887	1.00	86.48	NS14	ATOM	370	CG	GLU	45	211.182	131.524	20.663	1.00	80.42	NS14
ATOM	318	CA	CYS	39	220.253	129.903	22.807	1.00	86.48	NS14	ATOM	371	CD	GLU	45	210.991	130.373	21.640	1.00	80.42	NS14
ATOM	319	CB	CYS	39	219.894	128.435	23.057	1.00	55.54	NS14	ATOM	372	OE1	GLU	45	211.535	130.447	22.765	1.00	80.42	NS14
ATOM	320	SG	CYS	39	218.119	128.057	22.891	1.00	55.54	NS14	ATOM	373	OE2	GLU	45	210.313	129.388	21.275	1.00	80.42	NS14
ATOM	321	C	CYS	39	219.536	130.385	21.557	1.00	86.48	NS14	ATOM	374	C	GLU	45	211.443	135.352	21.179	1.00	63.23	NS14
ATOM	322	O	CYS	39	218.735	131.324	21.624	1.00	86.48	NS14	ATOM	375	O	GLU	45	210.688	136.286	20.877	1.00	63.23	NS14
ATOM	323	N	ARG	40	219.830	129.760	20.417	1.00	78.72	NS14	ATOM	376	N	LEU	46	212.297	135.400	22.200	1.00	45.27	NS14
ATOM	324	CA	ARG	40	219.152	130.114	19.173	1.00	78.72	NS14	ATOM	377	CA	LEU	46	212.437	136.590	23.030	1.00	45.27	NS14
ATOM	325	CB	ARG	40	219.622	129.217	18.032	1.00	117.55	NS14	ATOM	378	CB	LEU	46	213.483	136.353	24.113	1.00	55.33	NS14
ATOM	326	CG	ARG	40	218.959	127.853	18.065	1.00	117.55	NS14	ATOM	379	CG	LEU	46	213.039	135.357	25.180	1.00	55.33	NS14
ATOM	327	CD	ARG	40	219.252	127.026	16.842	1.00	117.55	NS14	ATOM	380	CD1	LEU	46	214.237	134.779	25.916	1.00	55.33	NS14
ATOM	328	NE	ARG	40	220.683	126.825	16.693	1.00	117.55	NS14	ATOM	381	CD2	LEU	46	212.091	136.069	26.123	1.00	55.33	NS14
ATOM	329	CZ	ARG	40	221.216	125.889	15.923	1.00	117.55	NS14	ATOM	382	C	LEU	46	212.859	137.769	22.173	1.00	45.27	NS14
ATOM	330	NH1	ARG	40	220.421	125.074	15.242	1.00	117.55	NS14	ATOM	383	O	LEU	46	212.532	138.904	22.489	1.00	45.27	NS14
ATOM	331	NH2	ARG	40	222.535	125.770	15.833	1.00	117.55	NS14	ATOM	384	N	ALA	47	213.605	137.496	21.102	1.00	49.43	NS14
ATOM	332	C	ARG	40	217.728	129.732	19.553	1.00	78.72	NS14	ATOM	385	CA	ALA	47	214.057	138.539	20.181	1.00	49.43	NS14
ATOM	333	O	ARG	40	217.529	129.054	20.561	1.00	78.72	NS14	ATOM	386	CB	ALA	47	214.735	137.926	18.969	1.00	41.30	NS14
ATOM	334	N	ILE	41	216.735	130.125	18.774	1.00	51.17	NS14	ATOM	387	C	ALA	47	212.792	139.264	19.765	1.00	49.43	NS14
ATOM	335	CA	ILE	41	215.363	129.759	19.148	1.00	51.17	NS14	ATOM	388	O	ALA	47	212.690	140.481	19.916	1.00	49.43	NS14
ATOM	336	CB	ILE	41	215.239	128.292	19.653	1.00	26.22	NS14	ATOM	389	N	HIS	48	211.831	138.503	19.244	1.00	74.71	NS14

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ATOM    390  CA  HIS    48     210.546 139.064  18.862  1.00 74.71      NS14
ATOM    391  CB  HIS    48     209.675 138.008  18.187  1.00 83.72      NS14
ATOM    392  CG  HIS    48     210.270 137.425  16.941  1.00 83.72      NS14
ATOM    393  CD2 HIS    48     210.498 136.140  16.579  1.00 83.72      NS14
ATOM    394  ND1 HIS    48     210.658 138.200  15.867  1.00 83.72      NS14
ATOM    395  CE1 HIS    48     211.096 137.416  14.898  1.00 83.72      NS14
ATOM    396  NE2 HIS    48     211.009 136.162  15.305  1.00 83.72      NS14
ATOM    397  C   HIS    48     209.966 139.415  20.222  1.00 74.71      NS14
ATOM    398  O   HIS    48     210.674 139.323  21.218  1.00 74.71      NS14
ATOM    399  N   LYS    49     208.697 139.792  20.299  1.00106.12     NS14
ATOM    400  CA  LYS    49     208.121 140.141  21.603  1.00106.12     NS14
ATOM    401  CB  LYS    49     208.445 139.077  22.658  1.00 52.25      NS14
ATOM    402  CG  LYS    49     207.628 137.819  22.585  1.00 52.25      NS14
ATOM    403  CD  LYS    49     207.997 136.915  23.741  1.00 52.25      NS14
ATOM    404  CE  LYS    49     206.972 135.808  23.952  1.00 52.25      NS14
ATOM    405  NZ  LYS    49     206.808 134.913  22.759  1.00 52.25      NS14
ATOM    406  C   LYS    49     208.672 141.473  22.099  1.00106.12     NS14
ATOM    407  O   LYS    49     207.921 142.357  22.518  1.00106.12     NS14
ATOM    408  N   GLY    50     209.993 141.599  22.065  1.00 88.85      NS14
ATOM    409  CA  GLY    50     210.636 142.817  22.512  1.00 88.85      NS14
ATOM    410  C   GLY    50     211.223 142.624  23.890  1.00 88.85      NS14
ATOM    411  O   GLY    50     211.437 143.589  24.622  1.00 88.85      NS14
ATOM    412  N   GLN    51     211.483 141.372  24.248  1.00 61.99      NS14
ATOM    413  CA  GLN    51     212.044 141.070  25.557  1.00 61.99      NS14
ATOM    414  CB  GLN    51     211.644 139.667  26.004  1.00 63.09      NS14
ATOM    415  CG  GLN    51     210.170 139.390  25.861  1.00 63.09      NS14
ATOM    416  CD  GLN    51     209.546 138.819  27.117  1.00 63.09      NS14
ATOM    417  OE1 GLN    51     210.016 137.823  27.680  1.00 63.09      NS14
ATOM    418  NE2 GLN    51     208.466 139.444  27.557  1.00 63.09      NS14
ATOM    419  C   GLN    51     213.562 141.193  25.559  1.00 61.99      NS14
ATOM    420  O   GLN    51     214.195 141.161  26.613  1.00 61.99      NS14
ATOM    421  N   LEU    52     214.158 141.313  24.381  1.00 60.24      NS14
ATOM    422  CA  LEU    52     215.600 141.474  24.328  1.00 60.24      NS14
ATOM    423  CB  LEU    52     216.220 140.614  23.233  1.00 52.20      NS14
ATOM    424  CG  LEU    52     215.931 139.115  23.316  1.00 52.20      NS14
ATOM    425  CD1 LEU    52     216.847 138.399  22.324  1.00 52.20      NS14
ATOM    426  CD2 LEU    52     216.142 138.602  24.736  1.00 52.20      NS14
ATOM    427  C   LEU    52     215.809 142.941  24.025  1.00 60.24      NS14
ATOM    428  O   LEU    52     215.685 143.381  22.875  1.00 60.24      NS14
ATOM    429  N   PRO    53     216.114 143.726  25.068  1.00 58.90      NS14
ATOM    430  CD  PRO    53     216.397 143.261  26.437  1.00 45.13      NS14
ATOM    431  CA  PRO    53     216.340 145.167  24.943  1.00 58.90      NS14
ATOM    432  CB  PRO    53     216.696 145.593  26.378  1.00 45.13      NS14
ATOM    433  CG  PRO    53     217.283 144.362  26.971  1.00 45.13      NS14
ATOM    434  C   PRO    53     217.414 145.522  23.933  1.00 58.90      NS14
ATOM    435  O   PRO    53     218.498 144.953  23.945  1.00 58.90      NS14
ATOM    436  N   GLY    54     217.095 146.457  23.048  1.00 75.43      NS14
ATOM    437  CA  GLY    54     218.057 146.878  22.050  1.00 75.43      NS14
ATOM    438  C   GLY    54     218.183 145.936  20.872  1.00 75.43      NS14
ATOM    439  O   GLY    54     218.605 146.352  19.792  1.00 75.43      NS14
ATOM    440  N   VAL    55     217.826 144.669  21.077  1.00 63.96      NS14
ATOM    441  CA  VAL    55     217.897 143.671  20.016  1.00 63.96      NS14
ATOM    442  CB  VAL    55     217.755 142.253  20.577  1.00 70.24      NS14
ATOM    443  CG1 VAL    55     218.000 141.242  19.473  1.00 70.24      NS14
ATOM    444  CG2 VAL    55     218.750 142.039  21.712  1.00 70.24      NS14
ATOM    445  C   VAL    55     216.773 143.935  19.031  1.00 63.96      NS14
ATOM    446  O   VAL    55     215.707 144.401  19.409  1.00 63.96      NS14
ATOM    447  N   ARG    56     217.012 143.645  17.762  1.00 82.06      NS14
ATOM    448  CA  ARG    56     216.007 143.894  16.746  1.00 82.06      NS14
ATOM    449  CB  ARG    56     215.950 145.386  16.450  1.00 74.35      NS14
ATOM    450  CG  ARG    56     214.822 145.752  15.541  1.00 74.35      NS14
ATOM    451  CD  ARG    56     215.067 147.061  14.846  1.00 74.35      NS14
ATOM    452  NE  ARG    56     215.265 148.137  15.798  1.00 74.35      NS14
ATOM    453  CZ  ARG    56     214.986 149.407  15.539  1.00 74.35      NS14
ATOM    454  NH1 ARG    56     214.490 149.749  14.350  1.00 74.35      NS14
ATOM    455  NH2 ARG    56     215.206 150.334  16.468  1.00 74.35      NS14
ATOM    456  C   ARG    56     216.298 143.141  15.446  1.00 82.06      NS14
ATOM    457  O   ARG    56     217.304 142.431  15.335  1.00 82.06      NS14
ATOM    458  N   LYS    57     215.408 143.296  14.467  1.00 53.60      NS14
ATOM    459  CA  LYS    57     215.577 142.651  13.180  1.00 53.60      NS14
ATOM    460  CB  LYS    57     214.248 142.592  12.421  1.00 68.43      NS14
ATOM    461  CG  LYS    57     213.514 141.265  12.568  1.00 68.43      NS14
ATOM    462  CD  LYS    57     212.494 141.068  11.462  1.00 68.43      NS14
ATOM    463  CE  LYS    57     211.995 139.645  11.447  1.00 68.43      NS14
ATOM    464  NZ  LYS    57     213.114 138.682  11.290  1.00 68.43      NS14
ATOM    465  C   LYS    57     216.621 143.410  12.362  1.00 53.60      NS14
ATOM    466  O   LYS    57     216.520 144.625  12.159  1.00 53.60      NS14
ATOM    467  N   ALA    58     217.620 142.668  11.894  1.00 64.27      NS14
ATOM    468  CA  ALA    58     218.717 143.213  11.115  1.00 64.27      NS14
ATOM    469  CB  ALA    58     219.922 142.340  11.310  1.00 54.72      NS14
ATOM    470  C   ALA    58     218.393 143.327   9.631  1.00 64.27      NS14
ATOM    471  O   ALA    58     218.095 142.336   8.982  1.00 64.27      NS14
ATOM    472  N   SER    59     218.466 144.531   9.086  1.00 81.25      NS14
ATOM    473  CA  SER    59     218.171 144.728   7.668  1.00 81.25      NS14
ATOM    474  CB  SER    59     216.793 145.376   7.501  1.00 93.09      NS14
ATOM    475  OG  SER    59     216.579 145.799   6.164  1.00 93.09      NS14
ATOM    476  C   SER    59     219.230 145.614   7.018  1.00 81.25      NS14
ATOM    477  O   SER    59     219.635 146.624   7.596  1.00 81.25      NS14
ATOM    478  N   TRP    60     219.672 145.248   5.817  1.00 93.04      NS14
ATOM    479  CA  TRP    60     220.690 146.032   5.139  1.00 93.04      NS14
ATOM    480  CB  TRP    60     221.889 146.197   6.061  1.00 44.94      NS14
ATOM    481  CG  TRP    60     222.845 145.048   6.074  1.00 44.94      NS14
ATOM    482  CD2 TRP    60     222.716 143.806   6.787  1.00 44.94      NS14
ATOM    483  CE2 TRP    60     223.879 143.048   6.523  1.00 44.94      NS14
ATOM    484  CE3 TRP    60     221.741 143.261   7.621  1.00 44.94      NS14
ATOM    485  CD1 TRP    60     224.044 144.987   5.423  1.00 44.94      NS14
ATOM    486  NE1 TRP    60     224.673 143.791   5.689  1.00 44.94      NS14
ATOM    487  CZ2 TRP    60     224.088 141.770   7.068  1.00 44.94      NS14
ATOM    488  CZ3 TRP    60     221.956 141.983   8.166  1.00 44.94      NS14
ATOM    489  CH2 TRP    60     223.118 141.260   7.886  1.00 44.94      NS14
ATOM    490  C   TRP    60     221.129 145.413   3.818  1.00 93.04      NS14
ATOM    491  O   TRP    60     221.334 146.182   2.854  1.00 93.04      NS14
ATOM    492  OXT TRP    60     221.280 144.172   3.764  1.00 74.01      NS14
ATOM    493  CB  ALA     1     278.766 116.927  -7.702  1.00 38.34      MS13
ATOM    494  C   ALA     1     278.288 114.649  -8.564  1.00 94.79      MS13
ATOM    495  O   ALA     1     277.629 113.923  -9.304  1.00 94.79      MS13
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ATOM	496	N	ALA	1	277.501	116.661	-9.795	1.00	94.79	MS13	ATOM	549	O	ILE	8	273.471	114.189	-11.650	1.00	149.39	MS13
ATOM	497	CA	ALA	1	278.586	116.090	-8.949	1.00	94.79	MS13	ATOM	550	N	PRO	9	273.427	114.979	-9.542	1.00	123.43	MS13
ATOM	498	N	ARG	2	278.776	114.236	-7.401	1.00	86.54	MS13	ATOM	551	CD	PRO	9	273.811	115.062	-8.119	1.00	85.69	MS13
ATOM	499	CA	ARG	2	278.569	112.873	-6.927	1.00	86.54	MS13	ATOM	552	CA	PRO	9	272.699	116.182	-9.958	1.00	123.43	MS13
ATOM	500	CB	ARG	2	279.700	111.966	-7.414	1.00	157.94	MS13	ATOM	553	CB	PRO	9	272.314	116.807	-8.626	1.00	85.69	MS13
ATOM	501	CG	ARG	2	279.761	111.797	-8.922	1.00	157.94	MS13	ATOM	554	CG	PRO	9	273.528	116.509	-7.780	1.00	85.69	MS13
ATOM	502	CD	ARG	2	278.827	110.698	-9.399	1.00	157.94	MS13	ATOM	555	C	PRO	9	273.589	117.099	-10.794	1.00	123.43	MS13
ATOM	503	NE	ARG	2	278.732	110.668	-10.857	1.00	157.94	MS13	ATOM	556	O	PRO	9	274.695	117.437	-10.365	1.00	123.43	MS13
ATOM	504	CZ	ARG	2	278.267	109.639	-11.561	1.00	157.94	MS13	ATOM	557	N	ARG	10	273.119	117.496	-11.978	1.00	101.19	MS13
ATOM	505	NH1	ARG	2	277.853	108.537	-10.945	1.00	157.94	MS13	ATOM	558	CA	ARG	10	273.902	118.382	-12.856	1.00	101.19	MS13
ATOM	506	NH2	ARG	2	278.207	109.716	-12.885	1.00	157.94	MS13	ATOM	559	CB	ARG	10	274.529	117.589	-14.010	1.00	154.14	MS13
ATOM	507	C	ARG	2	278.541	112.870	-5.412	1.00	86.54	MS13	ATOM	560	CG	ARG	10	275.578	118.374	-14.796	1.00	154.14	MS13
ATOM	508	O	ARG	2	279.200	112.049	-4.776	1.00	86.54	MS13	ATOM	561	CD	ARG	10	275.560	118.040	-16.284	1.00	154.14	MS13
ATOM	509	N	ILE	3	277.775	113.795	-4.840	1.00	73.54	MS13	ATOM	562	NE	ARG	10	275.962	116.666	-16.568	1.00	154.14	MS13
ATOM	510	CA	ILE	3	277.659	113.920	-3.390	1.00	73.54	MS13	ATOM	563	CZ	ARG	10	275.856	116.089	-17.763	1.00	154.14	MS13
ATOM	511	CB	ILE	3	277.188	115.336	-3.003	1.00	53.65	MS13	ATOM	564	NH1	ARG	10	275.358	116.769	-18.791	1.00	154.14	MS13
ATOM	512	CG2	ILE	3	277.094	115.463	-1.488	1.00	53.65	MS13	ATOM	565	NH2	ARG	10	276.246	114.831	-17.933	1.00	154.14	MS13
ATOM	513	CG1	ILE	3	278.171	116.369	-3.563	1.00	53.65	MS13	ATOM	566	C	ARG	10	273.012	119.484	-13.429	1.00	101.19	MS13
ATOM	514	CD1	ILE	3	277.826	117.814	-3.229	1.00	53.65	MS13	ATOM	567	O	ARG	10	271.867	119.640	-12.987	1.00	101.19	MS13
ATOM	515	C	ILE	3	276.714	112.899	-2.762	1.00	73.54	MS13	ATOM	568	N	ASN	11	273.542	120.240	-14.396	1.00	76.42	MS13
ATOM	516	O	ILE	3	275.701	112.529	-3.344	1.00	73.54	MS13	ATOM	569	CA	ASN	11	272.808	121.324	-15.059	1.00	76.42	MS13
ATOM	517	N	ALA	4	277.066	112.445	-1.567	1.00	63.57	MS13	ATOM	570	CB	ASN	11	272.386	120.888	-16.461	1.00	120.50	MS13
ATOM	518	CA	ALA	4	276.271	111.468	-0.824	1.00	63.57	MS13	ATOM	571	CG	ASN	11	273.430	121.199	-17.504	1.00	120.50	MS13
ATOM	519	CB	ALA	4	274.993	112.118	-0.314	1.00	85.26	MS13	ATOM	572	OD1	ASN	11	273.723	122.365	-17.770	1.00	120.50	MS13
ATOM	520	C	ALA	4	275.935	110.218	-1.623	1.00	63.57	MS13	ATOM	573	ND2	ASN	11	274.002	120.159	-18.106	1.00	120.50	MS13
ATOM	521	O	ALA	4	276.276	110.115	-2.803	1.00	63.57	MS13	ATOM	574	C	ASN	11	271.572	121.757	-14.286	1.00	76.42	MS13
ATOM	522	N	GLY	5	275.267	109.277	-0.957	1.00	112.82	MS13	ATOM	575	O	ASN	11	270.499	121.203	-14.476	1.00	76.42	MS13
ATOM	523	CA	GLY	5	274.875	108.021	-1.574	1.00	112.82	MS13	ATOM	576	N	LYS	12	271.729	122.754	-13.425	1.00	85.89	MS13
ATOM	524	C	GLY	5	275.559	107.743	-2.897	1.00	112.82	MS13	ATOM	577	CA	LYS	12	270.652	123.265	-12.582	1.00	85.89	MS13
ATOM	525	O	GLY	5	276.498	106.956	-2.972	1.00	112.82	MS13	ATOM	578	CB	LYS	12	269.679	122.155	-12.171	1.00	107.84	MS13
ATOM	526	N	VAL	6	275.073	108.401	-3.941	1.00	115.41	MS13	ATOM	579	CG	LYS	12	268.303	122.234	-12.830	1.00	107.84	MS13
ATOM	527	CA	VAL	6	275.608	108.275	-5.289	1.00	115.41	MS13	ATOM	580	CD	LYS	12	267.332	121.233	-12.221	1.00	107.84	MS13
ATOM	528	CB	VAL	6	275.427	106.844	-5.865	1.00	109.72	MS13	ATOM	581	CE	LYS	12	267.902	119.833	-12.283	1.00	107.84	MS13
ATOM	529	CG1	VAL	6	276.629	105.977	-5.508	1.00	109.72	MS13	ATOM	582	NZ	LYS	12	267.017	118.838	-11.628	1.00	107.84	MS13
ATOM	530	CG2	VAL	6	274.138	106.223	-5.335	1.00	109.72	MS13	ATOM	583	C	LYS	12	271.321	123.771	-11.322	1.00	85.89	MS13
ATOM	531	C	VAL	6	274.814	109.247	-6.143	1.00	115.41	MS13	ATOM	584	O	LYS	12	272.281	123.160	-10.848	1.00	85.89	MS13
ATOM	532	O	VAL	6	274.222	108.864	-7.157	1.00	115.41	MS13	ATOM	585	N	ARG	13	270.823	124.878	-10.783	1.00	49.65	MS13
ATOM	533	N	GLU	7	274.798	110.508	-5.721	1.00	90.02	MS13	ATOM	586	CA	ARG	13	271.374	125.425	-9.551	1.00	49.65	MS13
ATOM	534	CA	GLU	7	274.054	111.529	-6.441	1.00	90.02	MS13	ATOM	587	CB	ARG	13	270.359	126.384	-8.932	1.00	62.30	MS13
ATOM	535	CB	GLU	7	273.761	112.711	-5.519	1.00	192.91	MS13	ATOM	588	CG	ARG	13	270.157	127.654	-9.740	1.00	62.30	MS13
ATOM	536	CG	GLU	7	273.073	112.289	-4.239	1.00	192.91	MS13	ATOM	589	CD	ARG	13	268.893	128.372	-9.335	1.00	62.30	MS13
ATOM	537	CD	GLU	7	272.061	111.190	-4.477	1.00	192.91	MS13	ATOM	590	NE	ARG	13	269.129	129.761	-8.948	1.00	62.30	MS13
ATOM	538	OE1	GLU	7	271.085	111.432	-5.218	1.00	192.91	MS13	ATOM	591	CZ	ARG	13	269.536	130.141	-7.741	1.00	62.30	MS13
ATOM	539	OE2	GLU	7	272.250	110.083	-3.933	1.00	192.91	MS13	ATOM	592	NH1	ARG	13	269.758	129.228	-6.798	1.00	62.30	MS13
ATOM	540	C	GLU	7	274.759	112.008	-7.698	1.00	90.02	MS13	ATOM	593	NH2	ARG	13	269.701	131.436	-7.474	1.00	62.30	MS13
ATOM	541	O	GLU	7	275.984	112.063	-7.757	1.00	90.02	MS13	ATOM	594	C	ARG	13	271.693	124.288	-8.568	1.00	49.65	MS13
ATOM	542	N	ILE	8	273.968	112.354	-8.704	1.00	149.39	MS13	ATOM	595	O	ARG	13	271.048	123.240	-8.590	1.00	49.65	MS13
ATOM	543	CA	ILE	8	274.511	112.814	-9.970	1.00	149.39	MS13	ATOM	596	N	VAL	14	272.693	124.486	-7.716	1.00	64.62	MS13
ATOM	544	CB	ILE	8	274.400	111.699	-11.043	1.00	119.88	MS13	ATOM	597	CA	VAL	14	273.067	123.459	-6.747	1.00	64.62	MS13
ATOM	545	CG2	ILE	8	275.413	111.938	-12.165	1.00	119.88	MS13	ATOM	598	CB	VAL	14	274.430	123.767	-6.117	1.00	60.66	MS13
ATOM	546	CG1	ILE	8	274.628	110.322	-10.400	1.00	119.88	MS13	ATOM	599	CG1	VAL	14	274.893	122.590	-5.265	1.00	60.66	MS13
ATOM	547	CD1	ILE	8	273.382	109.701	-9.746	1.00	119.88	MS13	ATOM	600	CG2	VAL	14	275.430	124.087	-7.201	1.00	60.66	MS13
ATOM	548	C	ILE	8	273.755	114.052	-10.458	1.00	149.39	MS13	ATOM	601	C	VAL	14	272.033	123.385	-5.631	1.00	64.62	MS13

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ATOM    602  O   VAL  14     271.676 122.300  -5.172  1.00 64.62      MS13
ATOM    603  N   ASP  15     271.561 124.551  -5.199  1.00 84.85      MS13
ATOM    604  CA  ASP  15     270.567 124.642  -4.135  1.00 84.85      MS13
ATOM    605  CB  ASP  15     270.216 126.109  -3.873  1.00 76.94      MS13
ATOM    606  CG  ASP  15     269.648 126.805  -5.094  1.00 76.94      MS13
ATOM    607  OD1 ASP  15     269.963 126.378  -6.224  1.00 76.94      MS13
ATOM    608  OD2 ASP  15     268.901 127.792  -4.926  1.00 76.94      MS13
ATOM    609  C   ASP  15     269.320 123.861  -4.504  1.00 84.85      MS13
ATOM    610  O   ASP  15     268.486 123.549  -3.652  1.00 84.85      MS13
ATOM    611  N   VAL  16     269.199 123.555  -5.789  1.00 67.10      MS13
ATOM    612  CA  VAL  16     268.072 122.792  -6.294  1.00 67.10      MS13
ATOM    613  CB  VAL  16     267.597 123.321  -7.653  1.00 86.35      MS13
ATOM    614  CG1 VAL  16     266.657 122.323  -8.290  1.00 86.35      MS13
ATOM    615  CG2 VAL  16     266.899 124.652  -7.479  1.00 86.35      MS13
ATOM    616  C   VAL  16     268.511 121.353  -6.479  1.00 67.10      MS13
ATOM    617  O   VAL  16     267.769 120.417  -6.187  1.00 67.10      MS13
ATOM    618  N   ALA  17     269.729 121.188  -6.972  1.00 46.76      MS13
ATOM    619  CA  ALA  17     270.286 119.865  -7.216  1.00 46.76      MS13
ATOM    620  CB  ALA  17     271.487 119.967  -8.173  1.00 15.18      MS13
ATOM    621  C   ALA  17     270.700 119.175  -5.921  1.00 46.76      MS13
ATOM    622  O   ALA  17     270.777 117.951  -5.875  1.00 46.76      MS13
ATOM    623  N   LEU  18     270.974 119.956  -4.877  1.00 76.69      MS13
ATOM    624  CA  LEU  18     271.376 119.369  -3.606  1.00 76.69      MS13
ATOM    625  CB  LEU  18     271.837 120.441  -2.626  1.00 68.93      MS13
ATOM    626  CG  LEU  18     273.348 120.663  -2.709  1.00 68.93      MS13
ATOM    627  CD1 LEU  18     273.767 121.832  -1.829  1.00 68.93      MS13
ATOM    628  CD2 LEU  18     274.052 119.387  -2.288  1.00 68.93      MS13
ATOM    629  C   LEU  18     270.226 118.563  -3.036  1.00 76.69      MS13
ATOM    630  O   LEU  18     270.371 117.841  -2.040  1.00 76.69      MS13
ATOM    631  N   THR  19     269.071 118.706  -3.676  1.00 95.84      MS13
ATOM    632  CA  THR  19     267.909 117.926  -3.305  1.00 95.84      MS13
ATOM    633  CB  THR  19     266.637 118.445  -3.967  1.00 69.91      MS13
ATOM    634  OG1 THR  19     266.431 119.819  -3.614  1.00 69.91      MS13
ATOM    635  CG2 THR  19     265.453 117.625  -3.513  1.00 69.91      MS13
ATOM    636  C   THR  19     268.332 116.653  -4.008  1.00 95.84      MS13
ATOM    637  O   THR  19     269.519 116.442  -4.214  1.00 95.84      MS13
ATOM    638  N   TYR  20     267.397 115.810  -4.406  1.00 60.84      MS13
ATOM    639  CA  TYR  20     267.777 114.586  -5.102  1.00 60.84      MS13
ATOM    640  CB  TYR  20     268.501 114.925  -6.410  1.00 62.75      MS13
ATOM    641  CG  TYR  20     267.666 115.754  -7.362  1.00 62.75      MS13
ATOM    642  CD1 TYR  20     267.430 117.106  -7.121  1.00 62.75      MS13
ATOM    643  CE1 TYR  20     266.581 117.843  -7.939  1.00 62.75      MS13
ATOM    644  CD2 TYR  20     267.040 115.162  -8.457  1.00 62.75      MS13
ATOM    645  CE2 TYR  20     266.190 115.886  -9.282  1.00 62.75      MS13
ATOM    646  CZ  TYR  20     265.957 117.225  -9.019  1.00 62.75      MS13
ATOM    647  OH  TYR  20     265.071 117.926  -9.818  1.00 62.75      MS13
ATOM    648  C   TYR  20     268.662 113.682  -4.252  1.00 60.84      MS13
ATOM    649  O   TYR  20     268.718 112.476  -4.476  1.00 60.84      MS13
ATOM    650  N   ILE  21     269.344 114.265  -3.272  1.00 93.46      MS13
ATOM    651  CA  ILE  21     270.233 113.524  -2.387  1.00 93.46      MS13
ATOM    652  CB  ILE  21     271.329 114.456  -1.820  1.00 70.60      MS13
ATOM    653  CG2 ILE  21     272.379 113.647  -1.085  1.00 70.60      MS13
ATOM    654  CG1 ILE  21     271.985 115.241  -2.959  1.00 70.60      MS13
ATOM    655  CD1 ILE  21     273.127 116.125  -2.522  1.00 70.60      MS13
ATOM    656  C   ILE  21     269.400 112.966  -1.240  1.00 93.46      MS13
ATOM    657  O   ILE  21     269.796 113.028  -0.073  1.00 93.46      MS13
ATOM    658  N   TYR  22     268.250 112.404  -1.591  1.00117.29      MS13
ATOM    659  CA  TYR  22     267.315 111.861  -0.618  1.00117.29      MS13
ATOM    660  CB  TYR  22     267.713 110.457  -0.155  1.00 81.27      MS13
ATOM    661  CG  TYR  22     266.566 109.744   0.524  1.00 81.27      MS13
ATOM    662  CD1 TYR  22     265.343 109.587  -0.127  1.00 81.27      MS13
ATOM    663  CE1 TYR  22     264.245 109.001   0.513  1.00 81.27      MS13
ATOM    664  CD2 TYR  22     266.670 109.285   1.835  1.00 81.27      MS13
ATOM    665  CE2 TYR  22     265.572 108.691   2.485  1.00 81.27      MS13
ATOM    666  CZ  TYR  22     264.365 108.559   1.815  1.00 81.27      MS13
ATOM    667  OH  TYR  22     263.274 108.003   2.443  1.00 81.27      MS13
ATOM    668  C   TYR  22     267.218 112.795   0.578  1.00117.29      MS13
ATOM    669  O   TYR  22     266.688 113.894   0.449  1.00117.29      MS13
ATOM    670  N   GLY  23     267.752 112.375   1.722  1.00 53.92      MS13
ATOM    671  CA  GLY  23     267.688 113.188   2.930  1.00 53.92      MS13
ATOM    672  C   GLY  23     267.985 114.690   2.930  1.00 53.92      MS13
ATOM    673  O   GLY  23     268.163 115.259   4.007  1.00 53.92      MS13
ATOM    674  N   ILE  24     268.027 115.354   1.775  1.00 56.57      MS13
ATOM    675  CA  ILE  24     268.321 116.788   1.776  1.00 56.57      MS13
ATOM    676  CB  ILE  24     269.586 117.100   0.943  1.00 52.15      MS13
ATOM    677  CG2 ILE  24     270.026 118.549   1.185  1.00 52.15      MS13
ATOM    678  CG1 ILE  24     270.723 116.176   1.369  1.00 52.15      MS13
ATOM    679  CD1 ILE  24     271.990 116.415   0.622  1.00 52.15      MS13
ATOM    680  C   ILE  24     267.198 117.732   1.321  1.00 56.57      MS13
ATOM    681  O   ILE  24     266.299 118.063   2.100  1.00 56.57      MS13
ATOM    682  N   GLY  25     267.263 118.185   0.070  1.00 74.49      MS13
ATOM    683  CA  GLY  25     266.253 119.103  -0.435  1.00 74.49      MS13
ATOM    684  C   GLY  25     266.179 120.402   0.357  1.00 74.49      MS13
ATOM    685  O   GLY  25     266.515 120.423   1.538  1.00 74.49      MS13
ATOM    686  N   LYS  26     265.730 121.474  -0.301  1.00 90.66      MS13
ATOM    687  CA  LYS  26     265.593 122.812   0.293  1.00 90.66      MS13
ATOM    688  CB  LYS  26     264.266 123.450  -0.134  1.00139.36      MS13
ATOM    689  CG  LYS  26     264.170 123.820  -1.616  1.00139.36      MS13
ATOM    690  CD  LYS  26     265.058 125.013  -1.976  1.00139.36      MS13
ATOM    691  CE  LYS  26     264.815 125.474  -3.417  1.00139.36      MS13
ATOM    692  NZ  LYS  26     265.559 126.723  -3.773  1.00139.36      MS13
ATOM    693  C   LYS  26     265.689 122.840   1.810  1.00 90.66      MS13
ATOM    694  O   LYS  26     265.173 121.951   2.492  1.00 90.66      MS13
ATOM    695  N   ALA  27     266.330 123.889   2.320  1.00 80.94      MS13
ATOM    696  CA  ALA  27     266.552 124.092   3.755  1.00 80.94      MS13
ATOM    697  CB  ALA  27     265.473 123.356   4.618  1.00 39.58      MS13
ATOM    698  C   ALA  27     267.947 123.555   4.056  1.00 80.94      MS13
ATOM    699  O   ALA  27     268.862 124.327   4.345  1.00 80.94      MS13
ATOM    700  N   ARG  28     268.111 122.237   3.983  1.00 75.09      MS13
ATOM    701  CA  ARG  28     269.416 121.642   4.214  1.00 75.09      MS13
ATOM    702  CB  ARG  28     269.317 120.123   4.302  1.00 51.40      MS13
ATOM    703  CG  ARG  28     268.879 119.627   5.667  1.00 51.40      MS13
ATOM    704  CD  ARG  28     268.849 118.100   5.747  1.00 51.40      MS13
ATOM    705  NE  ARG  28     268.917 117.645   7.134  1.00 51.40      MS13
ATOM    706  CZ  ARG  28     268.868 116.372   7.508  1.00 51.40      MS13
ATOM    707  NH1 ARG  28     268.744 115.423   6.593  1.00 51.40      MS13
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ATOM	708	NH2	ARG	28	268.965	116.044	8.792	1.00	51.40	MS13	ATOM	761	CE	LYS	35	275.132	125.175	8.987	1.00	121.00	MS13
ATOM	709	C	ARG	28	270.307	122.039	3.050	1.00	75.09	MS13	ATOM	762	NZ	LYS	35	274.731	123.969	9.772	1.00	121.00	MS13
ATOM	710	O	ARG	28	271.528	122.078	3.179	1.00	75.09	MS13	ATOM	763	C	LYS	35	279.457	126.470	4.575	1.00	84.65	MS13
ATOM	711	N	ALA	29	269.692	122.334	1.909	1.00	53.50	MS13	ATOM	764	O	LYS	35	280.583	126.681	5.022	1.00	84.65	MS13
ATOM	712	CA	ALA	29	270.446	122.764	0.743	1.00	53.50	MS13	ATOM	765	N	THR	36	279.243	125.888	3.402	1.00	86.96	MS13
ATOM	713	CB	ALA	29	269.551	122.821	-0.469	1.00	80.72	MS13	ATOM	766	CA	THR	36	280.335	125.457	2.542	1.00	86.96	MS13
ATOM	714	C	ALA	29	271.025	124.145	1.040	1.00	53.50	MS13	ATOM	767	CB	THR	36	279.891	124.248	1.683	1.00	88.06	MS13
ATOM	715	O	ALA	29	272.228	124.345	0.922	1.00	53.50	MS13	ATOM	768	OG1	THR	36	279.740	123.094	2.523	1.00	88.06	MS13
ATOM	716	N	LYS	30	270.175	125.093	1.438	1.00	70.61	MS13	ATOM	769	CG2	THR	36	280.897	123.936	0.627	1.00	88.06	MS13
ATOM	717	CA	LYS	30	270.640	126.445	1.774	1.00	70.61	MS13	ATOM	770	C	THR	36	280.759	126.634	1.662	1.00	86.96	MS13
ATOM	718	CB	LYS	30	269.493	127.308	2.303	1.00	114.35	MS13	ATOM	771	O	THR	36	281.475	126.481	0.679	1.00	86.96	MS13
ATOM	719	CG	LYS	30	268.371	127.553	1.313	1.00	114.35	MS13	ATOM	772	N	GLY	37	280.311	127.822	2.042	1.00	73.48	MS13
ATOM	720	CD	LYS	30	267.276	128.416	1.937	1.00	114.35	MS13	ATOM	773	CA	GLY	37	280.653	129.018	1.301	1.00	73.48	MS13
ATOM	721	CE	LYS	30	266.037	128.484	1.051	1.00	114.35	MS13	ATOM	774	C	GLY	37	280.564	128.911	-0.206	1.00	73.48	MS13
ATOM	722	NZ	LYS	30	264.947	129.292	1.671	1.00	114.35	MS13	ATOM	775	O	GLY	37	281.494	129.286	-0.908	1.00	73.48	MS13
ATOM	723	C	LYS	30	271.733	126.379	2.842	1.00	70.61	MS13	ATOM	776	N	ILE	38	279.455	128.393	-0.715	1.00	101.59	MS13
ATOM	724	O	LYS	30	272.606	127.241	2.908	1.00	70.61	MS13	ATOM	777	CA	ILE	38	279.275	128.277	-2.157	1.00	101.59	MS13
ATOM	725	N	GLU	31	271.675	125.354	3.684	1.00	80.21	MS13	ATOM	778	CB	ILE	38	279.188	126.823	-2.612	1.00	45.94	MS13
ATOM	726	CA	GLU	31	272.669	125.189	4.728	1.00	80.21	MS13	ATOM	779	CG2	ILE	38	279.169	126.774	-4.150	1.00	45.94	MS13
ATOM	727	CB	GLU	31	272.240	124.091	5.700	1.00	126.73	MS13	ATOM	780	CG1	ILE	38	280.340	126.017	-2.006	1.00	45.94	MS13
ATOM	728	CG	GLU	31	272.273	124.508	7.159	1.00	126.73	MS13	ATOM	781	CD1	ILE	38	280.283	124.531	-2.314	1.00	45.94	MS13
ATOM	729	CD	GLU	31	272.074	123.339	8.110	1.00	126.73	MS13	ATOM	782	C	ILE	38	277.947	128.914	-2.483	1.00	101.59	MS13
ATOM	730	OE1	GLU	31	272.999	122.509	8.236	1.00	126.73	MS13	ATOM	783	O	ILE	38	276.903	128.370	-2.128	1.00	101.59	MS13
ATOM	731	OE2	GLU	31	270.991	123.248	8.729	1.00	126.73	MS13	ATOM	784	N	ASN	39	277.962	130.062	-3.146	1.00	72.25	MS13
ATOM	732	C	GLU	31	274.005	124.816	4.093	1.00	80.21	MS13	ATOM	785	CA	ASN	39	276.693	130.693	-3.468	1.00	72.25	MS13
ATOM	733	O	GLU	31	274.836	125.684	3.828	1.00	80.21	MS13	ATOM	786	CB	ASN	39	276.885	132.027	-4.188	1.00	78.81	MS13
ATOM	734	N	ALA	32	274.197	123.521	3.844	1.00	119.75	MS13	ATOM	787	CG	ASN	39	276.924	131.870	-5.687	1.00	78.81	MS13
ATOM	735	CA	ALA	32	275.432	123.006	3.253	1.00	119.75	MS13	ATOM	788	OD1	ASN	39	277.799	131.197	-6.222	1.00	78.81	MS13
ATOM	736	CB	ALA	32	275.169	121.674	2.534	1.00	71.00	MS13	ATOM	789	ND2	ASN	39	275.968	132.481	-6.374	1.00	78.81	MS13
ATOM	737	C	ALA	32	276.076	123.992	2.295	1.00	119.75	MS13	ATOM	790	C	ASN	39	275.999	129.723	-4.395	1.00	72.25	MS13
ATOM	738	O	ALA	32	277.280	124.199	2.334	1.00	119.75	MS13	ATOM	791	O	ASN	39	276.606	129.221	-5.340	1.00	72.25	MS13
ATOM	739	N	LEU	33	275.273	124.607	1.441	1.00	83.70	MS13	ATOM	792	N	PRO	40	274.726	129.415	-4.125	1.00	126.26	MS13
ATOM	740	CA	LEU	33	275.801	125.567	0.488	1.00	83.70	MS13	ATOM	793	CD	PRO	40	273.793	129.960	-3.124	1.00	62.41	MS13
ATOM	741	CB	LEU	33	274.687	126.056	-0.431	1.00	87.16	MS13	ATOM	794	CA	PRO	40	274.055	128.479	-5.023	1.00	126.26	MS13
ATOM	742	CG	LEU	33	274.293	125.001	-1.464	1.00	87.16	MS13	ATOM	795	CB	PRO	40	272.718	128.249	-4.334	1.00	62.41	MS13
ATOM	743	CD1	LEU	33	272.950	125.346	-2.052	1.00	87.16	MS13	ATOM	796	CG	PRO	40	272.451	129.579	-3.696	1.00	62.41	MS13
ATOM	744	CD2	LEU	33	275.355	124.907	-2.547	1.00	87.16	MS13	ATOM	797	C	PRO	40	273.937	129.158	-6.379	1.00	126.26	MS13
ATOM	745	C	LEU	33	276.461	126.748	1.178	1.00	83.70	MS13	ATOM	798	O	PRO	40	274.799	129.958	-6.737	1.00	126.26	MS13
ATOM	746	O	LEU	33	277.658	126.991	1.015	1.00	83.70	MS13	ATOM	799	N	ALA	41	272.881	128.867	-7.128	1.00	59.16	MS13
ATOM	747	N	GLU	34	275.674	127.480	1.952	1.00	75.13	MS13	ATOM	800	CA	ALA	41	272.726	129.469	-8.453	1.00	59.16	MS13
ATOM	748	CA	GLU	34	276.168	128.643	2.674	1.00	75.13	MS13	ATOM	801	CB	ALA	41	272.872	130.991	-8.376	1.00	20.16	MS13
ATOM	749	CB	GLU	34	275.024	129.268	3.459	1.00	151.17	MS13	ATOM	802	C	ALA	41	273.779	128.893	-9.398	1.00	59.16	MS13
ATOM	750	CG	GLU	34	275.353	130.595	4.081	1.00	151.17	MS13	ATOM	803	O	ALA	41	273.561	128.808	-10.603	1.00	59.16	MS13
ATOM	751	CD	GLU	34	274.103	131.346	4.461	1.00	151.17	MS13	ATOM	804	N	THR	42	274.930	128.517	-8.848	1.00	58.55	MS13
ATOM	752	OE1	GLU	34	273.318	130.811	5.272	1.00	151.17	MS13	ATOM	805	CA	THR	42	275.986	127.932	-9.655	1.00	58.55	MS13
ATOM	753	OE2	GLU	34	273.903	132.463	3.939	1.00	151.17	MS13	ATOM	806	CB	THR	42	277.208	127.594	-8.802	1.00	109.86	MS13
ATOM	754	C	GLU	34	277.324	128.304	3.614	1.00	75.13	MS13	ATOM	807	OG1	THR	42	276.775	127.235	-7.482	1.00	109.86	MS13
ATOM	755	O	GLU	34	278.355	128.976	3.599	1.00	75.13	MS13	ATOM	808	CG2	THR	42	278.157	128.783	-8.740	1.00	109.86	MS13
ATOM	756	N	LYS	35	277.155	127.271	4.434	1.00	84.65	MS13	ATOM	809	C	THR	42	275.424	126.658	-10.278	1.00	58.55	MS13
ATOM	757	CA	LYS	35	278.211	126.872	5.355	1.00	84.65	MS13	ATOM	810	O	THR	42	274.815	125.824	-9.592	1.00	58.55	MS13
ATOM	758	CB	LYS	35	277.750	125.707	6.222	1.00	121.00	MS13	ATOM	811	N	ARG	43	275.649	126.519	-11.579	1.00	59.57	MS13
ATOM	759	CG	LYS	35	276.640	126.066	7.177	1.00	121.00	MS13	ATOM	812	CA	ARG	43	275.133	125.398	-12.343	1.00	59.57	MS13
ATOM	760	CD	LYS	35	276.296	124.880	8.049	1.00	121.00	MS13	ATOM	813	CB	ARG	43	275.306	125.696	-13.832	1.00	94.27	MS13

ATOM	814	CG	ARG	43	274.053	125.456	-14.636	1.00	94.27	MS13	ATOM	867	OE2	GLU	49	286.424	120.873	-11.660	1.00144.81	MS13
ATOM	815	CD	ARG	43	272.903	126.273	-14.084	1.00	94.27	MS13	ATOM	868	C	GLU	49	286.441	120.888	-6.412	1.00 78.77	MS13
ATOM	816	NE	ARG	43	271.620	125.804	-14.591	1.00	94.27	MS13	ATOM	869	O	GLU	49	285.922	120.179	-5.554	1.00 78.77	MS13
ATOM	817	CZ	ARG	43	270.450	126.315	-14.228	1.00	94.27	MS13	ATOM	870	N	ALA	50	287.089	122.019	-6.142	1.00 91.88	MS13
ATOM	818	NH1	ARG	43	270.404	127.314	-13.356	1.00	94.27	MS13	ATOM	871	CA	ALA	50	287.284	122.511	-4.783	1.00 91.88	MS13
ATOM	819	NH2	ARG	43	269.329	125.828	-14.735	1.00	94.27	MS13	ATOM	872	CB	ALA	50	288.074	123.819	-4.816	1.00 56.79	MS13
ATOM	820	C	ARG	43	275.655	123.996	-12.047	1.00	59.57	MS13	ATOM	873	C	ALA	50	285.954	122.714	-4.062	1.00 91.88	MS13
ATOM	821	O	ARG	43	275.477	123.097	-12.862	1.00	59.57	MS13	ATOM	874	O	ALA	50	285.791	122.289	-2.917	1.00 91.88	MS13
ATOM	822	N	VAL	44	276.268	123.782	-10.894	1.00	64.82	MS13	ATOM	875	N	GLU	51	285.009	123.375	-4.725	1.00 76.31	MS13
ATOM	823	CA	VAL	44	276.784	122.448	-10.582	1.00	64.82	MS13	ATOM	876	CA	GLU	51	283.696	123.595	-4.130	1.00 76.31	MS13
ATOM	824	CB	VAL	44	275.696	121.357	-10.673	1.00	59.90	MS13	ATOM	877	CB	GLU	51	282.809	124.420	-5.070	1.00 85.63	MS13
ATOM	825	CG1	VAL	44	276.316	119.989	-10.411	1.00	59.90	MS13	ATOM	878	CG	GLU	51	283.362	125.799	-5.366	1.00 85.63	MS13
ATOM	826	CG2	VAL	44	274.589	121.644	-9.676	1.00	59.90	MS13	ATOM	879	CD	GLU	51	282.566	126.554	-6.423	1.00 85.63	MS13
ATOM	827	C	VAL	44	277.870	122.090	-11.577	1.00	64.82	MS13	ATOM	880	OE1	GLU	51	282.285	125.979	-7.502	1.00 85.63	MS13
ATOM	828	O	VAL	44	279.052	122.095	-11.247	1.00	64.82	MS13	ATOM	881	OE2	GLU	51	282.236	127.737	-6.184	1.00 85.63	MS13
ATOM	829	N	LYS	45	277.461	121.750	-12.793	1.00	73.90	MS13	ATOM	882	C	GLU	51	283.064	122.226	-3.879	1.00 76.31	MS13
ATOM	830	CA	LYS	45	278.421	121.431	-13.835	1.00	73.90	MS13	ATOM	883	O	GLU	51	282.567	121.936	-2.785	1.00 76.31	MS13
ATOM	831	CB	LYS	45	277.746	121.498	-15.210	1.00	81.40	MS13	ATOM	884	N	VAL	52	283.109	121.375	-4.896	1.00 52.95	MS13
ATOM	832	CG	LYS	45	277.110	122.851	-15.507	1.00	81.40	MS13	ATOM	885	CA	VAL	52	282.541	120.046	-4.766	1.00 52.95	MS13
ATOM	833	CD	LYS	45	276.361	122.874	-16.824	1.00	81.40	MS13	ATOM	886	CB	VAL	52	282.714	119.225	-6.044	1.00 41.54	MS13
ATOM	834	CE	LYS	45	277.296	122.779	-18.012	1.00	81.40	MS13	ATOM	887	CG1	VAL	52	281.990	117.894	-5.904	1.00 41.54	MS13
ATOM	835	NZ	LYS	45	276.537	122.715	-19.296	1.00	81.40	MS13	ATOM	888	CG2	VAL	52	282.185	120.011	-7.232	1.00 41.54	MS13
ATOM	836	C	LYS	45	279.485	122.522	-13.725	1.00	73.90	MS13	ATOM	889	C	VAL	52	283.168	119.263	-3.628	1.00 52.95	MS13
ATOM	837	O	LYS	45	280.690	122.241	-13.692	1.00	73.90	MS13	ATOM	890	O	VAL	52	282.643	118.231	-3.228	1.00 52.95	MS13
ATOM	838	N	ASP	46	279.004	123.765	-13.625	1.00	78.61	MS13	ATOM	891	N	VAL	53	284.294	119.733	-3.107	1.00 70.79	MS13
ATOM	839	CA	ASP	46	279.843	124.953	-13.528	1.00	78.61	MS13	ATOM	892	CA	VAL	53	284.932	119.010	-2.017	1.00 70.79	MS13
ATOM	840	CB	ASP	46	279.055	126.197	-13.960	1.00	150.21	MS13	ATOM	893	CB	VAL	53	286.443	119.350	-1.893	1.00 78.15	MS13
ATOM	841	CG	ASP	46	278.705	126.186	-15.440	1.00	150.21	MS13	ATOM	894	CG1	VAL	53	287.133	118.367	-0.948	1.00 78.15	MS13
ATOM	842	OD1	ASP	46	279.619	125.983	-16.267	1.00	150.21	MS13	ATOM	895	CG2	VAL	53	287.094	119.316	-3.245	1.00 78.15	MS13
ATOM	843	OD2	ASP	46	277.519	126.388	-15.779	1.00	150.21	MS13	ATOM	896	C	VAL	53	284.231	119.414	-0.731	1.00 70.79	MS13
ATOM	844	C	ASP	46	280.426	125.186	-12.137	1.00	78.61	MS13	ATOM	897	O	VAL	53	283.657	118.581	-0.032	1.00 70.79	MS13
ATOM	845	O	ASP	46	280.884	126.289	-11.838	1.00	78.61	MS13	ATOM	898	N	ARG	54	284.283	120.705	-0.429	1.00 94.03	MS13
ATOM	846	N	LEU	47	280.414	124.161	-11.289	1.00	88.20	MS13	ATOM	899	CA	ARG	54	283.659	121.229	0.773	1.00 94.03	MS13
ATOM	847	CA	LEU	47	280.969	124.295	-9.944	1.00	88.20	MS13	ATOM	900	CB	ARG	54	283.665	122.755	0.727	1.00 73.03	MS13
ATOM	848	CB	LEU	47	280.500	123.150	-9.041	1.00	52.74	MS13	ATOM	901	CG	ARG	54	285.010	123.374	0.491	1.00 73.03	MS13
ATOM	849	CG	LEU	47	279.101	123.244	-8.410	1.00	52.74	MS13	ATOM	902	CD	ARG	54	284.893	124.880	0.445	1.00 73.03	MS13
ATOM	850	CD1	LEU	47	278.756	121.905	-7.767	1.00	52.74	MS13	ATOM	903	NE	ARG	54	284.458	125.373	-0.857	1.00 73.03	MS13
ATOM	851	CD2	LEU	47	279.046	124.386	-7.385	1.00	52.74	MS13	ATOM	904	CZ	ARG	54	283.986	126.603	-1.063	1.00 73.03	MS13
ATOM	852	C	LEU	47	282.483	124.282	-10.022	1.00	88.20	MS13	ATOM	905	NH1	ARG	54	283.889	127.453	-0.047	1.00 73.03	MS13
ATOM	853	O	LEU	47	283.058	124.671	-11.037	1.00	88.20	MS13	ATOM	906	NH2	ARG	54	283.612	126.994	-2.280	1.00 73.03	MS13
ATOM	854	N	THR	48	283.121	123.839	-8.944	1.00	65.15	MS13	ATOM	907	C	ARG	54	282.219	120.722	0.872	1.00 94.03	MS13
ATOM	855	CA	THR	48	284.579	123.749	-8.870	1.00	65.15	MS13	ATOM	908	O	ARG	54	281.814	120.144	1.885	1.00 94.03	MS13
ATOM	856	CB	THR	48	285.211	124.986	-8.213	1.00	50.69	MS13	ATOM	909	N	LEU	55	281.459	120.943	-0.200	1.00 73.91	MS13
ATOM	857	OG1	THR	48	285.360	126.028	-9.184	1.00	50.69	MS13	ATOM	910	CA	LEU	55	280.067	120.532	-0.273	1.00 73.91	MS13
ATOM	858	CG2	THR	48	286.562	124.638	-7.628	1.00	50.69	MS13	ATOM	911	CB	LEU	55	279.527	120.745	-1.688	1.00 54.95	MS13
ATOM	859	C	THR	48	284.965	122.550	-8.034	1.00	65.15	MS13	ATOM	912	CG	LEU	55	278.096	121.302	-1.742	1.00 54.95	MS13
ATOM	860	O	THR	48	284.465	122.378	-6.918	1.00	65.15	MS13	ATOM	913	CD1	LEU	55	277.595	121.357	-3.177	1.00 54.95	MS13
ATOM	861	N	GLU	49	285.860	121.729	-8.576	1.00	78.77	MS13	ATOM	914	CD2	LEU	55	277.182	120.432	-0.895	1.00 54.95	MS13
ATOM	862	CA	GLU	49	286.333	120.536	-7.886	1.00	78.77	MS13	ATOM	915	C	LEU	55	279.946	119.067	0.095	1.00 73.91	MS13
ATOM	863	CB	GLU	49	287.702	120.121	-8.430	1.00	144.81	MS13	ATOM	916	O	LEU	55	279.315	118.718	1.091	1.00 73.91	MS13
ATOM	864	CG	GLU	49	287.735	119.847	-9.937	1.00	144.81	MS13	ATOM	917	N	ARG	56	280.563	118.214	-0.713	1.00 66.60	MS13
ATOM	865	CD	GLU	49	287.303	121.046	-10.787	1.00	144.81	MS13	ATOM	918	CA	ARG	56	280.525	116.775	-0.493	1.00 66.60	MS13
ATOM	866	OE1	GLU	49	287.843	122.157	-10.589	1.00	144.81	MS13	ATOM	919	CB	ARG	56	281.514	116.080	-1.418	1.00 90.28	MS13

ATOM	920	CG	ARG	56	281.652	114.621	-1.118	1.00	90.28	MS13	ATOM	973	N	THR	62	277.666	115.867	7.884	1.00	77.24	MS13
ATOM	921	CD	ARG	56	282.653	113.980	-2.022	1.00	90.28	MS13	ATOM	974	CA	THR	62	276.919	116.764	8.741	1.00	77.24	MS13
ATOM	922	NE	ARG	56	282.291	114.180	-3.417	1.00	90.28	MS13	ATOM	975	CB	THR	62	276.948	118.208	8.185	1.00	86.81	MS13
ATOM	923	CZ	ARG	56	282.972	113.674	-4.438	1.00	90.28	MS13	ATOM	976	OG1	THR	62	276.279	119.088	9.094	1.00	86.81	MS13
ATOM	924	NH1	ARG	56	284.052	112.936	-4.208	1.00	90.28	MS13	ATOM	977	CG2	THR	62	276.269	118.282	6.836	1.00	86.81	MS13
ATOM	925	NH2	ARG	56	282.572	113.907	-5.685	1.00	90.28	MS13	ATOM	978	C	THR	62	275.477	116.256	8.889	1.00	77.24	MS13
ATOM	926	C	ARG	56	280.763	116.283	0.937	1.00	66.60	MS13	ATOM	979	O	THR	62	274.723	116.752	9.722	1.00	77.24	MS13
ATOM	927	O	ARG	56	279.867	115.707	1.547	1.00	66.60	MS13	ATOM	980	N	TRP	63	275.111	115.250	8.091	1.00	109.37	MS13
ATOM	928	N	GLU	57	281.957	116.490	1.480	1.00	119.82	MS13	ATOM	981	CA	TRP	63	273.769	114.657	8.134	1.00	109.37	MS13
ATOM	929	CA	GLU	57	282.231	115.999	2.828	1.00	119.82	MS13	ATOM	982	CB	TRP	63	272.834	115.296	7.106	1.00	48.23	MS13
ATOM	930	CB	GLU	57	283.744	115.949	3.092	1.00	182.41	MS13	ATOM	983	CG	TRP	63	272.520	116.718	7.348	1.00	48.23	MS13
ATOM	931	CG	GLU	57	284.416	114.700	2.486	1.00	182.41	MS13	ATOM	984	CD2	TRP	63	272.693	117.796	6.425	1.00	48.23	MS13
ATOM	932	CD	GLU	57	284.855	113.667	3.531	1.00	182.41	MS13	ATOM	985	CE2	TRP	63	272.284	118.979	7.082	1.00	48.23	MS13
ATOM	933	OE1	GLU	57	284.157	113.496	4.551	1.00	182.41	MS13	ATOM	986	CE3	TRP	63	273.159	117.879	5.107	1.00	48.23	MS13
ATOM	934	OE2	GLU	57	285.898	113.013	3.318	1.00	182.41	MS13	ATOM	987	CD1	TRP	63	272.019	117.266	8.494	1.00	48.23	MS13
ATOM	935	C	GLU	57	281.502	116.714	3.959	1.00	119.82	MS13	ATOM	988	NE1	TRP	63	271.876	118.627	8.344	1.00	48.23	MS13
ATOM	936	O	GLU	57	281.442	116.198	5.076	1.00	119.82	MS13	ATOM	989	CZ2	TRP	63	272.326	120.241	6.459	1.00	48.23	MS13
ATOM	937	N	TYR	58	280.953	117.895	3.693	1.00	82.38	MS13	ATOM	990	CZ3	TRP	63	273.201	119.136	4.488	1.00	48.23	MS13
ATOM	938	CA	TYR	58	280.186	118.572	4.734	1.00	82.38	MS13	ATOM	991	CH2	TRP	63	272.787	120.298	5.170	1.00	48.23	MS13
ATOM	939	CB	TYR	58	279.833	120.006	4.353	1.00	93.55	MS13	ATOM	992	C	TRP	63	273.736	113.155	7.871	1.00	109.37	MS13
ATOM	940	CG	TYR	58	278.841	120.612	5.318	1.00	93.55	MS13	ATOM	993	O	TRP	63	274.713	112.548	7.427	1.00	109.37	MS13
ATOM	941	CD1	TYR	58	279.187	120.829	6.651	1.00	93.55	MS13	ATOM	994	N	LYS	64	272.572	112.579	8.141	1.00	93.30	MS13
ATOM	942	CE1	TYR	58	278.280	121.360	7.558	1.00	93.55	MS13	ATOM	995	CA	LYS	64	272.308	111.164	7.931	1.00	93.30	MS13
ATOM	943	CD2	TYR	58	277.552	120.943	4.912	1.00	93.55	MS13	ATOM	996	CB	LYS	64	271.428	110.657	9.067	1.00	95.94	MS13
ATOM	944	CE2	TYR	58	276.634	121.475	5.814	1.00	93.55	MS13	ATOM	997	CG	LYS	64	271.560	109.194	9.381	1.00	95.94	MS13
ATOM	945	CZ	TYR	58	277.009	121.679	7.135	1.00	93.55	MS13	ATOM	998	CD	LYS	64	270.972	108.939	10.756	1.00	95.94	MS13
ATOM	946	OH	TYR	58	276.115	122.194	8.040	1.00	93.55	MS13	ATOM	999	CE	LYS	64	271.238	107.526	11.229	1.00	95.94	MS13
ATOM	947	C	TYR	58	278.897	117.778	4.814	1.00	82.38	MS13	ATOM	1000	NZ	LYS	64	270.878	107.356	12.664	1.00	95.94	MS13
ATOM	948	O	TYR	58	278.574	117.179	5.835	1.00	82.38	MS13	ATOM	1001	C	LYS	64	271.534	111.211	6.615	1.00	93.30	MS13
ATOM	949	N	VAL	59	278.177	117.782	3.697	1.00	86.07	MS13	ATOM	1002	O	LYS	64	270.420	111.741	6.563	1.00	93.30	MS13
ATOM	950	CA	VAL	59	276.920	117.069	3.549	1.00	86.07	MS13	ATOM	1003	N	LEU	65	272.117	110.674	5.552	1.00	65.25	MS13
ATOM	951	CB	VAL	59	276.501	117.025	2.064	1.00	62.36	MS13	ATOM	1004	CA	LEU	65	271.466	110.748	4.256	1.00	65.25	MS13
ATOM	952	CG1	VAL	59	275.294	116.137	1.887	1.00	62.36	MS13	ATOM	1005	CB	LEU	65	272.256	111.701	3.369	1.00	70.05	MS13
ATOM	953	CG2	VAL	59	276.200	118.426	1.575	1.00	62.36	MS13	ATOM	1006	CG	LEU	65	272.288	113.129	3.917	1.00	70.05	MS13
ATOM	954	C	VAL	59	277.000	115.637	4.072	1.00	86.07	MS13	ATOM	1007	CD1	LEU	65	273.352	113.983	3.219	1.00	70.05	MS13
ATOM	955	O	VAL	59	276.259	115.252	4.974	1.00	86.07	MS13	ATOM	1008	CD2	LEU	65	270.900	113.717	3.735	1.00	70.05	MS13
ATOM	956	N	GLU	60	277.905	114.850	3.507	1.00	83.86	MS13	ATOM	1009	C	LEU	65	271.233	109.457	3.497	1.00	65.25	MS13
ATOM	957	CA	GLU	60	278.044	113.459	3.910	1.00	83.86	MS13	ATOM	1010	O	LEU	65	271.589	108.362	3.941	1.00	65.25	MS13
ATOM	958	CB	GLU	60	279.083	112.766	3.033	1.00	109.17	MS13	ATOM	1011	N	GLU	66	270.609	109.616	2.336	1.00	73.19	MS13
ATOM	959	CG	GLU	60	278.724	112.743	1.563	1.00	109.17	MS13	ATOM	1012	CA	GLU	66	270.313	108.513	1.443	1.00	73.19	MS13
ATOM	960	CD	GLU	60	279.750	111.995	0.733	1.00	109.17	MS13	ATOM	1013	CB	GLU	66	271.462	108.351	0.452	1.00	61.43	MS13
ATOM	961	OE1	GLU	60	279.876	110.760	0.898	1.00	109.17	MS13	ATOM	1014	CG	GLU	66	271.380	109.269	-0.743	1.00	61.43	MS13
ATOM	962	OE2	GLU	60	280.436	112.642	-0.082	1.00	109.17	MS13	ATOM	1015	CD	GLU	66	270.181	108.942	-1.615	1.00	61.43	MS13
ATOM	963	C	GLU	60	278.399	113.241	5.376	1.00	83.86	MS13	ATOM	1016	OE1	GLU	66	269.863	107.732	-1.768	1.00	61.43	MS13
ATOM	964	O	GLU	60	278.219	112.138	5.906	1.00	83.86	MS13	ATOM	1017	OE2	GLU	66	269.562	109.890	-2.153	1.00	61.43	MS13
ATOM	965	N	ASN	61	278.896	114.277	6.043	1.00	83.84	MS13	ATOM	1018	C	GLU	66	270.027	107.178	2.119	1.00	73.19	MS13
ATOM	966	CA	ASN	61	279.274	114.118	7.439	1.00	83.84	MS13	ATOM	1019	O	GLU	66	269.382	107.122	3.166	1.00	73.19	MS13
ATOM	967	CB	ASN	61	280.788	114.265	7.589	1.00	133.05	MS13	ATOM	1020	N	GLY	67	270.519	106.114	1.491	1.00	70.94	MS13
ATOM	968	CG	ASN	61	281.537	113.083	7.013	1.00	133.05	MS13	ATOM	1021	CA	GLY	67	270.331	104.756	1.973	1.00	70.94	MS13
ATOM	969	OD1	ASN	61	281.388	111.951	7.477	1.00	133.05	MS13	ATOM	1022	C	GLY	67	270.385	104.462	3.462	1.00	70.94	MS13
ATOM	970	ND2	ASN	61	282.337	113.335	5.990	1.00	133.05	MS13	ATOM	1023	O	GLY	67	269.917	103.401	3.884	1.00	70.94	MS13
ATOM	971	C	ASN	61	278.559	115.039	8.404	1.00	83.84	MS13	ATOM	1024	N	GLU	68	270.949	105.363	4.263	1.00	102.48	MS13
ATOM	972	O	ASN	61	278.805	114.998	9.609	1.00	83.84	MS13	ATOM	1025	CA	GLU	68	271.014	105.124	5.701	1.00	102.48	MS13

ATOM	1026	CB	GLU	68	272.102	105.969	6.347	1.00147.89	MS13	ATOM	1079	CA	ALA	75	263.734	100.348	11.314	1.00 95.96	MS13
ATOM	1027	CG	GLU	68	272.567	105.400	7.667	1.00147.89	MS13	ATOM	1080	CB	ALA	75	265.146	100.675	11.751	1.00102.73	MS13
ATOM	1028	CD	GLU	68	273.488	106.337	8.407	1.00147.89	MS13	ATOM	1081	C	ALA	75	262.744	100.840	12.360	1.00 95.96	MS13
ATOM	1029	OE1	GLU	68	274.311	107.005	7.747	1.00147.89	MS13	ATOM	1082	O	ALA	75	262.222	100.047	13.145	1.00 95.96	MS13
ATOM	1030	OE2	GLU	68	273.395	106.397	9.650	1.00147.89	MS13	ATOM	1083	N	ASN	76	262.501	102.148	12.383	1.00 91.62	MS13
ATOM	1031	C	GLU	68	269.667	105.465	6.325	1.00102.48	MS13	ATOM	1084	CA	ASN	76	261.558	102.722	13.338	1.00 91.62	MS13
ATOM	1032	O	GLU	68	269.211	104.792	7.250	1.00102.48	MS13	ATOM	1085	CB	ASN	76	261.386	104.223	13.100	1.00 85.65	MS13
ATOM	1033	N	LEU	69	269.046	106.526	5.816	1.00 82.95	MS13	ATOM	1086	CG	ASN	76	262.679	104.993	13.258	1.00 85.65	MS13
ATOM	1034	CA	LEU	69	267.732	106.957	6.280	1.00 82.95	MS13	ATOM	1087	OD1	ASN	76	263.290	104.999	14.326	1.00 85.65	MS13
ATOM	1035	CB	LEU	69	267.276	108.188	5.507	1.00 61.17	MS13	ATOM	1088	ND2	ASN	76	263.103	105.653	12.188	1.00 85.65	MS13
ATOM	1036	CG	LEU	69	267.587	109.576	6.033	1.00 61.17	MS13	ATOM	1089	C	ASN	76	260.216	102.039	13.141	1.00 91.62	MS13
ATOM	1037	CD1	LEU	69	266.775	110.597	5.233	1.00 61.17	MS13	ATOM	1090	O	ASN	76	259.660	101.450	14.068	1.00 91.62	MS13
ATOM	1038	CD2	LEU	69	267.220	109.647	7.506	1.00 61.17	MS13	ATOM	1091	N	ILE	77	259.709	102.115	11.916	1.00 67.21	MS13
ATOM	1039	C	LEU	69	266.716	105.846	6.030	1.00 82.95	MS13	ATOM	1092	CA	ILE	77	258.431	101.513	11.571	1.00 67.21	MS13
ATOM	1040	O	LEU	69	266.042	105.365	6.944	1.00 82.95	MS13	ATOM	1093	CB	ILE	77	258.170	101.644	10.064	1.00 65.28	MS13
ATOM	1041	N	ARG	70	266.600	105.462	4.765	1.00 83.96	MS13	ATOM	1094	CG2	ILE	77	256.732	101.268	9.749	1.00 65.28	MS13
ATOM	1042	CA	ARG	70	265.676	104.420	4.369	1.00 83.96	MS13	ATOM	1095	CG1	ILE	77	258.421	103.092	9.632	1.00 65.28	MS13
ATOM	1043	CB	ARG	70	266.041	103.918	2.977	1.00 93.03	MS13	ATOM	1096	CD1	ILE	77	258.251	103.337	8.154	1.00 65.28	MS13
ATOM	1044	CG	ARG	70	266.007	105.018	1.932	1.00 93.03	MS13	ATOM	1097	C	ILE	77	258.375	100.042	11.987	1.00 67.21	MS13
ATOM	1045	CD	ARG	70	266.550	104.540	0.600	1.00 93.03	MS13	ATOM	1098	O	ILE	77	257.301	99.482	12.174	1.00 67.21	MS13
ATOM	1046	NE	ARG	70	266.532	105.603	-0.397	1.00 93.03	MS13	ATOM	1099	N	LYS	78	259.536	99.420	12.138	1.00 68.27	MS13
ATOM	1047	CZ	ARG	70	265.423	106.076	-0.951	1.00 93.03	MS13	ATOM	1100	CA	LYS	78	259.595	98.027	12.555	1.00 68.27	MS13
ATOM	1048	NH1	ARG	70	264.244	105.573	-0.608	1.00 93.03	MS13	ATOM	1101	CB	LYS	78	260.990	97.458	12.281	1.00 80.28	MS13
ATOM	1049	NH2	ARG	70	265.493	107.062	-1.835	1.00 93.03	MS13	ATOM	1102	CG	LYS	78	261.026	96.060	11.663	1.00 80.28	MS13
ATOM	1050	C	ARG	70	265.732	103.293	5.381	1.00 83.96	MS13	ATOM	1103	CD	LYS	78	260.581	94.984	12.624	1.00 80.28	MS13
ATOM	1051	O	ARG	70	264.719	102.672	5.689	1.00 83.96	MS13	ATOM	1104	CE	LYS	78	260.972	93.605	12.114	1.00 80.28	MS13
ATOM	1052	N	ALA	71	266.926	103.041	5.904	1.00 72.18	MS13	ATOM	1105	NZ	LYS	78	260.756	92.519	13.126	1.00 80.28	MS13
ATOM	1053	CA	ALA	71	267.118	102.000	6.909	1.00 72.18	MS13	ATOM	1106	C	LYS	78	259.311	97.993	14.054	1.00 68.27	MS13
ATOM	1054	CB	ALA	71	268.597	101.695	7.060	1.00 91.64	MS13	ATOM	1107	O	LYS	78	258.441	97.259	14.518	1.00 68.27	MS13
ATOM	1055	C	ALA	71	266.551	102.541	8.220	1.00 72.18	MS13	ATOM	1108	N	ARG	79	260.046	98.812	14.797	1.00 73.69	MS13
ATOM	1056	O	ALA	71	265.674	101.930	8.840	1.00 72.18	MS13	ATOM	1109	CA	ARG	79	259.918	98.897	16.246	1.00 73.69	MS13
ATOM	1057	N	GLU	72	267.076	103.695	8.625	1.00 74.43	MS13	ATOM	1110	CB	ARG	79	260.716	100.091	16.771	1.00138.03	MS13
ATOM	1058	CA	GLU	72	266.639	104.393	9.824	1.00 74.43	MS13	ATOM	1111	CG	ARG	79	262.170	100.061	16.381	1.00138.03	MS13
ATOM	1059	CB	GLU	72	267.008	105.873	9.693	1.00124.21	MS13	ATOM	1112	CD	ARG	79	262.850	101.387	16.645	1.00138.03	MS13
ATOM	1060	CG	GLU	72	266.400	106.785	10.736	1.00124.21	MS13	ATOM	1113	NE	ARG	79	264.176	101.407	16.040	1.00138.03	MS13
ATOM	1061	CD	GLU	72	267.074	106.654	12.076	1.00124.21	MS13	ATOM	1114	CZ	ARG	79	264.939	102.489	15.943	1.00138.03	MS13
ATOM	1062	OE1	GLU	72	266.666	107.371	13.017	1.00124.21	MS13	ATOM	1115	NH1	ARG	79	264.506	103.649	16.416	1.00138.03	MS13
ATOM	1063	OE2	GLU	72	268.013	105.835	12.182	1.00124.21	MS13	ATOM	1116	NH2	ARG	79	266.132	102.411	15.367	1.00138.03	MS13
ATOM	1064	C	GLU	72	265.123	104.239	9.909	1.00 74.43	MS13	ATOM	1117	C	ARG	79	258.478	99.018	16.727	1.00 73.69	MS13
ATOM	1065	O	GLU	72	264.606	103.394	10.647	1.00 74.43	MS13	ATOM	1118	O	ARG	79	257.869	98.036	17.169	1.00 73.69	MS13
ATOM	1066	N	VAL	73	264.428	105.052	9.120	1.00 76.60	MS13	ATOM	1119	N	LEU	80	257.941	100.233	16.655	1.00140.63	MS13
ATOM	1067	CA	VAL	73	262.972	105.053	9.053	1.00 76.60	MS13	ATOM	1120	CA	LEU	80	256.579	100.500	17.108	1.00140.63	MS13
ATOM	1068	CB	VAL	73	262.497	105.784	7.768	1.00 70.60	MS13	ATOM	1121	CB	LEU	80	256.149	101.914	16.692	1.00 63.13	MS13
ATOM	1069	CG1	VAL	73	261.065	105.423	7.438	1.00 70.60	MS13	ATOM	1122	CG	LEU	80	255.853	102.152	15.218	1.00 63.13	MS13
ATOM	1070	CG2	VAL	73	262.611	107.287	7.969	1.00 70.60	MS13	ATOM	1123	CD1	LEU	80	255.943	103.653	14.941	1.00 63.13	MS13
ATOM	1071	C	VAL	73	262.372	103.652	9.089	1.00 76.60	MS13	ATOM	1124	CD2	LEU	80	256.838	101.368	14.351	1.00 63.13	MS13
ATOM	1072	O	VAL	73	261.600	103.318	9.993	1.00 76.60	MS13	ATOM	1125	C	LEU	80	255.614	99.455	16.559	1.00140.63	MS13
ATOM	1073	N	ALA	74	262.725	102.836	8.105	1.00 59.35	MS13	ATOM	1126	O	LEU	80	254.532	99.240	17.100	1.00140.63	MS13
ATOM	1074	CA	ALA	74	262.202	101.479	8.029	1.00 59.35	MS13	ATOM	1127	N	MET	81	256.017	98.800	15.481	1.00 70.68	MS13
ATOM	1075	CB	ALA	74	262.975	100.680	6.982	1.00 49.45	MS13	ATOM	1128	CA	MET	81	255.187	97.763	14.899	1.00 70.68	MS13
ATOM	1076	C	ALA	74	262.300	100.807	9.391	1.00 59.35	MS13	ATOM	1129	CB	MET	81	255.616	97.496	13.459	1.00 80.81	MS13
ATOM	1077	O	ALA	74	261.336	100.203	9.870	1.00 59.35	MS13	ATOM	1130	CG	MET	81	254.609	96.720	12.650	1.00 80.81	MS13
ATOM	1078	N	ALA	75	263.471	100.933	10.008	1.00 95.96	MS13	ATOM	1131	SD	MET	81	255.144	96.586	10.940	1.00 80.81	MS13

ATOM	1132	CE	MET	81	255.121	98.301	10.455	1.00	80.81	MS13	ATOM	1185	CA	GLY	88	252.420	99.901	14.746	1.00	67.00	MS13
ATOM	1133	C	MET	81	255.356	96.498	15.747	1.00	70.68	MS13	ATOM	1186	C	GLY	88	251.366	99.120	13.981	1.00	67.00	MS13
ATOM	1134	O	MET	81	254.391	95.783	16.016	1.00	70.68	MS13	ATOM	1187	O	GLY	88	251.554	98.794	12.805	1.00	67.00	MS13
ATOM	1135	N	ASP	82	256.593	96.243	16.173	1.00	111.99	MS13	ATOM	1188	N	LEU	89	250.253	98.816	14.644	1.00	69.98	MS13
ATOM	1136	CA	ASP	82	256.927	95.080	16.996	1.00	111.99	MS13	ATOM	1189	CA	LEU	89	249.183	98.061	14.002	1.00	69.98	MS13
ATOM	1137	CB	ASP	82	258.433	94.899	17.064	1.00	92.80	MS13	ATOM	1190	CB	LEU	89	247.983	97.898	14.940	1.00	83.24	MS13
ATOM	1138	CG	ASP	82	259.038	94.685	15.717	1.00	92.80	MS13	ATOM	1191	CG	LEU	89	248.203	97.196	16.287	1.00	83.24	MS13
ATOM	1139	OD1	ASP	82	258.551	93.787	14.993	1.00	92.80	MS13	ATOM	1192	CD1	LEU	89	246.845	96.857	16.880	1.00	83.24	MS13
ATOM	1140	OD2	ASP	82	259.998	95.413	15.387	1.00	92.80	MS13	ATOM	1193	CD2	LEU	89	249.042	95.922	16.117	1.00	83.24	MS13
ATOM	1141	C	ASP	82	256.385	95.163	18.415	1.00	111.99	MS13	ATOM	1194	C	LEU	89	248.741	98.759	12.733	1.00	69.98	MS13
ATOM	1142	O	ASP	82	256.684	94.319	19.257	1.00	111.99	MS13	ATOM	1195	O	LEU	89	248.647	98.136	11.680	1.00	69.98	MS13
ATOM	1143	N	ILE	83	255.619	96.203	18.692	1.00	80.36	MS13	ATOM	1196	N	ARG	90	248.475	100.058	12.830	1.00	64.17	MS13
ATOM	1144	CA	ILE	83	255.009	96.342	19.996	1.00	80.36	MS13	ATOM	1197	CA	ARG	90	248.046	100.821	11.667	1.00	64.17	MS13
ATOM	1145	CB	ILE	83	255.735	97.423	20.843	1.00	59.08	MS13	ATOM	1198	CB	ARG	90	248.020	102.318	11.985	1.00	75.40	MS13
ATOM	1146	CG2	ILE	83	257.226	97.127	20.839	1.00	59.08	MS13	ATOM	1199	CG	ARG	90	247.104	102.682	13.143	1.00	75.40	MS13
ATOM	1147	CG1	ILE	83	255.522	98.825	20.260	1.00	59.08	MS13	ATOM	1200	CD	ARG	90	245.664	102.283	12.859	1.00	75.40	MS13
ATOM	1148	CD1	ILE	83	256.132	99.947	21.090	1.00	59.08	MS13	ATOM	1201	NE	ARG	90	245.068	103.114	11.814	1.00	75.40	MS13
ATOM	1149	C	ILE	83	253.563	96.705	19.667	1.00	80.36	MS13	ATOM	1202	CZ	ARG	90	243.841	102.948	11.317	1.00	75.40	MS13
ATOM	1150	O	ILE	83	253.311	97.466	18.729	1.00	80.36	MS13	ATOM	1203	NH1	ARG	90	243.054	101.973	11.766	1.00	75.40	MS13
ATOM	1151	N	GLY	84	252.622	96.110	20.396	1.00	83.25	MS13	ATOM	1204	NH2	ARG	90	243.401	103.763	10.364	1.00	75.40	MS13
ATOM	1152	CA	GLY	84	251.206	96.354	20.156	1.00	83.25	MS13	ATOM	1205	C	ARG	90	248.998	100.537	10.514	1.00	64.17	MS13
ATOM	1153	C	GLY	84	250.880	97.733	19.617	1.00	83.25	MS13	ATOM	1206	O	ARG	90	248.564	100.244	9.406	1.00	64.17	MS13
ATOM	1154	O	GLY	84	249.877	97.917	18.929	1.00	83.25	MS13	ATOM	1207	N	HIS	91	250.299	100.610	10.776	1.00	71.21	MS13
ATOM	1155	N	CYS	85	251.737	98.698	19.941	1.00	51.79	MS13	ATOM	1208	CA	HIS	91	251.283	100.333	9.736	1.00	71.21	MS13
ATOM	1156	CA	CYS	85	251.595	100.085	19.517	1.00	51.79	MS13	ATOM	1209	CB	HIS	91	252.704	100.452	10.280	1.00	55.13	MS13
ATOM	1157	CB	CYS	85	252.955	100.617	19.059	1.00	92.51	MS13	ATOM	1210	CG	HIS	91	253.273	101.830	10.180	1.00	55.13	MS13
ATOM	1158	SG	CYS	85	252.945	102.300	18.421	1.00	92.51	MS13	ATOM	1211	CD2	HIS	91	253.724	102.681	11.132	1.00	55.13	MS13
ATOM	1159	C	CYS	85	250.562	100.304	18.415	1.00	51.79	MS13	ATOM	1212	ND1	HIS	91	253.439	102.478	8.975	1.00	55.13	MS13
ATOM	1160	O	CYS	85	250.686	99.771	17.303	1.00	51.79	MS13	ATOM	1213	CE1	HIS	91	253.969	103.670	9.190	1.00	55.13	MS13
ATOM	1161	N	TYR	86	249.538	101.090	18.734	1.00	66.57	MS13	ATOM	1214	NE2	HIS	91	254.152	103.818	10.490	1.00	55.13	MS13
ATOM	1162	CA	TYR	86	248.490	101.394	17.774	1.00	66.57	MS13	ATOM	1215	C	HIS	91	251.080	98.933	9.189	1.00	71.21	MS13
ATOM	1163	CB	TYR	86	247.684	102.614	18.240	1.00	94.71	MS13	ATOM	1216	O	HIS	91	250.998	98.735	7.980	1.00	71.21	MS13
ATOM	1164	CG	TYR	86	246.541	102.972	17.314	1.00	94.71	MS13	ATOM	1217	N	ARG	92	250.987	97.961	10.085	1.00	71.34	MS13
ATOM	1165	CD1	TYR	86	245.508	102.067	17.064	1.00	94.71	MS13	ATOM	1218	CA	ARG	92	250.806	96.575	9.676	1.00	71.34	MS13
ATOM	1166	CE1	TYR	86	244.477	102.379	16.186	1.00	94.71	MS13	ATOM	1219	CB	ARG	92	250.661	95.680	10.903	1.00	119.16	MS13
ATOM	1167	CD2	TYR	86	246.509	104.201	16.664	1.00	94.71	MS13	ATOM	1220	CG	ARG	92	251.001	94.229	10.643	1.00	119.16	MS13
ATOM	1168	CE2	TYR	86	245.483	104.524	15.785	1.00	94.71	MS13	ATOM	1221	CD	ARG	92	250.881	93.439	11.919	1.00	119.16	MS13
ATOM	1169	CZ	TYR	86	244.472	103.609	15.549	1.00	94.71	MS13	ATOM	1222	NE	ARG	92	251.443	94.172	13.049	1.00	119.16	MS13
ATOM	1170	OH	TYR	86	243.465	103.923	14.663	1.00	94.71	MS13	ATOM	1223	CZ	ARG	92	251.421	93.734	14.303	1.00	119.16	MS13
ATOM	1171	C	TYR	86	249.192	101.697	16.462	1.00	66.57	MS13	ATOM	1224	NH1	ARG	92	250.866	92.561	14.583	1.00	119.16	MS13
ATOM	1172	O	TYR	86	249.064	100.965	15.479	1.00	66.57	MS13	ATOM	1225	NH2	ARG	92	251.940	94.472	15.277	1.00	119.16	MS13
ATOM	1173	N	ARG	87	249.952	102.782	16.481	1.00	65.34	MS13	ATOM	1226	C	ARG	92	249.590	96.405	8.773	1.00	71.34	MS13
ATOM	1174	CA	ARG	87	250.724	103.230	15.335	1.00	65.34	MS13	ATOM	1227	O	ARG	92	249.631	95.635	7.811	1.00	71.34	MS13
ATOM	1175	CB	ARG	87	251.887	104.085	15.835	1.00	83.27	MS13	ATOM	1228	N	ARG	93	248.516	97.126	9.089	1.00	70.63	MS13
ATOM	1176	CG	ARG	87	252.567	104.949	14.806	1.00	83.27	MS13	ATOM	1229	CA	ARG	93	247.279	97.067	8.317	1.00	70.63	MS13
ATOM	1177	CD	ARG	87	252.256	106.408	15.069	1.00	83.27	MS13	ATOM	1230	CB	ARG	93	246.110	97.633	9.131	1.00	142.95	MS13
ATOM	1178	NE	ARG	87	253.379	107.290	14.750	1.00	83.27	MS13	ATOM	1231	CG	ARG	93	245.421	96.628	10.034	1.00	142.95	MS13
ATOM	1179	CZ	ARG	87	254.561	107.256	15.364	1.00	83.27	MS13	ATOM	1232	CD	ARG	93	244.699	95.579	9.213	1.00	142.95	MS13
ATOM	1180	NH1	ARG	87	254.790	106.379	16.334	1.00	83.27	MS13	ATOM	1233	NE	ARG	93	244.129	94.529	10.049	1.00	142.95	MS13
ATOM	1181	NH2	ARG	87	255.508	108.119	15.024	1.00	83.27	MS13	ATOM	1234	CZ	ARG	93	243.568	93.417	9.577	1.00	142.95	MS13
ATOM	1182	C	ARG	87	251.253	101.996	14.603	1.00	65.34	MS13	ATOM	1235	NH1	ARG	93	243.499	93.207	8.266	1.00	142.95	MS13
ATOM	1183	O	ARG	87	251.079	101.848	13.394	1.00	65.34	MS13	ATOM	1236	NH2	ARG	93	243.084	92.508	10.416	1.00	142.95	MS13
ATOM	1184	N	GLY	88	251.888	101.103	15.350	1.00	67.00	MS13	ATOM	1237	C	ARG	93	247.388	97.837	7.012	1.00	70.63	MS13

ATOM	1238	O	ARG	93	246.717	97.513	6.036	1.00	70.63	MS13	ATOM	1291	CB	ARG	101	238.518	109.821	7.080	1.00	65.04	MS13
ATOM	1239	N	GLY	94	248.239	98.852	6.992	1.00	69.41	MS13	ATOM	1292	CG	ARG	101	237.515	110.884	7.454	1.00	65.04	MS13
ATOM	1240	CA	GLY	94	248.379	99.650	5.793	1.00	69.41	MS13	ATOM	1293	CD	ARG	101	236.238	110.652	6.659	1.00	65.04	MS13
ATOM	1241	C	GLY	94	247.296	100.715	5.750	1.00	69.41	MS13	ATOM	1294	NE	ARG	101	235.160	111.560	7.035	1.00	65.04	MS13
ATOM	1242	O	GLY	94	246.810	101.090	4.679	1.00	69.41	MS13	ATOM	1295	CZ	ARG	101	233.874	111.359	6.751	1.00	65.04	MS13
ATOM	1243	N	LEU	95	246.911	101.194	6.930	1.00	62.71	MS13	ATOM	1296	NH1	ARG	101	233.487	110.275	6.087	1.00	65.04	MS13
ATOM	1244	CA	LEU	95	245.894	102.230	7.066	1.00	62.71	MS13	ATOM	1297	NH2	ARG	101	232.968	112.253	7.125	1.00	65.04	MS13
ATOM	1245	CB	LEU	95	244.734	101.711	7.907	1.00	56.58	MS13	ATOM	1298	C	ARG	101	239.697	107.769	7.830	1.00	68.99	MS13
ATOM	1246	CG	LEU	95	243.887	100.625	7.231	1.00	56.58	MS13	ATOM	1299	O	ARG	101	240.774	107.292	8.180	1.00	68.99	MS13
ATOM	1247	CD1	LEU	95	242.822	100.116	8.186	1.00	56.58	MS13	ATOM	1300	N	THR	102	238.840	107.102	7.079	1.00	68.07	MS13
ATOM	1248	CD2	LEU	95	243.233	101.203	5.979	1.00	56.58	MS13	ATOM	1301	CA	THR	102	239.106	105.753	6.608	1.00	68.07	MS13
ATOM	1249	C	LEU	95	246.547	103.431	7.733	1.00	62.71	MS13	ATOM	1302	CB	THR	102	239.265	104.763	7.760	1.00	61.47	MS13
ATOM	1250	O	LEU	95	247.437	103.266	8.561	1.00	62.71	MS13	ATOM	1303	OG1	THR	102	238.968	105.430	8.986	1.00	61.47	MS13
ATOM	1251	N	PRO	96	246.108	104.654	7.391	1.00	49.77	MS13	ATOM	1304	CG2	THR	102	240.685	104.211	7.816	1.00	61.47	MS13
ATOM	1252	CD	PRO	96	244.848	104.955	6.694	1.00	40.80	MS13	ATOM	1305	C	THR	102	237.841	105.412	5.878	1.00	68.07	MS13
ATOM	1253	CA	PRO	96	246.687	105.873	7.974	1.00	49.77	MS13	ATOM	1306	O	THR	102	237.845	104.692	4.881	1.00	68.07	MS13
ATOM	1254	CB	PRO	96	245.668	106.966	7.625	1.00	40.80	MS13	ATOM	1307	N	ARG	103	236.750	105.963	6.395	1.00	40.37	MS13
ATOM	1255	CG	PRO	96	244.407	106.215	7.387	1.00	40.80	MS13	ATOM	1308	CA	ARG	103	235.445	105.751	5.825	1.00	40.37	MS13
ATOM	1256	C	PRO	96	246.972	105.755	9.459	1.00	49.77	MS13	ATOM	1309	CB	ARG	103	234.372	106.382	6.705	1.00	49.94	MS13
ATOM	1257	O	PRO	96	246.191	105.174	10.217	1.00	49.77	MS13	ATOM	1310	CG	ARG	103	232.956	106.042	6.271	1.00	49.94	MS13
ATOM	1258	N	VAL	97	248.117	106.302	9.854	1.00	79.45	MS13	ATOM	1311	CD	ARG	103	231.925	106.686	7.163	1.00	49.94	MS13
ATOM	1259	CA	VAL	97	248.578	106.234	11.230	1.00	79.45	MS13	ATOM	1312	NE	ARG	103	230.574	106.352	6.733	1.00	49.94	MS13
ATOM	1260	CB	VAL	97	250.011	105.677	11.282	1.00	127.17	MS13	ATOM	1313	CZ	ARG	103	229.461	106.819	7.298	1.00	49.94	MS13
ATOM	1261	CG1	VAL	97	250.226	104.959	12.589	1.00	127.17	MS13	ATOM	1314	NH1	ARG	103	229.518	107.652	8.331	1.00	49.94	MS13
ATOM	1262	CG2	VAL	97	250.264	104.751	10.102	1.00	127.17	MS13	ATOM	1315	NH2	ARG	103	228.282	106.447	6.823	1.00	49.94	MS13
ATOM	1263	C	VAL	97	248.574	107.578	11.941	1.00	79.45	MS13	ATOM	1316	C	ARG	103	235.360	106.358	4.439	1.00	40.37	MS13
ATOM	1264	O	VAL	97	249.406	107.828	12.812	1.00	79.45	MS13	ATOM	1317	O	ARG	103	234.684	105.813	3.570	1.00	40.37	MS13
ATOM	1265	N	ARG	98	247.642	108.448	11.581	1.00	67.63	MS13	ATOM	1318	N	THR	104	236.061	107.460	4.210	1.00	79.08	MS13
ATOM	1266	CA	ARG	98	247.587	109.755	12.218	1.00	67.63	MS13	ATOM	1319	CA	THR	104	235.937	108.099	2.920	1.00	79.08	MS13
ATOM	1267	CB	ARG	98	248.415	110.771	11.423	1.00	65.65	MS13	ATOM	1320	CB	THR	104	235.206	109.413	3.071	1.00	67.14	MS13
ATOM	1268	CG	ARG	98	249.858	110.342	11.241	1.00	65.65	MS13	ATOM	1321	OG1	THR	104	234.055	109.199	3.883	1.00	67.14	MS13
ATOM	1269	CD	ARG	98	250.736	111.415	10.630	1.00	65.65	MS13	ATOM	1322	CG2	THR	104	234.745	109.919	1.724	1.00	67.14	MS13
ATOM	1270	NE	ARG	98	252.120	110.959	10.597	1.00	65.65	MS13	ATOM	1323	C	THR	104	237.167	108.345	2.081	1.00	79.08	MS13
ATOM	1271	CZ	ARG	98	253.143	111.668	10.139	1.00	65.65	MS13	ATOM	1324	O	THR	104	237.076	108.403	0.854	1.00	79.08	MS13
ATOM	1272	NH1	ARG	98	252.950	112.892	9.660	1.00	65.65	MS13	ATOM	1325	N	ASN	105	238.320	108.499	2.705	1.00	65.21	MS13
ATOM	1273	NH2	ARG	98	254.364	111.150	10.171	1.00	65.65	MS13	ATOM	1326	CA	ASN	105	239.500	108.751	1.905	1.00	65.21	MS13
ATOM	1274	C	ARG	98	246.166	110.252	12.382	1.00	67.63	MS13	ATOM	1327	CB	ASN	105	239.951	110.197	2.111	1.00	47.76	MS13
ATOM	1275	O	ARG	98	245.825	111.355	11.945	1.00	67.63	MS13	ATOM	1328	CG	ASN	105	238.898	111.199	1.666	1.00	47.76	MS13
ATOM	1276	N	GLY	99	245.348	109.416	13.019	1.00	70.61	MS13	ATOM	1329	OD1	ASN	105	238.320	111.069	0.591	1.00	47.76	MS13
ATOM	1277	CA	GLY	99	243.956	109.743	13.276	1.00	70.61	MS13	ATOM	1330	ND2	ASN	105	238.649	112.205	2.492	1.00	47.76	MS13
ATOM	1278	C	GLY	99	243.229	110.459	12.161	1.00	70.61	MS13	ATOM	1331	C	ASN	105	240.610	107.769	2.225	1.00	65.21	MS13
ATOM	1279	O	GLY	99	242.725	111.559	12.355	1.00	70.61	MS13	ATOM	1332	O	ASN	105	240.397	106.556	2.171	1.00	65.21	MS13
ATOM	1280	N	GLN	100	243.184	109.843	10.988	1.00	65.66	MS13	ATOM	1333	N	ALA	106	241.793	108.281	2.545	1.00	47.79	MS13
ATOM	1281	CA	GLN	100	242.488	110.425	9.855	1.00	65.66	MS13	ATOM	1334	CA	ALA	106	242.906	107.416	2.881	1.00	47.79	MS13
ATOM	1282	CB	GLN	100	243.383	110.388	8.628	1.00	61.26	MS13	ATOM	1335	CB	ALA	106	242.533	106.520	4.061	1.00	70.22	MS13
ATOM	1283	CG	GLN	100	244.581	111.318	8.726	1.00	61.26	MS13	ATOM	1336	C	ALA	106	243.277	106.568	1.679	1.00	47.79	MS13
ATOM	1284	CD	GLN	100	245.881	110.620	8.397	1.00	61.26	MS13	ATOM	1337	O	ALA	106	243.624	105.387	1.811	1.00	47.79	MS13
ATOM	1285	OE1	GLN	100	246.254	109.642	9.053	1.00	61.26	MS13	ATOM	1338	N	ARG	107	243.198	107.166	0.500	1.00	55.43	MS13
ATOM	1286	NE2	GLN	100	246.582	111.112	7.381	1.00	61.26	MS13	ATOM	1339	CA	ARG	107	243.545	106.428	-0.695	1.00	55.43	MS13
ATOM	1287	C	GLN	100	241.224	109.615	9.610	1.00	65.66	MS13	ATOM	1340	CB	ARG	107	242.964	107.116	-1.931	1.00	52.31	MS13
ATOM	1288	O	GLN	100	240.896	108.714	10.398	1.00	65.66	MS13	ATOM	1341	CG	ARG	107	241.445	107.281	-1.921	1.00	52.31	MS13
ATOM	1289	N	ARG	101	240.489	109.941	8.550	1.00	68.99	MS13	ATOM	1342	CD	ARG	107	240.660	106.051	-1.419	1.00	52.31	MS13
ATOM	1290	CA	ARG	101	239.282	109.184	8.237	1.00	68.99	MS13	ATOM	1343	NE	ARG	107	241.220	104.774	-1.847	1.00	52.31	MS13

ATOM	1344	CZ	ARG	107	240.626	103.594	-1.663	1.00	52.31	MS13	ATOM	1397	O	ARG	113	240.023	99.564	-6.651	1.00	82.11	MS13
ATOM	1345	NH1	ARG	107	239.442	103.526	-1.068	1.00	52.31	MS13	ATOM	1398	N	LYS	114	239.058	99.570	-4.630	1.00	70.65	MS13
ATOM	1346	NH2	ARG	107	241.230	102.474	-2.043	1.00	52.31	MS13	ATOM	1399	CA	LYS	114	238.688	98.163	-4.693	1.00	70.65	MS13
ATOM	1347	C	ARG	107	245.071	106.308	-0.817	1.00	55.43	MS13	ATOM	1400	CB	LYS	114	238.624	97.572	-3.287	1.00	80.99	MS13
ATOM	1348	O	ARG	107	245.591	105.254	-1.204	1.00	55.43	MS13	ATOM	1401	CG	LYS	114	239.971	97.490	-2.600	1.00	80.99	MS13
ATOM	1349	N	THR	108	245.787	107.380	-0.474	1.00	46.08	MS13	ATOM	1402	CD	LYS	114	240.907	96.612	-3.388	1.00	80.99	MS13
ATOM	1350	CA	THR	108	247.238	107.358	-0.559	1.00	46.08	MS13	ATOM	1403	CE	LYS	114	242.235	96.467	-2.699	1.00	80.99	MS13
ATOM	1351	CB	THR	108	247.852	108.696	-0.105	1.00	46.59	MS13	ATOM	1404	NZ	LYS	114	243.125	95.588	-3.505	1.00	80.99	MS13
ATOM	1352	OG1	THR	108	247.670	109.678	-1.136	1.00	46.59	MS13	ATOM	1405	C	LYS	114	237.319	98.044	-5.374	1.00	70.65	MS13
ATOM	1353	CG2	THR	108	249.350	108.542	0.158	1.00	46.59	MS13	ATOM	1406	O	LYS	114	237.231	97.806	-6.576	1.00	70.65	MS13
ATOM	1354	C	THR	108	247.781	106.229	0.300	1.00	46.08	MS13	ATOM	1407	N	THR	115	236.263	98.223	-4.588	1.00	48.68	MS13
ATOM	1355	O	THR	108	248.818	105.638	-0.001	1.00	46.08	MS13	ATOM	1408	CA	THR	115	234.866	98.171	-5.041	1.00	48.68	MS13
ATOM	1356	N	ARG	109	247.063	105.919	1.367	1.00	54.50	MS13	ATOM	1409	CB	THR	115	234.642	98.764	-6.454	1.00	45.50	MS13
ATOM	1357	CA	ARG	109	247.484	104.855	2.257	1.00	54.50	MS13	ATOM	1410	OG1	THR	115	235.027	100.149	-6.471	1.00	45.50	MS13
ATOM	1358	CB	ARG	109	246.911	105.095	3.655	1.00	79.61	MS13	ATOM	1411	CG2	THR	115	233.165	98.660	-6.827	1.00	45.50	MS13
ATOM	1359	CG	ARG	109	247.814	104.682	4.802	1.00	79.61	MS13	ATOM	1412	C	THR	115	234.251	96.792	-5.023	1.00	48.68	MS13
ATOM	1360	CD	ARG	109	248.830	105.767	5.117	1.00	79.61	MS13	ATOM	1413	O	THR	115	234.635	95.902	-5.777	1.00	48.68	MS13
ATOM	1361	NE	ARG	109	250.188	105.329	4.829	1.00	79.61	MS13	ATOM	1414	N	VAL	116	233.273	96.657	-4.137	1.00	77.44	MS13
ATOM	1362	CZ	ARG	109	250.781	104.292	5.414	1.00	79.61	MS13	ATOM	1415	CA	VAL	116	232.534	95.430	-3.920	1.00	77.44	MS13
ATOM	1363	NH1	ARG	109	250.144	103.570	6.332	1.00	79.61	MS13	ATOM	1416	CB	VAL	116	232.444	95.133	-2.423	1.00	47.37	MS13
ATOM	1364	NH2	ARG	109	252.019	103.973	5.072	1.00	79.61	MS13	ATOM	1417	CG1	VAL	116	231.851	93.751	-2.193	1.00	47.37	MS13
ATOM	1365	C	ARG	109	246.965	103.526	1.717	1.00	54.50	MS13	ATOM	1418	CG2	VAL	116	233.808	95.250	-1.805	1.00	47.37	MS13
ATOM	1366	O	ARG	109	247.739	102.624	1.419	1.00	54.50	MS13	ATOM	1419	C	VAL	116	231.130	95.655	-4.438	1.00	77.44	MS13
ATOM	1367	N	LYS	110	245.643	103.429	1.591	1.00	64.45	MS13	ATOM	1420	O	VAL	116	230.771	96.775	-4.804	1.00	77.44	MS13
ATOM	1368	CA	LYS	110	244.970	102.219	1.121	1.00	64.45	MS13	ATOM	1421	N	ALA	117	230.337	94.591	-4.465	1.00	80.07	MS13
ATOM	1369	CB	LYS	110	243.457	102.401	1.183	1.00	74.77	MS13	ATOM	1422	CA	ALA	117	228.958	94.689	-4.914	1.00	80.07	MS13
ATOM	1370	CG	LYS	110	242.833	102.472	2.557	1.00	74.77	MS13	ATOM	1423	CB	ALA	117	228.330	93.310	-4.960	1.00	74.95	MS13
ATOM	1371	CD	LYS	110	241.326	102.290	2.387	1.00	74.77	MS13	ATOM	1424	C	ALA	117	228.207	95.594	-3.934	1.00	80.07	MS13
ATOM	1372	CE	LYS	110	240.546	102.486	3.671	1.00	74.77	MS13	ATOM	1425	O	ALA	117	228.175	96.809	-4.110	1.00	80.07	MS13
ATOM	1373	NZ	LYS	110	239.087	102.233	3.455	1.00	74.77	MS13	ATOM	1426	N	GLY	118	227.604	95.012	-2.906	1.00	120.88	MS13
ATOM	1374	C	LYS	110	245.315	101.745	-0.290	1.00	64.45	MS13	ATOM	1427	CA	GLY	118	226.901	95.821	-1.925	1.00	120.88	MS13
ATOM	1375	O	LYS	110	245.102	100.579	-0.618	1.00	64.45	MS13	ATOM	1428	C	GLY	118	225.491	96.269	-2.271	1.00	120.88	MS13
ATOM	1376	N	GLY	111	245.827	102.636	-1.132	1.00	52.28	MS13	ATOM	1429	O	GLY	118	225.183	96.578	-3.424	1.00	120.88	MS13
ATOM	1377	CA	GLY	111	246.143	102.236	-2.491	1.00	52.28	MS13	ATOM	1430	N	LYS	119	224.645	96.307	-1.242	1.00	147.05	MS13
ATOM	1378	C	GLY	111	244.954	102.509	-3.393	1.00	52.28	MS13	ATOM	1431	CA	LYS	119	223.242	96.712	-1.343	1.00	147.05	MS13
ATOM	1379	O	GLY	111	244.072	103.278	-3.015	1.00	52.28	MS13	ATOM	1432	CB	LYS	119	222.650	96.838	0.073	1.00	107.79	MS13
ATOM	1380	N	PRO	112	244.886	101.898	-4.587	1.00	84.66	MS13	ATOM	1433	CG	LYS	119	221.346	97.631	0.174	1.00	107.79	MS13
ATOM	1381	CD	PRO	112	245.917	101.033	-5.184	1.00	82.35	MS13	ATOM	1434	CD	LYS	119	220.952	97.859	1.635	1.00	107.79	MS13
ATOM	1382	CA	PRO	112	243.776	102.102	-5.528	1.00	84.66	MS13	ATOM	1435	CE	LYS	119	219.883	98.943	1.768	1.00	107.79	MS13
ATOM	1383	CB	PRO	112	244.305	101.479	-6.815	1.00	82.35	MS13	ATOM	1436	NZ	LYS	119	219.543	99.234	3.193	1.00	107.79	MS13
ATOM	1384	CG	PRO	112	245.160	100.363	-6.309	1.00	82.35	MS13	ATOM	1437	C	LYS	119	223.055	98.022	-2.112	1.00	147.05	MS13
ATOM	1385	C	PRO	112	242.413	101.524	-5.118	1.00	84.66	MS13	ATOM	1438	O	LYS	119	223.450	99.092	-1.640	1.00	147.05	MS13
ATOM	1386	O	PRO	112	242.326	100.623	-4.277	1.00	84.66	MS13	ATOM	1439	N	LYS	120	222.447	97.920	-3.294	1.00	173.40	MS13
ATOM	1387	N	ARG	113	241.357	102.050	-5.737	1.00	82.11	MS13	ATOM	1440	CA	LYS	120	222.186	99.074	-4.160	1.00	173.40	MS13
ATOM	1388	CA	ARG	113	239.981	101.633	-5.470	1.00	82.11	MS13	ATOM	1441	CB	LYS	120	221.723	98.590	-5.550	1.00	153.51	MS13
ATOM	1389	CB	ARG	113	239.013	102.379	-6.385	1.00	72.10	MS13	ATOM	1442	CG	LYS	120	221.554	99.675	-6.632	1.00	153.51	MS13
ATOM	1390	CG	ARG	113	238.633	103.745	-5.907	1.00	72.10	MS13	ATOM	1443	CD	LYS	120	222.886	100.261	-7.116	1.00	153.51	MS13
ATOM	1391	CD	ARG	113	237.980	103.647	-4.560	1.00	72.10	MS13	ATOM	1444	CE	LYS	120	223.489	101.276	-6.134	1.00	153.51	MS13
ATOM	1392	NE	ARG	113	237.925	104.952	-3.912	1.00	72.10	MS13	ATOM	1445	NZ	LYS	120	222.690	102.538	-6.017	1.00	153.51	MS13
ATOM	1393	CZ	ARG	113	237.031	105.893	-4.186	1.00	72.10	MS13	ATOM	1446	C	LYS	120	221.118	99.968	-3.517	1.00	173.40	MS13
ATOM	1394	NH1	ARG	113	236.095	105.677	-5.101	1.00	72.10	MS13	ATOM	1447	O	LYS	120	220.937	99.938	-2.298	1.00	173.40	MS13
ATOM	1395	NH2	ARG	113	237.082	107.052	-3.544	1.00	72.10	MS13	ATOM	1448	N	LYS	121	220.416	100.756	-4.331	1.00	142.53	MS13
ATOM	1396	C	ARG	113	239.696	100.157	-5.631	1.00	82.11	MS13	ATOM	1449	CA	LYS	121	219.378	101.652	-3.824	1.00	142.53	MS13

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ATOM   1450  CB  LYS   121     218.253 100.838  -3.165  1.00144.23      MS13
ATOM   1451  CG  LYS   121     216.950 100.739  -3.960  1.00144.23      MS13
ATOM   1452  CD  LYS   121     216.122 102.015  -3.837  1.00144.23      MS13
ATOM   1453  CE  LYS   121     214.710 101.823  -4.380  1.00144.23      MS13
ATOM   1454  NZ  LYS   121     213.862 103.032  -4.177  1.00144.23      MS13
ATOM   1455  C   LYS   121     220.006 102.592  -2.798  1.00142.53      MS13
ATOM   1456  O   LYS   121     221.140 103.049  -2.965  1.00142.53      MS13
ATOM   1457  N   ALA   122     219.251 102.872  -1.740  1.00200.66      MS13
ATOM   1458  CA  ALA   122     219.702 103.729  -0.650  1.00200.66      MS13
ATOM   1459  CB  ALA   122     220.807 103.027   0.122  1.00115.27      MS13
ATOM   1460  C   ALA   122     220.157 105.135  -1.045  1.00200.66      MS13
ATOM   1461  O   ALA   122     220.561 105.384  -2.186  1.00200.66      MS13
ATOM   1462  N   PRO   123     220.075 106.077  -0.090  1.00166.44      MS13
ATOM   1463  CD  PRO   123     219.100 105.962   1.003  1.00191.00      MS13
ATOM   1464  CA  PRO   123     220.458 107.481  -0.261  1.00166.44      MS13
ATOM   1465  CB  PRO   123     219.292 108.244   0.385  1.00191.00      MS13
ATOM   1466  CG  PRO   123     218.247 107.160   0.737  1.00191.00      MS13
ATOM   1467  C   PRO   123     221.800 107.852   0.376  1.00166.44      MS13
ATOM   1468  O   PRO   123     222.232 107.245   1.352  1.00166.44      MS13
ATOM   1469  N   ARG   124     222.433 108.874  -0.188  1.00129.54      MS13
ATOM   1470  CA  ARG   124     223.727 109.377   0.256  1.00129.54      MS13
ATOM   1471  CB  ARG   124     224.748 108.240   0.365  1.00111.08      MS13
ATOM   1472  CG  ARG   124     224.605 107.099  -0.674  1.00111.08      MS13
ATOM   1473  CD  ARG   124     224.499 107.570  -2.137  1.00111.08      MS13
ATOM   1474  NE  ARG   124     224.473 106.456  -3.092  1.00111.08      MS13
ATOM   1475  CZ  ARG   124     224.288 106.586  -4.406  1.00111.08      MS13
ATOM   1476  NH1 ARG   124     224.109 107.786  -4.945  1.00111.08      MS13
ATOM   1477  NH2 ARG   124     224.278 105.513  -5.184  1.00111.08      MS13
ATOM   1478  C   ARG   124     224.168 110.331  -0.832  1.00129.54      MS13
ATOM   1479  O   ARG   124     225.347 110.617  -0.972  1.00129.54      MS13
ATOM   1480  N   LYS   125     223.199 110.805  -1.610  1.00190.53      MS13
ATOM   1481  CA  LYS   125     223.457 111.705  -2.732  1.00190.53      MS13
ATOM   1482  CB  LYS   125     222.432 111.443  -3.834  1.00158.10      MS13
ATOM   1483  CG  LYS   125     222.428 110.019  -4.368  1.00158.10      MS13
ATOM   1484  CD  LYS   125     221.155 109.717  -5.149  1.00158.10      MS13
ATOM   1485  CE  LYS   125     220.941 110.700  -6.294  1.00158.10      MS13
ATOM   1486  NZ  LYS   125     220.656 112.101  -5.838  1.00158.10      MS13
ATOM   1487  C   LYS   125     223.428 113.184  -2.366  1.00190.53      MS13
ATOM   1488  O   LYS   125     222.745 113.948  -3.079  1.00190.53      MS13
ATOM   1489  OXT LYS   125     224.085 113.572  -1.378  1.00187.17      MS13
ATOM   1490  CB  PRO     1     154.594 109.757 -72.769  1.00 65.85      OS15
ATOM   1491  CG  PRO     1     156.018 109.339 -73.095  1.00 65.85      OS15
ATOM   1492  C   PRO     1     152.425 108.589 -73.155  1.00106.56      OS15
ATOM   1493  O   PRO     1     151.985 108.172 -74.230  1.00106.56      OS15
ATOM   1494  N   PRO     1     154.632 107.525 -73.696  1.00106.56      OS15
ATOM   1495  CD  PRO     1     155.883 108.180 -74.119  1.00 65.85      OS15
ATOM   1496  CA  PRO     1     153.887 108.413 -72.773  1.00106.56      OS15
ATOM   1497  N   ILE     2     151.684 109.228 -72.259  1.00 74.93      OS15
ATOM   1498  CA  ILE     2     150.262 109.473 -72.448  1.00 74.93      OS15
ATOM   1499  CB  ILE     2     149.519 109.371 -71.098  1.00 77.72      OS15
ATOM   1500  CG2 ILE     2     148.095 109.862 -71.243  1.00 77.72      OS15
ATOM   1501  CG1 ILE     2     149.543 107.920 -70.608  1.00 77.72      OS15
ATOM   1502  CD1 ILE     2     148.953 107.722 -69.231  1.00 77.72      OS15
ATOM   1503  C   ILE     2     150.032 110.854 -73.044  1.00 74.93      OS15
ATOM   1504  O   ILE     2     150.201 111.862 -72.370  1.00 74.93      OS15
ATOM   1505  N   THR     3     149.643 110.897 -74.312  1.00 92.77      OS15
ATOM   1506  CA  THR     3     149.400 112.170 -74.974  1.00 92.77      OS15
ATOM   1507  CB  THR     3     149.378 112.001 -76.498  1.00 91.43      OS15
ATOM   1508  OG1 THR     3     148.247 111.206 -76.877  1.00 91.43      OS15
ATOM   1509  CG2 THR     3     150.640 111.312 -76.965  1.00 91.43      OS15
ATOM   1510  C   THR     3     148.070 112.771 -74.539  1.00 92.77      OS15
ATOM   1511  O   THR     3     147.131 112.053 -74.189  1.00 92.77      OS15
ATOM   1512  N   LYS     4     148.001 114.096 -74.563  1.00 95.13      OS15
ATOM   1513  CA  LYS     4     146.788 114.808 -74.192  1.00 95.13      OS15
ATOM   1514  CB  LYS     4     146.896 116.260 -74.644  1.00 98.41      OS15
ATOM   1515  CG  LYS     4     148.205 116.895 -74.220  1.00 98.41      OS15
ATOM   1516  CD  LYS     4     148.515 118.152 -75.004  1.00 98.41      OS15
ATOM   1517  CE  LYS     4     149.930 118.639 -74.711  1.00 98.41      OS15
ATOM   1518  NZ  LYS     4     150.307 119.791 -75.580  1.00 98.41      OS15
ATOM   1519  C   LYS     4     145.635 114.120 -74.901  1.00 95.13      OS15
ATOM   1520  O   LYS     4     144.652 113.722 -74.278  1.00 95.13      OS15
ATOM   1521  N   GLU     5     145.784 113.967 -76.212  1.00 76.32      OS15
ATOM   1522  CA  GLU     5     144.780 113.320 -77.039  1.00 76.32      OS15
ATOM   1523  CB  GLU     5     145.374 112.980 -78.406  1.00161.61      OS15
ATOM   1524  CG  GLU     5     145.957 114.163 -79.154  1.00161.61      OS15
ATOM   1525  CD  GLU     5     144.903 115.182 -79.539  1.00161.61      OS15
ATOM   1526  OE1 GLU     5     143.920 114.796 -80.207  1.00161.61      OS15
ATOM   1527  OE2 GLU     5     145.061 116.367 -79.177  1.00161.61      OS15
ATOM   1528  C   GLU     5     144.297 112.037 -76.375  1.00 76.32      OS15
ATOM   1529  O   GLU     5     143.142 111.933 -75.964  1.00 76.32      OS15
ATOM   1530  N   GLU     6     145.200 111.066 -76.268  1.00 67.95      OS15
ATOM   1531  CA  GLU     6     144.888 109.771 -75.673  1.00 67.95      OS15
ATOM   1532  CB  GLU     6     146.171 108.953 -75.485  1.00159.98      OS15
ATOM   1533  CG  GLU     6     146.244 107.731 -76.387  1.00159.98      OS15
ATOM   1534  CD  GLU     6     145.108 106.742 -76.133  1.00159.98      OS15
ATOM   1535  OE1 GLU     6     145.265 105.855 -75.266  1.00159.98      OS15
ATOM   1536  OE2 GLU     6     144.050 106.861 -76.791  1.00159.98      OS15
ATOM   1537  C   GLU     6     144.149 109.873 -74.345  1.00 67.95      OS15
ATOM   1538  O   GLU     6     143.273 109.060 -74.044  1.00 67.95      OS15
ATOM   1539  N   LYS     7     144.497 110.877 -73.553  1.00 65.34      OS15
ATOM   1540  CA  LYS     7     143.864 111.046 -72.263  1.00 65.34      OS15
ATOM   1541  CB  LYS     7     144.643 112.066 -71.450  1.00 64.37      OS15
ATOM   1542  CG  LYS     7     144.381 112.002 -69.968  1.00 64.37      OS15
ATOM   1543  CD  LYS     7     145.293 112.970 -69.242  1.00 64.37      OS15
ATOM   1544  CE  LYS     7     144.965 113.040 -67.769  1.00 64.37      OS15
ATOM   1545  NZ  LYS     7     145.817 114.031 -67.068  1.00 64.37      OS15
ATOM   1546  C   LYS     7     142.405 111.474 -72.413  1.00 65.34      OS15
ATOM   1547  O   LYS     7     141.495 110.769 -71.954  1.00 65.34      OS15
ATOM   1548  N   GLN     8     142.174 112.618 -73.058  1.00 78.73      OS15
ATOM   1549  CA  GLN     8     140.807 113.096 -73.250  1.00 78.73      OS15
ATOM   1550  CB  GLN     8     140.761 114.291 -74.201  1.00118.46      OS15
ATOM   1551  CG  GLN     8     140.659 115.624 -73.489  1.00118.46      OS15
ATOM   1552  CD  GLN     8     141.968 116.041 -72.852  1.00118.46      OS15
ATOM   1553  OE1 GLN     8     142.857 116.576 -73.521  1.00118.46      OS15
ATOM   1554  NE2 GLN     8     142.101 115.787 -71.556  1.00118.46      OS15
ATOM   1555  C   GLN     8     139.923 111.991 -73.798  1.00 78.73      OS15
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ATOM	1556	O	GLN	8	138.823	111.765	-73.295	1.00 78.73	OS15	ATOM	1609	O	PHE	14	132.516	108.291	-67.704	1.00 69.00	OS15
ATOM	1557	N	LYS	9	140.407	111.298	-74.824	1.00 83.45	OS15	ATOM	1610	N	ALA	15	133.454	109.841	-69.028	1.00 58.10	OS15
ATOM	1558	CA	LYS	9	139.638	110.216	-75.420	1.00 83.45	OS15	ATOM	1611	CA	ALA	15	132.774	110.952	-68.363	1.00 58.10	OS15
ATOM	1559	CB	LYS	9	140.503	109.399	-76.384	1.00120.27	OS15	ATOM	1612	CB	ALA	15	132.965	112.234	-69.161	1.00 53.42	OS15
ATOM	1560	CG	LYS	9	141.140	110.240	-77.480	1.00120.27	OS15	ATOM	1613	C	ALA	15	131.283	110.680	-68.144	1.00 58.10	OS15
ATOM	1561	CD	LYS	9	141.670	109.400	-78.634	1.00120.27	OS15	ATOM	1614	O	ALA	15	130.594	110.173	-69.028	1.00 58.10	OS15
ATOM	1562	CE	LYS	9	140.533	108.807	-79.458	1.00120.27	OS15	ATOM	1615	N	ARG	16	130.795	111.012	-66.956	1.00 97.22	OS15
ATOM	1563	NZ	LYS	9	141.027	108.078	-80.666	1.00120.27	OS15	ATOM	1616	CA	ARG	16	129.394	110.800	-66.616	1.00 97.22	OS15
ATOM	1564	C	LYS	9	139.119	109.335	-74.302	1.00 83.45	OS15	ATOM	1617	CB	ARG	16	129.177	111.097	-65.136	1.00 91.67	OS15
ATOM	1565	O	LYS	9	137.957	108.934	-74.300	1.00 83.45	OS15	ATOM	1618	CG	ARG	16	129.901	110.153	-64.199	1.00 91.67	OS15
ATOM	1566	N	VAL	10	139.987	109.059	-73.336	1.00 62.74	OS15	ATOM	1619	CD	ARG	16	129.212	108.798	-64.135	1.00 91.67	OS15
ATOM	1567	CA	VAL	10	139.618	108.232	-72.194	1.00 62.74	OS15	ATOM	1620	NE	ARG	16	127.825	108.911	-63.680	1.00 91.67	OS15
ATOM	1568	CB	VAL	10	140.842	107.894	-71.333	1.00 67.11	OS15	ATOM	1621	CZ	ARG	16	127.444	109.510	-62.552	1.00 91.67	OS15
ATOM	1569	CG1	VAL	10	140.444	106.953	-70.213	1.00 67.11	OS15	ATOM	1622	NH1	ARG	16	128.344	110.066	-61.740	1.00 91.67	OS15
ATOM	1570	CG2	VAL	10	141.916	107.278	-72.192	1.00 67.11	OS15	ATOM	1623	NH2	ARG	16	126.155	109.553	-62.239	1.00 91.67	OS15
ATOM	1571	C	VAL	10	138.623	108.999	-71.336	1.00 62.74	OS15	ATOM	1624	C	ARG	16	128.461	111.676	-67.445	1.00 97.22	OS15
ATOM	1572	O	VAL	10	137.552	108.491	-70.995	1.00 62.74	OS15	ATOM	1625	O	ARG	16	127.338	111.281	-67.765	1.00 97.22	OS15
ATOM	1573	N	ILE	11	138.987	110.228	-70.992	1.00 54.61	OS15	ATOM	1626	N	PHE	17	128.938	112.866	-67.792	1.00 65.81	OS15
ATOM	1574	CA	ILE	11	138.118	111.055	-70.178	1.00 54.61	OS15	ATOM	1627	CA	PHE	17	128.155	113.825	-68.561	1.00 65.81	OS15
ATOM	1575	CB	ILE	11	138.622	112.501	-70.118	1.00 47.01	OS15	ATOM	1628	CB	PHE	17	127.155	114.505	-67.638	1.00 70.05	OS15
ATOM	1576	CG2	ILE	11	137.628	113.371	-69.385	1.00 47.01	OS15	ATOM	1629	CG	PHE	17	127.791	115.169	-66.462	1.00 70.05	OS15
ATOM	1577	CG1	ILE	11	139.980	112.534	-69.413	1.00 47.01	OS15	ATOM	1630	CD1	PHE	17	128.719	116.196	-66.643	1.00 70.05	OS15
ATOM	1578	CD1	ILE	11	140.597	113.920	-69.304	1.00 47.01	OS15	ATOM	1631	CD2	PHE	17	127.480	114.761	-65.167	1.00 70.05	OS15
ATOM	1579	C	ILE	11	136.705	111.040	-70.737	1.00 54.61	OS15	ATOM	1632	CE1	PHE	17	129.333	116.811	-65.554	1.00 70.05	OS15
ATOM	1580	O	ILE	11	135.789	110.503	-70.116	1.00 54.61	OS15	ATOM	1633	CE2	PHE	17	128.088	115.369	-64.061	1.00 70.05	OS15
ATOM	1581	N	GLN	12	136.516	111.621	-71.912	1.00 86.97	OS15	ATOM	1634	CZ	PHE	17	129.020	116.399	-64.257	1.00 70.05	OS15
ATOM	1582	CA	GLN	12	135.188	111.634	-72.498	1.00 86.97	OS15	ATOM	1635	C	PHE	17	129.098	114.869	-69.161	1.00 65.81	OS15
ATOM	1583	CB	GLN	12	135.242	112.213	-73.908	1.00132.99	OS15	ATOM	1636	O	PHE	17	130.302	114.847	-68.906	1.00 65.81	OS15
ATOM	1584	CG	GLN	12	135.661	113.669	-73.926	1.00132.99	OS15	ATOM	1637	N	PRO	18	128.564	115.810	-69.954	1.00 80.59	OS15
ATOM	1585	CD	GLN	12	135.470	114.311	-75.279	1.00132.99	OS15	ATOM	1638	CD	PRO	18	127.178	115.989	-70.416	1.00 90.05	OS15
ATOM	1586	OE1	GLN	12	135.743	115.498	-75.458	1.00132.99	OS15	ATOM	1639	CA	PRO	18	129.446	116.821	-70.543	1.00 80.59	OS15
ATOM	1587	NE2	GLN	12	134.996	113.530	-76.244	1.00132.99	OS15	ATOM	1640	CB	PRO	18	128.482	117.695	-71.341	1.00 90.05	OS15
ATOM	1588	C	GLN	12	134.590	110.230	-72.518	1.00 86.97	OS15	ATOM	1641	CG	PRO	18	127.376	116.745	-71.698	1.00 90.05	OS15
ATOM	1589	O	GLN	12	133.452	110.030	-72.096	1.00 86.97	OS15	ATOM	1642	C	PRO	18	130.192	117.625	-69.477	1.00 80.59	OS15
ATOM	1590	N	GLU	13	135.368	109.257	-72.982	1.00 67.56	OS15	ATOM	1643	O	PRO	18	129.575	118.380	-68.723	1.00 80.59	OS15
ATOM	1591	CA	GLU	13	134.898	107.876	-73.055	1.00 67.56	OS15	ATOM	1644	N	GLY	19	131.512	117.461	-69.413	1.00 79.89	OS15
ATOM	1592	CB	GLU	13	136.054	106.937	-73.400	1.00140.12	OS15	ATOM	1645	CA	GLY	19	132.301	118.201	-68.440	1.00 79.89	OS15
ATOM	1593	CG	GLU	13	135.699	105.456	-73.301	1.00140.12	OS15	ATOM	1646	C	GLY	19	132.713	117.418	-67.205	1.00 79.89	OS15
ATOM	1594	CD	GLU	13	134.520	105.056	-74.180	1.00140.12	OS15	ATOM	1647	O	GLY	19	133.221	117.987	-66.233	1.00 79.89	OS15
ATOM	1595	OE1	GLU	13	134.127	103.869	-74.136	1.00140.12	OS15	ATOM	1648	N	ASP	20	132.489	116.109	-67.230	1.00 70.57	OS15
ATOM	1596	OE2	GLU	13	133.986	105.917	-74.913	1.00140.12	OS15	ATOM	1649	CA	ASP	20	132.860	115.281	-66.097	1.00 70.57	OS15
ATOM	1597	C	GLU	13	134.219	107.384	-71.783	1.00 67.56	OS15	ATOM	1650	CB	ASP	20	132.138	113.931	-66.127	1.00 68.18	OS15
ATOM	1598	O	GLU	13	133.339	106.534	-71.844	1.00 67.56	OS15	ATOM	1651	CG	ASP	20	132.450	113.087	-64.902	1.00 68.18	OS15
ATOM	1599	N	PHE	14	134.622	107.914	-70.632	1.00 69.00	OS15	ATOM	1652	OD1	ASP	20	132.124	111.875	-64.876	1.00 68.18	OS15
ATOM	1600	CA	PHE	14	134.030	107.496	-69.362	1.00 69.00	OS15	ATOM	1653	OD2	ASP	20	133.031	113.656	-63.955	1.00 68.18	OS15
ATOM	1601	CB	PHE	14	135.105	106.950	-68.412	1.00 44.98	OS15	ATOM	1654	C	ASP	20	134.354	115.048	-66.180	1.00 70.57	OS15
ATOM	1602	CG	PHE	14	135.613	105.591	-68.784	1.00 44.98	OS15	ATOM	1655	O	ASP	20	134.809	114.170	-66.911	1.00 70.57	OS15
ATOM	1603	CD1	PHE	14	136.538	105.436	-69.803	1.00 44.98	OS15	ATOM	1656	N	THR	21	135.116	115.839	-65.434	1.00 63.41	OS15
ATOM	1604	CD2	PHE	14	135.113	104.461	-68.155	1.00 44.98	OS15	ATOM	1657	CA	THR	21	136.564	115.699	-65.444	1.00 63.41	OS15
ATOM	1605	CE1	PHE	14	136.951	104.178	-70.196	1.00 44.98	OS15	ATOM	1658	CB	THR	21	137.267	117.057	-65.230	1.00 67.92	OS15
ATOM	1606	CE2	PHE	14	135.520	103.195	-68.544	1.00 44.98	OS15	ATOM	1659	OG1	THR	21	137.140	117.446	-63.861	1.00 67.92	OS15
ATOM	1607	CZ	PHE	14	136.442	103.055	-69.571	1.00 44.98	OS15	ATOM	1660	CG2	THR	21	136.638	118.139	-66.087	1.00 67.92	OS15
ATOM	1608	C	PHE	14	133.266	108.587	-68.630	1.00 69.00	OS15	ATOM	1661	C	THR	21	137.056	114.722	-64.370	1.00 63.41	OS15

ATOM	1662	O	THR	21	138.004	113.987	-64.605	1.00	63.41	OS15	ATOM	1715	C	ALA	29	141.092	105.373	-66.272	1.00	58.29	OS15
ATOM	1663	N	GLY	22	136.417	114.691	-63.202	1.00	61.87	OS15	ATOM	1716	O	ALA	29	141.944	104.569	-66.672	1.00	58.29	OS15
ATOM	1664	CA	GLY	22	136.894	113.790	-62.162	1.00	61.87	OS15	ATOM	1717	N	LEU	30	141.380	106.649	-66.000	1.00	56.32	OS15
ATOM	1665	C	GLY	22	135.933	113.055	-61.233	1.00	61.87	OS15	ATOM	1718	CA	LEU	30	142.743	107.159	-66.176	1.00	56.32	OS15
ATOM	1666	O	GLY	22	135.909	113.304	-60.025	1.00	61.87	OS15	ATOM	1719	CB	LEU	30	142.851	108.634	-65.779	1.00	55.52	OS15
ATOM	1667	N	SER	23	135.151	112.134	-61.783	1.00	56.00	OS15	ATOM	1720	CG	LEU	30	141.951	109.641	-66.489	1.00	55.52	OS15
ATOM	1668	CA	SER	23	134.223	111.350	-60.986	1.00	56.00	OS15	ATOM	1721	CD1	LEU	30	140.604	109.615	-65.816	1.00	55.52	OS15
ATOM	1669	CB	SER	23	132.891	111.215	-61.700	1.00	94.82	OS15	ATOM	1722	CD2	LEU	30	142.524	111.032	-66.402	1.00	55.52	OS15
ATOM	1670	OG	SER	23	132.352	112.487	-61.971	1.00	94.82	OS15	ATOM	1723	C	LEU	30	143.752	106.361	-65.358	1.00	56.32	OS15
ATOM	1671	C	SER	23	134.875	109.989	-60.900	1.00	56.00	OS15	ATOM	1724	O	LEU	30	144.849	106.081	-65.828	1.00	56.32	OS15
ATOM	1672	O	SER	23	135.838	109.726	-61.620	1.00	56.00	OS15	ATOM	1725	N	LEU	31	143.387	106.009	-64.128	1.00	64.75	OS15
ATOM	1673	N	THR	24	134.352	109.119	-60.045	1.00	46.97	OS15	ATOM	1726	CA	LEU	31	144.278	105.228	-63.278	1.00	64.75	OS15
ATOM	1674	CA	THR	24	134.925	107.798	-59.906	1.00	46.97	OS15	ATOM	1727	CB	LEU	31	143.656	104.973	-61.907	1.00	48.91	OS15
ATOM	1675	CB	THR	24	134.030	106.888	-59.077	1.00	50.02	OS15	ATOM	1728	CG	LEU	31	143.963	106.050	-60.871	1.00	48.91	OS15
ATOM	1676	OG1	THR	24	133.919	107.421	-57.755	1.00	50.02	OS15	ATOM	1729	CD1	LEU	31	143.306	105.706	-59.527	1.00	48.91	OS15
ATOM	1677	CG2	THR	24	134.624	105.488	-58.997	1.00	50.02	OS15	ATOM	1730	CD2	LEU	31	145.471	106.167	-60.727	1.00	48.91	OS15
ATOM	1678	C	THR	24	135.177	107.153	-61.256	1.00	46.97	OS15	ATOM	1731	C	LEU	31	144.547	103.909	-63.952	1.00	64.75	OS15
ATOM	1679	O	THR	24	136.319	106.833	-61.579	1.00	46.97	OS15	ATOM	1732	O	LEU	31	145.684	103.452	-64.011	1.00	64.75	OS15
ATOM	1680	N	GLU	25	134.133	106.971	-62.058	1.00	58.01	OS15	ATOM	1733	N	THR	32	143.490	103.299	-64.469	1.00	52.69	OS15
ATOM	1681	CA	GLU	25	134.313	106.345	-63.365	1.00	58.01	OS15	ATOM	1734	CA	THR	32	143.630	102.027	-65.152	1.00	52.69	OS15
ATOM	1682	CB	GLU	25	133.035	106.447	-64.207	1.00	61.60	OS15	ATOM	1735	CB	THR	32	142.286	101.511	-65.626	1.00	49.05	OS15
ATOM	1683	CG	GLU	25	131.960	105.410	-63.867	1.00	61.60	OS15	ATOM	1736	OG1	THR	32	141.415	101.371	-64.499	1.00	49.05	OS15
ATOM	1684	CD	GLU	25	130.928	105.905	-62.848	1.00	61.60	OS15	ATOM	1737	CG2	THR	32	142.456	100.168	-66.297	1.00	49.05	OS15
ATOM	1685	OE1	GLU	25	129.969	105.151	-62.555	1.00	61.60	OS15	ATOM	1738	C	THR	32	144.553	102.176	-66.352	1.00	52.69	OS15
ATOM	1686	OE2	GLU	25	131.072	107.042	-62.347	1.00	61.60	OS15	ATOM	1739	O	THR	32	145.317	101.265	-66.667	1.00	52.69	OS15
ATOM	1687	C	GLU	25	135.503	106.931	-64.135	1.00	58.01	OS15	ATOM	1740	N	LEU	33	144.486	103.331	-67.010	1.00	59.42	OS15
ATOM	1688	O	GLU	25	136.413	106.190	-64.522	1.00	58.01	OS15	ATOM	1741	CA	LEU	33	145.331	103.592	-68.169	1.00	59.42	OS15
ATOM	1689	N	VAL	26	135.510	108.247	-64.352	1.00	45.70	OS15	ATOM	1742	CB	LEU	33	145.074	104.998	-68.724	1.00	73.58	OS15
ATOM	1690	CA	VAL	26	136.620	108.868	-65.072	1.00	45.70	OS15	ATOM	1743	CG	LEU	33	145.693	105.339	-70.090	1.00	73.58	OS15
ATOM	1691	CB	VAL	26	136.531	110.406	-65.059	1.00	49.29	OS15	ATOM	1744	CD1	LEU	33	145.411	106.804	-70.423	1.00	73.58	OS15
ATOM	1692	CG1	VAL	26	137.746	110.991	-65.714	1.00	49.29	OS15	ATOM	1745	CD2	LEU	33	147.203	105.080	-70.083	1.00	73.58	OS15
ATOM	1693	CG2	VAL	26	135.300	110.871	-65.807	1.00	49.29	OS15	ATOM	1746	C	LEU	33	146.785	103.478	-67.741	1.00	59.42	OS15
ATOM	1694	C	VAL	26	137.922	108.471	-64.397	1.00	45.70	OS15	ATOM	1747	O	LEU	33	147.525	102.609	-68.210	1.00	59.42	OS15
ATOM	1695	O	VAL	26	138.731	107.735	-64.960	1.00	45.70	OS15	ATOM	1748	N	ARG	34	147.180	104.377	-66.850	1.00	53.65	OS15
ATOM	1696	N	GLN	27	138.101	108.958	-63.174	1.00	48.40	OS15	ATOM	1749	CA	ARG	34	148.534	104.414	-66.326	1.00	53.65	OS15
ATOM	1697	CA	GLN	27	139.289	108.684	-62.375	1.00	48.40	OS15	ATOM	1750	CB	ARG	34	148.616	105.459	-65.220	1.00	58.90	OS15
ATOM	1698	CB	GLN	27	139.042	109.068	-60.921	1.00	50.13	OS15	ATOM	1751	CG	ARG	34	148.075	106.797	-65.637	1.00	58.90	OS15
ATOM	1699	CG	GLN	27	139.428	110.502	-60.604	1.00	50.13	OS15	ATOM	1752	CD	ARG	34	148.406	107.846	-64.619	1.00	58.90	OS15
ATOM	1700	CD	GLN	27	139.209	110.849	-59.147	1.00	50.13	OS15	ATOM	1753	NE	ARG	34	149.848	107.909	-64.435	1.00	58.90	OS15
ATOM	1701	OE1	GLN	27	139.579	110.089	-58.256	1.00	50.13	OS15	ATOM	1754	CZ	ARG	34	150.445	108.512	-63.413	1.00	58.90	OS15
ATOM	1702	NE2	GLN	27	138.613	112.007	-58.899	1.00	50.13	OS15	ATOM	1755	NH1	ARG	34	149.716	109.118	-62.477	1.00	58.90	OS15
ATOM	1703	C	GLN	27	139.796	107.255	-62.434	1.00	48.40	OS15	ATOM	1756	NH2	ARG	34	151.770	108.475	-63.309	1.00	58.90	OS15
ATOM	1704	O	GLN	27	140.987	107.030	-62.651	1.00	48.40	OS15	ATOM	1757	C	ARG	34	149.007	103.052	-65.802	1.00	53.65	OS15
ATOM	1705	N	VAL	28	138.908	106.290	-62.226	1.00	44.31	OS15	ATOM	1758	O	ARG	34	150.083	102.577	-66.186	1.00	53.65	OS15
ATOM	1706	CA	VAL	28	139.314	104.891	-62.279	1.00	44.31	OS15	ATOM	1759	N	ILE	35	148.215	102.426	-64.932	1.00	43.97	OS15
ATOM	1707	CB	VAL	28	138.165	103.941	-61.865	1.00	34.10	OS15	ATOM	1760	CA	ILE	35	148.597	101.129	-64.393	1.00	43.97	OS15
ATOM	1708	CG1	VAL	28	138.601	102.493	-62.033	1.00	34.10	OS15	ATOM	1761	CB	ILE	35	147.446	100.421	-63.655	1.00	43.80	OS15
ATOM	1709	CG2	VAL	28	137.782	104.194	-60.412	1.00	34.10	OS15	ATOM	1762	CG2	ILE	35	147.884	99.014	-63.255	1.00	43.80	OS15
ATOM	1710	C	VAL	28	139.781	104.523	-63.684	1.00	44.31	OS15	ATOM	1763	CG1	ILE	35	147.052	101.209	-62.402	1.00	43.80	OS15
ATOM	1711	O	VAL	28	140.624	103.642	-63.855	1.00	44.31	OS15	ATOM	1764	CD1	ILE	35	145.866	100.623	-61.647	1.00	43.80	OS15
ATOM	1712	N	ALA	29	139.238	105.197	-64.689	1.00	58.29	OS15	ATOM	1765	C	ILE	35	149.042	100.212	-65.517	1.00	43.97	OS15
ATOM	1713	CA	ALA	29	139.642	104.918	-66.058	1.00	58.29	OS15	ATOM	1766	O	ILE	35	150.051	99.515	-65.403	1.00	43.97	OS15
ATOM	1714	CB	ALA	29	138.716	105.622	-67.034	1.00	76.10	OS15	ATOM	1767	N	ASN	36	148.294	100.212	-66.611	1.00	54.91	OS15

ATOM	1768	CA	ASN	36	148.637	99.359	-67.736	1.00	54.91	OS15	ATOM	1821	CB	LEU	42	157.314	97.072	-64.390	1.00	42.74	OS15
ATOM	1769	CB	ASN	36	147.498	99.387	-68.742	1.00	57.08	OS15	ATOM	1822	CG	LEU	42	157.205	98.459	-63.769	1.00	42.74	OS15
ATOM	1770	CG	ASN	36	146.271	98.659	-68.223	1.00	57.08	OS15	ATOM	1823	CD1	LEU	42	156.387	98.382	-62.494	1.00	42.74	OS15
ATOM	1771	OD1	ASN	36	145.186	98.765	-68.782	1.00	57.08	OS15	ATOM	1824	CD2	LEU	42	158.595	99.003	-63.496	1.00	42.74	OS15
ATOM	1772	ND2	ASN	36	146.447	97.905	-67.142	1.00	57.08	OS15	ATOM	1825	C	LEU	42	158.169	95.601	-66.206	1.00	44.94	OS15
ATOM	1773	C	ASN	36	149.963	99.766	-68.358	1.00	54.91	OS15	ATOM	1826	O	LEU	42	158.884	94.834	-65.559	1.00	44.94	OS15
ATOM	1774	O	ASN	36	150.846	98.932	-68.543	1.00	54.91	OS15	ATOM	1827	N	LYS	43	157.505	95.209	-67.296	1.00	60.07	OS15
ATOM	1775	N	ARG	37	150.116	101.048	-68.661	1.00	50.80	OS15	ATOM	1828	CA	LYS	43	157.666	93.846	-67.803	1.00	60.07	OS15
ATOM	1776	CA	ARG	37	151.371	101.526	-69.229	1.00	50.80	OS15	ATOM	1829	CB	LYS	43	156.770	93.578	-69.010	1.00	135.02	OS15
ATOM	1777	CB	ARG	37	151.342	103.046	-69.396	1.00	82.97	OS15	ATOM	1830	CG	LYS	43	155.353	93.159	-68.664	1.00	135.02	OS15
ATOM	1778	CG	ARG	37	150.416	103.526	-70.467	1.00	82.97	OS15	ATOM	1831	CD	LYS	43	154.600	92.744	-69.921	1.00	135.02	OS15
ATOM	1779	CD	ARG	37	150.767	102.901	-71.812	1.00	82.97	OS15	ATOM	1832	CE	LYS	43	153.175	92.314	-69.612	1.00	135.02	OS15
ATOM	1780	NE	ARG	37	150.064	103.567	-72.903	1.00	82.97	OS15	ATOM	1833	NZ	LYS	43	152.474	91.829	-70.838	1.00	135.02	OS15
ATOM	1781	CZ	ARG	37	150.226	104.850	-73.210	1.00	82.97	OS15	ATOM	1834	C	LYS	43	159.112	93.857	-68.231	1.00	60.07	OS15
ATOM	1782	NH1	ARG	37	151.075	105.599	-72.509	1.00	82.97	OS15	ATOM	1835	O	LYS	43	159.874	92.946	-67.934	1.00	60.07	OS15
ATOM	1783	NH2	ARG	37	149.523	105.388	-74.201	1.00	82.97	OS15	ATOM	1836	N	VAL	44	159.470	94.910	-68.952	1.00	86.69	OS15
ATOM	1784	C	ARG	37	152.555	101.158	-68.322	1.00	50.80	OS15	ATOM	1837	CA	VAL	44	160.841	95.137	-69.371	1.00	86.69	OS15
ATOM	1785	O	ARG	37	153.581	100.658	-68.789	1.00	50.80	OS15	ATOM	1838	CB	VAL	44	160.898	96.089	-70.555	1.00	58.63	OS15
ATOM	1786	N	LEU	38	152.390	101.421	-67.028	1.00	52.90	OS15	ATOM	1839	CG1	VAL	44	162.318	96.534	-70.788	1.00	58.63	OS15
ATOM	1787	CA	LEU	38	153.420	101.162	-66.034	1.00	52.90	OS15	ATOM	1840	CG2	VAL	44	160.348	95.412	-71.774	1.00	58.63	OS15
ATOM	1788	CB	LEU	38	153.003	101.784	-64.692	1.00	68.68	OS15	ATOM	1841	C	VAL	44	161.279	95.892	-68.137	1.00	86.69	OS15
ATOM	1789	CG	LEU	38	154.073	102.331	-63.732	1.00	68.68	OS15	ATOM	1842	O	VAL	44	160.428	96.385	-67.409	1.00	86.69	OS15
ATOM	1790	CD1	LEU	38	153.393	102.867	-62.478	1.00	68.68	OS15	ATOM	1843	N	HIS	45	162.565	96.004	-67.863	1.00	56.33	OS15
ATOM	1791	CD2	LEU	38	155.074	101.246	-63.373	1.00	68.68	OS15	ATOM	1844	CA	HIS	45	162.962	96.742	-66.655	1.00	56.33	OS15
ATOM	1792	C	LEU	38	153.669	99.663	-65.871	1.00	52.90	OS15	ATOM	1845	CB	HIS	45	162.482	98.197	-66.722	1.00	59.88	OS15
ATOM	1793	O	LEU	38	154.824	99.220	-65.776	1.00	52.90	OS15	ATOM	1846	CG	HIS	45	162.770	98.877	-68.024	1.00	59.88	OS15
ATOM	1794	N	SER	39	152.591	98.883	-65.829	1.00	50.37	OS15	ATOM	1847	CD2	HIS	45	163.916	99.400	-68.524	1.00	59.88	OS15
ATOM	1795	CA	SER	39	152.730	97.442	-65.688	1.00	50.37	OS15	ATOM	1848	ND1	HIS	45	161.803	99.091	-68.981	1.00	59.88	OS15
ATOM	1796	CB	SER	39	151.364	96.763	-65.644	1.00	106.94	OS15	ATOM	1849	CE1	HIS	45	162.339	99.720	-70.013	1.00	59.88	OS15
ATOM	1797	OG	SER	39	150.731	96.991	-64.397	1.00	106.94	OS15	ATOM	1850	NE2	HIS	45	163.620	99.920	-69.761	1.00	59.88	OS15
ATOM	1798	C	SER	39	153.530	96.949	-66.875	1.00	50.37	OS15	ATOM	1851	C	HIS	45	162.422	96.127	-65.349	1.00	56.33	OS15
ATOM	1799	O	SER	39	154.416	96.114	-66.727	1.00	50.37	OS15	ATOM	1852	O	HIS	45	161.789	96.819	-64.554	1.00	56.33	OS15
ATOM	1800	N	GLU	40	153.220	97.486	-68.050	1.00	67.37	OS15	ATOM	1853	N	LYS	46	162.670	94.839	-65.126	1.00	71.66	OS15
ATOM	1801	CA	GLU	40	153.923	97.127	-69.276	1.00	67.37	OS15	ATOM	1854	CA	LYS	46	162.212	94.182	-63.904	1.00	71.66	OS15
ATOM	1802	CB	GLU	40	153.389	97.949	-70.446	1.00	91.89	OS15	ATOM	1855	CB	LYS	46	162.579	92.692	-63.911	1.00	80.69	OS15
ATOM	1803	CG	GLU	40	152.288	97.269	-71.198	1.00	91.89	OS15	ATOM	1856	CG	LYS	46	162.276	91.927	-65.191	1.00	80.69	OS15
ATOM	1804	CD	GLU	40	152.767	95.984	-71.825	1.00	91.89	OS15	ATOM	1857	CD	LYS	46	160.807	91.582	-65.340	1.00	80.69	OS15
ATOM	1805	OE1	GLU	40	152.166	94.925	-71.554	1.00	91.89	OS15	ATOM	1858	CE	LYS	46	160.600	90.618	-66.502	1.00	80.69	OS15
ATOM	1806	OE2	GLU	40	153.752	96.038	-72.587	1.00	91.89	OS15	ATOM	1859	NZ	LYS	46	159.159	90.306	-66.747	1.00	80.69	OS15
ATOM	1807	C	GLU	40	155.395	97.430	-69.096	1.00	67.37	OS15	ATOM	1860	C	LYS	46	162.890	94.830	-62.689	1.00	71.66	OS15
ATOM	1808	O	GLU	40	156.253	96.548	-69.148	1.00	67.37	OS15	ATOM	1861	O	LYS	46	162.482	94.609	-61.550	1.00	71.66	OS15
ATOM	1809	N	HIS	41	155.664	98.709	-68.898	1.00	57.99	OS15	ATOM	1862	N	LYS	47	163.926	95.626	-62.937	1.00	58.48	OS15
ATOM	1810	CA	HIS	41	157.005	99.214	-68.695	1.00	57.99	OS15	ATOM	1863	CA	LYS	47	164.667	96.266	-61.861	1.00	58.48	OS15
ATOM	1811	CB	HIS	41	156.923	100.590	-68.067	1.00	57.46	OS15	ATOM	1864	CB	LYS	47	166.165	96.169	-62.130	1.00	75.53	OS15
ATOM	1812	CG	HIS	41	158.213	101.061	-67.489	1.00	57.46	OS15	ATOM	1865	CG	LYS	47	166.719	94.767	-62.051	1.00	75.53	OS15
ATOM	1813	CD2	HIS	41	158.616	101.190	-66.204	1.00	57.46	OS15	ATOM	1866	CD	LYS	47	168.213	94.750	-62.351	1.00	75.53	OS15
ATOM	1814	ND1	HIS	41	159.274	101.462	-68.269	1.00	57.46	OS15	ATOM	1867	CE	LYS	47	168.525	95.260	-63.760	1.00	75.53	OS15
ATOM	1815	CE1	HIS	41	160.276	101.822	-67.489	1.00	57.46	OS15	ATOM	1868	NZ	LYS	47	169.940	94.987	-64.153	1.00	75.53	OS15
ATOM	1816	NE2	HIS	41	159.902	101.667	-66.231	1.00	57.46	OS15	ATOM	1869	C	LYS	47	164.340	97.714	-61.564	1.00	58.48	OS15
ATOM	1817	C	HIS	41	157.843	98.313	-67.805	1.00	57.99	OS15	ATOM	1870	O	LYS	47	165.005	98.318	-60.736	1.00	58.48	OS15
ATOM	1818	O	HIS	41	158.977	98.004	-68.135	1.00	57.99	OS15	ATOM	1871	N	ASP	48	163.352	98.293	-62.236	1.00	62.41	OS15
ATOM	1819	N	LEU	42	157.286	97.903	-66.670	1.00	44.94	OS15	ATOM	1872	CA	ASP	48	163.006	99.684	-61.957	1.00	62.41	OS15
ATOM	1820	CA	LEU	42	158.004	97.047	-65.743	1.00	44.94	OS15	ATOM	1873	CB	ASP	48	162.242	100.296	-63.128	1.00	58.45	OS15

ATOM	1874	CG	ASP	48	162.021	101.797	-62.965	1.00	58.45	OS15	ATOM	1927	CA	GLY	54	154.422	104.297	-58.059	1.00	56.81	OS15
ATOM	1875	OD1	ASP	48	161.811	102.252	-61.821	1.00	58.45	OS15	ATOM	1928	C	GLY	54	153.233	103.407	-58.351	1.00	56.81	OS15
ATOM	1876	OD2	ASP	48	162.045	102.533	-63.976	1.00	58.45	OS15	ATOM	1929	O	GLY	54	152.128	103.652	-57.868	1.00	56.81	OS15
ATOM	1877	C	ASP	48	162.122	99.678	-60.712	1.00	62.41	OS15	ATOM	1930	N	LEU	55	153.473	102.357	-59.130	1.00	45.77	OS15
ATOM	1878	O	ASP	48	160.937	99.981	-60.784	1.00	62.41	OS15	ATOM	1931	CA	LEU	55	152.440	101.405	-59.503	1.00	45.77	OS15
ATOM	1879	N	HIS	49	162.700	99.334	-59.568	1.00	52.05	OS15	ATOM	1932	CB	LEU	55	153.070	100.181	-60.153	1.00	42.68	OS15
ATOM	1880	CA	HIS	49	161.933	99.265	-58.341	1.00	52.05	OS15	ATOM	1933	CG	LEU	55	152.118	99.012	-60.414	1.00	42.68	OS15
ATOM	1881	CB	HIS	49	162.811	98.837	-57.176	1.00	54.37	OS15	ATOM	1934	CD1	LEU	55	151.045	99.441	-61.396	1.00	42.68	OS15
ATOM	1882	CG	HIS	49	163.460	97.507	-57.369	1.00	54.37	OS15	ATOM	1935	CD2	LEU	55	152.892	97.833	-60.970	1.00	42.68	OS15
ATOM	1883	CD2	HIS	49	164.745	97.112	-57.212	1.00	54.37	OS15	ATOM	1936	C	LEU	55	151.626	100.950	-58.306	1.00	45.77	OS15
ATOM	1884	ND1	HIS	49	162.760	96.394	-57.775	1.00	54.37	OS15	ATOM	1937	O	LEU	55	150.400	100.915	-58.352	1.00	45.77	OS15
ATOM	1885	CE1	HIS	49	163.588	95.368	-57.863	1.00	54.37	OS15	ATOM	1938	N	LEU	56	152.319	100.595	-57.231	1.00	60.97	OS15
ATOM	1886	NE2	HIS	49	164.799	95.777	-57.527	1.00	54.37	OS15	ATOM	1939	CA	LEU	56	151.659	100.112	-56.022	1.00	60.97	OS15
ATOM	1887	C	HIS	49	161.267	100.564	-57.973	1.00	52.05	OS15	ATOM	1940	CB	LEU	56	152.690	99.688	-54.979	1.00	52.28	OS15
ATOM	1888	O	HIS	49	160.131	100.571	-57.516	1.00	52.05	OS15	ATOM	1941	CG	LEU	56	152.653	98.181	-54.738	1.00	52.28	OS15
ATOM	1889	N	HIS	50	161.964	101.672	-58.148	1.00	44.24	OS15	ATOM	1942	CD1	LEU	56	152.576	97.432	-56.069	1.00	52.28	OS15
ATOM	1890	CA	HIS	50	161.376	102.942	-57.785	1.00	44.24	OS15	ATOM	1943	CD2	LEU	56	153.878	97.776	-53.954	1.00	52.28	OS15
ATOM	1891	CB	HIS	50	162.344	104.066	-58.097	1.00	52.43	OS15	ATOM	1944	C	LEU	56	150.730	101.118	-55.413	1.00	60.97	OS15
ATOM	1892	CG	HIS	50	163.487	104.125	-57.138	1.00	52.43	OS15	ATOM	1945	O	LEU	56	149.726	100.750	-54.814	1.00	60.97	OS15
ATOM	1893	CD2	HIS	50	163.978	105.139	-56.391	1.00	52.43	OS15	ATOM	1946	N	MET	57	151.077	102.387	-55.553	1.00	58.51	OS15
ATOM	1894	ND1	HIS	50	164.222	103.010	-56.800	1.00	52.43	OS15	ATOM	1947	CA	MET	57	150.249	103.440	-55.009	1.00	58.51	OS15
ATOM	1895	CE1	HIS	50	165.113	103.332	-55.880	1.00	52.43	OS15	ATOM	1948	CB	MET	57	151.036	104.750	-54.916	1.00	60.38	OS15
ATOM	1896	NE2	HIS	50	164.985	104.619	-55.613	1.00	52.43	OS15	ATOM	1949	CG	MET	57	152.248	104.682	-54.001	1.00	60.38	OS15
ATOM	1897	C	HIS	50	160.042	103.163	-58.449	1.00	44.24	OS15	ATOM	1950	SD	MET	57	152.951	106.320	-53.629	1.00	60.38	OS15
ATOM	1898	O	HIS	50	159.069	103.485	-57.773	1.00	44.24	OS15	ATOM	1951	CE	MET	57	153.955	106.623	-55.080	1.00	60.38	OS15
ATOM	1899	N	SER	51	159.982	102.977	-59.762	1.00	43.84	OS15	ATOM	1952	C	MET	57	149.052	103.605	-55.927	1.00	58.51	OS15
ATOM	1900	CA	SER	51	158.723	103.149	-60.482	1.00	43.84	OS15	ATOM	1953	O	MET	57	147.923	103.735	-55.463	1.00	58.51	OS15
ATOM	1901	CB	SER	51	158.920	102.895	-61.975	1.00	45.25	OS15	ATOM	1954	N	MET	58	149.312	103.588	-57.230	1.00	43.23	OS15
ATOM	1902	OG	SER	51	159.848	103.810	-62.524	1.00	45.25	OS15	ATOM	1955	CA	MET	58	148.266	103.732	-58.232	1.00	43.23	OS15
ATOM	1903	C	SER	51	157.681	102.172	-59.933	1.00	43.84	OS15	ATOM	1956	CB	MET	58	148.864	103.637	-59.630	1.00	68.30	OS15
ATOM	1904	O	SER	51	156.504	102.487	-59.852	1.00	43.84	OS15	ATOM	1957	CG	MET	58	149.681	104.847	-60.021	1.00	68.30	OS15
ATOM	1905	N	HIS	52	158.119	100.991	-59.530	1.00	40.44	OS15	ATOM	1958	SD	MET	58	150.516	104.659	-61.607	1.00	68.30	OS15
ATOM	1906	CA	HIS	52	157.190	100.013	-59.015	1.00	40.44	OS15	ATOM	1959	CE	MET	58	149.297	103.707	-62.522	1.00	68.30	OS15
ATOM	1907	CB	HIS	52	157.901	98.709	-58.686	1.00	48.77	OS15	ATOM	1960	C	MET	58	147.221	102.642	-58.056	1.00	43.23	OS15
ATOM	1908	CG	HIS	52	156.983	97.646	-58.173	1.00	48.77	OS15	ATOM	1961	O	MET	58	146.019	102.908	-57.932	1.00	43.23	OS15
ATOM	1909	CD2	HIS	52	156.289	96.679	-58.819	1.00	48.77	OS15	ATOM	1962	N	VAL	59	147.686	101.404	-58.051	1.00	51.67	OS15
ATOM	1910	ND1	HIS	52	156.663	97.519	-56.838	1.00	48.77	OS15	ATOM	1963	CA	VAL	59	146.788	100.285	-57.878	1.00	51.67	OS15
ATOM	1911	CE1	HIS	52	155.814	96.518	-56.684	1.00	48.77	OS15	ATOM	1964	CB	VAL	59	147.557	98.977	-57.786	1.00	27.06	OS15
ATOM	1912	NE2	HIS	52	155.569	95.993	-57.871	1.00	48.77	OS15	ATOM	1965	CG1	VAL	59	146.636	97.886	-57.280	1.00	27.06	OS15
ATOM	1913	C	HIS	52	156.420	100.495	-57.800	1.00	40.44	OS15	ATOM	1966	CG2	VAL	59	148.131	98.621	-59.160	1.00	27.06	OS15
ATOM	1914	O	HIS	52	155.285	100.053	-57.561	1.00	40.44	OS15	ATOM	1967	C	VAL	59	145.989	100.452	-56.601	1.00	51.67	OS15
ATOM	1915	N	ARG	53	157.021	101.380	-57.012	1.00	52.73	OS15	ATOM	1968	O	VAL	59	144.825	100.072	-56.533	1.00	51.67	OS15
ATOM	1916	CA	ARG	53	156.304	101.885	-55.849	1.00	52.73	OS15	ATOM	1969	N	GLY	60	146.626	101.024	-55.589	1.00	42.36	OS15
ATOM	1917	CB	ARG	53	157.223	102.696	-54.942	1.00	42.35	OS15	ATOM	1970	CA	GLY	60	145.967	101.211	-54.314	1.00	42.36	OS15
ATOM	1918	CG	ARG	53	156.483	103.479	-53.890	1.00	42.35	OS15	ATOM	1971	C	GLY	60	144.859	102.208	-54.441	1.00	42.36	OS15
ATOM	1919	CD	ARG	53	157.386	103.815	-52.729	1.00	42.35	OS15	ATOM	1972	O	GLY	60	143.709	101.891	-54.151	1.00	42.36	OS15
ATOM	1920	NE	ARG	53	156.790	104.794	-51.816	1.00	42.35	OS15	ATOM	1973	N	GLN	61	145.208	103.411	-54.886	1.00	60.42	OS15
ATOM	1921	CZ	ARG	53	156.608	106.074	-52.123	1.00	42.35	OS15	ATOM	1974	CA	GLN	61	144.239	104.480	-55.060	1.00	60.42	OS15
ATOM	1922	NH1	ARG	53	156.969	106.529	-53.311	1.00	42.35	OS15	ATOM	1975	CB	GLN	61	144.903	105.684	-55.724	1.00	57.69	OS15
ATOM	1923	NH2	ARG	53	156.085	106.906	-51.248	1.00	42.35	OS15	ATOM	1976	CG	GLN	61	143.997	106.906	-55.929	1.00	57.69	OS15
ATOM	1924	C	ARG	53	155.173	102.755	-56.373	1.00	52.73	OS15	ATOM	1977	CD	GLN	61	143.467	107.522	-54.629	1.00	57.69	OS15
ATOM	1925	O	ARG	53	154.084	102.781	-55.809	1.00	52.73	OS15	ATOM	1978	OE1	GLN	61	144.200	107.658	-53.650	1.00	57.69	OS15
ATOM	1926	N	GLY	54	155.442	103.460	-57.467	1.00	56.81	OS15	ATOM	1979	NE2	GLN	61	142.189	107.919	-54.632	1.00	57.69	OS15

ATOM	1980	C	GLN	61	143.077	103.984	-55.906	1.00	60.42	OS15	ATOM	2033	CB	ARG	67	136.627	100.273	-51.916	1.00	78.77	OS15
ATOM	1981	O	GLN	61	141.936	104.396	-55.703	1.00	60.42	OS15	ATOM	2034	CG	ARG	67	135.986	100.098	-50.553	1.00	78.77	OS15
ATOM	1982	N	ARG	62	143.348	103.096	-56.855	1.00	45.75	OS15	ATOM	2035	CD	ARG	67	137.035	100.229	-49.482	1.00	78.77	OS15
ATOM	1983	CA	ARG	62	142.254	102.596	-57.669	1.00	45.75	OS15	ATOM	2036	NE	ARG	67	138.146	99.334	-49.773	1.00	78.77	OS15
ATOM	1984	CB	ARG	62	142.760	101.803	-58.866	1.00	53.09	OS15	ATOM	2037	CZ	ARG	67	139.423	99.613	-49.529	1.00	78.77	OS15
ATOM	1985	CG	ARG	62	141.628	101.393	-59.795	1.00	53.09	OS15	ATOM	2038	NH1	ARG	67	139.770	100.776	-48.981	1.00	78.77	OS15
ATOM	1986	CD	ARG	62	142.134	100.824	-61.106	1.00	53.09	OS15	ATOM	2039	NH2	ARG	67	140.357	98.728	-49.855	1.00	78.77	OS15
ATOM	1987	NE	ARG	62	142.826	99.555	-60.920	1.00	53.09	OS15	ATOM	2040	C	ARG	67	134.475	101.122	-52.764	1.00	43.64	OS15
ATOM	1988	CZ	ARG	62	143.205	98.764	-61.918	1.00	53.09	OS15	ATOM	2041	O	ARG	67	133.397	100.675	-52.380	1.00	43.64	OS15
ATOM	1989	NH1	ARG	62	142.963	99.111	-63.177	1.00	53.09	OS15	ATOM	2042	N	TYR	68	134.712	102.416	-52.937	1.00	51.54	OS15
ATOM	1990	NH2	ARG	62	143.821	97.621	-61.657	1.00	53.09	OS15	ATOM	2043	CA	TYR	68	133.710	103.437	-52.668	1.00	51.54	OS15
ATOM	1991	C	ARG	62	141.366	101.710	-56.818	1.00	45.75	OS15	ATOM	2044	CB	TYR	68	134.346	104.822	-52.711	1.00	48.37	OS15
ATOM	1992	O	ARG	62	140.159	101.924	-56.734	1.00	45.75	OS15	ATOM	2045	CG	TYR	68	133.338	105.931	-52.797	1.00	48.37	OS15
ATOM	1993	N	ARG	63	141.973	100.713	-56.186	1.00	53.70	OS15	ATOM	2046	CD1	TYR	68	132.672	106.377	-51.665	1.00	48.37	OS15
ATOM	1994	CA	ARG	63	141.249	99.786	-55.327	1.00	53.70	OS15	ATOM	2047	CE1	TYR	68	131.738	107.410	-51.735	1.00	48.37	OS15
ATOM	1995	CB	ARG	63	142.250	98.915	-54.564	1.00	144.83	OS15	ATOM	2048	CD2	TYR	68	133.046	106.533	-54.012	1.00	48.37	OS15
ATOM	1996	CG	ARG	63	141.648	98.048	-53.487	1.00	144.83	OS15	ATOM	2049	CE2	TYR	68	132.111	107.562	-54.098	1.00	48.37	OS15
ATOM	1997	CD	ARG	63	142.221	96.650	-53.552	1.00	144.83	OS15	ATOM	2050	CZ	TYR	68	131.462	107.997	-52.953	1.00	48.37	OS15
ATOM	1998	NE	ARG	63	141.846	95.997	-54.805	1.00	144.83	OS15	ATOM	2051	OH	TYR	68	130.546	109.018	-53.024	1.00	48.37	OS15
ATOM	1999	CZ	ARG	63	142.046	94.709	-55.081	1.00	144.83	OS15	ATOM	2052	C	TYR	68	132.579	103.410	-53.661	1.00	51.54	OS15
ATOM	2000	NH1	ARG	63	142.628	93.912	-54.191	1.00	144.83	OS15	ATOM	2053	O	TYR	68	131.431	103.653	-53.308	1.00	51.54	OS15
ATOM	2001	NH2	ARG	63	141.650	94.215	-56.252	1.00	144.83	OS15	ATOM	2054	N	LEU	69	132.918	103.153	-54.917	1.00	44.57	OS15
ATOM	2002	C	ARG	63	140.351	100.554	-54.356	1.00	53.70	OS15	ATOM	2055	CA	LEU	69	131.921	103.110	-55.968	1.00	44.57	OS15
ATOM	2003	O	ARG	63	139.258	100.117	-54.015	1.00	53.70	OS15	ATOM	2056	CB	LEU	69	132.596	102.931	-57.333	1.00	61.87	OS15
ATOM	2004	N	ARG	64	140.812	101.716	-53.924	1.00	52.54	OS15	ATOM	2057	CG	LEU	69	131.779	103.271	-58.589	1.00	61.87	OS15
ATOM	2005	CA	ARG	64	140.039	102.512	-52.992	1.00	52.54	OS15	ATOM	2058	CD1	LEU	69	130.677	102.251	-58.780	1.00	61.87	OS15
ATOM	2006	CB	ARG	64	140.930	103.563	-52.348	1.00	66.92	OS15	ATOM	2059	CD2	LEU	69	131.197	104.676	-58.472	1.00	61.87	OS15
ATOM	2007	CG	ARG	64	141.083	103.396	-50.863	1.00	66.92	OS15	ATOM	2060	C	LEU	69	130.981	101.955	-55.668	1.00	44.57	OS15
ATOM	2008	CD	ARG	64	142.527	103.531	-50.508	1.00	66.92	OS15	ATOM	2061	O	LEU	69	129.799	102.165	-55.467	1.00	44.57	OS15
ATOM	2009	NE	ARG	64	143.107	104.679	-51.189	1.00	66.92	OS15	ATOM	2062	N	GLN	70	131.505	100.738	-55.614	1.00	48.41	OS15
ATOM	2010	CZ	ARG	64	144.401	104.809	-51.448	1.00	66.92	OS15	ATOM	2063	CA	GLN	70	130.656	99.593	-55.329	1.00	48.41	OS15
ATOM	2011	NH1	ARG	64	145.249	103.856	-51.077	1.00	66.92	OS15	ATOM	2064	CB	GLN	70	131.484	98.343	-55.085	1.00	100.55	OS15
ATOM	2012	NH2	ARG	64	144.845	105.881	-52.089	1.00	66.92	OS15	ATOM	2065	CG	GLN	70	130.633	97.161	-54.693	1.00	100.55	OS15
ATOM	2013	C	ARG	64	138.850	103.182	-53.666	1.00	52.54	OS15	ATOM	2066	CD	GLN	70	131.452	96.023	-54.150	1.00	100.55	OS15
ATOM	2014	O	ARG	64	137.731	103.119	-53.149	1.00	52.54	OS15	ATOM	2067	OE1	GLN	70	132.118	96.162	-53.124	1.00	100.55	OS15
ATOM	2015	N	LEU	65	139.093	103.832	-54.806	1.00	50.03	OS15	ATOM	2068	NE2	GLN	70	131.415	94.883	-54.834	1.00	100.55	OS15
ATOM	2016	CA	LEU	65	138.027	104.493	-55.538	1.00	50.03	OS15	ATOM	2069	C	GLN	70	129.821	99.866	-54.095	1.00	48.41	OS15
ATOM	2017	CB	LEU	65	138.530	105.030	-56.870	1.00	32.66	OS15	ATOM	2070	O	GLN	70	128.631	99.577	-54.064	1.00	48.41	OS15
ATOM	2018	CG	LEU	65	139.208	106.405	-56.941	1.00	32.66	OS15	ATOM	2071	N	ARG	71	130.454	100.419	-53.069	1.00	51.54	OS15
ATOM	2019	CD1	LEU	65	139.381	106.720	-58.395	1.00	32.66	OS15	ATOM	2072	CA	ARG	71	129.759	100.738	-51.833	1.00	51.54	OS15
ATOM	2020	CD2	LEU	65	138.370	107.516	-56.298	1.00	32.66	OS15	ATOM	2073	CB	ARG	71	130.736	101.336	-50.818	1.00	82.72	OS15
ATOM	2021	C	LEU	65	136.911	103.499	-55.788	1.00	50.03	OS15	ATOM	2074	CG	ARG	71	130.070	102.005	-49.634	1.00	82.72	OS15
ATOM	2022	O	LEU	65	135.760	103.760	-55.446	1.00	50.03	OS15	ATOM	2075	CD	ARG	71	131.002	102.044	-48.439	1.00	82.72	OS15
ATOM	2023	N	LEU	66	137.250	102.356	-56.381	1.00	51.43	OS15	ATOM	2076	NE	ARG	71	132.205	102.839	-48.667	1.00	82.72	OS15
ATOM	2024	CA	LEU	66	136.257	101.324	-56.648	1.00	51.43	OS15	ATOM	2077	CZ	ARG	71	132.225	104.168	-48.710	1.00	82.72	OS15
ATOM	2025	CB	LEU	66	136.920	100.121	-57.307	1.00	45.39	OS15	ATOM	2078	NH1	ARG	71	131.102	104.860	-48.543	1.00	82.72	OS15
ATOM	2026	CG	LEU	66	137.488	100.405	-58.690	1.00	45.39	OS15	ATOM	2079	NH2	ARG	71	133.371	104.808	-48.908	1.00	82.72	OS15
ATOM	2027	CD1	LEU	66	137.915	99.108	-59.331	1.00	45.39	OS15	ATOM	2080	C	ARG	71	128.635	101.719	-52.105	1.00	51.54	OS15
ATOM	2028	CD2	LEU	66	136.437	101.074	-59.547	1.00	45.39	OS15	ATOM	2081	O	ARG	71	127.549	101.583	-51.566	1.00	51.54	OS15
ATOM	2029	C	LEU	66	135.520	100.876	-55.374	1.00	51.43	OS15	ATOM	2082	N	GLU	72	128.893	102.688	-52.975	1.00	61.58	OS15
ATOM	2030	O	LEU	66	134.296	100.757	-55.358	1.00	51.43	OS15	ATOM	2083	CA	GLU	72	127.917	103.720	-53.297	1.00	61.58	OS15
ATOM	2031	N	ARG	67	136.260	100.618	-54.305	1.00	43.64	OS15	ATOM	2084	CB	GLU	72	128.634	105.065	-53.426	1.00	90.37	OS15
ATOM	2032	CA	ARG	67	135.635	100.201	-53.066	1.00	43.64	OS15	ATOM	2085	CG	GLU	72	127.909	106.187	-52.738	1.00	90.37	OS15

ATOM	2086	CD	GLU	72	127.822	105.958	-51.246	1.00	90.37	OS15	ATOM	2139	CA	ARG	78	129.748	96.368	-62.350	1.00	85.45	OS15
ATOM	2087	OE1	GLU	72	126.961	106.589	-50.597	1.00	90.37	OS15	ATOM	2140	CB	ARG	78	128.423	95.603	-62.444	1.00	117.55	OS15
ATOM	2088	OE2	GLU	72	128.622	105.150	-50.723	1.00	90.37	OS15	ATOM	2141	CG	ARG	78	128.044	94.835	-61.192	1.00	117.55	OS15
ATOM	2089	C	GLU	72	127.054	103.505	-54.545	1.00	61.58	OS15	ATOM	2142	CD	ARG	78	126.680	94.169	-61.348	1.00	117.55	OS15
ATOM	2090	O	GLU	72	126.347	104.421	-54.955	1.00	61.58	OS15	ATOM	2143	NE	ARG	78	126.226	93.555	-60.102	1.00	117.55	OS15
ATOM	2091	N	ASP	73	127.106	102.320	-55.152	1.00	65.64	OS15	ATOM	2144	CZ	ARG	78	125.920	94.232	-58.998	1.00	117.55	OS15
ATOM	2092	CA	ASP	73	126.317	102.030	-56.357	1.00	65.64	OS15	ATOM	2145	NH1	ARG	78	126.011	95.553	-58.981	1.00	117.55	OS15
ATOM	2093	CB	ASP	73	126.329	103.226	-57.313	1.00	95.29	OS15	ATOM	2146	NH2	ARG	78	125.537	93.588	-57.903	1.00	117.55	OS15
ATOM	2094	CG	ASP	73	125.282	103.109	-58.398	1.00	95.29	OS15	ATOM	2147	C	ARG	78	130.062	96.983	-63.705	1.00	85.45	OS15
ATOM	2095	OD1	ASP	73	125.229	102.054	-59.066	1.00	95.29	OS15	ATOM	2148	O	ARG	78	130.988	96.558	-64.393	1.00	85.45	OS15
ATOM	2096	OD2	ASP	73	124.515	104.078	-58.580	1.00	95.29	OS15	ATOM	2149	N	ALA	79	129.282	97.995	-64.071	1.00	69.26	OS15
ATOM	2097	C	ASP	73	126.870	100.812	-57.094	1.00	65.64	OS15	ATOM	2150	CA	ALA	79	129.457	98.696	-65.337	1.00	69.26	OS15
ATOM	2098	O	ASP	73	127.586	100.942	-58.090	1.00	65.64	OS15	ATOM	2151	CB	ALA	79	128.628	99.977	-65.335	1.00	50.79	OS15
ATOM	2099	N	PRO	74	126.533	99.608	-56.619	1.00	56.29	OS15	ATOM	2152	C	ALA	79	130.925	99.029	-65.587	1.00	69.26	OS15
ATOM	2100	CD	PRO	74	125.624	99.299	-55.508	1.00	42.97	OS15	ATOM	2153	O	ALA	79	131.473	98.706	-66.645	1.00	69.26	OS15
ATOM	2101	CA	PRO	74	127.015	98.377	-57.250	1.00	56.29	OS15	ATOM	2154	N	LEU	80	131.553	99.672	-64.603	1.00	77.98	OS15
ATOM	2102	CB	PRO	74	126.291	97.275	-56.476	1.00	42.97	OS15	ATOM	2155	CA	LEU	80	132.956	100.065	-64.697	1.00	77.98	OS15
ATOM	2103	CG	PRO	74	125.091	97.967	-55.931	1.00	42.97	OS15	ATOM	2156	CB	LEU	80	133.403	100.808	-63.435	1.00	44.83	OS15
ATOM	2104	C	PRO	74	126.788	98.287	-58.749	1.00	56.29	OS15	ATOM	2157	CG	LEU	80	134.057	102.182	-63.613	1.00	44.83	OS15
ATOM	2105	O	PRO	74	127.509	97.565	-59.447	1.00	56.29	OS15	ATOM	2158	CD1	LEU	80	134.895	102.523	-62.390	1.00	44.83	OS15
ATOM	2106	N	GLU	75	125.802	99.018	-59.255	1.00	82.73	OS15	ATOM	2159	CD2	LEU	80	134.923	102.175	-64.853	1.00	44.83	OS15
ATOM	2107	CA	GLU	75	125.553	98.966	-60.685	1.00	82.73	OS15	ATOM	2160	C	LEU	80	133.871	98.869	-64.890	1.00	77.98	OS15
ATOM	2108	CB	GLU	75	124.164	99.498	-61.024	1.00	122.83	OS15	ATOM	2161	O	LEU	80	134.590	98.790	-65.891	1.00	77.98	OS15
ATOM	2109	CG	GLU	75	123.661	98.969	-62.360	1.00	122.83	OS15	ATOM	2162	N	ILE	81	133.852	97.949	-63.923	1.00	82.49	OS15
ATOM	2110	CD	GLU	75	123.906	97.469	-62.518	1.00	122.83	OS15	ATOM	2163	CA	ILE	81	134.696	96.762	-63.989	1.00	82.49	OS15
ATOM	2111	OE1	GLU	75	123.525	96.699	-61.606	1.00	122.83	OS15	ATOM	2164	CB	ILE	81	134.238	95.663	-63.023	1.00	93.05	OS15
ATOM	2112	OE2	GLU	75	124.478	97.064	-63.555	1.00	122.83	OS15	ATOM	2165	CG2	ILE	81	134.962	94.355	-63.353	1.00	93.05	OS15
ATOM	2113	C	GLU	75	126.622	99.747	-61.434	1.00	82.73	OS15	ATOM	2166	CG1	ILE	81	134.521	96.070	-61.581	1.00	93.05	OS15
ATOM	2114	O	GLU	75	127.275	99.204	-62.330	1.00	82.73	OS15	ATOM	2167	CD1	ILE	81	134.352	94.925	-60.612	1.00	93.05	OS15
ATOM	2115	N	ARG	76	126.811	101.015	-61.073	1.00	58.82	OS15	ATOM	2168	C	ILE	81	134.697	96.162	-65.385	1.00	82.49	OS15
ATOM	2116	CA	ARG	76	127.844	101.798	-61.729	1.00	58.82	OS15	ATOM	2169	O	ILE	81	135.752	95.897	-65.953	1.00	82.49	OS15
ATOM	2117	CB	ARG	76	127.994	103.166	-61.081	1.00	56.16	OS15	ATOM	2170	N	GLU	82	133.508	95.943	-65.932	1.00	89.00	OS15
ATOM	2118	CG	ARG	76	126.904	104.134	-61.466	1.00	56.16	OS15	ATOM	2171	CA	GLU	82	133.389	95.372	-67.264	1.00	89.00	OS15
ATOM	2119	CD	ARG	76	127.419	105.567	-61.437	1.00	56.16	OS15	ATOM	2172	CB	GLU	82	131.917	95.203	-67.636	1.00	146.71	OS15
ATOM	2120	NE	ARG	76	127.508	106.108	-60.088	1.00	56.16	OS15	ATOM	2173	CG	GLU	82	131.697	94.730	-69.061	1.00	146.71	OS15
ATOM	2121	CZ	ARG	76	128.257	107.153	-59.757	1.00	56.16	OS15	ATOM	2174	CD	GLU	82	130.239	94.766	-69.465	1.00	146.71	OS15
ATOM	2122	NH1	ARG	76	128.988	107.761	-60.679	1.00	56.16	OS15	ATOM	2175	OE1	GLU	82	129.621	95.847	-69.360	1.00	146.71	OS15
ATOM	2123	NH2	ARG	76	128.266	107.606	-58.509	1.00	56.16	OS15	ATOM	2176	OE2	GLU	82	129.714	93.716	-69.893	1.00	146.71	OS15
ATOM	2124	C	ARG	76	129.134	101.012	-61.577	1.00	58.82	OS15	ATOM	2177	C	GLU	82	134.070	96.262	-68.293	1.00	89.00	OS15
ATOM	2125	O	ARG	76	130.007	101.055	-62.438	1.00	58.82	OS15	ATOM	2178	O	GLU	82	135.143	95.938	-68.802	1.00	89.00	OS15
ATOM	2126	N	TYR	77	129.234	100.273	-60.477	1.00	51.96	OS15	ATOM	2179	N	LYS	83	133.432	97.387	-68.589	1.00	64.55	OS15
ATOM	2127	CA	TYR	77	130.406	99.459	-60.212	1.00	51.96	OS15	ATOM	2180	CA	LYS	83	133.945	98.329	-69.567	1.00	64.55	OS15
ATOM	2128	CB	TYR	77	130.272	98.781	-58.859	1.00	56.94	OS15	ATOM	2181	CB	LYS	83	133.309	99.695	-69.337	1.00	59.11	OS15
ATOM	2129	CG	TYR	77	131.446	97.911	-58.522	1.00	56.94	OS15	ATOM	2182	CG	LYS	83	133.634	100.733	-70.393	1.00	59.11	OS15
ATOM	2130	CD1	TYR	77	132.710	98.462	-58.337	1.00	56.94	OS15	ATOM	2183	CD	LYS	83	132.818	101.994	-70.126	1.00	59.11	OS15
ATOM	2131	CE1	TYR	77	133.801	97.662	-58.037	1.00	56.94	OS15	ATOM	2184	CE	LYS	83	133.082	103.115	-71.119	1.00	59.11	OS15
ATOM	2132	CD2	TYR	77	131.297	96.535	-58.398	1.00	56.94	OS15	ATOM	2185	NZ	LYS	83	132.321	104.326	-70.678	1.00	59.11	OS15
ATOM	2133	CE2	TYR	77	132.375	95.723	-58.097	1.00	56.94	OS15	ATOM	2186	C	LYS	83	135.462	98.430	-69.482	1.00	64.55	OS15
ATOM	2134	CZ	TYR	77	133.627	96.287	-57.920	1.00	56.94	OS15	ATOM	2187	O	LYS	83	136.170	98.120	-70.442	1.00	64.55	OS15
ATOM	2135	OH	TYR	77	134.709	95.474	-57.660	1.00	56.94	OS15	ATOM	2188	N	LEU	84	135.960	98.863	-68.329	1.00	102.82	OS15
ATOM	2136	C	TYR	77	130.571	98.411	-61.301	1.00	51.96	OS15	ATOM	2189	CA	LEU	84	137.394	98.984	-68.133	1.00	102.82	OS15
ATOM	2137	O	TYR	77	131.491	98.501	-62.104	1.00	51.96	OS15	ATOM	2190	CB	LEU	84	137.704	99.466	-66.720	1.00	47.22	OS15
ATOM	2138	N	ARG	78	129.677	97.424	-61.334	1.00	85.45	OS15	ATOM	2191	CG	LEU	84	137.640	100.956	-66.403	1.00	47.22	OS15

ATOM	2192	CD1	LEU	84	137.857	101.139	-64.913	1.00 47.22	OS15	ATOM	2245	NZ	LYS	3	110.692	67.944	11.692	1.00 41.57	PS16
ATOM	2193	CD2	LEU	84	138.700	101.718	-67.192	1.00 47.22	OS15	ATOM	2246	C	LYS	3	109.953	73.333	8.848	1.00 44.53	PS16
ATOM	2194	C	LEU	84	138.066	97.639	-68.336	1.00102.82	OS15	ATOM	2247	O	LYS	3	110.688	74.170	8.327	1.00 44.53	PS16
ATOM	2195	O	LEU	84	139.107	97.542	-68.979	1.00102.82	OS15	ATOM	2248	N	ILE	4	109.206	73.592	9.911	1.00 47.77	PS16
ATOM	2196	N	GLY	85	137.463	96.596	-67.782	1.00107.60	OS15	ATOM	2249	CA	ILE	4	109.291	74.870	10.592	1.00 47.77	PS16
ATOM	2197	CA	GLY	85	138.051	95.275	-67.892	1.00107.60	OS15	ATOM	2250	CB	ILE	4	107.918	75.392	11.013	1.00 37.20	PS16
ATOM	2198	C	GLY	85	139.023	95.083	-66.741	1.00107.60	OS15	ATOM	2251	CG2	ILE	4	108.073	76.623	11.883	1.00 37.20	PS16
ATOM	2199	O	GLY	85	140.221	94.888	-66.949	1.00107.60	OS15	ATOM	2252	CG1	ILE	4	107.082	75.714	9.784	1.00 37.20	PS16
ATOM	2200	N	ILE	86	138.495	95.157	-65.521	1.00112.37	OS15	ATOM	2253	CD1	ILE	4	105.669	76.105	10.148	1.00 37.20	PS16
ATOM	2201	CA	ILE	86	139.289	95.007	-64.307	1.00112.37	OS15	ATOM	2254	C	ILE	4	110.039	74.412	11.817	1.00 47.77	PS16
ATOM	2202	CB	ILE	86	139.199	96.271	-63.429	1.00 73.31	OS15	ATOM	2255	O	ILE	4	109.488	73.681	12.636	1.00 47.77	PS16
ATOM	2203	CG2	ILE	86	140.165	96.179	-62.256	1.00 73.31	OS15	ATOM	2256	N	ARG	5	111.298	74.810	11.935	1.00 42.51	PS16
ATOM	2204	CG1	ILE	86	139.557	97.497	-64.265	1.00 73.31	OS15	ATOM	2257	CA	ARG	5	112.088	74.367	13.064	1.00 42.51	PS16
ATOM	2205	CD1	ILE	86	139.549	98.786	-63.479	1.00 73.31	OS15	ATOM	2258	CB	ARG	5	112.862	73.117	12.667	1.00 43.35	PS16
ATOM	2206	C	ILE	86	138.785	93.814	-63.509	1.00112.37	OS15	ATOM	2259	CG	ARG	5	113.927	73.342	11.622	1.00 43.35	PS16
ATOM	2207	O	ILE	86	138.246	92.865	-64.077	1.00112.37	OS15	ATOM	2260	CD	ARG	5	114.364	72.005	11.078	1.00 43.35	PS16
ATOM	2208	N	ARG	87	138.951	93.873	-62.193	1.00157.02	OS15	ATOM	2261	NE	ARG	5	115.712	72.028	10.523	1.00 43.35	PS16
ATOM	2209	CA	ARG	87	138.534	92.789	-61.324	1.00157.02	OS15	ATOM	2262	CZ	ARG	5	116.150	71.194	9.582	1.00 43.35	PS16
ATOM	2210	CB	ARG	87	137.013	92.620	-61.381	1.00148.30	OS15	ATOM	2263	NH1	ARG	5	115.355	70.260	9.069	1.00 43.35	PS16
ATOM	2211	CG	ARG	87	136.467	91.501	-60.506	1.00148.30	OS15	ATOM	2264	NH2	ARG	5	117.394	71.302	9.146	1.00 43.35	PS16
ATOM	2212	CD	ARG	87	137.088	91.522	-59.119	1.00148.30	OS15	ATOM	2265	C	ARG	5	113.039	75.427	13.562	1.00 42.51	PS16
ATOM	2213	NE	ARG	87	137.191	92.878	-58.591	1.00148.30	OS15	ATOM	2266	O	ARG	5	113.058	76.536	13.053	1.00 42.51	PS16
ATOM	2214	CZ	ARG	87	137.607	93.170	-57.364	1.00148.30	OS15	ATOM	2267	N	LEU	6	113.841	75.073	14.553	1.00 40.61	PS16
ATOM	2215	NH1	ARG	87	137.957	92.195	-56.531	1.00148.30	OS15	ATOM	2268	CA	LEU	6	114.785	76.004	15.132	1.00 40.61	PS16
ATOM	2216	NH2	ARG	87	137.677	94.436	-56.971	1.00148.30	OS15	ATOM	2269	CB	LEU	6	114.788	75.824	16.651	1.00 36.21	PS16
ATOM	2217	C	ARG	87	139.238	91.534	-61.822	1.00157.02	OS15	ATOM	2270	CG	LEU	6	113.636	76.448	17.451	1.00 36.21	PS16
ATOM	2218	O	ARG	87	138.610	90.500	-62.052	1.00157.02	OS15	ATOM	2271	CD1	LEU	6	112.312	76.266	16.736	1.00 36.21	PS16
ATOM	2219	N	GLY	88	140.553	91.655	-62.000	1.00157.81	OS15	ATOM	2272	CD2	LEU	6	113.594	75.831	18.831	1.00 36.21	PS16
ATOM	2220	CA	GLY	88	141.372	90.552	-62.476	1.00157.81	OS15	ATOM	2273	C	LEU	6	116.204	75.850	14.580	1.00 40.61	PS16
ATOM	2221	C	GLY	88	140.848	89.166	-62.140	1.00157.81	OS15	ATOM	2274	O	LEU	6	116.730	74.722	14.485	1.00 40.61	PS16
ATOM	2222	O	GLY	88	140.558	88.400	-63.085	1.00157.81	OS15	ATOM	2275	N	ALA	7	116.813	76.978	14.194	1.00 43.29	PS16
ATOM	2223	OXT	GLY	88	140.725	88.842	-60.936	1.00109.09	OS15	ATOM	2276	CA	ALA	7	118.190	76.966	13.682	1.00 43.29	PS16
ATOM	2224	CB	MET	1	108.766	66.675	4.432	1.00 67.10	PS16	ATOM	2277	CB	ALA	7	118.286	77.677	12.355	1.00 14.51	PS16
ATOM	2225	CG	MET	1	107.715	67.179	5.400	1.00 67.10	PS16	ATOM	2278	C	ALA	7	119.075	77.652	14.711	1.00 43.29	PS16
ATOM	2226	SD	MET	1	107.338	65.990	6.667	1.00 67.10	PS16	ATOM	2279	O	ALA	7	118.765	78.736	15.199	1.00 43.29	PS16
ATOM	2227	CE	MET	1	108.773	66.231	7.756	1.00 67.10	PS16	ATOM	2280	N	ARG	8	120.174	77.004	15.055	1.00 57.60	PS16
ATOM	2228	C	MET	1	109.706	68.947	4.254	1.00 84.06	PS16	ATOM	2281	CA	ARG	8	121.080	77.541	16.047	1.00 57.60	PS16
ATOM	2229	O	MET	1	110.453	68.796	5.221	1.00 84.06	PS16	ATOM	2282	CB	ARG	8	122.048	76.456	16.484	1.00 50.84	PS16
ATOM	2230	N	MET	1	110.314	67.219	2.584	1.00 84.06	PS16	ATOM	2283	CG	ARG	8	121.977	76.116	17.946	1.00 50.84	PS16
ATOM	2231	CA	MET	1	109.229	67.746	3.459	1.00 84.06	PS16	ATOM	2284	CD	ARG	8	122.864	77.006	18.773	1.00 50.84	PS16
ATOM	2232	N	VAL	2	109.257	70.135	3.862	1.00 48.91	PS16	ATOM	2285	NE	ARG	8	122.989	76.461	20.114	1.00 50.84	PS16
ATOM	2233	CA	VAL	2	109.680	71.350	4.548	1.00 48.91	PS16	ATOM	2286	CZ	ARG	8	123.817	76.935	21.031	1.00 50.84	PS16
ATOM	2234	CB	VAL	2	109.122	72.629	3.856	1.00 50.56	PS16	ATOM	2287	NH1	ARG	8	124.591	77.968	20.743	1.00 50.84	PS16
ATOM	2235	CG1	VAL	2	108.799	72.326	2.406	1.00 50.56	PS16	ATOM	2288	NH2	ARG	8	123.880	76.369	22.229	1.00 50.84	PS16
ATOM	2236	CG2	VAL	2	107.910	73.145	4.586	1.00 50.56	PS16	ATOM	2289	C	ARG	8	121.853	78.733	15.520	1.00 57.60	PS16
ATOM	2237	C	VAL	2	109.267	71.312	6.015	1.00 48.91	PS16	ATOM	2290	O	ARG	8	122.584	78.630	14.528	1.00 57.60	PS16
ATOM	2238	O	VAL	2	108.243	70.739	6.379	1.00 48.91	PS16	ATOM	2291	N	PHE	9	121.694	79.865	16.196	1.00 51.50	PS16
ATOM	2239	N	LYS	3	110.080	71.930	6.850	1.00 44.53	PS16	ATOM	2292	CA	PHE	9	122.375	81.084	15.812	1.00 51.50	PS16
ATOM	2240	CA	LYS	3	109.825	71.941	8.267	1.00 44.53	PS16	ATOM	2293	CB	PHE	9	121.424	82.002	15.062	1.00 35.37	PS16
ATOM	2241	CB	LYS	3	110.825	71.016	8.941	1.00 41.57	PS16	ATOM	2294	CG	PHE	9	121.475	81.819	13.596	1.00 35.37	PS16
ATOM	2242	CG	LYS	3	110.727	69.597	8.443	1.00 41.57	PS16	ATOM	2295	CD1	PHE	9	122.380	82.532	12.837	1.00 35.37	PS16
ATOM	2243	CD	LYS	3	110.040	68.729	9.465	1.00 41.57	PS16	ATOM	2296	CD2	PHE	9	120.697	80.862	12.987	1.00 35.37	PS16
ATOM	2244	CE	LYS	3	111.094	68.047	10.278	1.00 41.57	PS16	ATOM	2297	CE1	PHE	9	122.509	82.298	11.495	1.00 35.37	PS16

ATOM	2298	CE2	PHE	9	120.820	80.616	11.642	1.00	35.37	PS16	ATOM	2351	ND1	HIS	16	121.066	84.303	21.923	1.00	44.28	PS16
ATOM	2299	CZ	PHE	9	121.734	81.337	10.892	1.00	35.37	PS16	ATOM	2352	CE1	HIS	16	120.838	85.261	22.802	1.00	44.28	PS16
ATOM	2300	C	PHE	9	122.913	81.784	17.021	1.00	51.50	PS16	ATOM	2353	NE2	HIS	16	119.767	85.931	22.418	1.00	44.28	PS16
ATOM	2301	O	PHE	9	123.381	82.919	16.943	1.00	51.50	PS16	ATOM	2354	C	HIS	16	119.156	81.276	18.905	1.00	41.25	PS16
ATOM	2302	N	GLY	10	122.857	81.103	18.151	1.00	48.39	PS16	ATOM	2355	O	HIS	16	119.998	81.027	18.045	1.00	41.25	PS16
ATOM	2303	CA	GLY	10	123.354	81.723	19.356	1.00	48.39	PS16	ATOM	2356	N	TYR	17	117.884	80.924	18.806	1.00	44.10	PS16
ATOM	2304	C	GLY	10	124.812	82.166	19.319	1.00	48.39	PS16	ATOM	2357	CA	TYR	17	117.426	80.197	17.645	1.00	44.10	PS16
ATOM	2305	O	GLY	10	125.235	83.004	18.521	1.00	48.39	PS16	ATOM	2358	CB	TYR	17	116.595	78.974	18.050	1.00	49.51	PS16
ATOM	2306	N	SER	11	125.569	81.555	20.217	1.00	47.31	PS16	ATOM	2359	CG	TYR	17	117.332	77.986	18.910	1.00	49.51	PS16
ATOM	2307	CA	SER	11	126.976	81.808	20.431	1.00	47.31	PS16	ATOM	2360	CD1	TYR	17	117.414	78.160	20.293	1.00	49.51	PS16
ATOM	2308	CB	SER	11	127.151	83.253	20.880	1.00	68.89	PS16	ATOM	2361	CE1	TYR	17	118.109	77.268	21.089	1.00	49.51	PS16
ATOM	2309	OG	SER	11	128.360	83.453	21.588	1.00	68.89	PS16	ATOM	2362	CD2	TYR	17	117.968	76.889	18.341	1.00	49.51	PS16
ATOM	2310	C	SER	11	127.213	80.843	21.580	1.00	47.31	PS16	ATOM	2363	CE2	TYR	17	118.670	75.988	19.126	1.00	49.51	PS16
ATOM	2311	O	SER	11	126.285	80.562	22.336	1.00	47.31	PS16	ATOM	2364	CZ	TYR	17	118.736	76.179	20.503	1.00	49.51	PS16
ATOM	2312	N	LYS	12	128.421	80.316	21.720	1.00	59.82	PS16	ATOM	2365	OH	TYR	17	119.418	75.263	21.283	1.00	49.51	PS16
ATOM	2313	CA	LYS	12	128.676	79.362	22.800	1.00	59.82	PS16	ATOM	2366	C	TYR	17	116.593	81.040	16.743	1.00	44.10	PS16
ATOM	2314	CB	LYS	12	130.172	79.172	23.009	1.00	53.29	PS16	ATOM	2367	O	TYR	17	115.939	81.980	17.175	1.00	44.10	PS16
ATOM	2315	CG	LYS	12	130.540	77.852	23.640	1.00	53.29	PS16	ATOM	2368	N	ARG	18	116.631	80.688	15.472	1.00	35.47	PS16
ATOM	2316	CD	LYS	12	131.960	77.931	24.126	1.00	53.29	PS16	ATOM	2369	CA	ARG	18	115.818	81.354	14.486	1.00	35.47	PS16
ATOM	2317	CE	LYS	12	132.662	76.592	24.128	1.00	53.29	PS16	ATOM	2370	CB	ARG	18	116.627	81.685	13.238	1.00	56.05	PS16
ATOM	2318	NZ	LYS	12	134.035	76.755	24.704	1.00	53.29	PS16	ATOM	2371	CG	ARG	18	117.734	82.661	13.488	1.00	56.05	PS16
ATOM	2319	C	LYS	12	128.034	79.817	24.112	1.00	59.82	PS16	ATOM	2372	CD	ARG	18	118.181	83.317	12.201	1.00	56.05	PS16
ATOM	2320	O	LYS	12	128.183	80.967	24.525	1.00	59.82	PS16	ATOM	2373	NE	ARG	18	119.231	84.300	12.440	1.00	56.05	PS16
ATOM	2321	N	HIS	13	127.318	78.902	24.755	1.00	57.53	PS16	ATOM	2374	CZ	ARG	18	119.930	84.878	11.473	1.00	56.05	PS16
ATOM	2322	CA	HIS	13	126.629	79.185	26.009	1.00	57.53	PS16	ATOM	2375	NH1	ARG	18	119.684	84.571	10.207	1.00	56.05	PS16
ATOM	2323	CB	HIS	13	127.632	79.405	27.130	1.00	54.11	PS16	ATOM	2376	NH2	ARG	18	120.886	85.742	11.770	1.00	56.05	PS16
ATOM	2324	CG	HIS	13	128.332	78.158	27.556	1.00	54.11	PS16	ATOM	2377	C	ARG	18	114.742	80.337	14.130	1.00	35.47	PS16
ATOM	2325	CD2	HIS	13	129.647	77.888	27.736	1.00	54.11	PS16	ATOM	2378	O	ARG	18	115.051	79.201	13.722	1.00	35.47	PS16
ATOM	2326	ND1	HIS	13	127.652	77.002	27.877	1.00	54.11	PS16	ATOM	2379	N	ILE	19	113.486	80.707	14.345	1.00	39.85	PS16
ATOM	2327	CE1	HIS	13	128.519	76.072	28.238	1.00	54.11	PS16	ATOM	2380	CA	ILE	19	112.409	79.817	13.969	1.00	39.85	PS16
ATOM	2328	NE2	HIS	13	129.736	76.585	28.162	1.00	54.11	PS16	ATOM	2381	CB	ILE	19	111.066	80.302	14.514	1.00	40.80	PS16
ATOM	2329	C	HIS	13	125.696	80.385	25.917	1.00	57.53	PS16	ATOM	2382	CG2	ILE	19	109.915	79.574	13.805	1.00	40.80	PS16
ATOM	2330	O	HIS	13	125.241	80.914	26.937	1.00	57.53	PS16	ATOM	2383	CG1	ILE	19	111.057	80.122	16.032	1.00	40.80	PS16
ATOM	2331	N	ASN	14	125.418	80.808	24.688	1.00	43.48	PS16	ATOM	2384	CD1	ILE	19	109.725	80.429	16.689	1.00	40.80	PS16
ATOM	2332	CA	ASN	14	124.527	81.932	24.444	1.00	43.48	PS16	ATOM	2385	C	ILE	19	112.458	79.944	12.450	1.00	39.85	PS16
ATOM	2333	CB	ASN	14	125.314	83.215	24.190	1.00	61.13	PS16	ATOM	2386	O	ILE	19	112.562	81.054	11.921	1.00	39.85	PS16
ATOM	2334	CG	ASN	14	124.411	84.386	23.935	1.00	61.13	PS16	ATOM	2387	N	VAL	20	112.383	78.825	11.742	1.00	60.82	PS16
ATOM	2335	OD1	ASN	14	123.393	84.531	24.603	1.00	61.13	PS16	ATOM	2388	CA	VAL	20	112.500	78.910	10.306	1.00	60.82	PS16
ATOM	2336	ND2	ASN	14	124.768	85.230	22.972	1.00	61.13	PS16	ATOM	2389	CB	VAL	20	113.992	79.024	9.946	1.00	62.65	PS16
ATOM	2337	C	ASN	14	123.656	81.609	23.239	1.00	43.48	PS16	ATOM	2390	CG1	VAL	20	114.777	77.941	10.635	1.00	62.65	PS16
ATOM	2338	O	ASN	14	123.634	82.325	22.240	1.00	43.48	PS16	ATOM	2391	CG2	VAL	20	114.174	78.900	8.480	1.00	62.65	PS16
ATOM	2339	N	PRO	15	122.906	80.514	23.338	1.00	58.11	PS16	ATOM	2392	C	VAL	20	111.883	77.780	9.498	1.00	60.82	PS16
ATOM	2340	CD	PRO	15	122.628	79.791	24.590	1.00	37.80	PS16	ATOM	2393	O	VAL	20	111.657	76.688	10.011	1.00	60.82	PS16
ATOM	2341	CA	PRO	15	122.018	80.062	22.272	1.00	58.11	PS16	ATOM	2394	N	VAL	21	111.609	78.075	8.228	1.00	53.02	PS16
ATOM	2342	CB	PRO	15	121.437	78.789	22.844	1.00	37.80	PS16	ATOM	2395	CA	VAL	21	111.060	77.113	7.281	1.00	53.02	PS16
ATOM	2343	CG	PRO	15	121.290	79.171	24.290	1.00	37.80	PS16	ATOM	2396	CB	VAL	21	110.048	77.771	6.333	1.00	35.89	PS16
ATOM	2344	C	PRO	15	120.931	81.071	21.949	1.00	58.11	PS16	ATOM	2397	CG1	VAL	21	109.510	76.756	5.320	1.00	35.89	PS16
ATOM	2345	O	PRO	15	120.421	81.768	22.826	1.00	58.11	PS16	ATOM	2398	CG2	VAL	21	108.918	78.360	7.137	1.00	35.89	PS16
ATOM	2346	N	HIS	16	120.592	81.133	20.672	1.00	41.25	PS16	ATOM	2399	C	VAL	21	112.226	76.637	6.422	1.00	53.02	PS16
ATOM	2347	CA	HIS	16	119.550	82.002	20.155	1.00	41.25	PS16	ATOM	2400	O	VAL	21	112.974	77.458	5.899	1.00	53.02	PS16
ATOM	2348	CB	HIS	16	120.080	83.395	19.785	1.00	44.28	PS16	ATOM	2401	N	THR	22	112.385	75.323	6.275	1.00	51.54	PS16
ATOM	2349	CG	HIS	16	120.109	84.355	20.932	1.00	44.28	PS16	ATOM	2402	CA	THR	22	113.457	74.774	5.454	1.00	51.54	PS16
ATOM	2350	CD2	HIS	16	119.291	85.384	21.250	1.00	44.28	PS16	ATOM	2403	CB	THR	22	114.799	74.820	6.168	1.00	37.10	PS16

ATOM	2404	OG1	THR	22	115.806	74.281	5.299	1.00	37.10	PS16	ATOM	2457	NE	ARG	28	121.955	72.383	15.749	1.00	30.76	PS16
ATOM	2405	CG2	THR	22	114.744	74.020	7.452	1.00	37.10	PS16	ATOM	2458	CZ	ARG	28	123.024	73.175	15.773	1.00	30.76	PS16
ATOM	2406	C	THR	22	113.158	73.334	5.150	1.00	51.54	PS16	ATOM	2459	NH1	ARG	28	123.131	74.163	14.905	1.00	30.76	PS16
ATOM	2407	O	THR	22	112.330	72.731	5.810	1.00	51.54	PS16	ATOM	2460	NH2	ARG	28	123.965	73.006	16.703	1.00	30.76	PS16
ATOM	2408	N	ASP	23	113.828	72.778	4.151	1.00	38.33	PS16	ATOM	2461	C	ARG	28	120.372	73.906	10.934	1.00	66.51	PS16
ATOM	2409	CA	ASP	23	113.616	71.378	3.791	1.00	38.33	PS16	ATOM	2462	O	ARG	28	119.434	74.709	10.977	1.00	66.51	PS16
ATOM	2410	CB	ASP	23	114.176	71.104	2.388	1.00	54.84	PS16	ATOM	2463	N	ASP	29	121.627	74.285	10.751	1.00	74.00	PS16
ATOM	2411	CG	ASP	23	114.060	69.642	1.975	1.00	54.84	PS16	ATOM	2464	CA	ASP	29	121.926	75.686	10.548	1.00	74.00	PS16
ATOM	2412	OD1	ASP	23	114.783	68.798	2.551	1.00	54.84	PS16	ATOM	2465	CB	ASP	29	123.320	75.966	11.067	1.00	50.04	PS16
ATOM	2413	OD2	ASP	23	113.248	69.331	1.071	1.00	54.84	PS16	ATOM	2466	CG	ASP	29	123.396	75.727	12.568	1.00	50.04	PS16
ATOM	2414	C	ASP	23	114.299	70.491	4.840	1.00	38.33	PS16	ATOM	2467	OD1	ASP	29	124.434	75.982	13.219	1.00	50.04	PS16
ATOM	2415	O	ASP	23	115.441	70.737	5.249	1.00	38.33	PS16	ATOM	2468	OD2	ASP	29	122.365	75.272	13.097	1.00	50.04	PS16
ATOM	2416	N	ALA	24	113.590	69.455	5.274	1.00	46.10	PS16	ATOM	2469	C	ASP	29	121.734	75.922	9.056	1.00	74.00	PS16
ATOM	2417	CA	ALA	24	114.097	68.542	6.289	1.00	46.10	PS16	ATOM	2470	O	ASP	29	120.592	76.059	8.630	1.00	74.00	PS16
ATOM	2418	CB	ALA	24	113.175	67.356	6.401	1.00	38.42	PS16	ATOM	2471	N	GLY	30	122.794	75.964	8.263	1.00	38.98	PS16
ATOM	2419	C	ALA	24	115.535	68.069	6.089	1.00	46.10	PS16	ATOM	2472	CA	GLY	30	122.632	76.113	6.816	1.00	38.98	PS16
ATOM	2420	O	ALA	24	116.237	67.803	7.060	1.00	46.10	PS16	ATOM	2473	C	GLY	30	121.450	76.832	6.155	1.00	38.98	PS16
ATOM	2421	N	ARG	25	115.983	67.970	4.846	1.00	58.29	PS16	ATOM	2474	O	GLY	30	120.567	77.369	6.808	1.00	38.98	PS16
ATOM	2422	CA	ARG	25	117.345	67.518	4.567	1.00	58.29	PS16	ATOM	2475	N	LYS	31	121.411	76.809	4.828	1.00	42.95	PS16
ATOM	2423	CB	ARG	25	117.363	66.820	3.212	1.00	46.04	PS16	ATOM	2476	CA	LYS	31	120.373	77.528	4.086	1.00	42.95	PS16
ATOM	2424	CG	ARG	25	116.252	65.817	3.027	1.00	46.04	PS16	ATOM	2477	CB	LYS	31	120.649	77.508	2.578	1.00	58.10	PS16
ATOM	2425	CD	ARG	25	115.999	65.500	1.563	1.00	46.04	PS16	ATOM	2478	CG	LYS	31	119.585	78.280	1.802	1.00	58.10	PS16
ATOM	2426	NE	ARG	25	115.422	66.646	0.873	1.00	46.04	PS16	ATOM	2479	CD	LYS	31	119.993	78.622	0.381	1.00	58.10	PS16
ATOM	2427	CZ	ARG	25	114.873	66.599	-0.338	1.00	46.04	PS16	ATOM	2480	CE	LYS	31	120.125	77.382	-0.477	1.00	58.10	PS16
ATOM	2428	NH1	ARG	25	114.820	65.450	-1.006	1.00	46.04	PS16	ATOM	2481	NZ	LYS	31	120.471	77.727	-1.884	1.00	58.10	PS16
ATOM	2429	NH2	ARG	25	114.375	67.708	-0.881	1.00	46.04	PS16	ATOM	2482	C	LYS	31	118.912	77.195	4.273	1.00	42.95	PS16
ATOM	2430	C	ARG	25	118.294	68.714	4.538	1.00	58.29	PS16	ATOM	2483	O	LYS	31	118.414	76.229	3.716	1.00	42.95	PS16
ATOM	2431	O	ARG	25	118.651	69.187	3.471	1.00	58.29	PS16	ATOM	2484	N	TYR	32	118.209	78.016	5.036	1.00	34.28	PS16
ATOM	2432	N	ARG	26	118.736	69.194	5.689	1.00	43.58	PS16	ATOM	2485	CA	TYR	32	116.787	77.804	5.217	1.00	34.28	PS16
ATOM	2433	CA	ARG	26	119.590	70.379	5.690	1.00	43.58	PS16	ATOM	2486	CB	TYR	32	116.351	78.319	6.581	1.00	43.68	PS16
ATOM	2434	CB	ARG	26	118.738	71.601	5.407	1.00	46.63	PS16	ATOM	2487	CG	TYR	32	116.785	79.724	6.944	1.00	43.68	PS16
ATOM	2435	CG	ARG	26	118.889	72.165	4.046	1.00	46.63	PS16	ATOM	2488	CD1	TYR	32	117.804	79.942	7.865	1.00	43.68	PS16
ATOM	2436	CD	ARG	26	119.787	73.365	4.042	1.00	46.63	PS16	ATOM	2489	CE1	TYR	32	118.154	81.232	8.273	1.00	43.68	PS16
ATOM	2437	NE	ARG	26	119.472	74.151	2.859	1.00	46.63	PS16	ATOM	2490	CD2	TYR	32	116.128	80.826	6.428	1.00	43.68	PS16
ATOM	2438	CZ	ARG	26	119.706	73.749	1.615	1.00	46.63	PS16	ATOM	2491	CE2	TYR	32	116.467	82.118	6.823	1.00	43.68	PS16
ATOM	2439	NH1	ARG	26	120.276	72.581	1.399	1.00	46.63	PS16	ATOM	2492	CZ	TYR	32	117.476	82.318	7.746	1.00	43.68	PS16
ATOM	2440	NH2	ARG	26	119.319	74.485	0.585	1.00	46.63	PS16	ATOM	2493	OH	TYR	32	117.783	83.602	8.145	1.00	43.68	PS16
ATOM	2441	C	ARG	26	120.300	70.648	6.994	1.00	43.58	PS16	ATOM	2494	C	TYR	32	116.025	78.523	4.099	1.00	34.28	PS16
ATOM	2442	O	ARG	26	119.649	70.657	8.034	1.00	43.58	PS16	ATOM	2495	O	TYR	32	116.593	79.331	3.367	1.00	34.28	PS16
ATOM	2443	N	LYS	27	121.606	70.906	6.961	1.00	50.01	PS16	ATOM	2496	N	ILE	33	114.743	78.231	3.956	1.00	47.55	PS16
ATOM	2444	CA	LYS	27	122.309	71.209	8.207	1.00	50.01	PS16	ATOM	2497	CA	ILE	33	113.943	78.860	2.913	1.00	47.55	PS16
ATOM	2445	CB	LYS	27	123.515	72.109	7.941	1.00	50.53	PS16	ATOM	2498	CB	ILE	33	112.707	78.020	2.588	1.00	28.85	PS16
ATOM	2446	CG	LYS	27	124.414	71.673	6.816	1.00	50.53	PS16	ATOM	2499	CG2	ILE	33	111.704	78.859	1.857	1.00	28.85	PS16
ATOM	2447	CD	LYS	27	125.633	72.557	6.783	1.00	50.53	PS16	ATOM	2500	CG1	ILE	33	113.114	76.793	1.773	1.00	28.85	PS16
ATOM	2448	CE	LYS	27	126.562	72.068	5.733	1.00	50.53	PS16	ATOM	2501	CD1	ILE	33	112.272	75.565	2.031	1.00	28.85	PS16
ATOM	2449	NZ	LYS	27	125.756	71.801	4.508	1.00	50.53	PS16	ATOM	2502	C	ILE	33	113.454	80.242	3.309	1.00	47.55	PS16
ATOM	2450	C	LYS	27	121.290	71.998	9.038	1.00	50.01	PS16	ATOM	2503	O	ILE	33	113.377	81.137	2.473	1.00	47.55	PS16
ATOM	2451	O	LYS	27	120.641	72.898	8.505	1.00	50.01	PS16	ATOM	2504	N	GLU	34	113.107	80.398	4.583	1.00	52.78	PS16
ATOM	2452	N	ARG	28	121.127	71.683	10.318	1.00	66.51	PS16	ATOM	2505	CA	GLU	34	112.583	81.652	5.098	1.00	52.78	PS16
ATOM	2453	CA	ARG	28	120.132	72.416	11.080	1.00	66.51	PS16	ATOM	2506	CB	GLU	34	111.153	81.862	4.602	1.00	55.17	PS16
ATOM	2454	CB	ARG	28	120.127	72.009	12.550	1.00	30.76	PS16	ATOM	2507	CG	GLU	34	110.453	83.050	5.231	1.00	55.17	PS16
ATOM	2455	CG	ARG	28	121.251	72.539	13.379	1.00	30.76	PS16	ATOM	2508	CD	GLU	34	109.026	83.236	4.722	1.00	55.17	PS16
ATOM	2456	CD	ARG	28	120.829	72.512	14.826	1.00	30.76	PS16	ATOM	2509	OE1	GLU	34	108.716	82.778	3.591	1.00	55.17	PS16

ATOM	2510	OE2	GLU	34	108.215	83.860	5.450	1.00	55.17	PS16	ATOM	2563	OD2	ASP	40	117.554	85.707	25.104	1.00	66.31	PS16
ATOM	2511	C	GLU	34	112.560	81.687	6.613	1.00	52.78	PS16	ATOM	2564	C	ASP	40	115.424	82.493	24.082	1.00	51.12	PS16
ATOM	2512	O	GLU	34	112.154	80.724	7.262	1.00	52.78	PS16	ATOM	2565	O	ASP	40	114.662	83.018	24.889	1.00	51.12	PS16
ATOM	2513	N	LYS	35	112.997	82.805	7.173	1.00	50.73	PS16	ATOM	2566	N	PRO	41	115.843	81.227	24.210	1.00	51.70	PS16
ATOM	2514	CA	LYS	35	112.966	82.991	8.612	1.00	50.73	PS16	ATOM	2567	CD	PRO	41	117.008	80.671	23.501	1.00	58.14	PS16
ATOM	2515	CB	LYS	35	113.953	84.085	9.018	1.00	38.31	PS16	ATOM	2568	CA	PRO	41	115.429	80.326	25.284	1.00	51.70	PS16
ATOM	2516	CG	LYS	35	113.928	84.450	10.489	1.00	38.31	PS16	ATOM	2569	CB	PRO	41	116.218	79.060	24.983	1.00	58.14	PS16
ATOM	2517	CD	LYS	35	115.137	85.295	10.901	1.00	38.31	PS16	ATOM	2570	CG	PRO	41	117.493	79.607	24.460	1.00	58.14	PS16
ATOM	2518	CE	LYS	35	114.982	85.792	12.337	1.00	38.31	PS16	ATOM	2571	C	PRO	41	115.664	80.826	26.697	1.00	51.70	PS16
ATOM	2519	NZ	LYS	35	116.014	86.786	12.774	1.00	38.31	PS16	ATOM	2572	O	PRO	41	114.871	80.553	27.591	1.00	51.70	PS16
ATOM	2520	C	LYS	35	111.536	83.445	8.876	1.00	50.73	PS16	ATOM	2573	N	ARG	42	116.751	81.545	26.919	1.00	50.10	PS16
ATOM	2521	O	LYS	35	110.952	84.143	8.055	1.00	50.73	PS16	ATOM	2574	CA	ARG	42	117.013	82.026	28.264	1.00	50.10	PS16
ATOM	2522	N	ILE	36	110.943	83.021	9.982	1.00	44.89	PS16	ATOM	2575	CB	ARG	42	118.510	82.112	28.511	1.00	55.86	PS16
ATOM	2523	CA	ILE	36	109.584	83.458	10.286	1.00	44.89	PS16	ATOM	2576	CG	ARG	42	119.242	80.837	28.215	1.00	55.86	PS16
ATOM	2524	CB	ILE	36	108.503	82.430	9.900	1.00	38.20	PS16	ATOM	2577	CD	ARG	42	120.708	81.034	28.478	1.00	55.86	PS16
ATOM	2525	CG2	ILE	36	108.567	82.143	8.411	1.00	38.20	PS16	ATOM	2578	NE	ARG	42	121.221	82.169	27.721	1.00	55.86	PS16
ATOM	2526	CG1	ILE	36	108.673	81.153	10.729	1.00	38.20	PS16	ATOM	2579	CZ	ARG	42	122.345	82.807	28.023	1.00	55.86	PS16
ATOM	2527	CD1	ILE	36	107.621	80.077	10.420	1.00	38.20	PS16	ATOM	2580	NH1	ARG	42	123.056	82.410	29.067	1.00	55.86	PS16
ATOM	2528	C	ILE	36	109.469	83.740	11.765	1.00	44.89	PS16	ATOM	2581	NH2	ARG	42	122.759	83.831	27.286	1.00	55.86	PS16
ATOM	2529	O	ILE	36	108.384	83.989	12.275	1.00	44.89	PS16	ATOM	2582	C	ARG	42	116.382	83.389	28.508	1.00	50.10	PS16
ATOM	2530	N	GLY	37	110.598	83.707	12.457	1.00	44.30	PS16	ATOM	2583	O	ARG	42	116.581	83.989	29.570	1.00	50.10	PS16
ATOM	2531	CA	GLY	37	110.573	84.008	13.872	1.00	44.30	PS16	ATOM	2584	N	LYS	43	115.633	83.871	27.521	1.00	114.78	PS16
ATOM	2532	C	GLY	37	111.952	83.880	14.459	1.00	44.30	PS16	ATOM	2585	CA	LYS	43	114.978	85.166	27.615	1.00	114.78	PS16
ATOM	2533	O	GLY	37	112.908	83.567	13.747	1.00	44.30	PS16	ATOM	2586	CB	LYS	43	114.206	85.273	28.927	1.00	62.20	PS16
ATOM	2534	N	TYR	38	112.055	84.146	15.754	1.00	53.26	PS16	ATOM	2587	CG	LYS	43	112.979	84.383	28.988	1.00	62.20	PS16
ATOM	2535	CA	TYR	38	113.312	84.012	16.470	1.00	53.26	PS16	ATOM	2588	CD	LYS	43	113.323	82.907	29.002	1.00	62.20	PS16
ATOM	2536	CB	TYR	38	114.190	85.261	16.313	1.00	62.08	PS16	ATOM	2589	CE	LYS	43	112.051	82.047	29.020	1.00	62.20	PS16
ATOM	2537	CG	TYR	38	113.628	86.545	16.869	1.00	62.08	PS16	ATOM	2590	NZ	LYS	43	112.372	80.591	29.167	1.00	62.20	PS16
ATOM	2538	CD1	TYR	38	113.747	86.850	18.226	1.00	62.08	PS16	ATOM	2591	C	LYS	43	115.954	86.339	27.498	1.00	114.78	PS16
ATOM	2539	CE1	TYR	38	113.257	88.038	18.732	1.00	62.08	PS16	ATOM	2592	O	LYS	43	116.075	86.953	26.438	1.00	114.78	PS16
ATOM	2540	CD2	TYR	38	112.994	87.468	16.033	1.00	62.08	PS16	ATOM	2593	N	THR	44	116.640	86.647	28.592	1.00	61.64	PS16
ATOM	2541	CE2	TYR	38	112.499	88.658	16.531	1.00	62.08	PS16	ATOM	2594	CA	THR	44	117.611	87.748	28.649	1.00	61.64	PS16
ATOM	2542	CZ	TYR	38	112.634	88.937	17.881	1.00	62.08	PS16	ATOM	2595	CB	THR	44	118.860	87.483	27.749	1.00	60.71	PS16
ATOM	2543	OH	TYR	38	112.151	90.120	18.385	1.00	62.08	PS16	ATOM	2596	OG1	THR	44	118.489	87.500	26.371	1.00	60.71	PS16
ATOM	2544	C	TYR	38	112.957	83.745	17.920	1.00	53.26	PS16	ATOM	2597	CG2	THR	44	119.466	86.145	28.065	1.00	60.71	PS16
ATOM	2545	O	TYR	38	111.882	84.137	18.388	1.00	53.26	PS16	ATOM	2598	C	THR	44	117.036	89.126	28.305	1.00	61.64	PS16
ATOM	2546	N	TYR	39	113.850	83.078	18.634	1.00	40.46	PS16	ATOM	2599	O	THR	44	117.582	90.146	28.718	1.00	61.64	PS16
ATOM	2547	CA	TYR	39	113.556	82.722	20.005	1.00	40.46	PS16	ATOM	2600	N	THR	45	115.935	89.156	27.561	1.00	45.82	PS16
ATOM	2548	CB	TYR	39	112.765	81.410	19.986	1.00	63.13	PS16	ATOM	2601	CA	THR	45	115.311	90.414	27.180	1.00	45.82	PS16
ATOM	2549	CG	TYR	39	112.913	80.527	21.202	1.00	63.13	PS16	ATOM	2602	CB	THR	45	115.856	90.949	25.852	1.00	52.18	PS16
ATOM	2550	CD1	TYR	39	112.496	80.957	22.456	1.00	63.13	PS16	ATOM	2603	OG1	THR	45	115.625	89.976	24.831	1.00	52.18	PS16
ATOM	2551	CE1	TYR	39	112.593	80.131	23.563	1.00	63.13	PS16	ATOM	2604	CG2	THR	45	117.335	91.248	25.955	1.00	52.18	PS16
ATOM	2552	CD2	TYR	39	113.434	79.247	21.086	1.00	63.13	PS16	ATOM	2605	C	THR	45	113.805	90.258	27.011	1.00	45.82	PS16
ATOM	2553	CE2	TYR	39	113.534	78.417	22.179	1.00	63.13	PS16	ATOM	2606	O	THR	45	113.312	89.204	26.583	1.00	45.82	PS16
ATOM	2554	CZ	TYR	39	113.114	78.861	23.417	1.00	63.13	PS16	ATOM	2607	N	PRO	46	113.055	91.327	27.324	1.00	65.47	PS16
ATOM	2555	OH	TYR	39	113.226	78.040	24.513	1.00	63.13	PS16	ATOM	2608	CD	PRO	46	113.577	92.675	27.607	1.00	80.42	PS16
ATOM	2556	C	TYR	39	114.795	82.587	20.864	1.00	40.46	PS16	ATOM	2609	CA	PRO	46	111.596	91.355	27.225	1.00	65.47	PS16
ATOM	2557	O	TYR	39	115.708	81.840	20.524	1.00	40.46	PS16	ATOM	2610	CB	PRO	46	111.302	92.836	27.070	1.00	80.42	PS16
ATOM	2558	N	ASP	40	114.830	83.329	21.967	1.00	51.12	PS16	ATOM	2611	CG	PRO	46	112.327	93.440	27.958	1.00	80.42	PS16
ATOM	2559	CA	ASP	40	115.948	83.273	22.895	1.00	51.12	PS16	ATOM	2612	C	PRO	46	111.085	90.544	26.049	1.00	65.47	PS16
ATOM	2560	CB	ASP	40	116.369	84.669	23.332	1.00	66.31	PS16	ATOM	2613	O	PRO	46	110.346	89.580	26.211	1.00	65.47	PS16
ATOM	2561	CG	ASP	40	117.314	84.642	24.512	1.00	66.31	PS16	ATOM	2614	N	ASP	47	111.502	90.941	24.860	1.00	69.00	PS16
ATOM	2562	OD1	ASP	40	117.829	83.557	24.852	1.00	66.31	PS16	ATOM	2615	CA	ASP	47	111.078	90.274	23.652	1.00	69.00	PS16

ATOM	2616	CB	ASP	47	111.132	91.269	22.494	1.00119.64	PS16	ATOM	2669	CA	VAL	53	101.435	84.283	13.079	1.00 56.28	PS16
ATOM	2617	CG	ASP	47	110.713	90.661	21.181	1.00119.64	PS16	ATOM	2670	CB	VAL	53	100.151	84.651	13.814	1.00 77.08	PS16
ATOM	2618	OD1	ASP	47	110.697	91.401	20.177	1.00119.64	PS16	ATOM	2671	CG1	VAL	53	100.437	84.778	15.291	1.00 77.08	PS16
ATOM	2619	OD2	ASP	47	110.401	89.451	21.148	1.00119.64	PS16	ATOM	2672	CG2	VAL	53	99.585	85.936	13.262	1.00 77.08	PS16
ATOM	2620	C	ASP	47	111.961	89.071	23.354	1.00 69.00	PS16	ATOM	2673	C	VAL	53	101.123	84.102	11.609	1.00 56.28	PS16
ATOM	2621	O	ASP	47	112.894	89.176	22.566	1.00 69.00	PS16	ATOM	2674	O	VAL	53	100.873	82.984	11.169	1.00 56.28	PS16
ATOM	2622	N	TRP	48	111.677	87.929	23.977	1.00 50.96	PS16	ATOM	2675	N	GLU	54	101.124	85.178	10.830	1.00 68.80	PS16
ATOM	2623	CA	TRP	48	112.481	86.736	23.723	1.00 50.96	PS16	ATOM	2676	CA	GLU	54	100.878	85.019	9.396	1.00 68.80	PS16
ATOM	2624	CB	TRP	48	112.930	86.073	25.025	1.00 61.94	PS16	ATOM	2677	CB	GLU	54	100.791	86.384	8.709	1.00137.51	PS16
ATOM	2625	CG	TRP	48	111.830	85.776	25.977	1.00 61.94	PS16	ATOM	2678	CG	GLU	54	99.432	86.682	8.092	1.00137.51	PS16
ATOM	2626	CD2	TRP	48	110.962	84.644	25.954	1.00 61.94	PS16	ATOM	2679	CD	GLU	54	99.144	85.829	6.866	1.00137.51	PS16
ATOM	2627	CE2	TRP	48	110.082	84.773	27.041	1.00 61.94	PS16	ATOM	2680	OE1	GLU	54	99.336	84.593	6.938	1.00137.51	PS16
ATOM	2628	CE3	TRP	48	110.840	83.534	25.117	1.00 61.94	PS16	ATOM	2681	OE2	GLU	54	98.715	86.398	5.837	1.00137.51	PS16
ATOM	2629	CD1	TRP	48	111.454	86.526	27.045	1.00 61.94	PS16	ATOM	2682	C	GLU	54	102.121	84.273	8.934	1.00 68.80	PS16
ATOM	2630	NE1	TRP	48	110.405	85.931	27.693	1.00 61.94	PS16	ATOM	2683	O	GLU	54	102.985	83.971	9.751	1.00 68.80	PS16
ATOM	2631	CZ2	TRP	48	109.092	83.832	27.319	1.00 61.94	PS16	ATOM	2684	N	ARG	55	102.242	83.961	7.657	1.00 72.35	PS16
ATOM	2632	CZ3	TRP	48	109.857	82.599	25.390	1.00 61.94	PS16	ATOM	2685	CA	ARG	55	103.454	83.264	7.227	1.00 72.35	PS16
ATOM	2633	CH2	TRP	48	108.992	82.755	26.483	1.00 61.94	PS16	ATOM	2686	CB	ARG	55	104.695	84.028	7.697	1.00 43.06	PS16
ATOM	2634	C	TRP	48	111.795	85.699	22.842	1.00 50.96	PS16	ATOM	2687	CG	ARG	55	104.949	85.317	6.973	1.00 43.06	PS16
ATOM	2635	O	TRP	48	112.219	84.548	22.797	1.00 50.96	PS16	ATOM	2688	CD	ARG	55	105.646	85.018	5.680	1.00 43.06	PS16
ATOM	2636	N	LEU	49	110.737	86.099	22.150	1.00 54.86	PS16	ATOM	2689	NE	ARG	55	104.717	84.695	4.605	1.00 43.06	PS16
ATOM	2637	CA	LEU	49	110.054	85.195	21.238	1.00 54.86	PS16	ATOM	2690	CZ	ARG	55	105.031	83.933	3.560	1.00 43.06	PS16
ATOM	2638	CB	LEU	49	109.286	84.105	21.991	1.00 51.18	PS16	ATOM	2691	NH1	ARG	55	106.250	83.403	3.460	1.00 43.06	PS16
ATOM	2639	CG	LEU	49	108.411	83.241	21.058	1.00 51.18	PS16	ATOM	2692	NH2	ARG	55	104.139	83.722	2.593	1.00 43.06	PS16
ATOM	2640	CD1	LEU	49	109.278	82.315	20.208	1.00 51.18	PS16	ATOM	2693	C	ARG	55	103.473	81.866	7.829	1.00 72.35	PS16
ATOM	2641	CD2	LEU	49	107.426	82.435	21.879	1.00 51.18	PS16	ATOM	2694	O	ARG	55	103.452	80.862	7.105	1.00 72.35	PS16
ATOM	2642	C	LEU	49	109.092	85.948	20.331	1.00 54.86	PS16	ATOM	2695	N	ALA	56	103.552	81.804	9.155	1.00 50.88	PS16
ATOM	2643	O	LEU	49	108.054	86.433	20.777	1.00 54.86	PS16	ATOM	2696	CA	ALA	56	103.529	80.523	9.826	1.00 50.88	PS16
ATOM	2644	N	LYS	50	109.445	86.063	19.058	1.00 45.14	PS16	ATOM	2697	CB	ALA	56	103.451	80.706	11.316	1.00 33.95	PS16
ATOM	2645	CA	LYS	50	108.584	86.738	18.098	1.00 45.14	PS16	ATOM	2698	C	ALA	56	102.247	79.901	9.303	1.00 50.88	PS16
ATOM	2646	CB	LYS	50	109.344	87.836	17.355	1.00 91.45	PS16	ATOM	2699	O	ALA	56	102.269	78.837	8.692	1.00 50.88	PS16
ATOM	2647	CG	LYS	50	108.595	88.356	16.145	1.00 91.45	PS16	ATOM	2700	N	ARG	57	101.134	80.597	9.508	1.00 46.54	PS16
ATOM	2648	CD	LYS	50	109.404	89.359	15.352	1.00 91.45	PS16	ATOM	2701	CA	ARG	57	99.852	80.102	9.041	1.00 46.54	PS16
ATOM	2649	CE	LYS	50	108.699	89.687	14.045	1.00 91.45	PS16	ATOM	2702	CB	ARG	57	98.754	81.145	9.247	1.00 72.71	PS16
ATOM	2650	NZ	LYS	50	108.494	88.462	13.222	1.00 91.45	PS16	ATOM	2703	CG	ARG	57	98.282	81.327	10.674	1.00 72.71	PS16
ATOM	2651	C	LYS	50	108.237	85.618	17.153	1.00 45.14	PS16	ATOM	2704	CD	ARG	57	97.366	82.558	10.751	1.00 72.71	PS16
ATOM	2652	O	LYS	50	109.069	84.739	16.940	1.00 45.14	PS16	ATOM	2705	NE	ARG	57	97.128	83.013	12.120	1.00 72.71	PS16
ATOM	2653	N	VAL	51	107.039	85.611	16.581	1.00 58.06	PS16	ATOM	2706	CZ	ARG	57	96.301	82.419	12.968	1.00 72.71	PS16
ATOM	2654	CA	VAL	51	106.725	84.496	15.703	1.00 58.06	PS16	ATOM	2707	NH1	ARG	57	95.618	81.347	12.585	1.00 72.71	PS16
ATOM	2655	CB	VAL	51	105.954	83.395	16.450	1.00 56.25	PS16	ATOM	2708	NH2	ARG	57	96.183	82.878	14.203	1.00 72.71	PS16
ATOM	2656	CG1	VAL	51	105.616	82.257	15.506	1.00 56.25	PS16	ATOM	2709	C	ARG	57	99.952	79.762	7.565	1.00 46.54	PS16
ATOM	2657	CG2	VAL	51	106.791	82.873	17.600	1.00 56.25	PS16	ATOM	2710	O	ARG	57	99.269	78.868	7.082	1.00 46.54	PS16
ATOM	2658	C	VAL	51	105.994	84.790	14.424	1.00 58.06	PS16	ATOM	2711	N	TYR	58	100.789	80.470	6.828	1.00 55.20	PS16
ATOM	2659	O	VAL	51	105.940	83.931	13.554	1.00 58.06	PS16	ATOM	2712	CA	TYR	58	100.891	80.143	5.417	1.00 55.20	PS16
ATOM	2660	N	ASP	52	105.411	85.967	14.283	1.00 52.26	PS16	ATOM	2713	CB	TYR	58	101.544	81.269	4.617	1.00 33.85	PS16
ATOM	2661	CA	ASP	52	104.738	86.248	13.017	1.00 52.26	PS16	ATOM	2714	CG	TYR	58	102.068	80.774	3.296	1.00 33.85	PS16
ATOM	2662	CB	ASP	52	105.794	86.292	11.906	1.00 59.18	PS16	ATOM	2715	CD1	TYR	58	103.432	80.491	3.119	1.00 33.85	PS16
ATOM	2663	CG	ASP	52	105.207	86.613	10.560	1.00 59.18	PS16	ATOM	2716	CE1	TYR	58	103.916	79.980	1.905	1.00 33.85	PS16
ATOM	2664	OD1	ASP	52	104.180	86.003	10.204	1.00 59.18	PS16	ATOM	2717	CD2	TYR	58	101.204	80.534	2.239	1.00 33.85	PS16
ATOM	2665	OD2	ASP	52	105.772	87.471	9.848	1.00 59.18	PS16	ATOM	2718	CE2	TYR	58	101.671	80.025	1.029	1.00 33.85	PS16
ATOM	2666	C	ASP	52	103.672	85.177	12.677	1.00 52.26	PS16	ATOM	2719	CZ	TYR	58	103.024	79.752	0.865	1.00 33.85	PS16
ATOM	2667	O	ASP	52	103.919	84.298	11.841	1.00 52.26	PS16	ATOM	2720	OH	TYR	58	103.473	79.266	-0.346	1.00 33.85	PS16
ATOM	2668	N	VAL	53	102.496	85.258	13.310	1.00 56.28	PS16	ATOM	2721	C	TYR	58	101.686	78.866	5.216	1.00 55.20	PS16

ATOM	2722	O	TYR	58	101.259	77.975	4.491	1.00	55.20	PS16	ATOM	2775	O	GLN	65	107.768	70.830	10.539	1.00	59.80	PS16
ATOM	2723	N	TRP	59	102.850	78.779	5.847	1.00	57.66	PS16	ATOM	2776	N	PRO	66	105.980	71.557	11.660	1.00	47.58	PS16
ATOM	2724	CA	TRP	59	103.667	77.586	5.687	1.00	57.66	PS16	ATOM	2777	CD	PRO	66	104.559	71.872	11.891	1.00	38.94	PS16
ATOM	2725	CB	TRP	59	105.056	77.774	6.335	1.00	42.82	PS16	ATOM	2778	CA	PRO	66	106.807	71.984	12.788	1.00	47.58	PS16
ATOM	2726	CG	TRP	59	105.963	78.620	5.468	1.00	42.82	PS16	ATOM	2779	CB	PRO	66	105.836	72.805	13.624	1.00	38.94	PS16
ATOM	2727	CD2	TRP	59	106.483	78.256	4.186	1.00	42.82	PS16	ATOM	2780	CG	PRO	66	104.522	72.105	13.381	1.00	38.94	PS16
ATOM	2728	CE2	TRP	59	107.139	79.389	3.661	1.00	42.82	PS16	ATOM	2781	C	PRO	66	107.477	70.900	13.617	1.00	47.58	PS16
ATOM	2729	CE3	TRP	59	106.449	77.081	3.427	1.00	42.82	PS16	ATOM	2782	O	PRO	66	106.975	69.791	13.755	1.00	47.58	PS16
ATOM	2730	CD1	TRP	59	106.326	79.926	5.670	1.00	42.82	PS16	ATOM	2783	N	THR	67	108.630	71.247	14.166	1.00	44.12	PS16
ATOM	2731	NE1	TRP	59	107.029	80.394	4.584	1.00	42.82	PS16	ATOM	2784	CA	THR	67	109.370	70.372	15.051	1.00	44.12	PS16
ATOM	2732	CZ2	TRP	59	107.755	79.382	2.413	1.00	42.82	PS16	ATOM	2785	CB	THR	67	110.749	70.982	15.356	1.00	57.50	PS16
ATOM	2733	CZ3	TRP	59	107.060	77.074	2.185	1.00	42.82	PS16	ATOM	2786	OG1	THR	67	111.621	70.783	14.240	1.00	57.50	PS16
ATOM	2734	CH2	TRP	59	107.707	78.221	1.689	1.00	42.82	PS16	ATOM	2787	CG2	THR	67	111.356	70.354	16.584	1.00	57.50	PS16
ATOM	2735	C	TRP	59	102.965	76.351	6.228	1.00	57.66	PS16	ATOM	2788	C	THR	67	108.520	70.412	16.321	1.00	44.12	PS16
ATOM	2736	O	TRP	59	103.144	75.263	5.693	1.00	57.66	PS16	ATOM	2789	O	THR	67	107.650	71.279	16.457	1.00	44.12	PS16
ATOM	2737	N	LEU	60	102.161	76.516	7.273	1.00	50.78	PS16	ATOM	2790	N	ASP	68	108.743	69.502	17.259	1.00	58.25	PS16
ATOM	2738	CA	LEU	60	101.429	75.395	7.838	1.00	50.78	PS16	ATOM	2791	CA	ASP	68	107.945	69.563	18.472	1.00	58.25	PS16
ATOM	2739	CB	LEU	60	100.694	75.823	9.097	1.00	46.23	PS16	ATOM	2792	CB	ASP	68	108.233	68.378	19.389	1.00	90.89	PS16
ATOM	2740	CG	LEU	60	101.674	76.202	10.199	1.00	46.23	PS16	ATOM	2793	CG	ASP	68	107.389	67.174	19.043	1.00	90.89	PS16
ATOM	2741	CD1	LEU	60	100.932	76.847	11.349	1.00	46.23	PS16	ATOM	2794	OD1	ASP	68	106.191	67.380	18.758	1.00	90.89	PS16
ATOM	2742	CD2	LEU	60	102.431	74.956	10.649	1.00	46.23	PS16	ATOM	2795	OD2	ASP	68	107.908	66.034	19.059	1.00	90.89	PS16
ATOM	2743	C	LEU	60	100.453	74.915	6.775	1.00	50.78	PS16	ATOM	2796	C	ASP	68	108.157	70.875	19.222	1.00	58.25	PS16
ATOM	2744	O	LEU	60	100.282	73.708	6.574	1.00	50.78	PS16	ATOM	2797	O	ASP	68	107.196	71.451	19.723	1.00	58.25	PS16
ATOM	2745	N	SER	61	99.788	75.845	6.097	1.00	53.05	PS16	ATOM	2798	N	THR	69	109.395	71.357	19.301	1.00	60.49	PS16
ATOM	2746	CA	SER	61	98.917	75.434	5.009	1.00	53.05	PS16	ATOM	2799	CA	THR	69	109.637	72.616	19.998	1.00	60.49	PS16
ATOM	2747	CB	SER	61	98.091	76.604	4.501	1.00	56.05	PS16	ATOM	2800	CB	THR	69	111.116	72.842	20.343	1.00	50.27	PS16
ATOM	2748	OG	SER	61	98.878	77.473	3.711	1.00	56.05	PS16	ATOM	2801	OG1	THR	69	111.609	71.745	21.113	1.00	50.27	PS16
ATOM	2749	C	SER	61	100.025	75.131	4.020	1.00	53.05	PS16	ATOM	2802	CG2	THR	69	111.263	74.101	21.170	1.00	50.27	PS16
ATOM	2750	O	SER	61	101.187	75.343	4.350	1.00	53.05	PS16	ATOM	2803	C	THR	69	109.188	73.780	19.134	1.00	60.49	PS16
ATOM	2751	N	VAL	62	99.740	74.643	2.827	1.00	59.28	PS16	ATOM	2804	O	THR	69	108.665	74.771	19.639	1.00	60.49	PS16
ATOM	2752	CA	VAL	62	100.871	74.407	1.931	1.00	59.28	PS16	ATOM	2805	N	ALA	70	109.402	73.667	17.830	1.00	59.37	PS16
ATOM	2753	CB	VAL	62	101.770	75.655	1.851	1.00	52.98	PS16	ATOM	2806	CA	ALA	70	108.984	74.724	16.927	1.00	59.37	PS16
ATOM	2754	CG1	VAL	62	103.007	75.350	1.078	1.00	52.98	PS16	ATOM	2807	CB	ALA	70	109.214	74.306	15.484	1.00	55.71	PS16
ATOM	2755	CG2	VAL	62	101.013	76.795	1.221	1.00	52.98	PS16	ATOM	2808	C	ALA	70	107.502	74.978	17.169	1.00	59.37	PS16
ATOM	2756	C	VAL	62	101.740	73.225	2.369	1.00	59.28	PS16	ATOM	2809	O	ALA	70	107.078	76.120	17.317	1.00	59.37	PS16
ATOM	2757	O	VAL	62	102.459	72.654	1.551	1.00	59.28	PS16	ATOM	2810	N	ARG	71	106.720	73.905	17.226	1.00	55.19	PS16
ATOM	2758	N	GLY	63	101.724	72.883	3.655	1.00	38.57	PS16	ATOM	2811	CA	ARG	71	105.281	74.017	17.451	1.00	55.19	PS16
ATOM	2759	CA	GLY	63	102.476	71.718	4.083	1.00	38.57	PS16	ATOM	2812	CB	ARG	71	104.644	72.633	17.321	1.00	53.65	PS16
ATOM	2760	C	GLY	63	103.626	71.757	5.070	1.00	38.57	PS16	ATOM	2813	CG	ARG	71	103.200	72.544	17.770	1.00	53.65	PS16
ATOM	2761	O	GLY	63	104.216	70.708	5.343	1.00	38.57	PS16	ATOM	2814	CD	ARG	71	102.605	71.196	17.412	1.00	53.65	PS16
ATOM	2762	N	ALA	64	103.981	72.919	5.605	1.00	65.92	PS16	ATOM	2815	NE	ARG	71	101.878	71.246	16.148	1.00	53.65	PS16
ATOM	2763	CA	ALA	64	105.086	72.942	6.553	1.00	65.92	PS16	ATOM	2816	CZ	ARG	71	101.996	70.336	15.185	1.00	53.65	PS16
ATOM	2764	CB	ALA	64	105.292	74.325	7.113	1.00	60.60	PS16	ATOM	2817	NH1	ARG	71	102.824	69.308	15.344	1.00	53.65	PS16
ATOM	2765	C	ALA	64	104.768	71.963	7.670	1.00	65.92	PS16	ATOM	2818	NH2	ARG	71	101.276	70.442	14.070	1.00	53.65	PS16
ATOM	2766	O	ALA	64	103.610	71.589	7.886	1.00	65.92	PS16	ATOM	2819	C	ARG	71	104.938	74.641	18.814	1.00	55.19	PS16
ATOM	2767	N	GLN	65	105.805	71.564	8.390	1.00	59.80	PS16	ATOM	2820	O	ARG	71	104.062	75.505	18.918	1.00	55.19	PS16
ATOM	2768	CA	GLN	65	105.659	70.595	9.451	1.00	59.80	PS16	ATOM	2821	N	ARG	72	105.637	74.201	19.852	1.00	52.70	PS16
ATOM	2769	CB	GLN	65	106.100	69.243	8.927	1.00	47.12	PS16	ATOM	2822	CA	ARG	72	105.421	74.705	21.199	1.00	52.70	PS16
ATOM	2770	CG	GLN	65	105.419	68.129	9.601	1.00	47.12	PS16	ATOM	2823	CB	ARG	72	106.499	74.156	22.133	1.00	57.02	PS16
ATOM	2771	CD	GLN	65	103.950	68.171	9.327	1.00	47.12	PS16	ATOM	2824	CG	ARG	72	106.328	74.529	23.585	1.00	57.02	PS16
ATOM	2772	OE1	GLN	65	103.515	67.945	8.191	1.00	47.12	PS16	ATOM	2825	CD	ARG	72	107.622	74.281	24.340	1.00	57.02	PS16
ATOM	2773	NE2	GLN	65	103.165	68.470	10.359	1.00	47.12	PS16	ATOM	2826	NE	ARG	72	108.143	75.510	24.943	1.00	57.02	PS16
ATOM	2774	C	GLN	65	106.557	71.011	10.594	1.00	59.80	PS16	ATOM	2827	CZ	ARG	72	109.440	75.769	25.097	1.00	57.02	PS16

ATOM	2828	NH1	ARG	72	110.343	74.884	24.690	1.00	57.02	PS16	ATOM	2881	CG2	VAL	79	101.901	80.889	15.372	1.00	45.18	PS16
ATOM	2829	NH2	ARG	72	109.836	76.913	25.652	1.00	57.02	PS16	ATOM	2882	C	VAL	79	98.377	79.495	15.463	1.00	55.24	PS16
ATOM	2830	C	ARG	72	105.495	76.225	21.180	1.00	52.70	PS16	ATOM	2883	O	VAL	79	97.870	79.424	14.349	1.00	55.24	PS16
ATOM	2831	O	ARG	72	104.742	76.915	21.889	1.00	52.70	PS16	ATOM	2884	N	PHE	80	97.987	78.728	16.473	1.00	57.85	PS16
ATOM	2832	N	LEU	73	106.414	76.740	20.364	1.00	49.98	PS16	ATOM	2885	CA	PHE	80	96.921	77.755	16.271	1.00	57.85	PS16
ATOM	2833	CA	LEU	73	106.606	78.174	20.238	1.00	49.98	PS16	ATOM	2886	CB	PHE	80	97.315	76.398	16.851	1.00	55.17	PS16
ATOM	2834	CB	LEU	73	107.997	78.473	19.684	1.00	63.47	PS16	ATOM	2887	CG	PHE	80	98.619	75.868	16.320	1.00	55.17	PS16
ATOM	2835	CG	LEU	73	109.116	77.904	20.566	1.00	63.47	PS16	ATOM	2888	CD1	PHE	80	99.776	75.918	17.100	1.00	55.17	PS16
ATOM	2836	CD1	LEU	73	110.480	78.342	20.035	1.00	63.47	PS16	ATOM	2889	CD2	PHE	80	98.687	75.300	15.044	1.00	55.17	PS16
ATOM	2837	CD2	LEU	73	108.921	78.370	22.014	1.00	63.47	PS16	ATOM	2890	CE1	PHE	80	100.977	75.409	16.624	1.00	55.17	PS16
ATOM	2838	C	LEU	73	105.543	78.780	19.348	1.00	49.98	PS16	ATOM	2891	CE2	PHE	80	99.882	74.786	14.550	1.00	55.17	PS16
ATOM	2839	O	LEU	73	104.897	79.746	19.735	1.00	49.98	PS16	ATOM	2892	CZ	PHE	80	101.031	74.837	15.341	1.00	55.17	PS16
ATOM	2840	N	LEU	74	105.353	78.230	18.155	1.00	44.92	PS16	ATOM	2893	C	PHE	80	95.624	78.228	16.902	1.00	57.85	PS16
ATOM	2841	CA	LEU	74	104.331	78.776	17.279	1.00	44.92	PS16	ATOM	2894	O	PHE	80	94.568	77.627	16.693	1.00	57.85	PS16
ATOM	2842	CB	LEU	74	104.125	77.901	16.041	1.00	34.15	PS16	ATOM	2895	N	ARG	81	95.729	79.308	17.676	1.00	70.04	PS16
ATOM	2843	CG	LEU	74	105.239	77.730	15.018	1.00	34.15	PS16	ATOM	2896	CA	ARG	81	94.598	79.935	18.360	1.00	70.04	PS16
ATOM	2844	CD1	LEU	74	104.639	77.884	13.621	1.00	34.15	PS16	ATOM	2897	CB	ARG	81	94.938	81.391	18.673	1.00	103.51	PS16
ATOM	2845	CD2	LEU	74	106.326	78.749	15.250	1.00	34.15	PS16	ATOM	2898	CG	ARG	81	95.306	81.661	20.103	1.00	103.51	PS16
ATOM	2846	C	LEU	74	103.030	78.833	18.071	1.00	44.92	PS16	ATOM	2899	CD	ARG	81	94.076	81.944	20.900	1.00	103.51	PS16
ATOM	2847	O	LEU	74	102.159	79.661	17.799	1.00	44.92	PS16	ATOM	2900	NE	ARG	81	94.347	81.866	22.325	1.00	103.51	PS16
ATOM	2848	N	ARG	75	102.893	77.945	19.051	1.00	43.50	PS16	ATOM	2901	CZ	ARG	81	93.430	82.067	23.264	1.00	103.51	PS16
ATOM	2849	CA	ARG	75	101.687	77.935	19.865	1.00	43.50	PS16	ATOM	2902	NH1	ARG	81	92.183	82.365	22.917	1.00	103.51	PS16
ATOM	2850	CB	ARG	75	101.636	76.681	20.742	1.00	60.07	PS16	ATOM	2903	NH2	ARG	81	93.755	81.955	24.548	1.00	103.51	PS16
ATOM	2851	CG	ARG	75	100.296	76.465	21.432	1.00	60.07	PS16	ATOM	2904	C	ARG	81	93.319	79.915	17.542	1.00	70.04	PS16
ATOM	2852	CD	ARG	75	100.294	75.200	22.278	1.00	60.07	PS16	ATOM	2905	O	ARG	81	93.004	80.895	16.871	1.00	70.04	PS16
ATOM	2853	NE	ARG	75	100.493	73.983	21.488	1.00	60.07	PS16	ATOM	2906	N	GLN	82	92.586	78.808	17.581	1.00	140.94	PS16
ATOM	2854	CZ	ARG	75	99.697	73.591	20.494	1.00	60.07	PS16	ATOM	2907	CA	GLN	82	91.329	78.721	16.848	1.00	140.94	PS16
ATOM	2855	NH1	ARG	75	98.637	74.316	20.158	1.00	60.07	PS16	ATOM	2908	CB	GLN	82	90.826	77.285	16.782	1.00	121.66	PS16
ATOM	2856	NH2	ARG	75	99.965	72.475	19.829	1.00	60.07	PS16	ATOM	2909	CG	GLN	82	91.378	76.490	15.638	1.00	121.66	PS16
ATOM	2857	C	ARG	75	101.649	79.195	20.738	1.00	43.50	PS16	ATOM	2910	CD	GLN	82	91.263	75.007	15.883	1.00	121.66	PS16
ATOM	2858	O	ARG	75	100.733	79.999	20.612	1.00	43.50	PS16	ATOM	2911	OE1	GLN	82	90.182	74.493	16.175	1.00	121.66	PS16
ATOM	2859	N	GLN	76	102.637	79.363	21.619	1.00	52.85	PS16	ATOM	2912	NE2	GLN	82	92.384	74.305	15.770	1.00	121.66	PS16
ATOM	2860	CA	GLN	76	102.700	80.544	22.482	1.00	52.85	PS16	ATOM	2913	C	GLN	82	90.331	79.551	17.614	1.00	140.94	PS16
ATOM	2861	CB	GLN	76	104.089	80.710	23.067	1.00	55.18	PS16	ATOM	2914	O	GLN	82	89.789	79.105	18.623	1.00	140.94	PS16
ATOM	2862	CG	GLN	76	104.294	80.014	24.349	1.00	55.18	PS16	ATOM	2915	N	GLU	83	90.096	80.766	17.149	1.00	119.03	PS16
ATOM	2863	CD	GLN	76	105.671	80.281	24.899	1.00	55.18	PS16	ATOM	2916	CA	GLU	83	89.151	81.636	17.820	1.00	119.03	PS16
ATOM	2864	OE1	GLN	76	106.114	81.432	24.950	1.00	55.18	PS16	ATOM	2917	CB	GLU	83	89.888	82.760	18.551	1.00	132.87	PS16
ATOM	2865	NE2	GLN	76	106.366	79.219	25.322	1.00	55.18	PS16	ATOM	2918	CG	GLU	83	90.939	82.281	19.544	1.00	132.87	PS16
ATOM	2866	C	GLN	76	102.379	81.808	21.706	1.00	52.85	PS16	ATOM	2919	CD	GLU	83	90.355	81.435	20.656	1.00	132.87	PS16
ATOM	2867	O	GLN	76	101.777	82.747	22.232	1.00	52.85	PS16	ATOM	2920	OE1	GLU	83	89.418	81.908	21.333	1.00	132.87	PS16
ATOM	2868	N	ALA	77	102.810	81.830	20.453	1.00	55.07	PS16	ATOM	2921	OE2	GLU	83	90.841	80.302	20.857	1.00	132.87	PS16
ATOM	2869	CA	ALA	77	102.590	82.974	19.598	1.00	55.07	PS16	ATOM	2922	C	GLU	83	88.196	82.218	16.798	1.00	119.03	PS16
ATOM	2870	CB	ALA	77	103.521	82.900	18.422	1.00	46.40	PS16	ATOM	2923	O	GLU	83	87.779	83.369	16.916	1.00	119.03	PS16
ATOM	2871	C	ALA	77	101.139	83.039	19.131	1.00	55.07	PS16	ATOM	2924	N	ALA	84	87.862	81.421	15.787	1.00	165.06	PS16
ATOM	2872	O	ALA	77	100.740	83.979	18.452	1.00	55.07	PS16	ATOM	2925	CA	ALA	84	86.937	81.867	14.757	1.00	165.06	PS16
ATOM	2873	N	GLY	78	100.352	82.034	19.497	1.00	53.43	PS16	ATOM	2926	CB	ALA	84	86.542	80.704	13.862	1.00	82.25	PS16
ATOM	2874	CA	GLY	78	98.953	82.011	19.120	1.00	53.43	PS16	ATOM	2927	C	ALA	84	85.710	82.440	15.460	1.00	165.06	PS16
ATOM	2875	C	GLY	78	98.739	81.672	17.667	1.00	53.43	PS16	ATOM	2928	O	ALA	84	85.466	83.642	15.398	1.00	165.06	PS16
ATOM	2876	O	GLY	78	97.790	82.131	17.039	1.00	53.43	PS16	ATOM	2929	N	ARG	85	84.960	81.567	16.133	1.00	182.73	PS16
ATOM	2877	N	VAL	79	99.623	80.855	17.121	1.00	55.24	PS16	ATOM	2930	CA	ARG	85	83.757	81.929	16.891	1.00	182.73	PS16
ATOM	2878	CA	VAL	79	99.497	80.483	15.728	1.00	55.24	PS16	ATOM	2931	CB	ARG	85	82.815	82.834	16.077	1.00	200.66	PS16
ATOM	2879	CB	VAL	79	100.788	79.888	15.203	1.00	45.18	PS16	ATOM	2932	CG	ARG	85	83.116	84.332	16.159	1.00	200.66	PS16
ATOM	2880	CG1	VAL	79	100.625	79.523	13.740	1.00	45.18	PS16	ATOM	2933	CD	ARG	85	83.332	84.794	17.595	1.00	200.66	PS16

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ATOM   2934  NE  ARG    85      83.770  86.187  17.660  1.00200.66      PS16
ATOM   2935  CZ  ARG    85      84.189  86.790  18.770  1.00200.66      PS16
ATOM   2936  NH1 ARG    85      84.228  86.121  19.917  1.00200.66      PS16
ATOM   2937  NH2 ARG    85      84.573  88.061  18.734  1.00200.66      PS16
ATOM   2938  C   ARG    85      82.986  80.683  17.323  1.00182.73      PS16
ATOM   2939  O   ARG    85      81.773  80.736  17.528  1.00182.73      PS16
ATOM   2940  N   GLU    86      83.690  79.564  17.462  1.00141.81      PS16
ATOM   2941  CA  GLU    86      83.052  78.313  17.863  1.00141.81      PS16
ATOM   2942  CB  GLU    86      83.905  77.118  17.418  1.00159.71      PS16
ATOM   2943  CG  GLU    86      83.243  76.205  16.381  1.00159.71      PS16
ATOM   2944  CD  GLU    86      83.024  76.879  15.033  1.00159.71      PS16
ATOM   2945  OE1 GLU    86      84.018  77.325  14.420  1.00159.71      PS16
ATOM   2946  OE2 GLU    86      81.860  76.957  14.585  1.00159.71      PS16
ATOM   2947  C   GLU    86      82.827  78.260  19.375  1.00141.81      PS16
ATOM   2948  O   GLU    86      83.720  78.587  20.158  1.00141.81      PS16
ATOM   2949  N   GLY    87      81.625  77.851  19.776  1.00166.06      PS16
ATOM   2950  CA  GLY    87      81.300  77.766  21.190  1.00166.06      PS16
ATOM   2951  C   GLY    87      79.880  77.296  21.457  1.00166.06      PS16
ATOM   2952  O   GLY    87      79.641  76.498  22.368  1.00166.06      PS16
ATOM   2953  N   ALA    88      78.935  77.794  20.662  1.00187.92      PS16
ATOM   2954  CA  ALA    88      77.529  77.425  20.805  1.00187.92      PS16
ATOM   2955  CB  ALA    88      76.768  78.539  21.521  1.00130.19      PS16
ATOM   2956  C   ALA    88      76.897  77.151  19.441  1.00187.92      PS16
ATOM   2957  O   ALA    88      77.582  77.371  18.419  1.00187.92      PS16
ATOM   2958  OXT ALA    88      75.722  76.723  19.411  1.00130.19      PS16
ATOM   2959  CB  PRO     2     112.550  87.199 -21.841  1.00 45.98      QS17
ATOM   2960  CG  PRO     2     112.130  87.727 -20.491  1.00 45.98      QS17
ATOM   2961  C   PRO     2     113.470  84.989 -22.467  1.00 48.68      QS17
ATOM   2962  O   PRO     2     114.674  85.126 -22.239  1.00 48.68      QS17
ATOM   2963  N   PRO     2     112.606  85.454 -20.180  1.00 48.68      QS17
ATOM   2964  CD  PRO     2     112.668  86.735 -19.457  1.00 45.98      QS17
ATOM   2965  CA  PRO     2     112.435  85.702 -21.622  1.00 48.68      QS17
ATOM   2966  N   LYS     3     112.988  84.218 -23.435  1.00 46.17      QS17
ATOM   2967  CA  LYS     3     113.865  83.532 -24.359  1.00 46.17      QS17
ATOM   2968  CB  LYS     3     113.040  82.756 -25.378  1.00 53.40      QS17
ATOM   2969  CG  LYS     3     112.199  81.669 -24.730  1.00 53.40      QS17
ATOM   2970  CD  LYS     3     111.742  80.620 -25.731  1.00 53.40      QS17
ATOM   2971  CE  LYS     3     111.139  79.426 -25.019  1.00 53.40      QS17
ATOM   2972  NZ  LYS     3     110.022  79.808 -24.110  1.00 53.40      QS17
ATOM   2973  C   LYS     3     114.630  84.682 -25.008  1.00 46.17      QS17
ATOM   2974  O   LYS     3     114.043  85.697 -25.387  1.00 46.17      QS17
ATOM   2975  N   LYS     4     115.938  84.514 -25.122  1.00 49.20      QS17
ATOM   2976  CA  LYS     4     116.824  85.538 -25.636  1.00 49.20      QS17
ATOM   2977  CB  LYS     4     118.204  84.942 -25.858  1.00 47.08      QS17
ATOM   2978  CG  LYS     4     119.271  86.004 -26.042  1.00 47.08      QS17
ATOM   2979  CD  LYS     4     119.211  86.983 -24.911  1.00 47.08      QS17
ATOM   2980  CE  LYS     4     120.252  88.033 -25.064  1.00 47.08      QS17
ATOM   2981  NZ  LYS     4     120.133  88.944 -23.905  1.00 47.08      QS17
ATOM   2982  C   LYS     4     116.503  86.432 -26.829  1.00 49.20      QS17
ATOM   2983  O   LYS     4     116.298  87.631 -26.649  1.00 49.20      QS17
ATOM   2984  N   VAL     5     116.492  85.896 -28.043  1.00 43.98      QS17
ATOM   2985  CA  VAL     5     116.244  86.746 -29.222  1.00 43.98      QS17
ATOM   2986  CB  VAL     5     115.071  87.743 -29.014  1.00 27.82      QS17
ATOM   2987  CG1 VAL     5     114.640  88.319 -30.351  1.00 27.82      QS17
ATOM   2988  CG2 VAL     5     113.914  87.054 -28.355  1.00 27.82      QS17
ATOM   2989  C   VAL     5     117.489  87.590 -29.563  1.00 43.98      QS17
ATOM   2990  O   VAL     5     117.822  88.543 -28.857  1.00 43.98      QS17
ATOM   2991  N   LEU     6     118.165  87.238 -30.650  1.00 49.75      QS17
ATOM   2992  CA  LEU     6     119.358  87.954 -31.058  1.00 49.75      QS17
ATOM   2993  CB  LEU     6     120.589  87.124 -30.755  1.00 35.63      QS17
ATOM   2994  CG  LEU     6     120.730  86.710 -29.299  1.00 35.63      QS17
ATOM   2995  CD1 LEU     6     121.820  85.653 -29.131  1.00 35.63      QS17
ATOM   2996  CD2 LEU     6     121.025  87.934 -28.502  1.00 35.63      QS17
ATOM   2997  C   LEU     6     119.332  88.284 -32.539  1.00 49.75      QS17
ATOM   2998  O   LEU     6     118.629  87.646 -33.329  1.00 49.75      QS17
ATOM   2999  N   THR     7     120.124  89.280 -32.913  1.00 53.84      QS17
ATOM   3000  CA  THR     7     120.179  89.729 -34.290  1.00 53.84      QS17
ATOM   3001  CB  THR     7     119.681  91.148 -34.382  1.00 55.11      QS17
ATOM   3002  OG1 THR     7     118.310  91.192 -33.970  1.00 55.11      QS17
ATOM   3003  CG2 THR     7     119.808  91.645 -35.795  1.00 55.11      QS17
ATOM   3004  C   THR     7     121.564  89.659 -34.917  1.00 53.84      QS17
ATOM   3005  O   THR     7     122.539  90.188 -34.382  1.00 53.84      QS17
ATOM   3006  N   GLY     8     121.640  89.016 -36.074  1.00 46.17      QS17
ATOM   3007  CA  GLY     8     122.915  88.886 -36.740  1.00 46.17      QS17
ATOM   3008  C   GLY     8     122.732  88.521 -38.187  1.00 46.17      QS17
ATOM   3009  O   GLY     8     121.601  88.436 -38.663  1.00 46.17      QS17
ATOM   3010  N   VAL     9     123.843  88.287 -38.877  1.00 47.52      QS17
ATOM   3011  CA  VAL     9     123.795  87.961 -40.290  1.00 47.52      QS17
ATOM   3012  CB  VAL     9     124.882  88.702 -41.066  1.00 65.35      QS17
ATOM   3013  CG1 VAL     9     124.666  88.516 -42.554  1.00 65.35      QS17
ATOM   3014  CG2 VAL     9     124.866  90.158 -40.705  1.00 65.35      QS17
ATOM   3015  C   VAL     9     123.975  86.493 -40.594  1.00 47.52      QS17
ATOM   3016  O   VAL     9     124.807  85.817 -39.990  1.00 47.52      QS17
ATOM   3017  N   VAL    10     123.201  86.001 -41.550  1.00 59.73      QS17
ATOM   3018  CA  VAL    10     123.327  84.616 -41.948  1.00 59.73      QS17
ATOM   3019  CB  VAL    10     122.171  84.193 -42.843  1.00 50.82      QS17
ATOM   3020  CG1 VAL    10     122.363  82.754 -43.288  1.00 50.82      QS17
ATOM   3021  CG2 VAL    10     120.877  84.348 -42.099  1.00 50.82      QS17
ATOM   3022  C   VAL    10     124.618  84.531 -42.743  1.00 59.73      QS17
ATOM   3023  O   VAL    10     124.644  84.855 -43.925  1.00 59.73      QS17
ATOM   3024  N   VAL    11     125.697  84.114 -42.097  1.00 45.11      QS17
ATOM   3025  CA  VAL    11     126.971  84.018 -42.790  1.00 45.11      QS17
ATOM   3026  CB  VAL    11     128.136  84.375 -41.864  1.00 48.52      QS17
ATOM   3027  CG1 VAL    11     127.774  85.578 -41.043  1.00 48.52      QS17
ATOM   3028  CG2 VAL    11     128.465  83.201 -40.962  1.00 48.52      QS17
ATOM   3029  C   VAL    11     127.201  82.622 -43.346  1.00 45.11      QS17
ATOM   3030  O   VAL    11     128.281  82.333 -43.846  1.00 45.11      QS17
ATOM   3031  N   SER    12     126.194  81.755 -43.256  1.00 62.30      QS17
ATOM   3032  CA  SER    12     126.320  80.397 -43.796  1.00 62.30      QS17
ATOM   3033  CB  SER    12     127.253  79.548 -42.945  1.00 50.42      QS17
ATOM   3034  OG  SER    12     127.176  78.199 -43.370  1.00 50.42      QS17
ATOM   3035  C   SER    12     125.021  79.624 -43.963  1.00 62.30      QS17
ATOM   3036  O   SER    12     124.219  79.530 -43.030  1.00 62.30      QS17
ATOM   3037  N   ASP    13     124.841  79.056 -45.155  1.00 74.39      QS17
ATOM   3038  CA  ASP    13     123.664  78.260 -45.486  1.00 74.39      QS17
ATOM   3039  CB  ASP    13     122.774  79.008 -46.483  1.00167.53      QS17
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ATOM	3040	CG	ASP	13	121.453	78.293	-46.744	1.00167.53	QS17	ATOM	3093	O	VAL	19	122.653	79.049	-38.575	1.00 51.37	QS17
ATOM	3041	OD1	ASP	13	120.694	78.762	-47.623	1.00167.53	QS17	ATOM	3094	N	THR	20	124.194	79.683	-40.093	1.00 43.77	QS17
ATOM	3042	OD2	ASP	13	121.168	77.270	-46.074	1.00167.53	QS17	ATOM	3095	CA	THR	20	125.051	80.299	-39.103	1.00 43.77	QS17
ATOM	3043	C	ASP	13	124.132	76.941	-46.103	1.00 74.39	QS17	ATOM	3096	CB	THR	20	126.517	80.146	-39.456	1.00 45.26	QS17
ATOM	3044	O	ASP	13	123.373	76.252	-46.788	1.00 74.39	QS17	ATOM	3097	OG1	THR	20	126.846	78.756	-39.563	1.00 45.26	QS17
ATOM	3045	N	LYS	14	125.386	76.583	-45.844	1.00 74.84	QS17	ATOM	3098	CG2	THR	20	127.368	80.785	-38.381	1.00 45.26	QS17
ATOM	3046	CA	LYS	14	125.957	75.360	-46.390	1.00 74.84	QS17	ATOM	3099	C	THR	20	124.737	81.777	-39.066	1.00 43.77	QS17
ATOM	3047	CB	LYS	14	127.469	75.353	-46.171	1.00106.75	QS17	ATOM	3100	O	THR	20	124.763	82.446	-40.095	1.00 43.77	QS17
ATOM	3048	CG	LYS	14	128.135	76.609	-46.681	1.00106.75	QS17	ATOM	3101	N	VAL	21	124.430	82.286	-37.884	1.00 46.13	QS17
ATOM	3049	CD	LYS	14	129.631	76.556	-46.541	1.00106.75	QS17	ATOM	3102	CA	VAL	21	124.133	83.693	-37.750	1.00 46.13	QS17
ATOM	3050	CE	LYS	14	130.234	77.889	-46.930	1.00106.75	QS17	ATOM	3103	CB	VAL	21	122.819	83.917	-37.026	1.00 41.05	QS17
ATOM	3051	NZ	LYS	14	131.718	77.826	-46.949	1.00106.75	QS17	ATOM	3104	CG1	VAL	21	122.421	85.373	-37.150	1.00 41.05	QS17
ATOM	3052	C	LYS	14	125.348	74.100	-45.797	1.00 74.84	QS17	ATOM	3105	CG2	VAL	21	121.753	83.019	-37.600	1.00 41.05	QS17
ATOM	3053	O	LYS	14	125.316	73.054	-46.438	1.00 74.84	QS17	ATOM	3106	C	VAL	21	125.249	84.349	-36.951	1.00 46.13	QS17
ATOM	3054	N	MET	15	124.857	74.201	-44.571	1.00 78.91	QS17	ATOM	3107	O	VAL	21	125.599	83.895	-35.864	1.00 46.13	QS17
ATOM	3055	CA	MET	15	124.273	73.053	-43.906	1.00 78.91	QS17	ATOM	3108	N	LEU	22	125.816	85.415	-37.494	1.00 50.56	QS17
ATOM	3056	CB	MET	15	124.356	73.239	-42.401	1.00 60.97	QS17	ATOM	3109	CA	LEU	22	126.895	86.093	-36.814	1.00 50.56	QS17
ATOM	3057	CG	MET	15	125.767	73.300	-41.897	1.00 60.97	QS17	ATOM	3110	CB	LEU	22	127.903	86.624	-37.828	1.00 43.49	QS17
ATOM	3058	SD	MET	15	125.798	73.340	-40.128	1.00 60.97	QS17	ATOM	3111	CG	LEU	22	129.206	87.188	-37.269	1.00 43.49	QS17
ATOM	3059	CE	MET	15	125.719	75.086	-39.833	1.00 60.97	QS17	ATOM	3112	CD1	LEU	22	129.907	86.131	-36.444	1.00 43.49	QS17
ATOM	3060	C	MET	15	122.835	72.775	-44.302	1.00 78.91	QS17	ATOM	3113	CD2	LEU	22	130.084	87.613	-38.406	1.00 43.49	QS17
ATOM	3061	O	MET	15	122.234	73.527	-45.078	1.00 78.91	QS17	ATOM	3114	C	LEU	22	126.295	87.230	-36.036	1.00 50.56	QS17
ATOM	3062	N	GLN	16	122.294	71.685	-43.759	1.00 92.82	QS17	ATOM	3115	O	LEU	22	125.895	88.238	-36.621	1.00 50.56	QS17
ATOM	3063	CA	GLN	16	120.926	71.276	-44.032	1.00 92.82	QS17	ATOM	3116	N	VAL	23	126.233	87.069	-34.718	1.00 47.51	QS17
ATOM	3064	CB	GLN	16	120.621	69.952	-43.338	1.00102.46	QS17	ATOM	3117	CA	VAL	23	125.652	88.089	-33.851	1.00 47.51	QS17
ATOM	3065	CG	GLN	16	120.021	68.878	-44.261	1.00102.46	QS17	ATOM	3118	CB	VAL	23	124.845	87.435	-32.708	1.00 38.23	QS17
ATOM	3066	CD	GLN	16	121.013	68.337	-45.292	1.00102.46	QS17	ATOM	3119	CG1	VAL	23	124.376	88.490	-31.715	1.00 38.23	QS17
ATOM	3067	OE1	GLN	16	121.492	69.071	-46.160	1.00102.46	QS17	ATOM	3120	CG2	VAL	23	123.666	86.685	-33.292	1.00 38.23	QS17
ATOM	3068	NE2	GLN	16	121.321	67.048	-45.195	1.00102.46	QS17	ATOM	3121	C	VAL	23	126.700	89.002	-33.253	1.00 47.51	QS17
ATOM	3069	C	GLN	16	119.950	72.346	-43.563	1.00 92.82	QS17	ATOM	3122	O	VAL	23	127.568	88.556	-32.505	1.00 47.51	QS17
ATOM	3070	O	GLN	16	119.995	73.480	-44.041	1.00 92.82	QS17	ATOM	3123	N	GLU	24	126.615	90.286	-33.580	1.00 53.19	QS17
ATOM	3071	N	LYS	17	119.077	72.012	-42.621	1.00 48.17	QS17	ATOM	3124	CA	GLU	24	127.575	91.258	-33.061	1.00 53.19	QS17
ATOM	3072	CA	LYS	17	118.099	72.999	-42.159	1.00 48.17	QS17	ATOM	3125	CB	GLU	24	127.835	92.354	-34.097	1.00112.17	QS17
ATOM	3073	CB	LYS	17	116.852	72.286	-41.658	1.00 58.82	QS17	ATOM	3126	CG	GLU	24	129.165	93.065	-33.923	1.00112.17	QS17
ATOM	3074	CG	LYS	17	116.324	71.279	-42.652	1.00 58.82	QS17	ATOM	3127	CD	GLU	24	129.572	93.840	-35.165	1.00112.17	QS17
ATOM	3075	CD	LYS	17	115.401	70.292	-41.982	1.00 58.82	QS17	ATOM	3128	OE1	GLU	24	129.686	93.214	-36.242	1.00112.17	QS17
ATOM	3076	CE	LYS	17	115.112	69.126	-42.892	1.00 58.82	QS17	ATOM	3129	OE2	GLU	24	129.779	95.070	-35.066	1.00112.17	QS17
ATOM	3077	NZ	LYS	17	114.245	68.133	-42.215	1.00 58.82	QS17	ATOM	3130	C	GLU	24	127.041	91.847	-31.755	1.00 53.19	QS17
ATOM	3078	C	LYS	17	118.694	73.864	-41.057	1.00 48.17	QS17	ATOM	3131	O	GLU	24	125.838	91.799	-31.485	1.00 53.19	QS17
ATOM	3079	O	LYS	17	118.058	74.143	-40.034	1.00 48.17	QS17	ATOM	3132	N	ARG	25	127.947	92.409	-30.959	1.00 44.39	QS17
ATOM	3080	N	THR	18	119.929	74.292	-41.283	1.00 57.53	QS17	ATOM	3133	CA	ARG	25	127.610	92.957	-29.648	1.00 44.39	QS17
ATOM	3081	CA	THR	18	120.642	75.106	-40.320	1.00 57.53	QS17	ATOM	3134	CB	ARG	25	127.599	91.807	-28.640	1.00 49.33	QS17
ATOM	3082	CB	THR	18	121.704	74.271	-39.604	1.00 49.30	QS17	ATOM	3135	CG	ARG	25	127.776	92.196	-27.202	1.00 49.33	QS17
ATOM	3083	OG1	THR	18	121.207	72.945	-39.386	1.00 49.30	QS17	ATOM	3136	CD	ARG	25	127.791	90.958	-26.317	1.00 49.33	QS17
ATOM	3084	CG2	THR	18	122.078	74.921	-38.282	1.00 49.30	QS17	ATOM	3137	NE	ARG	25	129.041	90.206	-26.394	1.00 49.33	QS17
ATOM	3085	C	THR	18	121.369	76.250	-41.018	1.00 57.53	QS17	ATOM	3138	CZ	ARG	25	129.908	90.131	-25.389	1.00 49.33	QS17
ATOM	3086	O	THR	18	121.808	76.109	-42.160	1.00 57.53	QS17	ATOM	3139	NH1	ARG	25	129.649	90.764	-24.255	1.00 49.33	QS17
ATOM	3087	N	VAL	19	121.497	77.378	-40.329	1.00 51.37	QS17	ATOM	3140	NH2	ARG	25	131.021	89.424	-25.501	1.00 49.33	QS17
ATOM	3088	CA	VAL	19	122.226	78.519	-40.870	1.00 51.37	QS17	ATOM	3141	C	ARG	25	128.654	93.974	-29.237	1.00 44.39	QS17
ATOM	3089	CB	VAL	19	121.310	79.637	-41.361	1.00 36.29	QS17	ATOM	3142	O	ARG	25	129.840	93.688	-29.321	1.00 44.39	QS17
ATOM	3090	CG1	VAL	19	120.573	79.231	-42.634	1.00 36.29	QS17	ATOM	3143	N	GLN	26	128.234	95.155	-28.800	1.00 46.22	QS17
ATOM	3091	CG2	VAL	19	120.374	79.981	-40.258	1.00 36.29	QS17	ATOM	3144	CA	GLN	26	129.201	96.167	-28.381	1.00 46.22	QS17
ATOM	3092	C	VAL	19	123.049	79.110	-39.740	1.00 51.37	QS17	ATOM	3145	CB	GLN	26	128.902	97.517	-29.029	1.00100.55	QS17

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ATOM   3146  CG  GLN    26     128.858  97.494 -30.539  1.00100.55      QS17
ATOM   3147  CD  GLN    26     128.904  98.886 -31.130  1.00100.55      QS17
ATOM   3148  OE1 GLN    26     128.261  99.808 -30.622  1.00100.55      QS17
ATOM   3149  NE2 GLN    26     129.659  99.046 -32.214  1.00100.55      QS17
ATOM   3150  C   GLN    26     129.134  96.315 -26.875  1.00 46.22      QS17
ATOM   3151  O   GLN    26     128.243  95.759 -26.247  1.00 46.22      QS17
ATOM   3152  N   PHE    27     130.076  97.058 -26.298  1.00 58.74      QS17
ATOM   3153  CA  PHE    27     130.105  97.282 -24.855  1.00 58.74      QS17
ATOM   3154  CB  PHE    27     129.788  95.990 -24.086  1.00 39.09      QS17
ATOM   3155  CG  PHE    27     130.865  94.963 -24.145  1.00 39.09      QS17
ATOM   3156  CD1 PHE    27     131.983  95.066 -23.339  1.00 39.09      QS17
ATOM   3157  CD2 PHE    27     130.768  93.889 -25.019  1.00 39.09      QS17
ATOM   3158  CE1 PHE    27     133.003  94.105 -23.403  1.00 39.09      QS17
ATOM   3159  CE2 PHE    27     131.781  92.927 -25.088  1.00 39.09      QS17
ATOM   3160  CZ  PHE    27     132.899  93.039 -24.278  1.00 39.09      QS17
ATOM   3161  C   PHE    27     131.425  97.843 -24.354  1.00 58.74      QS17
ATOM   3162  O   PHE    27     132.481  97.648 -24.962  1.00 58.74      QS17
ATOM   3163  N   PRO    28     131.377  98.531 -23.209  1.00 41.81      QS17
ATOM   3164  CD  PRO    28     130.193  98.661 -22.351  1.00 30.53      QS17
ATOM   3165  CA  PRO    28     132.519  99.156 -22.556  1.00 41.81      QS17
ATOM   3166  CB  PRO    28     131.883  99.887 -21.397  1.00 30.53      QS17
ATOM   3167  CG  PRO    28     130.812  98.950 -21.012  1.00 30.53      QS17
ATOM   3168  C   PRO    28     133.475  98.138 -22.044  1.00 41.81      QS17
ATOM   3169  O   PRO    28     133.072  97.096 -21.539  1.00 41.81      QS17
ATOM   3170  N   HIS    29     134.749  98.457 -22.167  1.00 45.49      QS17
ATOM   3171  CA  HIS    29     135.781  97.590 -21.662  1.00 45.49      QS17
ATOM   3172  CB  HIS    29     137.126  98.031 -22.224  1.00 41.79      QS17
ATOM   3173  CG  HIS    29     138.238  97.097 -21.896  1.00 41.79      QS17
ATOM   3174  CD2 HIS    29     138.944  96.246 -22.677  1.00 41.79      QS17
ATOM   3175  ND1 HIS    29     138.692  96.910 -20.607  1.00 41.79      QS17
ATOM   3176  CE1 HIS    29     139.626  95.978 -20.611  1.00 41.79      QS17
ATOM   3177  NE2 HIS    29     139.798  95.559 -21.854  1.00 41.79      QS17
ATOM   3178  C   HIS    29     135.720  97.801 -20.142  1.00 45.49      QS17
ATOM   3179  O   HIS    29     135.686  98.928 -19.653  1.00 45.49      QS17
ATOM   3180  N   PRO    30     135.671  96.719 -19.377  1.00 49.51      QS17
ATOM   3181  CD  PRO    30     135.617  95.321 -19.813  1.00 38.01      QS17
ATOM   3182  CA  PRO    30     135.605  96.819 -17.916  1.00 49.51      QS17
ATOM   3183  CB  PRO    30     135.546  95.364 -17.466  1.00 38.01      QS17
ATOM   3184  CG  PRO    30     136.188  94.626 -18.604  1.00 38.01      QS17
ATOM   3185  C   PRO    30     136.712  97.591 -17.208  1.00 49.51      QS17
ATOM   3186  O   PRO    30     136.561  97.943 -16.037  1.00 49.51      QS17
ATOM   3187  N   LEU    31     137.832  97.847 -17.871  1.00 38.86      QS17
ATOM   3188  CA  LEU    31     138.868  98.606 -17.191  1.00 38.86      QS17
ATOM   3189  CB  LEU    31     140.116  97.759 -16.961  1.00 20.46      QS17
ATOM   3190  CG  LEU    31     141.294  98.522 -16.325  1.00 20.46      QS17
ATOM   3191  CD1 LEU    31     140.936  98.995 -14.941  1.00 20.46      QS17
ATOM   3192  CD2 LEU    31     142.497  97.635 -16.249  1.00 20.46      QS17
ATOM   3193  C   LEU    31     139.241  99.837 -17.980  1.00 38.86      QS17
ATOM   3194  O   LEU    31     139.554 100.876 -17.408  1.00 38.86      QS17
ATOM   3195  N   TYR    32     139.203  99.715 -19.299  1.00 33.09      QS17
ATOM   3196  CA  TYR    32     139.567 100.819 -20.156  1.00 33.09      QS17
ATOM   3197  CB  TYR    32     140.415 100.279 -21.300  1.00 45.24      QS17
ATOM   3198  CG  TYR    32     141.660  99.663 -20.721  1.00 45.24      QS17
ATOM   3199  CD1 TYR    32     142.092  98.376 -21.087  1.00 45.24      QS17
ATOM   3200  CE1 TYR    32     143.182  97.778 -20.446  1.00 45.24      QS17
ATOM   3201  CD2 TYR    32     142.358 100.331 -19.713  1.00 45.24      QS17
ATOM   3202  CE2 TYR    32     143.435  99.746 -19.078  1.00 45.24      QS17
ATOM   3203  CZ  TYR    32     143.840  98.479 -19.440  1.00 45.24      QS17
ATOM   3204  OH  TYR    32     144.905  97.945 -18.753  1.00 45.24      QS17
ATOM   3205  C   TYR    32     138.382 101.628 -20.636  1.00 33.09      QS17
ATOM   3206  O   TYR    32     138.542 102.681 -21.248  1.00 33.09      QS17
ATOM   3207  N   GLY    33     137.192 101.137 -20.331  1.00 38.41      QS17
ATOM   3208  CA  GLY    33     135.981 101.834 -20.700  1.00 38.41      QS17
ATOM   3209  C   GLY    33     135.668 102.058 -22.167  1.00 38.41      QS17
ATOM   3210  O   GLY    33     134.489 102.198 -22.514  1.00 38.41      QS17
ATOM   3211  N   LYS    34     136.674 102.107 -23.036  1.00 24.78      QS17
ATOM   3212  CA  LYS    34     136.378 102.350 -24.436  1.00 24.78      QS17
ATOM   3213  CB  LYS    34     137.664 102.370 -25.267  1.00 25.74      QS17
ATOM   3214  CG  LYS    34     138.186 101.045 -25.704  1.00 25.74      QS17
ATOM   3215  CD  LYS    34     137.937 100.809 -27.186  1.00 25.74      QS17
ATOM   3216  CE  LYS    34     138.727 101.772 -28.051  1.00 25.74      QS17
ATOM   3217  NZ  LYS    34     138.688 101.338 -29.478  1.00 25.74      QS17
ATOM   3218  C   LYS    34     135.402 101.279 -24.918  1.00 24.78      QS17
ATOM   3219  O   LYS    34     135.472 100.128 -24.493  1.00 24.78      QS17
ATOM   3220  N   VAL    35     134.447 101.676 -25.749  1.00 35.44      QS17
ATOM   3221  CA  VAL    35     133.469 100.738 -26.262  1.00 35.44      QS17
ATOM   3222  CB  VAL    35     132.330 101.480 -26.983  1.00 21.32      QS17
ATOM   3223  CG1 VAL    35     131.503 100.516 -27.814  1.00 21.32      QS17
ATOM   3224  CG2 VAL    35     131.458 102.150 -25.985  1.00 21.32      QS17
ATOM   3225  C   VAL    35     134.179  99.813 -27.237  1.00 35.44      QS17
ATOM   3226  O   VAL    35     135.028 100.252 -28.000  1.00 35.44      QS17
ATOM   3227  N   ILE    36     133.833  98.530 -27.202  1.00 37.53      QS17
ATOM   3228  CA  ILE    36     134.459  97.547 -28.078  1.00 37.53      QS17
ATOM   3229  CB  ILE    36     135.501  96.714 -27.316  1.00 51.78      QS17
ATOM   3230  CG2 ILE    36     136.345  97.613 -26.441  1.00 51.78      QS17
ATOM   3231  CG1 ILE    36     134.804  95.700 -26.413  1.00 51.78      QS17
ATOM   3232  CD1 ILE    36     135.750  94.674 -25.807  1.00 51.78      QS17
ATOM   3233  C   ILE    36     133.427  96.587 -28.646  1.00 37.53      QS17
ATOM   3234  O   ILE    36     132.483  96.220 -27.960  1.00 37.53      QS17
ATOM   3235  N   LYS    37     133.595  96.196 -29.902  1.00 52.53      QS17
ATOM   3236  CA  LYS    37     132.680  95.248 -30.508  1.00 52.53      QS17
ATOM   3237  CB  LYS    37     132.706  95.345 -32.030  1.00 78.66      QS17
ATOM   3238  CG  LYS    37     132.150  96.629 -32.588  1.00 78.66      QS17
ATOM   3239  CD  LYS    37     132.166  96.589 -34.104  1.00 78.66      QS17
ATOM   3240  CE  LYS    37     131.653  97.887 -34.705  1.00 78.66      QS17
ATOM   3241  NZ  LYS    37     131.774  97.887 -36.193  1.00 78.66      QS17
ATOM   3242  C   LYS    37     133.179  93.871 -30.091  1.00 52.53      QS17
ATOM   3243  O   LYS    37     134.262  93.739 -29.513  1.00 52.53      QS17
ATOM   3244  N   ARG    38     132.384  92.851 -30.386  1.00 51.19      QS17
ATOM   3245  CA  ARG    38     132.709  91.466 -30.068  1.00 51.19      QS17
ATOM   3246  CB  ARG    38     132.682  91.239 -28.559  1.00 79.46      QS17
ATOM   3247  CG  ARG    38     133.440  90.010 -28.125  1.00 79.46      QS17
ATOM   3248  CD  ARG    38     134.813  90.357 -27.553  1.00 79.46      QS17
ATOM   3249  NE  ARG    38     135.579  91.271 -28.399  1.00 79.46      QS17
ATOM   3250  CZ  ARG    38     136.810  91.692 -28.112  1.00 79.46      QS17
ATOM   3251  NH1 ARG    38     137.407  91.270 -27.001  1.00 79.46      QS17
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ATOM	3252	NH2	ARG	38	137.438	92.548	-28.917	1.00	79.46	QS17	ATOM	3305	CA	HIS	45	117.539	76.020	-37.065	1.00	45.51	QS17
ATOM	3253	C	ARG	38	131.574	90.711	-30.747	1.00	51.19	QS17	ATOM	3306	CB	HIS	45	116.708	75.262	-36.020	1.00	61.25	QS17
ATOM	3254	O	ARG	38	130.465	91.242	-30.868	1.00	51.19	QS17	ATOM	3307	CG	HIS	45	115.787	74.227	-36.587	1.00	61.25	QS17
ATOM	3255	N	SER	39	131.827	89.494	-31.209	1.00	41.53	QS17	ATOM	3308	CD2	HIS	45	114.508	73.910	-36.274	1.00	61.25	QS17
ATOM	3256	CA	SER	39	130.779	88.757	-31.900	1.00	41.53	QS17	ATOM	3309	ND1	HIS	45	116.173	73.339	-37.568	1.00	61.25	QS17
ATOM	3257	CB	SER	39	130.891	89.016	-33.392	1.00	36.34	QS17	ATOM	3310	CE1	HIS	45	115.170	72.521	-37.835	1.00	61.25	QS17
ATOM	3258	OG	SER	39	132.148	88.582	-33.853	1.00	36.34	QS17	ATOM	3311	NE2	HIS	45	114.149	72.846	-37.063	1.00	61.25	QS17
ATOM	3259	C	SER	39	130.789	87.253	-31.650	1.00	41.53	QS17	ATOM	3312	C	HIS	45	116.635	76.660	-38.129	1.00	45.51	QS17
ATOM	3260	O	SER	39	131.695	86.710	-31.011	1.00	41.53	QS17	ATOM	3313	O	HIS	45	115.916	77.617	-37.857	1.00	45.51	QS17
ATOM	3261	N	LYS	40	129.794	86.573	-32.196	1.00	45.67	QS17	ATOM	3314	N	ASP	46	116.679	76.143	-39.347	1.00	58.39	QS17
ATOM	3262	CA	LYS	40	129.674	85.146	-31.992	1.00	45.67	QS17	ATOM	3315	CA	ASP	46	115.836	76.697	-40.391	1.00	58.39	QS17
ATOM	3263	CB	LYS	40	129.078	84.938	-30.612	1.00	42.17	QS17	ATOM	3316	CB	ASP	46	116.632	77.609	-41.333	1.00	68.86	QS17
ATOM	3264	CG	LYS	40	128.913	83.525	-30.140	1.00	42.17	QS17	ATOM	3317	CG	ASP	46	115.774	78.170	-42.477	1.00	68.86	QS17
ATOM	3265	CD	LYS	40	128.508	83.584	-28.673	1.00	42.17	QS17	ATOM	3318	OD1	ASP	46	116.350	78.642	-43.487	1.00	68.86	QS17
ATOM	3266	CE	LYS	40	128.233	82.234	-28.081	1.00	42.17	QS17	ATOM	3319	OD2	ASP	46	114.527	78.147	-42.361	1.00	68.86	QS17
ATOM	3267	NZ	LYS	40	127.656	82.449	-26.741	1.00	42.17	QS17	ATOM	3320	C	ASP	46	115.148	75.631	-41.221	1.00	58.39	QS17
ATOM	3268	C	LYS	40	128.769	84.565	-33.063	1.00	45.67	QS17	ATOM	3321	O	ASP	46	115.697	75.148	-42.212	1.00	58.39	QS17
ATOM	3269	O	LYS	40	127.879	85.255	-33.563	1.00	45.67	QS17	ATOM	3322	N	PRO	47	113.944	75.225	-40.807	1.00	90.46	QS17
ATOM	3270	N	LYS	41	129.005	83.312	-33.435	1.00	48.30	QS17	ATOM	3323	CD	PRO	47	113.287	75.494	-39.519	1.00	62.50	QS17
ATOM	3271	CA	LYS	41	128.176	82.668	-34.445	1.00	48.30	QS17	ATOM	3324	CA	PRO	47	113.213	74.214	-41.571	1.00	90.46	QS17
ATOM	3272	CB	LYS	41	129.019	81.934	-35.494	1.00	37.07	QS17	ATOM	3325	CB	PRO	47	112.095	73.802	-40.621	1.00	62.50	QS17
ATOM	3273	CG	LYS	41	129.738	82.810	-36.502	1.00	37.07	QS17	ATOM	3326	CG	PRO	47	112.616	74.197	-39.258	1.00	62.50	QS17
ATOM	3274	CD	LYS	41	130.625	81.976	-37.446	1.00	37.07	QS17	ATOM	3327	C	PRO	47	112.685	75.039	-42.737	1.00	90.46	QS17
ATOM	3275	CE	LYS	41	131.755	81.295	-36.684	1.00	37.07	QS17	ATOM	3328	O	PRO	47	112.683	76.269	-42.656	1.00	90.46	QS17
ATOM	3276	NZ	LYS	41	132.519	80.267	-37.473	1.00	37.07	QS17	ATOM	3329	N	GLU	48	112.233	74.404	-43.809	1.00	81.17	QS17
ATOM	3277	C	LYS	41	127.301	81.647	-33.756	1.00	48.30	QS17	ATOM	3330	CA	GLU	48	111.729	75.179	-44.941	1.00	81.17	QS17
ATOM	3278	O	LYS	41	127.791	80.812	-32.997	1.00	48.30	QS17	ATOM	3331	CB	GLU	48	110.507	76.014	-44.530	1.00	167.63	QS17
ATOM	3279	N	TYR	42	126.006	81.718	-34.018	1.00	42.67	QS17	ATOM	3332	CG	GLU	48	109.250	75.219	-44.198	1.00	167.63	QS17
ATOM	3280	CA	TYR	42	125.062	80.766	-33.463	1.00	42.67	QS17	ATOM	3333	CD	GLU	48	108.142	76.094	-43.621	1.00	167.63	QS17
ATOM	3281	CB	TYR	42	123.906	81.510	-32.797	1.00	41.07	QS17	ATOM	3334	OE1	GLU	48	107.761	77.092	-44.270	1.00	167.63	QS17
ATOM	3282	CG	TYR	42	124.299	82.292	-31.565	1.00	41.07	QS17	ATOM	3335	OE2	GLU	48	107.650	75.782	-42.516	1.00	167.63	QS17
ATOM	3283	CD1	TYR	42	124.877	83.563	-31.659	1.00	41.07	QS17	ATOM	3336	C	GLU	48	112.838	76.124	-45.370	1.00	81.17	QS17
ATOM	3284	CE1	TYR	42	125.243	84.279	-30.510	1.00	41.07	QS17	ATOM	3337	O	GLU	48	112.572	77.159	-45.976	1.00	81.17	QS17
ATOM	3285	CD2	TYR	42	124.100	81.754	-30.302	1.00	41.07	QS17	ATOM	3338	N	GLU	49	114.074	75.749	-45.046	1.00	53.47	QS17
ATOM	3286	CE2	TYR	42	124.464	82.451	-29.150	1.00	41.07	QS17	ATOM	3339	CA	GLU	49	115.258	76.550	-45.345	1.00	53.47	QS17
ATOM	3287	CZ	TYR	42	125.033	83.711	-29.251	1.00	41.07	QS17	ATOM	3340	CB	GLU	49	116.267	75.730	-46.155	1.00	78.81	QS17
ATOM	3288	OH	TYR	42	125.380	84.378	-28.083	1.00	41.07	QS17	ATOM	3341	CG	GLU	49	116.837	74.558	-45.364	1.00	78.81	QS17
ATOM	3289	C	TYR	42	124.545	79.922	-34.639	1.00	42.67	QS17	ATOM	3342	CD	GLU	49	118.038	73.890	-46.020	1.00	78.81	QS17
ATOM	3290	O	TYR	42	124.393	80.440	-35.742	1.00	42.67	QS17	ATOM	3343	OE1	GLU	49	119.096	74.553	-46.179	1.00	78.81	QS17
ATOM	3291	N	LEU	43	124.306	78.629	-34.432	1.00	53.84	QS17	ATOM	3344	OE2	GLU	49	117.924	72.694	-46.366	1.00	78.81	QS17
ATOM	3292	CA	LEU	43	123.773	77.798	-35.514	1.00	53.84	QS17	ATOM	3345	C	GLU	49	114.942	77.857	-46.058	1.00	53.47	QS17
ATOM	3293	CB	LEU	43	124.329	76.371	-35.469	1.00	35.47	QS17	ATOM	3346	O	GLU	49	115.119	77.976	-47.267	1.00	53.47	QS17
ATOM	3294	CG	LEU	43	125.838	76.206	-35.681	1.00	35.47	QS17	ATOM	3347	N	LYS	50	114.444	78.834	-45.311	1.00	74.12	QS17
ATOM	3295	CD1	LEU	43	126.179	74.744	-35.875	1.00	35.47	QS17	ATOM	3348	CA	LYS	50	114.135	80.119	-45.912	1.00	74.12	QS17
ATOM	3296	CD2	LEU	43	126.265	77.013	-36.903	1.00	35.47	QS17	ATOM	3349	CB	LYS	50	113.279	80.984	-44.985	1.00	62.09	QS17
ATOM	3297	C	LEU	43	122.274	77.736	-35.331	1.00	53.84	QS17	ATOM	3350	CG	LYS	50	111.969	80.396	-44.547	1.00	62.09	QS17
ATOM	3298	O	LEU	43	121.781	76.944	-34.540	1.00	53.84	QS17	ATOM	3351	CD	LYS	50	111.221	81.432	-43.726	1.00	62.09	QS17
ATOM	3299	N	ALA	44	121.549	78.579	-36.051	1.00	44.60	QS17	ATOM	3352	CE	LYS	50	109.934	80.870	-43.152	1.00	62.09	QS17
ATOM	3300	CA	ALA	44	120.100	78.608	-35.951	1.00	44.60	QS17	ATOM	3353	NZ	LYS	50	109.227	81.901	-42.346	1.00	62.09	QS17
ATOM	3301	CB	ALA	44	119.590	80.011	-36.257	1.00	76.83	QS17	ATOM	3354	C	LYS	50	115.450	80.841	-46.104	1.00	74.12	QS17
ATOM	3302	C	ALA	44	119.421	77.586	-36.869	1.00	44.60	QS17	ATOM	3355	O	LYS	50	116.104	80.755	-47.142	1.00	74.12	QS17
ATOM	3303	O	ALA	44	119.856	77.330	-37.997	1.00	44.60	QS17	ATOM	3356	N	TYR	51	115.814	81.547	-45.044	1.00	63.49	QS17
ATOM	3304	N	HIS	45	118.335	77.019	-36.361	1.00	45.51	QS17	ATOM	3357	CA	TYR	51	117.009	82.359	-44.939	1.00	63.49	QS17

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ATOM   3358  CB  TYR    51     117.333  82.486 -43.465  1.00 49.27      QS17
ATOM   3359  CG  TYR    51     116.051  82.606 -42.682  1.00 49.27      QS17
ATOM   3360  CD1 TYR    51     115.388  81.468 -42.233  1.00 49.27      QS17
ATOM   3361  CE1 TYR    51     114.169  81.557 -41.587  1.00 49.27      QS17
ATOM   3362  CD2 TYR    51     115.457  83.851 -42.459  1.00 49.27      QS17
ATOM   3363  CE2 TYR    51     114.230  83.958 -41.811  1.00 49.27      QS17
ATOM   3364  CZ  TYR    51     113.586  82.801 -41.377  1.00 49.27      QS17
ATOM   3365  OH  TYR    51     112.352  82.871 -40.743  1.00 49.27      QS17
ATOM   3366  C   TYR    51     118.230  81.951 -45.738  1.00 63.49      QS17
ATOM   3367  O   TYR    51     118.664  80.797 -45.713  1.00 63.49      QS17
ATOM   3368  N   LYS    52     118.760  82.947 -46.448  1.00 71.45      QS17
ATOM   3369  CA  LYS    52     119.935  82.817 -47.304  1.00 71.45      QS17
ATOM   3370  CB  LYS    52     119.555  83.131 -48.754  1.00127.95      QS17
ATOM   3371  CG  LYS    52     118.348  82.368 -49.284  1.00127.95      QS17
ATOM   3372  CD  LYS    52     118.021  82.808 -50.713  1.00127.95      QS17
ATOM   3373  CE  LYS    52     116.845  82.029 -51.317  1.00127.95      QS17
ATOM   3374  NZ  LYS    52     116.523  82.470 -52.720  1.00127.95      QS17
ATOM   3375  C   LYS    52     121.013  83.806 -46.843  1.00 71.45      QS17
ATOM   3376  O   LYS    52     120.722  84.751 -46.105  1.00 71.45      QS17
ATOM   3377  N   LEU    53     122.249  83.588 -47.285  1.00 64.48      QS17
ATOM   3378  CA  LEU    53     123.366  84.459 -46.924  1.00 64.48      QS17
ATOM   3379  CB  LEU    53     124.544  84.201 -47.858  1.00 62.04      QS17
ATOM   3380  CG  LEU    53     125.707  83.383 -47.289  1.00 62.04      QS17
ATOM   3381  CD1 LEU    53     125.197  82.287 -46.379  1.00 62.04      QS17
ATOM   3382  CD2 LEU    53     126.507  82.802 -48.433  1.00 62.04      QS17
ATOM   3383  C   LEU    53     122.963  85.918 -46.997  1.00 64.48      QS17
ATOM   3384  O   LEU    53     122.163  86.295 -47.841  1.00 64.48      QS17
ATOM   3385  N   GLY    54     123.508  86.740 -46.109  1.00 51.15      QS17
ATOM   3386  CA  GLY    54     123.165  88.153 -46.109  1.00 51.15      QS17
ATOM   3387  C   GLY    54     121.845  88.494 -45.422  1.00 51.15      QS17
ATOM   3388  O   GLY    54     121.457  89.657 -45.359  1.00 51.15      QS17
ATOM   3389  N   ASP    55     121.146  87.497 -44.898  1.00 57.49      QS17
ATOM   3390  CA  ASP    55     119.874  87.757 -44.233  1.00 57.49      QS17
ATOM   3391  CB  ASP    55     118.993  86.504 -44.230  1.00 93.09      QS17
ATOM   3392  CG  ASP    55     118.082  86.424 -45.430  1.00 93.09      QS17
ATOM   3393  OD1 ASP    55     117.669  87.494 -45.922  1.00 93.09      QS17
ATOM   3394  OD2 ASP    55     117.764  85.295 -45.863  1.00 93.09      QS17
ATOM   3395  C   ASP    55     120.015  88.228 -42.797  1.00 57.49      QS17
ATOM   3396  O   ASP    55     120.397  87.463 -41.922  1.00 57.49      QS17
ATOM   3397  N   VAL    56     119.715  89.488 -42.534  1.00 66.68      QS17
ATOM   3398  CA  VAL    56     119.786  89.940 -41.159  1.00 66.68      QS17
ATOM   3399  CB  VAL    56     119.657  91.440 -41.048  1.00 45.81      QS17
ATOM   3400  CG1 VAL    56     119.718  91.845 -39.584  1.00 45.81      QS17
ATOM   3401  CG2 VAL    56     120.765  92.092 -41.827  1.00 45.81      QS17
ATOM   3402  C   VAL    56     118.581  89.306 -40.500  1.00 66.68      QS17
ATOM   3403  O   VAL    56     117.451  89.719 -40.737  1.00 66.68      QS17
ATOM   3404  N   VAL    57     118.817  88.305 -39.669  1.00 63.42      QS17
ATOM   3405  CA  VAL    57     117.716  87.613 -39.025  1.00 63.42      QS17
ATOM   3406  CB  VAL    57     117.749  86.144 -39.396  1.00 43.85      QS17
ATOM   3407  CG1 VAL    57     117.844  86.001 -40.901  1.00 43.85      QS17
ATOM   3408  CG2 VAL    57     118.944  85.480 -38.727  1.00 43.85      QS17
ATOM   3409  C   VAL    57     117.739  87.696 -37.511  1.00 63.42      QS17
ATOM   3410  O   VAL    57     118.677  88.221 -36.911  1.00 63.42      QS17
ATOM   3411  N   GLU    58     116.687  87.166 -36.898  1.00 68.62      QS17
ATOM   3412  CA  GLU    58     116.593  87.127 -35.449  1.00 68.62      QS17
ATOM   3413  CB  GLU    58     115.398  87.918 -34.946  1.00 79.04      QS17
ATOM   3414  CG  GLU    58     115.435  89.377 -35.275  1.00 79.04      QS17
ATOM   3415  CD  GLU    58     114.365  90.137 -34.516  1.00 79.04      QS17
ATOM   3416  OE1 GLU    58     113.267  89.568 -34.320  1.00 79.04      QS17
ATOM   3417  OE2 GLU    58     114.610  91.301 -34.121  1.00 79.04      QS17
ATOM   3418  C   GLU    58     116.469  85.675 -35.002  1.00 68.62      QS17
ATOM   3419  O   GLU    58     115.583  84.933 -35.423  1.00 68.62      QS17
ATOM   3420  N   ILE    59     117.398  85.288 -34.148  1.00 30.47      QS17
ATOM   3421  CA  ILE    59     117.478  83.962 -33.591  1.00 30.47      QS17
ATOM   3422  CB  ILE    59     118.939  83.611 -33.362  1.00 57.99      QS17
ATOM   3423  CG2 ILE    59     119.102  82.146 -33.307  1.00 57.99      QS17
ATOM   3424  CG1 ILE    59     119.769  84.110 -34.537  1.00 57.99      QS17
ATOM   3425  CD1 ILE    59     119.220  83.671 -35.887  1.00 57.99      QS17
ATOM   3426  C   ILE    59     116.761  84.098 -32.253  1.00 30.47      QS17
ATOM   3427  O   ILE    59     116.785  85.172 -31.648  1.00 30.47      QS17
ATOM   3428  N   ILE    60     116.136  83.029 -31.771  1.00 59.20      QS17
ATOM   3429  CA  ILE    60     115.425  83.161 -30.519  1.00 59.20      QS17
ATOM   3430  CB  ILE    60     113.928  82.943 -30.740  1.00 51.84      QS17
ATOM   3431  CG2 ILE    60     113.699  81.590 -31.356  1.00 51.84      QS17
ATOM   3432  CG1 ILE    60     113.186  83.122 -29.421  1.00 51.84      QS17
ATOM   3433  CD1 ILE    60     111.714  83.200 -29.585  1.00 51.84      QS17
ATOM   3434  C   ILE    60     115.901  82.345 -29.317  1.00 59.20      QS17
ATOM   3435  O   ILE    60     116.404  82.939 -28.354  1.00 59.20      QS17
ATOM   3436  N   GLU    61     115.738  81.022 -29.345  1.00 51.66      QS17
ATOM   3437  CA  GLU    61     116.164  80.159 -28.227  1.00 51.66      QS17
ATOM   3438  CB  GLU    61     115.952  80.838 -26.855  1.00 39.82      QS17
ATOM   3439  CG  GLU    61     117.239  81.137 -26.064  1.00 39.82      QS17
ATOM   3440  CD  GLU    61     117.120  80.926 -24.524  1.00 39.82      QS17
ATOM   3441  OE1 GLU    61     117.482  79.829 -24.051  1.00 39.82      QS17
ATOM   3442  OE2 GLU    61     116.679  81.829 -23.765  1.00 39.82      QS17
ATOM   3443  C   GLU    61     115.485  78.790 -28.127  1.00 51.66      QS17
ATOM   3444  O   GLU    61     115.016  78.175 -29.105  1.00 51.66      QS17
ATOM   3445  N   SER    62     115.480  78.345 -26.877  1.00 63.02      QS17
ATOM   3446  CA  SER    62     114.901  77.097 -26.410  1.00 63.02      QS17
ATOM   3447  CB  SER    62     113.396  77.294 -26.154  1.00147.28      QS17
ATOM   3448  OG  SER    62     112.830  76.217 -25.415  1.00147.28      QS17
ATOM   3449  C   SER    62     115.121  75.863 -27.254  1.00 63.02      QS17
ATOM   3450  O   SER    62     115.678  75.928 -28.335  1.00 63.02      QS17
ATOM   3451  N   ARG    63     114.675  74.741 -26.697  1.00 53.53      QS17
ATOM   3452  CA  ARG    63     114.733  73.416 -27.293  1.00 53.53      QS17
ATOM   3453  CB  ARG    63     113.592  73.214 -28.279  1.00 68.60      QS17
ATOM   3454  CG  ARG    63     112.369  72.593 -27.674  1.00 68.60      QS17
ATOM   3455  CD  ARG    63     112.507  71.114 -27.414  1.00 68.60      QS17
ATOM   3456  NE  ARG    63     111.301  70.475 -27.922  1.00 68.60      QS17
ATOM   3457  CZ  ARG    63     111.093  70.225 -29.208  1.00 68.60      QS17
ATOM   3458  NH1 ARG    63     112.020  70.545 -30.091  1.00 68.60      QS17
ATOM   3459  NH2 ARG    63     109.950  69.698 -29.617  1.00 68.60      QS17
ATOM   3460  C   ARG    63     115.988  72.989 -27.980  1.00 53.53      QS17
ATOM   3461  O   ARG    63     116.142  73.179 -29.184  1.00 53.53      QS17
ATOM   3462  N   PRO    64     116.914  72.398 -27.232  1.00 50.58      QS17
ATOM   3463  CD  PRO    64     117.078  72.193 -25.781  1.00 40.59      QS17
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ATOM	3464	CA	PRO	64	118.101	71.985	-27.968	1.00	50.58	QS17	ATOM	3517	NE	ARG	70	122.370	72.914	-26.588	1.00	42.71	QS17
ATOM	3465	CB	PRO	64	118.821	71.114	-26.957	1.00	40.59	QS17	ATOM	3518	CZ	ARG	70	122.310	71.853	-27.392	1.00	42.71	QS17
ATOM	3466	CG	PRO	64	118.563	71.891	-25.673	1.00	40.59	QS17	ATOM	3519	NH1	ARG	70	122.049	71.999	-28.686	1.00	42.71	QS17
ATOM	3467	C	PRO	64	117.597	71.218	-29.195	1.00	50.58	QS17	ATOM	3520	NH2	ARG	70	122.501	70.640	-26.895	1.00	42.71	QS17
ATOM	3468	O	PRO	64	116.665	70.415	-29.111	1.00	50.58	QS17	ATOM	3521	C	ARG	70	119.129	77.186	-29.712	1.00	49.36	QS17
ATOM	3469	N	ILE	65	118.180	71.513	-30.343	1.00	42.35	QS17	ATOM	3522	O	ARG	70	118.777	77.854	-28.745	1.00	49.36	QS17
ATOM	3470	CA	ILE	65	117.787	70.869	-31.581	1.00	42.35	QS17	ATOM	3523	N	PHE	71	118.962	77.567	-30.972	1.00	48.08	QS17
ATOM	3471	CB	ILE	65	117.542	71.915	-32.665	1.00	40.93	QS17	ATOM	3524	CA	PHE	71	118.361	78.839	-31.343	1.00	48.08	QS17
ATOM	3472	CG2	ILE	65	117.364	71.250	-34.022	1.00	40.93	QS17	ATOM	3525	CB	PHE	71	119.463	79.874	-31.560	1.00	34.06	QS17
ATOM	3473	CG1	ILE	65	116.352	72.776	-32.260	1.00	40.93	QS17	ATOM	3526	CG	PHE	71	119.822	80.673	-30.339	1.00	34.06	QS17
ATOM	3474	CD1	ILE	65	116.011	73.840	-33.249	1.00	40.93	QS17	ATOM	3527	CD1	PHE	71	119.049	81.754	-29.947	1.00	34.06	QS17
ATOM	3475	C	ILE	65	118.876	69.937	-32.065	1.00	42.35	QS17	ATOM	3528	CD2	PHE	71	120.972	80.376	-29.609	1.00	34.06	QS17
ATOM	3476	O	ILE	65	118.585	68.861	-32.594	1.00	42.35	QS17	ATOM	3529	CE1	PHE	71	119.418	82.539	-28.845	1.00	34.06	QS17
ATOM	3477	N	SER	66	120.131	70.345	-31.867	1.00	62.27	QS17	ATOM	3530	CE2	PHE	71	121.344	81.155	-28.505	1.00	34.06	QS17
ATOM	3478	CA	SER	66	121.237	69.538	-32.348	1.00	62.27	QS17	ATOM	3531	CZ	PHE	71	120.563	82.238	-28.130	1.00	34.06	QS17
ATOM	3479	CB	SER	66	121.444	69.793	-33.848	1.00	51.83	QS17	ATOM	3532	C	PHE	71	117.610	78.613	-32.654	1.00	48.08	QS17
ATOM	3480	OG	SER	66	122.273	70.921	-34.077	1.00	51.83	QS17	ATOM	3533	O	PHE	71	118.082	77.887	-33.534	1.00	48.08	QS17
ATOM	3481	C	SER	66	122.581	69.683	-31.668	1.00	62.27	QS17	ATOM	3534	N	ARG	72	116.442	79.228	-32.789	1.00	50.64	QS17
ATOM	3482	O	SER	66	123.589	69.797	-32.348	1.00	62.27	QS17	ATOM	3535	CA	ARG	72	115.656	79.070	-34.005	1.00	50.64	QS17
ATOM	3483	N	LYS	67	122.629	69.666	-30.349	1.00	45.98	QS17	ATOM	3536	CB	ARG	72	114.249	78.554	-33.687	1.00	35.70	QS17
ATOM	3484	CA	LYS	67	123.923	69.776	-29.676	1.00	45.98	QS17	ATOM	3537	CG	ARG	72	114.165	77.141	-33.151	1.00	35.70	QS17
ATOM	3485	CB	LYS	67	124.951	68.808	-30.254	1.00	26.51	QS17	ATOM	3538	CD	ARG	72	112.718	76.730	-32.979	1.00	35.70	QS17
ATOM	3486	CG	LYS	67	126.377	69.246	-29.923	1.00	26.51	QS17	ATOM	3539	NE	ARG	72	112.088	77.448	-31.880	1.00	35.70	QS17
ATOM	3487	CD	LYS	67	127.440	68.230	-30.282	1.00	26.51	QS17	ATOM	3540	CZ	ARG	72	110.793	77.372	-31.594	1.00	35.70	QS17
ATOM	3488	CE	LYS	67	128.790	68.695	-29.773	1.00	26.51	QS17	ATOM	3541	NH1	ARG	72	110.000	76.610	-32.334	1.00	35.70	QS17
ATOM	3489	NZ	LYS	67	129.916	67.817	-30.182	1.00	26.51	QS17	ATOM	3542	NH2	ARG	72	110.292	78.055	-30.574	1.00	35.70	QS17
ATOM	3490	C	LYS	67	124.530	71.141	-29.788	1.00	45.98	QS17	ATOM	3543	C	ARG	72	115.510	80.412	-34.665	1.00	50.64	QS17
ATOM	3491	O	LYS	67	124.898	71.739	-28.788	1.00	45.98	QS17	ATOM	3544	O	ARG	72	115.938	81.430	-34.125	1.00	50.64	QS17
ATOM	3492	N	ARG	68	124.678	71.604	-31.022	1.00	51.03	QS17	ATOM	3545	N	TYR	73	114.891	80.419	-35.835	1.00	74.11	QS17
ATOM	3493	CA	ARG	68	125.250	72.906	-31.302	1.00	51.03	QS17	ATOM	3546	CA	TYR	73	114.656	81.668	-36.511	1.00	74.11	QS17
ATOM	3494	CB	ARG	68	126.173	72.788	-32.515	1.00	59.47	QS17	ATOM	3547	CB	TYR	73	114.380	81.459	-37.967	1.00133.27		QS17
ATOM	3495	CG	ARG	68	127.049	73.981	-32.761	1.00	59.47	QS17	ATOM	3548	CG	TYR	73	115.624	81.655	-38.725	1.00133.27		QS17
ATOM	3496	CD	ARG	68	128.427	73.821	-32.147	1.00	59.47	QS17	ATOM	3549	CD1	TYR	73	116.467	80.590	-38.988	1.00133.27		QS17
ATOM	3497	NE	ARG	68	129.017	75.139	-31.948	1.00	59.47	QS17	ATOM	3550	CE1	TYR	73	117.656	80.780	-39.642	1.00133.27		QS17
ATOM	3498	CZ	ARG	68	129.234	76.016	-32.925	1.00	59.47	QS17	ATOM	3551	CD2	TYR	73	116.001	82.922	-39.132	1.00133.27		QS17
ATOM	3499	NH1	ARG	68	128.923	75.713	-34.182	1.00	59.47	QS17	ATOM	3552	CE2	TYR	73	117.186	83.127	-39.783	1.00133.27		QS17
ATOM	3500	NH2	ARG	68	129.724	77.218	-32.644	1.00	59.47	QS17	ATOM	3553	CZ	TYR	73	118.017	82.059	-40.043	1.00133.27		QS17
ATOM	3501	C	ARG	68	124.117	73.903	-31.575	1.00	51.03	QS17	ATOM	3554	OH	TYR	73	119.200	82.278	-40.718	1.00133.27		QS17
ATOM	3502	O	ARG	68	124.277	75.105	-31.389	1.00	51.03	QS17	ATOM	3555	C	TYR	73	113.481	82.334	-35.885	1.00	74.11	QS17
ATOM	3503	N	LYS	69	122.971	73.394	-32.023	1.00	49.14	QS17	ATOM	3556	O	TYR	73	112.876	81.797	-34.968	1.00	74.11	QS17
ATOM	3504	CA	LYS	69	121.811	74.232	-32.313	1.00	49.14	QS17	ATOM	3557	N	LEU	74	113.133	83.500	-36.395	1.00	65.26	QS17
ATOM	3505	CB	LYS	69	120.972	73.627	-33.438	1.00	46.31	QS17	ATOM	3558	CA	LEU	74	112.033	84.247	-35.825	1.00	65.26	QS17
ATOM	3506	CG	LYS	69	121.693	73.532	-34.763	1.00	46.31	QS17	ATOM	3559	CB	LEU	74	112.361	84.579	-34.365	1.00	30.55	QS17
ATOM	3507	CD	LYS	69	120.906	72.730	-35.787	1.00	46.31	QS17	ATOM	3560	CG	LEU	74	111.377	85.262	-33.420	1.00	30.55	QS17
ATOM	3508	CE	LYS	69	119.536	73.328	-36.059	1.00	46.31	QS17	ATOM	3561	CD1	LEU	74	111.993	86.548	-32.883	1.00	30.55	QS17
ATOM	3509	NZ	LYS	69	118.935	72.681	-37.270	1.00	46.31	QS17	ATOM	3562	CD2	LEU	74	110.085	85.530	-34.147	1.00	30.55	QS17
ATOM	3510	C	LYS	69	120.936	74.348	-31.082	1.00	49.14	QS17	ATOM	3563	C	LEU	74	111.969	85.508	-36.646	1.00	65.26	QS17
ATOM	3511	O	LYS	69	120.538	73.342	-30.505	1.00	49.14	QS17	ATOM	3564	O	LEU	74	112.365	86.582	-36.190	1.00	65.26	QS17
ATOM	3512	N	ARG	70	120.631	75.578	-30.691	1.00	49.36	QS17	ATOM	3565	N	ARG	75	111.500	85.360	-37.875	1.00	62.15	QS17
ATOM	3513	CA	ARG	70	119.787	75.842	-29.534	1.00	49.36	QS17	ATOM	3566	CA	ARG	75	111.369	86.478	-38.804	1.00	62.15	QS17
ATOM	3514	CB	ARG	70	120.619	75.843	-28.259	1.00	42.71	QS17	ATOM	3567	CB	ARG	75	110.351	87.512	-38.298	1.00	77.79	QS17
ATOM	3515	CG	ARG	70	120.839	74.455	-27.733	1.00	42.71	QS17	ATOM	3568	CG	ARG	75	110.814	88.389	-37.167	1.00	77.79	QS17
ATOM	3516	CD	ARG	70	122.161	74.298	-27.022	1.00	42.71	QS17	ATOM	3569	CD	ARG	75	111.136	89.766	-37.657	1.00	77.79	QS17

ATOM	3570	NE	ARG	75	111.456	90.651	-36.539	1.00	77.79	QS17	ATOM	3623	CB	MET	82	126.954	90.326	-49.640	1.00	78.85	QS17
ATOM	3571	CZ	ARG	75	111.808	91.928	-36.670	1.00	77.79	QS17	ATOM	3624	CG	MET	82	125.631	89.800	-50.182	1.00	78.85	QS17
ATOM	3572	NH1	ARG	75	111.879	92.480	-37.880	1.00	77.79	QS17	ATOM	3625	SD	MET	82	125.095	88.281	-49.378	1.00	78.85	QS17
ATOM	3573	NH2	ARG	75	112.111	92.645	-35.592	1.00	77.79	QS17	ATOM	3626	CE	MET	82	126.487	87.167	-49.766	1.00	78.85	QS17
ATOM	3574	C	ARG	75	112.655	87.187	-39.157	1.00	62.15	QS17	ATOM	3627	C	MET	82	128.191	91.235	-47.691	1.00	69.94	QS17
ATOM	3575	O	ARG	75	113.478	87.526	-38.316	1.00	62.15	QS17	ATOM	3628	O	MET	82	129.262	90.766	-47.329	1.00	69.94	QS17
ATOM	3576	N	LEU	76	112.787	87.398	-40.452	1.00	56.26	QS17	ATOM	3629	N	ASP	83	127.970	92.540	-47.753	1.00	69.95	QS17
ATOM	3577	CA	LEU	76	113.910	88.067	-41.049	1.00	56.26	QS17	ATOM	3630	CA	ASP	83	128.996	93.478	-47.335	1.00	69.95	QS17
ATOM	3578	CB	LEU	76	113.853	87.774	-42.540	1.00	51.86	QS17	ATOM	3631	CB	ASP	83	128.418	94.895	-47.263	1.00	81.90	QS17
ATOM	3579	CG	LEU	76	114.392	88.676	-43.631	1.00	51.86	QS17	ATOM	3632	CG	ASP	83	127.211	94.996	-46.348	1.00	81.90	QS17
ATOM	3580	CD1	LEU	76	114.206	87.925	-44.951	1.00	51.86	QS17	ATOM	3633	OD1	ASP	83	126.521	93.970	-46.133	1.00	81.90	QS17
ATOM	3581	CD2	LEU	76	113.649	90.016	-43.653	1.00	51.86	QS17	ATOM	3634	OD2	ASP	83	126.944	96.112	-45.855	1.00	81.90	QS17
ATOM	3582	C	LEU	76	113.781	89.557	-40.752	1.00	56.26	QS17	ATOM	3635	C	ASP	83	129.430	92.986	-45.962	1.00	69.95	QS17
ATOM	3583	O	LEU	76	112.695	90.039	-40.453	1.00	56.26	QS17	ATOM	3636	O	ASP	83	130.615	93.017	-45.612	1.00	69.95	QS17
ATOM	3584	N	VAL	77	114.888	90.283	-40.819	1.00	61.99	QS17	ATOM	3637	N	LEU	84	128.446	92.499	-45.207	1.00	70.71	QS17
ATOM	3585	CA	VAL	77	114.867	91.711	-40.552	1.00	61.99	QS17	ATOM	3638	CA	LEU	84	128.658	91.945	-43.880	1.00	70.71	QS17
ATOM	3586	CB	VAL	77	115.887	92.063	-39.477	1.00	51.35	QS17	ATOM	3639	CB	LEU	84	127.326	91.790	-43.173	1.00	50.45	QS17
ATOM	3587	CG1	VAL	77	116.015	93.562	-39.340	1.00	51.35	QS17	ATOM	3640	CG	LEU	84	126.619	93.078	-42.788	1.00	50.45	QS17
ATOM	3588	CG2	VAL	77	115.452	91.445	-38.167	1.00	51.35	QS17	ATOM	3641	CD1	LEU	84	125.152	92.793	-42.492	1.00	50.45	QS17
ATOM	3589	C	VAL	77	115.139	92.508	-41.825	1.00	61.99	QS17	ATOM	3642	CD2	LEU	84	127.319	93.682	-41.580	1.00	50.45	QS17
ATOM	3590	O	VAL	77	114.449	93.489	-42.109	1.00	61.99	QS17	ATOM	3643	C	LEU	84	129.280	90.569	-44.061	1.00	70.71	QS17
ATOM	3591	N	GLU	78	116.153	92.098	-42.579	1.00	69.69	QS17	ATOM	3644	O	LEU	84	130.346	90.269	-43.528	1.00	70.71	QS17
ATOM	3592	CA	GLU	78	116.471	92.743	-43.848	1.00	69.69	QS17	ATOM	3645	N	VAL	85	128.599	89.728	-44.823	1.00	53.93	QS17
ATOM	3593	CB	GLU	78	117.181	94.088	-43.646	1.00	116.35	QS17	ATOM	3646	CA	VAL	85	129.095	88.392	-45.066	1.00	53.93	QS17
ATOM	3594	CG	GLU	78	118.636	94.010	-43.245	1.00	116.35	QS17	ATOM	3647	CB	VAL	85	128.250	87.677	-46.129	1.00	61.20	QS17
ATOM	3595	CD	GLU	78	119.401	95.278	-43.601	1.00	116.35	QS17	ATOM	3648	CG1	VAL	85	128.674	86.213	-46.241	1.00	61.20	QS17
ATOM	3596	OE1	GLU	78	119.498	95.589	-44.808	1.00	116.35	QS17	ATOM	3649	CG2	VAL	85	126.782	87.787	-45.771	1.00	61.20	QS17
ATOM	3597	OE2	GLU	78	119.900	95.960	-42.679	1.00	116.35	QS17	ATOM	3650	C	VAL	85	130.537	88.460	-45.545	1.00	53.93	QS17
ATOM	3598	C	GLU	78	117.334	91.798	-44.672	1.00	69.69	QS17	ATOM	3651	O	VAL	85	131.398	87.710	-45.081	1.00	53.93	QS17
ATOM	3599	O	GLU	78	118.342	91.281	-44.196	1.00	69.69	QS17	ATOM	3652	N	GLU	86	130.810	89.374	-46.465	1.00	67.11	QS17
ATOM	3600	N	SER	79	116.920	91.563	-45.910	1.00	52.60	QS17	ATOM	3653	CA	GLU	86	132.157	89.486	-46.983	1.00	67.11	QS17
ATOM	3601	CA	SER	79	117.631	90.655	-46.796	1.00	52.60	QS17	ATOM	3654	CB	GLU	86	132.248	90.510	-48.098	1.00	129.60	QS17
ATOM	3602	CB	SER	79	116.653	90.069	-47.819	1.00	102.11	QS17	ATOM	3655	CG	GLU	86	133.651	90.607	-48.631	1.00	129.60	QS17
ATOM	3603	OG	SER	79	117.255	89.032	-48.576	1.00	102.11	QS17	ATOM	3656	CD	GLU	86	133.682	90.865	-50.111	1.00	129.60	QS17
ATOM	3604	C	SER	79	118.801	91.316	-47.518	1.00	52.60	QS17	ATOM	3657	OE1	GLU	86	133.205	91.938	-50.533	1.00	129.60	QS17
ATOM	3605	O	SER	79	118.972	92.529	-47.464	1.00	52.60	QS17	ATOM	3658	OE2	GLU	86	134.175	89.989	-50.854	1.00	129.60	QS17
ATOM	3606	N	GLY	80	119.607	90.492	-48.180	1.00	66.44	QS17	ATOM	3659	C	GLU	86	133.107	89.863	-45.877	1.00	67.11	QS17
ATOM	3607	CA	GLY	80	120.753	90.975	-48.931	1.00	66.44	QS17	ATOM	3660	O	GLU	86	134.209	89.311	-45.789	1.00	67.11	QS17
ATOM	3608	C	GLY	80	121.722	91.909	-48.230	1.00	66.44	QS17	ATOM	3661	N	LYS	87	132.689	90.806	-45.035	1.00	49.56	QS17
ATOM	3609	O	GLY	80	121.432	93.079	-48.027	1.00	66.44	QS17	ATOM	3662	CA	LYS	87	133.544	91.214	-43.933	1.00	49.56	QS17
ATOM	3610	N	ARG	81	122.886	91.390	-47.867	1.00	95.90	QS17	ATOM	3663	CB	LYS	87	132.785	92.097	-42.940	1.00	89.57	QS17
ATOM	3611	CA	ARG	81	123.906	92.194	-47.214	1.00	95.90	QS17	ATOM	3664	CG	LYS	87	133.282	93.538	-42.905	1.00	89.57	QS17
ATOM	3612	CB	ARG	81	123.934	91.897	-45.731	1.00	53.95	QS17	ATOM	3665	CD	LYS	87	132.326	94.469	-42.170	1.00	89.57	QS17
ATOM	3613	CG	ARG	81	122.648	92.333	-45.069	1.00	53.95	QS17	ATOM	3666	CE	LYS	87	132.680	95.923	-42.477	1.00	89.57	QS17
ATOM	3614	CD	ARG	81	122.413	93.812	-45.302	1.00	53.95	QS17	ATOM	3667	NZ	LYS	87	131.640	96.897	-42.017	1.00	89.57	QS17
ATOM	3615	NE	ARG	81	123.597	94.565	-44.905	1.00	53.95	QS17	ATOM	3668	C	LYS	87	133.965	89.922	-43.275	1.00	49.56	QS17
ATOM	3616	CZ	ARG	81	123.571	95.635	-44.117	1.00	53.95	QS17	ATOM	3669	O	LYS	87	135.154	89.624	-43.166	1.00	49.56	QS17
ATOM	3617	NH1	ARG	81	122.410	96.085	-43.649	1.00	53.95	QS17	ATOM	3670	N	TYR	88	132.974	89.133	-42.878	1.00	50.73	QS17
ATOM	3618	NH2	ARG	81	124.707	96.229	-43.764	1.00	53.95	QS17	ATOM	3671	CA	TYR	88	133.240	87.856	-42.243	1.00	50.73	QS17
ATOM	3619	C	ARG	81	125.238	91.884	-47.848	1.00	95.90	QS17	ATOM	3672	CB	TYR	88	131.936	87.099	-42.014	1.00	50.44	QS17
ATOM	3620	O	ARG	81	125.750	92.673	-48.633	1.00	95.90	QS17	ATOM	3673	CG	TYR	88	132.150	85.678	-41.553	1.00	50.44	QS17
ATOM	3621	N	MET	82	125.796	90.731	-47.523	1.00	69.94	QS17	ATOM	3674	CD1	TYR	88	132.637	85.404	-40.279	1.00	50.44	QS17
ATOM	3622	CA	MET	82	127.060	90.325	-48.115	1.00	69.94	QS17	ATOM	3675	CE1	TYR	88	132.830	84.095	-39.851	1.00	50.44	QS17

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ATOM   3676  CD2 TYR    88     131.864  84.604 -42.397  1.00 50.44      QS17
ATOM   3677  CE2 TYR    88     132.055  83.293 -41.984  1.00 50.44      QS17
ATOM   3678  CZ  TYR    88     132.536  83.044 -40.710  1.00 50.44      QS17
ATOM   3679  OH  TYR    88     132.716  81.745 -40.295  1.00 50.44      QS17
ATOM   3680  C   TYR    88     134.178  86.996 -43.088  1.00 50.73      QS17
ATOM   3681  O   TYR    88     135.180  86.487 -42.594  1.00 50.73      QS17
ATOM   3682  N   LEU    89     133.861  86.842 -44.366  1.00 46.44      QS17
ATOM   3683  CA  LEU    89     134.686  86.008 -45.227  1.00 46.44      QS17
ATOM   3684  CB  LEU    89     134.051  85.902 -46.608  1.00 58.95      QS17
ATOM   3685  CG  LEU    89     132.733  85.134 -46.579  1.00 58.95      QS17
ATOM   3686  CD1 LEU    89     132.123  85.128 -47.961  1.00 58.95      QS17
ATOM   3687  CD2 LEU    89     132.980  83.718 -46.084  1.00 58.95      QS17
ATOM   3688  C   LEU    89     136.135  86.455 -45.343  1.00 46.44      QS17
ATOM   3689  O   LEU    89     137.048  85.673 -45.098  1.00 46.44      QS17
ATOM   3690  N   ILE    90     136.352  87.703 -45.728  1.00 57.59      QS17
ATOM   3691  CA  ILE    90     137.707  88.209 -45.848  1.00 57.59      QS17
ATOM   3692  CB  ILE    90     137.689  89.710 -46.137  1.00 64.68      QS17
ATOM   3693  CG2 ILE    90     139.086  90.291 -45.993  1.00 64.68      QS17
ATOM   3694  CG1 ILE    90     137.110  89.938 -47.534  1.00 64.68      QS17
ATOM   3695  CD1 ILE    90     136.892  91.387 -47.883  1.00 64.68      QS17
ATOM   3696  C   ILE    90     138.464  87.943 -44.548  1.00 57.59      QS17
ATOM   3697  O   ILE    90     139.612  87.498 -44.565  1.00 57.59      QS17
ATOM   3698  N   ARG    91     137.808  88.194 -43.419  1.00 53.65      QS17
ATOM   3699  CA  ARG    91     138.431  87.979 -42.119  1.00 53.65      QS17
ATOM   3700  CB  ARG    91     137.440  88.277 -40.983  1.00 88.37      QS17
ATOM   3701  CG  ARG    91     138.098  88.819 -39.718  1.00 88.37      QS17
ATOM   3702  CD  ARG    91     137.701  88.035 -38.474  1.00 88.37      QS17
ATOM   3703  NE  ARG    91     136.307  88.246 -38.089  1.00 88.37      QS17
ATOM   3704  CZ  ARG    91     135.687  87.590 -37.108  1.00 88.37      QS17
ATOM   3705  NH1 ARG    91     136.330  86.669 -36.402  1.00 88.37      QS17
ATOM   3706  NH2 ARG    91     134.419  87.858 -36.829  1.00 88.37      QS17
ATOM   3707  C   ARG    91     138.921  86.541 -42.023  1.00 53.65      QS17
ATOM   3708  O   ARG    91     140.069  86.293 -41.665  1.00 53.65      QS17
ATOM   3709  N   ARG    92     138.059  85.588 -42.348  1.00 57.30      QS17
ATOM   3710  CA  ARG    92     138.459  84.190 -42.280  1.00 57.30      QS17
ATOM   3711  CB  ARG    92     137.282  83.277 -42.656  1.00125.88      QS17
ATOM   3712  CG  ARG    92     137.084  83.087 -44.154  1.00125.88      QS17
ATOM   3713  CD  ARG    92     135.723  82.491 -44.489  1.00125.88      QS17
ATOM   3714  NE  ARG    92     135.485  81.206 -43.841  1.00125.88      QS17
ATOM   3715  CZ  ARG    92     134.393  80.474 -44.029  1.00125.88      QS17
ATOM   3716  NH1 ARG    92     133.441  80.901 -44.848  1.00125.88      QS17
ATOM   3717  NH2 ARG    92     134.247  79.318 -43.399  1.00125.88      QS17
ATOM   3718  C   ARG    92     139.638  83.974 -43.242  1.00 57.30      QS17
ATOM   3719  O   ARG    92     140.643  83.338 -42.899  1.00 57.30      QS17
ATOM   3720  N   GLN    93     139.505  84.527 -44.441  1.00 62.19      QS17
ATOM   3721  CA  GLN    93     140.522  84.425 -45.472  1.00 62.19      QS17
ATOM   3722  CB  GLN    93     140.084  85.278 -46.653  1.00122.06      QS17
ATOM   3723  CG  GLN    93     140.938  85.189 -47.882  1.00122.06      QS17
ATOM   3724  CD  GLN    93     140.252  85.846 -49.063  1.00122.06      QS17
ATOM   3725  OE1 GLN    93     139.643  86.910 -48.922  1.00122.06      QS17
ATOM   3726  NE2 GLN    93     140.344  85.219 -50.235  1.00122.06      QS17
ATOM   3727  C   GLN    93     141.910  84.855 -44.964  1.00 62.19      QS17
ATOM   3728  O   GLN    93     142.921  84.209 -45.274  1.00 62.19      QS17
ATOM   3729  N   ASN    94     141.957  85.937 -44.183  1.00 60.48      QS17
ATOM   3730  CA  ASN    94     143.219  86.435 -43.625  1.00 60.48      QS17
ATOM   3731  CB  ASN    94     142.984  87.565 -42.624  1.00 64.06      QS17
ATOM   3732  CG  ASN    94     142.857  88.908 -43.287  1.00 64.06      QS17
ATOM   3733  OD1 ASN    94     143.235  89.069 -44.447  1.00 64.06      QS17
ATOM   3734  ND2 ASN    94     142.339  89.892 -42.552  1.00 64.06      QS17
ATOM   3735  C   ASN    94     143.977  85.346 -42.903  1.00 60.48      QS17
ATOM   3736  O   ASN    94     145.197  85.266 -42.987  1.00 60.48      QS17
ATOM   3737  N   TYR    95     143.245  84.517 -42.174  1.00 59.85      QS17
ATOM   3738  CA  TYR    95     143.858  83.444 -41.417  1.00 59.85      QS17
ATOM   3739  CB  TYR    95     142.762  82.495 -40.919  1.00 72.77      QS17
ATOM   3740  CG  TYR    95     141.918  83.164 -39.852  1.00 72.77      QS17
ATOM   3741  CD1 TYR    95     142.041  84.544 -39.623  1.00 72.77      QS17
ATOM   3742  CE1 TYR    95     141.328  85.187 -38.621  1.00 72.77      QS17
ATOM   3743  CD2 TYR    95     141.036  82.434 -39.041  1.00 72.77      QS17
ATOM   3744  CE2 TYR    95     140.307  83.072 -38.019  1.00 72.77      QS17
ATOM   3745  CZ  TYR    95     140.469  84.455 -37.817  1.00 72.77      QS17
ATOM   3746  OH  TYR    95     139.830  85.129 -36.794  1.00 72.77      QS17
ATOM   3747  C   TYR    95     144.927  82.728 -42.230  1.00 59.85      QS17
ATOM   3748  O   TYR    95     146.008  82.420 -41.717  1.00 59.85      QS17
ATOM   3749  N   GLN    96     144.635  82.508 -43.509  1.00 84.99      QS17
ATOM   3750  CA  GLN    96     145.560  81.834 -44.412  1.00 84.99      QS17
ATOM   3751  CB  GLN    96     145.081  82.005 -45.860  1.00131.38      QS17
ATOM   3752  CG  GLN    96     145.887  81.238 -46.909  1.00131.38      QS17
ATOM   3753  CD  GLN    96     146.674  82.155 -47.842  1.00131.38      QS17
ATOM   3754  OE1 GLN    96     146.123  83.092 -48.423  1.00131.38      QS17
ATOM   3755  NE2 GLN    96     147.966  81.879 -47.995  1.00131.38      QS17
ATOM   3756  C   GLN    96     146.979  82.386 -44.259  1.00 84.99      QS17
ATOM   3757  O   GLN    96     147.925  81.637 -44.008  1.00 84.99      QS17
ATOM   3758  N   SER    97     147.113  83.702 -44.389  1.00106.95      QS17
ATOM   3759  CA  SER    97     148.413  84.353 -44.296  1.00106.95      QS17
ATOM   3760  CB  SER    97     148.285  85.848 -44.591  1.00 97.98      QS17
ATOM   3761  OG  SER    97     147.715  86.542 -43.494  1.00 97.98      QS17
ATOM   3762  C   SER    97     149.109  84.182 -42.957  1.00106.95      QS17
ATOM   3763  O   SER    97     150.144  83.527 -42.875  1.00106.95      QS17
ATOM   3764  N   LEU    98     148.536  84.774 -41.912  1.00 57.63      QS17
ATOM   3765  CA  LEU    98     149.118  84.731 -40.562  1.00 57.63      QS17
ATOM   3766  CB  LEU    98     148.336  85.660 -39.606  1.00 60.01      QS17
ATOM   3767  CG  LEU    98     146.825  85.542 -39.370  1.00 60.01      QS17
ATOM   3768  CD1 LEU    98     146.439  84.165 -38.889  1.00 60.01      QS17
ATOM   3769  CD2 LEU    98     146.425  86.579 -38.343  1.00 60.01      QS17
ATOM   3770  C   LEU    98     149.301  83.374 -39.883  1.00 57.63      QS17
ATOM   3771  O   LEU    98     149.333  83.300 -38.659  1.00 57.63      QS17
ATOM   3772  N   SER    99     149.438  82.310 -40.660  1.00 92.82      QS17
ATOM   3773  CA  SER    99     149.628  80.991 -40.080  1.00 92.82      QS17
ATOM   3774  CB  SER    99     148.395  80.122 -40.338  1.00169.85      QS17
ATOM   3775  OG  SER    99     148.101  80.057 -41.725  1.00169.85      QS17
ATOM   3776  C   SER    99     150.857  80.347 -40.692  1.00 92.82      QS17
ATOM   3777  O   SER    99     150.915  80.145 -41.904  1.00 92.82      QS17
ATOM   3778  N   LYS   100     151.834  80.026 -39.848  1.00161.59      QS17
ATOM   3779  CA  LYS   100     153.086  79.404 -40.288  1.00161.59      QS17
ATOM   3780  CB  LYS   100     153.946  79.066 -39.070  1.00 77.56      QS17
ATOM   3781  CG  LYS   100     153.897  80.119 -37.981  1.00 77.56      QS17
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ATOM	3782	CD	LYS	100	154.674	79.674	-36.752	1.00	77.56	QS17	ATOM	3835	OG1	THR	25	182.410	141.341	-68.410	1.00 90.98	RS18
ATOM	3783	CE	LYS	100	154.648	80.741	-35.667	1.00	77.56	QS17	ATOM	3836	CG2	THR	25	182.656	141.393	-70.792	1.00 90.98	RS18
ATOM	3784	NZ	LYS	100	155.576	80.422	-34.538	1.00	77.56	QS17	ATOM	3837	C	THR	25	179.660	141.251	-70.961	1.00103.93	RS18
ATOM	3785	C	LYS	100	152.881	78.132	-41.126	1.00161.	59	QS17	ATOM	3838	O	THR	25	180.036	141.544	-72.093	1.00103.93	RS18
ATOM	3786	O	LYS	100	151.712	77.741	-41.356	1.00161.	59	QS17	ATOM	3839	N	LEU	26	178.602	140.481	-70.729	1.00 97.93	RS18
ATOM	3787	OXT	LYS	100	153.904	77.535	-41.543	1.00106.	63	QS17	ATOM	3840	CA	LEU	26	177.806	139.931	-71.821	1.00 97.93	RS18
ATOM	3788	CB	LYS	19	188.175	142.709	-61.587	1.00118.	58	RS18	ATOM	3841	CB	LEU	26	177.499	138.447	-71.570	1.00111.39	RS18
ATOM	3789	CG	LYS	19	189.535	142.579	-60.909	1.00118.	58	RS18	ATOM	3842	CG	LEU	26	178.558	137.348	-71.739	1.00111.39	RS18
ATOM	3790	CD	LYS	19	190.606	143.358	-61.673	1.00118.	58	RS18	ATOM	3843	CD1	LEU	26	178.932	137.212	-73.204	1.00111.39	RS18
ATOM	3791	CE	LYS	19	192.016	142.958	-61.240	1.00118.	58	RS18	ATOM	3844	CD2	LEU	26	179.775	137.657	-70.903	1.00111.39	RS18
ATOM	3792	NZ	LYS	19	193.084	143.590	-62.075	1.00118.	58	RS18	ATOM	3845	C	LEU	26	176.491	140.688	-71.978	1.00 97.93	RS18
ATOM	3793	C	LYS	19	185.946	141.698	-62.082	1.00103.	89	RS18	ATOM	3846	O	LEU	26	176.260	141.706	-71.322	1.00 97.93	RS18
ATOM	3794	O	LYS	19	186.091	141.330	-63.247	1.00103.	89	RS18	ATOM	3847	N	GLY	27	175.639	140.170	-72.859	1.00 73.06	RS18
ATOM	3795	N	LYS	19	187.736	140.326	-61.068	1.00103.	89	RS18	ATOM	3848	CA	GLY	27	174.336	140.759	-73.112	1.00 73.06	RS18
ATOM	3796	CA	LYS	19	187.131	141.691	-61.116	1.00103.	89	RS18	ATOM	3849	C	GLY	27	173.371	139.660	-73.515	1.00 73.06	RS18
ATOM	3797	N	ALA	20	184.779	142.112	-61.595	1.00101.	64	RS18	ATOM	3850	O	GLY	27	173.798	138.548	-73.823	1.00 73.06	RS18
ATOM	3798	CA	ALA	20	183.567	142.176	-62.417	1.00101.	64	RS18	ATOM	3851	N	GLU	28	172.077	139.958	-73.500	1.00129.11	RS18
ATOM	3799	CB	ALA	20	183.784	143.121	-63.599	1.00113.	18	RS18	ATOM	3852	CA	GLU	28	171.056	138.983	-73.876	1.00129.11	RS18
ATOM	3800	C	ALA	20	183.104	140.813	-62.926	1.00101.	64	RS18	ATOM	3853	CB	GLU	28	169.959	139.680	-74.688	1.00146.32	RS18
ATOM	3801	O	ALA	20	183.857	140.093	-63.577	1.00101.	64	RS18	ATOM	3854	CG	GLU	28	169.004	138.736	-75.406	1.00146.32	RS18
ATOM	3802	N	LYS	21	181.851	140.478	-62.629	1.00	95.78	RS18	ATOM	3855	CD	GLU	28	168.003	139.471	-76.285	1.00146.32	RS18
ATOM	3803	CA	LYS	21	181.258	139.208	-63.038	1.00	95.78	RS18	ATOM	3856	OE1	GLU	28	167.132	140.178	-75.734	1.00146.32	RS18
ATOM	3804	CB	LYS	21	179.813	139.123	-62.548	1.00129.	51	RS18	ATOM	3857	OE2	GLU	28	168.094	139.342	-77.525	1.00146.32	RS18
ATOM	3805	CG	LYS	21	179.550	139.849	-61.247	1.00129.	51	RS18	ATOM	3858	C	GLU	28	171.634	137.817	-74.684	1.00129.11	RS18
ATOM	3806	CD	LYS	21	178.056	139.999	-61.014	1.00129.	51	RS18	ATOM	3859	O	GLU	28	171.836	137.936	-75.894	1.00129.11	RS18
ATOM	3807	CE	LYS	21	177.749	141.291	-60.270	1.00129.	51	RS18	ATOM	3860	N	PHE	29	171.913	136.699	-74.015	1.00 64.40	RS18
ATOM	3808	NZ	LYS	21	178.495	141.395	-58.981	1.00129.	51	RS18	ATOM	3861	CA	PHE	29	172.456	135.525	-74.695	1.00 64.40	RS18
ATOM	3809	C	LYS	21	181.272	139.095	-64.558	1.00	95.78	RS18	ATOM	3862	CB	PHE	29	173.969	135.444	-74.482	1.00 90.35	RS18
ATOM	3810	O	LYS	21	181.110	140.093	-65.260	1.00	95.78	RS18	ATOM	3863	CG	PHE	29	174.377	135.214	-73.053	1.00 90.35	RS18
ATOM	3811	N	VAL	22	181.454	137.877	-65.061	1.00	58.12	RS18	ATOM	3864	CD1	PHE	29	174.312	133.941	-72.491	1.00 90.35	RS18
ATOM	3812	CA	VAL	22	181.489	137.640	-66.500	1.00	58.12	RS18	ATOM	3865	CD2	PHE	29	174.851	136.265	-72.274	1.00 90.35	RS18
ATOM	3813	CB	VAL	22	181.749	136.150	-66.824	1.00	49.71	RS18	ATOM	3866	CE1	PHE	29	174.717	133.720	-71.180	1.00 90.35	RS18
ATOM	3814	CG1	VAL	22	182.078	135.990	-68.308	1.00	49.71	RS18	ATOM	3867	CE2	PHE	29	175.257	136.051	-70.961	1.00 90.35	RS18
ATOM	3815	CG2	VAL	22	182.880	135.610	-65.951	1.00	49.71	RS18	ATOM	3868	CZ	PHE	29	175.191	134.774	-70.414	1.00 90.35	RS18
ATOM	3816	C	VAL	22	180.145	138.027	-67.103	1.00	58.12	RS18	ATOM	3869	C	PHE	29	171.775	134.253	-74.202	1.00 64.40	RS18
ATOM	3817	O	VAL	22	180.019	138.221	-68.306	1.00	58.12	RS18	ATOM	3870	O	PHE	29	171.426	134.145	-73.031	1.00 64.40	RS18
ATOM	3818	N	LYS	23	179.144	138.134	-66.242	1.00	95.75	RS18	ATOM	3871	N	ASP	30	171.588	133.291	-75.099	1.00 61.93	RS18
ATOM	3819	CA	LYS	23	177.792	138.485	-66.647	1.00	95.75	RS18	ATOM	3872	CA	ASP	30	170.924	132.041	-74.747	1.00 61.93	RS18
ATOM	3820	CB	LYS	23	176.852	138.247	-65.466	1.00114.	36	RS18	ATOM	3873	CB	ASP	30	170.374	131.356	-75.997	1.00 75.14	RS18
ATOM	3821	CG	LYS	23	175.381	138.443	-65.740	1.00114.	36	RS18	ATOM	3874	CG	ASP	30	169.831	129.977	-75.701	1.00 75.14	RS18
ATOM	3822	CD	LYS	23	174.609	138.150	-64.469	1.00114.	36	RS18	ATOM	3875	OD1	ASP	30	169.327	129.780	-74.582	1.00 75.14	RS18
ATOM	3823	CE	LYS	23	173.117	138.205	-64.683	1.00114.	36	RS18	ATOM	3876	OD2	ASP	30	169.894	129.091	-76.578	1.00 75.14	RS18
ATOM	3824	NZ	LYS	23	172.417	137.810	-63.434	1.00114.	36	RS18	ATOM	3877	C	ASP	30	171.805	131.056	-73.987	1.00 61.93	RS18
ATOM	3825	C	LYS	23	177.712	139.939	-67.099	1.00	95.75	RS18	ATOM	3878	O	ASP	30	172.674	130.396	-74.573	1.00 61.93	RS18
ATOM	3826	O	LYS	23	177.139	140.245	-68.143	1.00	95.75	RS18	ATOM	3879	N	LEU	31	171.561	130.938	-72.684	1.00 59.26	RS18
ATOM	3827	N	ALA	24	178.294	140.833	-66.308	1.00105.	08	RS18	ATOM	3880	CA	LEU	31	172.349	130.035	-71.860	1.00 59.26	RS18
ATOM	3828	CA	ALA	24	178.280	142.255	-66.627	1.00105.	08	RS18	ATOM	3881	CB	LEU	31	171.921	130.133	-70.389	1.00 62.52	RS18
ATOM	3829	CB	ALA	24	178.714	143.064	-65.413	1.00124.	68	RS18	ATOM	3882	CG	LEU	31	172.563	131.303	-69.629	1.00 62.52	RS18
ATOM	3830	C	ALA	24	179.171	142.584	-67.818	1.00105.	08	RS18	ATOM	3883	CD1	LEU	31	172.027	131.434	-68.214	1.00 62.52	RS18
ATOM	3831	O	ALA	24	179.503	143.745	-68.052	1.00105.	08	RS18	ATOM	3884	CD2	LEU	31	174.051	131.063	-69.590	1.00 62.52	RS18
ATOM	3832	N	THR	25	179.567	141.560	-68.564	1.00103.	93	RS18	ATOM	3885	C	LEU	31	172.271	128.595	-72.337	1.00 59.26	RS18
ATOM	3833	CA	THR	25	180.405	141.763	-69.736	1.00103.	93	RS18	ATOM	3886	O	LEU	31	173.096	127.773	-71.952	1.00 59.26	RS18
ATOM	3834	CB	THR	25	181.750	141.004	-69.634	1.00	90.98	RS18	ATOM	3887	N	ARG	32	171.291	128.286	-73.180	1.00 64.07	RS18

ATOM	3888	CA	ARG	32	171.147	126.925	-73.689	1.00	64.07	RS18	ATOM	3941	CG2	VAL	37	182.160	127.501	-79.931	1.00	57.04	RS18
ATOM	3889	CB	ARG	32	169.676	126.566	-73.905	1.00	72.01	RS18	ATOM	3942	C	VAL	37	182.111	130.682	-77.810	1.00	58.30	RS18
ATOM	3890	CG	ARG	32	168.879	126.304	-72.643	1.00	72.01	RS18	ATOM	3943	O	VAL	37	182.471	130.915	-76.660	1.00	58.30	RS18
ATOM	3891	CD	ARG	32	167.596	125.542	-72.981	1.00	72.01	RS18	ATOM	3944	N	GLU	38	182.041	131.608	-78.760	1.00	73.50	RS18
ATOM	3892	NE	ARG	32	166.822	125.189	-71.792	1.00	72.01	RS18	ATOM	3945	CA	GLU	38	182.389	132.996	-78.507	1.00	73.50	RS18
ATOM	3893	CZ	ARG	32	166.159	126.067	-71.048	1.00	72.01	RS18	ATOM	3946	CB	GLU	38	181.646	133.904	-79.488	1.00	176.39	RS18
ATOM	3894	NH1	ARG	32	166.172	127.352	-71.373	1.00	72.01	RS18	ATOM	3947	CG	GLU	38	182.555	134.695	-80.411	1.00	176.39	RS18
ATOM	3895	NH2	ARG	32	165.487	125.663	-69.982	1.00	72.01	RS18	ATOM	3948	CD	GLU	38	183.453	135.665	-79.657	1.00	176.39	RS18
ATOM	3896	C	ARG	32	171.885	126.722	-75.001	1.00	64.07	RS18	ATOM	3949	OE1	GLU	38	184.222	136.400	-80.314	1.00	176.39	RS18
ATOM	3897	O	ARG	32	171.799	125.649	-75.597	1.00	64.07	RS18	ATOM	3950	OE2	GLU	38	183.389	135.694	-78.409	1.00	176.39	RS18
ATOM	3898	N	ASP	33	172.609	127.744	-75.453	1.00	83.77	RS18	ATOM	3951	C	GLU	38	182.007	133.354	-77.076	1.00	73.50	RS18
ATOM	3899	CA	ASP	33	173.337	127.649	-76.715	1.00	83.77	RS18	ATOM	3952	O	GLU	38	182.863	133.727	-76.270	1.00	73.50	RS18
ATOM	3900	CB	ASP	33	173.598	129.040	-77.281	1.00	102.45	RS18	ATOM	3953	N	VAL	39	180.718	133.211	-76.766	1.00	71.42	RS18
ATOM	3901	CG	ASP	33	173.826	129.017	-78.775	1.00	102.45	RS18	ATOM	3954	CA	VAL	39	180.186	133.510	-75.437	1.00	71.42	RS18
ATOM	3902	OD1	ASP	33	174.313	127.986	-79.289	1.00	102.45	RS18	ATOM	3955	CB	VAL	39	178.634	133.485	-75.441	1.00	50.80	RS18
ATOM	3903	OD2	ASP	33	173.523	130.030	-79.436	1.00	102.45	RS18	ATOM	3956	CG1	VAL	39	178.100	133.506	-74.018	1.00	50.80	RS18
ATOM	3904	C	ASP	33	174.667	126.919	-76.565	1.00	83.77	RS18	ATOM	3957	CG2	VAL	39	178.100	134.683	-76.202	1.00	50.80	RS18
ATOM	3905	O	ASP	33	175.680	127.524	-76.207	1.00	83.77	RS18	ATOM	3958	C	VAL	39	180.681	132.536	-74.368	1.00	71.42	RS18
ATOM	3906	N	TYR	34	174.670	125.622	-76.856	1.00	64.08	RS18	ATOM	3959	O	VAL	39	181.327	132.943	-73.401	1.00	71.42	RS18
ATOM	3907	CA	TYR	34	175.888	124.834	-76.729	1.00	64.08	RS18	ATOM	3960	N	LEU	40	180.374	131.253	-74.548	1.00	55.11	RS18
ATOM	3908	CB	TYR	34	175.543	123.361	-76.529	1.00	80.40	RS18	ATOM	3961	CA	LEU	40	180.769	130.228	-73.588	1.00	55.11	RS18
ATOM	3909	CG	TYR	34	174.780	122.754	-77.674	1.00	80.40	RS18	ATOM	3962	CB	LEU	40	180.540	128.834	-74.180	1.00	45.86	RS18
ATOM	3910	CD1	TYR	34	175.432	122.316	-78.828	1.00	80.40	RS18	ATOM	3963	CG	LEU	40	179.066	128.466	-74.440	1.00	45.86	RS18
ATOM	3911	CE1	TYR	34	174.720	121.765	-79.891	1.00	80.40	RS18	ATOM	3964	CD1	LEU	40	178.940	127.042	-74.995	1.00	45.86	RS18
ATOM	3912	CD2	TYR	34	173.398	122.627	-77.610	1.00	80.40	RS18	ATOM	3965	CD2	LEU	40	178.292	128.578	-73.149	1.00	45.86	RS18
ATOM	3913	CE2	TYR	34	172.675	122.076	-78.665	1.00	80.40	RS18	ATOM	3966	C	LEU	40	182.202	130.357	-73.069	1.00	55.11	RS18
ATOM	3914	CZ	TYR	34	173.339	121.650	-79.797	1.00	80.40	RS18	ATOM	3967	O	LEU	40	182.425	130.287	-71.854	1.00	55.11	RS18
ATOM	3915	OH	TYR	34	172.606	121.114	-80.823	1.00	80.40	RS18	ATOM	3968	N	LYS	41	183.167	130.553	-73.968	1.00	86.75	RS18
ATOM	3916	C	TYR	34	176.806	124.974	-77.931	1.00	64.08	RS18	ATOM	3969	CA	LYS	41	184.570	130.706	-73.566	1.00	86.75	RS18
ATOM	3917	O	TYR	34	177.521	124.039	-78.282	1.00	64.08	RS18	ATOM	3970	CB	LYS	41	185.372	131.470	-74.622	1.00	131.42	RS18
ATOM	3918	N	ARG	35	176.793	126.139	-78.564	1.00	81.68	RS18	ATOM	3971	CG	LYS	41	185.290	130.950	-76.038	1.00	131.42	RS18
ATOM	3919	CA	ARG	35	177.637	126.356	-79.726	1.00	81.68	RS18	ATOM	3972	CD	LYS	41	185.938	131.956	-76.984	1.00	131.42	RS18
ATOM	3920	CB	ARG	35	176.864	126.071	-81.004	1.00	83.39	RS18	ATOM	3973	CE	LYS	41	185.760	131.579	-78.448	1.00	131.42	RS18
ATOM	3921	CG	ARG	35	176.776	124.611	-81.327	1.00	83.39	RS18	ATOM	3974	NZ	LYS	41	186.372	132.596	-79.355	1.00	131.42	RS18
ATOM	3922	CD	ARG	35	176.159	124.429	-82.687	1.00	83.39	RS18	ATOM	3975	C	LYS	41	184.628	131.519	-72.276	1.00	86.75	RS18
ATOM	3923	NE	ARG	35	174.709	124.551	-82.658	1.00	83.39	RS18	ATOM	3976	O	LYS	41	185.196	131.087	-71.276	1.00	86.75	RS18
ATOM	3924	CZ	ARG	35	173.952	124.750	-83.734	1.00	83.39	RS18	ATOM	3977	N	ARG	42	184.026	132.703	-72.327	1.00	85.53	RS18
ATOM	3925	NH1	ARG	35	174.508	124.864	-84.933	1.00	83.39	RS18	ATOM	3978	CA	ARG	42	183.984	133.638	-71.205	1.00	85.53	RS18
ATOM	3926	NH2	ARG	35	172.631	124.811	-83.613	1.00	83.39	RS18	ATOM	3979	CB	ARG	42	182.804	134.601	-71.368	1.00	102.83	RS18
ATOM	3927	C	ARG	35	178.184	127.754	-79.780	1.00	81.68	RS18	ATOM	3980	CG	ARG	42	182.889	135.565	-72.538	1.00	102.83	RS18
ATOM	3928	O	ARG	35	179.118	128.025	-80.523	1.00	81.68	RS18	ATOM	3981	CD	ARG	42	184.039	136.547	-72.387	1.00	102.83	RS18
ATOM	3929	N	ASN	36	177.602	128.647	-78.994	1.00	71.04	RS18	ATOM	3982	NE	ARG	42	183.803	137.767	-73.156	1.00	102.83	RS18
ATOM	3930	CA	ASN	36	178.064	130.020	-78.981	1.00	71.04	RS18	ATOM	3983	CZ	ARG	42	182.976	138.738	-72.776	1.00	102.83	RS18
ATOM	3931	CB	ASN	36	177.036	130.922	-78.307	1.00	108.99	RS18	ATOM	3984	NH1	ARG	42	182.313	138.630	-71.632	1.00	102.83	RS18
ATOM	3932	CG	ASN	36	177.388	132.386	-78.425	1.00	108.99	RS18	ATOM	3985	NH2	ARG	42	182.799	139.809	-73.540	1.00	102.83	RS18
ATOM	3933	OD1	ASN	36	176.552	133.258	-78.185	1.00	108.99	RS18	ATOM	3986	C	ARG	42	183.876	132.992	-69.829	1.00	85.53	RS18
ATOM	3934	ND2	ASN	36	178.635	132.668	-78.792	1.00	108.99	RS18	ATOM	3987	O	ARG	42	184.503	133.446	-68.869	1.00	85.53	RS18
ATOM	3935	C	ASN	36	179.387	130.062	-78.237	1.00	71.04	RS18	ATOM	3988	N	PHE	43	183.076	131.934	-69.737	1.00	72.64	RS18
ATOM	3936	O	ASN	36	179.515	130.699	-77.188	1.00	71.04	RS18	ATOM	3989	CA	PHE	43	182.852	131.267	-68.464	1.00	72.64	RS18
ATOM	3937	N	VAL	37	180.367	129.360	-78.799	1.00	58.30	RS18	ATOM	3990	CB	PHE	43	181.435	130.677	-68.454	1.00	64.55	RS18
ATOM	3938	CA	VAL	37	181.699	129.285	-78.224	1.00	58.30	RS18	ATOM	3991	CG	PHE	43	180.348	131.717	-68.584	1.00	64.55	RS18
ATOM	3939	CB	VAL	37	182.720	128.748	-79.245	1.00	57.04	RS18	ATOM	3992	CD1	PHE	43	179.228	131.476	-69.366	1.00	64.55	RS18
ATOM	3940	CG1	VAL	37	184.048	128.435	-78.547	1.00	57.04	RS18	ATOM	3993	CD2	PHE	43	180.458	132.948	-67.944	1.00	64.55	RS18

ATOM	3994	CE1	PHE	43	178.234	132.442	-69.518	1.00	64.55	RS18	ATOM	4047	CD1	ILE	50	181.101	123.318	-66.276	1.00	44.12	RS18
ATOM	3995	CE2	PHE	43	179.471	133.918	-68.090	1.00	64.55	RS18	ATOM	4048	C	ILE	50	183.925	126.897	-64.167	1.00	55.92	RS18
ATOM	3996	CZ	PHE	43	178.357	133.663	-68.881	1.00	64.55	RS18	ATOM	4049	O	ILE	50	184.041	126.445	-63.030	1.00	55.92	RS18
ATOM	3997	C	PHE	43	183.866	130.199	-68.072	1.00	72.64	RS18	ATOM	4050	N	LEU	51	183.960	128.199	-64.433	1.00	72.58	RS18
ATOM	3998	O	PHE	43	183.826	129.702	-66.949	1.00	72.64	RS18	ATOM	4051	CA	LEU	51	184.109	129.182	-63.368	1.00	72.58	RS18
ATOM	3999	N	LEU	44	184.795	129.876	-68.968	1.00	74.42	RS18	ATOM	4052	CB	LEU	51	184.049	130.602	-63.926	1.00	53.25	RS18
ATOM	4000	CA	LEU	44	185.775	128.829	-68.691	1.00	74.42	RS18	ATOM	4053	CG	LEU	51	185.229	131.134	-64.737	1.00	53.25	RS18
ATOM	4001	CB	LEU	44	186.182	128.147	-69.990	1.00	48.61	RS18	ATOM	4054	CD1	LEU	51	185.000	132.603	-65.081	1.00	53.25	RS18
ATOM	4002	CG	LEU	44	185.398	126.877	-70.305	1.00	48.61	RS18	ATOM	4055	CD2	LEU	51	186.492	131.003	-63.918	1.00	53.25	RS18
ATOM	4003	CD1	LEU	44	186.170	126.069	-71.349	1.00	48.61	RS18	ATOM	4056	C	LEU	51	182.989	129.017	-62.361	1.00	72.58	RS18
ATOM	4004	CD2	LEU	44	185.195	126.046	-69.028	1.00	48.61	RS18	ATOM	4057	O	LEU	51	181.853	128.712	-62.729	1.00	72.58	RS18
ATOM	4005	C	LEU	44	187.047	129.073	-67.884	1.00	74.42	RS18	ATOM	4058	N	PRO	52	183.287	129.217	-61.071	1.00	85.46	RS18
ATOM	4006	O	LEU	44	187.455	128.193	-67.135	1.00	74.42	RS18	ATOM	4059	CD	PRO	52	184.515	129.775	-60.476	1.00	50.82	RS18
ATOM	4007	N	SER	45	187.694	130.221	-68.041	1.00	53.22	RS18	ATOM	4060	CA	PRO	52	182.243	129.078	-60.056	1.00	85.46	RS18
ATOM	4008	CA	SER	45	188.938	130.493	-67.306	1.00	53.22	RS18	ATOM	4061	CB	PRO	52	183.025	129.220	-58.759	1.00	50.82	RS18
ATOM	4009	CB	SER	45	188.860	130.000	-65.863	1.00	47.15	RS18	ATOM	4062	CG	PRO	52	184.028	130.247	-59.118	1.00	50.82	RS18
ATOM	4010	OG	SER	45	189.839	128.988	-65.639	1.00	47.15	RS18	ATOM	4063	C	PRO	52	181.332	130.262	-60.291	1.00	85.46	RS18
ATOM	4011	C	SER	45	190.220	129.892	-67.893	1.00	53.22	RS18	ATOM	4064	O	PRO	52	181.414	130.890	-61.339	1.00	85.46	RS18
ATOM	4012	O	SER	45	190.201	129.053	-68.800	1.00	53.22	RS18	ATOM	4065	N	ARG	53	180.452	130.572	-59.351	1.00	93.73	RS18
ATOM	4013	N	GLU	46	191.326	130.317	-67.287	1.00	97.93	RS18	ATOM	4066	CA	ARG	53	179.639	131.758	-59.543	1.00	93.73	RS18
ATOM	4014	CA	GLU	46	192.699	129.949	-67.626	1.00	97.93	RS18	ATOM	4067	CB	ARG	53	178.518	131.828	-58.522	1.00	82.21	RS18
ATOM	4015	CB	GLU	46	193.646	130.624	-66.626	1.00	112.56	RS18	ATOM	4068	CG	ARG	53	177.220	131.172	-58.980	1.00	82.21	RS18
ATOM	4016	CG	GLU	46	193.249	132.058	-66.236	1.00	112.56	RS18	ATOM	4069	CD	ARG	53	176.284	131.082	-57.797	1.00	82.21	RS18
ATOM	4017	CD	GLU	46	191.938	132.138	-65.442	1.00	112.56	RS18	ATOM	4070	NE	ARG	53	174.872	130.987	-58.137	1.00	82.21	RS18
ATOM	4018	OE1	GLU	46	191.885	131.622	-64.306	1.00	112.56	RS18	ATOM	4071	CZ	ARG	53	173.907	131.121	-57.234	1.00	82.21	RS18
ATOM	4019	OE2	GLU	46	190.956	132.719	-65.956	1.00	112.56	RS18	ATOM	4072	NH1	ARG	53	174.218	131.352	-55.968	1.00	82.21	RS18
ATOM	4020	C	GLU	46	193.026	128.457	-67.675	1.00	97.93	RS18	ATOM	4073	NH2	ARG	53	172.635	131.032	-57.581	1.00	82.21	RS18
ATOM	4021	O	GLU	46	194.097	128.073	-68.142	1.00	97.93	RS18	ATOM	4074	C	ARG	53	180.677	132.841	-59.295	1.00	93.73	RS18
ATOM	4022	N	THR	47	192.121	127.614	-67.194	1.00	49.63	RS18	ATOM	4075	O	ARG	53	181.752	132.785	-59.883	1.00	93.73	RS18
ATOM	4023	CA	THR	47	192.372	126.175	-67.184	1.00	49.63	RS18	ATOM	4076	N	ARG	54	180.405	133.794	-58.413	1.00	104.19	RS18
ATOM	4024	CB	THR	47	192.639	125.686	-65.742	1.00	58.26	RS18	ATOM	4077	CA	ARG	54	181.385	134.848	-58.160	1.00	104.19	RS18
ATOM	4025	OG1	THR	47	193.852	126.278	-65.261	1.00	58.26	RS18	ATOM	4078	CB	ARG	54	182.613	134.289	-57.437	1.00	135.08	RS18
ATOM	4026	CG2	THR	47	192.770	124.169	-65.687	1.00	58.26	RS18	ATOM	4079	CG	ARG	54	182.352	133.094	-56.536	1.00	135.08	RS18
ATOM	4027	C	THR	47	191.203	125.401	-67.776	1.00	49.63	RS18	ATOM	4080	CD	ARG	54	183.591	132.191	-56.428	1.00	135.08	RS18
ATOM	4028	O	THR	47	191.150	124.171	-67.699	1.00	49.63	RS18	ATOM	4081	NE	ARG	54	184.515	132.560	-55.353	1.00	135.08	RS18
ATOM	4029	N	GLY	48	190.263	126.126	-68.373	1.00	63.56	RS18	ATOM	4082	CZ	ARG	54	185.190	133.706	-55.277	1.00	135.08	RS18
ATOM	4030	CA	GLY	48	189.118	125.475	-68.981	1.00	63.56	RS18	ATOM	4083	NH1	ARG	54	185.061	134.634	-56.217	1.00	135.08	RS18
ATOM	4031	C	GLY	48	188.188	124.831	-67.976	1.00	63.56	RS18	ATOM	4084	NH2	ARG	54	186.000	133.927	-54.246	1.00	135.08	RS18
ATOM	4032	O	GLY	48	187.460	123.889	-68.305	1.00	63.56	RS18	ATOM	4085	C	ARG	54	181.818	135.334	-59.540	1.00	104.19	RS18
ATOM	4033	N	LYS	49	188.223	125.330	-66.744	1.00	60.71	RS18	ATOM	4086	O	ARG	54	181.229	136.257	-60.100	1.00	104.19	RS18
ATOM	4034	CA	LYS	49	187.356	124.821	-65.692	1.00	60.71	RS18	ATOM	4087	N	ARG	55	182.850	134.687	-60.078	1.00	73.37	RS18
ATOM	4035	CB	LYS	49	188.082	124.823	-64.353	1.00	64.05	RS18	ATOM	4088	CA	ARG	55	183.378	134.995	-61.400	1.00	73.37	RS18
ATOM	4036	CG	LYS	49	189.232	123.857	-64.268	1.00	64.05	RS18	ATOM	4089	CB	ARG	55	184.324	133.887	-61.838	1.00	114.58	RS18
ATOM	4037	CD	LYS	49	189.810	123.853	-62.880	1.00	64.05	RS18	ATOM	4090	CG	ARG	55	185.410	133.625	-60.827	1.00	114.58	RS18
ATOM	4038	CE	LYS	49	191.061	123.032	-62.843	1.00	64.05	RS18	ATOM	4091	CD	ARG	55	186.273	134.861	-60.613	1.00	114.58	RS18
ATOM	4039	NZ	LYS	49	191.716	123.122	-61.512	1.00	64.05	RS18	ATOM	4092	NE	ARG	55	187.030	135.209	-61.813	1.00	114.58	RS18
ATOM	4040	C	LYS	49	186.139	125.730	-65.602	1.00	60.71	RS18	ATOM	4093	CZ	ARG	55	186.634	136.092	-62.724	1.00	114.58	RS18
ATOM	4041	O	LYS	49	186.265	126.952	-65.672	1.00	60.71	RS18	ATOM	4094	NH1	ARG	55	185.481	136.733	-62.574	1.00	114.58	RS18
ATOM	4042	N	ILE	50	184.958	125.145	-65.452	1.00	55.92	RS18	ATOM	4095	NH2	ARG	55	187.390	136.327	-63.791	1.00	114.58	RS18
ATOM	4043	CA	ILE	50	183.764	125.959	-65.348	1.00	55.92	RS18	ATOM	4096	C	ARG	55	182.229	135.126	-62.392	1.00	73.37	RS18
ATOM	4044	CB	ILE	50	182.525	125.102	-65.131	1.00	44.12	RS18	ATOM	4097	O	ARG	55	182.015	136.190	-62.965	1.00	73.37	RS18
ATOM	4045	CG2	ILE	50	181.323	125.997	-64.972	1.00	44.12	RS18	ATOM	4098	N	THR	56	181.503	134.042	-62.620	1.00	57.68	RS18
ATOM	4046	CG1	ILE	50	182.341	124.159	-66.324	1.00	44.12	RS18	ATOM	4099	CA	THR	56	180.361	134.124	-63.511	1.00	57.68	RS18

ATOM	4100	CB	THR	56	179.808	132.728	-63.881	1.00	77.99	RS18	ATOM	4153	O	GLN	63	172.471	126.611	-63.988	1.00	62.93	RS18
ATOM	4101	OG1	THR	56	179.056	132.197	-62.782	1.00	77.99	RS18	ATOM	4154	N	ARG	64	174.429	125.542	-63.877	1.00	94.07	RS18
ATOM	4102	CG2	THR	56	180.950	131.775	-64.204	1.00	77.99	RS18	ATOM	4155	CA	ARG	64	173.784	124.245	-64.048	1.00	94.07	RS18
ATOM	4103	C	THR	56	179.342	134.850	-62.642	1.00	57.68	RS18	ATOM	4156	CB	ARG	64	172.531	124.115	-63.172	1.00	149.91	RS18
ATOM	4104	O	THR	56	179.240	134.566	-61.445	1.00	57.68	RS18	ATOM	4157	CG	ARG	64	172.136	122.679	-62.809	1.00	149.91	RS18
ATOM	4105	N	GLY	57	178.601	135.795	-63.204	1.00	55.88	RS18	ATOM	4158	CD	ARG	64	172.126	121.713	-64.006	1.00	149.91	RS18
ATOM	4106	CA	GLY	57	177.634	136.492	-62.373	1.00	55.88	RS18	ATOM	4159	NE	ARG	64	173.472	121.312	-64.426	1.00	149.91	RS18
ATOM	4107	C	GLY	57	176.336	135.717	-62.236	1.00	55.88	RS18	ATOM	4160	CZ	ARG	64	173.730	120.392	-65.354	1.00	149.91	RS18
ATOM	4108	O	GLY	57	175.417	136.141	-61.536	1.00	55.88	RS18	ATOM	4161	NH1	ARG	64	172.733	119.767	-65.968	1.00	149.91	RS18
ATOM	4109	N	LEU	58	176.275	134.567	-62.901	1.00	60.71	RS18	ATOM	4162	NH2	ARG	64	174.985	120.096	-65.672	1.00	149.91	RS18
ATOM	4110	CA	LEU	58	175.093	133.718	-62.918	1.00	60.71	RS18	ATOM	4163	C	ARG	64	173.393	124.219	-65.516	1.00	94.07	RS18
ATOM	4111	CB	LEU	58	175.401	132.437	-63.690	1.00	73.12	RS18	ATOM	4164	O	ARG	64	173.800	123.325	-66.253	1.00	94.07	RS18
ATOM	4112	CG	LEU	58	175.888	132.631	-65.122	1.00	73.12	RS18	ATOM	4165	N	ILE	65	172.598	125.196	-65.945	1.00	69.05	RS18
ATOM	4113	CD1	LEU	58	175.951	131.282	-65.835	1.00	73.12	RS18	ATOM	4166	CA	ILE	65	172.236	125.265	-67.354	1.00	69.05	RS18
ATOM	4114	CD2	LEU	58	174.937	133.557	-65.847	1.00	73.12	RS18	ATOM	4167	CB	ILE	65	171.353	126.470	-67.699	1.00	62.45	RS18
ATOM	4115	C	LEU	58	174.439	133.343	-61.591	1.00	60.71	RS18	ATOM	4168	CG2	ILE	65	171.172	126.532	-69.204	1.00	62.45	RS18
ATOM	4116	O	LEU	58	175.073	133.287	-60.540	1.00	60.71	RS18	ATOM	4169	CG1	ILE	65	169.991	126.361	-67.019	1.00	62.45	RS18
ATOM	4117	N	SER	59	173.145	133.067	-61.681	1.00	48.44	RS18	ATOM	4170	CD1	ILE	65	169.078	127.558	-67.304	1.00	62.45	RS18
ATOM	4118	CA	SER	59	172.314	132.668	-60.559	1.00	48.44	RS18	ATOM	4171	C	ILE	65	173.572	125.498	-68.038	1.00	69.05	RS18
ATOM	4119	CB	SER	59	170.880	133.070	-60.824	1.00	43.38	RS18	ATOM	4172	O	ILE	65	174.014	124.708	-68.872	1.00	69.05	RS18
ATOM	4120	OG	SER	59	170.330	132.191	-61.787	1.00	43.38	RS18	ATOM	4173	N	LEU	66	174.213	126.598	-67.657	1.00	50.01	RS18
ATOM	4121	C	SER	59	172.366	131.153	-60.493	1.00	48.44	RS18	ATOM	4174	CA	LEU	66	175.503	126.945	-68.214	1.00	50.01	RS18
ATOM	4122	O	SER	59	173.031	130.522	-61.307	1.00	48.44	RS18	ATOM	4175	CB	LEU	66	176.189	128.009	-67.360	1.00	42.91	RS18
ATOM	4123	N	GLY	60	171.632	130.575	-59.547	1.00	44.85	RS18	ATOM	4176	CG	LEU	66	177.584	128.336	-67.887	1.00	42.91	RS18
ATOM	4124	CA	GLY	60	171.626	129.135	-59.393	1.00	44.85	RS18	ATOM	4177	CD1	LEU	66	177.414	129.000	-69.223	1.00	42.91	RS18
ATOM	4125	C	GLY	60	171.118	128.504	-60.666	1.00	44.85	RS18	ATOM	4178	CD2	LEU	66	178.343	129.250	-66.947	1.00	42.91	RS18
ATOM	4126	O	GLY	60	171.842	127.785	-61.349	1.00	44.85	RS18	ATOM	4179	C	LEU	66	176.336	125.681	-68.210	1.00	50.01	RS18
ATOM	4127	N	LYS	61	169.869	128.800	-60.999	1.00	53.54	RS18	ATOM	4180	O	LEU	66	176.717	125.178	-69.259	1.00	50.01	RS18
ATOM	4128	CA	LYS	61	169.242	128.243	-62.187	1.00	53.54	RS18	ATOM	4181	N	ALA	67	176.589	125.166	-67.010	1.00	53.10	RS18
ATOM	4129	CB	LYS	61	167.821	128.809	-62.336	1.00	64.78	RS18	ATOM	4182	CA	ALA	67	177.375	123.952	-66.816	1.00	53.10	RS18
ATOM	4130	CG	LYS	61	166.999	128.197	-63.459	1.00	64.78	RS18	ATOM	4183	CB	ALA	67	177.110	123.382	-65.435	1.00	46.08	RS18
ATOM	4131	CD	LYS	61	165.566	128.699	-63.436	1.00	64.78	RS18	ATOM	4184	C	ALA	67	177.077	122.898	-67.863	1.00	53.10	RS18
ATOM	4132	CE	LYS	61	164.775	128.127	-64.602	1.00	64.78	RS18	ATOM	4185	O	ALA	67	177.966	122.461	-68.596	1.00	53.10	RS18
ATOM	4133	NZ	LYS	61	163.358	128.599	-64.619	1.00	64.78	RS18	ATOM	4186	N	LYS	68	175.817	122.496	-67.927	1.00	44.08	RS18
ATOM	4134	C	LYS	61	170.061	128.505	-63.447	1.00	53.54	RS18	ATOM	4187	CA	LYS	68	175.377	121.480	-68.868	1.00	44.08	RS18
ATOM	4135	O	LYS	61	170.219	127.615	-64.283	1.00	53.54	RS18	ATOM	4188	CB	LYS	68	173.908	121.151	-68.617	1.00	87.95	RS18
ATOM	4136	N	GLU	62	170.586	129.720	-63.580	1.00	60.59	RS18	ATOM	4189	CG	LYS	68	173.499	119.766	-69.049	1.00	87.95	RS18
ATOM	4137	CA	GLU	62	171.384	130.066	-64.751	1.00	60.59	RS18	ATOM	4190	CD	LYS	68	172.001	119.609	-68.928	1.00	87.95	RS18
ATOM	4138	CB	GLU	62	171.863	131.518	-64.656	1.00	69.96	RS18	ATOM	4191	CE	LYS	68	171.547	118.234	-69.382	1.00	87.95	RS18
ATOM	4139	CG	GLU	62	170.704	132.493	-64.563	1.00	69.96	RS18	ATOM	4192	NZ	LYS	68	170.135	118.267	-69.881	1.00	87.95	RS18
ATOM	4140	CD	GLU	62	171.137	133.939	-64.403	1.00	69.96	RS18	ATOM	4193	C	LYS	68	175.559	121.959	-70.301	1.00	44.08	RS18
ATOM	4141	OE1	GLU	62	172.217	134.194	-63.822	1.00	69.96	RS18	ATOM	4194	O	LYS	68	176.059	121.229	-71.151	1.00	44.08	RS18
ATOM	4142	OE2	GLU	62	170.376	134.828	-64.847	1.00	69.96	RS18	ATOM	4195	N	THR	69	175.154	123.191	-70.569	1.00	73.63	RS18
ATOM	4143	C	GLU	62	172.553	129.090	-64.845	1.00	60.59	RS18	ATOM	4196	CA	THR	69	175.284	123.753	-71.903	1.00	73.63	RS18
ATOM	4144	O	GLU	62	172.759	128.476	-65.901	1.00	60.59	RS18	ATOM	4197	CB	THR	69	174.413	125.018	-72.046	1.00	93.97	RS18
ATOM	4145	N	GLN	63	173.313	128.941	-63.755	1.00	62.93	RS18	ATOM	4198	OG1	THR	69	173.057	124.709	-71.695	1.00	93.97	RS18
ATOM	4146	CA	GLN	63	174.417	127.976	-63.738	1.00	62.93	RS18	ATOM	4199	CG2	THR	69	174.445	125.533	-73.468	1.00	93.97	RS18
ATOM	4147	CB	GLN	63	175.162	127.997	-62.405	1.00	53.64	RS18	ATOM	4200	C	THR	69	176.746	124.118	-72.119	1.00	73.63	RS18
ATOM	4148	CG	GLN	63	175.993	129.239	-62.146	1.00	53.64	RS18	ATOM	4201	O	THR	69	177.064	125.127	-72.737	1.00	73.63	RS18
ATOM	4149	CD	GLN	63	177.457	129.086	-62.568	1.00	53.64	RS18	ATOM	4202	N	ILE	70	177.635	123.292	-71.593	1.00	57.84	RS18
ATOM	4150	OE1	GLN	63	178.125	128.109	-62.207	1.00	53.64	RS18	ATOM	4203	CA	ILE	70	179.066	123.522	-71.699	1.00	57.84	RS18
ATOM	4151	NE2	GLN	63	177.964	130.065	-63.321	1.00	53.64	RS18	ATOM	4204	CB	ILE	70	179.607	124.221	-70.461	1.00	41.50	RS18
ATOM	4152	C	GLN	63	173.699	126.643	-63.888	1.00	62.93	RS18	ATOM	4205	CG2	ILE	70	181.100	124.019	-70.349	1.00	41.50	RS18

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ATOM   4206  CG1 ILE    70     179.297 125.708 -70.541  1.00 41.50      RS18
ATOM   4207  CD1 ILE    70     179.868 126.512 -69.370  1.00 41.50      RS18
ATOM   4208  C   ILE    70     179.741 122.183 -71.815  1.00 57.84      RS18
ATOM   4209  O   ILE    70     180.745 122.033 -72.513  1.00 57.84      RS18
ATOM   4210  N   LYS    71     179.204 121.210 -71.096  1.00 53.66      RS18
ATOM   4211  CA  LYS    71     179.740 119.876 -71.165  1.00 53.66      RS18
ATOM   4212  CB  LYS    71     179.058 118.997 -70.115  1.00 47.83      RS18
ATOM   4213  CG  LYS    71     179.548 119.331 -68.717  1.00 47.83      RS18
ATOM   4214  CD  LYS    71     178.738 118.717 -67.597  1.00 47.83      RS18
ATOM   4215  CE  LYS    71     179.194 119.355 -66.294  1.00 47.83      RS18
ATOM   4216  NZ  LYS    71     178.298 119.076 -65.143  1.00 47.83      RS18
ATOM   4217  C   LYS    71     179.452 119.413 -72.591  1.00 53.66      RS18
ATOM   4218  O   LYS    71     180.217 118.649 -73.186  1.00 53.66      RS18
ATOM   4219  N   ARG    72     178.358 119.915 -73.151  1.00 69.39      RS18
ATOM   4220  CA  ARG    72     177.993 119.573 -74.516  1.00 69.39      RS18
ATOM   4221  CB  ARG    72     176.636 120.179 -74.857  1.00 70.91      RS18
ATOM   4222  CG  ARG    72     175.493 119.577 -74.085  1.00 70.91      RS18
ATOM   4223  CD  ARG    72     174.183 120.232 -74.474  1.00 70.91      RS18
ATOM   4224  NE  ARG    72     173.039 119.521 -73.916  1.00 70.91      RS18
ATOM   4225  CZ  ARG    72     171.774 119.800 -74.207  1.00 70.91      RS18
ATOM   4226  NH1 ARG    72     171.484 120.779 -75.054  1.00 70.91      RS18
ATOM   4227  NH2 ARG    72     170.798 119.094 -73.653  1.00 70.91      RS18
ATOM   4228  C   ARG    72     179.057 120.106 -75.477  1.00 69.39      RS18
ATOM   4229  O   ARG    72     179.604 119.363 -76.291  1.00 69.39      RS18
ATOM   4230  N   ALA    73     179.343 121.399 -75.373  1.00 63.71      RS18
ATOM   4231  CA  ALA    73     180.339 122.041 -76.220  1.00 63.71      RS18
ATOM   4232  CB  ALA    73     180.511 123.492 -75.809  1.00 43.45      RS18
ATOM   4233  C   ALA    73     181.672 121.315 -76.114  1.00 63.71      RS18
ATOM   4234  O   ALA    73     182.429 121.220 -77.085  1.00 63.71      RS18
ATOM   4235  N   ARG    74     181.970 120.814 -74.925  1.00 66.85      RS18
ATOM   4236  CA  ARG    74     183.214 120.097 -74.733  1.00 66.85      RS18
ATOM   4237  CB  ARG    74     183.389 119.712 -73.260  1.00 55.13      RS18
ATOM   4238  CG  ARG    74     183.957 120.839 -72.407  1.00 55.13      RS18
ATOM   4239  CD  ARG    74     184.084 120.444 -70.947  1.00 55.13      RS18
ATOM   4240  NE  ARG    74     184.662 121.523 -70.151  1.00 55.13      RS18
ATOM   4241  CZ  ARG    74     184.634 121.576 -68.825  1.00 55.13      RS18
ATOM   4242  NH1 ARG    74     184.050 120.607 -68.134  1.00 55.13      RS18
ATOM   4243  NH2 ARG    74     185.191 122.600 -68.195  1.00 55.13      RS18
ATOM   4244  C   ARG    74     183.232 118.858 -75.615  1.00 66.85      RS18
ATOM   4245  O   ARG    74     184.189 118.621 -76.351  1.00 66.85      RS18
ATOM   4246  N   ILE    75     182.157 118.081 -75.552  1.00 59.99      RS18
ATOM   4247  CA  ILE    75     182.064 116.862 -76.337  1.00 59.99      RS18
ATOM   4248  CB  ILE    75     180.804 116.073 -75.973  1.00 63.96      RS18
ATOM   4249  CG2 ILE    75     180.726 114.807 -76.806  1.00 63.96      RS18
ATOM   4250  CG1 ILE    75     180.841 115.716 -74.488  1.00 63.96      RS18
ATOM   4251  CD1 ILE    75     179.765 114.740 -74.067  1.00 63.96      RS18
ATOM   4252  C   ILE    75     182.084 117.130 -77.834  1.00 59.99      RS18
ATOM   4253  O   ILE    75     182.516 116.283 -78.616  1.00 59.99      RS18
ATOM   4254  N   LEU    76     181.614 118.301 -78.242  1.00 53.38      RS18
ATOM   4255  CA  LEU    76     181.634 118.636 -79.652  1.00 53.38      RS18
ATOM   4256  CB  LEU    76     180.439 119.521 -80.011  1.00 43.91      RS18
ATOM   4257  CG  LEU    76     179.093 118.805 -79.847  1.00 43.91      RS18
ATOM   4258  CD1 LEU    76     178.008 119.528 -80.634  1.00 43.91      RS18
ATOM   4259  CD2 LEU    76     179.228 117.367 -80.336  1.00 43.91      RS18
ATOM   4260  C   LEU    76     182.940 119.362 -79.911  1.00 53.38      RS18
ATOM   4261  O   LEU    76     182.996 120.312 -80.688  1.00 53.38      RS18
ATOM   4262  N   GLY    77     183.992 118.900 -79.242  1.00 50.76      RS18
ATOM   4263  CA  GLY    77     185.299 119.506 -79.390  1.00 50.76      RS18
ATOM   4264  C   GLY    77     185.254 121.021 -79.482  1.00 50.76      RS18
ATOM   4265  O   GLY    77     186.203 121.636 -79.952  1.00 50.76      RS18
ATOM   4266  N   LEU    78     184.173 121.640 -79.025  1.00 49.99      RS18
ATOM   4267  CA  LEU    78     184.077 123.085 -79.115  1.00 49.99      RS18
ATOM   4268  CB  LEU    78     182.623 123.508 -79.299  1.00 68.20      RS18
ATOM   4269  CG  LEU    78     182.020 123.073 -80.634  1.00 68.20      RS18
ATOM   4270  CD1 LEU    78     180.588 123.567 -80.742  1.00 68.20      RS18
ATOM   4271  CD2 LEU    78     182.875 123.616 -81.768  1.00 68.20      RS18
ATOM   4272  C   LEU    78     184.690 123.829 -77.941  1.00 49.99      RS18
ATOM   4273  O   LEU    78     185.122 124.977 -78.086  1.00 49.99      RS18
ATOM   4274  N   LEU    79     184.719 123.191 -76.776  1.00 61.73      RS18
ATOM   4275  CA  LEU    79     185.312 123.804 -75.590  1.00 61.73      RS18
ATOM   4276  CB  LEU    79     184.232 124.219 -74.601  1.00 59.86      RS18
ATOM   4277  CG  LEU    79     183.395 125.417 -75.029  1.00 59.86      RS18
ATOM   4278  CD1 LEU    79     182.340 125.709 -73.972  1.00 59.86      RS18
ATOM   4279  CD2 LEU    79     184.301 126.614 -75.226  1.00 59.86      RS18
ATOM   4280  C   LEU    79     186.249 122.800 -74.945  1.00 61.73      RS18
ATOM   4281  O   LEU    79     185.978 121.604 -74.931  1.00 61.73      RS18
ATOM   4282  N   PRO    80     187.368 123.272 -74.396  1.00 45.52      RS18
ATOM   4283  CD  PRO    80     187.744 124.677 -74.151  1.00 37.84      RS18
ATOM   4284  CA  PRO    80     188.317 122.358 -73.766  1.00 45.52      RS18
ATOM   4285  CB  PRO    80     189.533 123.237 -73.574  1.00 37.84      RS18
ATOM   4286  CG  PRO    80     188.895 124.558 -73.156  1.00 37.84      RS18
ATOM   4287  C   PRO    80     187.815 121.812 -72.436  1.00 45.52      RS18
ATOM   4288  O   PRO    80     186.957 122.412 -71.793  1.00 45.52      RS18
ATOM   4289  N   PHE    81     188.339 120.661 -72.036  1.00 65.60      RS18
ATOM   4290  CA  PHE    81     187.986 120.095 -70.750  1.00 65.60      RS18
ATOM   4291  CB  PHE    81     188.041 118.577 -70.757  1.00 57.06      RS18
ATOM   4292  CG  PHE    81     186.971 117.919 -71.566  1.00 57.06      RS18
ATOM   4293  CD1 PHE    81     187.001 117.960 -72.955  1.00 57.06      RS18
ATOM   4294  CD2 PHE    81     185.978 117.170 -70.939  1.00 57.06      RS18
ATOM   4295  CE1 PHE    81     186.064 117.254 -73.705  1.00 57.06      RS18
ATOM   4296  CE2 PHE    81     185.044 116.469 -71.680  1.00 57.06      RS18
ATOM   4297  CZ  PHE    81     185.087 116.507 -73.061  1.00 57.06      RS18
ATOM   4298  C   PHE    81     189.065 120.585 -69.794  1.00 65.60      RS18
ATOM   4299  O   PHE    81     188.833 120.701 -68.594  1.00 65.60      RS18
ATOM   4300  N   THR    82     190.250 120.866 -70.338  1.00 75.91      RS18
ATOM   4301  CA  THR    82     191.380 121.323 -69.532  1.00 75.91      RS18
ATOM   4302  CB  THR    82     192.121 120.140 -68.897  1.00 91.50      RS18
ATOM   4303  OG1 THR    82     191.183 119.293 -68.228  1.00 91.50      RS18
ATOM   4304  CG2 THR    82     193.148 120.636 -67.890  1.00 91.50      RS18
ATOM   4305  C   THR    82     192.415 122.109 -70.326  1.00 75.91      RS18
ATOM   4306  O   THR    82     192.606 121.882 -71.514  1.00 75.91      RS18
ATOM   4307  N   GLU    83     193.095 123.024 -69.649  1.00 60.19      RS18
ATOM   4308  CA  GLU    83     194.125 123.835 -70.271  1.00 60.19      RS18
ATOM   4309  CB  GLU    83     193.618 125.249 -70.551  1.00129.06      RS18
ATOM   4310  CG  GLU    83     192.526 125.330 -71.593  1.00129.06      RS18
ATOM   4311  CD  GLU    83     192.303 126.749 -72.076  1.00129.06      RS18
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ATOM	4312	OE1	GLU	83	192.159	127.647	-71.223	1.00129.06	RS18	ATOM	4365	N	PRO	2	256.065	111.615	15.902	1.00122.90	SS19
ATOM	4313	OE2	GLU	83	192.269	126.967	-73.306	1.00129.06	RS18	ATOM	4366	CD	PRO	2	255.694	111.725	14.480	1.00138.04	SS19
ATOM	4314	C	GLU	83	195.310	123.915	-69.329	1.00 60.19	RS18	ATOM	4367	CA	PRO	2	256.429	112.953	16.434	1.00122.90	SS19
ATOM	4315	O	GLU	83	195.153	123.777	-68.116	1.00 60.19	RS18	ATOM	4368	N	ARG	3	255.301	112.515	18.552	1.00193.97	SS19
ATOM	4316	N	LYS	84	196.497	124.134	-69.891	1.00 63.19	RS18	ATOM	4369	CA	ARG	3	254.443	112.779	19.719	1.00193.97	SS19
ATOM	4317	CA	LYS	84	197.709	124.247	-69.095	1.00 63.19	RS18	ATOM	4370	CB	ARG	3	254.541	111.602	20.704	1.00177.60	SS19
ATOM	4318	CB	LYS	84	198.925	123.958	-69.971	1.00103.64	RS18	ATOM	4371	CG	ARG	3	254.001	110.275	20.146	1.00177.60	SS19
ATOM	4319	CG	LYS	84	198.877	122.585	-70.612	1.00103.64	RS18	ATOM	4372	CD	ARG	3	254.225	109.089	21.096	1.00177.60	SS19
ATOM	4320	CD	LYS	84	200.108	122.309	-71.460	1.00103.64	RS18	ATOM	4373	NE	ARG	3	253.540	107.875	20.640	1.00177.60	SS19
ATOM	4321	CE	LYS	84	200.035	120.921	-72.098	1.00103.64	RS18	ATOM	4374	CZ	ARG	3	253.600	106.691	21.250	1.00177.60	SS19
ATOM	4322	NZ	LYS	84	201.214	120.607	-72.961	1.00103.64	RS18	ATOM	4375	NH1	ARG	3	254.322	106.537	22.354	1.00177.60	SS19
ATOM	4323	C	LYS	84	197.780	125.655	-68.507	1.00 63.19	RS18	ATOM	4376	NH2	ARG	3	252.926	105.656	20.762	1.00177.60	SS19
ATOM	4324	O	LYS	84	197.308	126.622	-69.113	1.00 63.19	RS18	ATOM	4377	C	ARG	3	254.805	114.101	20.415	1.00193.97	SS19
ATOM	4325	N	LEU	85	198.344	125.772	-67.313	1.00 89.08	RS18	ATOM	4378	O	ARG	3	255.889	114.639	20.180	1.00193.97	SS19
ATOM	4326	CA	LEU	85	198.453	127.074	-66.675	1.00 89.08	RS18	ATOM	4379	N	SER	4	253.918	114.625	21.268	1.00 98.70	SS19
ATOM	4327	CB	LEU	85	198.339	126.927	-65.159	1.00101.54	RS18	ATOM	4380	CA	SER	4	254.208	115.898	21.926	1.00 98.70	SS19
ATOM	4328	CG	LEU	85	198.495	128.197	-64.323	1.00101.54	RS18	ATOM	4381	CB	SER	4	254.124	117.021	20.901	1.00113.30	SS19
ATOM	4329	CD1	LEU	85	197.720	129.355	-64.945	1.00101.54	RS18	ATOM	4382	OG	SER	4	252.792	117.158	20.435	1.00113.30	SS19
ATOM	4330	CD2	LEU	85	198.008	127.908	-62.909	1.00101.54	RS18	ATOM	4383	C	SER	4	253.368	116.310	23.134	1.00 98.70	SS19
ATOM	4331	C	LEU	85	199.774	127.725	-67.043	1.00 89.08	RS18	ATOM	4384	O	SER	4	252.139	116.375	23.069	1.00 98.70	SS19
ATOM	4332	O	LEU	85	200.836	127.134	-66.867	1.00 89.08	RS18	ATOM	4385	N	LEU	5	254.062	116.619	24.225	1.00104.04	SS19
ATOM	4333	N	VAL	86	199.695	128.947	-67.557	1.00 95.85	RS18	ATOM	4386	CA	LEU	5	253.458	117.074	25.469	1.00104.04	SS19
ATOM	4334	CA	VAL	86	200.875	129.694	-67.975	1.00 95.85	RS18	ATOM	4387	CB	LEU	5	253.744	116.077	26.598	1.00125.04	SS19
ATOM	4335	CB	VAL	86	200.664	130.266	-69.378	1.00 62.31	RS18	ATOM	4388	CG	LEU	5	253.554	114.586	26.260	1.00125.04	SS19
ATOM	4336	CG1	VAL	86	201.983	130.714	-69.964	1.00 62.31	RS18	ATOM	4389	CD1	LEU	5	253.760	113.731	27.502	1.00125.04	SS19
ATOM	4337	CG2	VAL	86	200.017	129.222	-70.259	1.00 62.31	RS18	ATOM	4390	CD2	LEU	5	252.160	114.353	25.702	1.00125.04	SS19
ATOM	4338	C	VAL	86	201.155	130.840	-67.009	1.00 95.85	RS18	ATOM	4391	C	LEU	5	254.179	118.402	25.704	1.00104.04	SS19
ATOM	4339	O	VAL	86	200.352	131.109	-66.117	1.00 95.85	RS18	ATOM	4392	O	LEU	5	253.982	119.330	24.926	1.00104.04	SS19
ATOM	4340	N	ARG	87	202.287	131.518	-67.187	1.00119.44	RS18	ATOM	4393	N	LYS	6	255.025	118.497	26.734	1.00100.80	SS19
ATOM	4341	CA	ARG	87	202.649	132.627	-66.311	1.00119.44	RS18	ATOM	4394	CA	LYS	6	255.785	119.731	27.013	1.00100.80	SS19
ATOM	4342	CB	ARG	87	201.511	133.658	-66.274	1.00162.46	RS18	ATOM	4395	CB	LYS	6	254.886	120.825	27.597	1.00 95.66	SS19
ATOM	4343	CG	ARG	87	201.873	135.048	-66.773	1.00162.46	RS18	ATOM	4396	CG	LYS	6	253.775	121.346	26.716	1.00 95.66	SS19
ATOM	4344	CD	ARG	87	202.807	135.763	-65.809	1.00162.46	RS18	ATOM	4397	CD	LYS	6	252.482	121.399	27.528	1.00 95.66	SS19
ATOM	4345	NE	ARG	87	203.261	137.047	-66.336	1.00162.46	RS18	ATOM	4398	CE	LYS	6	251.377	122.182	26.846	1.00 95.66	SS19
ATOM	4346	CZ	ARG	87	203.952	137.193	-67.463	1.00162.46	RS18	ATOM	4399	NZ	LYS	6	251.663	123.646	26.741	1.00 95.66	SS19
ATOM	4347	NH1	ARG	87	204.272	136.133	-68.193	1.00162.46	RS18	ATOM	4400	C	LYS	6	256.929	119.501	28.010	1.00100.80	SS19
ATOM	4348	NH2	ARG	87	204.330	138.401	-67.858	1.00162.46	RS18	ATOM	4401	O	LYS	6	258.054	119.142	27.639	1.00100.80	SS19
ATOM	4349	C	ARG	87	202.857	132.036	-64.923	1.00119.44	RS18	ATOM	4402	N	LYS	7	256.626	119.740	29.285	1.00103.83	SS19
ATOM	4350	O	ARG	87	201.971	132.113	-64.072	1.00119.44	RS18	ATOM	4403	CA	LYS	7	257.582	119.580	30.376	1.00103.83	SS19
ATOM	4351	N	LYS	88	204.026	131.449	-64.691	1.00 92.63	RS18	ATOM	4404	CB	LYS	7	258.132	120.935	30.792	1.00 53.67	SS19
ATOM	4352	CA	LYS	88	204.312	130.817	-63.403	1.00 92.63	RS18	ATOM	4405	CG	LYS	7	258.675	121.721	29.626	1.00 53.67	SS19
ATOM	4353	CB	LYS	88	204.050	129.309	-63.523	1.00 89.21	RS18	ATOM	4406	CD	LYS	7	258.670	123.212	29.926	1.00 53.67	SS19
ATOM	4354	CG	LYS	88	204.285	128.499	-62.261	1.00 89.21	RS18	ATOM	4407	CE	LYS	7	257.287	123.705	30.333	1.00 53.67	SS19
ATOM	4355	CD	LYS	88	203.937	127.044	-62.501	1.00 89.21	RS18	ATOM	4408	NZ	LYS	7	257.163	125.188	30.169	1.00 53.67	SS19
ATOM	4356	CE	LYS	88	204.170	126.226	-61.250	1.00 89.21	RS18	ATOM	4409	C	LYS	7	256.863	118.951	31.556	1.00103.83	SS19
ATOM	4357	NZ	LYS	88	203.747	124.815	-61.443	1.00 89.21	RS18	ATOM	4410	O	LYS	7	256.168	119.632	32.310	1.00103.83	SS19
ATOM	4358	C	LYS	88	205.736	131.075	-62.894	1.00 92.63	RS18	ATOM	4411	N	GLY	8	257.029	117.643	31.701	1.00 78.63	SS19
ATOM	4359	O	LYS	88	206.383	132.016	-63.404	1.00 92.63	RS18	ATOM	4412	CA	GLY	8	256.389	116.943	32.789	1.00 78.63	SS19
ATOM	4360	OXT	LYS	88	206.188	130.349	-61.976	1.00118.28	RS18	ATOM	4413	C	GLY	8	255.754	115.648	32.338	1.00 78.63	SS19
ATOM	4361	CB	PRO	2	256.352	113.927	15.263	1.00138.04	SS19	ATOM	4414	O	GLY	8	254.923	115.093	33.060	1.00 78.63	SS19
ATOM	4362	CG	PRO	2	255.355	113.219	14.342	1.00138.04	SS19	ATOM	4415	N	VAL	9	256.148	115.159	31.162	1.00128.59	SS19
ATOM	4363	C	PRO	2	255.513	113.403	17.577	1.00122.90	SS19	ATOM	4416	CA	VAL	9	255.587	113.923	30.622	1.00128.59	SS19
ATOM	4364	O	PRO	2	255.017	114.533	17.569	1.00122.90	SS19	ATOM	4417	CB	VAL	9	256.411	112.696	31.043	1.00 66.87	SS19

ATOM	4418	CG1	VAL	9	255.929	111.471	30.309	1.00	66.87	SS19	ATOM	4471	CD2	LEU	15	249.104	102.486	36.216	1.00	94.64	SS19
ATOM	4419	CG2	VAL	9	257.874	112.932	30.750	1.00	66.87	SS19	ATOM	4472	C	LEU	15	251.179	104.073	39.339	1.00	82.91	SS19
ATOM	4420	C	VAL	9	254.195	113.800	31.214	1.00	128.59	SS19	ATOM	4473	O	LEU	15	251.562	103.008	39.818	1.00	82.91	SS19
ATOM	4421	O	VAL	9	253.352	114.679	31.011	1.00	128.59	SS19	ATOM	4474	N	LEU	16	251.918	105.179	39.313	1.00	89.62	SS19
ATOM	4422	N	PHE	10	253.969	112.722	31.961	1.00	73.06	SS19	ATOM	4475	CA	LEU	16	253.256	105.202	39.867	1.00	89.62	SS19
ATOM	4423	CA	PHE	10	252.693	112.503	32.637	1.00	73.06	SS19	ATOM	4476	CB	LEU	16	253.784	106.634	39.955	1.00	80.97	SS19
ATOM	4424	CB	PHE	10	251.526	113.104	31.860	1.00	63.72	SS19	ATOM	4477	CG	LEU	16	254.307	107.209	38.634	1.00	80.97	SS19
ATOM	4425	CG	PHE	10	250.248	113.144	32.645	1.00	63.72	SS19	ATOM	4478	CD1	LEU	16	254.659	108.676	38.810	1.00	80.97	SS19
ATOM	4426	CD1	PHE	10	249.774	114.347	33.162	1.00	63.72	SS19	ATOM	4479	CD2	LEU	16	255.524	106.414	38.171	1.00	80.97	SS19
ATOM	4427	CD2	PHE	10	249.518	111.972	32.879	1.00	63.72	SS19	ATOM	4480	C	LEU	16	253.184	104.577	41.237	1.00	89.62	SS19
ATOM	4428	CE1	PHE	10	248.587	114.384	33.900	1.00	63.72	SS19	ATOM	4481	O	LEU	16	253.894	103.613	41.518	1.00	89.62	SS19
ATOM	4429	CE2	PHE	10	248.331	111.995	33.614	1.00	63.72	SS19	ATOM	4482	N	GLU	17	252.315	105.109	42.090	1.00	77.14	SS19
ATOM	4430	CZ	PHE	10	247.864	113.201	34.124	1.00	63.72	SS19	ATOM	4483	CA	GLU	17	252.177	104.533	43.419	1.00	77.14	SS19
ATOM	4431	C	PHE	10	252.351	111.057	32.939	1.00	73.06	SS19	ATOM	4484	CB	GLU	17	250.960	105.096	44.151	1.00	135.93	SS19
ATOM	4432	O	PHE	10	252.346	110.196	32.052	1.00	73.06	SS19	ATOM	4485	CG	GLU	17	250.906	106.605	44.244	1.00	135.93	SS19
ATOM	4433	N	VAL	11	252.038	110.820	34.211	1.00	79.71	SS19	ATOM	4486	CD	GLU	17	249.880	107.074	45.262	1.00	135.93	SS19
ATOM	4434	CA	VAL	11	251.649	109.507	34.700	1.00	79.71	SS19	ATOM	4487	OE1	GLU	17	248.797	106.453	45.349	1.00	135.93	SS19
ATOM	4435	CB	VAL	11	252.832	108.760	35.345	1.00	59.52	SS19	ATOM	4488	OE2	GLU	17	250.155	108.067	45.970	1.00	135.93	SS19
ATOM	4436	CG1	VAL	11	252.416	107.332	35.673	1.00	59.52	SS19	ATOM	4489	C	GLU	17	251.978	103.041	43.189	1.00	77.14	SS19
ATOM	4437	CG2	VAL	11	254.038	108.777	34.411	1.00	59.52	SS19	ATOM	4490	O	GLU	17	252.879	102.243	43.443	1.00	77.14	SS19
ATOM	4438	C	VAL	11	250.578	109.725	35.759	1.00	79.71	SS19	ATOM	4491	N	LYS	18	250.804	102.687	42.671	1.00	93.26	SS19
ATOM	4439	O	VAL	11	250.738	110.570	36.646	1.00	79.71	SS19	ATOM	4492	CA	LYS	18	250.448	101.301	42.390	1.00	93.26	SS19
ATOM	4440	N	ASP	12	249.482	108.981	35.656	1.00	101.36	SS19	ATOM	4493	CB	LYS	18	249.436	101.243	41.243	1.00	129.13	SS19
ATOM	4441	CA	ASP	12	248.397	109.108	36.619	1.00	101.36	SS19	ATOM	4494	CG	LYS	18	248.838	99.864	40.998	1.00	129.13	SS19
ATOM	4442	CB	ASP	12	247.242	108.170	36.265	1.00	157.17	SS19	ATOM	4495	CD	LYS	18	247.920	99.433	42.140	1.00	129.13	SS19
ATOM	4443	CG	ASP	12	246.629	108.489	34.918	1.00	157.17	SS19	ATOM	4496	CE	LYS	18	247.269	98.079	41.850	1.00	129.13	SS19
ATOM	4444	OD1	ASP	12	247.264	108.185	33.887	1.00	157.17	SS19	ATOM	4497	NZ	LYS	18	246.380	97.607	42.955	1.00	129.13	SS19
ATOM	4445	OD2	ASP	12	245.515	109.054	34.890	1.00	157.17	SS19	ATOM	4498	C	LYS	18	251.675	100.470	42.034	1.00	93.26	SS19
ATOM	4446	C	ASP	12	248.917	108.788	38.008	1.00	101.36	SS19	ATOM	4499	O	LYS	18	251.786	99.316	42.445	1.00	93.26	SS19
ATOM	4447	O	ASP	12	249.230	107.640	38.323	1.00	101.36	SS19	ATOM	4500	N	VAL	19	252.592	101.061	41.272	1.00	124.79	SS19
ATOM	4448	N	ASP	13	249.018	109.824	38.829	1.00	119.80	SS19	ATOM	4501	CA	VAL	19	253.818	100.374	40.870	1.00	124.79	SS19
ATOM	4449	CA	ASP	13	249.507	109.679	40.186	1.00	119.80	SS19	ATOM	4502	CB	VAL	19	253.886	100.179	39.336	1.00	138.83	SS19
ATOM	4450	CB	ASP	13	249.530	111.043	40.874	1.00	164.11	SS19	ATOM	4503	CG1	VAL	19	255.230	99.586	38.945	1.00	138.83	SS19
ATOM	4451	CG	ASP	13	250.366	111.042	42.132	1.00	164.11	SS19	ATOM	4504	CG2	VAL	19	252.763	99.251	38.882	1.00	138.83	SS19
ATOM	4452	OD1	ASP	13	251.559	110.677	42.047	1.00	164.11	SS19	ATOM	4505	C	VAL	19	255.057	101.131	41.342	1.00	124.79	SS19
ATOM	4453	OD2	ASP	13	249.834	111.407	43.203	1.00	164.11	SS19	ATOM	4506	O	VAL	19	255.710	101.848	40.582	1.00	124.79	SS19
ATOM	4454	C	ASP	13	248.616	108.710	40.949	1.00	119.80	SS19	ATOM	4507	N	LEU	20	255.349	100.953	42.622	1.00	134.21	SS19
ATOM	4455	O	ASP	13	247.758	109.115	41.726	1.00	119.80	SS19	ATOM	4508	CA	LEU	20	256.482	101.550	43.316	1.00	134.21	SS19
ATOM	4456	N	HIS	14	248.824	107.425	40.695	1.00	90.73	SS19	ATOM	4509	CB	LEU	20	256.255	103.043	43.579	1.00	79.54	SS19
ATOM	4457	CA	HIS	14	248.076	106.347	41.330	1.00	90.73	SS19	ATOM	4510	CG	LEU	20	256.613	104.002	42.444	1.00	79.54	SS19
ATOM	4458	CB	HIS	14	246.552	106.538	41.136	1.00	112.42	SS19	ATOM	4511	CD1	LEU	20	256.224	105.412	42.822	1.00	79.54	SS19
ATOM	4459	CG	HIS	14	245.953	105.795	39.975	1.00	112.42	SS19	ATOM	4512	CD2	LEU	20	258.101	103.916	42.158	1.00	79.54	SS19
ATOM	4460	CD2	HIS	14	246.076	104.507	39.571	1.00	112.42	SS19	ATOM	4513	C	LEU	20	256.440	100.781	44.617	1.00	134.21	SS19
ATOM	4461	ND1	HIS	14	245.025	106.371	39.134	1.00	112.42	SS19	ATOM	4514	O	LEU	20	257.467	100.484	45.227	1.00	134.21	SS19
ATOM	4462	CE1	HIS	14	244.604	105.472	38.262	1.00	112.42	SS19	ATOM	4515	N	GLU	21	255.215	100.464	45.022	1.00	127.65	SS19
ATOM	4463	NE2	HIS	14	245.225	104.332	38.506	1.00	112.42	SS19	ATOM	4516	CA	GLU	21	254.969	99.690	46.221	1.00	127.65	SS19
ATOM	4464	C	HIS	14	248.603	105.088	40.660	1.00	90.73	SS19	ATOM	4517	CB	GLU	21	253.471	99.653	46.531	1.00	160.02	SS19
ATOM	4465	O	HIS	14	248.485	103.978	41.183	1.00	90.73	SS19	ATOM	4518	CG	GLU	21	252.842	101.022	46.755	1.00	160.02	SS19
ATOM	4466	N	LEU	15	249.190	105.288	39.485	1.00	82.91	SS19	ATOM	4519	CD	GLU	21	251.356	100.935	47.071	1.00	160.02	SS19
ATOM	4467	CA	LEU	15	249.798	104.208	38.728	1.00	82.91	SS19	ATOM	4520	OE1	GLU	21	250.600	100.401	46.231	1.00	160.02	SS19
ATOM	4468	CB	LEU	15	249.951	104.598	37.260	1.00	94.64	SS19	ATOM	4521	OE2	GLU	21	250.947	101.403	48.156	1.00	160.02	SS19
ATOM	4469	CG	LEU	15	249.021	104.005	36.209	1.00	94.64	SS19	ATOM	4522	C	GLU	21	255.468	98.297	45.867	1.00	127.65	SS19
ATOM	4470	CD1	LEU	15	249.435	104.546	34.857	1.00	94.64	SS19	ATOM	4523	O	GLU	21	255.875	97.523	46.737	1.00	127.65	SS19

ATOM	4524	N	LEU	22	255.433	97.990	44.572	1.00120.77	SS19	ATOM	4577	CA	ARG	29	251.614	89.476	38.484	1.00189.36	SS19
ATOM	4525	CA	LEU	22	255.898	96.703	44.072	1.00120.77	SS19	ATOM	4578	CB	ARG	29	250.945	88.233	39.086	1.00181.64	SS19
ATOM	4526	CB	LEU	22	255.114	96.293	42.826	1.00137.18	SS19	ATOM	4579	CG	ARG	29	250.520	87.181	38.063	1.00181.64	SS19
ATOM	4527	CG	LEU	22	253.597	96.191	42.978	1.00137.18	SS19	ATOM	4580	CD	ARG	29	250.316	85.816	38.719	1.00181.64	SS19
ATOM	4528	CD1	LEU	22	253.008	95.662	41.682	1.00137.18	SS19	ATOM	4581	NE	ARG	29	251.571	85.279	39.246	1.00181.64	SS19
ATOM	4529	CD2	LEU	22	253.240	95.277	44.145	1.00137.18	SS19	ATOM	4582	CZ	ARG	29	251.685	84.118	39.886	1.00181.64	SS19
ATOM	4530	C	LEU	22	257.369	96.867	43.727	1.00120.77	SS19	ATOM	4583	NH1	ARG	29	250.614	83.358	40.084	1.00181.64	SS19
ATOM	4531	O	LEU	22	258.109	95.891	43.598	1.00120.77	SS19	ATOM	4584	NH2	ARG	29	252.870	83.717	40.328	1.00181.64	SS19
ATOM	4532	N	ASN	23	257.776	98.121	43.571	1.00122.99	SS19	ATOM	4585	C	ARG	29	250.667	90.161	37.499	1.00189.36	SS19
ATOM	4533	CA	ASN	23	259.159	98.453	43.270	1.00122.99	SS19	ATOM	4586	O	ARG	29	250.643	89.820	36.315	1.00189.36	SS19
ATOM	4534	CB	ASN	23	259.223	99.668	42.345	1.00119.45	SS19	ATOM	4587	N	LEU	30	249.890	91.121	37.995	1.00 96.35	SS19
ATOM	4535	CG	ASN	23	258.862	99.326	40.923	1.00119.45	SS19	ATOM	4588	CA	LEU	30	248.949	91.870	37.165	1.00 96.35	SS19
ATOM	4536	OD1	ASN	23	257.803	98.760	40.660	1.00119.45	SS19	ATOM	4589	CB	LEU	30	247.717	91.022	36.820	1.00113.59	SS19
ATOM	4537	ND2	ASN	23	259.745	99.664	39.993	1.00119.45	SS19	ATOM	4590	CG	LEU	30	247.840	90.023	35.660	1.00113.59	SS19
ATOM	4538	C	ASN	23	259.871	98.752	44.583	1.00122.99	SS19	ATOM	4591	CD1	LEU	30	246.554	89.225	35.516	1.00113.59	SS19
ATOM	4539	O	ASN	23	260.688	99.665	44.678	1.00122.99	SS19	ATOM	4592	CD2	LEU	30	248.137	90.766	34.373	1.00113.59	SS19
ATOM	4540	N	ALA	24	259.527	97.976	45.600	1.00130.59	SS19	ATOM	4593	C	LEU	30	248.512	93.139	37.877	1.00 96.35	SS19
ATOM	4541	CA	ALA	24	260.112	98.101	46.925	1.00130.59	SS19	ATOM	4594	O	LEU	30	248.540	93.211	39.099	1.00 96.35	SS19
ATOM	4542	CB	ALA	24	259.232	98.944	47.809	1.00 88.60	SS19	ATOM	4595	N	ILE	31	248.114	94.138	37.100	1.00107.96	SS19
ATOM	4543	C	ALA	24	260.149	96.675	47.430	1.00130.59	SS19	ATOM	4596	CA	ILE	31	247.673	95.417	37.641	1.00107.96	SS19
ATOM	4544	O	ALA	24	260.661	96.381	48.511	1.00130.59	SS19	ATOM	4597	CB	ILE	31	248.857	96.405	37.780	1.00 81.31	SS19
ATOM	4545	N	LYS	25	259.575	95.798	46.616	1.00113.73	SS19	ATOM	4598	CG2	ILE	31	248.349	97.803	38.112	1.00 81.31	SS19
ATOM	4546	CA	LYS	25	259.512	94.377	46.895	1.00113.73	SS19	ATOM	4599	CG1	ILE	31	249.817	95.910	38.860	1.00 81.31	SS19
ATOM	4547	CB	LYS	25	258.158	94.011	47.503	1.00127.83	SS19	ATOM	4600	CD1	ILE	31	249.168	95.736	40.235	1.00 81.31	SS19
ATOM	4548	CG	LYS	25	258.090	92.580	48.007	1.00127.83	SS19	ATOM	4601	C	ILE	31	246.638	96.014	36.698	1.00107.96	SS19
ATOM	4549	CD	LYS	25	256.656	92.131	48.242	1.00127.83	SS19	ATOM	4602	O	ILE	31	246.898	96.171	35.504	1.00107.96	SS19
ATOM	4550	CE	LYS	25	256.605	90.638	48.528	1.00127.83	SS19	ATOM	4603	N	LYS	32	245.471	96.350	37.238	1.00125.23	SS19
ATOM	4551	NZ	LYS	25	255.207	90.148	48.665	1.00127.83	SS19	ATOM	4604	CA	LYS	32	244.390	96.919	36.444	1.00125.23	SS19
ATOM	4552	C	LYS	25	259.696	93.684	45.547	1.00113.73	SS19	ATOM	4605	CB	LYS	32	243.117	97.024	37.291	1.00103.42	SS19
ATOM	4553	O	LYS	25	260.569	94.071	44.768	1.00113.73	SS19	ATOM	4606	CG	LYS	32	242.569	95.687	37.782	1.00103.42	SS19
ATOM	4554	N	GLY	26	258.867	92.685	45.259	1.00115.53	SS19	ATOM	4607	CD	LYS	32	242.280	94.745	36.622	1.00103.42	SS19
ATOM	4555	CA	GLY	26	258.996	91.971	44.003	1.00115.53	SS19	ATOM	4608	CE	LYS	32	241.675	93.436	37.099	1.00103.42	SS19
ATOM	4556	C	GLY	26	257.794	92.036	43.082	1.00115.53	SS19	ATOM	4609	NZ	LYS	32	241.467	92.491	35.962	1.00103.42	SS19
ATOM	4557	O	GLY	26	256.987	91.107	43.057	1.00115.53	SS19	ATOM	4610	C	LYS	32	244.728	98.289	35.852	1.00125.23	SS19
ATOM	4558	N	GLU	27	257.683	93.128	42.324	1.00140.78	SS19	ATOM	4611	O	LYS	32	245.643	98.416	35.038	1.00125.23	SS19
ATOM	4559	CA	GLU	27	256.593	93.335	41.362	1.00140.78	SS19	ATOM	4612	N	THR	33	243.970	99.299	36.271	1.00 96.07	SS19
ATOM	4560	CB	GLU	27	256.943	92.683	40.020	1.00124.78	SS19	ATOM	4613	CA	THR	33	244.110	100.688	35.829	1.00 96.07	SS19
ATOM	4561	CG	GLU	27	258.368	92.893	39.541	1.00124.78	SS19	ATOM	4614	CB	THR	33	245.595	101.102	35.600	1.00 83.90	SS19
ATOM	4562	CD	GLU	27	258.694	92.011	38.346	1.00124.78	SS19	ATOM	4615	OG1	THR	33	245.762	102.478	35.961	1.00 83.90	SS19
ATOM	4563	OE1	GLU	27	258.359	90.805	38.395	1.00124.78	SS19	ATOM	4616	CG2	THR	33	245.994	100.943	34.139	1.00 83.90	SS19
ATOM	4564	OE2	GLU	27	259.285	92.514	37.366	1.00124.78	SS19	ATOM	4617	C	THR	33	243.312	100.959	34.560	1.00 96.07	SS19
ATOM	4565	C	GLU	27	255.266	92.754	41.848	1.00140.78	SS19	ATOM	4618	O	THR	33	243.300	100.157	33.624	1.00 96.07	SS19
ATOM	4566	O	GLU	27	254.756	93.136	42.902	1.00140.78	SS19	ATOM	4619	N	TRP	34	242.628	102.095	34.556	1.00115.53	SS19
ATOM	4567	N	LYS	28	254.718	91.835	41.054	1.00 99.15	SS19	ATOM	4620	CA	TRP	34	241.822	102.517	33.423	1.00115.53	SS19
ATOM	4568	CA	LYS	28	253.466	91.151	41.364	1.00 99.15	SS19	ATOM	4621	CB	TRP	34	240.498	103.110	33.905	1.00 91.56	SS19
ATOM	4569	CB	LYS	28	252.304	92.140	41.512	1.00139.17	SS19	ATOM	4622	CG	TRP	34	239.424	102.104	34.152	1.00 91.56	SS19
ATOM	4570	CG	LYS	28	251.873	92.351	42.962	1.00139.17	SS19	ATOM	4623	CD2	TRP	34	239.421	101.074	35.145	1.00 91.56	SS19
ATOM	4571	CD	LYS	28	250.445	92.872	43.067	1.00139.17	SS19	ATOM	4624	CE2	TRP	34	238.213	100.362	35.002	1.00 91.56	SS19
ATOM	4572	CE	LYS	28	249.435	91.822	42.608	1.00139.17	SS19	ATOM	4625	CE3	TRP	34	240.321	100.682	36.142	1.00 91.56	SS19
ATOM	4573	NZ	LYS	28	248.026	92.294	42.757	1.00139.17	SS19	ATOM	4626	CD1	TRP	34	238.255	101.981	33.469	1.00 91.56	SS19
ATOM	4574	C	LYS	28	253.125	90.129	40.288	1.00 99.15	SS19	ATOM	4627	NE1	TRP	34	237.520	100.937	33.972	1.00 91.56	SS19
ATOM	4575	O	LYS	28	253.826	89.128	40.137	1.00 99.15	SS19	ATOM	4628	CZ2	TRP	34	237.880	99.280	35.817	1.00 91.56	SS19
ATOM	4576	N	ARG	29	252.045	90.380	39.549	1.00189.36	SS19	ATOM	4629	CZ3	TRP	34	239.989	99.603	36.955	1.00 91.56	SS19

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ATOM   4630  CH2 TRP   34     238.778  98.915  36.786  1.00 91.56      SS19
ATOM   4631  C   TRP   34     242.588 103.582  32.666  1.00115.53      SS19
ATOM   4632  O   TRP   34     242.543 103.650  31.440  1.00115.53      SS19
ATOM   4633  N   SER   35     243.297 104.410  33.423  1.00108.95      SS19
ATOM   4634  CA  SER   35     244.075 105.510  32.878  1.00108.95      SS19
ATOM   4635  CB  SER   35     245.180 105.902  33.856  1.00 87.50      SS19
ATOM   4636  OG  SER   35     246.080 104.830  34.042  1.00 87.50      SS19
ATOM   4637  C   SER   35     244.690 105.255  31.512  1.00108.95      SS19
ATOM   4638  O   SER   35     244.109 105.615  30.488  1.00108.95      SS19
ATOM   4639  N   ARG   36     245.873 104.645  31.505  1.00 92.08      SS19
ATOM   4640  CA  ARG   36     246.609 104.371  30.271  1.00 92.08      SS19
ATOM   4641  CB  ARG   36     245.987 103.194  29.515  1.00115.29      SS19
ATOM   4642  CG  ARG   36     245.303 103.546  28.221  1.00115.29      SS19
ATOM   4643  CD  ARG   36     243.886 103.957  28.466  1.00115.29      SS19
ATOM   4644  NE  ARG   36     243.304 104.499  27.255  1.00115.29      SS19
ATOM   4645  CZ  ARG   36     242.004 104.632  27.052  1.00115.29      SS19
ATOM   4646  NH1 ARG   36     241.143 104.261  27.987  1.00115.29      SS19
ATOM   4647  NH2 ARG   36     241.571 105.095  25.892  1.00115.29      SS19
ATOM   4648  C   ARG   36     246.650 105.635  29.404  1.00 92.08      SS19
ATOM   4649  O   ARG   36     247.098 105.630  28.256  1.00 92.08      SS19
ATOM   4650  N   ARG   37     246.164 106.714  30.003  1.00 69.68      SS19
ATOM   4651  CA  ARG   37     246.133 108.042  29.429  1.00 69.68      SS19
ATOM   4652  CB  ARG   37     245.036 108.855  30.115  1.00174.24      SS19
ATOM   4653  CG  ARG   37     243.956 109.378  29.208  1.00174.24      SS19
ATOM   4654  CD  ARG   37     244.443 110.568  28.416  1.00174.24      SS19
ATOM   4655  NE  ARG   37     243.394 111.080  27.544  1.00174.24      SS19
ATOM   4656  CZ  ARG   37     243.528 112.142  26.759  1.00174.24      SS19
ATOM   4657  NH1 ARG   37     244.674 112.813  26.738  1.00174.24      SS19
ATOM   4658  NH2 ARG   37     242.519 112.527  25.988  1.00174.24      SS19
ATOM   4659  C   ARG   37     247.486 108.560  29.879  1.00 69.68      SS19
ATOM   4660  O   ARG   37     247.844 109.713  29.645  1.00 69.68      SS19
ATOM   4661  N   SER   38     248.217 107.667  30.546  1.00 80.71      SS19
ATOM   4662  CA  SER   38     249.528 107.948  31.118  1.00 80.71      SS19
ATOM   4663  CB  SER   38     249.574 107.423  32.553  1.00 90.39      SS19
ATOM   4664  OG  SER   38     249.158 106.071  32.598  1.00 90.39      SS19
ATOM   4665  C   SER   38     250.715 107.387  30.349  1.00 80.71      SS19
ATOM   4666  O   SER   38     250.615 106.365  29.671  1.00 80.71      SS19
ATOM   4667  N   THR   39     251.848 108.066  30.496  1.00 74.54      SS19
ATOM   4668  CA  THR   39     253.083 107.694  29.825  1.00 74.54      SS19
ATOM   4669  CB  THR   39     254.098 108.837  29.831  1.00 61.98      SS19
ATOM   4670  OG1 THR   39     253.525 110.016  29.245  1.00 61.98      SS19
ATOM   4671  CG2 THR   39     255.346 108.417  29.070  1.00 61.98      SS19
ATOM   4672  C   THR   39     253.764 106.550  30.529  1.00 74.54      SS19
ATOM   4673  O   THR   39     253.800 106.511  31.759  1.00 74.54      SS19
ATOM   4674  N   ILE   40     254.317 105.622  29.757  1.00 97.77      SS19
ATOM   4675  CA  ILE   40     255.031 104.511  30.358  1.00 97.77      SS19
ATOM   4676  CB  ILE   40     255.252 103.341  29.386  1.00 62.34      SS19
ATOM   4677  CG2 ILE   40     256.153 102.308  30.043  1.00 62.34      SS19
ATOM   4678  CG1 ILE   40     253.906 102.722  28.987  1.00 62.34      SS19
ATOM   4679  CD1 ILE   40     254.009 101.326  28.374  1.00 62.34      SS19
ATOM   4680  C   ILE   40     256.394 105.040  30.757  1.00 97.77      SS19
ATOM   4681  O   ILE   40     257.080 105.678  29.955  1.00 97.77      SS19
ATOM   4682  N   VAL   41     256.776 104.782  32.001  1.00 83.11      SS19
ATOM   4683  CA  VAL   41     258.064 105.227  32.508  1.00 83.11      SS19
ATOM   4684  CB  VAL   41     257.869 106.109  33.760  1.00 64.07      SS19
ATOM   4685  CG1 VAL   41     257.109 107.381  33.375  1.00 64.07      SS19
ATOM   4686  CG2 VAL   41     257.086 105.348  34.828  1.00 64.07      SS19
ATOM   4687  C   VAL   41     258.927 104.001  32.828  1.00 83.11      SS19
ATOM   4688  O   VAL   41     258.403 102.910  33.072  1.00 83.11      SS19
ATOM   4689  N   PRO   42     260.264 104.165  32.822  1.00140.71      SS19
ATOM   4690  CD  PRO   42     260.947 105.467  32.712  1.00 77.45      SS19
ATOM   4691  CA  PRO   42     261.239 103.102  33.099  1.00140.71      SS19
ATOM   4692  CB  PRO   42     262.449 103.877  33.581  1.00 77.45      SS19
ATOM   4693  CG  PRO   42     262.418 105.064  32.685  1.00 77.45      SS19
ATOM   4694  C   PRO   42     260.787 102.047  34.098  1.00140.71      SS19
ATOM   4695  O   PRO   42     260.594 100.889  33.732  1.00140.71      SS19
ATOM   4696  N   GLU   43     260.638 102.447  35.358  1.00 91.84      SS19
ATOM   4697  CA  GLU   43     260.189 101.536  36.408  1.00 91.84      SS19
ATOM   4698  CB  GLU   43     259.503 102.313  37.532  1.00104.83      SS19
ATOM   4699  CG  GLU   43     258.859 103.598  37.070  1.00104.83      SS19
ATOM   4700  CD  GLU   43     259.890 104.616  36.625  1.00104.83      SS19
ATOM   4701  OE1 GLU   43     260.587 105.171  37.500  1.00104.83      SS19
ATOM   4702  OE2 GLU   43     260.018 104.850  35.404  1.00104.83      SS19
ATOM   4703  C   GLU   43     259.215 100.541  35.807  1.00 91.84      SS19
ATOM   4704  O   GLU   43     259.416  99.328  35.881  1.00 91.84      SS19
ATOM   4705  N   MET   44     258.157 101.059  35.199  1.00 93.24      SS19
ATOM   4706  CA  MET   44     257.187 100.187  34.566  1.00 93.24      SS19
ATOM   4707  CB  MET   44     256.213 100.995  33.696  1.00 90.21      SS19
ATOM   4708  CG  MET   44     255.208 101.842  34.458  1.00 90.21      SS19
ATOM   4709  SD  MET   44     254.235 102.914  33.356  1.00 90.21      SS19
ATOM   4710  CE  MET   44     254.019 104.394  34.386  1.00 90.21      SS19
ATOM   4711  C   MET   44     257.980  99.229  33.685  1.00 93.24      SS19
ATOM   4712  O   MET   44     258.649  99.653  32.751  1.00 93.24      SS19
ATOM   4713  N   VAL   45     257.931  97.947  34.015  1.00 83.68      SS19
ATOM   4714  CA  VAL   45     258.601  96.902  33.246  1.00 83.68      SS19
ATOM   4715  CB  VAL   45     260.142  96.993  33.302  1.00 77.43      SS19
ATOM   4716  CG1 VAL   45     260.742  95.678  32.811  1.00 77.43      SS19
ATOM   4717  CG2 VAL   45     260.649  98.118  32.404  1.00 77.43      SS19
ATOM   4718  C   VAL   45     258.161  95.594  33.877  1.00 83.68      SS19
ATOM   4719  O   VAL   45     257.797  95.578  35.047  1.00 83.68      SS19
ATOM   4720  N   GLY   46     258.176  94.508  33.108  1.00118.85      SS19
ATOM   4721  CA  GLY   46     257.757  93.224  33.641  1.00118.85      SS19
ATOM   4722  C   GLY   46     256.317  93.278  34.120  1.00118.85      SS19
ATOM   4723  O   GLY   46     255.520  92.381  33.843  1.00118.85      SS19
ATOM   4724  N   HIS   47     255.989  94.346  34.839  1.00124.67      SS19
ATOM   4725  CA  HIS   47     254.660  94.567  35.382  1.00124.67      SS19
ATOM   4726  CB  HIS   47     254.554  95.977  35.947  1.00119.99      SS19
ATOM   4727  CG  HIS   47     255.488  96.250  37.079  1.00119.99      SS19
ATOM   4728  CD2 HIS   47     256.391  97.240  37.267  1.00119.99      SS19
ATOM   4729  ND1 HIS   47     255.515  95.482  38.223  1.00119.99      SS19
ATOM   4730  CE1 HIS   47     256.391  95.992  39.070  1.00119.99      SS19
ATOM   4731  NE2 HIS   47     256.936  97.060  38.515  1.00119.99      SS19
ATOM   4732  C   HIS   47     253.583  94.404  34.328  1.00124.67      SS19
ATOM   4733  O   HIS   47     253.212  95.374  33.665  1.00124.67      SS19
ATOM   4734  N   THR   48     253.078  93.188  34.167  1.00 87.83      SS19
ATOM   4735  CA  THR   48     252.026  92.972  33.191  1.00 87.83      SS19
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ATOM	4736	CB	THR	48	251.573	91.501	33.165	1.00117.95	SS19	ATOM	4789	CD	LYS	55	233.949	94.261	25.096	1.00 79.12	SS19
ATOM	4737	OG1	THR	48	252.719	90.646	33.064	1.00117.95	SS19	ATOM	4790	CE	LYS	55	233.107	93.016	25.163	1.00 79.12	SS19
ATOM	4738	CG2	THR	48	250.667	91.248	31.970	1.00117.95	SS19	ATOM	4791	NZ	LYS	55	232.985	92.416	23.808	1.00 79.12	SS19
ATOM	4739	C	THR	48	250.869	93.848	33.663	1.00 87.83	SS19	ATOM	4792	C	LYS	55	235.937	95.641	28.617	1.00 64.61	SS19
ATOM	4740	O	THR	48	250.166	93.486	34.606	1.00 87.83	SS19	ATOM	4793	O	LYS	55	235.280	95.056	29.471	1.00 64.61	SS19
ATOM	4741	N	ILE	49	250.692	95.007	33.027	1.00112.35	SS19	ATOM	4794	N	GLN	56	237.217	95.370	28.389	1.00 88.51	SS19
ATOM	4742	CA	ILE	49	249.621	95.933	33.398	1.00112.35	SS19	ATOM	4795	CA	GLN	56	237.931	94.355	29.167	1.00 88.51	SS19
ATOM	4743	CB	ILE	49	250.084	97.395	33.343	1.00 72.33	SS19	ATOM	4796	CB	GLN	56	238.232	93.119	28.305	1.00119.64	SS19
ATOM	4744	CG2	ILE	49	248.923	98.311	33.707	1.00 72.33	SS19	ATOM	4797	CG	GLN	56	237.158	92.723	27.295	1.00119.64	SS19
ATOM	4745	CG1	ILE	49	251.273	97.604	34.282	1.00 72.33	SS19	ATOM	4798	CD	GLN	56	235.857	92.267	27.936	1.00119.64	SS19
ATOM	4746	CD1	ILE	49	251.776	99.029	34.316	1.00 72.33	SS19	ATOM	4799	OE1	GLN	56	234.974	91.731	27.261	1.00119.64	SS19
ATOM	4747	C	ILE	49	248.405	95.812	32.494	1.00112.35	SS19	ATOM	4800	NE2	GLN	56	235.728	92.482	29.241	1.00119.64	SS19
ATOM	4748	O	ILE	49	248.490	96.037	31.285	1.00112.35	SS19	ATOM	4801	C	GLN	56	239.257	94.935	29.658	1.00 88.51	SS19
ATOM	4749	N	ALA	50	247.269	95.471	33.092	1.00 71.30	SS19	ATOM	4802	O	GLN	56	239.547	96.107	29.455	1.00 88.51	SS19
ATOM	4750	CA	ALA	50	246.027	95.315	32.346	1.00 71.30	SS19	ATOM	4803	N	HIS	57	240.058	94.108	30.313	1.00105.35	SS19
ATOM	4751	CB	ALA	50	245.079	94.372	33.078	1.00 53.28	SS19	ATOM	4804	CA	HIS	57	241.370	94.534	30.785	1.00105.35	SS19
ATOM	4752	C	ALA	50	245.365	96.665	32.149	1.00 71.30	SS19	ATOM	4805	CB	HIS	57	241.477	94.357	32.305	1.00 83.17	SS19
ATOM	4753	O	ALA	50	244.903	97.296	33.102	1.00 71.30	SS19	ATOM	4806	CG	HIS	57	240.831	95.459	33.090	1.00 83.17	SS19
ATOM	4754	N	VAL	51	245.332	97.101	30.897	1.00 92.49	SS19	ATOM	4807	CD2	HIS	57	239.628	95.528	33.708	1.00 83.17	SS19
ATOM	4755	CA	VAL	51	244.728	98.371	30.537	1.00 92.49	SS19	ATOM	4808	ND1	HIS	57	241.433	96.685	33.288	1.00 83.17	SS19
ATOM	4756	CB	VAL	51	245.539	99.054	29.433	1.00 86.33	SS19	ATOM	4809	CE1	HIS	57	240.631	97.461	33.996	1.00 83.17	SS19
ATOM	4757	CG1	VAL	51	244.850	100.329	29.006	1.00 86.33	SS19	ATOM	4810	NE2	HIS	57	239.529	96.783	34.263	1.00 83.17	SS19
ATOM	4758	CG2	VAL	51	246.949	99.336	29.927	1.00 86.33	SS19	ATOM	4811	C	HIS	57	242.349	93.614	30.063	1.00105.35	SS19
ATOM	4759	C	VAL	51	243.308	98.122	30.041	1.00 92.49	SS19	ATOM	4812	O	HIS	57	242.184	92.392	30.089	1.00105.35	SS19
ATOM	4760	O	VAL	51	243.080	97.261	29.187	1.00 92.49	SS19	ATOM	4813	N	VAL	58	243.348	94.184	29.396	1.00131.05	SS19
ATOM	4761	N	TYR	52	242.353	98.871	30.581	1.00 87.76	SS19	ATOM	4814	CA	VAL	58	244.308	93.354	28.674	1.00131.05	SS19
ATOM	4762	CA	TYR	52	240.964	98.697	30.186	1.00 87.76	SS19	ATOM	4815	CB	VAL	58	244.388	93.729	27.178	1.00 67.98	SS19
ATOM	4763	CB	TYR	52	240.050	99.665	30.945	1.00 70.91	SS19	ATOM	4816	CG1	VAL	58	243.283	93.018	26.418	1.00 67.98	SS19
ATOM	4764	CG	TYR	52	238.577	99.281	30.917	1.00 70.91	SS19	ATOM	4817	CG2	VAL	58	244.265	95.232	27.007	1.00 67.98	SS19
ATOM	4765	CD1	TYR	52	238.174	97.974	31.213	1.00 70.91	SS19	ATOM	4818	C	VAL	58	245.721	93.341	29.226	1.00131.05	SS19
ATOM	4766	CE1	TYR	52	236.828	97.621	31.255	1.00 70.91	SS19	ATOM	4819	O	VAL	58	246.333	94.388	29.444	1.00131.05	SS19
ATOM	4767	CD2	TYR	52	237.586	100.230	30.656	1.00 70.91	SS19	ATOM	4820	N	PRO	59	246.257	92.134	29.456	1.00 93.39	SS19
ATOM	4768	CE2	TYR	52	236.233	99.888	30.701	1.00 70.91	SS19	ATOM	4821	CD	PRO	59	245.664	90.836	29.086	1.00 88.53	SS19
ATOM	4769	CZ	TYR	52	235.864	98.580	31.002	1.00 70.91	SS19	ATOM	4822	CA	PRO	59	247.611	91.956	29.980	1.00 93.39	SS19
ATOM	4770	OH	TYR	52	234.535	98.227	31.070	1.00 70.91	SS19	ATOM	4823	CB	PRO	59	247.741	90.438	30.076	1.00 88.53	SS19
ATOM	4771	C	TYR	52	240.810	98.924	28.695	1.00 87.76	SS19	ATOM	4824	CG	PRO	59	246.883	89.959	28.937	1.00 88.53	SS19
ATOM	4772	O	TYR	52	241.236	99.948	28.172	1.00 87.76	SS19	ATOM	4825	C	PRO	59	248.590	92.562	28.984	1.00 93.39	SS19
ATOM	4773	N	ASN	53	240.201	97.953	28.023	1.00 83.61	SS19	ATOM	4826	O	PRO	59	248.798	92.020	27.896	1.00 93.39	SS19
ATOM	4774	CA	ASN	53	239.960	98.010	26.591	1.00 83.61	SS19	ATOM	4827	N	VAL	60	249.194	93.683	29.351	1.00105.55	SS19
ATOM	4775	CB	ASN	53	239.586	96.617	26.088	1.00106.47	SS19	ATOM	4828	CA	VAL	60	250.117	94.339	28.447	1.00105.55	SS19
ATOM	4776	CG	ASN	53	239.579	96.520	24.581	1.00106.47	SS19	ATOM	4829	CB	VAL	60	249.980	95.861	28.563	1.00 98.60	SS19
ATOM	4777	OD1	ASN	53	239.188	95.495	24.019	1.00106.47	SS19	ATOM	4830	CG1	VAL	60	250.960	96.549	27.635	1.00 98.60	SS19
ATOM	4778	ND2	ASN	53	240.020	97.582	23.912	1.00106.47	SS19	ATOM	4831	CG2	VAL	60	248.558	96.262	28.212	1.00 98.60	SS19
ATOM	4779	C	ASN	53	238.796	98.962	26.374	1.00 83.61	SS19	ATOM	4832	C	VAL	60	251.583	93.937	28.591	1.00105.55	SS19
ATOM	4780	O	ASN	53	238.563	99.444	25.270	1.00 83.61	SS19	ATOM	4833	O	VAL	60	252.192	93.491	27.617	1.00105.55	SS19
ATOM	4781	N	GLY	54	238.090	99.248	27.463	1.00 65.74	SS19	ATOM	4834	N	TYR	61	252.144	94.082	29.789	1.00 82.10	SS19
ATOM	4782	CA	GLY	54	236.916	100.103	27.416	1.00 65.74	SS19	ATOM	4835	CA	TYR	61	253.552	93.740	30.039	1.00 82.10	SS19
ATOM	4783	C	GLY	54	235.792	99.112	27.639	1.00 65.74	SS19	ATOM	4836	CB	TYR	61	253.902	92.368	29.434	1.00 98.57	SS19
ATOM	4784	O	GLY	54	234.632	99.463	27.874	1.00 65.74	SS19	ATOM	4837	CG	TYR	61	255.277	91.823	29.800	1.00 98.57	SS19
ATOM	4785	N	LYS	55	236.189	97.844	27.578	1.00 64.61	SS19	ATOM	4838	CD1	TYR	61	255.463	90.453	30.024	1.00 98.57	SS19
ATOM	4786	CA	LYS	55	235.295	96.716	27.749	1.00 64.61	SS19	ATOM	4839	CE1	TYR	61	256.717	89.935	30.373	1.00 98.57	SS19
ATOM	4787	CB	LYS	55	234.949	96.124	26.385	1.00 79.12	SS19	ATOM	4840	CD2	TYR	61	256.389	92.664	29.929	1.00 98.57	SS19
ATOM	4788	CG	LYS	55	234.080	94.891	26.454	1.00 79.12	SS19	ATOM	4841	CE2	TYR	61	257.649	92.154	30.274	1.00 98.57	SS19

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ATOM   4842  CZ  TYR    61     257.802  90.790  30.496  1.00 98.57      SS19
ATOM   4843  OH  TYR    61     259.027  90.276  30.853  1.00 98.57      SS19
ATOM   4844  C   TYR    61     254.441  94.816  29.429  1.00 82.10      SS19
ATOM   4845  O   TYR    61     254.788  94.763  28.249  1.00 82.10      SS19
ATOM   4846  N   ILE    62     254.815  95.790  30.245  1.00 78.24      SS19
ATOM   4847  CA  ILE    62     255.649  96.882  29.781  1.00 78.24      SS19
ATOM   4848  CB  ILE    62     255.533  98.071  30.761  1.00 77.16      SS19
ATOM   4849  CG2 ILE    62     255.535  97.571  32.188  1.00 77.16      SS19
ATOM   4850  CG1 ILE    62     256.644  99.073  30.490  1.00 77.16      SS19
ATOM   4851  CD1 ILE    62     256.770  99.439  29.026  1.00 77.16      SS19
ATOM   4852  C   ILE    62     257.119  96.478  29.547  1.00 78.24      SS19
ATOM   4853  O   ILE    62     257.836  96.132  30.483  1.00 78.24      SS19
ATOM   4854  N   THR    63     257.554  96.540  28.286  1.00103.97      SS19
ATOM   4855  CA  THR    63     258.915  96.154  27.894  1.00103.97      SS19
ATOM   4856  CB  THR    63     258.884  95.001  26.875  1.00 97.04      SS19
ATOM   4857  OG1 THR    63     258.376  93.820  27.504  1.00 97.04      SS19
ATOM   4858  CG2 THR    63     260.277  94.723  26.337  1.00 97.04      SS19
ATOM   4859  C   THR    63     259.791  97.250  27.290  1.00103.97      SS19
ATOM   4860  O   THR    63     259.514  97.747  26.203  1.00103.97      SS19
ATOM   4861  N   GLU    64     260.872  97.576  27.993  1.00102.41      SS19
ATOM   4862  CA  GLU    64     261.853  98.589  27.588  1.00102.41      SS19
ATOM   4863  CB  GLU    64     263.236  97.945  27.466  1.00131.97      SS19
ATOM   4864  CG  GLU    64     264.109  98.134  28.690  1.00131.97      SS19
ATOM   4865  CD  GLU    64     264.188  99.587  29.104  1.00131.97      SS19
ATOM   4866  OE1 GLU    64     264.320 100.446  28.207  1.00131.97      SS19
ATOM   4867  OE2 GLU    64     264.119  99.868  30.320  1.00131.97      SS19
ATOM   4868  C   GLU    64     261.599  99.423  26.333  1.00102.41      SS19
ATOM   4869  O   GLU    64     261.201 100.586  26.427  1.00102.41      SS19
ATOM   4870  N   ASN    65     261.857  98.830  25.168  1.00 94.22      SS19
ATOM   4871  CA  ASN    65     261.684  99.504  23.879  1.00 94.22      SS19
ATOM   4872  CB  ASN    65     261.749  98.477  22.747  1.00123.45      SS19
ATOM   4873  CG  ASN    65     260.973  97.219  23.065  1.00123.45      SS19
ATOM   4874  OD1 ASN    65     261.344  96.464  23.962  1.00123.45      SS19
ATOM   4875  ND2 ASN    65     259.886  96.989  22.339  1.00123.45      SS19
ATOM   4876  C   ASN    65     260.400 100.324  23.754  1.00 94.22      SS19
ATOM   4877  O   ASN    65     260.287 101.185  22.881  1.00 94.22      SS19
ATOM   4878  N   MET    66     259.438 100.055  24.629  1.00 97.81      SS19
ATOM   4879  CA  MET    66     258.171 100.772  24.621  1.00 97.81      SS19
ATOM   4880  CB  MET    66     257.002  99.786  24.516  1.00 75.60      SS19
ATOM   4881  CG  MET    66     256.913  98.801  25.672  1.00 75.60      SS19
ATOM   4882  SD  MET    66     255.747  97.447  25.419  1.00 75.60      SS19
ATOM   4883  CE  MET    66     254.664  97.675  26.808  1.00 75.60      SS19
ATOM   4884  C   MET    66     258.029 101.599  25.890  1.00 97.81      SS19
ATOM   4885  O   MET    66     257.588 101.101  26.918  1.00 97.81      SS19
ATOM   4886  N   VAL    67     258.421 102.862  25.820  1.00 65.61      SS19
ATOM   4887  CA  VAL    67     258.312 103.749  26.970  1.00 65.61      SS19
ATOM   4888  CB  VAL    67     259.732 104.095  27.536  1.00 84.23      SS19
ATOM   4889  CG1 VAL    67     259.630 104.968  28.776  1.00 84.23      SS19
ATOM   4890  CG2 VAL    67     260.460 102.811  27.909  1.00 84.23      SS19
ATOM   4891  C   VAL    67     257.533 105.007  26.541  1.00 65.61      SS19
ATOM   4892  O   VAL    67     257.966 106.143  26.747  1.00 65.61      SS19
ATOM   4893  N   GLY    68     256.372 104.771  25.925  1.00112.88      SS19
ATOM   4894  CA  GLY    68     255.502 105.843  25.464  1.00112.88      SS19
ATOM   4895  C   GLY    68     254.179 105.722  26.191  1.00112.88      SS19
ATOM   4896  O   GLY    68     254.145 105.160  27.281  1.00112.88      SS19
ATOM   4897  N   HIS    69     253.092 106.231  25.612  1.00 95.92      SS19
ATOM   4898  CA  HIS    69     251.775 106.152  26.258  1.00 95.92      SS19
ATOM   4899  CB  HIS    69     250.771 107.041  25.528  1.00105.63      SS19
ATOM   4900  CG  HIS    69     250.900 108.494  25.861  1.00105.63      SS19
ATOM   4901  CD2 HIS    69     251.303 109.550  25.115  1.00105.63      SS19
ATOM   4902  ND1 HIS    69     250.580 109.003  27.101  1.00105.63      SS19
ATOM   4903  CE1 HIS    69     250.776 110.310  27.104  1.00105.63      SS19
ATOM   4904  NE2 HIS    69     251.215 110.668  25.911  1.00105.63      SS19
ATOM   4905  C   HIS    69     251.261 104.712  26.317  1.00 95.92      SS19
ATOM   4906  O   HIS    69     251.804 103.832  25.648  1.00 95.92      SS19
ATOM   4907  N   LYS    70     250.220 104.461  27.110  1.00 70.79      SS19
ATOM   4908  CA  LYS    70     249.700 103.097  27.240  1.00 70.79      SS19
ATOM   4909  CB  LYS    70     249.097 102.889  28.631  1.00 80.82      SS19
ATOM   4910  CG  LYS    70     249.942 103.479  29.748  1.00 80.82      SS19
ATOM   4911  CD  LYS    70     249.631 102.841  31.077  1.00 80.82      SS19
ATOM   4912  CE  LYS    70     250.050 101.377  31.069  1.00 80.82      SS19
ATOM   4913  NZ  LYS    70     249.920 100.789  32.435  1.00 80.82      SS19
ATOM   4914  C   LYS    70     248.688 102.701  26.173  1.00 70.79      SS19
ATOM   4915  O   LYS    70     247.725 101.975  26.446  1.00 70.79      SS19
ATOM   4916  N   LEU    71     248.922 103.199  24.957  1.00 98.12      SS19
ATOM   4917  CA  LEU    71     248.089 102.901  23.794  1.00 98.12      SS19
ATOM   4918  CB  LEU    71     248.523 103.736  22.584  1.00 84.99      SS19
ATOM   4919  CG  LEU    71     250.018 103.810  22.231  1.00 84.99      SS19
ATOM   4920  CD1 LEU    71     250.210 104.150  20.761  1.00 84.99      SS19
ATOM   4921  CD2 LEU    71     250.691 104.858  23.086  1.00 84.99      SS19
ATOM   4922  C   LEU    71     248.345 101.440  23.499  1.00 98.12      SS19
ATOM   4923  O   LEU    71     247.693 100.849  22.648  1.00 98.12      SS19
ATOM   4924  N   GLY    72     249.322 100.893  24.223  1.00118.88      SS19
ATOM   4925  CA  GLY    72     249.721  99.503  24.096  1.00118.88      SS19
ATOM   4926  C   GLY    72     248.737  98.705  23.282  1.00118.88      SS19
ATOM   4927  O   GLY    72     248.682  98.857  22.064  1.00118.88      SS19
ATOM   4928  N   GLU    73     247.954  97.864  23.946  1.00114.67      SS19
ATOM   4929  CA  GLU    73     246.965  97.053  23.253  1.00114.67      SS19
ATOM   4930  CB  GLU    73     247.086  95.597  23.713  1.00170.57      SS19
ATOM   4931  CG  GLU    73     248.421  94.985  23.276  1.00170.57      SS19
ATOM   4932  CD  GLU    73     248.621  93.546  23.718  1.00170.57      SS19
ATOM   4933  OE1 GLU    73     247.720  92.712  23.475  1.00170.57      SS19
ATOM   4934  OE2 GLU    73     249.691  93.249  24.295  1.00170.57      SS19
ATOM   4935  C   GLU    73     245.565  97.621  23.482  1.00114.67      SS19
ATOM   4936  O   GLU    73     245.076  97.677  24.607  1.00114.67      SS19
ATOM   4937  N   PHE    74     244.928  98.052  22.398  1.00 70.91      SS19
ATOM   4938  CA  PHE    74     243.609  98.656  22.487  1.00 70.91      SS19
ATOM   4939  CB  PHE    74     243.748 100.169  22.490  1.00 92.94      SS19
ATOM   4940  CG  PHE    74     243.387 100.800  23.782  1.00 92.94      SS19
ATOM   4941  CD1 PHE    74     243.242 102.181  23.875  1.00 92.94      SS19
ATOM   4942  CD2 PHE    74     243.158 100.019  24.907  1.00 92.94      SS19
ATOM   4943  CE1 PHE    74     242.869 102.772  25.062  1.00 92.94      SS19
ATOM   4944  CE2 PHE    74     242.784 100.605  26.103  1.00 92.94      SS19
ATOM   4945  CZ  PHE    74     242.636 101.983  26.183  1.00 92.94      SS19
ATOM   4946  C   PHE    74     242.674  98.276  21.362  1.00 70.91      SS19
ATOM   4947  O   PHE    74     241.617  97.679  21.583  1.00 70.91      SS19
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ATOM	4948	N	ALA	75	243.064	98.684	20.162	1.00200.66	SS19	ATOM	5001	CD	ARG	81	234.409	94.697	5.003	1.00 68.77	SS19
ATOM	4949	CA	ALA	75	242.328	98.439	18.927	1.00200.66	SS19	ATOM	5002	NE	ARG	81	233.760	95.676	5.868	1.00 68.77	SS19
ATOM	4950	CB	ALA	75	243.056	97.356	18.108	1.00 91.29	SS19	ATOM	5003	CZ	ARG	81	234.300	96.842	6.207	1.00 68.77	SS19
ATOM	4951	C	ALA	75	240.841	98.083	19.031	1.00200.66	SS19	ATOM	5004	NH1	ARG	81	235.499	97.175	5.751	1.00 68.77	SS19
ATOM	4952	O	ALA	75	240.417	97.083	18.446	1.00200.66	SS19	ATOM	5005	NH2	ARG	81	233.645	97.677	6.999	1.00 68.77	SS19
ATOM	4953	N	PRO	76	240.029	98.879	19.769	1.00 78.99	SS19	ATOM	5006	C	ARG	81	234.878	91.358	5.147	1.00117.60	SS19
ATOM	4954	CD	PRO	76	240.285	100.089	20.591	1.00 61.38	SS19	ATOM	5007	O	ARG	81	234.748	90.155	4.828	1.00117.60	SS19
ATOM	4955	CA	PRO	76	238.616	98.506	19.832	1.00 78.99	SS19	ATOM	5008	OXT	ARG	81	235.789	92.097	4.711	1.00 97.84	SS19
ATOM	4956	CB	PRO	76	237.947	99.856	20.014	1.00 61.38	SS19	ATOM	5009	CB	VAL	7	152.261	167.740	-25.564	1.00 58.45	BS2
ATOM	4957	CG	PRO	76	238.882	100.499	21.071	1.00 61.38	SS19	ATOM	5010	CG1	VAL	7	152.971	167.438	-26.891	1.00 58.45	BS2
ATOM	4958	C	PRO	76	238.115	97.704	18.608	1.00 78.99	SS19	ATOM	5011	CG2	VAL	7	153.305	167.917	-24.477	1.00 58.45	BS2
ATOM	4959	O	PRO	76	237.902	98.255	17.529	1.00 78.99	SS19	ATOM	5012	C	VAL	7	150.942	169.162	-27.122	1.00 80.73	BS2
ATOM	4960	N	THR	77	237.971	96.389	18.832	1.00112.46	SS19	ATOM	5013	O	VAL	7	150.315	168.247	-27.668	1.00 80.73	BS2
ATOM	4961	CA	THR	77	237.533	95.344	17.882	1.00112.46	SS19	ATOM	5014	N	VAL	7	150.259	169.048	-24.725	1.00 80.73	BS2
ATOM	4962	CB	THR	77	236.319	94.556	18.438	1.00 88.01	SS19	ATOM	5015	CA	VAL	7	151.403	169.036	-25.683	1.00 80.73	BS2
ATOM	4963	OG1	THR	77	236.677	93.924	19.674	1.00 88.01	SS19	ATOM	5016	N	LYS	8	151.283	170.310	-27.710	1.00122.99	BS2
ATOM	4964	CG2	THR	77	235.881	93.489	17.448	1.00 88.01	SS19	ATOM	5017	CA	LYS	8	150.978	170.678	-29.092	1.00122.99	BS2
ATOM	4965	C	THR	77	237.193	95.720	16.451	1.00112.46	SS19	ATOM	5018	CB	LYS	8	152.263	171.177	-29.776	1.00 80.76	BS2
ATOM	4966	O	THR	77	236.455	96.670	16.218	1.00112.46	SS19	ATOM	5019	CG	LYS	8	153.581	170.570	-29.240	1.00 80.76	BS2
ATOM	4967	N	ARG	78	237.691	94.930	15.499	1.00 86.70	SS19	ATOM	5020	CD	LYS	8	154.287	171.425	-28.132	1.00 80.76	BS2
ATOM	4968	CA	ARG	78	237.443	95.207	14.093	1.00 86.70	SS19	ATOM	5021	CE	LYS	8	153.793	171.127	-26.698	1.00 80.76	BS2
ATOM	4969	CB	ARG	78	237.753	96.669	13.843	1.00194.52	SS19	ATOM	5022	NZ	LYS	8	154.761	171.525	-25.618	1.00 80.76	BS2
ATOM	4970	CG	ARG	78	236.661	97.382	13.142	1.00194.52	SS19	ATOM	5023	C	LYS	8	150.313	169.590	-29.935	1.00122.99	BS2
ATOM	4971	CD	ARG	78	235.295	97.058	13.712	1.00194.52	SS19	ATOM	5024	O	LYS	8	150.847	169.164	-30.957	1.00122.99	BS2
ATOM	4972	NE	ARG	78	234.295	97.783	12.948	1.00194.52	SS19	ATOM	5025	N	GLU	9	149.134	169.171	-29.476	1.00126.61	BS2
ATOM	4973	CZ	ARG	78	234.153	97.666	11.632	1.00194.52	SS19	ATOM	5026	CA	GLU	9	148.297	168.142	-30.094	1.00126.61	BS2
ATOM	4974	NH1	ARG	78	234.936	96.840	10.946	1.00194.52	SS19	ATOM	5027	CB	GLU	9	147.030	168.786	-30.663	1.00199.40	BS2
ATOM	4975	NH2	ARG	78	233.255	98.397	10.991	1.00194.52	SS19	ATOM	5028	CG	GLU	9	146.124	169.423	-29.622	1.00199.40	BS2
ATOM	4976	C	ARG	78	238.233	94.352	13.099	1.00 86.70	SS19	ATOM	5029	CD	GLU	9	144.924	170.126	-30.245	1.00199.40	BS2
ATOM	4977	O	ARG	78	239.443	94.511	12.978	1.00 86.70	SS19	ATOM	5030	OE1	GLU	9	144.167	169.459	-30.984	1.00199.40	BS2
ATOM	4978	N	THR	79	237.545	93.471	12.369	1.00 78.43	SS19	ATOM	5031	OE2	GLU	9	144.745	171.340	-29.993	1.00199.40	BS2
ATOM	4979	CA	THR	79	238.191	92.595	11.384	1.00 78.43	SS19	ATOM	5032	C	GLU	9	148.929	167.275	-31.174	1.00126.61	BS2
ATOM	4980	CB	THR	79	238.054	91.115	11.777	1.00 89.23	SS19	ATOM	5033	O	GLU	9	150.143	167.060	-31.203	1.00126.61	BS2
ATOM	4981	OG1	THR	79	238.735	90.886	13.017	1.00 89.23	SS19	ATOM	5034	N	LEU	10	148.074	166.760	-32.055	1.00 93.88	BS2
ATOM	4982	CG2	THR	79	238.663	90.219	10.707	1.00 89.23	SS19	ATOM	5035	CA	LEU	10	148.516	165.926	-33.161	1.00 93.88	BS2
ATOM	4983	C	THR	79	237.638	92.783	9.966	1.00 78.43	SS19	ATOM	5036	CB	LEU	10	147.337	165.612	-34.085	1.00130.58	BS2
ATOM	4984	O	THR	79	238.160	92.221	9.000	1.00 78.43	SS19	ATOM	5037	CG	LEU	10	146.006	165.229	-33.423	1.00130.58	BS2
ATOM	4985	N	TYR	80	236.571	93.570	9.862	1.00138.98	SS19	ATOM	5038	CD1	LEU	10	144.965	164.955	-34.500	1.00130.58	BS2
ATOM	4986	CA	TYR	80	235.924	93.919	8.590	1.00138.98	SS19	ATOM	5039	CD2	LEU	10	146.184	164.002	-32.544	1.00130.58	BS2
ATOM	4987	CB	TYR	80	236.769	94.944	7.822	1.00102.67	SS19	ATOM	5040	C	LEU	10	149.554	166.761	-33.897	1.00 93.88	BS2
ATOM	4988	CG	TYR	80	237.768	95.669	8.681	1.00102.67	SS19	ATOM	5041	O	LEU	10	150.375	166.238	-34.650	1.00 93.88	BS2
ATOM	4989	CD1	TYR	80	239.039	95.945	8.203	1.00102.67	SS19	ATOM	5042	N	LEU	11	149.498	168.072	-33.659	1.00117.06	BS2
ATOM	4990	CE1	TYR	80	239.997	96.515	9.017	1.00102.67	SS19	ATOM	5043	CA	LEU	11	150.420	169.037	-34.255	1.00117.06	BS2
ATOM	4991	CD2	TYR	80	237.476	95.996	10.002	1.00102.67	SS19	ATOM	5044	CB	LEU	11	150.298	170.399	-33.567	1.00145.85	BS2
ATOM	4992	CE2	TYR	80	238.422	96.559	10.819	1.00102.67	SS19	ATOM	5045	CG	LEU	11	149.020	171.224	-33.699	1.00145.85	BS2
ATOM	4993	CZ	TYR	80	239.683	96.816	10.328	1.00102.67	SS19	ATOM	5046	CD1	LEU	11	149.075	172.388	-32.716	1.00145.85	BS2
ATOM	4994	OH	TYR	80	240.640	97.353	11.157	1.00102.67	SS19	ATOM	5047	CD2	LEU	11	148.873	171.723	-35.133	1.00145.85	BS2
ATOM	4995	C	TYR	80	235.583	92.786	7.639	1.00138.98	SS19	ATOM	5048	C	LEU	11	151.844	168.555	-34.078	1.00117.06	BS2
ATOM	4996	O	TYR	80	236.363	91.863	7.427	1.00138.98	SS19	ATOM	5049	O	LEU	11	152.755	169.016	-34.767	1.00117.06	BS2
ATOM	4997	N	ARG	81	234.398	92.909	7.056	1.00117.60	SS19	ATOM	5050	N	GLU	12	152.045	167.630	-33.147	1.00 94.87	BS2
ATOM	4998	CA	ARG	81	233.838	91.970	6.091	1.00117.60	SS19	ATOM	5051	CA	GLU	12	153.386	167.156	-32.929	1.00 94.87	BS2
ATOM	4999	CB	ARG	81	232.787	92.700	5.268	1.00 68.77	SS19	ATOM	5052	CB	GLU	12	153.592	166.727	-31.487	1.00114.18	BS2
ATOM	5000	CG	ARG	81	233.409	93.733	4.333	1.00 68.77	SS19	ATOM	5053	CG	GLU	12	155.071	166.722	-31.171	1.00114.18	BS2

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ATOM   5054  CD  GLU  12     155.802 167.889 -31.843  1.00114.18      BS2
ATOM   5055  OE1 GLU  12     157.037 167.792 -32.011  1.00114.18      BS2
ATOM   5056  OE2 GLU  12     155.145 168.899 -32.198  1.00114.18      BS2
ATOM   5057  C   GLU  12     153.889 166.077 -33.868  1.00 94.87      BS2
ATOM   5058  O   GLU  12     154.563 165.129 -33.459  1.00 94.87      BS2
ATOM   5059  N   ALA  13     153.547 166.227 -35.139  1.00112.18      BS2
ATOM   5060  CA  ALA  13     154.034 165.312 -36.149  1.00112.18      BS2
ATOM   5061  CB  ALA  13     153.087 165.255 -37.337  1.00 51.15      BS2
ATOM   5062  C   ALA  13     155.316 166.030 -36.524  1.00112.18      BS2
ATOM   5063  O   ALA  13     156.131 165.531 -37.296  1.00112.18      BS2
ATOM   5064  N   GLY  14     155.472 167.224 -35.954  1.00110.22      BS2
ATOM   5065  CA  GLY  14     156.652 168.030 -36.201  1.00110.22      BS2
ATOM   5066  C   GLY  14     157.871 167.206 -35.867  1.00110.22      BS2
ATOM   5067  O   GLY  14     158.998 167.569 -36.198  1.00110.22      BS2
ATOM   5068  N   VAL  15     157.624 166.088 -35.191  1.00138.78      BS2
ATOM   5069  CA  VAL  15     158.661 165.146 -34.797  1.00138.78      BS2
ATOM   5070  CB  VAL  15     159.399 165.598 -33.507  1.00 87.79      BS2
ATOM   5071  CG1 VAL  15     160.724 164.857 -33.385  1.00 87.79      BS2
ATOM   5072  CG2 VAL  15     159.611 167.101 -33.505  1.00 87.79      BS2
ATOM   5073  C   VAL  15     157.947 163.830 -34.492  1.00138.78      BS2
ATOM   5074  O   VAL  15     156.718 163.758 -34.560  1.00138.78      BS2
ATOM   5075  N   HIS  16     158.723 162.798 -34.169  1.00119.45      BS2
ATOM   5076  CA  HIS  16     158.193 161.485 -33.805  1.00119.45      BS2
ATOM   5077  CB  HIS  16     157.029 161.636 -32.833  1.00141.63      BS2
ATOM   5078  CG  HIS  16     157.401 162.307 -31.556  1.00141.63      BS2
ATOM   5079  CD2 HIS  16     156.716 163.156 -30.757  1.00141.63      BS2
ATOM   5080  ND1 HIS  16     158.608 162.078 -30.922  1.00141.63      BS2
ATOM   5081  CE1 HIS  16     158.642 162.753 -29.791  1.00141.63      BS2
ATOM   5082  NE2 HIS  16     157.505 163.417 -29.665  1.00141.63      BS2
ATOM   5083  C   HIS  16     157.764 160.548 -34.912  1.00119.45      BS2
ATOM   5084  O   HIS  16     158.250 160.622 -36.038  1.00119.45      BS2
ATOM   5085  N   PHE  17     156.851 159.652 -34.543  1.00 55.49      BS2
ATOM   5086  CA  PHE  17     156.287 158.626 -35.420  1.00 55.49      BS2
ATOM   5087  CB  PHE  17     155.257 159.251 -36.381  1.00 81.81      BS2
ATOM   5088  CG  PHE  17     155.847 160.179 -37.399  1.00 81.81      BS2
ATOM   5089  CD1 PHE  17     156.793 159.724 -38.321  1.00 81.81      BS2
ATOM   5090  CD2 PHE  17     155.472 161.511 -37.434  1.00 81.81      BS2
ATOM   5091  CE1 PHE  17     157.361 160.587 -39.264  1.00 81.81      BS2
ATOM   5092  CE2 PHE  17     156.029 162.379 -38.368  1.00 81.81      BS2
ATOM   5093  CZ  PHE  17     156.977 161.915 -39.284  1.00 81.81      BS2
ATOM   5094  C   PHE  17     157.280 157.745 -36.208  1.00 55.49      BS2
ATOM   5095  O   PHE  17     158.466 158.072 -36.379  1.00 55.49      BS2
ATOM   5096  N   GLY  18     156.776 156.605 -36.664  1.00124.29      BS2
ATOM   5097  CA  GLY  18     157.591 155.688 -37.437  1.00124.29      BS2
ATOM   5098  C   GLY  18     158.765 155.028 -36.740  1.00124.29      BS2
ATOM   5099  O   GLY  18     158.604 154.065 -35.993  1.00124.29      BS2
ATOM   5100  N   HIS  19     159.955 155.552 -37.001  1.00115.63      BS2
ATOM   5101  CA  HIS  19     161.191 155.020 -36.439  1.00115.63      BS2
ATOM   5102  CB  HIS  19     161.238 155.234 -34.928  1.00168.73      BS2
ATOM   5103  CG  HIS  19     162.292 156.205 -34.496  1.00168.73      BS2
ATOM   5104  CD2 HIS  19     163.362 156.058 -33.678  1.00168.73      BS2
ATOM   5105  ND1 HIS  19     162.300 157.524 -34.900  1.00168.73      BS2
ATOM   5106  CE1 HIS  19     163.327 158.146 -34.349  1.00168.73      BS2
ATOM   5107  NE2 HIS  19     163.988 157.279 -33.602  1.00168.73      BS2
ATOM   5108  C   HIS  19     161.427 153.545 -36.768  1.00115.63      BS2
ATOM   5109  O   HIS  19     160.516 152.839 -37.204  1.00115.63      BS2
ATOM   5110  N   GLU  20     162.668 153.108 -36.554  1.00 99.25      BS2
ATOM   5111  CA  GLU  20     163.125 151.747 -36.826  1.00 99.25      BS2
ATOM   5112  CB  GLU  20     163.401 150.988 -35.524  1.00 71.78      BS2
ATOM   5113  CG  GLU  20     162.838 151.603 -34.265  1.00 71.78      BS2
ATOM   5114  CD  GLU  20     163.867 152.420 -33.506  1.00 71.78      BS2
ATOM   5115  OE1 GLU  20     165.057 152.053 -33.545  1.00 71.78      BS2
ATOM   5116  OE2 GLU  20     163.483 153.416 -32.856  1.00 71.78      BS2
ATOM   5117  C   GLU  20     162.238 150.890 -37.715  1.00 99.25      BS2
ATOM   5118  O   GLU  20     161.129 150.517 -37.342  1.00 99.25      BS2
ATOM   5119  N   ARG  21     162.753 150.578 -38.896  1.00105.85      BS2
ATOM   5120  CA  ARG  21     162.061 149.740 -39.867  1.00105.85      BS2
ATOM   5121  CB  ARG  21     162.829 149.784 -41.187  1.00120.85      BS2
ATOM   5122  CG  ARG  21     164.338 149.930 -40.992  1.00120.85      BS2
ATOM   5123  CD  ARG  21     164.890 148.824 -40.104  1.00120.85      BS2
ATOM   5124  NE  ARG  21     166.075 149.238 -39.363  1.00120.85      BS2
ATOM   5125  CZ  ARG  21     167.244 149.521 -39.923  1.00120.85      BS2
ATOM   5126  NH1 ARG  21     167.392 149.433 -41.240  1.00120.85      BS2
ATOM   5127  NH2 ARG  21     168.266 149.894 -39.166  1.00120.85      BS2
ATOM   5128  C   ARG  21     162.006 148.301 -39.334  1.00105.85      BS2
ATOM   5129  O   ARG  21     162.838 147.922 -38.509  1.00105.85      BS2
ATOM   5130  N   LYS  22     161.039 147.516 -39.814  1.00 71.72      BS2
ATOM   5131  CA  LYS  22     160.824 146.113 -39.413  1.00 71.72      BS2
ATOM   5132  CB  LYS  22     160.422 145.300 -40.653  1.00102.16      BS2
ATOM   5133  CG  LYS  22     159.272 145.922 -41.476  1.00102.16      BS2
ATOM   5134  CD  LYS  22     159.011 145.131 -42.762  1.00102.16      BS2
ATOM   5135  CE  LYS  22     158.063 145.844 -43.723  1.00102.16      BS2
ATOM   5136  NZ  LYS  22     156.643 145.842 -43.275  1.00102.16      BS2
ATOM   5137  C   LYS  22     161.970 145.396 -38.654  1.00 71.72      BS2
ATOM   5138  O   LYS  22     162.464 144.349 -39.069  1.00 71.72      BS2
ATOM   5139  N   ARG  23     162.369 145.981 -37.529  1.00 91.81      BS2
ATOM   5140  CA  ARG  23     163.417 145.463 -36.652  1.00 91.81      BS2
ATOM   5141  CB  ARG  23     164.583 146.447 -36.601  1.00180.10      BS2
ATOM   5142  CG  ARG  23     165.950 145.821 -36.790  1.00180.10      BS2
ATOM   5143  CD  ARG  23     166.562 145.338 -35.483  1.00180.10      BS2
ATOM   5144  NE  ARG  23     167.903 144.794 -35.702  1.00180.10      BS2
ATOM   5145  CZ  ARG  23     168.761 144.480 -34.735  1.00180.10      BS2
ATOM   5146  NH1 ARG  23     168.428 144.654 -33.460  1.00180.10      BS2
ATOM   5147  NH2 ARG  23     169.955 143.991 -35.045  1.00180.10      BS2
ATOM   5148  C   ARG  23     162.662 145.480 -35.336  1.00 91.81      BS2
ATOM   5149  O   ARG  23     163.225 145.455 -34.244  1.00 91.81      BS2
ATOM   5150  N   TRP  24     161.349 145.538 -35.511  1.00 74.46      BS2
ATOM   5151  CA  TRP  24     160.335 145.601 -34.473  1.00 74.46      BS2
ATOM   5152  CB  TRP  24     158.986 145.863 -35.134  1.00 59.76      BS2
ATOM   5153  CG  TRP  24     158.367 144.610 -35.704  1.00 59.76      BS2
ATOM   5154  CD2 TRP  24     156.974 144.317 -35.814  1.00 59.76      BS2
ATOM   5155  CE2 TRP  24     156.861 143.021 -36.368  1.00 59.76      BS2
ATOM   5156  CE3 TRP  24     155.809 145.019 -35.499  1.00 59.76      BS2
ATOM   5157  CD1 TRP  24     159.026 143.513 -36.189  1.00 59.76      BS2
ATOM   5158  NE1 TRP  24     158.129 142.554 -36.585  1.00 59.76      BS2
ATOM   5159  CZ2 TRP  24     155.626 142.413 -36.614  1.00 59.76      BS2
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ATOM	5160	CZ3	TRP	24	154.577	144.412	-35.744	1.00	59.76	BS2	ATOM	5213	C	ARG	30	148.950	149.314	-31.441	1.00	77.55	BS2
ATOM	5161	CH2	TRP	24	154.498	143.122	-36.297	1.00	59.76	BS2	ATOM	5214	O	ARG	30	148.013	150.044	-31.149	1.00	77.55	BS2
ATOM	5162	C	TRP	24	160.182	144.341	-33.654	1.00	74.46	BS2	ATOM	5215	N	TYR	31	150.082	149.785	-31.936	1.00	91.02	BS2
ATOM	5163	O	TRP	24	160.892	143.357	-33.846	1.00	74.46	BS2	ATOM	5216	CA	TYR	31	150.238	151.206	-32.188	1.00	91.02	BS2
ATOM	5164	N	ASN	25	159.203	144.391	-32.758	1.00	60.51	BS2	ATOM	5217	CB	TYR	31	151.355	151.764	-31.327	1.00	57.86	BS2
ATOM	5165	CA	ASN	25	158.843	143.263	-31.922	1.00	60.51	BS2	ATOM	5218	CG	TYR	31	151.119	151.498	-29.862	1.00	57.86	BS2
ATOM	5166	CB	ASN	25	159.609	143.309	-30.581	1.00	65.57	BS2	ATOM	5219	CD1	TYR	31	151.873	150.555	-29.172	1.00	57.86	BS2
ATOM	5167	CG	ASN	25	158.727	143.539	-29.386	1.00	65.57	BS2	ATOM	5220	CE1	TYR	31	151.666	150.328	-27.811	1.00	57.86	BS2
ATOM	5168	OD1	ASN	25	158.670	144.645	-28.866	1.00	65.57	BS2	ATOM	5221	CD2	TYR	31	150.145	152.204	-29.157	1.00	57.86	BS2
ATOM	5169	ND2	ASN	25	158.043	142.496	-28.933	1.00	65.57	BS2	ATOM	5222	CE2	TYR	31	149.932	151.986	-27.802	1.00	57.86	BS2
ATOM	5170	C	ASN	25	157.316	143.350	-31.800	1.00	60.51	BS2	ATOM	5223	CZ	TYR	31	150.694	151.050	-27.138	1.00	57.86	BS2
ATOM	5171	O	ASN	25	156.771	144.141	-31.040	1.00	60.51	BS2	ATOM	5224	OH	TYR	31	150.477	150.835	-25.801	1.00	57.86	BS2
ATOM	5172	N	PRO	26	156.615	142.531	-32.598	1.00	63.59	BS2	ATOM	5225	C	TYR	31	150.532	151.394	-33.671	1.00	91.02	BS2
ATOM	5173	CD	PRO	26	157.288	141.301	-33.059	1.00	46.83	BS2	ATOM	5226	O	TYR	31	149.613	151.681	-34.441	1.00	91.02	BS2
ATOM	5174	CA	PRO	26	155.168	142.378	-32.740	1.00	63.59	BS2	ATOM	5227	N	ILE	32	151.795	151.210	-34.060	1.00	58.25	BS2
ATOM	5175	CB	PRO	26	155.005	140.873	-32.883	1.00	46.83	BS2	ATOM	5228	CA	ILE	32	152.245	151.329	-35.455	1.00	58.25	BS2
ATOM	5176	CG	PRO	26	156.171	140.531	-33.726	1.00	46.83	BS2	ATOM	5229	CB	ILE	32	153.028	150.059	-35.865	1.00	57.40	BS2
ATOM	5177	C	PRO	26	154.280	142.954	-31.653	1.00	63.59	BS2	ATOM	5230	CG2	ILE	32	153.487	150.150	-37.311	1.00	57.40	BS2
ATOM	5178	O	PRO	26	153.275	143.587	-31.954	1.00	63.59	BS2	ATOM	5231	CG1	ILE	32	154.244	149.892	-34.956	1.00	57.40	BS2
ATOM	5179	N	LYS	27	154.646	142.739	-30.394	1.00	49.90	BS2	ATOM	5232	CD1	ILE	32	154.859	148.528	-35.037	1.00	57.40	BS2
ATOM	5180	CA	LYS	27	153.841	143.223	-29.288	1.00	49.90	BS2	ATOM	5233	C	ILE	32	151.087	151.554	-36.435	1.00	58.25	BS2
ATOM	5181	CB	LYS	27	154.504	142.852	-27.962	1.00	67.82	BS2	ATOM	5234	O	ILE	32	150.323	150.630	-36.723	1.00	58.25	BS2
ATOM	5182	CG	LYS	27	154.437	141.364	-27.645	1.00	67.82	BS2	ATOM	5235	N	TYR	33	150.969	152.784	-36.942	1.00	86.59	BS2
ATOM	5183	CD	LYS	27	154.884	141.075	-26.225	1.00	67.82	BS2	ATOM	5236	CA	TYR	33	149.888	153.149	-37.852	1.00	86.59	BS2
ATOM	5184	CE	LYS	27	154.576	139.634	-25.846	1.00	67.82	BS2	ATOM	5237	CB	TYR	33	150.004	154.610	-38.303	1.00	132.88	BS2
ATOM	5185	NZ	LYS	27	154.849	139.324	-24.404	1.00	67.82	BS2	ATOM	5238	CG	TYR	33	148.841	155.099	-39.164	1.00	132.88	BS2
ATOM	5186	C	LYS	27	153.596	144.723	-29.362	1.00	49.90	BS2	ATOM	5239	CD1	TYR	33	148.215	154.253	-40.084	1.00	132.88	BS2
ATOM	5187	O	LYS	27	152.726	145.266	-28.677	1.00	49.90	BS2	ATOM	5240	CE1	TYR	33	147.170	154.697	-40.881	1.00	132.88	BS2
ATOM	5188	N	PHE	28	154.351	145.396	-30.212	1.00	50.26	BS2	ATOM	5241	CD2	TYR	33	148.384	156.414	-39.074	1.00	132.88	BS2
ATOM	5189	CA	PHE	28	154.194	146.824	-30.345	1.00	50.26	BS2	ATOM	5242	CE2	TYR	33	147.339	156.870	-39.874	1.00	132.88	BS2
ATOM	5190	CB	PHE	28	155.548	147.462	-30.606	1.00	61.80	BS2	ATOM	5243	CZ	TYR	33	146.737	156.004	-40.773	1.00	132.88	BS2
ATOM	5191	CG	PHE	28	155.497	148.946	-30.651	1.00	61.80	BS2	ATOM	5244	OH	TYR	33	145.701	156.435	-41.565	1.00	132.88	BS2
ATOM	5192	CD1	PHE	28	155.223	149.672	-29.504	1.00	61.80	BS2	ATOM	5245	C	TYR	33	149.879	152.284	-39.081	1.00	86.59	BS2
ATOM	5193	CD2	PHE	28	155.659	149.619	-31.853	1.00	61.80	BS2	ATOM	5246	O	TYR	33	148.930	151.540	-39.325	1.00	86.59	BS2
ATOM	5194	CE1	PHE	28	155.109	151.043	-29.552	1.00	61.80	BS2	ATOM	5247	N	ALA	34	150.925	152.408	-39.881	1.00	81.34	BS2
ATOM	5195	CE2	PHE	28	155.547	150.996	-31.911	1.00	61.80	BS2	ATOM	5248	CA	ALA	34	150.982	151.626	-41.095	1.00	81.34	BS2
ATOM	5196	CZ	PHE	28	155.271	151.710	-30.756	1.00	61.80	BS2	ATOM	5249	CB	ALA	34	150.128	152.293	-42.180	1.00	49.89	BS2
ATOM	5197	C	PHE	28	153.235	147.173	-31.481	1.00	50.26	BS2	ATOM	5250	C	ALA	34	152.402	151.401	-41.591	1.00	81.34	BS2
ATOM	5198	O	PHE	28	153.000	148.352	-31.783	1.00	50.26	BS2	ATOM	5251	O	ALA	34	153.381	151.749	-40.916	1.00	81.34	BS2
ATOM	5199	N	ALA	29	152.664	146.150	-32.103	1.00	61.30	BS2	ATOM	5252	N	GLU	35	152.482	150.804	-42.780	1.00	106.96	BS2
ATOM	5200	CA	ALA	29	151.769	146.377	-33.227	1.00	61.30	BS2	ATOM	5253	CA	GLU	35	153.727	150.457	-43.457	1.00	106.96	BS2
ATOM	5201	CB	ALA	29	151.299	145.041	-33.799	1.00	58.98	BS2	ATOM	5254	CB	GLU	35	153.425	150.088	-44.916	1.00	182.00	BS2
ATOM	5202	C	ALA	29	150.567	147.246	-32.890	1.00	61.30	BS2	ATOM	5255	CG	GLU	35	152.244	150.833	-45.543	1.00	182.00	BS2
ATOM	5203	O	ALA	29	150.137	148.065	-33.716	1.00	61.30	BS2	ATOM	5256	CD	GLU	35	152.312	152.342	-45.356	1.00	182.00	BS2
ATOM	5204	N	ARG	30	150.035	147.075	-31.681	1.00	77.55	BS2	ATOM	5257	OE1	GLU	35	153.368	152.943	-45.659	1.00	182.00	BS2
ATOM	5205	CA	ARG	30	148.853	147.811	-31.253	1.00	77.55	BS2	ATOM	5258	OE2	GLU	35	151.299	152.926	-44.915	1.00	182.00	BS2
ATOM	5206	CB	ARG	30	148.508	147.471	-29.801	1.00	93.12	BS2	ATOM	5259	C	GLU	35	154.876	151.459	-43.425	1.00	106.96	BS2
ATOM	5207	CG	ARG	30	148.899	148.507	-28.772	1.00	93.12	BS2	ATOM	5260	O	GLU	35	154.975	152.304	-42.538	1.00	106.96	BS2
ATOM	5208	CD	ARG	30	148.700	147.952	-27.373	1.00	93.12	BS2	ATOM	5261	N	ARG	36	155.752	151.333	-44.415	1.00	159.28	BS2
ATOM	5209	NE	ARG	30	149.310	146.631	-27.271	1.00	93.12	BS2	ATOM	5262	CA	ARG	36	156.924	152.184	-44.545	1.00	159.28	BS2
ATOM	5210	CZ	ARG	30	150.018	146.205	-26.230	1.00	93.12	BS2	ATOM	5263	CB	ARG	36	156.536	153.542	-45.132	1.00	103.47	BS2
ATOM	5211	NH1	ARG	30	150.211	147.000	-25.183	1.00	93.12	BS2	ATOM	5264	CG	ARG	36	157.625	154.134	-45.998	1.00	103.47	BS2
ATOM	5212	NH2	ARG	30	150.543	144.983	-26.246	1.00	93.12	BS2	ATOM	5265	CD	ARG	36	158.964	154.080	-45.290	1.00	103.47	BS2

ATOM	5266	NE	ARG	36	159.946	153.297	-46.032	1.00103.47	BS2	ATOM	5319	CA	ASP	43	149.744	156.147	-32.916	1.00100.74	BS2
ATOM	5267	CZ	ARG	36	160.433	153.646	-47.220	1.00103.47	BS2	ATOM	5320	CB	ASP	43	151.177	155.805	-33.285	1.00136.73	BS2
ATOM	5268	NH1	ARG	36	160.025	154.769	-47.805	1.00103.47	BS2	ATOM	5321	CG	ASP	43	151.287	154.597	-34.161	1.00136.73	BS2
ATOM	5269	NH2	ARG	36	161.338	152.881	-47.821	1.00103.47	BS2	ATOM	5322	OD1	ASP	43	150.641	154.588	-35.227	1.00136.73	BS2
ATOM	5270	C	ARG	36	157.621	152.376	-43.197	1.00159.28	BS2	ATOM	5323	OD2	ASP	43	152.032	153.668	-33.785	1.00136.73	BS2
ATOM	5271	O	ARG	36	157.490	153.420	-42.557	1.00159.28	BS2	ATOM	5324	C	ASP	43	149.770	157.516	-32.295	1.00100.74	BS2
ATOM	5272	N	ASN	37	158.364	151.356	-42.778	1.00 91.74	BS2	ATOM	5325	O	ASP	43	149.473	157.662	-31.127	1.00100.74	BS2
ATOM	5273	CA	ASN	37	159.090	151.382	-41.515	1.00 91.74	BS2	ATOM	5326	N	LEU	44	150.142	158.522	-33.084	1.00 83.31	BS2
ATOM	5274	CB	ASN	37	160.149	152.472	-41.560	1.00120.59	BS2	ATOM	5327	CA	LEU	44	150.194	159.893	-32.580	1.00 83.31	BS2
ATOM	5275	CG	ASN	37	160.962	152.399	-42.821	1.00120.59	BS2	ATOM	5328	CB	LEU	44	150.539	160.860	-33.710	1.00 77.81	BS2
ATOM	5276	OD1	ASN	37	161.388	151.317	-43.230	1.00120.59	BS2	ATOM	5329	CG	LEU	44	151.872	160.501	-34.370	1.00 77.81	BS2
ATOM	5277	ND2	ASN	37	161.177	153.541	-43.458	1.00120.59	BS2	ATOM	5330	CD1	LEU	44	152.083	161.342	-35.622	1.00 77.81	BS2
ATOM	5278	C	ASN	37	158.167	151.575	-40.324	1.00 91.74	BS2	ATOM	5331	CD2	LEU	44	152.999	160.690	-33.367	1.00 77.81	BS2
ATOM	5279	O	ASN	37	158.612	151.922	-39.225	1.00 91.74	BS2	ATOM	5332	C	LEU	44	148.832	160.212	-31.974	1.00 83.31	BS2
ATOM	5280	N	GLY	38	156.879	151.325	-40.556	1.00 82.19	BS2	ATOM	5333	O	LEU	44	148.687	161.111	-31.145	1.00 83.31	BS2
ATOM	5281	CA	GLY	38	155.887	151.444	-39.507	1.00 82.19	BS2	ATOM	5334	N	GLN	45	147.830	159.459	-32.402	1.00 73.62	BS2
ATOM	5282	C	GLY	38	155.877	152.847	-38.967	1.00 82.19	BS2	ATOM	5335	CA	GLN	45	146.502	159.611	-31.860	1.00 73.62	BS2
ATOM	5283	O	GLY	38	156.847	153.305	-38.374	1.00 82.19	BS2	ATOM	5336	CB	GLN	45	145.511	158.859	-32.737	1.00155.95	BS2
ATOM	5284	N	ILE	39	154.774	153.543	-39.164	1.00 79.87	BS2	ATOM	5337	CG	GLN	45	144.069	159.021	-32.342	1.00155.95	BS2
ATOM	5285	CA	ILE	39	154.714	154.901	-38.687	1.00 79.87	BS2	ATOM	5338	CD	GLN	45	143.155	158.223	-33.244	1.00155.95	BS2
ATOM	5286	CB	ILE	39	154.377	155.851	-39.846	1.00 89.38	BS2	ATOM	5339	OE1	GLN	45	143.235	156.992	-33.300	1.00155.95	BS2
ATOM	5287	CG2	ILE	39	154.760	157.274	-39.479	1.00 89.38	BS2	ATOM	5340	NE2	GLN	45	142.283	158.919	-33.966	1.00155.95	BS2
ATOM	5288	CG1	ILE	39	155.179	155.441	-41.082	1.00 89.38	BS2	ATOM	5341	C	GLN	45	146.656	158.923	-30.502	1.00 73.62	BS2
ATOM	5289	CD1	ILE	39	154.930	156.301	-42.313	1.00 89.38	BS2	ATOM	5342	O	GLN	45	146.474	159.529	-29.439	1.00 73.62	BS2
ATOM	5290	C	ILE	39	153.711	155.051	-37.556	1.00 79.87	BS2	ATOM	5343	N	LYS	46	147.036	157.651	-30.565	1.00 75.60	BS2
ATOM	5291	O	ILE	39	153.381	154.085	-36.872	1.00 79.87	BS2	ATOM	5344	CA	LYS	46	147.259	156.823	-29.389	1.00 75.60	BS2
ATOM	5292	N	HIS	40	153.235	156.274	-37.363	1.00200.66	BS2	ATOM	5345	CB	LYS	46	147.623	155.397	-29.825	1.00 68.29	BS2
ATOM	5293	CA	HIS	40	152.280	156.571	-36.312	1.00200.66	BS2	ATOM	5346	CG	LYS	46	146.494	154.673	-30.554	1.00 68.29	BS2
ATOM	5294	CB	HIS	40	153.016	157.227	-35.145	1.00 71.25	BS2	ATOM	5347	CD	LYS	46	146.959	153.375	-31.198	1.00 68.29	BS2
ATOM	5295	CG	HIS	40	153.970	156.307	-34.439	1.00 71.25	BS2	ATOM	5348	CE	LYS	46	145.823	152.709	-31.976	1.00 68.29	BS2
ATOM	5296	CD2	HIS	40	154.323	156.222	-33.133	1.00 71.25	BS2	ATOM	5349	NZ	LYS	46	146.259	151.480	-32.720	1.00 68.29	BS2
ATOM	5297	ND1	HIS	40	154.714	155.353	-35.100	1.00 71.25	BS2	ATOM	5350	C	LYS	46	148.371	157.399	-28.515	1.00 75.60	BS2
ATOM	5298	CE1	HIS	40	155.486	154.722	-34.231	1.00 71.25	BS2	ATOM	5351	O	LYS	46	148.318	157.300	-27.297	1.00 75.60	BS2
ATOM	5299	NE2	HIS	40	155.269	155.230	-33.031	1.00 71.25	BS2	ATOM	5352	N	THR	47	149.379	157.991	-29.145	1.00 53.82	BS2
ATOM	5300	C	HIS	40	151.122	157.448	-36.811	1.00200.66	BS2	ATOM	5353	CA	THR	47	150.508	158.587	-28.435	1.00 53.82	BS2
ATOM	5301	O	HIS	40	150.761	157.372	-37.985	1.00200.66	BS2	ATOM	5354	CB	THR	47	151.557	159.167	-29.409	1.00 58.63	BS2
ATOM	5302	N	ILE	41	150.561	158.274	-35.921	1.00185.76	BS2	ATOM	5355	OG1	THR	47	151.959	158.159	-30.342	1.00 58.63	BS2
ATOM	5303	CA	ILE	41	149.412	159.164	-36.192	1.00185.76	BS2	ATOM	5356	CG2	THR	47	152.776	159.639	-28.648	1.00 58.63	BS2
ATOM	5304	CB	ILE	41	149.191	159.435	-37.711	1.00 64.91	BS2	ATOM	5357	C	THR	47	149.964	159.725	-27.595	1.00 53.82	BS2
ATOM	5305	CG2	ILE	41	147.983	160.360	-37.926	1.00 64.91	BS2	ATOM	5358	O	THR	47	150.498	160.052	-26.534	1.00 53.82	BS2
ATOM	5306	CG1	ILE	41	150.441	160.099	-38.296	1.00 64.91	BS2	ATOM	5359	N	MET	48	148.896	160.334	-28.097	1.00 82.47	BS2
ATOM	5307	CD1	ILE	41	150.589	159.903	-39.789	1.00 64.91	BS2	ATOM	5360	CA	MET	48	148.260	161.422	-27.391	1.00 82.47	BS2
ATOM	5308	C	ILE	41	148.198	158.458	-35.577	1.00185.76	BS2	ATOM	5361	CB	MET	48	147.460	162.289	-28.363	1.00146.27	BS2
ATOM	5309	O	ILE	41	147.479	159.042	-34.765	1.00185.76	BS2	ATOM	5362	CG	MET	48	147.513	163.772	-28.020	1.00146.27	BS2
ATOM	5310	N	ILE	42	147.965	157.205	-35.972	1.00141.84	BS2	ATOM	5363	SD	MET	48	147.342	164.848	-29.459	1.00146.27	BS2
ATOM	5311	CA	ILE	42	146.897	156.419	-35.361	1.00141.84	BS2	ATOM	5364	CE	MET	48	145.557	165.146	-29.480	1.00146.27	BS2
ATOM	5312	CB	ILE	42	146.704	155.039	-36.023	1.00126.64	BS2	ATOM	5365	C	MET	48	147.362	160.736	-26.370	1.00 82.47	BS2
ATOM	5313	CG2	ILE	42	145.995	154.099	-35.055	1.00126.64	BS2	ATOM	5366	O	MET	48	147.394	161.074	-25.183	1.00 82.47	BS2
ATOM	5314	CG1	ILE	42	145.898	155.179	-37.317	1.00126.64	BS2	ATOM	5367	N	GLU	49	146.592	159.747	-26.828	1.00 63.64	BS2
ATOM	5315	CD1	ILE	42	144.489	155.729	-37.114	1.00126.64	BS2	ATOM	5368	CA	GLU	49	145.713	158.989	-25.934	1.00 63.64	BS2
ATOM	5316	C	ILE	42	147.569	156.203	-34.028	1.00141.84	BS2	ATOM	5369	CB	GLU	49	145.070	157.822	-26.680	1.00135.99	BS2
ATOM	5317	O	ILE	42	146.926	155.977	-33.009	1.00141.84	BS2	ATOM	5370	CG	GLU	49	144.246	158.258	-27.879	1.00135.99	BS2
ATOM	5318	N	ASP	43	148.896	156.276	-34.082	1.00100.74	BS2	ATOM	5371	CD	GLU	49	143.488	157.110	-28.521	1.00135.99	BS2

ATOM	5372	OE1	GLU	49	142.641	156.499	-27.833	1.00135.99	BS2	ATOM	5425	CD2	PHE	55	152.587	165.000	-20.460	1.00 92.82	BS2
ATOM	5373	OE2	GLU	49	143.738	156.820	-29.713	1.00135.99	BS2	ATOM	5426	CE1	PHE	55	154.062	162.717	-21.029	1.00 92.82	BS2
ATOM	5374	C	GLU	49	146.528	158.464	-24.744	1.00 63.64	BS2	ATOM	5427	CE2	PHE	55	153.721	165.086	-21.258	1.00 92.82	BS2
ATOM	5375	O	GLU	49	146.120	158.572	-23.584	1.00 63.64	BS2	ATOM	5428	CZ	PHE	55	154.461	163.946	-21.545	1.00 92.82	BS2
ATOM	5376	N	GLU	50	147.694	157.906	-25.051	1.00 79.71	BS2	ATOM	5429	C	PHE	55	149.600	162.537	-17.372	1.00 95.74	BS2
ATOM	5377	CA	GLU	50	148.596	157.376	-24.045	1.00 79.71	BS2	ATOM	5430	O	PHE	55	148.582	162.458	-18.052	1.00 95.74	BS2
ATOM	5378	CB	GLU	50	149.714	156.583	-24.708	1.00 97.60	BS2	ATOM	5431	N	ARG	56	149.596	162.542	-16.044	1.00 75.35	BS2
ATOM	5379	CG	GLU	50	149.257	155.295	-25.361	1.00 97.60	BS2	ATOM	5432	CA	ARG	56	148.358	162.428	-15.270	1.00 75.35	BS2
ATOM	5380	CD	GLU	50	148.552	154.365	-24.391	1.00 97.60	BS2	ATOM	5433	CB	ARG	56	147.317	161.606	-16.035	1.00105.75	BS2
ATOM	5381	OE1	GLU	50	148.960	154.316	-23.208	1.00 97.60	BS2	ATOM	5434	CG	ARG	56	145.921	161.552	-15.451	1.00105.75	BS2
ATOM	5382	OE2	GLU	50	147.599	153.677	-24.822	1.00 97.60	BS2	ATOM	5435	CD	ARG	56	145.062	160.671	-16.351	1.00105.75	BS2
ATOM	5383	C	GLU	50	149.195	158.511	-23.233	1.00 79.71	BS2	ATOM	5436	NE	ARG	56	143.756	160.337	-15.787	1.00105.75	BS2
ATOM	5384	O	GLU	50	149.223	158.452	-22.005	1.00 79.71	BS2	ATOM	5437	CZ	ARG	56	142.993	159.332	-16.218	1.00105.75	BS2
ATOM	5385	N	LEU	51	149.692	159.534	-23.920	1.00 63.82	BS2	ATOM	5438	NH1	ARG	56	143.408	158.561	-17.219	1.00105.75	BS2
ATOM	5386	CA	LEU	51	150.268	160.688	-23.243	1.00 63.82	BS2	ATOM	5439	NH2	ARG	56	141.813	159.094	-15.653	1.00105.75	BS2
ATOM	5387	CB	LEU	51	150.489	161.824	-24.235	1.00 47.03	BS2	ATOM	5440	C	ARG	56	148.881	161.627	-14.107	1.00 75.35	BS2
ATOM	5388	CG	LEU	51	151.846	161.904	-24.921	1.00 47.03	BS2	ATOM	5441	O	ARG	56	148.643	161.941	-12.939	1.00 75.35	BS2
ATOM	5389	CD1	LEU	51	151.750	162.754	-26.172	1.00 47.03	BS2	ATOM	5442	N	PHE	57	149.613	160.580	-14.462	1.00 56.86	BS2
ATOM	5390	CD2	LEU	51	152.855	162.477	-23.952	1.00 47.03	BS2	ATOM	5443	CA	PHE	57	150.248	159.722	-13.490	1.00 56.86	BS2
ATOM	5391	C	LEU	51	149.301	161.161	-22.171	1.00 63.82	BS2	ATOM	5444	CB	PHE	57	150.865	158.493	-14.185	1.00 48.15	BS2
ATOM	5392	O	LEU	51	149.648	161.259	-20.991	1.00 63.82	BS2	ATOM	5445	CG	PHE	57	151.726	157.663	-13.282	1.00 48.15	BS2
ATOM	5393	N	GLU	52	148.075	161.439	-22.599	1.00 74.78	BS2	ATOM	5446	CD1	PHE	57	151.164	156.921	-12.253	1.00 48.15	BS2
ATOM	5394	CA	GLU	52	147.041	161.919	-21.704	1.00 74.78	BS2	ATOM	5447	CD2	PHE	57	153.109	157.723	-13.378	1.00 48.15	BS2
ATOM	5395	CB	GLU	52	145.678	161.831	-22.390	1.00158.46	BS2	ATOM	5448	CE1	PHE	57	151.965	156.264	-11.327	1.00 48.15	BS2
ATOM	5396	CG	GLU	52	144.575	162.587	-21.673	1.00158.46	BS2	ATOM	5449	CE2	PHE	57	153.915	157.066	-12.449	1.00 48.15	BS2
ATOM	5397	CD	GLU	52	143.235	162.479	-22.378	1.00158.46	BS2	ATOM	5450	CZ	PHE	57	153.340	156.340	-11.423	1.00 48.15	BS2
ATOM	5398	OE1	GLU	52	142.684	161.356	-22.436	1.00158.46	BS2	ATOM	5451	C	PHE	57	151.324	160.627	-12.887	1.00 56.86	BS2
ATOM	5399	OE2	GLU	52	142.739	163.517	-22.872	1.00158.46	BS2	ATOM	5452	O	PHE	57	151.495	160.660	-11.669	1.00 56.86	BS2
ATOM	5400	C	GLU	52	147.020	161.126	-20.400	1.00 74.78	BS2	ATOM	5453	N	ILE	58	152.018	161.379	-13.747	1.00 62.89	BS2
ATOM	5401	O	GLU	52	146.801	161.691	-19.331	1.00 74.78	BS2	ATOM	5454	CA	ILE	58	153.070	162.316	-13.314	1.00 62.89	BS2
ATOM	5402	N	ARG	53	147.257	159.821	-20.491	1.00 89.10	BS2	ATOM	5455	CB	ILE	58	153.611	163.176	-14.463	1.00111.76	BS2
ATOM	5403	CA	ARG	53	147.246	158.956	-19.316	1.00 89.10	BS2	ATOM	5456	CG2	ILE	58	154.908	162.607	-14.999	1.00111.76	BS2
ATOM	5404	CB	ARG	53	146.933	157.525	-19.755	1.00 65.65	BS2	ATOM	5457	CG1	ILE	58	152.506	163.366	-15.501	1.00111.76	BS2
ATOM	5405	CG	ARG	53	146.718	156.540	-18.625	1.00 65.65	BS2	ATOM	5458	CD1	ILE	58	152.773	164.507	-16.461	1.00111.76	BS2
ATOM	5406	CD	ARG	53	146.312	155.174	-19.177	1.00 65.65	BS2	ATOM	5459	C	ILE	58	152.521	163.312	-12.312	1.00 62.89	BS2
ATOM	5407	NE	ARG	53	146.638	154.082	-18.262	1.00 65.65	BS2	ATOM	5460	O	ILE	58	152.960	163.355	-11.166	1.00 62.89	BS2
ATOM	5408	CZ	ARG	53	147.874	153.647	-18.024	1.00 65.65	BS2	ATOM	5461	N	GLU	59	151.584	164.142	-12.773	1.00 79.47	BS2
ATOM	5409	NH1	ARG	53	148.916	154.206	-18.631	1.00 65.65	BS2	ATOM	5462	CA	GLU	59	150.962	165.132	-11.907	1.00 79.47	BS2
ATOM	5410	NH2	ARG	53	148.071	152.649	-17.176	1.00 65.65	BS2	ATOM	5463	CB	GLU	59	149.615	165.592	-12.461	1.00110.56	BS2
ATOM	5411	C	ARG	53	148.559	159.013	-18.519	1.00 89.10	BS2	ATOM	5464	CG	GLU	59	149.670	166.674	-13.510	1.00110.56	BS2
ATOM	5412	O	ARG	53	148.547	159.218	-17.304	1.00 89.10	BS2	ATOM	5465	CD	GLU	59	148.299	167.287	-13.749	1.00110.56	BS2
ATOM	5413	N	THR	54	149.686	158.830	-19.202	1.00 66.04	BS2	ATOM	5466	OE1	GLU	59	147.357	166.530	-14.077	1.00110.56	BS2
ATOM	5414	CA	THR	54	150.992	158.881	-18.555	1.00 66.04	BS2	ATOM	5467	OE2	GLU	59	148.161	168.523	-13.606	1.00110.56	BS2
ATOM	5415	CB	THR	54	152.109	158.785	-19.583	1.00 69.79	BS2	ATOM	5468	C	GLU	59	150.712	164.455	-10.580	1.00 79.47	BS2
ATOM	5416	OG1	THR	54	151.980	157.550	-20.298	1.00 69.79	BS2	ATOM	5469	O	GLU	59	151.283	164.833	-9.553	1.00 79.47	BS2
ATOM	5417	CG2	THR	54	153.466	158.844	-18.900	1.00 69.79	BS2	ATOM	5470	N	ASP	60	149.850	163.445	-10.615	1.00 63.10	BS2
ATOM	5418	C	THR	54	151.081	160.219	-17.862	1.00 66.04	BS2	ATOM	5471	CA	ASP	60	149.520	162.708	-9.416	1.00 63.10	BS2
ATOM	5419	O	THR	54	151.300	160.297	-16.657	1.00 66.04	BS2	ATOM	5472	CB	ASP	60	148.901	161.361	-9.780	1.00124.10	BS2
ATOM	5420	N	PHE	55	150.940	161.283	-18.639	1.00 95.74	BS2	ATOM	5473	CG	ASP	60	148.645	160.495	-8.566	1.00124.10	BS2
ATOM	5421	CA	PHE	55	150.942	162.608	-18.055	1.00 95.74	BS2	ATOM	5474	OD1	ASP	60	147.994	160.991	-7.622	1.00124.10	BS2
ATOM	5422	CB	PHE	55	150.915	163.688	-19.134	1.00 92.82	BS2	ATOM	5475	OD2	ASP	60	149.092	159.325	-8.563	1.00124.10	BS2
ATOM	5423	CG	PHE	55	152.176	163.779	-19.942	1.00 92.82	BS2	ATOM	5476	C	ASP	60	150.783	162.497	-8.591	1.00 63.10	BS2
ATOM	5424	CD1	PHE	55	152.924	162.639	-20.233	1.00 92.82	BS2	ATOM	5477	O	ASP	60	150.851	162.905	-7.431	1.00 63.10	BS2

ATOM	5478	N	LEU	61	151.789	161.883	-9.205	1.00	55.46	BS2	ATOM	5531	C	ILE	68	162.777	160.057	-11.038	1.00	61.88	BS2
ATOM	5479	CA	LEU	61	153.049	161.603	-8.524	1.00	55.46	BS2	ATOM	5532	O	ILE	68	163.434	161.056	-11.308	1.00	61.88	BS2
ATOM	5480	CB	LEU	61	153.989	160.819	-9.453	1.00	62.77	BS2	ATOM	5533	N	LEU	69	163.244	158.824	-11.186	1.00	60.47	BS2
ATOM	5481	CG	LEU	61	154.999	159.777	-8.943	1.00	62.77	BS2	ATOM	5534	CA	LEU	69	164.578	158.567	-11.722	1.00	60.47	BS2
ATOM	5482	CD1	LEU	61	156.400	160.220	-9.305	1.00	62.77	BS2	ATOM	5535	CB	LEU	69	165.010	157.157	-11.353	1.00	52.72	BS2
ATOM	5483	CD2	LEU	61	154.865	159.567	-7.454	1.00	62.77	BS2	ATOM	5536	CG	LEU	69	166.470	156.895	-11.008	1.00	52.72	BS2
ATOM	5484	C	LEU	61	153.719	162.892	-8.068	1.00	55.46	BS2	ATOM	5537	CD1	LEU	69	166.599	155.450	-10.513	1.00	52.72	BS2
ATOM	5485	O	LEU	61	153.969	163.065	-6.879	1.00	55.46	BS2	ATOM	5538	CD2	LEU	69	167.353	157.142	-12.228	1.00	52.72	BS2
ATOM	5486	N	ALA	62	154.000	163.793	-9.011	1.00	57.80	BS2	ATOM	5539	C	LEU	69	164.369	158.662	-13.226	1.00	60.47	BS2
ATOM	5487	CA	ALA	62	154.646	165.077	-8.710	1.00	57.80	BS2	ATOM	5540	O	LEU	69	163.389	158.129	-13.727	1.00	60.47	BS2
ATOM	5488	CB	ALA	62	154.554	165.996	-9.898	1.00	48.72	BS2	ATOM	5541	N	PHE	70	165.258	159.323	-13.963	1.00	75.15	BS2
ATOM	5489	C	ALA	62	154.032	165.752	-7.495	1.00	57.80	BS2	ATOM	5542	CA	PHE	70	165.016	159.423	-15.396	1.00	75.15	BS2
ATOM	5490	O	ALA	62	154.727	166.013	-6.515	1.00	57.80	BS2	ATOM	5543	CB	PHE	70	165.259	160.856	-15.861	1.00	50.00	BS2
ATOM	5491	N	MET	63	152.732	166.034	-7.570	1.00	70.06	BS2	ATOM	5544	CG	PHE	70	164.033	161.724	-15.738	1.00	50.00	BS2
ATOM	5492	CA	MET	63	152.011	166.661	-6.469	1.00	70.06	BS2	ATOM	5545	CD1	PHE	70	163.540	162.081	-14.489	1.00	50.00	BS2
ATOM	5493	CB	MET	63	150.508	166.530	-6.656	1.00	137.05	BS2	ATOM	5546	CD2	PHE	70	163.321	162.117	-16.870	1.00	50.00	BS2
ATOM	5494	CG	MET	63	149.890	167.453	-7.655	1.00	137.05	BS2	ATOM	5547	CE1	PHE	70	162.351	162.816	-14.369	1.00	50.00	BS2
ATOM	5495	SD	MET	63	148.109	167.379	-7.409	1.00	137.05	BS2	ATOM	5548	CE2	PHE	70	162.132	162.849	-16.759	1.00	50.00	BS2
ATOM	5496	CE	MET	63	147.774	165.674	-7.918	1.00	137.05	BS2	ATOM	5549	CZ	PHE	70	161.649	163.198	-15.508	1.00	50.00	BS2
ATOM	5497	C	MET	63	152.348	166.007	-5.143	1.00	70.06	BS2	ATOM	5550	C	PHE	70	165.650	158.388	-16.332	1.00	75.15	BS2
ATOM	5498	O	MET	63	152.931	166.627	-4.261	1.00	70.06	BS2	ATOM	5551	O	PHE	70	164.950	157.850	-17.194	1.00	75.15	BS2
ATOM	5499	N	ARG	64	151.959	164.748	-5.006	1.00	57.46	BS2	ATOM	5552	N	VAL	71	166.942	158.099	-16.200	1.00	51.79	BS2
ATOM	5500	CA	ARG	64	152.188	164.005	-3.779	1.00	57.46	BS2	ATOM	5553	CA	VAL	71	167.529	157.038	-17.043	1.00	51.79	BS2
ATOM	5501	CB	ARG	64	151.914	162.516	-4.013	1.00	148.96	BS2	ATOM	5554	CB	VAL	71	166.751	155.709	-16.799	1.00	61.58	BS2
ATOM	5502	CG	ARG	64	150.496	162.219	-4.471	1.00	148.96	BS2	ATOM	5555	CG1	VAL	71	167.274	154.618	-17.702	1.00	61.58	BS2
ATOM	5503	CD	ARG	64	150.257	160.729	-4.647	1.00	148.96	BS2	ATOM	5556	CG2	VAL	71	166.859	155.299	-15.332	1.00	61.58	BS2
ATOM	5504	NE	ARG	64	148.883	160.455	-5.063	1.00	148.96	BS2	ATOM	5557	C	VAL	71	167.588	157.277	-18.569	1.00	51.79	BS2
ATOM	5505	CZ	ARG	64	148.384	159.239	-5.273	1.00	148.96	BS2	ATOM	5558	O	VAL	71	166.648	156.942	-19.282	1.00	51.79	BS2
ATOM	5506	NH1	ARG	64	149.145	158.164	-5.106	1.00	148.96	BS2	ATOM	5559	N	GLY	72	168.703	157.819	-19.060	1.00	88.99	BS2
ATOM	5507	NH2	ARG	64	147.119	159.096	-5.654	1.00	148.96	BS2	ATOM	5560	CA	GLY	72	168.843	158.085	-20.486	1.00	88.99	BS2
ATOM	5508	C	ARG	64	153.589	164.190	-3.211	1.00	57.46	BS2	ATOM	5561	C	GLY	72	169.938	157.266	-21.160	1.00	88.99	BS2
ATOM	5509	O	ARG	64	153.851	163.772	-2.086	1.00	57.46	BS2	ATOM	5562	O	GLY	72	169.714	156.637	-22.198	1.00	88.99	BS2
ATOM	5510	N	GLY	65	154.476	164.822	-3.981	1.00	57.17	BS2	ATOM	5563	N	THR	73	171.129	157.293	-20.572	1.00	64.25	BS2
ATOM	5511	CA	GLY	65	155.848	165.033	-3.544	1.00	57.17	BS2	ATOM	5564	CA	THR	73	172.296	156.552	-21.050	1.00	64.25	BS2
ATOM	5512	C	GLY	65	156.735	164.030	-4.258	1.00	57.17	BS2	ATOM	5565	CB	THR	73	172.229	155.096	-20.578	1.00	66.65	BS2
ATOM	5513	O	GLY	65	157.823	163.686	-3.793	1.00	57.17	BS2	ATOM	5566	OG1	THR	73	172.125	155.067	-19.151	1.00	66.65	BS2
ATOM	5514	N	GLY	66	156.228	163.565	-5.397	1.00	76.04	BS2	ATOM	5567	CG2	THR	73	173.471	154.340	-20.986	1.00	66.65	BS2
ATOM	5515	CA	GLY	66	156.879	162.582	-6.250	1.00	76.04	BS2	ATOM	5568	C	THR	73	172.664	156.564	-22.541	1.00	64.25	BS2
ATOM	5516	C	GLY	66	158.249	161.989	-5.973	1.00	76.04	BS2	ATOM	5569	O	THR	73	173.817	156.833	-22.882	1.00	64.25	BS2
ATOM	5517	O	GLY	66	158.525	161.471	-4.891	1.00	76.04	BS2	ATOM	5570	N	LYS	74	171.730	156.277	-23.440	1.00	63.36	BS2
ATOM	5518	N	THR	67	159.079	162.055	-7.014	1.00	51.27	BS2	ATOM	5571	CA	LYS	74	172.095	156.288	-24.853	1.00	63.36	BS2
ATOM	5519	CA	THR	67	160.467	161.560	-7.095	1.00	51.27	BS2	ATOM	5572	CB	LYS	74	170.985	155.679	-25.709	1.00	55.18	BS2
ATOM	5520	CB	THR	67	160.928	160.749	-5.888	1.00	57.67	BS2	ATOM	5573	CG	LYS	74	169.763	156.536	-25.983	1.00	55.18	BS2
ATOM	5521	OG1	THR	67	160.930	161.570	-4.721	1.00	57.67	BS2	ATOM	5574	CD	LYS	74	168.849	155.748	-26.927	1.00	55.18	BS2
ATOM	5522	CG2	THR	67	162.332	160.257	-6.116	1.00	57.67	BS2	ATOM	5575	CE	LYS	74	167.653	156.534	-27.424	1.00	55.18	BS2
ATOM	5523	C	THR	67	160.501	160.623	-8.291	1.00	51.27	BS2	ATOM	5576	NZ	LYS	74	166.968	155.799	-28.529	1.00	55.18	BS2
ATOM	5524	O	THR	67	159.834	159.593	-8.295	1.00	51.27	BS2	ATOM	5577	C	LYS	74	172.452	157.676	-25.375	1.00	63.36	BS2
ATOM	5525	N	ILE	68	161.275	160.983	-9.305	1.00	61.88	BS2	ATOM	5578	O	LYS	74	171.778	158.657	-25.055	1.00	63.36	BS2
ATOM	5526	CA	ILE	68	161.360	160.182	-10.511	1.00	61.88	BS2	ATOM	5579	N	LYS	75	173.518	157.748	-26.176	1.00	96.32	BS2
ATOM	5527	CB	ILE	68	160.508	160.800	-11.616	1.00	36.37	BS2	ATOM	5580	CA	LYS	75	173.989	159.009	-26.759	1.00	96.32	BS2
ATOM	5528	CG2	ILE	68	160.566	159.948	-12.864	1.00	36.37	BS2	ATOM	5581	CB	LYS	75	174.869	158.737	-27.983	1.00	129.34	BS2
ATOM	5529	CG1	ILE	68	159.071	160.928	-11.144	1.00	36.37	BS2	ATOM	5582	CG	LYS	75	176.337	158.528	-27.657	1.00	129.34	BS2
ATOM	5530	CD1	ILE	68	158.126	161.391	-12.243	1.00	36.37	BS2	ATOM	5583	CD	LYS	75	176.886	159.732	-26.905	1.00	129.34	BS2

ATOM	5584	CE	LYS	75	178.391	159.641	-26.705	1.00129.34	BS2	ATOM	5637	CG	ARG	82	172.509	167.172	-16.760	1.00113.63	BS2
ATOM	5585	NZ	LYS	75	179.134	159.707	-28.000	1.00129.34	BS2	ATOM	5638	CD	ARG	82	174.003	167.328	-16.910	1.00113.63	BS2
ATOM	5586	C	LYS	75	172.847	159.930	-27.154	1.00 96.32	BS2	ATOM	5639	NE	ARG	82	174.689	166.056	-16.720	1.00113.63	BS2
ATOM	5587	O	LYS	75	172.747	161.051	-26.658	1.00 96.32	BS2	ATOM	5640	CZ	ARG	82	175.900	165.930	-16.188	1.00113.63	BS2
ATOM	5588	N	GLN	76	171.999	159.469	-28.066	1.00108.97	BS2	ATOM	5641	NH1	ARG	82	176.566	167.004	-15.780	1.00113.63	BS2
ATOM	5589	CA	GLN	76	170.849	160.261	-28.469	1.00108.97	BS2	ATOM	5642	NH2	ARG	82	176.448	164.727	-16.072	1.00113.63	BS2
ATOM	5590	CB	GLN	76	169.953	159.450	-29.406	1.00119.66	BS2	ATOM	5643	C	ARG	82	169.710	167.193	-17.282	1.00 71.95	BS2
ATOM	5591	CG	GLN	76	170.490	159.337	-30.811	1.00119.66	BS2	ATOM	5644	O	ARG	82	169.211	167.500	-16.201	1.00 71.95	BS2
ATOM	5592	CD	GLN	76	170.232	160.592	-31.622	1.00119.66	BS2	ATOM	5645	N	MET	83	169.633	167.988	-18.337	1.00 96.25	BS2
ATOM	5593	OE1	GLN	76	170.295	161.709	-31.103	1.00119.66	BS2	ATOM	5646	CA	MET	83	168.949	169.256	-18.204	1.00 96.25	BS2
ATOM	5594	NE2	GLN	76	169.951	160.415	-32.908	1.00119.66	BS2	ATOM	5647	CB	MET	83	168.784	169.922	-19.566	1.00132.91	BS2
ATOM	5595	C	GLN	76	170.104	160.572	-27.174	1.00108.97	BS2	ATOM	5648	CG	MET	83	170.101	170.254	-20.239	1.00132.91	BS2
ATOM	5596	O	GLN	76	169.797	159.667	-26.396	1.00108.97	BS2	ATOM	5649	SD	MET	83	169.878	171.435	-21.573	1.00132.91	BS2
ATOM	5597	N	ALA	77	169.841	161.847	-26.922	1.00 79.47	BS2	ATOM	5650	CE	MET	83	168.608	170.607	-22.527	1.00132.91	BS2
ATOM	5598	CA	ALA	77	169.130	162.235	-25.708	1.00 79.47	BS2	ATOM	5651	C	MET	83	167.592	169.071	-17.533	1.00 96.25	BS2
ATOM	5599	CB	ALA	77	167.723	161.663	-25.729	1.00 80.84	BS2	ATOM	5652	O	MET	83	167.444	169.345	-16.341	1.00 96.25	BS2
ATOM	5600	C	ALA	77	169.832	161.814	-24.415	1.00 79.47	BS2	ATOM	5653	N	GLU	84	166.613	168.588	-18.291	1.00 72.06	BS2
ATOM	5601	O	ALA	77	169.188	161.353	-23.474	1.00 79.47	BS2	ATOM	5654	CA	GLU	84	165.261	168.378	-17.777	1.00 72.06	BS2
ATOM	5602	N	GLN	78	171.148	161.971	-24.370	1.00 71.56	BS2	ATOM	5655	CB	GLU	84	164.475	167.510	-18.755	1.00 76.40	BS2
ATOM	5603	CA	GLN	78	171.905	161.619	-23.173	1.00 71.56	BS2	ATOM	5656	CG	GLU	84	164.646	167.889	-20.217	1.00 76.40	BS2
ATOM	5604	CB	GLN	78	173.291	161.101	-23.551	1.00 92.24	BS2	ATOM	5657	CD	GLU	84	164.034	169.236	-20.569	1.00 76.40	BS2
ATOM	5605	CG	GLN	78	174.073	160.544	-22.387	1.00 92.24	BS2	ATOM	5658	OE1	GLU	84	162.844	169.455	-20.245	1.00 76.40	BS2
ATOM	5606	CD	GLN	78	175.530	160.300	-22.731	1.00 92.24	BS2	ATOM	5659	OE2	GLU	84	164.743	170.071	-21.185	1.00 76.40	BS2
ATOM	5607	OE1	GLN	78	175.847	159.686	-23.753	1.00 92.24	BS2	ATOM	5660	C	GLU	84	165.224	167.738	-16.380	1.00 72.06	BS2
ATOM	5608	NE2	GLN	78	176.429	160.776	-21.872	1.00 92.24	BS2	ATOM	5661	O	GLU	84	164.462	168.166	-15.515	1.00 72.06	BS2
ATOM	5609	C	GLN	78	172.045	162.887	-22.340	1.00 71.56	BS2	ATOM	5662	N	ALA	85	166.043	166.714	-16.163	1.00 68.53	BS2
ATOM	5610	O	GLN	78	172.055	162.846	-21.117	1.00 71.56	BS2	ATOM	5663	CA	ALA	85	166.080	166.032	-14.870	1.00 68.53	BS2
ATOM	5611	N	ASP	79	172.151	164.020	-23.024	1.00 85.13	BS2	ATOM	5664	CB	ALA	85	167.096	164.890	-14.900	1.00 64.25	BS2
ATOM	5612	CA	ASP	79	172.284	165.303	-22.351	1.00 85.13	BS2	ATOM	5665	C	ALA	85	166.429	167.003	-13.749	1.00 68.53	BS2
ATOM	5613	CB	ASP	79	173.066	166.279	-23.223	1.00131.00	BS2	ATOM	5666	O	ALA	85	165.857	166.945	-12.656	1.00 68.53	BS2
ATOM	5614	CG	ASP	79	174.360	165.686	-23.736	1.00131.00	BS2	ATOM	5667	N	GLU	86	167.387	167.882	-14.027	1.00 78.83	BS2
ATOM	5615	OD1	ASP	79	175.217	165.314	-22.903	1.00131.00	BS2	ATOM	5668	CA	GLU	86	167.829	168.884	-13.067	1.00 78.83	BS2
ATOM	5616	OD2	ASP	79	174.517	165.588	-24.973	1.00131.00	BS2	ATOM	5669	CB	GLU	86	169.220	169.398	-13.432	1.00134.22	BS2
ATOM	5617	C	ASP	79	170.889	165.839	-22.117	1.00 85.13	BS2	ATOM	5670	CG	GLU	86	170.273	168.319	-13.545	1.00134.22	BS2
ATOM	5618	O	ASP	79	170.605	166.422	-21.072	1.00 85.13	BS2	ATOM	5671	CD	GLU	86	171.574	168.849	-14.111	1.00134.22	BS2
ATOM	5619	N	ILE	80	170.018	165.622	-23.100	1.00 83.96	BS2	ATOM	5672	OE1	GLU	86	171.543	169.438	-15.215	1.00134.22	BS2
ATOM	5620	CA	ILE	80	168.637	166.078	-23.018	1.00 83.96	BS2	ATOM	5673	OE2	GLU	86	172.625	168.676	-13.458	1.00134.22	BS2
ATOM	5621	CB	ILE	80	167.813	165.591	-24.222	1.00 71.34	BS2	ATOM	5674	C	GLU	86	166.839	170.031	-13.127	1.00 78.83	BS2
ATOM	5622	CG2	ILE	80	166.425	166.190	-24.176	1.00 71.34	BS2	ATOM	5675	O	GLU	86	166.590	170.699	-12.128	1.00 78.83	BS2
ATOM	5623	CG1	ILE	80	168.496	166.019	-25.521	1.00 71.34	BS2	ATOM	5676	N	ARG	87	166.275	170.264	-14.307	1.00 77.21	BS2
ATOM	5624	CD1	ILE	80	167.814	165.521	-26.784	1.00 71.34	BS2	ATOM	5677	CA	ARG	87	165.310	171.337	-14.452	1.00 77.21	BS2
ATOM	5625	C	ILE	80	167.998	165.570	-21.734	1.00 83.96	BS2	ATOM	5678	CB	ARG	87	164.796	171.414	-15.886	1.00 69.47	BS2
ATOM	5626	O	ILE	80	166.952	166.057	-21.315	1.00 83.96	BS2	ATOM	5679	CG	ARG	87	164.390	172.812	-16.278	1.00 69.47	BS2
ATOM	5627	N	VAL	81	168.636	164.586	-21.110	1.00 82.06	BS2	ATOM	5680	CD	ARG	87	162.920	172.916	-16.564	1.00 69.47	BS2
ATOM	5628	CA	VAL	81	168.140	164.039	-19.858	1.00 82.06	BS2	ATOM	5681	NE	ARG	87	162.549	172.216	-17.789	1.00 69.47	BS2
ATOM	5629	CB	VAL	81	168.687	162.612	-19.607	1.00 58.06	BS2	ATOM	5682	CZ	ARG	87	161.325	172.242	-18.313	1.00 69.47	BS2
ATOM	5630	CG1	VAL	81	168.492	162.215	-18.146	1.00 58.06	BS2	ATOM	5683	NH1	ARG	87	160.363	172.936	-17.712	1.00 69.47	BS2
ATOM	5631	CG2	VAL	81	167.974	161.629	-20.513	1.00 58.06	BS2	ATOM	5684	NH2	ARG	87	161.056	171.576	-19.433	1.00 69.47	BS2
ATOM	5632	C	VAL	81	168.588	164.965	-18.737	1.00 82.06	BS2	ATOM	5685	C	ARG	87	164.180	171.020	-13.481	1.00 77.21	BS2
ATOM	5633	O	VAL	81	167.768	165.632	-18.111	1.00 82.06	BS2	ATOM	5686	O	ARG	87	163.707	171.894	-12.752	1.00 77.21	BS2
ATOM	5634	N	ARG	82	169.896	165.016	-18.503	1.00 71.95	BS2	ATOM	5687	N	ALA	88	163.748	169.762	-13.470	1.00 99.36	BS2
ATOM	5635	CA	ARG	82	170.453	165.863	-17.453	1.00 71.95	BS2	ATOM	5688	CA	ALA	88	162.719	169.336	-12.533	1.00 99.36	BS2
ATOM	5636	CB	ARG	82	171.932	166.150	-17.719	1.00113.63	BS2	ATOM	5689	CB	ALA	88	162.142	167.999	-12.949	1.00 55.20	BS2

ATOM	5690	C	ALA	88	163.526	169.193	-11.253	1.00	99.36	BS2	ATOM	5743	OE1	GLN	95	178.992	156.921	-19.781	1.00149.36	BS2
ATOM	5691	O	ALA	88	164.582	169.804	-11.123	1.00	99.36	BS2	ATOM	5744	NE2	GLN	95	180.804	156.790	-18.453	1.00149.36	BS2
ATOM	5692	N	GLY	89	163.072	168.391	-10.307	1.00	67.34	BS2	ATOM	5745	C	GLN	95	176.172	155.954	-18.409	1.00 76.79	BS2
ATOM	5693	CA	GLY	89	163.872	168.271	-9.103	1.00	67.34	BS2	ATOM	5746	O	GLN	95	175.889	155.609	-19.564	1.00 76.79	BS2
ATOM	5694	C	GLY	89	164.469	166.892	-8.909	1.00	67.34	BS2	ATOM	5747	N	ARG	96	176.250	155.093	-17.399	1.00 69.48	BS2
ATOM	5695	O	GLY	89	165.104	166.620	-7.883	1.00	67.34	BS2	ATOM	5748	CA	ARG	96	175.965	153.678	-17.585	1.00 69.48	BS2
ATOM	5696	N	MET	90	164.302	166.026	-9.906	1.00	74.63	BS2	ATOM	5749	CB	ARG	96	177.254	152.869	-17.711	1.00131.52	BS2
ATOM	5697	CA	MET	90	164.775	164.655	-9.778	1.00	74.63	BS2	ATOM	5750	CG	ARG	96	177.016	151.443	-18.182	1.00131.52	BS2
ATOM	5698	CB	MET	90	163.697	163.698	-10.280	1.00	71.85	BS2	ATOM	5751	CD	ARG	96	177.092	151.332	-19.709	1.00131.52	BS2
ATOM	5699	CG	MET	90	162.562	163.486	-9.298	1.00	71.85	BS2	ATOM	5752	NE	ARG	96	176.317	152.350	-20.424	1.00131.52	BS2
ATOM	5700	SD	MET	90	161.384	164.807	-9.402	1.00	71.85	BS2	ATOM	5753	CZ	ARG	96	176.420	152.578	-21.733	1.00131.52	BS2
ATOM	5701	CE	MET	90	161.643	165.325	-11.158	1.00	71.85	BS2	ATOM	5754	NH1	ARG	96	177.262	151.864	-22.470	1.00131.52	BS2
ATOM	5702	C	MET	90	166.110	164.192	-10.342	1.00	74.63	BS2	ATOM	5755	NH2	ARG	96	175.696	153.526	-22.309	1.00131.52	BS2
ATOM	5703	O	MET	90	166.738	164.873	-11.154	1.00	74.63	BS2	ATOM	5756	C	ARG	96	175.171	153.152	-16.395	1.00 69.48	BS2
ATOM	5704	N	PRO	91	166.550	162.995	-9.892	1.00	68.98	BS2	ATOM	5757	O	ARG	96	175.609	153.265	-15.254	1.00 69.48	BS2
ATOM	5705	CD	PRO	91	165.919	162.291	-8.761	1.00	57.75	BS2	ATOM	5758	N	TRP	97	174.006	152.573	-16.651	1.00 62.19	BS2
ATOM	5706	CA	PRO	91	167.786	162.308	-10.264	1.00	68.98	BS2	ATOM	5759	CA	TRP	97	173.203	152.046	-15.562	1.00 62.19	BS2
ATOM	5707	CB	PRO	91	167.880	161.175	-9.247	1.00	57.75	BS2	ATOM	5760	CB	TRP	97	171.898	151.461	-16.103	1.00 74.08	BS2
ATOM	5708	CG	PRO	91	167.098	161.676	-8.086	1.00	57.75	BS2	ATOM	5761	CG	TRP	97	170.757	151.688	-15.180	1.00 74.08	BS2
ATOM	5709	C	PRO	91	167.696	161.757	-11.670	1.00	68.98	BS2	ATOM	5762	CD2	TRP	97	170.255	150.773	-14.217	1.00 74.08	BS2
ATOM	5710	O	PRO	91	166.680	161.904	-12.349	1.00	68.98	BS2	ATOM	5763	CE2	TRP	97	169.223	151.440	-13.501	1.00 74.08	BS2
ATOM	5711	N	TYR	92	168.767	161.098	-12.088	1.00	62.32	BS2	ATOM	5764	CE3	TRP	97	170.575	149.454	-13.879	1.00 74.08	BS2
ATOM	5712	CA	TYR	92	168.828	160.515	-13.416	1.00	62.32	BS2	ATOM	5765	CD1	TRP	97	170.032	152.846	-15.026	1.00 74.08	BS2
ATOM	5713	CB	TYR	92	168.878	161.625	-14.463	1.00	78.66	BS2	ATOM	5766	NE1	TRP	97	169.109	152.702	-14.016	1.00 74.08	BS2
ATOM	5714	CG	TYR	92	170.122	162.473	-14.341	1.00	78.66	BS2	ATOM	5767	CZ2	TRP	97	168.518	150.833	-12.475	1.00 74.08	BS2
ATOM	5715	CD1	TYR	92	171.240	162.221	-15.131	1.00	78.66	BS2	ATOM	5768	CZ3	TRP	97	169.877	148.849	-12.859	1.00 74.08	BS2
ATOM	5716	CE1	TYR	92	172.417	162.956	-14.971	1.00	78.66	BS2	ATOM	5769	CH2	TRP	97	168.856	149.541	-12.165	1.00 74.08	BS2
ATOM	5717	CD2	TYR	92	170.208	163.486	-13.387	1.00	78.66	BS2	ATOM	5770	C	TRP	97	174.003	150.955	-14.862	1.00 62.19	BS2
ATOM	5718	CE2	TYR	92	171.377	164.223	-13.218	1.00	78.66	BS2	ATOM	5771	O	TRP	97	174.351	149.958	-15.488	1.00 62.19	BS2
ATOM	5719	CZ	TYR	92	172.476	163.952	-14.014	1.00	78.66	BS2	ATOM	5772	N	LEU	98	174.312	151.148	-13.580	1.00 44.03	BS2
ATOM	5720	OH	TYR	92	173.637	164.666	-13.852	1.00	78.66	BS2	ATOM	5773	CA	LEU	98	175.064	150.150	-12.810	1.00 44.03	BS2
ATOM	5721	C	TYR	92	170.093	159.688	-13.511	1.00	62.32	BS2	ATOM	5774	CB	LEU	98	175.774	150.792	-11.622	1.00 38.12	BS2
ATOM	5722	O	TYR	92	171.039	159.883	-12.735	1.00	62.32	BS2	ATOM	5775	CG	LEU	98	176.582	152.086	-11.746	1.00 38.12	BS2
ATOM	5723	N	VAL	93	170.085	158.733	-14.432	1.00	61.61	BS2	ATOM	5776	CD1	LEU	98	177.455	152.238	-10.500	1.00 38.12	BS2
ATOM	5724	CA	VAL	93	171.268	157.932	-14.683	1.00	61.61	BS2	ATOM	5777	CD2	LEU	98	177.459	152.056	-12.981	1.00 38.12	BS2
ATOM	5725	CB	VAL	93	171.027	156.446	-14.499	1.00	62.84	BS2	ATOM	5778	C	LEU	98	174.127	149.088	-12.245	1.00 44.03	BS2
ATOM	5726	CG1	VAL	93	172.192	155.669	-15.087	1.00	62.84	BS2	ATOM	5779	O	LEU	98	173.212	149.429	-11.509	1.00 44.03	BS2
ATOM	5727	CG2	VAL	93	170.917	156.138	-13.016	1.00	62.84	BS2	ATOM	5780	N	GLY	99	174.349	147.816	-12.564	1.00 44.31	BS2
ATOM	5728	C	VAL	93	171.556	158.269	-16.131	1.00	61.61	BS2	ATOM	5781	CA	GLY	99	173.489	146.760	-12.036	1.00 44.31	BS2
ATOM	5729	O	VAL	93	170.704	158.100	-17.008	1.00	61.61	BS2	ATOM	5782	C	GLY	99	173.305	146.834	-10.525	1.00 44.31	BS2
ATOM	5730	N	ASN	94	172.762	158.777	-16.360	1.00	69.34	BS2	ATOM	5783	O	GLY	99	174.237	146.619	-9.756	1.00 44.31	BS2
ATOM	5731	CA	ASN	94	173.166	159.235	-17.675	1.00	69.34	BS2	ATOM	5784	N	GLY	100	172.088	147.121	-10.092	1.00 79.37	BS2
ATOM	5732	CB	ASN	94	173.521	160.717	-17.571	1.00	79.51	BS2	ATOM	5785	CA	GLY	100	171.815	147.264	-8.675	1.00 79.37	BS2
ATOM	5733	CG	ASN	94	173.254	161.453	-18.840	1.00	79.51	BS2	ATOM	5786	C	GLY	100	170.985	148.522	-8.659	1.00 79.37	BS2
ATOM	5734	OD1	ASN	94	172.729	160.879	-19.797	1.00	79.51	BS2	ATOM	5787	O	GLY	100	169.840	148.485	-9.096	1.00 79.37	BS2
ATOM	5735	ND2	ASN	94	173.602	162.732	-18.870	1.00	79.51	BS2	ATOM	5788	N	MET	101	171.545	149.635	-8.194	1.00 66.07	BS2
ATOM	5736	C	ASN	94	174.316	158.482	-18.327	1.00	69.34	BS2	ATOM	5789	CA	MET	101	170.810	150.895	-8.200	1.00 66.07	BS2
ATOM	5737	O	ASN	94	174.289	158.228	-19.523	1.00	69.34	BS2	ATOM	5790	CB	MET	101	171.162	151.720	-9.445	1.00 56.69	BS2
ATOM	5738	N	GLN	95	175.329	158.136	-17.547	1.00	76.79	BS2	ATOM	5791	CG	MET	101	172.620	152.078	-9.691	1.00 56.69	BS2
ATOM	5739	CA	GLN	95	176.478	157.426	-18.086	1.00	76.79	BS2	ATOM	5792	SD	MET	101	172.764	153.389	-10.984	1.00 56.69	BS2
ATOM	5740	CB	GLN	95	177.649	157.526	-17.105	1.00	149.36	BS2	ATOM	5793	CE	MET	101	171.427	152.995	-11.997	1.00 56.69	BS2
ATOM	5741	CG	GLN	95	178.920	158.127	-17.702	1.00	149.36	BS2	ATOM	5794	C	MET	101	169.319	150.610	-8.306	1.00 66.07	BS2
ATOM	5742	CD	GLN	95	179.578	157.223	-18.738	1.00	149.36	BS2	ATOM	5795	O	MET	101	168.777	150.763	-9.395	1.00 66.07	BS2

ATOM	5796	N	LEU	102	168.663	150.181	-7.228	1.00	72.48	BS2	ATOM	5849	CG2	ILE	108	174.112	152.899	-6.392	1.00	55.73	BS2
ATOM	5797	CA	LEU	102	167.222	149.876	-7.262	1.00	72.48	BS2	ATOM	5850	CG1	ILE	108	174.533	150.460	-6.688	1.00	55.73	BS2
ATOM	5798	CB	LEU	102	166.640	149.973	-8.673	1.00	22.17	BS2	ATOM	5851	CD1	ILE	108	174.982	149.169	-6.030	1.00	55.73	BS2
ATOM	5799	CG	LEU	102	165.668	151.109	-8.992	1.00	22.17	BS2	ATOM	5852	C	ILE	108	175.039	152.885	-3.875	1.00	53.19	BS2
ATOM	5800	CD1	LEU	102	166.386	152.445	-8.856	1.00	22.17	BS2	ATOM	5853	O	ILE	108	175.736	153.780	-4.331	1.00	53.19	BS2
ATOM	5801	CD2	LEU	102	165.114	150.933	-10.410	1.00	22.17	BS2	ATOM	5854	N	SER	109	174.253	153.035	-2.818	1.00	61.37	BS2
ATOM	5802	C	LEU	102	166.940	148.467	-6.800	1.00	72.48	BS2	ATOM	5855	CA	SER	109	174.156	154.295	-2.097	1.00	61.37	BS2
ATOM	5803	O	LEU	102	165.794	148.108	-6.511	1.00	72.48	BS2	ATOM	5856	CB	SER	109	173.056	154.211	-1.043	1.00	81.83	BS2
ATOM	5804	N	THR	103	167.977	147.653	-6.762	1.00	35.56	BS2	ATOM	5857	OG	SER	109	173.394	153.265	-0.040	1.00	81.83	BS2
ATOM	5805	CA	THR	103	167.798	146.276	-6.375	1.00	35.56	BS2	ATOM	5858	C	SER	109	175.479	154.580	-1.412	1.00	61.37	BS2
ATOM	5806	CB	THR	103	167.925	145.350	-7.619	1.00	36.23	BS2	ATOM	5859	O	SER	109	175.960	155.711	-1.435	1.00	61.37	BS2
ATOM	5807	OG1	THR	103	166.629	145.158	-8.214	1.00	36.23	BS2	ATOM	5860	N	GLN	110	176.057	153.545	-0.799	1.00	57.61	BS2
ATOM	5808	CG2	THR	103	168.514	144.032	-7.254	1.00	36.23	BS2	ATOM	5861	CA	GLN	110	177.327	153.674	-0.093	1.00	57.61	BS2
ATOM	5809	C	THR	103	168.857	145.998	-5.350	1.00	35.56	BS2	ATOM	5862	CB	GLN	110	177.854	152.303	0.309	1.00	79.98	BS2
ATOM	5810	O	THR	103	168.719	145.096	-4.518	1.00	35.56	BS2	ATOM	5863	CG	GLN	110	176.866	151.511	1.136	1.00	79.98	BS2
ATOM	5811	N	ASN	104	169.921	146.792	-5.410	1.00	64.27	BS2	ATOM	5864	CD	GLN	110	177.411	150.169	1.578	1.00	79.98	BS2
ATOM	5812	CA	ASN	104	171.003	146.669	-4.452	1.00	64.27	BS2	ATOM	5865	OE1	GLN	110	178.009	149.437	0.786	1.00	79.98	BS2
ATOM	5813	CB	ASN	104	172.234	146.058	-5.099	1.00	53.53	BS2	ATOM	5866	NE2	GLN	110	177.197	149.830	2.847	1.00	79.98	BS2
ATOM	5814	CG	ASN	104	173.263	145.638	-4.076	1.00	53.53	BS2	ATOM	5867	C	GLN	110	178.306	154.369	-1.015	1.00	57.61	BS2
ATOM	5815	OD1	ASN	104	172.995	145.665	-2.876	1.00	53.53	BS2	ATOM	5868	O	GLN	110	179.157	155.148	-0.568	1.00	57.61	BS2
ATOM	5816	ND2	ASN	104	174.442	145.242	-4.539	1.00	53.53	BS2	ATOM	5869	N	ARG	111	178.178	154.085	-2.308	1.00	75.54	BS2
ATOM	5817	C	ASN	104	171.300	148.075	-3.956	1.00	64.27	BS2	ATOM	5870	CA	ARG	111	179.024	154.717	-3.311	1.00	75.54	BS2
ATOM	5818	O	ASN	104	172.385	148.367	-3.443	1.00	64.27	BS2	ATOM	5871	CB	ARG	111	178.634	154.253	-4.715	1.00	71.32	BS2
ATOM	5819	N	PHE	105	170.288	148.927	-4.122	1.00	62.45	BS2	ATOM	5872	CG	ARG	111	179.329	152.993	-5.187	1.00	71.32	BS2
ATOM	5820	CA	PHE	105	170.292	150.340	-3.738	1.00	62.45	BS2	ATOM	5873	CD	ARG	111	180.828	153.191	-5.206	1.00	71.32	BS2
ATOM	5821	CB	PHE	105	168.846	150.829	-3.612	1.00	43.37	BS2	ATOM	5874	NE	ARG	111	181.404	153.010	-3.881	1.00	71.32	BS2
ATOM	5822	CG	PHE	105	168.717	152.304	-3.377	1.00	43.37	BS2	ATOM	5875	CZ	ARG	111	182.672	153.265	-3.580	1.00	71.32	BS2
ATOM	5823	CD1	PHE	105	168.783	153.202	-4.444	1.00	43.37	BS2	ATOM	5876	NH1	ARG	111	183.502	153.724	-4.510	1.00	71.32	BS2
ATOM	5824	CD2	PHE	105	168.533	152.802	-2.093	1.00	43.37	BS2	ATOM	5877	NH2	ARG	111	183.119	153.031	-2.354	1.00	71.32	BS2
ATOM	5825	CE1	PHE	105	168.666	154.579	-4.235	1.00	43.37	BS2	ATOM	5878	C	ARG	111	178.823	156.224	-3.210	1.00	75.54	BS2
ATOM	5826	CE2	PHE	105	168.419	154.170	-1.873	1.00	43.37	BS2	ATOM	5879	O	ARG	111	179.789	156.991	-3.240	1.00	75.54	BS2
ATOM	5827	CZ	PHE	105	168.485	155.059	-2.948	1.00	43.37	BS2	ATOM	5880	N	VAL	112	177.560	156.637	-3.090	1.00	61.44	BS2
ATOM	5828	C	PHE	105	171.044	150.671	-2.455	1.00	62.45	BS2	ATOM	5881	CA	VAL	112	177.212	158.051	-2.979	1.00	61.44	BS2
ATOM	5829	O	PHE	105	171.954	151.489	-2.473	1.00	62.45	BS2	ATOM	5882	CB	VAL	112	175.678	158.286	-3.064	1.00	55.47	BS2
ATOM	5830	N	LYS	106	170.673	150.049	-1.340	1.00	55.42	BS2	ATOM	5883	CG1	VAL	112	175.385	159.780	-3.019	1.00	55.47	BS2
ATOM	5831	CA	LYS	106	171.346	150.355	-0.084	1.00	55.42	BS2	ATOM	5884	CG2	VAL	112	175.114	157.687	-4.355	1.00	55.47	BS2
ATOM	5832	CB	LYS	106	170.888	149.438	1.048	1.00	120.24	BS2	ATOM	5885	C	VAL	112	177.734	158.640	-1.670	1.00	61.44	BS2
ATOM	5833	CG	LYS	106	171.326	149.953	2.423	1.00	120.24	BS2	ATOM	5886	O	VAL	112	178.205	159.768	-1.647	1.00	61.44	BS2
ATOM	5834	CD	LYS	106	171.068	148.949	3.540	1.00	120.24	BS2	ATOM	5887	N	HIS	113	177.661	157.887	-0.581	1.00	64.61	BS2
ATOM	5835	CE	LYS	106	169.592	148.567	3.651	1.00	120.24	BS2	ATOM	5888	CA	HIS	113	178.173	158.404	0.678	1.00	64.61	BS2
ATOM	5836	NZ	LYS	106	169.365	147.541	4.718	1.00	120.24	BS2	ATOM	5889	CB	HIS	113	177.964	157.391	1.796	1.00	108.32	BS2
ATOM	5837	C	LYS	106	172.851	150.253	-0.216	1.00	55.42	BS2	ATOM	5890	CG	HIS	113	176.528	157.026	1.998	1.00	108.32	BS2
ATOM	5838	O	LYS	106	173.585	150.847	0.568	1.00	55.42	BS2	ATOM	5891	CD2	HIS	113	175.885	155.839	1.893	1.00	108.32	BS2
ATOM	5839	N	THR	107	173.315	149.494	-1.202	1.00	70.33	BS2	ATOM	5892	ND1	HIS	113	175.561	157.963	2.292	1.00	108.32	BS2
ATOM	5840	CA	THR	107	174.745	149.336	-1.423	1.00	70.33	BS2	ATOM	5893	CE1	HIS	113	174.382	157.369	2.356	1.00	108.32	BS2
ATOM	5841	CB	THR	107	175.069	147.957	-2.017	1.00	49.07	BS2	ATOM	5894	NE2	HIS	113	174.551	156.081	2.118	1.00	108.32	BS2
ATOM	5842	OG1	THR	107	175.141	146.981	-0.966	1.00	49.07	BS2	ATOM	5895	C	HIS	113	179.654	158.686	0.481	1.00	64.61	BS2
ATOM	5843	CG2	THR	107	176.393	148.001	-2.754	1.00	49.07	BS2	ATOM	5896	O	HIS	113	180.148	159.757	0.847	1.00	64.61	BS2
ATOM	5844	C	THR	107	175.261	150.418	-2.365	1.00	70.33	BS2	ATOM	5897	N	ARG	114	180.356	157.732	-0.124	1.00	75.40	BS2
ATOM	5845	O	THR	107	176.205	151.139	-2.041	1.00	70.33	BS2	ATOM	5898	CA	ARG	114	181.781	157.885	-0.392	1.00	75.40	BS2
ATOM	5846	N	ILE	108	174.641	150.525	-3.534	1.00	53.19	BS2	ATOM	5899	CB	ARG	114	182.297	156.679	-1.175	1.00	96.96	BS2
ATOM	5847	CA	ILE	108	175.038	151.525	-4.507	1.00	53.19	BS2	ATOM	5900	CG	ARG	114	183.476	155.970	-0.533	1.00	96.96	BS2
ATOM	5848	CB	ILE	108	174.092	151.535	-5.701	1.00	55.73	BS2	ATOM	5901	CD	ARG	114	184.779	156.737	-0.690	1.00	96.96	BS2

ATOM	5902	NE	ARG	114	185.895	155.978	-0.130	1.00	96.96	BS2	ATOM	5955	O	ALA	120	187.089	167.789	1.641	1.00107.20	BS2
ATOM	5903	CZ	ARG	114	187.174	156.302	-0.275	1.00	96.96	BS2	ATOM	5956	N	LEU	121	186.883	165.737	2.552	1.00119.16	BS2
ATOM	5904	NH1	ARG	114	187.514	157.379	-0.967	1.00	96.96	BS2	ATOM	5957	CA	LEU	121	188.289	165.615	2.917	1.00119.16	BS2
ATOM	5905	NH2	ARG	114	188.116	155.543	0.269	1.00	96.96	BS2	ATOM	5958	CB	LEU	121	188.675	164.143	3.073	1.00168.82	BS2
ATOM	5906	C	ARG	114	182.043	159.164	-1.189	1.00	75.40	BS2	ATOM	5959	CG	LEU	121	188.034	163.344	4.206	1.00168.82	BS2
ATOM	5907	O	ARG	114	182.983	159.903	-0.899	1.00	75.40	BS2	ATOM	5960	CD1	LEU	121	188.478	161.890	4.108	1.00168.82	BS2
ATOM	5908	N	LEU	115	181.212	159.420	-2.196	1.00	61.48	BS2	ATOM	5961	CD2	LEU	121	188.434	163.946	5.548	1.00168.82	BS2
ATOM	5909	CA	LEU	115	181.372	160.614	-3.010	1.00	61.48	BS2	ATOM	5962	C	LEU	121	189.177	166.233	1.858	1.00119.16	BS2
ATOM	5910	CB	LEU	115	180.171	160.794	-3.944	1.00	58.35	BS2	ATOM	5963	O	LEU	121	189.951	167.146	2.133	1.00119.16	BS2
ATOM	5911	CG	LEU	115	180.091	162.105	-4.737	1.00	58.35	BS2	ATOM	5964	N	PHE	122	189.047	165.729	0.639	1.00112.32	BS2
ATOM	5912	CD1	LEU	115	181.432	162.432	-5.355	1.00	58.35	BS2	ATOM	5965	CA	PHE	122	189.858	166.207	-0.466	1.00112.32	BS2
ATOM	5913	CD2	LEU	115	179.030	161.986	-5.816	1.00	58.35	BS2	ATOM	5966	CB	PHE	122	189.772	165.219	-1.632	1.00184.89	BS2
ATOM	5914	C	LEU	115	181.513	161.820	-2.099	1.00	61.48	BS2	ATOM	5967	CG	PHE	122	190.495	163.928	-1.368	1.00184.89	BS2
ATOM	5915	O	LEU	115	182.566	162.451	-2.045	1.00	61.48	BS2	ATOM	5968	CD1	PHE	122	190.034	163.042	-0.396	1.00184.89	BS2
ATOM	5916	N	GLU	116	180.448	162.129	-1.373	1.00	70.36	BS2	ATOM	5969	CD2	PHE	122	191.673	163.625	-2.041	1.00184.89	BS2
ATOM	5917	CA	GLU	116	180.443	163.250	-0.447	1.00	70.36	BS2	ATOM	5970	CE1	PHE	122	190.739	161.876	-0.096	1.00184.89	BS2
ATOM	5918	CB	GLU	116	179.185	163.174	0.420	1.00107.40		BS2	ATOM	5971	CE2	PHE	122	192.385	162.463	-1.749	1.00184.89	BS2
ATOM	5919	CG	GLU	116	177.923	162.982	-0.405	1.00107.40		BS2	ATOM	5972	CZ	PHE	122	191.918	161.588	-0.773	1.00184.89	BS2
ATOM	5920	CD	GLU	116	176.748	162.460	0.400	1.00107.40		BS2	ATOM	5973	C	PHE	122	189.546	167.622	-0.919	1.00112.32	BS2
ATOM	5921	OE1	GLU	116	176.948	161.537	1.221	1.00107.40		BS2	ATOM	5974	O	PHE	122	190.367	168.265	-1.566	1.00112.32	BS2
ATOM	5922	OE2	GLU	116	175.621	162.960	0.196	1.00107.40		BS2	ATOM	5975	N	ALA	123	188.369	168.123	-0.578	1.00102.50	BS2
ATOM	5923	C	GLU	116	181.695	163.192	0.431	1.00	70.36	BS2	ATOM	5976	CA	ALA	123	188.036	169.485	-0.955	1.00102.50	BS2
ATOM	5924	O	GLU	116	182.552	164.079	0.375	1.00	70.36	BS2	ATOM	5977	CB	ALA	123	186.597	169.570	-1.424	1.00111.58	BS2
ATOM	5925	N	GLU	117	181.794	162.127	1.223	1.00	72.74	BS2	ATOM	5978	C	ALA	123	188.250	170.380	0.258	1.00102.50	BS2
ATOM	5926	CA	GLU	117	182.919	161.914	2.128	1.00	72.74	BS2	ATOM	5979	O	ALA	123	187.562	171.391	0.418	1.00102.50	BS2
ATOM	5927	CB	GLU	117	182.927	160.462	2.616	1.00148.93		BS2	ATOM	5980	N	SER	124	189.206	170.007	1.110	1.00127.74	BS2
ATOM	5928	CG	GLU	117	181.703	160.103	3.456	1.00148.93		BS2	ATOM	5981	CA	SER	124	189.482	170.795	2.305	1.00127.74	BS2
ATOM	5929	CD	GLU	117	181.623	158.625	3.799	1.00148.93		BS2	ATOM	5982	CB	SER	124	188.279	170.704	3.251	1.00 96.31	BS2
ATOM	5930	OE1	GLU	117	182.596	158.102	4.384	1.00148.93		BS2	ATOM	5983	OG	SER	124	188.577	171.266	4.518	1.00 96.31	BS2
ATOM	5931	OE2	GLU	117	180.587	157.991	3.489	1.00148.93		BS2	ATOM	5984	C	SER	124	190.797	170.566	3.088	1.00127.74	BS2
ATOM	5932	C	GLU	117	184.256	162.258	1.493	1.00	72.74	BS2	ATOM	5985	O	SER	124	191.738	171.344	2.929	1.00127.74	BS2
ATOM	5933	O	GLU	117	185.223	162.546	2.193	1.00	72.74	BS2	ATOM	5986	N	PRO	125	190.896	169.503	3.923	1.00139.06	BS2
ATOM	5934	N	LEU	118	184.314	162.221	0.167	1.00112.59		BS2	ATOM	5987	CD	PRO	125	189.870	168.658	4.567	1.00118.56	BS2
ATOM	5935	CA	LEU	118	185.545	162.555	-0.531	1.00112.59		BS2	ATOM	5988	CA	PRO	125	192.167	169.368	4.642	1.00139.06	BS2
ATOM	5936	CB	LEU	118	185.763	161.637	-1.735	1.00	97.79	BS2	ATOM	5989	CB	PRO	125	191.699	169.146	6.067	1.00118.56	BS2
ATOM	5937	CG	LEU	118	186.247	160.214	-1.448	1.00	97.79	BS2	ATOM	5990	CG	PRO	125	190.574	168.162	5.846	1.00118.56	BS2
ATOM	5938	CD1	LEU	118	186.696	159.563	-2.755	1.00	97.79	BS2	ATOM	5991	C	PRO	125	193.164	168.286	4.221	1.00139.06	BS2
ATOM	5939	CD2	LEU	118	187.397	160.248	-0.456	1.00	97.79	BS2	ATOM	5992	O	PRO	125	194.257	168.584	3.743	1.00139.06	BS2
ATOM	5940	C	LEU	118	185.509	164.003	-0.983	1.00112.59		BS2	ATOM	5993	N	GLU	126	192.782	167.031	4.432	1.00153.73	BS2
ATOM	5941	O	LEU	118	186.495	164.726	-0.834	1.00112.59		BS2	ATOM	5994	CA	GLU	126	193.631	165.878	4.139	1.00153.73	BS2
ATOM	5942	N	GLU	119	184.375	164.430	-1.534	1.00	77.97	BS2	ATOM	5995	CB	GLU	126	193.010	164.625	4.767	1.00161.68	BS2
ATOM	5943	CA	GLU	119	184.230	165.811	-1.982	1.00	77.97	BS2	ATOM	5996	CG	GLU	126	192.643	164.813	6.226	1.00161.68	BS2
ATOM	5944	CB	GLU	119	182.821	166.064	-2.521	1.00123.17		BS2	ATOM	5997	CD	GLU	126	193.773	165.441	7.015	1.00161.68	BS2
ATOM	5945	CG	GLU	119	182.511	165.398	-3.846	1.00123.17		BS2	ATOM	5998	OE1	GLU	126	194.802	164.765	7.228	1.00161.68	BS2
ATOM	5946	CD	GLU	119	181.096	165.689	-4.320	1.00123.17		BS2	ATOM	5999	OE2	GLU	126	193.634	166.618	7.407	1.00161.68	BS2
ATOM	5947	OE1	GLU	119	180.140	165.263	-3.634	1.00123.17		BS2	ATOM	6000	C	GLU	126	193.972	165.595	2.676	1.00153.73	BS2
ATOM	5948	OE2	GLU	119	180.940	166.345	-5.374	1.00123.17		BS2	ATOM	6001	O	GLU	126	194.163	164.439	2.298	1.00153.73	BS2
ATOM	5949	C	GLU	119	184.474	166.703	-0.773	1.00	77.97	BS2	ATOM	6002	N	ILE	127	194.059	166.635	1.855	1.00150.75	BS2
ATOM	5950	O	GLU	119	184.474	167.925	-0.881	1.00	77.97	BS2	ATOM	6003	CA	ILE	127	194.402	166.449	0.447	1.00150.75	BS2
ATOM	5951	N	ALA	120	184.670	166.073	0.381	1.00107.20		BS2	ATOM	6004	CB	ILE	127	193.716	167.487	-0.466	1.00 98.49	BS2
ATOM	5952	CA	ALA	120	184.914	166.785	1.625	1.00107.20		BS2	ATOM	6005	CG2	ILE	127	192.969	166.767	-1.584	1.00 98.49	BS2
ATOM	5953	CB	ALA	120	184.165	166.112	2.755	1.00	50.12	BS2	ATOM	6006	CG1	ILE	127	192.801	168.398	0.357	1.00 98.49	BS2
ATOM	5954	C	ALA	120	186.400	166.814	1.939	1.00107.20		BS2	ATOM	6007	CD1	ILE	127	193.539	169.404	1.210	1.00 98.49	BS2

ATOM	6008	C	ILE	127	195.902	166.621	0.294	1.00150.75	BS2	ATOM	6061	NZ	LYS	133	196.301	170.282	-5.897	1.00139.31	BS2
ATOM	6009	O	ILE	127	196.623	165.693	-0.077	1.00150.75	BS2	ATOM	6062	C	LYS	133	196.435	163.121	-3.781	1.00164.64	BS2
ATOM	6010	N	GLU	128	196.355	167.833	0.585	1.00168.56	BS2	ATOM	6063	O	LYS	133	195.738	162.929	-4.784	1.00164.64	BS2
ATOM	6011	CA	GLU	128	197.763	168.171	0.509	1.00168.56	BS2	ATOM	6064	N	GLU	134	196.966	162.149	-3.042	1.00157.17	BS2
ATOM	6012	CB	GLU	128	197.918	169.684	0.348	1.00118.87	BS2	ATOM	6065	CA	GLU	134	196.803	160.729	-3.315	1.00157.17	BS2
ATOM	6013	CG	GLU	128	197.076	170.255	-0.784	1.00118.87	BS2	ATOM	6066	CB	GLU	134	196.595	159.984	-1.999	1.00131.17	BS2
ATOM	6014	CD	GLU	128	196.247	171.445	-0.345	1.00118.87	BS2	ATOM	6067	CG	GLU	134	197.604	158.886	-1.738	1.00131.17	BS2
ATOM	6015	OE1	GLU	128	195.568	171.348	0.697	1.00118.87	BS2	ATOM	6068	CD	GLU	134	197.158	157.952	-0.628	1.00131.17	BS2
ATOM	6016	OE2	GLU	128	196.268	172.476	-1.044	1.00118.87	BS2	ATOM	6069	OE1	GLU	134	196.125	157.272	-0.807	1.00131.17	BS2
ATOM	6017	C	GLU	128	198.412	167.693	1.804	1.00168.56	BS2	ATOM	6070	OE2	GLU	134	197.831	157.897	0.423	1.00131.17	BS2
ATOM	6018	O	GLU	128	199.368	168.291	2.296	1.00168.56	BS2	ATOM	6071	C	GLU	134	195.666	160.387	-4.274	1.00157.17	BS2
ATOM	6019	N	GLU	129	197.868	166.611	2.355	1.00138.61	BS2	ATOM	6072	O	GLU	134	194.568	160.927	-4.154	1.00157.17	BS2
ATOM	6020	CA	GLU	129	198.375	166.020	3.589	1.00138.61	BS2	ATOM	6073	N	GLN	135	195.952	159.491	-5.219	1.00157.65	BS2
ATOM	6021	CB	GLU	129	197.302	166.056	4.679	1.00186.18	BS2	ATOM	6074	CA	GLN	135	194.989	159.008	-6.219	1.00157.65	BS2
ATOM	6022	CG	GLU	129	196.766	167.445	4.959	1.00186.18	BS2	ATOM	6075	CB	GLN	135	194.869	157.485	-6.115	1.00117.57	BS2
ATOM	6023	CD	GLU	129	197.872	168.442	5.230	1.00186.18	BS2	ATOM	6076	CG	GLN	135	194.535	156.999	-4.702	1.00117.57	BS2
ATOM	6024	OE1	GLU	129	198.658	168.216	6.175	1.00186.18	BS2	ATOM	6077	CD	GLN	135	194.185	155.525	-4.642	1.00117.57	BS2
ATOM	6025	OE2	GLU	129	197.956	169.450	4.495	1.00186.18	BS2	ATOM	6078	OE1	GLN	135	193.336	155.048	-5.394	1.00117.57	BS2
ATOM	6026	C	GLU	129	198.769	164.578	3.311	1.00138.61	BS2	ATOM	6079	NE2	GLN	135	194.830	154.796	-3.735	1.00117.57	BS2
ATOM	6027	O	GLU	129	199.563	163.984	4.039	1.00138.61	BS2	ATOM	6080	C	GLN	135	193.593	159.612	-6.094	1.00157.65	BS2
ATOM	6028	N	ARG	130	198.198	164.025	2.246	1.00121.04	BS2	ATOM	6081	O	GLN	135	193.154	160.377	-6.954	1.00157.65	BS2
ATOM	6029	CA	ARG	130	198.474	162.652	1.842	1.00121.04	BS2	ATOM	6082	N	VAL	136	192.912	159.227	-5.014	1.00107.45	BS2
ATOM	6030	CB	ARG	130	197.223	162.022	1.215	1.00121.92	BS2	ATOM	6083	CA	VAL	136	191.565	159.667	-4.665	1.00107.45	BS2
ATOM	6031	CG	ARG	130	195.944	162.202	2.020	1.00121.92	BS2	ATOM	6084	CB	VAL	136	191.370	159.639	-3.135	1.00119.77	BS2
ATOM	6032	CD	ARG	130	196.062	161.609	3.414	1.00121.92	BS2	ATOM	6085	CG1	VAL	136	189.916	159.863	-2.794	1.00119.77	BS2
ATOM	6033	NE	ARG	130	194.817	161.749	4.161	1.00121.92	BS2	ATOM	6086	CG2	VAL	136	191.857	158.324	-2.567	1.00119.77	BS2
ATOM	6034	CZ	ARG	130	193.656	161.239	3.767	1.00121.92	BS2	ATOM	6087	C	VAL	136	191.220	161.067	-5.163	1.00107.45	BS2
ATOM	6035	NH1	ARG	130	193.588	160.554	2.635	1.00121.92	BS2	ATOM	6088	O	VAL	136	191.229	162.032	-4.404	1.00107.45	BS2
ATOM	6036	NH2	ARG	130	192.566	161.417	4.501	1.00121.92	BS2	ATOM	6089	N	ARG	137	190.914	161.144	-6.450	1.00 78.89	BS2
ATOM	6037	C	ARG	130	199.594	162.679	0.808	1.00121.04	BS2	ATOM	6090	CA	ARG	137	190.533	162.364	-7.160	1.00 78.89	BS2
ATOM	6038	O	ARG	130	199.979	163.747	0.338	1.00121.04	BS2	ATOM	6091	CB	ARG	137	191.731	163.298	-7.368	1.00129.52	BS2
ATOM	6039	N	PRO	131	200.138	161.504	0.453	1.00133.27	BS2	ATOM	6092	CG	ARG	137	191.596	164.652	-6.673	1.00129.52	BS2
ATOM	6040	CD	PRO	131	199.936	160.208	1.126	1.00114.93	BS2	ATOM	6093	CD	ARG	137	191.744	164.512	-5.159	1.00129.52	BS2
ATOM	6041	CA	PRO	131	201.216	161.408	-0.536	1.00133.27	BS2	ATOM	6094	NE	ARG	137	191.364	165.716	-4.426	1.00129.52	BS2
ATOM	6042	CB	PRO	131	201.440	159.903	-0.645	1.00114.93	BS2	ATOM	6095	CZ	ARG	137	190.154	166.265	-4.472	1.00129.52	BS2
ATOM	6043	CG	PRO	131	201.197	159.447	0.756	1.00114.93	BS2	ATOM	6096	NH1	ARG	137	189.205	165.719	-5.217	1.00129.52	BS2
ATOM	6044	C	PRO	131	200.862	162.048	-1.883	1.00133.27	BS2	ATOM	6097	NH2	ARG	137	189.888	167.358	-3.775	1.00129.52	BS2
ATOM	6045	O	PRO	131	200.598	161.350	-2.869	1.00133.27	BS2	ATOM	6098	C	ARG	137	190.139	161.723	-8.473	1.00 78.89	BS2
ATOM	6046	N	LYS	132	200.857	163.380	-1.904	1.00167.13	BS2	ATOM	6099	O	ARG	137	189.338	162.244	-9.252	1.00 78.89	BS2
ATOM	6047	CA	LYS	132	200.558	164.156	-3.105	1.00167.13	BS2	ATOM	6100	N	LEU	138	190.741	160.557	-8.678	1.00145.32	BS2
ATOM	6048	CB	LYS	132	201.545	163.786	-4.213	1.00162.44	BS2	ATOM	6101	CA	LEU	138	190.499	159.716	-9.831	1.00145.32	BS2
ATOM	6049	CG	LYS	132	202.999	163.889	-3.779	1.00162.44	BS2	ATOM	6102	CB	LEU	138	191.773	158.944	-10.188	1.00103.80	BS2
ATOM	6050	CD	LYS	132	203.927	163.176	-4.744	1.00162.44	BS2	ATOM	6103	CG	LEU	138	192.194	158.833	-11.658	1.00103.80	BS2
ATOM	6051	CE	LYS	132	205.339	163.119	-4.186	1.00162.44	BS2	ATOM	6104	CD1	LEU	138	192.413	160.220	-12.258	1.00103.80	BS2
ATOM	6052	NZ	LYS	132	206.263	162.349	-5.063	1.00162.44	BS2	ATOM	6105	CD2	LEU	138	193.472	158.011	-11.742	1.00103.80	BS2
ATOM	6053	C	LYS	132	199.130	163.950	-3.596	1.00167.13	BS2	ATOM	6106	C	LEU	138	189.434	158.776	-9.272	1.00145.32	BS2
ATOM	6054	O	LYS	132	198.902	163.200	-4.548	1.00167.13	BS2	ATOM	6107	O	LEU	138	189.112	157.741	-9.852	1.00145.32	BS2
ATOM	6055	N	LYS	133	198.180	164.628	-2.948	1.00164.64	BS2	ATOM	6108	N	LYS	139	188.912	159.164	-8.110	1.00102.23	BS2
ATOM	6056	CA	LYS	133	196.761	164.531	-3.301	1.00164.64	BS2	ATOM	6109	CA	LYS	139	187.871	158.429	-7.402	1.00102.23	BS2
ATOM	6057	CB	LYS	133	196.415	165.547	-4.393	1.00139.31	BS2	ATOM	6110	CB	LYS	139	188.341	158.092	-5.994	1.00 66.84	BS2
ATOM	6058	CG	LYS	133	196.670	166.991	-3.995	1.00139.31	BS2	ATOM	6111	CG	LYS	139	187.630	156.914	-5.347	1.00 66.84	BS2
ATOM	6059	CD	LYS	133	196.301	167.935	-5.123	1.00139.31	BS2	ATOM	6112	CD	LYS	139	188.261	156.611	-3.990	1.00 66.84	BS2
ATOM	6060	CE	LYS	133	196.622	169.372	-4.765	1.00139.31	BS2	ATOM	6113	CE	LYS	139	188.087	155.160	-3.610	1.00 66.84	BS2

ATOM	6114	NZ	LYS	139	186.681	154.716	-3.842	1.00 66.84	BS2	ATOM	6167	CG	LEU	145	180.322	155.938	-14.039	1.00 54.51	BS2
ATOM	6115	C	LYS	139	186.682	159.379	-7.340	1.00102.23	BS2	ATOM	6168	CD1	LEU	145	181.272	154.782	-13.680	1.00 54.51	BS2
ATOM	6116	O	LYS	139	185.528	158.957	-7.319	1.00102.23	BS2	ATOM	6169	CD2	LEU	145	179.575	155.638	-15.330	1.00 54.51	BS2
ATOM	6117	N	HIS	140	186.987	160.674	-7.299	1.00 77.96	BS2	ATOM	6170	C	LEU	145	177.558	157.824	-11.916	1.00 81.72	BS2
ATOM	6118	CA	HIS	140	185.962	161.706	-7.292	1.00 77.96	BS2	ATOM	6171	O	LEU	145	176.574	157.084	-11.915	1.00 81.72	BS2
ATOM	6119	CB	HIS	140	186.561	163.097	-7.107	1.00164.05	BS2	ATOM	6172	N	GLN	146	177.690	158.832	-11.055	1.00 64.52	BS2
ATOM	6120	CG	HIS	140	186.593	163.560	-5.687	1.00164.05	BS2	ATOM	6173	CA	GLN	146	176.689	159.054	-10.017	1.00 64.52	BS2
ATOM	6121	CD2	HIS	140	185.918	164.552	-5.060	1.00164.05	BS2	ATOM	6174	CB	GLN	146	177.269	158.712	-8.654	1.00 76.05	BS2
ATOM	6122	ND1	HIS	140	187.409	162.988	-4.737	1.00164.05	BS2	ATOM	6175	CG	GLN	146	177.501	157.254	-8.436	1.00 76.05	BS2
ATOM	6123	CE1	HIS	140	187.238	163.611	-3.583	1.00164.05	BS2	ATOM	6176	CD	GLN	146	177.591	156.924	-6.960	1.00 76.05	BS2
ATOM	6124	NE2	HIS	140	186.339	164.562	-3.752	1.00164.05	BS2	ATOM	6177	OE1	GLN	146	178.471	157.418	-6.249	1.00 76.05	BS2
ATOM	6125	C	HIS	140	185.355	161.634	-8.667	1.00 77.96	BS2	ATOM	6178	NE2	GLN	146	176.667	156.093	-6.482	1.00 76.05	BS2
ATOM	6126	O	HIS	140	184.556	162.477	-9.054	1.00 77.96	BS2	ATOM	6179	C	GLN	146	176.014	160.423	-9.905	1.00 64.52	BS2
ATOM	6127	N	GLU	141	185.780	160.633	-9.419	1.00 80.86	BS2	ATOM	6180	O	GLN	146	176.634	161.425	-9.567	1.00 64.52	BS2
ATOM	6128	CA	GLU	141	185.270	160.421	-10.754	1.00 80.86	BS2	ATOM	6181	N	LYS	147	174.721	160.448	-10.197	1.00125.77	BS2
ATOM	6129	CB	GLU	141	186.404	159.892	-11.630	1.00178.33	BS2	ATOM	6182	CA	LYS	147	173.921	161.654	-10.064	1.00125.77	BS2
ATOM	6130	CG	GLU	141	187.645	160.800	-11.493	1.00178.33	BS2	ATOM	6183	CB	LYS	147	173.575	162.246	-11.422	1.00 87.51	BS2
ATOM	6131	CD	GLU	141	188.780	160.480	-12.455	1.00178.33	BS2	ATOM	6184	CG	LYS	147	174.821	162.746	-12.117	1.00 87.51	BS2
ATOM	6132	OE1	GLU	141	189.237	159.317	-12.484	1.00178.33	BS2	ATOM	6185	CD	LYS	147	175.692	163.493	-11.133	1.00 87.51	BS2
ATOM	6133	OE2	GLU	141	189.228	161.403	-13.172	1.00178.33	BS2	ATOM	6186	CE	LYS	147	177.054	163.782	-11.718	1.00 87.51	BS2
ATOM	6134	C	GLU	141	184.101	159.445	-10.574	1.00 80.86	BS2	ATOM	6187	NZ	LYS	147	176.991	164.749	-12.852	1.00 87.51	BS2
ATOM	6135	O	GLU	141	183.723	158.685	-11.472	1.00 80.86	BS2	ATOM	6188	C	LYS	147	172.713	161.156	-9.305	1.00125.77	BS2
ATOM	6136	N	LEU	142	183.562	159.495	-9.352	1.00 79.91	BS2	ATOM	6189	O	LYS	147	171.584	161.049	-9.802	1.00125.77	BS2
ATOM	6137	CA	LEU	142	182.394	158.739	-8.912	1.00 79.91	BS2	ATOM	6190	N	TYR	148	173.039	160.811	-8.068	1.00 67.89	BS2
ATOM	6138	CB	LEU	142	182.321	158.702	-7.394	1.00 38.96	BS2	ATOM	6191	CA	TYR	148	172.133	160.283	-7.097	1.00 67.89	BS2
ATOM	6139	CG	LEU	142	182.773	157.465	-6.635	1.00 38.96	BS2	ATOM	6192	CB	TYR	148	172.771	159.072	-6.443	1.00 65.96	BS2
ATOM	6140	CD1	LEU	142	183.048	157.804	-5.171	1.00 38.96	BS2	ATOM	6193	CG	TYR	148	172.311	157.787	-7.065	1.00 65.96	BS2
ATOM	6141	CD2	LEU	142	181.693	156.409	-6.750	1.00 38.96	BS2	ATOM	6194	CD1	TYR	148	171.848	157.761	-8.379	1.00 65.96	BS2
ATOM	6142	C	LEU	142	181.296	159.649	-9.399	1.00 79.91	BS2	ATOM	6195	CE1	TYR	148	171.317	156.608	-8.909	1.00 65.96	BS2
ATOM	6143	O	LEU	142	180.152	159.249	-9.576	1.00 79.91	BS2	ATOM	6196	CD2	TYR	148	172.245	156.611	-6.311	1.00 65.96	BS2
ATOM	6144	N	GLU	143	181.681	160.904	-9.587	1.00 63.66	BS2	ATOM	6197	CE2	TYR	148	171.715	155.456	-6.837	1.00 65.96	BS2
ATOM	6145	CA	GLU	143	180.786	161.935	-10.057	1.00 63.66	BS2	ATOM	6198	CZ	TYR	148	171.249	155.468	-8.126	1.00 65.96	BS2
ATOM	6146	CB	GLU	143	181.479	163.300	-9.976	1.00116.30	BS2	ATOM	6199	OH	TYR	148	170.654	154.349	-8.621	1.00 65.96	BS2
ATOM	6147	CG	GLU	143	181.975	163.657	-8.576	1.00116.30	BS2	ATOM	6200	C	TYR	148	171.792	161.312	-6.052	1.00 67.89	BS2
ATOM	6148	CD	GLU	143	182.822	164.919	-8.543	1.00116.30	BS2	ATOM	6201	O	TYR	148	172.630	161.708	-5.235	1.00 67.89	BS2
ATOM	6149	OE1	GLU	143	182.313	165.986	-8.950	1.00116.30	BS2	ATOM	6202	N	LEU	149	170.540	161.742	-6.109	1.00101.59	BS2
ATOM	6150	OE2	GLU	143	183.993	164.842	-8.106	1.00116.30	BS2	ATOM	6203	CA	LEU	149	169.991	162.696	-5.175	1.00101.59	BS2
ATOM	6151	C	GLU	143	180.389	161.637	-11.495	1.00 63.66	BS2	ATOM	6204	CB	LEU	149	169.080	163.679	-5.904	1.00 74.10	BS2
ATOM	6152	O	GLU	143	179.322	162.046	-11.949	1.00 63.66	BS2	ATOM	6205	CG	LEU	149	169.736	164.703	-6.830	1.00 74.10	BS2
ATOM	6153	N	ARG	144	181.241	160.914	-12.214	1.00 79.72	BS2	ATOM	6206	CD1	LEU	149	168.694	165.276	-7.784	1.00 74.10	BS2
ATOM	6154	CA	ARG	144	180.942	160.600	-13.602	1.00 79.72	BS2	ATOM	6207	CD2	LEU	149	170.372	165.809	-5.995	1.00 74.10	BS2
ATOM	6155	CB	ARG	144	182.187	160.065	-14.305	1.00185.45	BS2	ATOM	6208	C	LEU	149	169.162	161.845	-4.238	1.00101.59	BS2
ATOM	6156	CG	ARG	144	183.213	161.139	-14.586	1.00185.45	BS2	ATOM	6209	O	LEU	149	169.359	161.858	-3.028	1.00101.59	BS2
ATOM	6157	CD	ARG	144	184.412	160.587	-15.325	1.00185.45	BS2	ATOM	6210	N	SER	150	168.260	161.074	-4.834	1.00 74.02	BS2
ATOM	6158	NE	ARG	144	185.323	161.652	-15.731	1.00185.45	BS2	ATOM	6211	CA	SER	150	167.342	160.203	-4.111	1.00 74.02	BS2
ATOM	6159	CZ	ARG	144	186.489	161.450	-16.335	1.00185.45	BS2	ATOM	6212	CB	SER	150	166.964	158.996	-4.998	1.00 88.45	BS2
ATOM	6160	NH1	ARG	144	186.892	160.216	-16.604	1.00185.45	BS2	ATOM	6213	OG	SER	150	168.106	158.320	-5.489	1.00 88.45	BS2
ATOM	6161	NH2	ARG	144	187.250	162.484	-16.671	1.00185.45	BS2	ATOM	6214	C	SER	150	167.731	159.732	-2.698	1.00 74.02	BS2
ATOM	6162	C	ARG	144	179.797	159.614	-13.761	1.00 79.72	BS2	ATOM	6215	O	SER	150	167.847	160.533	-1.774	1.00 74.02	BS2
ATOM	6163	O	ARG	144	178.985	159.736	-14.683	1.00 79.72	BS2	ATOM	6216	N	GLY	151	167.922	158.435	-2.522	1.00 71.83	BS2
ATOM	6164	N	LEU	145	179.716	158.642	-12.861	1.00 81.72	BS2	ATOM	6217	CA	GLY	151	168.238	157.927	-1.198	1.00 71.83	BS2
ATOM	6165	CA	LEU	145	178.666	157.644	-12.966	1.00 81.72	BS2	ATOM	6218	C	GLY	151	166.944	157.337	-0.674	1.00 71.83	BS2
ATOM	6166	CB	LEU	145	179.300	156.233	-12.902	1.00 54.51	BS2	ATOM	6219	O	GLY	151	166.707	157.236	0.527	1.00 71.83	BS2

ATOM	6220	N	PHE	152	166.117	156.922	-1.626	1.00	49.26	BS2	ATOM	6273	CZ	ARG	157	159.053	160.535	-19.431	1.00	66.68	BS2
ATOM	6221	CA	PHE	152	164.795	156.358	-1.382	1.00	49.26	BS2	ATOM	6274	NH1	ARG	157	160.226	161.039	-19.796	1.00	66.68	BS2
ATOM	6222	CB	PHE	152	163.827	157.541	-1.188	1.00	76.33	BS2	ATOM	6275	NH2	ARG	157	157.918	161.112	-19.806	1.00	66.68	BS2
ATOM	6223	CG	PHE	152	162.729	157.328	-0.177	1.00	76.33	BS2	ATOM	6276	C	ARG	157	161.665	156.352	-17.308	1.00	84.66	BS2
ATOM	6224	CD1	PHE	152	163.006	156.850	1.096	1.00	76.33	BS2	ATOM	6277	O	ARG	157	161.209	155.256	-17.601	1.00	84.66	BS2
ATOM	6225	CD2	PHE	152	161.418	157.721	-0.469	1.00	76.33	BS2	ATOM	6278	N	LEU	158	162.661	156.945	-17.968	1.00	68.81	BS2
ATOM	6226	CE1	PHE	152	161.988	156.774	2.062	1.00	76.33	BS2	ATOM	6279	CA	LEU	158	163.432	156.352	-19.082	1.00	68.81	BS2
ATOM	6227	CE2	PHE	152	160.398	157.648	0.497	1.00	76.33	BS2	ATOM	6280	CB	LEU	158	163.877	154.925	-18.730	1.00	45.10	BS2
ATOM	6228	CZ	PHE	152	160.684	157.176	1.757	1.00	76.33	BS2	ATOM	6281	CG	LEU	158	162.886	153.773	-18.903	1.00	45.10	BS2
ATOM	6229	C	PHE	152	164.503	155.698	-2.734	1.00	49.26	BS2	ATOM	6282	CD1	LEU	158	162.719	153.387	-20.363	1.00	45.10	BS2
ATOM	6230	O	PHE	152	164.626	156.367	-3.762	1.00	49.26	BS2	ATOM	6283	CD2	LEU	158	163.402	152.602	-18.114	1.00	45.10	BS2
ATOM	6231	N	ARG	153	164.154	154.417	-2.778	1.00	44.35	BS2	ATOM	6284	C	LEU	158	162.916	156.319	-20.522	1.00	68.81	BS2
ATOM	6232	CA	ARG	153	163.815	153.849	-4.088	1.00	44.35	BS2	ATOM	6285	O	LEU	158	161.747	156.040	-20.774	1.00	68.81	BS2
ATOM	6233	CB	ARG	153	163.333	152.401	-3.939	1.00	89.20	BS2	ATOM	6286	N	PRO	159	163.811	156.614	-21.487	1.00	55.41	BS2
ATOM	6234	CG	ARG	153	164.435	151.457	-3.503	1.00	89.20	BS2	ATOM	6287	CD	PRO	159	165.010	157.422	-21.193	1.00	53.94	BS2
ATOM	6235	CD	ARG	153	163.914	150.077	-3.148	1.00	89.20	BS2	ATOM	6288	CA	PRO	159	163.547	156.626	-22.927	1.00	55.41	BS2
ATOM	6236	NE	ARG	153	164.984	149.197	-2.662	1.00	89.20	BS2	ATOM	6289	CB	PRO	159	164.231	157.906	-23.387	1.00	53.94	BS2
ATOM	6237	CZ	ARG	153	164.836	147.899	-2.378	1.00	89.20	BS2	ATOM	6290	CG	PRO	159	165.460	157.907	-22.571	1.00	53.94	BS2
ATOM	6238	NH1	ARG	153	163.657	147.298	-2.524	1.00	89.20	BS2	ATOM	6291	C	PRO	159	164.206	155.370	-23.497	1.00	55.41	BS2
ATOM	6239	NH2	ARG	153	165.875	147.187	-1.952	1.00	89.20	BS2	ATOM	6292	O	PRO	159	165.349	155.052	-23.159	1.00	55.41	BS2
ATOM	6240	C	ARG	153	162.690	154.774	-4.598	1.00	44.35	BS2	ATOM	6293	N	ASP	160	163.480	154.661	-24.355	1.00	69.21	BS2
ATOM	6241	O	ARG	153	161.792	155.125	-3.833	1.00	44.35	BS2	ATOM	6294	CA	ASP	160	163.961	153.412	-24.943	1.00	69.21	BS2
ATOM	6242	N	LEU	154	162.722	155.167	-5.868	1.00	37.14	BS2	ATOM	6295	CB	ASP	160	165.422	153.519	-25.395	1.00	144.74	BS2
ATOM	6243	CA	LEU	154	161.720	156.118	-6.373	1.00	37.14	BS2	ATOM	6296	CG	ASP	160	165.961	152.198	-25.925	1.00	144.74	BS2
ATOM	6244	CB	LEU	154	162.459	157.158	-7.187	1.00	119.61	BS2	ATOM	6297	OD1	ASP	160	165.558	151.797	-27.041	1.00	144.74	BS2
ATOM	6245	CG	LEU	154	163.759	156.504	-7.638	1.00	119.61	BS2	ATOM	6298	OD2	ASP	160	166.777	151.561	-25.218	1.00	144.74	BS2
ATOM	6246	CD1	LEU	154	163.433	155.423	-8.680	1.00	119.61	BS2	ATOM	6299	C	ASP	160	163.835	152.285	-23.909	1.00	69.21	BS2
ATOM	6247	CD2	LEU	154	164.728	157.575	-8.166	1.00	119.61	BS2	ATOM	6300	O	ASP	160	164.805	151.927	-23.223	1.00	69.21	BS2
ATOM	6248	C	LEU	154	160.467	155.656	-7.145	1.00	37.14	BS2	ATOM	6301	N	ALA	161	162.627	151.736	-23.804	1.00	60.71	BS2
ATOM	6249	O	LEU	154	159.568	155.054	-6.547	1.00	37.14	BS2	ATOM	6302	CA	ALA	161	162.363	150.658	-22.877	1.00	60.71	BS2
ATOM	6250	N	LEU	155	160.411	155.991	-8.454	1.00	80.57	BS2	ATOM	6303	CB	ALA	161	160.978	150.130	-23.113	1.00	36.75	BS2
ATOM	6251	CA	LEU	155	159.307	155.635	-9.389	1.00	80.57	BS2	ATOM	6304	C	ALA	161	163.395	149.529	-23.028	1.00	60.71	BS2
ATOM	6252	CB	LEU	155	158.035	156.378	-9.027	1.00	42.63	BS2	ATOM	6305	O	ALA	161	163.620	148.762	-22.092	1.00	60.71	BS2
ATOM	6253	CG	LEU	155	157.510	155.934	-7.683	1.00	42.63	BS2	ATOM	6306	N	ILE	162	164.016	149.416	-24.202	1.00	65.80	BS2
ATOM	6254	CD1	LEU	155	157.624	157.099	-6.678	1.00	42.63	BS2	ATOM	6307	CA	ILE	162	165.019	148.379	-24.418	1.00	65.80	BS2
ATOM	6255	CD2	LEU	155	156.086	155.422	-7.844	1.00	42.63	BS2	ATOM	6308	CB	ILE	162	165.313	148.167	-25.916	1.00	73.68	BS2
ATOM	6256	C	LEU	155	159.536	155.817	-10.911	1.00	80.57	BS2	ATOM	6309	CG2	ILE	162	166.270	147.013	-26.093	1.00	73.68	BS2
ATOM	6257	O	LEU	155	158.650	156.306	-11.605	1.00	80.57	BS2	ATOM	6310	CG1	ILE	162	164.024	147.821	-26.660	1.00	73.68	BS2
ATOM	6258	N	LYS	156	160.716	155.405	-11.386	1.00	50.62	BS2	ATOM	6311	CD1	ILE	162	163.051	148.965	-26.757	1.00	73.68	BS2
ATOM	6259	CA	LYS	156	161.210	155.404	-12.788	1.00	50.62	BS2	ATOM	6312	C	ILE	162	166.273	148.835	-23.683	1.00	65.80	BS2
ATOM	6260	CB	LYS	156	161.653	154.002	-13.126	1.00	71.95	BS2	ATOM	6313	O	ILE	162	167.384	148.924	-24.223	1.00	65.80	BS2
ATOM	6261	CG	LYS	156	163.116	153.778	-12.969	1.00	71.95	BS2	ATOM	6314	N	PHE	163	166.040	149.146	-22.419	1.00	107.44	BS2
ATOM	6262	CD	LYS	156	163.435	152.437	-13.548	1.00	71.95	BS2	ATOM	6315	CA	PHE	163	167.044	149.600	-21.482	1.00	107.44	BS2
ATOM	6263	CE	LYS	156	162.797	152.298	-14.925	1.00	71.95	BS2	ATOM	6316	CB	PHE	163	166.628	150.953	-20.935	1.00	76.64	BS2
ATOM	6264	NZ	LYS	156	163.039	150.946	-15.510	1.00	71.95	BS2	ATOM	6317	CG	PHE	163	167.678	151.988	-21.026	1.00	76.64	BS2
ATOM	6265	C	LYS	156	160.580	155.935	-14.080	1.00	50.62	BS2	ATOM	6318	CD1	PHE	163	167.557	153.027	-21.947	1.00	76.64	BS2
ATOM	6266	O	LYS	156	159.422	155.695	-14.400	1.00	50.62	BS2	ATOM	6319	CD2	PHE	163	168.792	151.939	-20.198	1.00	76.64	BS2
ATOM	6267	N	ARG	157	161.437	156.569	-14.874	1.00	84.66	BS2	ATOM	6320	CE1	PHE	163	168.532	154.007	-22.046	1.00	76.64	BS2
ATOM	6268	CA	ARG	157	161.070	157.158	-16.156	1.00	84.66	BS2	ATOM	6321	CE2	PHE	163	169.772	152.907	-20.284	1.00	76.64	BS2
ATOM	6269	CB	ARG	157	161.616	158.572	-16.238	1.00	66.68	BS2	ATOM	6322	CZ	PHE	163	169.640	153.946	-21.213	1.00	76.64	BS2
ATOM	6270	CG	ARG	157	160.774	159.496	-17.066	1.00	66.68	BS2	ATOM	6323	C	PHE	163	166.894	148.566	-20.383	1.00	107.44	BS2
ATOM	6271	CD	ARG	157	160.211	158.766	-18.234	1.00	66.68	BS2	ATOM	6324	O	PHE	163	167.720	148.456	-19.480	1.00	107.44	BS2
ATOM	6272	NE	ARG	157	159.022	159.447	-18.687	1.00	66.68	BS2	ATOM	6325	N	VAL	164	165.802	147.816	-20.493	1.00	75.58	BS2

ATOM	6326	CA	VAL	164	165.438	146.793	-19.533	1.00	75.58	BS2	ATOM	6379	N	ALA	171	163.291	148.454	-11.104	1.00	52.81	BS2
ATOM	6327	CB	VAL	164	164.488	145.717	-20.182	1.00	116.62	BS2	ATOM	6380	CA	ALA	171	161.979	149.044	-11.330	1.00	52.81	BS2
ATOM	6328	CG1	VAL	164	164.870	144.306	-19.749	1.00	116.62	BS2	ATOM	6381	CB	ALA	171	161.845	149.511	-12.774	1.00	31.03	BS2
ATOM	6329	CG2	VAL	164	163.026	145.994	-19.760	1.00	116.62	BS2	ATOM	6382	C	ALA	171	160.897	148.028	-10.991	1.00	52.81	BS2
ATOM	6330	C	VAL	164	166.595	146.146	-18.799	1.00	75.58	BS2	ATOM	6383	O	ALA	171	160.522	147.887	-9.828	1.00	52.81	BS2
ATOM	6331	O	VAL	164	167.393	145.405	-19.348	1.00	75.58	BS2	ATOM	6384	N	ILE	172	160.398	147.315	-11.996	1.00	53.68	BS2
ATOM	6332	N	VAL	165	166.641	146.510	-17.530	1.00	51.16	BS2	ATOM	6385	CA	ILE	172	159.383	146.299	-11.758	1.00	53.68	BS2
ATOM	6333	CA	VAL	165	167.564	146.104	-16.479	1.00	51.16	BS2	ATOM	6386	CB	ILE	172	159.073	145.577	-13.080	1.00	51.70	BS2
ATOM	6334	CB	VAL	165	169.030	146.484	-16.698	1.00	31.75	BS2	ATOM	6387	CG2	ILE	172	159.758	144.240	-13.107	1.00	51.70	BS2
ATOM	6335	CG1	VAL	165	169.792	146.149	-15.437	1.00	31.75	BS2	ATOM	6388	CG1	ILE	172	157.555	145.465	-13.283	1.00	51.70	BS2
ATOM	6336	CG2	VAL	165	169.642	145.718	-17.841	1.00	31.75	BS2	ATOM	6389	CD1	ILE	172	157.099	144.768	-14.577	1.00	51.70	BS2
ATOM	6337	C	VAL	165	166.981	147.110	-15.499	1.00	51.16	BS2	ATOM	6390	C	ILE	172	160.045	145.367	-10.733	1.00	53.68	BS2
ATOM	6338	O	VAL	165	166.637	146.780	-14.368	1.00	51.16	BS2	ATOM	6391	O	ILE	172	161.087	145.718	-10.182	1.00	53.68	BS2
ATOM	6339	N	ASP	166	166.851	148.343	-15.990	1.00	40.54	BS2	ATOM	6392	N	ALA	173	159.480	144.208	-10.437	1.00	50.31	BS2
ATOM	6340	CA	ASP	166	166.237	149.441	-15.268	1.00	40.54	BS2	ATOM	6393	CA	ALA	173	160.154	143.321	-9.480	1.00	50.31	BS2
ATOM	6341	CB	ASP	166	166.148	150.616	-16.218	1.00	123.45	BS2	ATOM	6394	CB	ALA	173	161.555	142.958	-9.985	1.00	36.77	BS2
ATOM	6342	CG	ASP	166	166.757	150.286	-17.569	1.00	123.45	BS2	ATOM	6395	C	ALA	173	160.277	143.941	-8.098	1.00	50.31	BS2
ATOM	6343	OD1	ASP	166	165.991	150.076	-18.530	1.00	123.45	BS2	ATOM	6396	O	ALA	173	159.920	143.328	-7.096	1.00	50.31	BS2
ATOM	6344	OD2	ASP	166	168.002	150.202	-17.659	1.00	123.45	BS2	ATOM	6397	N	VAL	174	160.818	145.149	-8.041	1.00	42.04	BS2
ATOM	6345	C	ASP	166	164.863	148.847	-14.908	1.00	40.54	BS2	ATOM	6398	CA	VAL	174	160.964	145.842	-6.780	1.00	42.04	BS2
ATOM	6346	O	ASP	166	164.450	148.913	-13.756	1.00	40.54	BS2	ATOM	6399	CB	VAL	174	162.378	146.575	-6.736	1.00	29.13	BS2
ATOM	6347	N	PRO	167	164.110	148.310	-15.896	1.00	41.41	BS2	ATOM	6400	CG1	VAL	174	162.300	147.915	-7.400	1.00	29.13	BS2
ATOM	6348	CD	PRO	167	164.027	148.696	-17.320	1.00	36.25	BS2	ATOM	6401	CG2	VAL	174	162.923	146.676	-5.314	1.00	29.13	BS2
ATOM	6349	CA	PRO	167	162.836	147.724	-15.463	1.00	41.41	BS2	ATOM	6402	C	VAL	174	159.732	146.791	-6.718	1.00	42.04	BS2
ATOM	6350	CB	PRO	167	162.066	147.552	-16.776	1.00	36.25	BS2	ATOM	6403	O	VAL	174	159.485	147.444	-5.702	1.00	42.04	BS2
ATOM	6351	CG	PRO	167	162.524	148.726	-17.586	1.00	36.25	BS2	ATOM	6404	N	ARG	175	158.945	146.809	-7.804	1.00	62.61	BS2
ATOM	6352	C	PRO	167	163.261	146.375	-14.851	1.00	41.41	BS2	ATOM	6405	CA	ARG	175	157.716	147.618	-7.933	1.00	62.61	BS2
ATOM	6353	O	PRO	167	163.805	146.317	-13.750	1.00	41.41	BS2	ATOM	6406	CB	ARG	175	156.889	147.557	-6.654	1.00	70.61	BS2
ATOM	6354	N	THR	168	163.059	145.292	-15.583	1.00	80.71	BS2	ATOM	6407	CG	ARG	175	156.720	146.183	-6.083	1.00	70.61	BS2
ATOM	6355	CA	THR	168	163.449	143.961	-15.108	1.00	80.71	BS2	ATOM	6408	CD	ARG	175	155.877	145.336	-6.976	1.00	70.61	BS2
ATOM	6356	CB	THR	168	164.806	143.570	-15.685	1.00	89.50	BS2	ATOM	6409	NE	ARG	175	155.959	143.942	-6.579	1.00	70.61	BS2
ATOM	6357	OG1	THR	168	164.995	144.278	-16.914	1.00	89.50	BS2	ATOM	6410	CZ	ARG	175	155.304	142.972	-7.194	1.00	70.61	BS2
ATOM	6358	CG2	THR	168	164.884	142.055	-15.940	1.00	89.50	BS2	ATOM	6411	NH1	ARG	175	154.525	143.264	-8.224	1.00	70.61	BS2
ATOM	6359	C	THR	168	163.548	143.841	-13.589	1.00	80.71	BS2	ATOM	6412	NH2	ARG	175	155.433	141.715	-6.790	1.00	70.61	BS2
ATOM	6360	O	THR	168	162.691	144.334	-12.859	1.00	80.71	BS2	ATOM	6413	C	ARG	175	157.974	149.089	-8.237	1.00	62.61	BS2
ATOM	6361	N	LYS	169	164.607	143.171	-13.132	1.00	200.66	BS2	ATOM	6414	O	ARG	175	158.651	149.758	-7.474	1.00	62.61	BS2
ATOM	6362	CA	LYS	169	164.861	142.962	-11.705	1.00	200.66	BS2	ATOM	6415	N	GLU	176	157.421	149.614	-9.324	1.00	49.05	BS2
ATOM	6363	CB	LYS	169	166.320	142.539	-11.461	1.00	74.39	BS2	ATOM	6416	CA	GLU	176	157.649	151.014	-9.647	1.00	49.05	BS2
ATOM	6364	CG	LYS	169	167.142	142.332	-12.711	1.00	74.39	BS2	ATOM	6417	CB	GLU	176	158.980	151.178	-10.356	1.00	45.14	BS2
ATOM	6365	CD	LYS	169	166.682	141.091	-13.477	1.00	74.39	BS2	ATOM	6418	CG	GLU	176	160.172	150.653	-9.595	1.00	45.14	BS2
ATOM	6366	CE	LYS	169	167.652	140.748	-14.601	1.00	74.39	BS2	ATOM	6419	CD	GLU	176	160.401	151.353	-8.288	1.00	45.14	BS2
ATOM	6367	NZ	LYS	169	169.030	140.584	-14.064	1.00	74.39	BS2	ATOM	6420	OE1	GLU	176	159.991	152.521	-8.202	1.00	45.14	BS2
ATOM	6368	C	LYS	169	164.618	144.263	-10.968	1.00	200.66	BS2	ATOM	6421	OE2	GLU	176	160.994	150.744	-7.365	1.00	45.14	BS2
ATOM	6369	O	LYS	169	164.060	144.295	-9.869	1.00	200.66	BS2	ATOM	6422	C	GLU	176	156.572	151.603	-10.534	1.00	49.05	BS2
ATOM	6370	N	GLU	170	165.049	145.342	-11.603	1.00	56.93	BS2	ATOM	6423	O	GLU	176	155.618	152.247	-10.070	1.00	49.05	BS2
ATOM	6371	CA	GLU	170	164.925	146.659	-11.031	1.00	56.93	BS2	ATOM	6424	N	ALA	177	156.757	151.415	-11.829	1.00	67.64	BS2
ATOM	6372	CB	GLU	170	165.963	147.534	-11.699	1.00	47.61	BS2	ATOM	6425	CA	ALA	177	155.785	151.909	-12.772	1.00	67.64	BS2
ATOM	6373	CG	GLU	170	167.261	146.778	-11.896	1.00	47.61	BS2	ATOM	6426	CB	ALA	177	155.319	153.306	-12.360	1.00	33.64	BS2
ATOM	6374	CD	GLU	170	168.224	146.952	-10.756	1.00	47.61	BS2	ATOM	6427	C	ALA	177	156.374	151.926	-14.166	1.00	67.64	BS2
ATOM	6375	OE1	GLU	170	167.765	147.153	-9.617	1.00	47.61	BS2	ATOM	6428	O	ALA	177	155.921	151.214	-15.070	1.00	67.64	BS2
ATOM	6376	OE2	GLU	170	169.442	146.885	-11.011	1.00	47.61	BS2	ATOM	6429	N	ARG	178	157.404	152.734	-14.332	1.00	49.13	BS2
ATOM	6377	C	GLU	170	163.517	147.159	-11.291	1.00	56.93	BS2	ATOM	6430	CA	ARG	178	158.062	152.855	-15.625	1.00	49.13	BS2
ATOM	6378	O	GLU	170	162.659	146.381	-11.677	1.00	56.93	BS2	ATOM	6431	CB	ARG	178	158.351	151.488	-16.245	1.00	87.97	BS2

ATOM	6432	CG	ARG	178	159.020	150.495	-15.353	1.00	87.97	BS2	ATOM	6485	CB	VAL	184	159.176	149.708	-34.362	1.00111.26	BS2
ATOM	6433	CD	ARG	178	158.287	149.180	-15.531	1.00	87.97	BS2	ATOM	6486	CG1	VAL	184	158.126	149.023	-35.202	1.00111.26	BS2
ATOM	6434	NE	ARG	178	159.152	148.004	-15.445	1.00	87.97	BS2	ATOM	6487	CG2	VAL	184	159.380	151.129	-34.855	1.00111.26	BS2
ATOM	6435	CZ	ARG	178	158.787	146.781	-15.822	1.00	87.97	BS2	ATOM	6488	C	VAL	184	159.617	148.739	-32.087	1.00 63.47	BS2
ATOM	6436	NH1	ARG	178	157.571	146.565	-16.311	1.00	87.97	BS2	ATOM	6489	O	VAL	184	159.187	147.628	-31.766	1.00 63.47	BS2
ATOM	6437	NH2	ARG	178	159.644	145.775	-15.716	1.00	87.97	BS2	ATOM	6490	N	ILE	185	160.829	149.158	-31.750	1.00 62.14	BS2
ATOM	6438	C	ARG	178	157.240	153.642	-16.630	1.00	49.13	BS2	ATOM	6491	CA	ILE	185	161.764	148.307	-31.023	1.00 62.14	BS2
ATOM	6439	O	ARG	178	156.142	153.233	-17.015	1.00	49.13	BS2	ATOM	6492	CB	ILE	185	163.107	149.053	-30.794	1.00126.61	BS2
ATOM	6440	N	LYS	179	157.793	154.779	-17.034	1.00	58.09	BS2	ATOM	6493	CG2	ILE	185	163.999	148.262	-29.855	1.00126.61	BS2
ATOM	6441	CA	LYS	179	157.193	155.617	-18.056	1.00	58.09	BS2	ATOM	6494	CG1	ILE	185	163.811	149.274	-32.134	1.00126.61	BS2
ATOM	6442	CB	LYS	179	157.187	157.084	-17.627	1.00	91.28	BS2	ATOM	6495	CD1	ILE	185	165.283	149.646	-32.022	1.00126.61	BS2
ATOM	6443	CG	LYS	179	156.327	157.400	-16.439	1.00	91.28	BS2	ATOM	6496	C	ILE	185	161.320	147.728	-29.671	1.00 62.14	BS2
ATOM	6444	CD	LYS	179	156.542	158.847	-16.035	1.00	91.28	BS2	ATOM	6497	O	ILE	185	161.695	146.617	-29.320	1.00 62.14	BS2
ATOM	6445	CE	LYS	179	155.290	159.486	-15.402	1.00	91.28	BS2	ATOM	6498	N	ALA	186	160.521	148.459	-28.911	1.00 58.22	BS2
ATOM	6446	NZ	LYS	179	154.531	160.417	-16.324	1.00	91.28	BS2	ATOM	6499	CA	ALA	186	160.146	147.983	-27.581	1.00 58.22	BS2
ATOM	6447	C	LYS	179	158.214	155.419	-19.168	1.00	58.09	BS2	ATOM	6500	CB	ALA	186	159.962	149.192	-26.646	1.00 83.54	BS2
ATOM	6448	O	LYS	179	159.344	155.037	-18.874	1.00	58.09	BS2	ATOM	6501	C	ALA	186	158.960	147.032	-27.410	1.00 58.22	BS2
ATOM	6449	N	LEU	180	157.852	155.652	-20.426	1.00	63.95	BS2	ATOM	6502	O	ALA	186	158.092	146.924	-28.274	1.00 58.22	BS2
ATOM	6450	CA	LEU	180	158.842	155.484	-21.481	1.00	63.95	BS2	ATOM	6503	N	LEU	187	158.953	146.355	-26.258	1.00 52.17	BS2
ATOM	6451	CB	LEU	180	159.507	154.118	-21.339	1.00	151.26	BS2	ATOM	6504	CA	LEU	187	157.889	145.442	-25.865	1.00 52.17	BS2
ATOM	6452	CG	LEU	180	158.526	152.982	-21.044	1.00	151.26	BS2	ATOM	6505	CB	LEU	187	158.431	144.354	-24.940	1.00 59.31	BS2
ATOM	6453	CD1	LEU	180	157.527	152.840	-22.181	1.00	151.26	BS2	ATOM	6506	CG	LEU	187	157.485	143.566	-24.018	1.00 59.31	BS2
ATOM	6454	CD2	LEU	180	159.300	151.693	-20.837	1.00	151.26	BS2	ATOM	6507	CD1	LEU	187	156.094	143.423	-24.622	1.00 59.31	BS2
ATOM	6455	C	LEU	180	158.389	155.646	-22.922	1.00	63.95	BS2	ATOM	6508	CD2	LEU	187	158.108	142.193	-23.754	1.00 59.31	BS2
ATOM	6456	O	LEU	180	157.194	155.695	-23.228	1.00	63.95	BS2	ATOM	6509	C	LEU	187	156.870	146.282	-25.115	1.00 52.17	BS2
ATOM	6457	N	PHE	181	159.379	155.714	-23.808	1.00	84.11	BS2	ATOM	6510	O	LEU	187	157.067	146.623	-23.946	1.00 52.17	BS2
ATOM	6458	CA	PHE	181	159.144	155.818	-25.237	1.00	84.11	BS2	ATOM	6511	N	ALA	188	155.788	146.628	-25.797	1.00 50.52	BS2
ATOM	6459	CB	PHE	181	160.092	156.827	-25.858	1.00	146.39	BS2	ATOM	6512	CA	ALA	188	154.756	147.436	-25.192	1.00 50.52	BS2
ATOM	6460	CG	PHE	181	159.958	158.187	-25.300	1.00	146.39	BS2	ATOM	6513	CB	ALA	188	153.555	147.459	-26.115	1.00 62.09	BS2
ATOM	6461	CD1	PHE	181	160.018	158.393	-23.928	1.00	146.39	BS2	ATOM	6514	C	ALA	188	154.339	146.934	-23.794	1.00 50.52	BS2
ATOM	6462	CD2	PHE	181	159.780	159.273	-26.142	1.00	146.39	BS2	ATOM	6515	O	ALA	188	154.269	147.710	-22.827	1.00 50.52	BS2
ATOM	6463	CE1	PHE	181	159.902	159.673	-23.397	1.00	146.39	BS2	ATOM	6516	N	ASP	189	154.074	145.629	-23.701	1.00 63.22	BS2
ATOM	6464	CE2	PHE	181	159.664	160.553	-25.630	1.00	146.39	BS2	ATOM	6517	CA	ASP	189	153.605	144.986	-22.471	1.00 63.22	BS2
ATOM	6465	CZ	PHE	181	159.724	160.761	-24.252	1.00	146.39	BS2	ATOM	6518	CB	ASP	189	153.413	143.481	-22.694	1.00130.98	BS2
ATOM	6466	C	PHE	181	159.448	154.448	-25.811	1.00	84.11	BS2	ATOM	6519	CG	ASP	189	152.364	143.166	-23.740	1.00130.98	BS2
ATOM	6467	O	PHE	181	160.216	153.687	-25.227	1.00	84.11	BS2	ATOM	6520	OD1	ASP	189	151.321	143.858	-23.776	1.00130.98	BS2
ATOM	6468	N	ILE	182	158.852	154.122	-26.946	1.00	99.11	BS2	ATOM	6521	OD2	ASP	189	152.576	142.208	-24.516	1.00130.98	BS2
ATOM	6469	CA	ILE	182	159.122	152.835	-27.552	1.00	99.11	BS2	ATOM	6522	C	ASP	189	154.408	145.142	-21.192	1.00 63.22	BS2
ATOM	6470	CB	ILE	182	157.877	152.309	-28.265	1.00	150.13	BS2	ATOM	6523	O	ASP	189	154.006	144.616	-20.160	1.00 63.22	BS2
ATOM	6471	CG2	ILE	182	157.414	151.031	-27.587	1.00	150.13	BS2	ATOM	6524	N	THR	190	155.511	145.871	-21.206	1.00 34.16	BS2
ATOM	6472	CG1	ILE	182	156.783	153.378	-28.258	1.00	150.13	BS2	ATOM	6525	CA	THR	190	156.291	145.920	-19.979	1.00 34.16	BS2
ATOM	6473	CD1	ILE	182	156.150	153.597	-26.902	1.00	150.13	BS2	ATOM	6526	CB	THR	190	157.630	145.146	-20.216	1.00 69.98	BS2
ATOM	6474	C	ILE	182	160.343	152.963	-28.481	1.00	99.11	BS2	ATOM	6527	OG1	THR	190	158.246	144.829	-18.964	1.00 69.98	BS2
ATOM	6475	O	ILE	182	161.464	153.028	-27.984	1.00	99.11	BS2	ATOM	6528	CG2	THR	190	158.576	145.957	-21.090	1.00 69.98	BS2
ATOM	6476	N	PRO	183	160.177	152.951	-29.820	1.00	83.58	BS2	ATOM	6529	C	THR	190	156.523	147.295	-19.331	1.00 34.16	BS2
ATOM	6477	CD	PRO	183	161.272	153.599	-30.576	1.00	81.69	BS2	ATOM	6530	O	THR	190	157.449	147.482	-18.548	1.00 34.16	BS2
ATOM	6478	CA	PRO	183	158.997	152.815	-30.673	1.00	83.58	BS2	ATOM	6531	N	ASP	191	155.655	148.249	-19.642	1.00 55.94	BS2
ATOM	6479	CB	PRO	183	159.331	153.705	-31.866	1.00	81.69	BS2	ATOM	6532	CA	ASP	191	155.745	149.581	-19.059	1.00 55.94	BS2
ATOM	6480	CG	PRO	183	160.796	153.518	-32.003	1.00	81.69	BS2	ATOM	6533	CB	ASP	191	156.250	150.570	-20.081	1.00 83.16	BS2
ATOM	6481	C	PRO	183	158.861	151.346	-31.050	1.00	83.58	BS2	ATOM	6534	CG	ASP	191	156.348	149.964	-21.437	1.00 83.16	BS2
ATOM	6482	O	PRO	183	158.771	150.480	-30.182	1.00	83.58	BS2	ATOM	6535	OD1	ASP	191	157.223	149.097	-21.623	1.00 83.16	BS2
ATOM	6483	N	VAL	184	158.878	151.077	-32.349	1.00	63.47	BS2	ATOM	6536	OD2	ASP	191	155.542	150.332	-22.312	1.00 83.16	BS2
ATOM	6484	CA	VAL	184	158.753	149.728	-32.879	1.00	63.47	BS2	ATOM	6537	C	ASP	191	154.346	149.968	-18.637	1.00 55.94	BS2

ATOM	6538	O	ASP	191	153.441	150.037	-19.465	1.00	55.94	BS2	ATOM	6591	N	TYR	199	162.601	157.753	-30.358	1.00	81.47	BS2
ATOM	6539	N	SER	192	154.163	150.200	-17.346	1.00	55.95	BS2	ATOM	6592	CA	TYR	199	163.675	158.216	-29.490	1.00	81.47	BS2
ATOM	6540	CA	SER	192	152.862	150.570	-16.847	1.00	55.95	BS2	ATOM	6593	CB	TYR	199	164.023	157.127	-28.477	1.00	89.64	BS2
ATOM	6541	CB	SER	192	152.942	150.859	-15.352	1.00	137.03	BS2	ATOM	6594	CG	TYR	199	164.179	155.761	-29.094	1.00	89.64	BS2
ATOM	6542	OG	SER	192	153.717	152.014	-15.110	1.00	137.03	BS2	ATOM	6595	CD1	TYR	199	164.729	155.604	-30.371	1.00	89.64	BS2
ATOM	6543	C	SER	192	152.348	151.791	-17.610	1.00	55.95	BS2	ATOM	6596	CE1	TYR	199	164.884	154.355	-30.940	1.00	89.64	BS2
ATOM	6544	O	SER	192	151.296	151.731	-18.241	1.00	55.95	BS2	ATOM	6597	CD2	TYR	199	163.791	154.618	-28.402	1.00	89.64	BS2
ATOM	6545	N	ASP	193	153.087	152.894	-17.573	1.00	65.05	BS2	ATOM	6598	CE2	TYR	199	163.949	153.352	-28.971	1.00	89.64	BS2
ATOM	6546	CA	ASP	193	152.663	154.108	-18.274	1.00	65.05	BS2	ATOM	6599	CZ	TYR	199	164.490	153.235	-30.239	1.00	89.64	BS2
ATOM	6547	CB	ASP	193	152.590	155.283	-17.279	1.00	61.44	BS2	ATOM	6600	OH	TYR	199	164.607	151.998	-30.810	1.00	89.64	BS2
ATOM	6548	CG	ASP	193	151.661	155.006	-16.078	1.00	61.44	BS2	ATOM	6601	C	TYR	199	164.976	158.694	-30.167	1.00	81.47	BS2
ATOM	6549	OD1	ASP	193	150.430	154.852	-16.276	1.00	61.44	BS2	ATOM	6602	O	TYR	199	165.852	157.893	-30.509	1.00	81.47	BS2
ATOM	6550	OD2	ASP	193	152.162	154.952	-14.923	1.00	61.44	BS2	ATOM	6603	N	ILE	200	165.078	160.016	-30.323	1.00	128.57	BS2
ATOM	6551	C	ASP	193	153.631	154.447	-19.432	1.00	65.05	BS2	ATOM	6604	CA	ILE	200	166.231	160.721	-30.894	1.00	128.57	BS2
ATOM	6552	O	ASP	193	154.646	155.116	-19.228	1.00	65.05	BS2	ATOM	6605	CB	ILE	200	166.541	160.275	-32.333	1.00	117.35	BS2
ATOM	6553	N	PRO	194	153.339	153.973	-20.660	1.00	66.25	BS2	ATOM	6606	CG2	ILE	200	167.265	161.394	-33.077	1.00	117.35	BS2
ATOM	6554	CD	PRO	194	152.418	152.880	-21.022	1.00	70.11	BS2	ATOM	6607	CG1	ILE	200	167.404	159.006	-32.296	1.00	117.35	BS2
ATOM	6555	CA	PRO	194	154.235	154.274	-21.786	1.00	66.25	BS2	ATOM	6608	CD1	ILE	200	167.734	158.425	-33.654	1.00	117.35	BS2
ATOM	6556	CB	PRO	194	154.088	153.050	-22.688	1.00	70.11	BS2	ATOM	6609	C	ILE	200	165.980	162.234	-30.856	1.00	128.57	BS2
ATOM	6557	CG	PRO	194	152.653	152.735	-22.545	1.00	70.11	BS2	ATOM	6610	O	ILE	200	165.098	162.753	-31.536	1.00	128.57	BS2
ATOM	6558	C	PRO	194	153.921	155.550	-22.549	1.00	66.25	BS2	ATOM	6611	N	ILE	201	166.780	162.911	-30.037	1.00	80.57	BS2
ATOM	6559	O	PRO	194	152.963	156.260	-22.259	1.00	66.25	BS2	ATOM	6612	CA	ILE	201	166.733	164.352	-29.785	1.00	80.57	BS2
ATOM	6560	N	ASP	195	154.758	155.813	-23.542	1.00	52.58	BS2	ATOM	6613	CB	ILE	201	167.919	165.055	-30.466	1.00	69.82	BS2
ATOM	6561	CA	ASP	195	154.621	156.963	-24.412	1.00	52.58	BS2	ATOM	6614	CG2	ILE	201	167.856	166.544	-30.220	1.00	69.82	BS2
ATOM	6562	CB	ASP	195	155.601	158.073	-24.050	1.00	88.94	BS2	ATOM	6615	CG1	ILE	201	169.219	164.525	-29.862	1.00	69.82	BS2
ATOM	6563	CG	ASP	195	155.049	159.018	-23.023	1.00	88.94	BS2	ATOM	6616	CD1	ILE	201	170.467	165.164	-30.409	1.00	69.82	BS2
ATOM	6564	OD1	ASP	195	153.952	159.564	-23.258	1.00	88.94	BS2	ATOM	6617	C	ILE	201	165.428	165.126	-30.027	1.00	80.57	BS2
ATOM	6565	OD2	ASP	195	155.715	159.219	-21.986	1.00	88.94	BS2	ATOM	6618	O	ILE	201	164.727	165.443	-29.067	1.00	80.57	BS2
ATOM	6566	C	ASP	195	154.973	156.465	-25.775	1.00	52.58	BS2	ATOM	6619	N	PRO	202	165.087	165.470	-31.281	1.00	91.53	BS2
ATOM	6567	O	ASP	195	156.146	156.310	-26.082	1.00	52.58	BS2	ATOM	6620	CD	PRO	202	165.756	165.381	-32.593	1.00	145.89	BS2
ATOM	6568	N	LEU	196	153.951	156.189	-26.574	1.00	68.19	BS2	ATOM	6621	CA	PRO	202	163.817	166.202	-31.389	1.00	91.53	BS2
ATOM	6569	CA	LEU	196	154.126	155.737	-27.943	1.00	68.19	BS2	ATOM	6622	CB	PRO	202	163.618	166.326	-32.896	1.00	145.89	BS2
ATOM	6570	CB	LEU	196	152.803	155.897	-28.670	1.00	172.07	BS2	ATOM	6623	CG	PRO	202	165.027	166.449	-33.399	1.00	145.89	BS2
ATOM	6571	CG	LEU	196	152.298	154.761	-29.544	1.00	172.07	BS2	ATOM	6624	C	PRO	202	162.694	165.422	-30.704	1.00	91.53	BS2
ATOM	6572	CD1	LEU	196	150.934	155.158	-30.078	1.00	172.07	BS2	ATOM	6625	O	PRO	202	161.886	165.993	-29.967	1.00	91.53	BS2
ATOM	6573	CD2	LEU	196	153.267	154.482	-30.677	1.00	172.07	BS2	ATOM	6626	N	GLY	203	162.659	164.112	-30.946	1.00	75.98	BS2
ATOM	6574	C	LEU	196	155.185	156.640	-28.589	1.00	68.19	BS2	ATOM	6627	CA	GLY	203	161.657	163.270	-30.317	1.00	75.98	BS2
ATOM	6575	O	LEU	196	155.692	157.553	-27.944	1.00	68.19	BS2	ATOM	6628	C	GLY	203	161.832	163.373	-28.812	1.00	75.98	BS2
ATOM	6576	N	VAL	197	155.525	156.401	-29.851	1.00	67.09	BS2	ATOM	6629	O	GLY	203	160.896	163.724	-28.092	1.00	75.98	BS2
ATOM	6577	CA	VAL	197	156.520	157.239	-30.531	1.00	67.09	BS2	ATOM	6630	N	ASN	204	163.041	163.077	-28.335	1.00	86.60	BS2
ATOM	6578	CB	VAL	197	156.238	158.738	-30.253	1.00	199.05	BS2	ATOM	6631	CA	ASN	204	163.341	163.159	-26.909	1.00	86.60	BS2
ATOM	6579	CG1	VAL	197	157.506	159.545	-30.364	1.00	199.05	BS2	ATOM	6632	CB	ASN	204	164.709	162.583	-26.596	1.00	83.93	BS2
ATOM	6580	CG2	VAL	197	155.196	159.255	-31.231	1.00	199.05	BS2	ATOM	6633	CG	ASN	204	164.963	161.310	-27.313	1.00	83.93	BS2
ATOM	6581	C	VAL	197	157.994	156.919	-30.228	1.00	67.09	BS2	ATOM	6634	OD1	ASN	204	164.171	160.384	-27.229	1.00	83.93	BS2
ATOM	6582	O	VAL	197	158.307	156.231	-29.264	1.00	67.09	BS2	ATOM	6635	ND2	ASN	204	166.072	161.242	-28.031	1.00	83.93	BS2
ATOM	6583	N	ASP	198	158.879	157.465	-31.064	1.00	80.85	BS2	ATOM	6636	C	ASN	204	163.366	164.606	-26.493	1.00	86.60	BS2
ATOM	6584	CA	ASP	198	160.337	157.252	-31.038	1.00	80.85	BS2	ATOM	6637	O	ASN	204	164.436	165.172	-26.254	1.00	86.60	BS2
ATOM	6585	CB	ASP	198	160.879	157.645	-32.393	1.00	134.34	BS2	ATOM	6638	N	ASP	205	162.203	165.229	-26.423	1.00	107.80	BS2
ATOM	6586	CG	ASP	198	160.553	159.062	-32.746	1.00	134.34	BS2	ATOM	6639	CA	ASP	205	162.185	166.610	-26.005	1.00	107.80	BS2
ATOM	6587	OD1	ASP	198	160.859	159.957	-31.929	1.00	134.34	BS2	ATOM	6640	CB	ASP	205	162.765	167.508	-27.085	1.00	102.89	BS2
ATOM	6588	OD2	ASP	198	159.994	159.276	-33.840	1.00	134.34	BS2	ATOM	6641	CG	ASP	205	162.975	168.917	-26.590	1.00	102.89	BS2
ATOM	6589	C	ASP	198	161.318	157.810	-30.000	1.00	80.85	BS2	ATOM	6642	OD1	ASP	205	163.738	169.082	-25.609	1.00	102.89	BS2
ATOM	6590	O	ASP	198	160.941	158.276	-28.935	1.00	80.85	BS2	ATOM	6643	OD2	ASP	205	162.372	169.848	-27.173	1.00	102.89	BS2

ATOM	6644	C	ASP	205	160.808	167.093	-25.619	1.00107.80	BS2	ATOM	6697	OE1	GLN	212	160.849	167.659	-19.059	1.00142.91	BS2
ATOM	6645	O	ASP	205	160.449	167.050	-24.453	1.00107.80	BS2	ATOM	6698	NE2	GLN	212	161.200	165.895	-17.711	1.00142.91	BS2
ATOM	6646	N	ASP	206	160.023	167.560	-26.574	1.00 93.23	BS2	ATOM	6699	C	GLN	212	158.554	170.045	-16.105	1.00113.78	BS2
ATOM	6647	CA	ASP	206	158.712	168.022	-26.181	1.00 93.23	BS2	ATOM	6700	O	GLN	212	158.487	170.734	-15.084	1.00113.78	BS2
ATOM	6648	CB	ASP	206	157.881	168.416	-27.401	1.00 84.86	BS2	ATOM	6701	N	LEU	213	157.846	170.281	-17.211	1.00 83.85	BS2
ATOM	6649	CG	ASP	206	157.731	167.298	-28.380	1.00 84.86	BS2	ATOM	6702	CA	LEU	213	156.890	171.368	-17.301	1.00 83.85	BS2
ATOM	6650	OD1	ASP	206	158.770	166.744	-28.801	1.00 84.86	BS2	ATOM	6703	CB	LEU	213	156.407	171.561	-18.750	1.00 78.74	BS2
ATOM	6651	OD2	ASP	206	156.575	166.984	-28.727	1.00 84.86	BS2	ATOM	6704	CG	LEU	213	157.375	171.890	-19.908	1.00 78.74	BS2
ATOM	6652	C	ASP	206	158.037	166.914	-25.378	1.00 93.23	BS2	ATOM	6705	CD1	LEU	213	156.564	172.271	-21.138	1.00 78.74	BS2
ATOM	6653	O	ASP	206	157.313	167.191	-24.422	1.00 93.23	BS2	ATOM	6706	CD2	LEU	213	158.300	173.031	-19.563	1.00 78.74	BS2
ATOM	6654	N	ALA	207	158.295	165.660	-25.740	1.00 79.54	BS2	ATOM	6707	C	LEU	213	155.720	170.976	-16.389	1.00 83.85	BS2
ATOM	6655	CA	ALA	207	157.692	164.565	-24.999	1.00 79.54	BS2	ATOM	6708	O	LEU	213	155.348	171.739	-15.497	1.00 83.85	BS2
ATOM	6656	CB	ALA	207	158.014	163.205	-25.656	1.00 16.81	BS2	ATOM	6709	N	ILE	214	155.145	169.788	-16.599	1.00 59.76	BS2
ATOM	6657	C	ALA	207	158.244	164.657	-23.574	1.00 79.54	BS2	ATOM	6710	CA	ILE	214	154.038	169.330	-15.747	1.00 59.76	BS2
ATOM	6658	O	ALA	207	157.516	164.455	-22.605	1.00 79.54	BS2	ATOM	6711	CB	ILE	214	153.372	168.029	-16.261	1.00 62.54	BS2
ATOM	6659	N	ILE	208	159.523	164.983	-23.437	1.00 81.43	BS2	ATOM	6712	CG2	ILE	214	152.641	167.334	-15.132	1.00 62.54	BS2
ATOM	6660	CA	ILE	208	160.096	165.136	-22.101	1.00 81.43	BS2	ATOM	6713	CG1	ILE	214	152.353	168.350	-17.344	1.00 62.54	BS2
ATOM	6661	CB	ILE	208	161.608	164.840	-22.058	1.00 69.19	BS2	ATOM	6714	CD1	ILE	214	151.221	169.216	-16.860	1.00 62.54	BS2
ATOM	6662	CG2	ILE	208	162.285	165.718	-21.005	1.00 69.19	BS2	ATOM	6715	C	ILE	214	154.608	169.039	-14.374	1.00 59.76	BS2
ATOM	6663	CG1	ILE	208	161.843	163.366	-21.724	1.00 69.19	BS2	ATOM	6716	O	ILE	214	154.004	169.338	-13.349	1.00 59.76	BS2
ATOM	6664	CD1	ILE	208	163.254	163.077	-21.201	1.00 69.19	BS2	ATOM	6717	N	LEU	215	155.782	168.443	-14.351	1.00 53.62	BS2
ATOM	6665	C	ILE	208	159.885	166.562	-21.590	1.00 81.43	BS2	ATOM	6718	CA	LEU	215	156.399	168.132	-13.082	1.00 53.62	BS2
ATOM	6666	O	ILE	208	159.116	166.769	-20.658	1.00 81.43	BS2	ATOM	6719	CB	LEU	215	157.788	167.550	-13.326	1.00 58.91	BS2
ATOM	6667	N	ARG	209	160.583	167.527	-22.204	1.00 99.88	BS2	ATOM	6720	CG	LEU	215	158.100	166.292	-12.535	1.00 58.91	BS2
ATOM	6668	CA	ARG	209	160.506	168.951	-21.851	1.00 99.88	BS2	ATOM	6721	CD1	LEU	215	158.974	165.356	-13.355	1.00 58.91	BS2
ATOM	6669	CB	ARG	209	160.631	169.835	-23.096	1.00189.45	BS2	ATOM	6722	CD2	LEU	215	158.759	166.703	-11.241	1.00 58.91	BS2
ATOM	6670	CG	ARG	209	160.871	171.307	-22.774	1.00189.45	BS2	ATOM	6723	C	LEU	215	156.488	169.433	-12.287	1.00 53.62	BS2
ATOM	6671	CD	ARG	209	160.412	172.266	-23.879	1.00189.45	BS2	ATOM	6724	O	LEU	215	156.254	169.447	-11.076	1.00 53.62	BS2
ATOM	6672	NE	ARG	209	161.051	172.039	-25.175	1.00189.45	BS2	ATOM	6725	N	SER	216	156.808	170.523	-12.994	1.00 87.85	BS2
ATOM	6673	CZ	ARG	209	160.980	172.886	-26.201	1.00189.45	BS2	ATOM	6726	CA	SER	216	156.948	171.857	-12.399	1.00 87.85	BS2
ATOM	6674	NH1	ARG	209	160.304	174.023	-26.084	1.00189.45	BS2	ATOM	6727	CB	SER	216	157.327	172.887	-13.456	1.00122.89	BS2
ATOM	6675	NH2	ARG	209	161.576	172.596	-27.351	1.00189.45	BS2	ATOM	6728	OG	SER	216	156.159	173.382	-14.089	1.00122.89	BS2
ATOM	6676	C	ARG	209	159.162	169.210	-21.212	1.00 99.88	BS2	ATOM	6729	C	SER	216	155.642	172.287	-11.759	1.00 87.85	BS2
ATOM	6677	O	ARG	209	159.060	169.785	-20.122	1.00 99.88	BS2	ATOM	6730	O	SER	216	155.640	172.925	-10.711	1.00 87.85	BS2
ATOM	6678	N	SER	210	158.126	168.773	-21.919	1.00 96.31	BS2	ATOM	6731	N	ARG	217	154.531	171.961	-12.411	1.00 78.09	BS2
ATOM	6679	CA	SER	210	156.760	168.909	-21.447	1.00 96.31	BS2	ATOM	6732	CA	ARG	217	153.224	172.282	-11.865	1.00 78.09	BS2
ATOM	6680	CB	SER	210	155.794	168.863	-22.645	1.00 86.44	BS2	ATOM	6733	CB	ARG	217	152.132	172.030	-12.897	1.00123.37	BS2
ATOM	6681	OG	SER	210	155.955	169.977	-23.489	1.00 86.44	BS2	ATOM	6734	CG	ARG	217	152.125	172.973	-14.074	1.00123.37	BS2
ATOM	6682	C	SER	210	156.472	167.797	-20.446	1.00 96.31	BS2	ATOM	6735	CD	ARG	217	150.939	172.628	-14.947	1.00123.37	BS2
ATOM	6683	O	SER	210	155.606	166.963	-20.663	1.00 96.31	BS2	ATOM	6736	NE	ARG	217	150.773	173.523	-16.087	1.00123.37	BS2
ATOM	6684	N	ILE	211	157.230	167.798	-19.355	1.00 59.56	BS2	ATOM	6737	CZ	ARG	217	149.876	173.331	-17.053	1.00123.37	BS2
ATOM	6685	CA	ILE	211	157.085	166.804	-18.302	1.00 59.56	BS2	ATOM	6738	NH1	ARG	217	149.069	172.276	-17.012	1.00123.37	BS2
ATOM	6686	CB	ILE	211	157.719	165.466	-18.691	1.00134.06	BS2	ATOM	6739	NH2	ARG	217	149.787	174.185	-18.066	1.00123.37	BS2
ATOM	6687	CG2	ILE	211	158.265	164.753	-17.460	1.00134.06	BS2	ATOM	6740	C	ARG	217	152.988	171.385	-10.644	1.00 78.09	BS2
ATOM	6688	CG1	ILE	211	156.678	164.604	-19.390	1.00134.06	BS2	ATOM	6741	O	ARG	217	151.929	170.780	-10.488	1.00 78.09	BS2
ATOM	6689	CD1	ILE	211	155.484	164.298	-18.516	1.00134.06	BS2	ATOM	6742	N	ALA	218	154.008	171.274	-9.805	1.00124.77	BS2
ATOM	6690	C	ILE	211	157.771	167.347	-17.068	1.00 59.56	BS2	ATOM	6743	CA	ALA	218	153.927	170.494	-8.580	1.00124.77	BS2
ATOM	6691	O	ILE	211	157.423	166.989	-15.945	1.00 59.56	BS2	ATOM	6744	CB	ALA	218	155.211	169.713	-8.353	1.00 70.16	BS2
ATOM	6692	N	GLN	212	158.781	168.180	-17.290	1.00113.78	BS2	ATOM	6745	C	ALA	218	153.804	171.579	-7.538	1.00124.77	BS2
ATOM	6693	CA	GLN	212	159.464	168.836	-16.192	1.00113.78	BS2	ATOM	6746	O	ALA	218	153.097	171.442	-6.542	1.00124.77	BS2
ATOM	6694	CB	GLN	212	160.878	169.257	-16.587	1.00142.91	BS2	ATOM	6747	N	VAL	219	154.513	172.668	-7.810	1.00128.61	BS2
ATOM	6695	CG	GLN	212	161.795	168.098	-16.901	1.00142.91	BS2	ATOM	6748	CA	VAL	219	154.546	173.842	-6.954	1.00128.61	BS2
ATOM	6696	CD	GLN	212	161.238	167.194	-17.985	1.00142.91	BS2	ATOM	6749	CB	VAL	219	155.368	173.599	-5.658	1.00126.27	BS2

ATOM	6750	CG1	VAL	219	155.700	174.937	-5.009	1.00126.27	BS2	ATOM	6803	CG	ARG	226	164.425	175.954	-18.338	1.00180.76	BS2
ATOM	6751	CG2	VAL	219	154.586	172.728	-4.673	1.00126.27	BS2	ATOM	6804	CD	ARG	226	165.378	177.090	-18.008	1.00180.76	BS2
ATOM	6752	C	VAL	219	155.203	175.004	-7.697	1.00128.61	BS2	ATOM	6805	NE	ARG	226	164.876	177.975	-16.960	1.00180.76	BS2
ATOM	6753	O	VAL	219	156.403	174.969	-7.979	1.00128.61	BS2	ATOM	6806	CZ	ARG	226	165.559	179.010	-16.475	1.00180.76	BS2
ATOM	6754	N	ASP	220	154.414	176.023	-8.020	1.00122.20	BS2	ATOM	6807	NH1	ARG	226	166.769	179.286	-16.947	1.00180.76	BS2
ATOM	6755	CA	ASP	220	154.936	177.212	-8.689	1.00122.20	BS2	ATOM	6808	NH2	ARG	226	165.041	179.767	-15.516	1.00180.76	BS2
ATOM	6756	CB	ASP	220	156.083	177.802	-7.852	1.00125.15	BS2	ATOM	6809	C	ARG	226	166.597	174.891	-21.295	1.00 75.78	BS2
ATOM	6757	CG	ASP	220	155.810	179.226	-7.388	1.00125.15	BS2	ATOM	6810	O	ARG	226	167.566	174.628	-20.582	1.00 75.78	BS2
ATOM	6758	OD1	ASP	220	154.749	179.472	-6.771	1.00125.15	BS2	ATOM	6811	N	GLY	227	166.576	174.646	-22.597	1.00 82.96	BS2
ATOM	6759	OD2	ASP	220	156.672	180.097	-7.637	1.00125.15	BS2	ATOM	6812	CA	GLY	227	167.703	174.009	-23.248	1.00 82.96	BS2
ATOM	6760	C	ASP	220	155.422	176.994	-10.122	1.00122.20	BS2	ATOM	6813	C	GLY	227	167.141	172.866	-24.058	1.00 82.96	BS2
ATOM	6761	O	ASP	220	156.546	176.531	-10.335	1.00122.20	BS2	ATOM	6814	O	GLY	227	167.837	172.228	-24.846	1.00 82.96	BS2
ATOM	6762	N	LEU	221	154.581	177.338	-11.098	1.00138.35	BS2	ATOM	6815	N	GLY	228	165.852	172.619	-23.849	1.00176.15	BS2
ATOM	6763	CA	LEU	221	154.957	177.203	-12.503	1.00138.35	BS2	ATOM	6816	CA	GLY	228	165.166	171.559	-24.555	1.00176.15	BS2
ATOM	6764	CB	LEU	221	153.909	177.862	-13.408	1.00 98.55	BS2	ATOM	6817	C	GLY	228	164.980	171.860	-26.031	1.00176.15	BS2
ATOM	6765	CG	LEU	221	153.119	176.962	-14.370	1.00 98.55	BS2	ATOM	6818	O	GLY	228	164.013	171.417	-26.639	1.00176.15	BS2
ATOM	6766	CD1	LEU	221	152.181	177.819	-15.211	1.00 98.55	BS2	ATOM	6819	N	VAL	229	165.890	172.640	-26.604	1.00130.17	BS2
ATOM	6767	CD2	LEU	221	154.079	176.192	-15.275	1.00 98.55	BS2	ATOM	6820	CA	VAL	229	165.854	172.980	-28.028	1.00130.17	BS2
ATOM	6768	C	LEU	221	156.309	177.900	-12.663	1.00138.35	BS2	ATOM	6821	CB	VAL	229	164.839	174.096	-28.362	1.00 82.12	BS2
ATOM	6769	O	LEU	221	156.478	179.047	-12.240	1.00138.35	BS2	ATOM	6822	CG1	VAL	229	163.835	173.585	-29.384	1.00 82.12	BS2
ATOM	6770	N	ILE	222	157.267	177.206	-13.271	1.00149.07	BS2	ATOM	6823	CG2	VAL	229	164.136	174.576	-27.100	1.00 82.12	BS2
ATOM	6771	CA	ILE	222	158.608	177.754	-13.432	1.00149.07	BS2	ATOM	6824	C	VAL	229	167.246	173.478	-28.356	1.00130.17	BS2
ATOM	6772	CB	ILE	222	159.556	177.123	-12.371	1.00109.09	BS2	ATOM	6825	O	VAL	229	167.695	173.438	-29.504	1.00130.17	BS2
ATOM	6773	CG2	ILE	222	161.008	177.318	-12.759	1.00109.09	BS2	ATOM	6826	N	VAL	230	167.922	173.937	-27.310	1.00124.71	BS2
ATOM	6774	CG1	ILE	222	159.262	177.730	-10.994	1.00109.09	BS2	ATOM	6827	CA	VAL	230	169.281	174.435	-27.410	1.00124.71	BS2
ATOM	6775	CD1	ILE	222	160.156	177.215	-9.876	1.00109.09	BS2	ATOM	6828	CB	VAL	230	169.701	175.125	-26.099	1.00120.33	BS2
ATOM	6776	C	ILE	222	159.232	177.620	-14.824	1.00149.07	BS2	ATOM	6829	CG1	VAL	230	171.087	175.737	-26.246	1.00120.33	BS2
ATOM	6777	O	ILE	222	159.600	176.527	-15.258	1.00149.07	BS2	ATOM	6830	CG2	VAL	230	168.668	176.180	-25.721	1.00120.33	BS2
ATOM	6778	N	ILE	223	159.352	178.755	-15.510	1.00141.30	BS2	ATOM	6831	C	VAL	230	170.165	173.217	-27.631	1.00124.71	BS2
ATOM	6779	CA	ILE	223	159.947	178.824	-16.843	1.00141.30	BS2	ATOM	6832	O	VAL	230	171.384	173.324	-27.730	1.00124.71	BS2
ATOM	6780	CB	ILE	223	161.471	178.498	-16.800	1.00107.55	BS2	ATOM	6833	N	GLU	231	169.526	172.053	-27.701	1.00 92.97	BS2
ATOM	6781	CG2	ILE	223	162.047	178.406	-18.221	1.00107.55	BS2	ATOM	6834	CA	GLU	231	170.228	170.797	-27.902	1.00 92.97	BS2
ATOM	6782	CG1	ILE	223	162.222	179.596	-16.045	1.00107.55	BS2	ATOM	6835	CB	GLU	231	169.792	169.782	-26.846	1.00117.97	BS2
ATOM	6783	CD1	ILE	223	161.951	179.650	-14.560	1.00107.55	BS2	ATOM	6836	CG	GLU	231	170.105	170.204	-25.428	1.00117.97	BS2
ATOM	6784	C	ILE	223	159.306	177.921	-17.886	1.00141.30	BS2	ATOM	6837	CD	GLU	231	171.592	170.348	-25.187	1.00117.97	BS2
ATOM	6785	O	ILE	223	158.616	176.954	-17.566	1.00141.30	BS2	ATOM	6838	OE1	GLU	231	172.224	171.179	-25.868	1.00117.97	BS2
ATOM	6786	N	GLN	224	159.547	178.274	-19.144	1.00109.91	BS2	ATOM	6839	OE2	GLU	231	172.130	169.633	-24.317	1.00117.97	BS2
ATOM	6787	CA	GLN	224	159.067	177.532	-20.298	1.00109.91	BS2	ATOM	6840	C	GLU	231	170.010	170.214	-29.296	1.00 92.97	BS2
ATOM	6788	CB	GLN	224	157.940	178.302	-20.987	1.00174.10	BS2	ATOM	6841	O	GLU	231	170.969	169.821	-29.956	1.00 92.97	BS2
ATOM	6789	CG	GLN	224	156.800	178.657	-20.040	1.00174.10	BS2	ATOM	6842	N	PRO	232	168.744	170.135	-29.752	1.00156.04	BS2
ATOM	6790	CD	GLN	224	155.682	179.429	-20.716	1.00174.10	BS2	ATOM	6843	CD	PRO	232	167.527	170.448	-28.983	1.00 99.41	BS2
ATOM	6791	OE1	GLN	224	155.911	180.479	-21.319	1.00174.10	BS2	ATOM	6844	CA	PRO	232	168.382	169.599	-31.067	1.00156.04	BS2
ATOM	6792	NE2	GLN	224	154.461	178.914	-20.609	1.00174.10	BS2	ATOM	6845	CB	PRO	232	166.915	169.983	-31.188	1.00 99.41	BS2
ATOM	6793	C	GLN	224	160.295	177.437	-21.197	1.00109.91	BS2	ATOM	6846	CG	PRO	232	166.436	169.789	-29.804	1.00 99.41	BS2
ATOM	6794	O	GLN	224	160.862	178.461	-21.583	1.00109.91	BS2	ATOM	6847	C	PRO	232	169.222	170.116	-32.231	1.00156.04	BS2
ATOM	6795	N	ALA	225	160.709	176.209	-21.510	1.00149.44	BS2	ATOM	6848	O	PRO	232	168.722	170.839	-33.093	1.00156.04	BS2
ATOM	6796	CA	ALA	225	161.901	175.958	-22.321	1.00149.44	BS2	ATOM	6849	N	SER	233	170.495	169.717	-32.239	1.00152.81	BS2
ATOM	6797	CB	ALA	225	161.934	176.888	-23.551	1.00 79.18	BS2	ATOM	6850	CA	SER	233	171.491	170.084	-33.249	1.00152.81	BS2
ATOM	6798	C	ALA	225	163.111	176.214	-21.417	1.00149.44	BS2	ATOM	6851	CB	SER	233	170.822	170.411	-34.597	1.00124.07	BS2
ATOM	6799	O	ALA	225	163.094	177.142	-20.605	1.00149.44	BS2	ATOM	6852	OG	SER	233	171.753	170.343	-35.664	1.00124.07	BS2
ATOM	6800	N	ARG	226	164.152	175.393	-21.546	1.00 75.78	BS2	ATOM	6853	C	SER	233	172.358	171.259	-32.767	1.00152.81	BS2
ATOM	6801	CA	ARG	226	165.346	175.550	-20.712	1.00 75.78	BS2	ATOM	6854	O	SER	233	173.583	171.137	-32.704	1.00152.81	BS2
ATOM	6802	CB	ARG	226	165.082	174.982	-19.312	1.00180.76	BS2	ATOM	6855	N	PRO	234	171.739	172.401	-32.406	1.00163.81	BS2

ATOM	6856	CD	PRO	234	170.332	172.809	-32.582	1.00122.01	BS2	ATOM	6909	CG	LYS	9	158.803	125.133	11.301	1.00 71.27	ES5
ATOM	6857	CA	PRO	234	172.538	173.540	-31.940	1.00163.81	BS2	ATOM	6910	CD	LYS	9	157.644	124.219	10.946	1.00 71.27	ES5
ATOM	6858	CB	PRO	234	171.536	174.693	-31.984	1.00122.01	BS2	ATOM	6911	CE	LYS	9	156.881	123.797	12.195	1.00 71.27	ES5
ATOM	6859	CG	PRO	234	170.233	174.012	-31.688	1.00122.01	BS2	ATOM	6912	NZ	LYS	9	155.882	122.733	11.898	1.00 71.27	ES5
ATOM	6860	C	PRO	234	173.182	173.386	-30.556	1.00163.81	BS2	ATOM	6913	C	LYS	9	162.041	125.887	9.471	1.00 62.40	ES5
ATOM	6861	O	PRO	234	172.814	174.097	-29.618	1.00163.81	BS2	ATOM	6914	O	LYS	9	162.119	126.406	8.347	1.00 62.40	ES5
ATOM	6862	N	SER	235	174.139	172.468	-30.431	1.00119.95	BS2	ATOM	6915	N	MET	10	162.911	124.994	9.933	1.00 53.98	ES5
ATOM	6863	CA	SER	235	174.837	172.256	-29.160	1.00119.95	BS2	ATOM	6916	CA	MET	10	164.051	124.500	9.167	1.00 53.98	ES5
ATOM	6864	CB	SER	235	173.868	171.743	-28.090	1.00132.49	BS2	ATOM	6917	CB	MET	10	165.141	124.034	10.126	1.00104.41	ES5
ATOM	6865	OG	SER	235	173.353	170.461	-28.415	1.00132.49	BS2	ATOM	6918	CG	MET	10	166.277	123.309	9.451	1.00104.41	ES5
ATOM	6866	C	SER	235	176.006	171.281	-29.286	1.00119.95	BS2	ATOM	6919	SD	MET	10	167.508	124.476	8.905	1.00104.41	ES5
ATOM	6867	O	SER	235	176.002	170.259	-28.563	1.00119.95	BS2	ATOM	6920	CE	MET	10	166.776	125.050	7.391	1.00104.41	ES5
ATOM	6868	OXT	SER	235	176.919	171.550	-30.098	1.00132.49	BS2	ATOM	6921	C	MET	10	163.625	123.314	8.303	1.00 53.98	ES5
ATOM	6869	CB	ASP	5	154.764	136.658	15.563	1.00130.37	ES5	ATOM	6922	O	MET	10	163.607	122.180	8.780	1.00 53.98	ES5
ATOM	6870	CG	ASP	5	153.517	136.256	14.782	1.00130.37	ES5	ATOM	6923	N	ILE	11	163.282	123.567	7.044	1.00 52.16	ES5
ATOM	6871	OD1	ASP	5	152.629	137.117	14.600	1.00130.37	ES5	ATOM	6924	CA	ILE	11	162.878	122.492	6.138	1.00 52.16	ES5
ATOM	6872	OD2	ASP	5	153.427	135.082	14.349	1.00130.37	ES5	ATOM	6925	CB	ILE	11	162.438	123.050	4.777	1.00 56.30	ES5
ATOM	6873	C	ASP	5	156.449	136.409	13.731	1.00120.25	ES5	ATOM	6926	CG2	ILE	11	162.359	121.929	3.746	1.00 56.30	ES5
ATOM	6874	O	ASP	5	157.667	136.240	13.750	1.00120.25	ES5	ATOM	6927	CG1	ILE	11	161.059	123.660	4.913	1.00 56.30	ES5
ATOM	6875	N	ASP	5	155.176	138.563	14.015	1.00120.25	ES5	ATOM	6928	CD1	ILE	11	160.098	122.674	5.465	1.00 56.30	ES5
ATOM	6876	CA	ASP	5	155.799	137.396	14.700	1.00120.25	ES5	ATOM	6929	C	ILE	11	163.995	121.464	5.917	1.00 52.16	ES5
ATOM	6877	N	PHE	6	155.644	135.763	12.888	1.00 62.95	ES5	ATOM	6930	O	ILE	11	163.771	120.257	6.015	1.00 52.16	ES5
ATOM	6878	CA	PHE	6	156.156	134.784	11.929	1.00 62.95	ES5	ATOM	6931	N	LEU	12	165.191	121.940	5.601	1.00 42.24	ES5
ATOM	6879	CB	PHE	6	157.139	135.436	10.944	1.00 63.71	ES5	ATOM	6932	CA	LEU	12	166.320	121.039	5.413	1.00 42.24	ES5
ATOM	6880	CG	PHE	6	156.489	136.193	9.802	1.00 63.71	ES5	ATOM	6933	CB	LEU	12	166.047	120.040	4.278	1.00 46.87	ES5
ATOM	6881	CD1	PHE	6	157.269	136.981	8.953	1.00 63.71	ES5	ATOM	6934	CG	LEU	12	166.231	120.453	2.810	1.00 46.87	ES5
ATOM	6882	CD2	PHE	6	155.121	136.102	9.556	1.00 63.71	ES5	ATOM	6935	CD1	LEU	12	165.518	121.759	2.601	1.00 46.87	ES5
ATOM	6883	CE1	PHE	6	156.700	137.663	7.879	1.00 63.71	ES5	ATOM	6936	CD2	LEU	12	167.696	120.585	2.438	1.00 46.87	ES5
ATOM	6884	CE2	PHE	6	154.542	136.782	8.484	1.00 63.71	ES5	ATOM	6937	C	LEU	12	167.596	121.788	5.102	1.00 42.24	ES5
ATOM	6885	CZ	PHE	6	155.333	137.563	7.644	1.00 63.71	ES5	ATOM	6938	O	LEU	12	167.574	122.829	4.447	1.00 42.24	ES5
ATOM	6886	C	PHE	6	156.895	133.673	12.666	1.00 62.95	ES5	ATOM	6939	N	ILE	13	168.711	121.257	5.585	1.00 47.45	ES5
ATOM	6887	O	PHE	6	157.857	133.937	13.382	1.00 62.95	ES5	ATOM	6940	CA	ILE	13	169.999	121.859	5.285	1.00 47.45	ES5
ATOM	6888	N	GLU	7	156.442	132.433	12.519	1.00 55.62	ES5	ATOM	6941	CB	ILE	13	170.655	122.520	6.501	1.00 73.78	ES5
ATOM	6889	CA	GLU	7	157.146	131.332	13.158	1.00 55.62	ES5	ATOM	6942	CG2	ILE	13	169.806	123.672	6.971	1.00 73.78	ES5
ATOM	6890	CB	GLU	7	156.226	130.139	13.426	1.00120.74	ES5	ATOM	6943	CG1	ILE	13	170.862	121.496	7.607	1.00 73.78	ES5
ATOM	6891	CG	GLU	7	156.800	129.206	14.483	1.00120.74	ES5	ATOM	6944	CD1	ILE	13	171.652	122.039	8.762	1.00 73.78	ES5
ATOM	6892	CD	GLU	7	155.950	127.975	14.732	1.00120.74	ES5	ATOM	6945	C	ILE	13	170.924	120.782	4.772	1.00 47.45	ES5
ATOM	6893	OE1	GLU	7	155.886	127.104	13.841	1.00120.74	ES5	ATOM	6946	O	ILE	13	171.051	119.722	5.381	1.00 47.45	ES5
ATOM	6894	OE2	GLU	7	155.349	127.875	15.823	1.00120.74	ES5	ATOM	6947	N	ARG	14	171.545	121.055	3.630	1.00 46.46	ES5
ATOM	6895	C	GLU	7	158.203	130.979	12.121	1.00 55.62	ES5	ATOM	6948	CA	ARG	14	172.480	120.122	3.023	1.00 46.46	ES5
ATOM	6896	O	GLU	7	158.151	131.477	10.995	1.00 55.62	ES5	ATOM	6949	CB	ARG	14	172.019	119.751	1.621	1.00 36.79	ES5
ATOM	6897	N	GLU	8	159.153	130.126	12.472	1.00 75.27	ES5	ATOM	6950	CG	ARG	14	171.986	120.899	0.664	1.00 36.79	ES5
ATOM	6898	CA	GLU	8	160.208	129.804	11.527	1.00 75.27	ES5	ATOM	6951	CD	ARG	14	171.353	120.415	-0.589	1.00 36.79	ES5
ATOM	6899	CB	GLU	8	161.391	130.721	11.815	1.00103.64	ES5	ATOM	6952	NE	ARG	14	171.392	121.409	-1.646	1.00 36.79	ES5
ATOM	6900	CG	GLU	8	162.319	130.975	10.662	1.00103.64	ES5	ATOM	6953	CZ	ARG	14	170.858	121.215	-2.851	1.00 36.79	ES5
ATOM	6901	CD	GLU	8	163.150	132.224	10.891	1.00103.64	ES5	ATOM	6954	NH1	ARG	14	170.250	120.063	-3.120	1.00 36.79	ES5
ATOM	6902	OE1	GLU	8	163.717	132.364	11.995	1.00103.64	ES5	ATOM	6955	NH2	ARG	14	170.944	122.163	-3.787	1.00 36.79	ES5
ATOM	6903	OE2	GLU	8	163.238	133.065	9.972	1.00103.64	ES5	ATOM	6956	C	ARG	14	173.856	120.760	2.958	1.00 46.46	ES5
ATOM	6904	C	GLU	8	160.621	128.342	11.612	1.00 75.27	ES5	ATOM	6957	O	ARG	14	173.990	121.983	3.020	1.00 46.46	ES5
ATOM	6905	O	GLU	8	160.997	127.855	12.680	1.00 75.27	ES5	ATOM	6958	N	ARG	15	174.877	119.926	2.817	1.00 50.67	ES5
ATOM	6906	N	LYS	9	160.545	127.642	10.484	1.00 62.40	ES5	ATOM	6959	CA	ARG	15	176.246	120.411	2.762	1.00 50.67	ES5
ATOM	6907	CA	LYS	9	160.914	126.235	10.441	1.00 62.40	ES5	ATOM	6960	CB	ARG	15	177.115	119.593	3.711	1.00 54.53	ES5
ATOM	6908	CB	LYS	9	159.693	125.381	10.115	1.00 71.27	ES5	ATOM	6961	CG	ARG	15	178.385	120.276	4.107	1.00 54.53	ES5

ATOM	6962	CD	ARG	15	179.516	119.959	3.178	1.00	54.53	ES5	ATOM	7015	CA	GLY	22	193.999	121.606	-3.904	1.00	41.94	ES5
ATOM	6963	NE	ARG	15	180.603	119.312	3.907	1.00	54.53	ES5	ATOM	7016	C	GLY	22	193.139	121.431	-2.650	1.00	41.94	ES5
ATOM	6964	CZ	ARG	15	180.932	118.030	3.784	1.00	54.53	ES5	ATOM	7017	O	GLY	22	193.439	121.992	-1.603	1.00	41.94	ES5
ATOM	6965	NH1	ARG	15	180.256	117.245	2.949	1.00	54.53	ES5	ATOM	7018	N	GLY	23	192.065	120.647	-2.751	1.00	68.21	ES5
ATOM	6966	NH2	ARG	15	181.948	117.537	4.481	1.00	54.53	ES5	ATOM	7019	CA	GLY	23	191.186	120.437	-1.611	1.00	68.21	ES5
ATOM	6967	C	ARG	15	176.792	120.320	1.360	1.00	50.67	ES5	ATOM	7020	C	GLY	23	189.714	120.658	-1.937	1.00	68.21	ES5
ATOM	6968	O	ARG	15	177.565	119.424	1.034	1.00	50.67	ES5	ATOM	7021	O	GLY	23	189.364	121.310	-2.932	1.00	68.21	ES5
ATOM	6969	N	THR	16	176.385	121.252	0.520	1.00	44.02	ES5	ATOM	7022	N	ARG	24	188.846	120.109	-1.091	1.00	62.13	ES5
ATOM	6970	CA	THR	16	176.852	121.265	-0.855	1.00	44.02	ES5	ATOM	7023	CA	ARG	24	187.398	120.217	-1.268	1.00	62.13	ES5
ATOM	6971	CB	THR	16	176.233	122.458	-1.644	1.00	47.36	ES5	ATOM	7024	CB	ARG	24	186.741	118.913	-0.805	1.00	58.98	ES5
ATOM	6972	OG1	THR	16	177.143	122.860	-2.665	1.00	47.36	ES5	ATOM	7025	CG	ARG	24	185.794	118.282	-1.807	1.00	58.98	ES5
ATOM	6973	CG2	THR	16	175.943	123.666	-0.725	1.00	47.36	ES5	ATOM	7026	CD	ARG	24	185.232	116.959	-1.284	1.00	58.98	ES5
ATOM	6974	C	THR	16	178.384	121.323	-0.959	1.00	44.02	ES5	ATOM	7027	NE	ARG	24	186.206	115.876	-1.322	1.00	58.98	ES5
ATOM	6975	O	THR	16	179.003	122.333	-0.666	1.00	44.02	ES5	ATOM	7028	CZ	ARG	24	186.643	115.303	-2.439	1.00	58.98	ES5
ATOM	6976	N	ALA	17	178.995	120.226	-1.376	1.00	87.47	ES5	ATOM	7029	NH1	ARG	24	186.191	115.701	-3.615	1.00	58.98	ES5
ATOM	6977	CA	ALA	17	180.445	120.189	-1.536	1.00	87.47	ES5	ATOM	7030	NH2	ARG	24	187.546	114.338	-2.382	1.00	58.98	ES5
ATOM	6978	CB	ALA	17	180.994	118.853	-1.040	1.00	107.40	ES5	ATOM	7031	C	ARG	24	186.860	121.393	-0.447	1.00	62.13	ES5
ATOM	6979	C	ALA	17	180.795	120.391	-3.015	1.00	87.47	ES5	ATOM	7032	O	ARG	24	187.063	121.443	0.772	1.00	62.13	ES5
ATOM	6980	O	ALA	17	180.037	120.014	-3.903	1.00	87.47	ES5	ATOM	7033	N	ARG	25	186.183	122.336	-1.103	1.00	56.93	ES5
ATOM	6981	N	ARG	18	181.935	121.006	-3.277	1.00	45.94	ES5	ATOM	7034	CA	ARG	25	185.638	123.502	-0.395	1.00	56.93	ES5
ATOM	6982	CA	ARG	18	182.380	121.245	-4.647	1.00	45.94	ES5	ATOM	7035	CB	ARG	25	186.149	124.798	-1.029	1.00	190.45	ES5
ATOM	6983	CB	ARG	18	181.360	122.079	-5.435	1.00	200.66	ES5	ATOM	7036	CG	ARG	25	187.650	124.990	-0.843	1.00	190.45	ES5
ATOM	6984	CG	ARG	18	181.871	122.502	-6.819	1.00	200.66	ES5	ATOM	7037	CD	ARG	25	188.109	126.414	-1.142	1.00	190.45	ES5
ATOM	6985	CD	ARG	18	180.803	123.149	-7.684	1.00	200.66	ES5	ATOM	7038	NE	ARG	25	189.480	126.644	-0.675	1.00	190.45	ES5
ATOM	6986	NE	ARG	18	179.928	122.174	-8.332	1.00	200.66	ES5	ATOM	7039	CZ	ARG	25	190.143	127.794	-0.797	1.00	190.45	ES5
ATOM	6987	CZ	ARG	18	178.868	122.496	-9.071	1.00	200.66	ES5	ATOM	7040	NH1	ARG	25	189.569	128.840	-1.376	1.00	190.45	ES5
ATOM	6988	NH1	ARG	18	178.541	123.766	-9.259	1.00	200.66	ES5	ATOM	7041	NH2	ARG	25	191.385	127.902	-0.337	1.00	190.45	ES5
ATOM	6989	NH2	ARG	18	178.124	121.550	-9.622	1.00	200.66	ES5	ATOM	7042	C	ARG	25	184.109	123.500	-0.302	1.00	56.93	ES5
ATOM	6990	C	ARG	18	183.715	121.970	-4.616	1.00	45.94	ES5	ATOM	7043	O	ARG	25	183.409	123.713	-1.289	1.00	56.93	ES5
ATOM	6991	O	ARG	18	184.719	121.409	-4.159	1.00	45.94	ES5	ATOM	7044	N	PHE	26	183.609	123.267	0.913	1.00	45.14	ES5
ATOM	6992	N	MET	19	183.715	123.204	-5.109	1.00	191.27	ES5	ATOM	7045	CA	PHE	26	182.182	123.181	1.171	1.00	45.14	ES5
ATOM	6993	CA	MET	19	184.896	124.048	-5.129	1.00	191.27	ES5	ATOM	7046	CB	PHE	26	181.940	122.356	2.411	1.00	32.83	ES5
ATOM	6994	CB	MET	19	184.786	125.037	-3.962	1.00	199.12	ES5	ATOM	7047	CG	PHE	26	182.738	121.103	2.471	1.00	32.83	ES5
ATOM	6995	CG	MET	19	185.679	126.268	-4.008	1.00	199.12	ES5	ATOM	7048	CD1	PHE	26	183.825	121.005	3.314	1.00	32.83	ES5
ATOM	6996	SD	MET	19	185.309	127.356	-2.587	1.00	199.12	ES5	ATOM	7049	CD2	PHE	26	182.354	119.987	1.744	1.00	32.83	ES5
ATOM	6997	CE	MET	19	183.618	127.881	-2.992	1.00	199.12	ES5	ATOM	7050	CE1	PHE	26	184.504	119.811	3.439	1.00	32.83	ES5
ATOM	6998	C	MET	19	186.176	123.205	-5.013	1.00	191.27	ES5	ATOM	7051	CE2	PHE	26	183.033	118.788	1.862	1.00	32.83	ES5
ATOM	6999	O	MET	19	187.105	123.573	-4.279	1.00	191.27	ES5	ATOM	7052	CZ	PHE	26	184.103	118.698	2.711	1.00	32.83	ES5
ATOM	7000	N	GLN	20	186.220	122.078	-5.733	1.00	56.91	ES5	ATOM	7053	C	PHE	26	181.396	124.470	1.338	1.00	45.14	ES5
ATOM	7001	CA	GLN	20	187.372	121.190	-5.694	1.00	56.91	ES5	ATOM	7054	O	PHE	26	181.947	125.535	1.616	1.00	45.14	ES5
ATOM	7002	CB	GLN	20	187.199	120.114	-6.766	1.00	40.84	ES5	ATOM	7055	N	ARG	27	180.080	124.330	1.193	1.00	50.02	ES5
ATOM	7003	CG	GLN	20	186.526	118.817	-6.283	1.00	40.84	ES5	ATOM	7056	CA	ARG	27	179.119	125.414	1.323	1.00	50.02	ES5
ATOM	7004	CD	GLN	20	187.494	117.867	-5.554	1.00	40.84	ES5	ATOM	7057	CB	ARG	27	178.812	126.027	-0.041	1.00	98.79	ES5
ATOM	7005	OE1	GLN	20	187.456	116.638	-5.734	1.00	40.84	ES5	ATOM	7058	CG	ARG	27	177.812	127.154	0.023	1.00	98.79	ES5
ATOM	7006	NE2	GLN	20	188.356	118.435	-4.728	1.00	40.84	ES5	ATOM	7059	CD	ARG	27	177.815	127.950	-1.254	1.00	98.79	ES5
ATOM	7007	C	GLN	20	188.673	121.990	-5.893	1.00	56.91	ES5	ATOM	7060	NE	ARG	27	179.147	128.478	-1.521	1.00	98.79	ES5
ATOM	7008	O	GLN	20	188.641	123.211	-5.868	1.00	56.91	ES5	ATOM	7061	CZ	ARG	27	179.499	129.117	-2.637	1.00	98.79	ES5
ATOM	7009	N	ALA	21	189.809	121.310	-6.052	1.00	82.85	ES5	ATOM	7062	NH1	ARG	27	178.606	129.318	-3.603	1.00	98.79	ES5
ATOM	7010	CA	ALA	21	191.110	121.966	-6.285	1.00	82.85	ES5	ATOM	7063	NH2	ARG	27	180.758	129.537	-2.798	1.00	98.79	ES5
ATOM	7011	CB	ALA	21	190.920	123.349	-6.904	1.00	53.90	ES5	ATOM	7064	C	ARG	27	177.857	124.792	1.917	1.00	50.02	ES5
ATOM	7012	C	ALA	21	191.957	122.096	-5.043	1.00	82.85	ES5	ATOM	7065	O	ARG	27	177.670	123.574	1.850	1.00	50.02	ES5
ATOM	7013	O	ALA	21	191.543	122.731	-4.075	1.00	82.85	ES5	ATOM	7066	N	PHE	28	176.995	125.616	2.508	1.00	55.71	ES5
ATOM	7014	N	GLY	22	193.167	121.545	-5.083	1.00	41.94	ES5	ATOM	7067	CA	PHE	28	175.774	125.089	3.105	1.00	55.71	ES5

ATOM	7068	CB	PHE	28	175.798	125.257	4.621	1.00	34.81	ES5	ATOM	7121	CB	ASP	36	151.606	134.793	10.584	1.00	67.63	ES5
ATOM	7069	CG	PHE	28	176.850	124.426	5.299	1.00	34.81	ES5	ATOM	7122	CG	ASP	36	150.560	134.812	9.485	1.00	67.63	ES5
ATOM	7070	CD1	PHE	28	178.196	124.767	5.199	1.00	34.81	ES5	ATOM	7123	OD1	ASP	36	150.107	133.724	9.062	1.00	67.63	ES5
ATOM	7071	CD2	PHE	28	176.501	123.283	6.005	1.00	34.81	ES5	ATOM	7124	OD2	ASP	36	150.184	135.925	9.049	1.00	67.63	ES5
ATOM	7072	CE1	PHE	28	179.165	123.974	5.794	1.00	34.81	ES5	ATOM	7125	C	ASP	36	151.021	132.465	11.204	1.00	72.96	ES5
ATOM	7073	CE2	PHE	28	177.466	122.494	6.598	1.00	34.81	ES5	ATOM	7126	O	ASP	36	150.132	132.816	11.975	1.00	72.96	ES5
ATOM	7074	CZ	PHE	28	178.796	122.836	6.494	1.00	34.81	ES5	ATOM	7127	N	ARG	37	151.041	131.275	10.627	1.00	61.53	ES5
ATOM	7075	C	PHE	28	174.502	125.680	2.566	1.00	55.71	ES5	ATOM	7128	CA	ARG	37	150.008	130.299	10.885	1.00	61.53	ES5
ATOM	7076	O	PHE	28	174.422	126.870	2.287	1.00	55.71	ES5	ATOM	7129	CB	ARG	37	150.139	129.792	12.314	1.00	52.11	ES5
ATOM	7077	N	GLY	29	173.505	124.814	2.431	1.00	48.90	ES5	ATOM	7130	CG	ARG	37	151.326	128.870	12.497	1.00	52.11	ES5
ATOM	7078	CA	GLY	29	172.207	125.220	1.925	1.00	48.90	ES5	ATOM	7131	CD	ARG	37	151.562	128.578	13.952	1.00	52.11	ES5
ATOM	7079	C	GLY	29	171.118	124.958	2.943	1.00	48.90	ES5	ATOM	7132	NE	ARG	37	152.616	127.593	14.166	1.00	52.11	ES5
ATOM	7080	O	GLY	29	171.083	123.901	3.576	1.00	48.90	ES5	ATOM	7133	CZ	ARG	37	152.561	126.333	13.748	1.00	52.11	ES5
ATOM	7081	N	ALA	30	170.224	125.930	3.089	1.00	29.84	ES5	ATOM	7134	NH1	ARG	37	151.500	125.892	13.079	1.00	52.11	ES5
ATOM	7082	CA	ALA	30	169.141	125.832	4.047	1.00	29.84	ES5	ATOM	7135	NH2	ARG	37	153.557	125.503	14.024	1.00	52.11	ES5
ATOM	7083	CB	ALA	30	169.500	126.617	5.289	1.00	29.81	ES5	ATOM	7136	C	ARG	37	148.635	130.898	10.651	1.00	61.53	ES5
ATOM	7084	C	ALA	30	167.832	126.345	3.468	1.00	29.84	ES5	ATOM	7137	O	ARG	37	147.648	130.461	11.240	1.00	61.53	ES5
ATOM	7085	O	ALA	30	167.785	127.411	2.856	1.00	29.84	ES5	ATOM	7138	N	GLN	38	148.571	131.894	9.773	1.00	53.41	ES5
ATOM	7086	N	LEU	31	166.778	125.554	3.653	1.00	58.43	ES5	ATOM	7139	CA	GLN	38	147.301	132.528	9.479	1.00	53.41	ES5
ATOM	7087	CA	LEU	31	165.433	125.901	3.203	1.00	58.43	ES5	ATOM	7140	CB	GLN	38	147.054	133.653	10.467	1.00	85.01	ES5
ATOM	7088	CB	LEU	31	164.706	124.696	2.618	1.00	27.12	ES5	ATOM	7141	CG	GLN	38	146.750	133.152	11.842	1.00	85.01	ES5
ATOM	7089	CG	LEU	31	164.322	124.744	1.145	1.00	27.12	ES5	ATOM	7142	CD	GLN	38	146.819	134.244	12.856	1.00	85.01	ES5
ATOM	7090	CD1	LEU	31	163.312	123.638	0.868	1.00	27.12	ES5	ATOM	7143	OE1	GLN	38	146.199	135.292	12.689	1.00	85.01	ES5
ATOM	7091	CD2	LEU	31	163.724	126.107	0.822	1.00	27.12	ES5	ATOM	7144	NE2	GLN	38	147.580	134.015	13.924	1.00	85.01	ES5
ATOM	7092	C	LEU	31	164.708	126.319	4.460	1.00	58.43	ES5	ATOM	7145	C	GLN	38	147.102	133.062	8.074	1.00	53.41	ES5
ATOM	7093	O	LEU	31	164.667	125.574	5.440	1.00	58.43	ES5	ATOM	7146	O	GLN	38	146.516	134.125	7.914	1.00	53.41	ES5
ATOM	7094	N	VAL	32	164.122	127.504	4.431	1.00	38.96	ES5	ATOM	7147	N	GLY	39	147.575	132.341	7.061	1.00	45.89	ES5
ATOM	7095	CA	VAL	32	163.433	128.002	5.596	1.00	38.96	ES5	ATOM	7148	CA	GLY	39	147.379	132.787	5.689	1.00	45.89	ES5
ATOM	7096	CB	VAL	32	164.204	129.186	6.158	1.00	35.41	ES5	ATOM	7149	C	GLY	39	148.575	133.486	5.082	1.00	45.89	ES5
ATOM	7097	CG1	VAL	32	163.387	129.913	7.193	1.00	35.41	ES5	ATOM	7150	O	GLY	39	148.513	133.965	3.947	1.00	45.89	ES5
ATOM	7098	CG2	VAL	32	165.499	128.678	6.762	1.00	35.41	ES5	ATOM	7151	N	ARG	40	149.664	133.549	5.844	1.00	49.31	ES5
ATOM	7099	C	VAL	32	162.011	128.409	5.300	1.00	38.96	ES5	ATOM	7152	CA	ARG	40	150.895	134.184	5.395	1.00	49.31	ES5
ATOM	7100	O	VAL	32	161.742	129.087	4.304	1.00	38.96	ES5	ATOM	7153	CB	ARG	40	151.193	135.392	6.276	1.00	85.86	ES5
ATOM	7101	N	VAL	33	161.087	127.969	6.146	1.00	45.75	ES5	ATOM	7154	CG	ARG	40	150.150	136.486	6.185	1.00	85.86	ES5
ATOM	7102	CA	VAL	33	159.690	128.351	5.969	1.00	45.75	ES5	ATOM	7155	CD	ARG	40	150.550	137.522	5.165	1.00	85.86	ES5
ATOM	7103	CB	VAL	33	158.716	127.181	6.101	1.00	51.18	ES5	ATOM	7156	NE	ARG	40	151.725	138.259	5.620	1.00	85.86	ES5
ATOM	7104	CG1	VAL	33	157.962	127.010	4.807	1.00	51.18	ES5	ATOM	7157	CZ	ARG	40	152.495	139.010	4.836	1.00	85.86	ES5
ATOM	7105	CG2	VAL	33	159.457	125.922	6.472	1.00	51.18	ES5	ATOM	7158	NH1	ARG	40	152.216	139.128	3.538	1.00	85.86	ES5
ATOM	7106	C	VAL	33	159.378	129.337	7.065	1.00	45.75	ES5	ATOM	7159	NH2	ARG	40	153.548	139.643	5.349	1.00	85.86	ES5
ATOM	7107	O	VAL	33	159.731	129.138	8.222	1.00	45.75	ES5	ATOM	7160	C	ARG	40	152.052	133.184	5.481	1.00	49.31	ES5
ATOM	7108	N	VAL	34	158.720	130.413	6.689	1.00	47.00	ES5	ATOM	7161	O	ARG	40	152.477	132.816	6.579	1.00	49.31	ES5
ATOM	7109	CA	VAL	34	158.389	131.430	7.649	1.00	47.00	ES5	ATOM	7162	N	VAL	41	152.551	132.731	4.331	1.00	44.85	ES5
ATOM	7110	CB	VAL	34	159.245	132.678	7.403	1.00	58.48	ES5	ATOM	7163	CA	VAL	41	153.674	131.792	4.319	1.00	44.85	ES5
ATOM	7111	CG1	VAL	34	158.859	133.784	8.351	1.00	58.48	ES5	ATOM	7164	CB	VAL	41	153.294	130.421	3.755	1.00	55.21	ES5
ATOM	7112	CG2	VAL	34	160.700	132.330	7.585	1.00	58.48	ES5	ATOM	7165	CG1	VAL	41	154.121	129.355	4.425	1.00	55.21	ES5
ATOM	7113	C	VAL	34	156.926	131.747	7.463	1.00	47.00	ES5	ATOM	7166	CG2	VAL	41	151.836	130.167	3.944	1.00	55.21	ES5
ATOM	7114	O	VAL	34	156.510	132.112	6.362	1.00	47.00	ES5	ATOM	7167	C	VAL	41	154.818	132.304	3.463	1.00	44.85	ES5
ATOM	7115	N	GLY	35	156.145	131.592	8.532	1.00	61.08	ES5	ATOM	7168	O	VAL	41	154.611	132.999	2.461	1.00	44.85	ES5
ATOM	7116	CA	GLY	35	154.720	131.871	8.448	1.00	61.08	ES5	ATOM	7169	N	GLY	42	156.030	131.934	3.850	1.00	55.32	ES5
ATOM	7117	C	GLY	35	154.112	132.381	9.739	1.00	61.08	ES5	ATOM	7170	CA	GLY	42	157.194	132.367	3.109	1.00	55.32	ES5
ATOM	7118	O	GLY	35	154.754	132.324	10.783	1.00	61.08	ES5	ATOM	7171	C	GLY	42	158.221	131.269	2.974	1.00	55.32	ES5
ATOM	7119	N	ASP	36	152.881	132.890	9.664	1.00	72.96	ES5	ATOM	7172	O	GLY	42	158.528	130.554	3.942	1.00	55.32	ES5
ATOM	7120	CA	ASP	36	152.170	133.397	10.842	1.00	72.96	ES5	ATOM	7173	N	LEU	43	158.753	131.139	1.761	1.00	58.05	ES5

ATOM	7174	CA	LEU	43	159.764	130.132	1.473	1.00	58.05	ES5	ATOM	7227	OE2	GLU	50	181.467	126.938	8.932	1.00135.86	ES5
ATOM	7175	CB	LEU	43	159.317	129.235	0.322	1.00	28.87	ES5	ATOM	7228	C	GLU	50	177.048	128.341	7.607	1.00 59.04	ES5
ATOM	7176	CG	LEU	43	159.703	127.768	0.509	1.00	28.87	ES5	ATOM	7229	O	GLU	50	176.262	129.182	7.179	1.00 59.04	ES5
ATOM	7177	CD1	LEU	43	160.048	127.179	-0.847	1.00	28.87	ES5	ATOM	7230	N	VAL	51	176.656	127.199	8.165	1.00 39.87	ES5
ATOM	7178	CD2	LEU	43	160.870	127.653	1.503	1.00	28.87	ES5	ATOM	7231	CA	VAL	51	175.237	126.867	8.329	1.00 39.87	ES5
ATOM	7179	C	LEU	43	161.078	130.783	1.098	1.00	58.05	ES5	ATOM	7232	CB	VAL	51	175.034	125.739	9.354	1.00 41.60	ES5
ATOM	7180	O	LEU	43	161.123	131.671	0.252	1.00	58.05	ES5	ATOM	7233	CG1	VAL	51	173.585	125.682	9.767	1.00 41.60	ES5
ATOM	7181	N	GLY	44	162.152	130.321	1.715	1.00	36.59	ES5	ATOM	7234	CG2	VAL	51	175.445	124.412	8.760	1.00 41.60	ES5
ATOM	7182	CA	GLY	44	163.459	130.886	1.428	1.00	36.59	ES5	ATOM	7235	C	VAL	51	174.391	128.058	8.789	1.00 39.87	ES5
ATOM	7183	C	GLY	44	164.603	129.879	1.417	1.00	36.59	ES5	ATOM	7236	O	VAL	51	173.435	128.457	8.113	1.00 39.87	ES5
ATOM	7184	O	GLY	44	164.750	129.033	2.314	1.00	36.59	ES5	ATOM	7237	N	PRO	52	174.725	128.632	9.962	1.00 47.61	ES5
ATOM	7185	N	PHE	45	165.436	129.980	0.393	1.00	60.10	ES5	ATOM	7238	CD	PRO	52	175.828	128.269	10.867	1.00 47.15	ES5
ATOM	7186	CA	PHE	45	166.556	129.071	0.260	1.00	60.10	ES5	ATOM	7239	CA	PRO	52	173.995	129.773	10.502	1.00 47.61	ES5
ATOM	7187	CB	PHE	45	166.338	128.194	-0.957	1.00	52.64	ES5	ATOM	7240	CB	PRO	52	174.869	130.207	11.657	1.00 47.15	ES5
ATOM	7188	CG	PHE	45	167.329	127.100	-1.077	1.00	52.64	ES5	ATOM	7241	CG	PRO	52	175.407	128.912	12.149	1.00 47.15	ES5
ATOM	7189	CD1	PHE	45	167.443	126.149	-0.075	1.00	52.64	ES5	ATOM	7242	C	PRO	52	173.859	130.849	9.452	1.00 47.61	ES5
ATOM	7190	CD2	PHE	45	168.147	127.009	-2.188	1.00	52.64	ES5	ATOM	7243	O	PRO	52	172.756	131.229	9.092	1.00 47.61	ES5
ATOM	7191	CE1	PHE	45	168.359	125.120	-0.178	1.00	52.64	ES5	ATOM	7244	N	LEU	53	174.987	131.326	8.943	1.00 37.92	ES5
ATOM	7192	CE2	PHE	45	169.062	125.983	-2.297	1.00	52.64	ES5	ATOM	7245	CA	LEU	53	174.949	132.365	7.926	1.00 37.92	ES5
ATOM	7193	CZ	PHE	45	169.169	125.035	-1.289	1.00	52.64	ES5	ATOM	7246	CB	LEU	53	176.304	132.464	7.233	1.00 81.05	ES5
ATOM	7194	C	PHE	45	167.865	129.825	0.107	1.00	60.10	ES5	ATOM	7247	CG	LEU	53	177.450	132.807	8.183	1.00 81.05	ES5
ATOM	7195	O	PHE	45	168.179	130.287	-0.989	1.00	60.10	ES5	ATOM	7248	CD1	LEU	53	178.799	132.673	7.478	1.00 81.05	ES5
ATOM	7196	N	GLY	46	168.634	129.932	1.191	1.00	36.83	ES5	ATOM	7249	CD2	LEU	53	177.250	134.214	8.701	1.00 81.05	ES5
ATOM	7197	CA	GLY	46	169.895	130.656	1.137	1.00	36.83	ES5	ATOM	7250	C	LEU	53	173.859	132.031	6.916	1.00 37.92	ES5
ATOM	7198	C	GLY	46	171.131	129.844	1.469	1.00	36.83	ES5	ATOM	7251	O	LEU	53	173.099	132.912	6.491	1.00 37.92	ES5
ATOM	7199	O	GLY	46	171.102	128.975	2.346	1.00	36.83	ES5	ATOM	7252	N	ALA	54	173.775	130.747	6.565	1.00 46.51	ES5
ATOM	7200	N	LYS	47	172.230	130.127	0.771	1.00	51.69	ES5	ATOM	7253	CA	ALA	54	172.800	130.258	5.594	1.00 46.51	ES5
ATOM	7201	CA	LYS	47	173.473	129.402	1.005	1.00	51.69	ES5	ATOM	7254	CB	ALA	54	173.055	128.806	5.279	1.00 42.26	ES5
ATOM	7202	CB	LYS	47	173.968	128.731	-0.267	1.00	47.60	ES5	ATOM	7255	C	ALA	54	171.386	130.418	6.086	1.00 46.51	ES5
ATOM	7203	CG	LYS	47	172.926	127.982	-1.023	1.00	47.60	ES5	ATOM	7256	O	ALA	54	170.591	131.135	5.479	1.00 46.51	ES5
ATOM	7204	CD	LYS	47	172.032	128.949	-1.709	1.00	47.60	ES5	ATOM	7257	N	VAL	55	171.076	129.727	7.178	1.00 35.52	ES5
ATOM	7205	CE	LYS	47	171.224	128.271	-2.757	1.00	47.60	ES5	ATOM	7258	CA	VAL	55	169.745	129.782	7.781	1.00 35.52	ES5
ATOM	7206	NZ	LYS	47	170.622	129.305	-3.650	1.00	47.60	ES5	ATOM	7259	CB	VAL	55	169.743	129.107	9.143	1.00 44.80	ES5
ATOM	7207	C	LYS	47	174.565	130.320	1.507	1.00	51.69	ES5	ATOM	7260	CG1	VAL	55	168.326	128.987	9.646	1.00 44.80	ES5
ATOM	7208	O	LYS	47	174.521	131.532	1.296	1.00	51.69	ES5	ATOM	7261	CG2	VAL	55	170.406	127.741	9.031	1.00 44.80	ES5
ATOM	7209	N	ALA	48	175.558	129.727	2.159	1.00	40.93	ES5	ATOM	7262	C	VAL	55	169.272	131.222	7.956	1.00 35.52	ES5
ATOM	7210	CA	ALA	48	176.675	130.483	2.701	1.00	40.93	ES5	ATOM	7263	O	VAL	55	168.132	131.548	7.626	1.00 35.52	ES5
ATOM	7211	CB	ALA	48	176.187	131.432	3.789	1.00	55.55	ES5	ATOM	7264	N	GLN	56	170.160	132.073	8.476	1.00 37.57	ES5
ATOM	7212	C	ALA	48	177.682	129.503	3.271	1.00	40.93	ES5	ATOM	7265	CA	GLN	56	169.863	133.484	8.681	1.00 37.57	ES5
ATOM	7213	O	ALA	48	177.362	128.326	3.472	1.00	40.93	ES5	ATOM	7266	CB	GLN	56	171.107	134.245	9.129	1.00119.80	ES5
ATOM	7214	N	PRO	49	178.924	129.964	3.498	1.00	36.64	ES5	ATOM	7267	CG	GLN	56	171.589	133.903	10.524	1.00119.80	ES5
ATOM	7215	CD	PRO	49	179.451	131.221	2.949	1.00	48.82	ES5	ATOM	7268	CD	GLN	56	172.936	134.534	10.835	1.00119.80	ES5
ATOM	7216	CA	PRO	49	180.015	129.150	4.047	1.00	36.64	ES5	ATOM	7269	OE1	GLN	56	173.136	135.732	10.617	1.00119.80	ES5
ATOM	7217	CB	PRO	49	181.184	130.129	4.140	1.00	48.82	ES5	ATOM	7270	NE2	GLN	56	173.866	133.732	11.348	1.00119.80	ES5
ATOM	7218	CG	PRO	49	180.565	131.498	3.896	1.00	48.82	ES5	ATOM	7271	C	GLN	56	169.423	134.009	7.342	1.00 37.57	ES5
ATOM	7219	C	PRO	49	179.695	128.484	5.373	1.00	36.64	ES5	ATOM	7272	O	GLN	56	168.298	134.464	7.175	1.00 37.57	ES5
ATOM	7220	O	PRO	49	180.132	127.368	5.623	1.00	36.64	ES5	ATOM	7273	N	LYS	57	170.317	133.917	6.370	1.00 49.58	ES5
ATOM	7221	N	GLU	50	178.923	129.153	6.222	1.00	59.04	ES5	ATOM	7274	CA	LYS	57	170.016	134.393	5.032	1.00 49.58	ES5
ATOM	7222	CA	GLU	50	178.549	128.567	7.504	1.00	59.04	ES5	ATOM	7275	CB	LYS	57	171.187	134.101	4.095	1.00 63.20	ES5
ATOM	7223	CB	GLU	50	179.020	129.456	8.654	1.00135.86		ES5	ATOM	7276	CG	LYS	57	171.027	134.726	2.722	1.00 63.20	ES5
ATOM	7224	CG	GLU	50	180.357	129.036	9.197	1.00135.86		ES5	ATOM	7277	CD	LYS	57	172.207	134.410	1.821	1.00 63.20	ES5
ATOM	7225	CD	GLU	50	180.444	127.523	9.347	1.00135.86		ES5	ATOM	7278	CE	LYS	57	173.514	134.920	2.412	1.00 63.20	ES5
ATOM	7226	OE1	GLU	50	179.487	126.919	9.880	1.00135.86		ES5	ATOM	7279	NZ	LYS	57	174.690	134.448	1.634	1.00 63.20	ES5

ATOM	7280	C	LYS	57	168.747	133.744	4.498	1.00	49.58	ES5	ATOM	7333	CB	ARG	64	161.866	139.280	0.608	1.00126.41	ES5
ATOM	7281	O	LYS	57	167.934	134.398	3.861	1.00	49.58	ES5	ATOM	7334	CG	ARG	64	162.814	139.555	1.773	1.00126.41	ES5
ATOM	7282	N	ALA	58	168.571	132.459	4.768	1.00	38.26	ES5	ATOM	7335	CD	ARG	64	163.983	140.414	1.342	1.00126.41	ES5
ATOM	7283	CA	ALA	58	167.390	131.747	4.290	1.00	38.26	ES5	ATOM	7336	NE	ARG	64	163.802	141.811	1.725	1.00126.41	ES5
ATOM	7284	CB	ALA	58	167.458	130.283	4.722	1.00	78.27	ES5	ATOM	7337	CZ	ARG	64	164.484	142.822	1.198	1.00126.41	ES5
ATOM	7285	C	ALA	58	166.087	132.395	4.783	1.00	38.26	ES5	ATOM	7338	NH1	ARG	64	165.392	142.591	0.256	1.00126.41	ES5
ATOM	7286	O	ALA	58	165.199	132.715	3.980	1.00	38.26	ES5	ATOM	7339	NH2	ARG	64	164.266	144.062	1.619	1.00126.41	ES5
ATOM	7287	N	GLY	59	165.987	132.584	6.100	1.00	46.50	ES5	ATOM	7340	C	ARG	64	160.247	137.431	0.069	1.00 79.93	ES5
ATOM	7288	CA	GLY	59	164.806	133.198	6.681	1.00	46.50	ES5	ATOM	7341	O	ARG	64	161.138	136.682	-0.337	1.00 79.93	ES5
ATOM	7289	C	GLY	59	164.593	134.580	6.092	1.00	46.50	ES5	ATOM	7342	N	ASN	65	158.965	137.303	-0.271	1.00 85.54	ES5
ATOM	7290	O	GLY	59	163.475	134.978	5.748	1.00	46.50	ES5	ATOM	7343	CA	ASN	65	158.456	136.242	-1.149	1.00 85.54	ES5
ATOM	7291	N	TYR	60	165.682	135.323	5.978	1.00	36.84	ES5	ATOM	7344	CB	ASN	65	159.598	135.325	-1.633	1.00 85.93	ES5
ATOM	7292	CA	TYR	60	165.623	136.651	5.407	1.00	36.84	ES5	ATOM	7345	CG	ASN	65	159.112	133.985	-2.152	1.00 85.93	ES5
ATOM	7293	CB	TYR	60	167.040	137.201	5.204	1.00	65.33	ES5	ATOM	7346	OD1	ASN	65	159.216	132.966	-1.460	1.00 85.93	ES5
ATOM	7294	CG	TYR	60	167.059	138.582	4.604	1.00	65.33	ES5	ATOM	7347	ND2	ASN	65	158.580	133.977	-3.374	1.00 85.93	ES5
ATOM	7295	CD1	TYR	60	166.860	139.707	5.401	1.00	65.33	ES5	ATOM	7348	C	ASN	65	157.432	135.450	-0.338	1.00 85.54	ES5
ATOM	7296	CE1	TYR	60	166.766	140.977	4.845	1.00	65.33	ES5	ATOM	7349	O	ASN	65	157.608	134.264	-0.051	1.00 85.54	ES5
ATOM	7297	CD2	TYR	60	167.176	138.762	3.227	1.00	65.33	ES5	ATOM	7350	N	MET	66	156.365	136.139	0.050	1.00 63.22	ES5
ATOM	7298	CE2	TYR	60	167.085	140.026	2.657	1.00	65.33	ES5	ATOM	7351	CA	MET	66	155.306	135.529	0.837	1.00 63.22	ES5
ATOM	7299	CZ	TYR	60	166.874	141.130	3.472	1.00	65.33	ES5	ATOM	7352	CB	MET	66	154.849	136.462	1.952	1.00 52.62	ES5
ATOM	7300	OH	TYR	60	166.736	142.383	2.922	1.00	65.33	ES5	ATOM	7353	CG	MET	66	155.940	137.034	2.805	1.00 52.62	ES5
ATOM	7301	C	TYR	60	164.933	136.519	4.057	1.00	36.84	ES5	ATOM	7354	SD	MET	66	156.251	136.057	4.277	1.00 52.62	ES5
ATOM	7302	O	TYR	60	163.991	137.248	3.752	1.00	36.84	ES5	ATOM	7355	CE	MET	66	154.573	135.808	4.930	1.00 52.62	ES5
ATOM	7303	N	TYR	61	165.424	135.570	3.259	1.00	52.27	ES5	ATOM	7356	C	MET	66	154.122	135.283	-0.068	1.00 63.22	ES5
ATOM	7304	CA	TYR	61	164.911	135.311	1.919	1.00	52.27	ES5	ATOM	7357	O	MET	66	153.994	135.902	-1.128	1.00 63.22	ES5
ATOM	7305	CB	TYR	61	165.711	134.176	1.266	1.00	91.75	ES5	ATOM	7358	N	VAL	67	153.253	134.380	0.370	1.00 45.64	ES5
ATOM	7306	CG	TYR	61	166.989	134.634	0.589	1.00	91.75	ES5	ATOM	7359	CA	VAL	67	152.049	134.060	-0.368	1.00 45.64	ES5
ATOM	7307	CD1	TYR	61	167.846	135.532	1.214	1.00	91.75	ES5	ATOM	7360	CB	VAL	67	152.067	132.614	-0.888	1.00 61.48	ES5
ATOM	7308	CE1	TYR	61	169.003	135.984	0.589	1.00	91.75	ES5	ATOM	7361	CG1	VAL	67	150.789	132.319	-1.644	1.00 61.48	ES5
ATOM	7309	CD2	TYR	61	167.328	134.188	-0.690	1.00	91.75	ES5	ATOM	7362	CG2	VAL	67	153.254	132.399	-1.783	1.00 61.48	ES5
ATOM	7310	CE2	TYR	61	168.487	134.635	-1.326	1.00	91.75	ES5	ATOM	7363	C	VAL	67	150.915	134.197	0.629	1.00 45.64	ES5
ATOM	7311	CZ	TYR	61	169.318	135.537	-0.675	1.00	91.75	ES5	ATOM	7364	O	VAL	67	151.095	133.908	1.824	1.00 45.64	ES5
ATOM	7312	OH	TYR	61	170.453	136.013	-1.285	1.00	91.75	ES5	ATOM	7365	N	GLU	68	149.761	134.654	0.146	1.00 48.89	ES5
ATOM	7313	C	TYR	61	163.428	134.979	1.923	1.00	52.27	ES5	ATOM	7366	CA	GLU	68	148.581	134.795	0.988	1.00 48.89	ES5
ATOM	7314	O	TYR	61	162.691	135.393	1.027	1.00	52.27	ES5	ATOM	7367	CB	GLU	68	147.839	136.101	0.683	1.00147.37	ES5
ATOM	7315	N	ALA	62	162.992	134.238	2.937	1.00	52.97	ES5	ATOM	7368	CG	GLU	68	148.253	137.282	1.543	1.00147.37	ES5
ATOM	7316	CA	ALA	62	161.590	133.862	3.059	1.00	52.97	ES5	ATOM	7369	CD	GLU	68	149.688	137.697	1.312	1.00147.37	ES5
ATOM	7317	CB	ALA	62	161.411	132.914	4.229	1.00	49.83	ES5	ATOM	7370	OE1	GLU	68	150.020	138.066	0.166	1.00147.37	ES5
ATOM	7318	C	ALA	62	160.684	135.088	3.223	1.00	52.97	ES5	ATOM	7371	OE2	GLU	68	150.483	137.657	2.274	1.00147.37	ES5
ATOM	7319	O	ALA	62	159.766	135.281	2.417	1.00	52.97	ES5	ATOM	7372	C	GLU	68	147.653	133.612	0.726	1.00 48.89	ES5
ATOM	7320	N	ARG	63	160.933	135.902	4.257	1.00	50.43	ES5	ATOM	7373	O	GLU	68	146.823	133.661	-0.181	1.00 48.89	ES5
ATOM	7321	CA	ARG	63	160.138	137.113	4.500	1.00	50.43	ES5	ATOM	7374	N	VAL	69	147.796	132.542	1.505	1.00 45.63	ES5
ATOM	7322	CB	ARG	63	160.867	138.085	5.414	1.00	74.29	ES5	ATOM	7375	CA	VAL	69	146.940	131.374	1.324	1.00 45.63	ES5
ATOM	7323	CG	ARG	63	160.527	137.949	6.873	1.00	74.29	ES5	ATOM	7376	CB	VAL	69	147.342	130.197	2.241	1.00 56.89	ES5
ATOM	7324	CD	ARG	63	161.391	136.919	7.534	1.00	74.29	ES5	ATOM	7377	CG1	VAL	69	146.409	129.016	1.984	1.00 56.89	ES5
ATOM	7325	NE	ARG	63	161.085	136.814	8.953	1.00	74.29	ES5	ATOM	7378	CG2	VAL	69	148.797	129.797	1.999	1.00 56.89	ES5
ATOM	7326	CZ	ARG	63	161.831	136.145	9.826	1.00	74.29	ES5	ATOM	7379	C	VAL	69	145.519	131.749	1.694	1.00 45.63	ES5
ATOM	7327	NH1	ARG	63	162.933	135.522	9.418	1.00	74.29	ES5	ATOM	7380	O	VAL	69	145.278	132.240	2.790	1.00 45.63	ES5
ATOM	7328	NH2	ARG	63	161.481	136.098	11.107	1.00	74.29	ES5	ATOM	7381	N	PRO	70	144.559	131.536	0.784	1.00 42.76	ES5
ATOM	7329	C	ARG	63	159.813	137.843	3.206	1.00	50.43	ES5	ATOM	7382	CD	PRO	70	144.686	131.143	-0.628	1.00 57.19	ES5
ATOM	7330	O	ARG	63	158.707	138.349	3.024	1.00	50.43	ES5	ATOM	7383	CA	PRO	70	143.174	131.873	1.095	1.00 42.76	ES5
ATOM	7331	N	ARG	64	160.787	137.912	2.311	1.00	79.93	ES5	ATOM	7384	CB	PRO	70	142.540	132.003	-0.279	1.00 57.19	ES5
ATOM	7332	CA	ARG	64	160.582	138.567	1.030	1.00	79.93	ES5	ATOM	7385	CG	PRO	70	143.227	130.934	-1.031	1.00 57.19	ES5

ATOM	7386	C	PRO	70	142.526	130.768	1.916	1.00	42.76	ES5	ATOM	7439	N	HIS	78	140.023	124.598	-2.694	1.00	48.14	ES5
ATOM	7387	O	PRO	70	141.617	130.091	1.438	1.00	42.76	ES5	ATOM	7440	CA	HIS	78	139.792	123.505	-3.639	1.00	48.14	ES5
ATOM	7388	N	LEU	71	142.990	130.587	3.150	1.00	55.23	ES5	ATOM	7441	CB	HIS	78	139.339	124.073	-4.985	1.00	48.70	ES5
ATOM	7389	CA	LEU	71	142.440	129.557	4.021	1.00	55.23	ES5	ATOM	7442	CG	HIS	78	140.351	124.966	-5.617	1.00	48.70	ES5
ATOM	7390	CB	LEU	71	143.072	129.653	5.411	1.00	66.01	ES5	ATOM	7443	CD2	HIS	78	140.427	126.315	-5.687	1.00	48.70	ES5
ATOM	7391	CG	LEU	71	144.529	129.171	5.473	1.00	66.01	ES5	ATOM	7444	ND1	HIS	78	141.517	124.485	-6.173	1.00	48.70	ES5
ATOM	7392	CD1	LEU	71	145.147	129.538	6.814	1.00	66.01	ES5	ATOM	7445	CE1	HIS	78	142.272	125.502	-6.550	1.00	48.70	ES5
ATOM	7393	CD2	LEU	71	144.590	127.663	5.255	1.00	66.01	ES5	ATOM	7446	NE2	HIS	78	141.635	126.624	-6.265	1.00	48.70	ES5
ATOM	7394	C	LEU	71	140.916	129.635	4.117	1.00	55.23	ES5	ATOM	7447	C	HIS	78	141.071	122.700	-3.814	1.00	48.14	ES5
ATOM	7395	O	LEU	71	140.324	130.708	4.029	1.00	55.23	ES5	ATOM	7448	O	HIS	78	142.043	122.924	-3.102	1.00	48.14	ES5
ATOM	7396	N	GLN	72	140.289	128.476	4.266	1.00	50.25	ES5	ATOM	7449	N	GLU	79	141.076	121.769	-4.762	1.00	51.94	ES5
ATOM	7397	CA	GLN	72	138.840	128.367	4.370	1.00	50.25	ES5	ATOM	7450	CA	GLU	79	142.254	120.940	-5.002	1.00	51.94	ES5
ATOM	7398	CB	GLN	72	138.231	127.793	3.097	1.00	62.88	ES5	ATOM	7451	CB	GLU	79	141.853	119.486	-5.276	1.00	77.88	ES5
ATOM	7399	CG	GLN	72	137.908	128.789	2.029	1.00	62.88	ES5	ATOM	7452	CG	GLU	79	140.407	119.143	-4.951	1.00	77.88	ES5
ATOM	7400	CD	GLN	72	136.847	128.246	1.090	1.00	62.88	ES5	ATOM	7453	CD	GLU	79	139.409	119.790	-5.907	1.00	77.88	ES5
ATOM	7401	OE1	GLN	72	136.219	127.225	1.389	1.00	62.88	ES5	ATOM	7454	OE1	GLU	79	139.452	119.481	-7.119	1.00	77.88	ES5
ATOM	7402	NE2	GLN	72	136.626	128.928	-0.043	1.00	62.88	ES5	ATOM	7455	OE2	GLU	79	138.582	120.608	-5.443	1.00	77.88	ES5
ATOM	7403	C	GLN	72	138.494	127.427	5.498	1.00	50.25	ES5	ATOM	7456	C	GLU	79	143.062	121.444	-6.183	1.00	51.94	ES5
ATOM	7404	O	GLN	72	138.320	126.232	5.286	1.00	50.25	ES5	ATOM	7457	O	GLU	79	142.494	121.889	-7.178	1.00	51.94	ES5
ATOM	7405	N	ASN	73	138.406	127.959	6.704	1.00	65.89	ES5	ATOM	7458	N	ILE	80	144.386	121.398	-6.054	1.00	49.46	ES5
ATOM	7406	CA	ASN	73	138.052	127.127	7.836	1.00	65.89	ES5	ATOM	7459	CA	ILE	80	145.284	121.778	-7.142	1.00	49.46	ES5
ATOM	7407	CB	ASN	73	136.667	126.521	7.615	1.00	86.09	ES5	ATOM	7460	CB	ILE	80	146.072	123.101	-6.917	1.00	52.54	ES5
ATOM	7408	CG	ASN	73	136.178	125.752	8.814	1.00	86.09	ES5	ATOM	7461	CG2	ILE	80	145.588	124.184	-7.854	1.00	52.54	ES5
ATOM	7409	OD1	ASN	73	135.339	124.855	8.690	1.00	86.09	ES5	ATOM	7462	CG1	ILE	80	146.032	123.485	-5.453	1.00	52.54	ES5
ATOM	7410	ND2	ASN	73	136.692	126.101	9.995	1.00	86.09	ES5	ATOM	7463	CD1	ILE	80	146.816	122.547	-4.619	1.00	52.54	ES5
ATOM	7411	C	ASN	73	139.071	126.015	8.042	1.00	65.89	ES5	ATOM	7464	C	ILE	80	146.330	120.696	-7.198	1.00	49.46	ES5
ATOM	7412	O	ASN	73	138.725	124.836	8.046	1.00	65.89	ES5	ATOM	7465	O	ILE	80	146.443	119.878	-6.280	1.00	49.46	ES5
ATOM	7413	N	GLY	74	140.331	126.400	8.203	1.00	51.40	ES5	ATOM	7466	N	GLU	81	147.086	120.704	-8.290	1.00	45.01	ES5
ATOM	7414	CA	GLY	74	141.384	125.424	8.431	1.00	51.40	ES5	ATOM	7467	CA	GLU	81	148.180	119.780	-8.514	1.00	45.01	ES5
ATOM	7415	C	GLY	74	141.884	124.658	7.222	1.00	51.40	ES5	ATOM	7468	CB	GLU	81	147.761	118.630	-9.430	1.00	152.10	ES5
ATOM	7416	O	GLY	74	142.943	124.043	7.286	1.00	51.40	ES5	ATOM	7469	CG	GLU	81	146.822	117.621	-8.790	1.00	152.10	ES5
ATOM	7417	N	THR	75	141.136	124.689	6.123	1.00	40.25	ES5	ATOM	7470	CD	GLU	81	146.536	116.430	-9.695	1.00	152.10	ES5
ATOM	7418	CA	THR	75	141.548	123.968	4.929	1.00	40.25	ES5	ATOM	7471	OE1	GLU	81	147.503	115.782	-10.151	1.00	152.10	ES5
ATOM	7419	CB	THR	75	140.577	122.811	4.602	1.00	40.04	ES5	ATOM	7472	OE2	GLU	81	145.347	116.140	-9.945	1.00	152.10	ES5
ATOM	7420	OG1	THR	75	141.250	121.826	3.803	1.00	40.04	ES5	ATOM	7473	C	GLU	81	149.167	120.665	-9.224	1.00	45.01	ES5
ATOM	7421	CG2	THR	75	139.364	123.330	3.852	1.00	40.04	ES5	ATOM	7474	O	GLU	81	148.813	121.300	-10.204	1.00	45.01	ES5
ATOM	7422	C	THR	75	141.667	124.881	3.721	1.00	40.25	ES5	ATOM	7475	N	VAL	82	150.392	120.742	-8.724	1.00	47.36	ES5
ATOM	7423	O	THR	75	141.678	126.094	3.843	1.00	40.25	ES5	ATOM	7476	CA	VAL	82	151.394	121.576	-9.373	1.00	47.36	ES5
ATOM	7424	N	ILE	76	141.736	124.280	2.549	1.00	53.84	ES5	ATOM	7477	CB	VAL	82	151.762	122.805	-8.527	1.00	44.79	ES5
ATOM	7425	CA	ILE	76	141.911	125.023	1.326	1.00	53.84	ES5	ATOM	7478	CG1	VAL	82	153.140	123.305	-8.923	1.00	44.79	ES5
ATOM	7426	CB	ILE	76	143.161	124.470	0.624	1.00	73.99	ES5	ATOM	7479	CG2	VAL	82	150.730	123.909	-8.734	1.00	44.79	ES5
ATOM	7427	CG2	ILE	76	143.187	124.852	-0.827	1.00	73.99	ES5	ATOM	7480	C	VAL	82	152.662	120.812	-9.639	1.00	47.36	ES5
ATOM	7428	CG1	ILE	76	144.389	124.966	1.384	1.00	73.99	ES5	ATOM	7481	O	VAL	82	153.139	120.068	-8.783	1.00	47.36	ES5
ATOM	7429	CD1	ILE	76	145.689	124.729	0.690	1.00	73.99	ES5	ATOM	7482	N	GLU	83	153.207	121.010	-10.833	1.00	54.18	ES5
ATOM	7430	C	ILE	76	140.692	125.035	0.401	1.00	53.84	ES5	ATOM	7483	CA	GLU	83	154.447	120.359	-11.238	1.00	54.18	ES5
ATOM	7431	O	ILE	76	139.982	124.034	0.270	1.00	53.84	ES5	ATOM	7484	CB	GLU	83	154.288	119.698	-12.611	1.00	96.14	ES5
ATOM	7432	N	PRO	77	140.440	126.179	-0.264	1.00	39.58	ES5	ATOM	7485	CG	GLU	83	153.445	118.438	-12.633	1.00	96.14	ES5
ATOM	7433	CD	PRO	77	141.320	127.354	-0.289	1.00	36.06	ES5	ATOM	7486	CD	GLU	83	153.403	117.782	-14.015	1.00	96.14	ES5
ATOM	7434	CA	PRO	77	139.314	126.373	-1.183	1.00	39.58	ES5	ATOM	7487	OE1	GLU	83	154.484	117.533	-14.597	1.00	96.14	ES5
ATOM	7435	CB	PRO	77	139.653	127.685	-1.892	1.00	36.06	ES5	ATOM	7488	OE2	GLU	83	152.295	117.501	-14.523	1.00	96.14	ES5
ATOM	7436	CG	PRO	77	141.122	127.833	-1.696	1.00	36.06	ES5	ATOM	7489	C	GLU	83	155.555	121.402	-11.326	1.00	54.18	ES5
ATOM	7437	C	PRO	77	139.000	125.251	-2.155	1.00	39.58	ES5	ATOM	7490	O	GLU	83	155.482	122.331	-12.127	1.00	54.18	ES5
ATOM	7438	O	PRO	77	137.826	124.977	-2.417	1.00	39.58	ES5	ATOM	7491	N	PHE	84	156.570	121.265	-10.489	1.00	33.71	ES5

ATOM	7492	CA	PHE	84	157.697	122.184	-10.525	1.00	33.71	ES5	ATOM	7545	CD1	LEU	91	148.611	122.685	-2.051	1.00	38.36	ES5
ATOM	7493	CB	PHE	84	157.949	122.861	-9.182	1.00	42.64	ES5	ATOM	7546	CD2	LEU	91	149.267	120.453	-1.053	1.00	38.36	ES5
ATOM	7494	CG	PHE	84	159.154	123.753	-9.185	1.00	42.64	ES5	ATOM	7547	C	LEU	91	145.256	119.093	-2.543	1.00	42.00	ES5
ATOM	7495	CD1	PHE	84	159.044	125.098	-9.533	1.00	42.64	ES5	ATOM	7548	O	LEU	91	144.648	119.494	-3.537	1.00	42.00	ES5
ATOM	7496	CD2	PHE	84	160.408	123.246	-8.885	1.00	42.64	ES5	ATOM	7549	N	LYS	92	144.674	118.459	-1.531	1.00	43.49	ES5
ATOM	7497	CE1	PHE	84	160.170	125.930	-9.584	1.00	42.64	ES5	ATOM	7550	CA	LYS	92	143.252	118.171	-1.509	1.00	43.49	ES5
ATOM	7498	CE2	PHE	84	161.537	124.069	-8.934	1.00	42.64	ES5	ATOM	7551	CB	LYS	92	143.049	116.667	-1.588	1.00	75.31	ES5
ATOM	7499	CZ	PHE	84	161.412	125.416	-9.286	1.00	42.64	ES5	ATOM	7552	CG	LYS	92	141.688	116.247	-2.055	1.00	75.31	ES5
ATOM	7500	C	PHE	84	158.854	121.274	-10.807	1.00	33.71	ES5	ATOM	7553	CD	LYS	92	141.689	114.759	-2.325	1.00	75.31	ES5
ATOM	7501	O	PHE	84	159.182	120.425	-9.971	1.00	33.71	ES5	ATOM	7554	CE	LYS	92	140.410	114.322	-2.988	1.00	75.31	ES5
ATOM	7502	N	GLY	85	159.482	121.448	-11.965	1.00	45.49	ES5	ATOM	7555	NZ	LYS	92	140.446	112.865	-3.237	1.00	75.31	ES5
ATOM	7503	CA	GLY	85	160.584	120.582	-12.317	1.00	45.49	ES5	ATOM	7556	C	LYS	92	142.675	118.712	-0.203	1.00	43.49	ES5
ATOM	7504	C	GLY	85	159.931	119.250	-12.595	1.00	45.49	ES5	ATOM	7557	O	LYS	92	143.206	118.444	0.889	1.00	43.49	ES5
ATOM	7505	O	GLY	85	158.843	119.208	-13.169	1.00	45.49	ES5	ATOM	7558	N	PRO	93	141.583	119.491	-0.294	1.00	44.39	ES5
ATOM	7506	N	ALA	86	160.568	118.159	-12.191	1.00	46.30	ES5	ATOM	7559	CD	PRO	93	140.824	119.855	-1.504	1.00	26.01	ES5
ATOM	7507	CA	ALA	86	159.981	116.848	-12.419	1.00	46.30	ES5	ATOM	7560	CA	PRO	93	140.954	120.059	0.900	1.00	44.39	ES5
ATOM	7508	CB	ALA	86	161.068	115.846	-12.724	1.00	77.85	ES5	ATOM	7561	CB	PRO	93	139.925	121.029	0.318	1.00	26.01	ES5
ATOM	7509	C	ALA	86	159.199	116.425	-11.175	1.00	46.30	ES5	ATOM	7562	CG	PRO	93	139.509	120.359	-0.930	1.00	26.01	ES5
ATOM	7510	O	ALA	86	158.789	115.265	-11.047	1.00	46.30	ES5	ATOM	7563	C	PRO	93	140.325	118.953	1.721	1.00	44.39	ES5
ATOM	7511	N	SER	87	159.002	117.378	-10.265	1.00	38.85	ES5	ATOM	7564	O	PRO	93	139.910	117.937	1.172	1.00	44.39	ES5
ATOM	7512	CA	SER	87	158.281	117.146	-9.023	1.00	38.85	ES5	ATOM	7565	N	ALA	94	140.258	119.144	3.032	1.00	52.72	ES5
ATOM	7513	CB	SER	87	158.991	117.852	-7.882	1.00	49.83	ES5	ATOM	7566	CA	ALA	94	139.672	118.129	3.895	1.00	52.72	ES5
ATOM	7514	OG	SER	87	160.369	117.524	-7.884	1.00	49.83	ES5	ATOM	7567	CB	ALA	94	140.753	117.168	4.376	1.00	20.97	ES5
ATOM	7515	C	SER	87	156.853	117.660	-9.130	1.00	38.85	ES5	ATOM	7568	C	ALA	94	138.940	118.724	5.090	1.00	52.72	ES5
ATOM	7516	O	SER	87	156.594	118.761	-9.631	1.00	38.85	ES5	ATOM	7569	O	ALA	94	139.233	119.846	5.531	1.00	52.72	ES5
ATOM	7517	N	LYS	88	155.923	116.849	-8.651	1.00	37.71	ES5	ATOM	7570	N	ALA	95	137.996	117.948	5.618	1.00	50.12	ES5
ATOM	7518	CA	LYS	88	154.516	117.191	-8.692	1.00	37.71	ES5	ATOM	7571	CA	ALA	95	137.201	118.375	6.758	1.00	50.12	ES5
ATOM	7519	CB	LYS	88	153.783	116.144	-9.509	1.00	57.74	ES5	ATOM	7572	CB	ALA	95	135.945	117.543	6.839	1.00	38.74	ES5
ATOM	7520	CG	LYS	88	152.402	116.513	-9.960	1.00	57.74	ES5	ATOM	7573	C	ALA	95	137.971	118.289	8.068	1.00	50.12	ES5
ATOM	7521	CD	LYS	88	151.969	115.492	-11.008	1.00	57.74	ES5	ATOM	7574	O	ALA	95	138.980	117.593	8.159	1.00	50.12	ES5
ATOM	7522	CE	LYS	88	150.480	115.539	-11.303	1.00	57.74	ES5	ATOM	7575	N	PRO	96	137.491	119.000	9.105	1.00	45.89	ES5
ATOM	7523	NZ	LYS	88	150.014	114.203	-11.795	1.00	57.74	ES5	ATOM	7576	CD	PRO	96	136.273	119.823	9.041	1.00	41.40	ES5
ATOM	7524	C	LYS	88	154.017	117.195	-7.257	1.00	37.71	ES5	ATOM	7577	CA	PRO	96	138.073	119.062	10.454	1.00	45.89	ES5
ATOM	7525	O	LYS	88	154.524	116.464	-6.417	1.00	37.71	ES5	ATOM	7578	CB	PRO	96	137.017	119.813	11.246	1.00	41.40	ES5
ATOM	7526	N	ILE	89	153.043	118.041	-6.955	1.00	43.08	ES5	ATOM	7579	CG	PRO	96	136.449	120.726	10.231	1.00	41.40	ES5
ATOM	7527	CA	ILE	89	152.508	118.087	-5.600	1.00	43.08	ES5	ATOM	7580	C	PRO	96	138.346	117.695	11.058	1.00	45.89	ES5
ATOM	7528	CB	ILE	89	153.081	119.320	-4.787	1.00	35.03	ES5	ATOM	7581	O	PRO	96	137.580	116.757	10.858	1.00	45.89	ES5
ATOM	7529	CG2	ILE	89	152.158	120.507	-4.863	1.00	35.03	ES5	ATOM	7582	N	GLY	97	139.433	117.594	11.808	1.00	64.91	ES5
ATOM	7530	CG1	ILE	89	153.337	118.926	-3.323	1.00	35.03	ES5	ATOM	7583	CA	GLY	97	139.771	116.329	12.422	1.00	64.91	ES5
ATOM	7531	CD1	ILE	89	152.180	118.281	-2.635	1.00	35.03	ES5	ATOM	7584	C	GLY	97	140.760	115.528	11.594	1.00	64.91	ES5
ATOM	7532	C	ILE	89	151.006	118.167	-5.741	1.00	43.08	ES5	ATOM	7585	O	GLY	97	141.482	114.673	12.131	1.00	64.91	ES5
ATOM	7533	O	ILE	89	150.488	118.826	-6.637	1.00	43.08	ES5	ATOM	7586	N	THR	98	140.806	115.802	10.290	1.00	46.12	ES5
ATOM	7534	N	VAL	90	150.305	117.457	-4.880	1.00	46.95	ES5	ATOM	7587	CA	THR	98	141.713	115.084	9.399	1.00	46.12	ES5
ATOM	7535	CA	VAL	90	148.868	117.498	-4.943	1.00	46.95	ES5	ATOM	7588	CB	THR	98	141.516	115.495	7.930	1.00	40.73	ES5
ATOM	7536	CB	VAL	90	148.284	116.166	-5.373	1.00	32.06	ES5	ATOM	7589	OG1	THR	98	140.151	115.291	7.540	1.00	40.73	ES5
ATOM	7537	CG1	VAL	90	146.787	116.335	-5.594	1.00	32.06	ES5	ATOM	7590	CG2	THR	98	142.414	114.667	7.045	1.00	40.73	ES5
ATOM	7538	CG2	VAL	90	148.971	115.677	-6.639	1.00	32.06	ES5	ATOM	7591	C	THR	98	143.174	115.329	9.762	1.00	46.12	ES5
ATOM	7539	C	VAL	90	148.276	117.856	-3.597	1.00	46.95	ES5	ATOM	7592	O	THR	98	143.958	114.386	9.890	1.00	46.12	ES5
ATOM	7540	O	VAL	90	148.604	117.243	-2.572	1.00	46.95	ES5	ATOM	7593	N	GLY	99	143.528	116.599	9.930	1.00	47.50	ES5
ATOM	7541	N	LEU	91	147.404	118.858	-3.611	1.00	42.00	ES5	ATOM	7594	CA	GLY	99	144.896	116.962	10.256	1.00	47.50	ES5
ATOM	7542	CA	LEU	91	146.749	119.304	-2.401	1.00	42.00	ES5	ATOM	7595	C	GLY	99	145.695	117.299	9.007	1.00	47.50	ES5
ATOM	7543	CB	LEU	91	147.035	120.778	-2.156	1.00	38.36	ES5	ATOM	7596	O	GLY	99	145.153	117.309	7.888	1.00	47.50	ES5
ATOM	7544	CG	LEU	91	148.514	121.168	-2.182	1.00	38.36	ES5	ATOM	7597	N	VAL	100	146.982	117.591	9.180	1.00	43.78	ES5

ATOM	7598	CA	VAL	100	147.813	117.891	8.020	1.00	43.78	ES5	ATOM	7651	N	ALA	108	155.424	121.384	6.746	1.00	41.61	ES5
ATOM	7599	CB	VAL	100	148.912	118.888	8.351	1.00	45.64	ES5	ATOM	7652	CA	ALA	108	155.940	122.589	7.373	1.00	41.61	ES5
ATOM	7600	CG1	VAL	100	149.521	119.408	7.072	1.00	45.64	ES5	ATOM	7653	CB	ALA	108	157.449	122.621	7.281	1.00	26.58	ES5
ATOM	7601	CG2	VAL	100	148.352	120.017	9.180	1.00	45.64	ES5	ATOM	7654	C	ALA	108	155.341	123.808	6.688	1.00	41.61	ES5
ATOM	7602	C	VAL	100	148.471	116.597	7.572	1.00	43.78	ES5	ATOM	7655	O	ALA	108	154.820	124.691	7.349	1.00	41.61	ES5
ATOM	7603	O	VAL	100	149.474	116.179	8.145	1.00	43.78	ES5	ATOM	7656	N	ILE	109	155.403	123.853	5.363	1.00	43.49	ES5
ATOM	7604	N	ILE	101	147.898	115.948	6.567	1.00	45.59	ES5	ATOM	7657	CA	ILE	109	154.838	124.973	4.630	1.00	43.49	ES5
ATOM	7605	CA	ILE	101	148.455	114.691	6.077	1.00	45.59	ES5	ATOM	7658	CB	ILE	109	154.992	124.766	3.113	1.00	33.01	ES5
ATOM	7606	CB	ILE	101	147.335	113.703	5.689	1.00	51.66	ES5	ATOM	7659	CG2	ILE	109	154.232	125.844	2.341	1.00	33.01	ES5
ATOM	7607	CG2	ILE	101	147.877	112.618	4.811	1.00	51.66	ES5	ATOM	7660	CG1	ILE	109	156.487	124.762	2.767	1.00	33.01	ES5
ATOM	7608	CG1	ILE	101	146.755	113.064	6.944	1.00	51.66	ES5	ATOM	7661	CD1	ILE	109	156.805	124.470	1.305	1.00	33.01	ES5
ATOM	7609	CD1	ILE	101	146.044	114.029	7.854	1.00	51.66	ES5	ATOM	7662	C	ILE	109	153.366	125.112	4.993	1.00	43.49	ES5
ATOM	7610	C	ILE	101	149.367	114.944	4.878	1.00	45.59	ES5	ATOM	7663	O	ILE	109	152.950	126.135	5.538	1.00	43.49	ES5
ATOM	7611	O	ILE	101	148.912	115.093	3.738	1.00	45.59	ES5	ATOM	7664	N	LEU	110	152.584	124.076	4.708	1.00	42.01	ES5
ATOM	7612	N	ALA	102	150.665	114.979	5.135	1.00	41.79	ES5	ATOM	7665	CA	LEU	110	151.150	124.074	5.018	1.00	42.01	ES5
ATOM	7613	CA	ALA	102	151.590	115.254	4.068	1.00	41.79	ES5	ATOM	7666	CB	LEU	110	150.560	122.690	4.733	1.00	27.23	ES5
ATOM	7614	CB	ALA	102	151.403	116.690	3.623	1.00	33.16	ES5	ATOM	7667	CG	LEU	110	150.459	122.365	3.249	1.00	27.23	ES5
ATOM	7615	C	ALA	102	153.017	115.048	4.538	1.00	41.79	ES5	ATOM	7668	CD1	LEU	110	149.899	120.983	3.099	1.00	27.23	ES5
ATOM	7616	O	ALA	102	153.280	115.003	5.747	1.00	41.79	ES5	ATOM	7669	CD2	LEU	110	149.571	123.354	2.551	1.00	27.23	ES5
ATOM	7617	N	GLY	103	153.934	114.940	3.575	1.00	47.89	ES5	ATOM	7670	C	LEU	110	150.825	124.491	6.467	1.00	42.01	ES5
ATOM	7618	CA	GLY	103	155.334	114.782	3.909	1.00	47.89	ES5	ATOM	7671	O	LEU	110	149.851	125.211	6.719	1.00	42.01	ES5
ATOM	7619	C	GLY	103	155.848	116.054	4.577	1.00	47.89	ES5	ATOM	7672	N	GLU	111	151.641	124.042	7.413	1.00	51.16	ES5
ATOM	7620	O	GLY	103	155.196	117.096	4.516	1.00	47.89	ES5	ATOM	7673	CA	GLU	111	151.420	124.387	8.805	1.00	51.16	ES5
ATOM	7621	N	ALA	104	157.024	115.971	5.196	1.00	34.99	ES5	ATOM	7674	CB	GLU	111	152.369	123.596	9.705	1.00	88.59	ES5
ATOM	7622	CA	ALA	104	157.632	117.089	5.896	1.00	34.99	ES5	ATOM	7675	CG	GLU	111	152.174	122.092	9.592	1.00	88.59	ES5
ATOM	7623	CB	ALA	104	159.009	116.727	6.309	1.00	32.58	ES5	ATOM	7676	CD	GLU	111	153.098	121.295	10.502	1.00	88.59	ES5
ATOM	7624	C	ALA	104	157.681	118.401	5.151	1.00	34.99	ES5	ATOM	7677	OE1	GLU	111	154.340	121.425	10.363	1.00	88.59	ES5
ATOM	7625	O	ALA	104	157.239	119.432	5.662	1.00	34.99	ES5	ATOM	7678	OE2	GLU	111	152.572	120.531	11.349	1.00	88.59	ES5
ATOM	7626	N	VAL	105	158.229	118.389	3.948	1.00	50.57	ES5	ATOM	7679	C	GLU	111	151.590	125.884	9.045	1.00	51.16	ES5
ATOM	7627	CA	VAL	105	158.342	119.634	3.205	1.00	50.57	ES5	ATOM	7680	O	GLU	111	150.672	126.548	9.542	1.00	51.16	ES5
ATOM	7628	CB	VAL	105	158.998	119.408	1.843	1.00	37.23	ES5	ATOM	7681	N	LEU	112	152.745	126.433	8.689	1.00	38.38	ES5
ATOM	7629	CG1	VAL	105	159.094	120.727	1.082	1.00	37.23	ES5	ATOM	7682	CA	LEU	112	152.953	127.854	8.907	1.00	38.38	ES5
ATOM	7630	CG2	VAL	105	160.373	118.809	2.048	1.00	37.23	ES5	ATOM	7683	CB	LEU	112	154.372	128.262	8.548	1.00	47.88	ES5
ATOM	7631	C	VAL	105	157.029	120.371	3.015	1.00	50.57	ES5	ATOM	7684	CG	LEU	112	155.490	127.610	9.349	1.00	47.88	ES5
ATOM	7632	O	VAL	105	156.844	121.451	3.556	1.00	50.57	ES5	ATOM	7685	CD1	LEU	112	156.574	128.653	9.532	1.00	47.88	ES5
ATOM	7633	N	PRO	106	156.090	119.792	2.267	1.00	44.81	ES5	ATOM	7686	CD2	LEU	112	155.006	127.133	10.703	1.00	47.88	ES5
ATOM	7634	CD	PRO	106	155.935	118.380	1.892	1.00	34.59	ES5	ATOM	7687	C	LEU	112	151.964	128.674	8.096	1.00	38.38	ES5
ATOM	7635	CA	PRO	106	154.833	120.509	2.081	1.00	44.81	ES5	ATOM	7688	O	LEU	112	151.828	129.879	8.297	1.00	38.38	ES5
ATOM	7636	CB	PRO	106	154.061	119.584	1.143	1.00	34.59	ES5	ATOM	7689	N	ALA	113	151.272	128.028	7.171	1.00	44.63	ES5
ATOM	7637	CG	PRO	106	154.426	118.252	1.699	1.00	34.59	ES5	ATOM	7690	CA	ALA	113	150.292	128.737	6.368	1.00	44.63	ES5
ATOM	7638	C	PRO	106	154.122	120.749	3.421	1.00	44.81	ES5	ATOM	7691	CB	ALA	113	150.021	127.970	5.093	1.00	69.05	ES5
ATOM	7639	O	PRO	106	153.367	121.721	3.573	1.00	44.81	ES5	ATOM	7692	C	ALA	113	149.011	128.849	7.171	1.00	44.63	ES5
ATOM	7640	N	ARG	107	154.371	119.871	4.391	1.00	51.65	ES5	ATOM	7693	O	ALA	113	148.082	129.560	6.792	1.00	44.63	ES5
ATOM	7641	CA	ARG	107	153.743	120.017	5.694	1.00	51.65	ES5	ATOM	7694	N	GLY	114	148.960	128.134	8.285	1.00	49.09	ES5
ATOM	7642	CB	ARG	107	154.109	118.871	6.631	1.00	68.59	ES5	ATOM	7695	CA	GLY	114	147.757	128.154	9.082	1.00	49.09	ES5
ATOM	7643	CG	ARG	107	153.888	119.228	8.087	1.00	68.59	ES5	ATOM	7696	C	GLY	114	146.798	127.088	8.584	1.00	49.09	ES5
ATOM	7644	CD	ARG	107	154.124	118.063	9.001	1.00	68.59	ES5	ATOM	7697	O	GLY	114	145.649	127.043	9.005	1.00	49.09	ES5
ATOM	7645	NE	ARG	107	152.934	117.230	9.106	1.00	68.59	ES5	ATOM	7698	N	VAL	115	147.256	126.242	7.667	1.00	52.88	ES5
ATOM	7646	CZ	ARG	107	152.967	115.900	9.197	1.00	68.59	ES5	ATOM	7699	CA	VAL	115	146.421	125.155	7.162	1.00	52.88	ES5
ATOM	7647	NH1	ARG	107	154.141	115.255	9.194	1.00	68.59	ES5	ATOM	7700	CB	VAL	115	147.071	124.421	5.983	1.00	33.18	ES5
ATOM	7648	NH2	ARG	107	151.828	115.211	9.287	1.00	68.59	ES5	ATOM	7701	CG1	VAL	115	146.307	123.151	5.707	1.00	33.18	ES5
ATOM	7649	C	ARG	107	154.166	121.320	6.328	1.00	51.65	ES5	ATOM	7702	CG2	VAL	115	147.098	125.315	4.748	1.00	33.18	ES5
ATOM	7650	O	ARG	107	153.367	122.251	6.441	1.00	51.65	ES5	ATOM	7703	C	VAL	115	146.304	124.163	8.303	1.00	52.88	ES5

ATOM	7704	O	VAL	115	147.254	123.964	9.051	1.00	52.88	ES5	ATOM	7757	OE1	GLU	122	157.875	114.707	-1.362	1.00	57.63	ES5
ATOM	7705	N	THR	116	145.164	123.512	8.433	1.00	52.67	ES5	ATOM	7758	OE2	GLU	122	156.456	115.498	0.147	1.00	57.63	ES5
ATOM	7706	CA	THR	116	145.015	122.597	9.542	1.00	52.67	ES5	ATOM	7759	C	GLU	122	154.198	112.899	-4.585	1.00	41.68	ES5
ATOM	7707	CB	THR	116	144.149	123.248	10.606	1.00	45.51	ES5	ATOM	7760	O	GLU	122	154.203	111.682	-4.328	1.00	41.68	ES5
ATOM	7708	OG1	THR	116	144.564	122.793	11.893	1.00	45.51	ES5	ATOM	7761	N	LEU	123	154.302	113.388	-5.812	1.00	45.53	ES5
ATOM	7709	CG2	THR	116	142.688	122.898	10.385	1.00	45.51	ES5	ATOM	7762	CA	LEU	123	154.451	112.524	-6.971	1.00	45.53	ES5
ATOM	7710	C	THR	116	144.441	121.224	9.181	1.00	52.67	ES5	ATOM	7763	CB	LEU	123	153.149	112.509	-7.759	1.00	43.83	ES5
ATOM	7711	O	THR	116	144.573	120.269	9.948	1.00	52.67	ES5	ATOM	7764	CG	LEU	123	151.988	111.915	-6.964	1.00	43.83	ES5
ATOM	7712	N	ASP	117	143.803	121.133	8.021	1.00	49.71	ES5	ATOM	7765	CD1	LEU	123	150.701	112.139	-7.724	1.00	43.83	ES5
ATOM	7713	CA	ASP	117	143.228	119.885	7.562	1.00	49.71	ES5	ATOM	7766	CD2	LEU	123	152.229	110.433	-6.708	1.00	43.83	ES5
ATOM	7714	CB	ASP	117	141.741	119.836	7.899	1.00	101.40	ES5	ATOM	7767	C	LEU	123	155.601	113.020	-7.843	1.00	45.53	ES5
ATOM	7715	CG	ASP	117	141.484	119.552	9.361	1.00	101.40	ES5	ATOM	7768	O	LEU	123	155.884	114.208	-7.883	1.00	45.53	ES5
ATOM	7716	OD1	ASP	117	141.486	118.364	9.749	1.00	101.40	ES5	ATOM	7769	N	GLY	124	156.275	112.113	-8.530	1.00	36.37	ES5
ATOM	7717	OD2	ASP	117	141.287	120.519	10.124	1.00	101.40	ES5	ATOM	7770	CA	GLY	124	157.381	112.531	-9.370	1.00	36.37	ES5
ATOM	7718	C	ASP	117	143.399	119.762	6.060	1.00	49.71	ES5	ATOM	7771	C	GLY	124	158.678	112.629	-8.591	1.00	36.37	ES5
ATOM	7719	O	ASP	117	142.670	120.413	5.299	1.00	49.71	ES5	ATOM	7772	O	GLY	124	158.905	111.849	-7.665	1.00	36.37	ES5
ATOM	7720	N	ILE	118	144.364	118.944	5.632	1.00	40.95	ES5	ATOM	7773	N	SER	125	159.545	113.567	-8.959	1.00	39.48	ES5
ATOM	7721	CA	ILE	118	144.602	118.725	4.205	1.00	40.95	ES5	ATOM	7774	CA	SER	125	160.802	113.711	-8.240	1.00	39.48	ES5
ATOM	7722	CB	ILE	118	145.706	119.644	3.623	1.00	68.42	ES5	ATOM	7775	CB	SER	125	161.674	114.804	-8.864	1.00	42.02	ES5
ATOM	7723	CG2	ILE	118	146.003	119.257	2.193	1.00	68.42	ES5	ATOM	7776	OG	SER	125	162.838	115.021	-8.078	1.00	42.02	ES5
ATOM	7724	CG1	ILE	118	145.229	121.080	3.518	1.00	68.42	ES5	ATOM	7777	C	SER	125	160.475	114.076	-6.800	1.00	39.48	ES5
ATOM	7725	CD1	ILE	118	146.133	121.938	2.620	1.00	68.42	ES5	ATOM	7778	O	SER	125	160.196	115.235	-6.475	1.00	39.48	ES5
ATOM	7726	C	ILE	118	145.034	117.308	3.872	1.00	40.95	ES5	ATOM	7779	N	ARG	126	160.487	113.080	-5.934	1.00	59.57	ES5
ATOM	7727	O	ILE	118	145.613	116.599	4.702	1.00	40.95	ES5	ATOM	7780	CA	ARG	126	160.185	113.330	-4.548	1.00	59.57	ES5
ATOM	7728	N	LEU	119	144.727	116.914	2.638	1.00	37.98	ES5	ATOM	7781	CB	ARG	126	159.906	112.002	-3.858	1.00	56.52	ES5
ATOM	7729	CA	LEU	119	145.134	115.631	2.079	1.00	37.98	ES5	ATOM	7782	CG	ARG	126	159.125	112.081	-2.577	1.00	56.52	ES5
ATOM	7730	CB	LEU	119	143.953	114.910	1.441	1.00	36.90	ES5	ATOM	7783	CD	ARG	126	158.271	110.841	-2.476	1.00	56.52	ES5
ATOM	7731	CG	LEU	119	142.825	114.475	2.365	1.00	36.90	ES5	ATOM	7784	NE	ARG	126	157.490	110.733	-3.700	1.00	56.52	ES5
ATOM	7732	CD1	LEU	119	141.866	113.640	1.537	1.00	36.90	ES5	ATOM	7785	CZ	ARG	126	156.608	109.773	-3.959	1.00	56.52	ES5
ATOM	7733	CD2	LEU	119	143.353	113.670	3.546	1.00	36.90	ES5	ATOM	7786	NH1	ARG	126	156.376	108.812	-3.075	1.00	56.52	ES5
ATOM	7734	C	LEU	119	146.169	115.981	0.995	1.00	37.98	ES5	ATOM	7787	NH2	ARG	126	155.961	109.775	-5.119	1.00	56.52	ES5
ATOM	7735	O	LEU	119	145.858	116.666	0.010	1.00	37.98	ES5	ATOM	7788	C	ARG	126	161.406	114.022	-3.945	1.00	59.57	ES5
ATOM	7736	N	THR	120	147.394	115.510	1.197	1.00	46.10	ES5	ATOM	7789	O	ARG	126	161.985	113.535	-2.977	1.00	59.57	ES5
ATOM	7737	CA	THR	120	148.510	115.774	0.295	1.00	46.10	ES5	ATOM	7790	N	ASN	127	161.801	115.153	-4.523	1.00	33.45	ES5
ATOM	7738	CB	THR	120	149.649	116.449	1.084	1.00	41.93	ES5	ATOM	7791	CA	ASN	127	162.961	115.907	-4.044	1.00	33.45	ES5
ATOM	7739	OG1	THR	120	149.499	117.864	0.998	1.00	41.93	ES5	ATOM	7792	CB	ASN	127	163.907	116.182	-5.217	1.00	55.31	ES5
ATOM	7740	CG2	THR	120	151.031	116.037	0.573	1.00	41.93	ES5	ATOM	7793	CG	ASN	127	164.603	117.527	-5.109	1.00	55.31	ES5
ATOM	7741	C	THR	120	149.064	114.519	-0.359	1.00	46.10	ES5	ATOM	7794	OD1	ASN	127	164.083	118.536	-5.578	1.00	55.31	ES5
ATOM	7742	O	THR	120	148.718	113.403	0.024	1.00	46.10	ES5	ATOM	7795	ND2	ASN	127	165.776	117.549	-4.478	1.00	55.31	ES5
ATOM	7743	N	LYS	121	149.928	114.714	-1.351	1.00	50.56	ES5	ATOM	7796	C	ASN	127	162.608	117.224	-3.345	1.00	33.45	ES5
ATOM	7744	CA	LYS	121	150.585	113.601	-2.023	1.00	50.56	ES5	ATOM	7797	O	ASN	127	161.958	118.102	-3.924	1.00	33.45	ES5
ATOM	7745	CB	LYS	121	149.584	112.774	-2.828	1.00	38.82	ES5	ATOM	7798	N	PRO	128	163.060	117.396	-2.097	1.00	45.94	ES5
ATOM	7746	CG	LYS	121	150.244	111.645	-3.578	1.00	38.82	ES5	ATOM	7799	CD	PRO	128	164.168	116.682	-1.441	1.00	36.65	ES5
ATOM	7747	CD	LYS	121	151.060	110.783	-2.627	1.00	38.82	ES5	ATOM	7800	CA	PRO	128	162.744	118.640	-1.384	1.00	45.94	ES5
ATOM	7748	CE	LYS	121	151.943	109.827	-3.402	1.00	38.82	ES5	ATOM	7801	CB	PRO	128	163.483	118.476	-0.061	1.00	36.65	ES5
ATOM	7749	NZ	LYS	121	152.684	108.889	-2.525	1.00	38.82	ES5	ATOM	7802	CG	PRO	128	164.701	117.725	-0.469	1.00	36.65	ES5
ATOM	7750	C	LYS	121	151.711	114.040	-2.945	1.00	50.56	ES5	ATOM	7803	C	PRO	128	163.259	119.800	-2.199	1.00	45.94	ES5
ATOM	7751	O	LYS	121	151.487	114.771	-3.911	1.00	50.56	ES5	ATOM	7804	O	PRO	128	164.213	119.650	-2.957	1.00	45.94	ES5
ATOM	7752	N	GLU	122	152.927	113.605	-2.636	1.00	41.68	ES5	ATOM	7805	N	ILE	129	162.641	120.955	-2.040	1.00	51.77	ES5
ATOM	7753	CA	GLU	122	154.070	113.934	-3.480	1.00	41.68	ES5	ATOM	7806	CA	ILE	129	163.025	122.143	-2.795	1.00	51.77	ES5
ATOM	7754	CB	GLU	122	155.359	113.942	-2.675	1.00	57.63	ES5	ATOM	7807	CB	ILE	129	164.455	122.103	-3.349	1.00	32.47	ES5
ATOM	7755	CG	GLU	122	155.679	115.262	-2.070	1.00	57.63	ES5	ATOM	7808	CG2	ILE	129	164.679	123.304	-4.252	1.00	32.47	ES5
ATOM	7756	CD	GLU	122	156.749	115.149	-1.021	1.00	57.63	ES5	ATOM	7809	CG1	ILE	129	165.468	122.108	-2.200	1.00	32.47	ES5

ATOM	7810	CD1	ILE	129	166.904	122.369	-2.639	1.00	32.47	ES5	ATOM	7863	CE	MET	136	156.180	130.502	-0.371	1.00	55.32	ES5
ATOM	7811	C	ILE	129	162.096	122.185	-3.967	1.00	51.77	ES5	ATOM	7864	C	MET	136	153.530	127.705	-4.052	1.00	40.82	ES5
ATOM	7812	O	ILE	129	161.165	122.979	-3.985	1.00	51.77	ES5	ATOM	7865	O	MET	136	152.589	128.481	-4.018	1.00	40.82	ES5
ATOM	7813	N	ASN	130	162.329	121.340	-4.958	1.00	41.18	ES5	ATOM	7866	N	GLU	137	153.960	127.164	-5.180	1.00	47.21	ES5
ATOM	7814	CA	ASN	130	161.414	121.357	-6.079	1.00	41.18	ES5	ATOM	7867	CA	GLU	137	153.314	127.496	-6.434	1.00	47.21	ES5
ATOM	7815	CB	ASN	130	161.850	120.384	-7.173	1.00	55.79	ES5	ATOM	7868	CB	GLU	137	153.940	126.723	-7.583	1.00	71.75	ES5
ATOM	7816	CG	ASN	130	163.165	120.783	-7.802	1.00	55.79	ES5	ATOM	7869	CG	GLU	137	154.473	127.639	-8.645	1.00	71.75	ES5
ATOM	7817	OD1	ASN	130	163.452	121.967	-7.965	1.00	55.79	ES5	ATOM	7870	CD	GLU	137	153.524	128.776	-8.924	1.00	71.75	ES5
ATOM	7818	ND2	ASN	130	163.970	119.796	-8.167	1.00	55.79	ES5	ATOM	7871	OE1	GLU	137	152.361	128.490	-9.262	1.00	71.75	ES5
ATOM	7819	C	ASN	130	160.019	121.014	-5.554	1.00	41.18	ES5	ATOM	7872	OE2	GLU	137	153.936	129.948	-8.799	1.00	71.75	ES5
ATOM	7820	O	ASN	130	159.015	121.425	-6.139	1.00	41.18	ES5	ATOM	7873	C	GLU	137	151.852	127.156	-6.345	1.00	47.21	ES5
ATOM	7821	N	ILE	131	159.949	120.270	-4.452	1.00	42.78	ES5	ATOM	7874	O	GLU	137	151.001	127.894	-6.826	1.00	47.21	ES5
ATOM	7822	CA	ILE	131	158.648	119.953	-3.868	1.00	42.78	ES5	ATOM	7875	N	ALA	138	151.565	126.026	-5.716	1.00	44.48	ES5
ATOM	7823	CB	ILE	131	158.737	118.806	-2.835	1.00	45.71	ES5	ATOM	7876	CA	ALA	138	150.200	125.573	-5.568	1.00	44.48	ES5
ATOM	7824	CG2	ILE	131	157.532	118.829	-1.910	1.00	45.71	ES5	ATOM	7877	CB	ALA	138	150.187	124.227	-4.931	1.00	20.57	ES5
ATOM	7825	CG1	ILE	131	158.793	117.460	-3.548	1.00	45.71	ES5	ATOM	7878	C	ALA	138	149.446	126.574	-4.715	1.00	44.48	ES5
ATOM	7826	CD1	ILE	131	157.536	117.132	-4.295	1.00	45.71	ES5	ATOM	7879	O	ALA	138	148.478	127.186	-5.167	1.00	44.48	ES5
ATOM	7827	C	ILE	131	158.181	121.227	-3.162	1.00	42.78	ES5	ATOM	7880	N	LEU	139	149.890	126.750	-3.478	1.00	45.22	ES5
ATOM	7828	O	ILE	131	157.058	121.701	-3.378	1.00	42.78	ES5	ATOM	7881	CA	LEU	139	149.232	127.707	-2.613	1.00	45.22	ES5
ATOM	7829	N	ALA	132	159.056	121.780	-2.323	1.00	45.67	ES5	ATOM	7882	CB	LEU	139	150.126	128.054	-1.430	1.00	37.83	ES5
ATOM	7830	CA	ALA	132	158.748	123.007	-1.605	1.00	45.67	ES5	ATOM	7883	CG	LEU	139	150.345	126.882	-0.457	1.00	37.83	ES5
ATOM	7831	CB	ALA	132	159.977	123.520	-0.896	1.00	25.93	ES5	ATOM	7884	CD1	LEU	139	151.326	127.302	0.610	1.00	37.83	ES5
ATOM	7832	C	ALA	132	158.239	124.052	-2.589	1.00	45.67	ES5	ATOM	7885	CD2	LEU	139	149.031	126.454	0.194	1.00	37.83	ES5
ATOM	7833	O	ALA	132	157.137	124.560	-2.432	1.00	45.67	ES5	ATOM	7886	C	LEU	139	148.881	128.957	-3.410	1.00	45.22	ES5
ATOM	7834	N	TYR	133	159.031	124.361	-3.609	1.00	42.00	ES5	ATOM	7887	O	LEU	139	147.751	129.410	-3.362	1.00	45.22	ES5
ATOM	7835	CA	TYR	133	158.633	125.354	-4.601	1.00	42.00	ES5	ATOM	7888	N	ARG	140	149.822	129.493	-4.180	1.00	49.05	ES5
ATOM	7836	CB	TYR	133	159.661	125.437	-5.737	1.00	81.11	ES5	ATOM	7889	CA	ARG	140	149.553	130.692	-4.976	1.00	49.05	ES5
ATOM	7837	CG	TYR	133	160.995	126.071	-5.399	1.00	81.11	ES5	ATOM	7890	CB	ARG	140	150.747	131.082	-5.829	1.00	48.37	ES5
ATOM	7838	CD1	TYR	133	162.125	125.769	-6.161	1.00	81.11	ES5	ATOM	7891	CG	ARG	140	151.872	131.689	-5.068	1.00	48.37	ES5
ATOM	7839	CE1	TYR	133	163.370	126.332	-5.879	1.00	81.11	ES5	ATOM	7892	CD	ARG	140	152.687	132.618	-5.948	1.00	48.37	ES5
ATOM	7840	CD2	TYR	133	161.138	126.969	-4.333	1.00	81.11	ES5	ATOM	7893	NE	ARG	140	153.973	132.833	-5.318	1.00	48.37	ES5
ATOM	7841	CE2	TYR	133	162.382	127.544	-4.036	1.00	81.11	ES5	ATOM	7894	CZ	ARG	140	154.937	131.924	-5.309	1.00	48.37	ES5
ATOM	7842	CZ	TYR	133	163.497	127.214	-4.820	1.00	81.11	ES5	ATOM	7895	NH1	ARG	140	154.755	130.755	-5.921	1.00	48.37	ES5
ATOM	7843	OH	TYR	133	164.747	127.738	-4.562	1.00	81.11	ES5	ATOM	7896	NH2	ARG	140	156.059	132.161	-4.639	1.00	48.37	ES5
ATOM	7844	C	TYR	133	157.270	125.030	-5.216	1.00	42.00	ES5	ATOM	7897	C	ARG	140	148.379	130.600	-5.918	1.00	49.05	ES5
ATOM	7845	O	TYR	133	156.443	125.920	-5.445	1.00	42.00	ES5	ATOM	7898	O	ARG	140	147.600	131.537	-6.040	1.00	49.05	ES5
ATOM	7846	N	ALA	134	157.040	123.759	-5.511	1.00	40.18	ES5	ATOM	7899	N	GLN	141	148.256	129.483	-6.611	1.00	42.07	ES5
ATOM	7847	CA	ALA	134	155.777	123.381	-6.110	1.00	40.18	ES5	ATOM	7900	CA	GLN	141	147.176	129.345	-7.576	1.00	42.07	ES5
ATOM	7848	CB	ALA	134	155.829	121.940	-6.565	1.00	41.34	ES5	ATOM	7901	CB	GLN	141	147.522	128.252	-8.580	1.00	49.61	ES5
ATOM	7849	C	ALA	134	154.634	123.587	-5.126	1.00	40.18	ES5	ATOM	7902	CG	GLN	141	148.989	128.237	-8.920	1.00	49.61	ES5
ATOM	7850	O	ALA	134	153.531	123.959	-5.522	1.00	40.18	ES5	ATOM	7903	CD	GLN	141	149.256	127.666	-10.281	1.00	49.61	ES5
ATOM	7851	N	THR	135	154.881	123.332	-3.847	1.00	42.92	ES5	ATOM	7904	OE1	GLN	141	148.612	126.711	-10.709	1.00	49.61	ES5
ATOM	7852	CA	THR	135	153.831	123.537	-2.864	1.00	42.92	ES5	ATOM	7905	NE2	GLN	141	150.222	128.243	-10.976	1.00	49.61	ES5
ATOM	7853	CB	THR	135	154.305	123.175	-1.461	1.00	52.95	ES5	ATOM	7906	C	GLN	141	145.829	129.073	-6.919	1.00	42.07	ES5
ATOM	7854	OG1	THR	135	154.574	121.773	-1.405	1.00	52.95	ES5	ATOM	7907	O	GLN	141	144.811	128.934	-7.602	1.00	42.07	ES5
ATOM	7855	CG2	THR	135	153.243	123.502	-0.444	1.00	52.95	ES5	ATOM	7908	N	LEU	142	145.819	128.998	-5.596	1.00	39.36	ES5
ATOM	7856	C	THR	135	153.462	125.020	-2.917	1.00	42.92	ES5	ATOM	7909	CA	LEU	142	144.564	128.778	-4.904	1.00	39.36	ES5
ATOM	7857	O	THR	135	152.298	125.379	-3.132	1.00	42.92	ES5	ATOM	7910	CB	LEU	142	144.800	128.610	-3.404	1.00	38.86	ES5
ATOM	7858	N	MET	136	154.466	125.875	-2.738	1.00	40.82	ES5	ATOM	7911	CG	LEU	142	145.341	127.233	-3.043	1.00	38.86	ES5
ATOM	7859	CA	MET	136	154.270	127.317	-2.783	1.00	40.82	ES5	ATOM	7912	CD1	LEU	142	145.600	127.160	-1.563	1.00	38.86	ES5
ATOM	7860	CB	MET	136	155.612	128.034	-2.756	1.00	55.32	ES5	ATOM	7913	CD2	LEU	142	144.339	126.181	-3.480	1.00	38.86	ES5
ATOM	7861	CG	MET	136	156.329	127.935	-1.443	1.00	55.32	ES5	ATOM	7914	C	LEU	142	143.634	129.962	-5.152	1.00	39.36	ES5
ATOM	7862	SD	MET	136	155.465	128.869	-0.163	1.00	55.32	ES5	ATOM	7915	O	LEU	142	144.071	131.114	-5.176	1.00	39.36	ES5

ATOM	7916	N	ARG	143	142.353	129.662	-5.339	1.00	44.09	ES5	ATOM	7969	OE2	GLU	149	129.588	135.113	-7.053	1.00	148.82	ES5
ATOM	7917	CA	ARG	143	141.349	130.678	-5.594	1.00	44.09	ES5	ATOM	7970	C	GLU	149	133.928	136.666	-10.320	1.00	63.24	ES5
ATOM	7918	CB	ARG	143	140.968	130.689	-7.070	1.00	43.80	ES5	ATOM	7971	O	GLU	149	133.550	137.003	-11.440	1.00	63.24	ES5
ATOM	7919	CG	ARG	143	142.089	131.115	-7.982	1.00	43.80	ES5	ATOM	7972	N	ARG	150	134.780	137.382	-9.593	1.00	48.90	ES5
ATOM	7920	CD	ARG	143	142.566	132.463	-7.570	1.00	43.80	ES5	ATOM	7973	CA	ARG	150	135.335	138.622	-10.112	1.00	48.90	ES5
ATOM	7921	NE	ARG	143	144.014	132.487	-7.456	1.00	43.80	ES5	ATOM	7974	CB	ARG	150	136.433	139.174	-9.202	1.00	148.84	ES5
ATOM	7922	CZ	ARG	143	144.840	132.739	-8.462	1.00	43.80	ES5	ATOM	7975	CG	ARG	150	135.955	139.804	-7.920	1.00	148.84	ES5
ATOM	7923	NH1	ARG	143	144.362	132.991	-9.677	1.00	43.80	ES5	ATOM	7976	CD	ARG	150	136.912	140.909	-7.510	1.00	148.84	ES5
ATOM	7924	NH2	ARG	143	146.146	132.755	-8.239	1.00	43.80	ES5	ATOM	7977	NE	ARG	150	136.910	141.124	-6.069	1.00	148.84	ES5
ATOM	7925	C	ARG	143	140.097	130.448	-4.772	1.00	44.09	ES5	ATOM	7978	CZ	ARG	150	137.310	140.216	-5.182	1.00	148.84	ES5
ATOM	7926	O	ARG	143	139.824	129.333	-4.317	1.00	44.09	ES5	ATOM	7979	NH1	ARG	150	137.745	139.031	-5.593	1.00	148.84	ES5
ATOM	7927	N	THR	144	139.337	131.527	-4.609	1.00	44.41	ES5	ATOM	7980	NH2	ARG	150	137.278	140.492	-3.884	1.00	148.84	ES5
ATOM	7928	CA	THR	144	138.094	131.537	-3.863	1.00	44.41	ES5	ATOM	7981	C	ARG	150	135.936	138.381	-11.489	1.00	48.90	ES5
ATOM	7929	CB	THR	144	138.115	132.653	-2.853	1.00	73.33	ES5	ATOM	7982	O	ARG	150	135.840	139.227	-12.373	1.00	48.90	ES5
ATOM	7930	OG1	THR	144	139.175	132.403	-1.931	1.00	73.33	ES5	ATOM	7983	N	LEU	151	136.560	137.224	-11.672	1.00	51.88	ES5
ATOM	7931	CG2	THR	144	136.790	132.747	-2.113	1.00	73.33	ES5	ATOM	7984	CA	LEU	151	137.184	136.920	-12.942	1.00	51.88	ES5
ATOM	7932	C	THR	144	136.963	131.789	-4.837	1.00	44.41	ES5	ATOM	7985	CB	LEU	151	138.103	135.713	-12.805	1.00	46.63	ES5
ATOM	7933	O	THR	144	137.193	132.320	-5.920	1.00	44.41	ES5	ATOM	7986	CG	LEU	151	139.564	135.943	-12.442	1.00	46.63	ES5
ATOM	7934	N	LYS	145	135.745	131.406	-4.461	1.00	53.86	ES5	ATOM	7987	CD1	LEU	151	140.264	134.609	-12.364	1.00	46.63	ES5
ATOM	7935	CA	LYS	145	134.591	131.628	-5.325	1.00	53.86	ES5	ATOM	7988	CD2	LEU	151	140.219	136.800	-13.494	1.00	46.63	ES5
ATOM	7936	CB	LYS	145	133.325	131.151	-4.620	1.00	82.89	ES5	ATOM	7989	C	LEU	151	136.199	136.669	-14.063	1.00	51.88	ES5
ATOM	7937	CG	LYS	145	132.081	131.157	-5.483	1.00	82.89	ES5	ATOM	7990	O	LEU	151	136.539	136.875	-15.227	1.00	51.88	ES5
ATOM	7938	CD	LYS	145	130.889	130.782	-4.625	1.00	82.89	ES5	ATOM	7991	N	ARG	152	134.987	136.225	-13.733	1.00	67.50	ES5
ATOM	7939	CE	LYS	145	129.576	130.811	-5.384	1.00	82.89	ES5	ATOM	7992	CA	ARG	152	134.002	135.959	-14.776	1.00	67.50	ES5
ATOM	7940	NZ	LYS	145	128.449	130.475	-4.460	1.00	82.89	ES5	ATOM	7993	CB	ARG	152	133.524	134.524	-14.692	1.00	68.96	ES5
ATOM	7941	C	LYS	145	134.514	133.133	-5.626	1.00	53.86	ES5	ATOM	7994	CG	ARG	152	134.599	133.497	-14.557	1.00	68.96	ES5
ATOM	7942	O	LYS	145	134.181	133.555	-6.743	1.00	53.86	ES5	ATOM	7995	CD	ARG	152	133.957	132.139	-14.709	1.00	68.96	ES5
ATOM	7943	N	ALA	146	134.850	133.934	-4.620	1.00	52.92	ES5	ATOM	7996	NE	ARG	152	134.506	131.150	-13.795	1.00	68.96	ES5
ATOM	7944	CA	ALA	146	134.847	135.378	-4.763	1.00	52.92	ES5	ATOM	7997	CZ	ARG	152	133.868	130.038	-13.448	1.00	68.96	ES5
ATOM	7945	CB	ALA	146	135.363	136.016	-3.501	1.00	41.51	ES5	ATOM	7998	NH1	ARG	152	132.658	129.786	-13.943	1.00	68.96	ES5
ATOM	7946	C	ALA	146	135.732	135.777	-5.932	1.00	52.92	ES5	ATOM	7999	NH2	ARG	152	134.439	129.179	-12.612	1.00	68.96	ES5
ATOM	7947	O	ALA	146	135.382	136.666	-6.711	1.00	52.92	ES5	ATOM	8000	C	ARG	152	132.766	136.862	-14.811	1.00	67.50	ES5
ATOM	7948	N	ASP	147	136.882	135.113	-6.045	1.00	43.73	ES5	ATOM	8001	O	ARG	152	131.792	136.528	-15.484	1.00	67.50	ES5
ATOM	7949	CA	ASP	147	137.842	135.393	-7.104	1.00	43.73	ES5	ATOM	8002	N	LYS	153	132.786	137.987	-14.099	1.00	86.72	ES5
ATOM	7950	CB	ASP	147	139.169	134.716	-6.814	1.00	55.23	ES5	ATOM	8003	CA	LYS	153	131.637	138.893	-14.099	1.00	86.72	ES5
ATOM	7951	CG	ASP	147	139.707	135.063	-5.461	1.00	55.23	ES5	ATOM	8004	CB	LYS	153	131.809	139.993	-13.047	1.00	133.40	ES5
ATOM	7952	OD1	ASP	147	139.770	136.270	-5.126	1.00	55.23	ES5	ATOM	8005	CG	LYS	153	131.794	139.505	-11.607	1.00	133.40	ES5
ATOM	7953	OD2	ASP	147	140.076	134.119	-4.734	1.00	55.23	ES5	ATOM	8006	CD	LYS	153	130.491	138.783	-11.265	1.00	133.40	ES5
ATOM	7954	C	ASP	147	137.379	134.933	-8.463	1.00	43.73	ES5	ATOM	8007	CE	LYS	153	130.517	138.221	-9.842	1.00	133.40	ES5
ATOM	7955	O	ASP	147	137.460	135.672	-9.448	1.00	43.73	ES5	ATOM	8008	NZ	LYS	153	129.380	137.293	-9.577	1.00	133.40	ES5
ATOM	7956	N	VAL	148	136.931	133.690	-8.526	1.00	44.67	ES5	ATOM	8009	C	LYS	153	131.451	139.535	-15.475	1.00	86.72	ES5
ATOM	7957	CA	VAL	148	136.474	133.135	-9.784	1.00	44.67	ES5	ATOM	8010	O	LYS	153	131.650	138.891	-16.509	1.00	86.72	ES5
ATOM	7958	CB	VAL	148	135.926	131.718	-9.576	1.00	64.08	ES5	ATOM	8011	N	GLY	154	131.063	140.807	-15.480	1.00	120.05	ES5
ATOM	7959	CG1	VAL	148	135.711	131.036	-10.919	1.00	64.08	ES5	ATOM	8012	CA	GLY	154	130.862	141.520	-16.729	1.00	120.05	ES5
ATOM	7960	CG2	VAL	148	136.884	130.928	-8.700	1.00	64.08	ES5	ATOM	8013	C	GLY	154	129.931	140.809	-17.693	1.00	120.05	ES5
ATOM	7961	C	VAL	148	135.370	134.043	-10.306	1.00	44.67	ES5	ATOM	8014	O	GLY	154	129.416	139.726	-17.340	1.00	120.05	ES5
ATOM	7962	O	VAL	148	135.286	134.335	-11.515	1.00	44.67	ES5	ATOM	8015	OXT	GLY	154	129.714	141.338	-18.806	1.00	126.35	ES5
ATOM	7963	N	GLU	149	134.538	134.500	-9.371	1.00	63.24	ES5	ATOM	8016	CB	GLU	1	245.588	178.450	-3.629	1.00	172.23	IS9
ATOM	7964	CA	GLU	149	133.426	135.378	-9.702	1.00	63.24	ES5	ATOM	8017	CG	GLU	1	246.854	179.279	-3.705	1.00	172.23	IS9
ATOM	7965	CB	GLU	149	132.605	135.685	-8.459	1.00	148.82	ES5	ATOM	8018	CD	GLU	1	247.779	179.014	-2.523	1.00	172.23	IS9
ATOM	7966	CG	GLU	149	131.660	134.573	-8.074	1.00	148.82	ES5	ATOM	8019	OE1	GLU	1	248.211	177.852	-2.350	1.00	172.23	IS9
ATOM	7967	CD	GLU	149	130.814	134.943	-6.880	1.00	148.82	ES5	ATOM	8020	OE2	GLU	1	248.077	179.963	-1.767	1.00	172.23	IS9
ATOM	7968	OE1	GLU	149	131.379	135.073	-5.772	1.00	148.82	ES5	ATOM	8021	C	GLU	1	243.823	177.192	-4.814	1.00	130.46	IS9

ATOM	8022	O	GLU	1	244.313	176.061	-4.869	1.00130.46	IS9
ATOM	8023	N	GLU	1	243.958	179.702	-5.033	1.00130.46	IS9
ATOM	8024	CA	GLU	1	244.721	178.426	-4.892	1.00130.46	IS9
ATOM	8025	N	GLN	2	242.516	177.391	-4.692	1.00107.92	IS9
ATOM	8026	CA	GLN	2	241.628	176.246	-4.565	1.00107.92	IS9
ATOM	8027	CB	GLN	2	241.189	176.110	-3.106	1.00118.36	IS9
ATOM	8028	CG	GLN	2	242.339	176.024	-2.118	1.00118.36	IS9
ATOM	8029	CD	GLN	2	243.248	174.844	-2.388	1.00118.36	IS9
ATOM	8030	OE1	GLN	2	242.803	173.701	-2.409	1.00118.36	IS9
ATOM	8031	NE2	GLN	2	244.531	175.115	-2.594	1.00118.36	IS9
ATOM	8032	C	GLN	2	240.392	176.221	-5.452	1.00107.92	IS9
ATOM	8033	O	GLN	2	239.762	177.248	-5.703	1.00107.92	IS9
ATOM	8034	N	TYR	3	240.066	175.017	-5.916	1.00127.19	IS9
ATOM	8035	CA	TYR	3	238.895	174.737	-6.746	1.00127.19	IS9
ATOM	8036	CB	TYR	3	239.182	175.043	-8.219	1.00156.57	IS9
ATOM	8037	CG	TYR	3	239.585	176.482	-8.417	1.00156.57	IS9
ATOM	8038	CD1	TYR	3	240.926	176.856	-8.388	1.00156.57	IS9
ATOM	8039	CE1	TYR	3	241.303	178.194	-8.437	1.00156.57	IS9
ATOM	8040	CD2	TYR	3	238.624	177.488	-8.510	1.00156.57	IS9
ATOM	8041	CE2	TYR	3	238.986	178.831	-8.560	1.00156.57	IS9
ATOM	8042	CZ	TYR	3	240.329	179.178	-8.521	1.00156.57	IS9
ATOM	8043	OH	TYR	3	240.710	180.504	-8.551	1.00156.57	IS9
ATOM	8044	C	TYR	3	238.611	173.255	-6.512	1.00127.19	IS9
ATOM	8045	O	TYR	3	239.015	172.388	-7.285	1.00127.19	IS9
ATOM	8046	N	TYR	4	237.922	173.003	-5.401	1.00 78.16	IS9
ATOM	8047	CA	TYR	4	237.566	171.672	-4.920	1.00 78.16	IS9
ATOM	8048	CB	TYR	4	237.092	171.788	-3.470	1.00 90.98	IS9
ATOM	8049	CG	TYR	4	237.063	170.483	-2.729	1.00 90.98	IS9
ATOM	8050	CD1	TYR	4	236.152	170.264	-1.705	1.00 90.98	IS9
ATOM	8051	CE1	TYR	4	236.127	169.060	-1.014	1.00 90.98	IS9
ATOM	8052	CD2	TYR	4	237.954	169.464	-3.047	1.00 90.98	IS9
ATOM	8053	CE2	TYR	4	237.938	168.258	-2.365	1.00 90.98	IS9
ATOM	8054	CZ	TYR	4	237.023	168.061	-1.352	1.00 90.98	IS9
ATOM	8055	OH	TYR	4	237.006	166.859	-0.685	1.00 90.98	IS9
ATOM	8056	C	TYR	4	236.513	170.913	-5.734	1.00 78.16	IS9
ATOM	8057	O	TYR	4	235.822	171.490	-6.578	1.00 78.16	IS9
ATOM	8058	N	GLY	5	236.398	169.612	-5.451	1.00148.80	IS9
ATOM	8059	CA	GLY	5	235.447	168.759	-6.144	1.00148.80	IS9
ATOM	8060	C	GLY	5	234.831	167.616	-5.339	1.00148.80	IS9
ATOM	8061	O	GLY	5	233.606	167.558	-5.198	1.00148.80	IS9
ATOM	8062	N	THR	6	235.665	166.714	-4.815	1.00 78.03	IS9
ATOM	8063	CA	THR	6	235.213	165.540	-4.042	1.00 78.03	IS9
ATOM	8064	CB	THR	6	234.053	165.841	-3.064	1.00 71.74	IS9
ATOM	8065	OG1	THR	6	234.478	166.757	-2.051	1.00 71.74	IS9
ATOM	8066	CG2	THR	6	233.593	164.549	-2.399	1.00 71.74	IS9
ATOM	8067	C	THR	6	234.709	164.410	-4.933	1.00 78.03	IS9
ATOM	8068	O	THR	6	233.672	164.532	-5.590	1.00 78.03	IS9
ATOM	8069	N	GLY	7	235.434	163.301	-4.936	1.00 69.91	IS9
ATOM	8070	CA	GLY	7	235.030	162.173	-5.748	1.00 69.91	IS9
ATOM	8071	C	GLY	7	234.819	160.932	-4.907	1.00 69.91	IS9
ATOM	8072	O	GLY	7	235.578	160.653	-3.968	1.00 69.91	IS9
ATOM	8073	N	ARG	8	233.767	160.187	-5.221	1.00 77.18	IS9
ATOM	8074	CA	ARG	8	233.501	158.959	-4.493	1.00 77.18	IS9
ATOM	8075	CB	ARG	8	232.430	159.169	-3.423	1.00 70.88	IS9
ATOM	8076	CG	ARG	8	233.043	159.335	-2.036	1.00 70.88	IS9
ATOM	8077	CD	ARG	8	232.032	159.787	-0.990	1.00 70.88	IS9
ATOM	8078	NE	ARG	8	231.445	161.083	-1.321	1.00 70.88	IS9
ATOM	8079	CZ	ARG	8	230.591	161.734	-0.543	1.00 70.88	IS9
ATOM	8080	NH1	ARG	8	230.230	161.207	0.616	1.00 70.88	IS9
ATOM	8081	NH2	ARG	8	230.085	162.900	-0.928	1.00 70.88	IS9
ATOM	8082	C	ARG	8	233.109	157.850	-5.439	1.00 77.18	IS9
ATOM	8083	O	ARG	8	232.150	157.961	-6.198	1.00 77.18	IS9
ATOM	8084	N	ARG	9	233.891	156.782	-5.407	1.00 52.59	IS9
ATOM	8085	CA	ARG	9	233.638	155.646	-6.260	1.00 52.59	IS9
ATOM	8086	CB	ARG	9	234.674	155.546	-7.375	1.00 75.30	IS9
ATOM	8087	CG	ARG	9	234.503	154.297	-8.216	1.00 75.30	IS9
ATOM	8088	CD	ARG	9	233.195	154.358	-8.981	1.00 75.30	IS9
ATOM	8089	NE	ARG	9	232.685	153.037	-9.347	1.00 75.30	IS9
ATOM	8090	CZ	ARG	9	233.265	152.204	-10.208	1.00 75.30	IS9
ATOM	8091	NH1	ARG	9	234.396	152.537	-10.813	1.00 75.30	IS9
ATOM	8092	NH2	ARG	9	232.706	151.032	-10.469	1.00 75.30	IS9
ATOM	8093	C	ARG	9	233.673	154.353	-5.486	1.00 52.59	IS9
ATOM	8094	O	ARG	9	234.675	154.018	-4.854	1.00 52.59	IS9
ATOM	8095	N	LYS	10	232.555	153.645	-5.525	1.00 58.63	IS9
ATOM	8096	CA	LYS	10	232.470	152.347	-4.909	1.00 58.63	IS9
ATOM	8097	CB	LYS	10	232.718	151.318	-6.029	1.00 54.40	IS9
ATOM	8098	CG	LYS	10	233.303	149.969	-5.631	1.00 54.40	IS9
ATOM	8099	CD	LYS	10	233.802	149.219	-6.851	1.00 54.40	IS9
ATOM	8100	CE	LYS	10	234.519	147.969	-6.410	1.00 54.40	IS9
ATOM	8101	NZ	LYS	10	235.071	147.282	-7.582	1.00 54.40	IS9
ATOM	8102	C	LYS	10	233.451	152.174	-3.750	1.00 58.63	IS9
ATOM	8103	O	LYS	10	234.385	151.385	-3.838	1.00 58.63	IS9
ATOM	8104	N	GLU	11	233.255	152.927	-2.674	1.00 43.10	IS9
ATOM	8105	CA	GLU	11	234.113	152.809	-1.480	1.00 43.10	IS9
ATOM	8106	CB	GLU	11	234.475	151.348	-1.224	1.00 73.49	IS9
ATOM	8107	CG	GLU	11	233.462	150.609	-0.432	1.00 73.49	IS9
ATOM	8108	CD	GLU	11	233.325	151.193	0.932	1.00 73.49	IS9
ATOM	8109	OE1	GLU	11	234.377	151.461	1.537	1.00 73.49	IS9
ATOM	8110	OE2	GLU	11	232.183	151.382	1.402	1.00 73.49	IS9
ATOM	8111	C	GLU	11	235.415	153.622	-1.430	1.00 43.10	IS9
ATOM	8112	O	GLU	11	236.295	153.355	-0.595	1.00 43.10	IS9
ATOM	8113	N	ALA	12	235.542	154.601	-2.314	1.00 83.39	IS9
ATOM	8114	CA	ALA	12	236.733	155.427	-2.343	1.00 83.39	IS9
ATOM	8115	CB	ALA	12	237.543	155.125	-3.592	1.00 51.00	IS9
ATOM	8116	C	ALA	12	236.298	156.878	-2.344	1.00 83.39	IS9
ATOM	8117	O	ALA	12	235.290	157.226	-2.966	1.00 83.39	IS9
ATOM	8118	N	VAL	13	237.041	157.718	-1.626	1.00 84.99	IS9
ATOM	8119	CA	VAL	13	236.739	159.147	-1.585	1.00 84.99	IS9
ATOM	8120	CB	VAL	13	236.342	159.627	-0.165	1.00 48.67	IS9
ATOM	8121	CG1	VAL	13	235.807	161.043	-0.255	1.00 48.67	IS9
ATOM	8122	CG2	VAL	13	235.284	158.716	0.436	1.00 48.67	IS9
ATOM	8123	C	VAL	13	237.981	159.908	-2.039	1.00 84.99	IS9
ATOM	8124	O	VAL	13	239.085	159.658	-1.553	1.00 84.99	IS9
ATOM	8125	N	ALA	14	237.797	160.836	-2.973	1.00 74.35	IS9
ATOM	8126	CA	ALA	14	238.914	161.609	-3.504	1.00 74.35	IS9
ATOM	8127	CB	ALA	14	239.184	161.192	-4.949	1.00 59.44	IS9

ATOM	8128	C	ALA	14	238.758	163.130	-3.432	1.00	74.35	IS9	ATOM	8181	CB	PRO	20	245.360	178.613	-11.851	1.00	100.57	IS9
ATOM	8129	O	ALA	14	237.901	163.724	-4.101	1.00	74.35	IS9	ATOM	8182	CG	PRO	20	245.473	179.066	-10.423	1.00	100.57	IS9
ATOM	8130	N	ARG	15	239.610	163.750	-2.617	1.00	82.02	IS9	ATOM	8183	C	PRO	20	247.332	177.006	-11.822	1.00	103.59	IS9
ATOM	8131	CA	ARG	15	239.630	165.199	-2.456	1.00	82.02	IS9	ATOM	8184	O	PRO	20	248.024	177.294	-10.844	1.00	103.59	IS9
ATOM	8132	CB	ARG	15	240.299	165.588	-1.138	1.00	110.32	IS9	ATOM	8185	N	GLY	21	247.843	176.533	-12.952	1.00	102.25	IS9
ATOM	8133	CG	ARG	15	239.632	165.091	0.122	1.00	110.32	IS9	ATOM	8186	CA	GLY	21	249.276	176.355	-13.079	1.00	102.25	IS9
ATOM	8134	CD	ARG	15	240.593	165.257	1.287	1.00	110.32	IS9	ATOM	8187	C	GLY	21	249.621	175.143	-13.913	1.00	102.25	IS9
ATOM	8135	NE	ARG	15	240.020	164.831	2.560	1.00	110.32	IS9	ATOM	8188	O	GLY	21	249.171	175.018	-15.052	1.00	102.25	IS9
ATOM	8136	CZ	ARG	15	240.640	164.036	3.432	1.00	110.32	IS9	ATOM	8189	N	ASN	22	250.417	174.242	-13.349	1.00	179.70	IS9
ATOM	8137	NH1	ARG	15	241.855	163.572	3.167	1.00	110.32	IS9	ATOM	8190	CA	ASN	22	250.806	173.043	-14.073	1.00	179.70	IS9
ATOM	8138	NH2	ARG	15	240.049	163.711	4.578	1.00	110.32	IS9	ATOM	8191	CB	ASN	22	252.321	172.969	-14.207	1.00	116.68	IS9
ATOM	8139	C	ARG	15	240.472	165.747	-3.601	1.00	82.02	IS9	ATOM	8192	CG	ASN	22	252.812	173.660	-15.444	1.00	116.68	IS9
ATOM	8140	O	ARG	15	241.689	165.545	-3.634	1.00	82.02	IS9	ATOM	8193	OD1	ASN	22	253.817	173.263	-16.032	1.00	116.68	IS9
ATOM	8141	N	VAL	16	239.827	166.423	-4.545	1.00	78.74	IS9	ATOM	8194	ND2	ASN	22	252.103	174.707	-15.856	1.00	116.68	IS9
ATOM	8142	CA	VAL	16	240.546	166.994	-5.673	1.00	78.74	IS9	ATOM	8195	C	ASN	22	250.307	171.734	-13.498	1.00	179.70	IS9
ATOM	8143	CB	VAL	16	239.872	166.624	-7.021	1.00	81.26	IS9	ATOM	8196	O	ASN	22	250.741	171.310	-12.430	1.00	179.70	IS9
ATOM	8144	CG1	VAL	16	240.649	167.221	-8.183	1.00	81.26	IS9	ATOM	8197	N	GLY	23	249.398	171.093	-14.226	1.00	121.84	IS9
ATOM	8145	CG2	VAL	16	239.815	165.121	-7.173	1.00	81.26	IS9	ATOM	8198	CA	GLY	23	248.873	169.819	-13.784	1.00	121.84	IS9
ATOM	8146	C	VAL	16	240.611	168.515	-5.535	1.00	78.74	IS9	ATOM	8199	C	GLY	23	250.016	168.886	-13.445	1.00	121.84	IS9
ATOM	8147	O	VAL	16	239.597	169.207	-5.641	1.00	78.74	IS9	ATOM	8200	O	GLY	23	250.591	168.244	-14.322	1.00	121.84	IS9
ATOM	8148	N	PHE	17	241.815	169.023	-5.282	1.00	89.82	IS9	ATOM	8201	N	LYS	24	250.359	168.832	-12.163	1.00	100.72	IS9
ATOM	8149	CA	PHE	17	242.050	170.457	-5.131	1.00	89.82	IS9	ATOM	8202	CA	LYS	24	251.428	167.969	-11.692	1.00	100.72	IS9
ATOM	8150	CB	PHE	17	242.894	170.722	-3.888	1.00	84.83	IS9	ATOM	8203	CB	LYS	24	252.357	168.733	-10.745	1.00	128.44	IS9
ATOM	8151	CG	PHE	17	242.125	170.656	-2.604	1.00	84.83	IS9	ATOM	8204	CG	LYS	24	253.153	169.829	-11.435	1.00	128.44	IS9
ATOM	8152	CD1	PHE	17	242.524	169.798	-1.585	1.00	84.83	IS9	ATOM	8205	CD	LYS	24	254.078	170.555	-10.472	1.00	128.44	IS9
ATOM	8153	CD2	PHE	17	241.023	171.482	-2.396	1.00	84.83	IS9	ATOM	8206	CE	LYS	24	254.874	171.636	-11.195	1.00	128.44	IS9
ATOM	8154	CE1	PHE	17	241.838	169.767	-0.373	1.00	84.83	IS9	ATOM	8207	NZ	LYS	24	255.789	172.368	-10.275	1.00	128.44	IS9
ATOM	8155	CE2	PHE	17	240.328	171.461	-1.189	1.00	84.83	IS9	ATOM	8208	C	LYS	24	250.802	166.780	-10.978	1.00	100.72	IS9
ATOM	8156	CZ	PHE	17	240.737	170.603	-0.175	1.00	84.83	IS9	ATOM	8209	O	LYS	24	251.297	165.658	-11.065	1.00	100.72	IS9
ATOM	8157	C	PHE	17	242.767	171.016	-6.350	1.00	89.82	IS9	ATOM	8210	N	VAL	25	249.704	167.025	-10.276	1.00	92.09	IS9
ATOM	8158	O	PHE	17	243.985	170.895	-6.481	1.00	89.82	IS9	ATOM	8211	CA	VAL	25	249.019	165.952	-9.573	1.00	92.09	IS9
ATOM	8159	N	LEU	18	242.010	171.619	-7.253	1.00	96.65	IS9	ATOM	8212	CB	VAL	25	248.605	164.839	-10.550	1.00	61.92	IS9
ATOM	8160	CA	LEU	18	242.613	172.187	-8.439	1.00	96.65	IS9	ATOM	8213	CG1	VAL	25	247.784	163.804	-9.823	1.00	61.92	IS9
ATOM	8161	CB	LEU	18	241.570	172.387	-9.533	1.00	80.30	IS9	ATOM	8214	CG2	VAL	25	247.822	165.430	-11.710	1.00	61.92	IS9
ATOM	8162	CG	LEU	18	241.073	171.087	-10.157	1.00	80.30	IS9	ATOM	8215	C	VAL	25	249.895	165.337	-8.489	1.00	92.09	IS9
ATOM	8163	CD1	LEU	18	240.287	171.387	-11.432	1.00	80.30	IS9	ATOM	8216	O	VAL	25	250.967	164.797	-8.768	1.00	92.09	IS9
ATOM	8164	CD2	LEU	18	242.269	170.200	-10.473	1.00	80.30	IS9	ATOM	8217	N	THR	26	249.429	165.409	-7.249	1.00	111.47	IS9
ATOM	8165	C	LEU	18	243.279	173.514	-8.126	1.00	96.65	IS9	ATOM	8218	CA	THR	26	250.193	164.856	-6.146	1.00	111.47	IS9
ATOM	8166	O	LEU	18	242.875	174.236	-7.211	1.00	96.65	IS9	ATOM	8219	CB	THR	26	250.894	165.975	-5.370	1.00	77.38	IS9
ATOM	8167	N	ARG	19	244.314	173.827	-8.890	1.00	110.58	IS9	ATOM	8220	OG1	THR	26	251.638	166.782	-6.290	1.00	77.38	IS9
ATOM	8168	CA	ARG	19	245.044	175.066	-8.715	1.00	110.58	IS9	ATOM	8221	CG2	THR	26	251.846	165.396	-4.341	1.00	77.38	IS9
ATOM	8169	CB	ARG	19	246.239	174.858	-7.783	1.00	122.80	IS9	ATOM	8222	C	THR	26	249.316	164.020	-5.222	1.00	111.47	IS9
ATOM	8170	CG	ARG	19	245.862	174.338	-6.413	1.00	122.80	IS9	ATOM	8223	O	THR	26	249.138	164.313	-4.035	1.00	111.47	IS9
ATOM	8171	CD	ARG	19	247.064	174.285	-5.491	1.00	122.80	IS9	ATOM	8224	N	VAL	27	248.769	162.963	-5.808	1.00	52.14	IS9
ATOM	8172	NE	ARG	19	246.688	173.902	-4.133	1.00	122.80	IS9	ATOM	8225	CA	VAL	27	247.912	162.008	-5.121	1.00	52.14	IS9
ATOM	8173	CZ	ARG	19	247.527	173.888	-3.101	1.00	122.80	IS9	ATOM	8226	CB	VAL	27	247.587	160.826	-6.060	1.00	76.18	IS9
ATOM	8174	NH1	ARG	19	248.797	174.235	-3.268	1.00	122.80	IS9	ATOM	8227	CG1	VAL	27	246.676	159.832	-5.361	1.00	76.18	IS9
ATOM	8175	NH2	ARG	19	247.095	173.532	-1.898	1.00	122.80	IS9	ATOM	8228	CG2	VAL	27	246.945	161.350	-7.339	1.00	76.18	IS9
ATOM	8176	C	ARG	19	245.532	175.476	-10.085	1.00	110.58	IS9	ATOM	8229	C	VAL	27	248.533	161.450	-3.833	1.00	52.14	IS9
ATOM	8177	O	ARG	19	246.064	174.657	-10.830	1.00	110.58	IS9	ATOM	8230	O	VAL	27	249.543	160.753	-3.872	1.00	52.14	IS9
ATOM	8178	N	PRO	20	245.344	176.748	-10.448	1.00	103.59	IS9	ATOM	8231	N	ASN	28	247.911	161.757	-2.700	1.00	69.78	IS9
ATOM	8179	CD	PRO	20	244.869	177.905	-9.668	1.00	100.57	IS9	ATOM	8232	CA	ASN	28	248.388	161.277	-1.412	1.00	69.78	IS9
ATOM	8180	CA	PRO	20	245.815	177.161	-11.770	1.00	103.59	IS9	ATOM	8233	CB	ASN	28	248.053	159.796	-1.247	1.00	87.89	IS9

ATOM	8234	CG	ASN	28	246.704	159.579	-0.609	1.00	87.89	IS9	ATOM	8287	O	GLU	34	253.121	155.105	-7.348	1.00	90.10	IS9
ATOM	8235	OD1	ASN	28	245.716	160.200	-0.996	1.00	87.89	IS9	ATOM	8288	N	TYR	35	251.746	156.884	-7.246	1.00	101.56	IS9
ATOM	8236	ND2	ASN	28	246.653	158.691	0.375	1.00	87.89	IS9	ATOM	8289	CA	TYR	35	250.731	156.182	-6.472	1.00	101.56	IS9
ATOM	8237	C	ASN	28	249.874	161.490	-1.195	1.00	69.78	IS9	ATOM	8290	CB	TYR	35	249.663	157.171	-5.976	1.00	71.64	IS9
ATOM	8238	O	ASN	28	250.596	160.570	-0.813	1.00	69.78	IS9	ATOM	8291	CG	TYR	35	248.714	156.582	-4.948	1.00	71.64	IS9
ATOM	8239	N	GLY	29	250.324	162.715	-1.435	1.00	105.98	IS9	ATOM	8292	CD1	TYR	35	249.204	155.985	-3.793	1.00	71.64	IS9
ATOM	8240	CA	GLY	29	251.723	163.030	-1.240	1.00	105.98	IS9	ATOM	8293	CE1	TYR	35	248.350	155.396	-2.868	1.00	71.64	IS9
ATOM	8241	C	GLY	29	252.620	162.539	-2.352	1.00	105.98	IS9	ATOM	8294	CD2	TYR	35	247.337	156.585	-5.151	1.00	71.64	IS9
ATOM	8242	O	GLY	29	253.668	163.130	-2.608	1.00	105.98	IS9	ATOM	8295	CE2	TYR	35	246.477	156.002	-4.234	1.00	71.64	IS9
ATOM	8243	N	GLN	30	252.223	161.459	-3.016	1.00	82.51	IS9	ATOM	8296	CZ	TYR	35	246.989	155.403	-3.094	1.00	71.64	IS9
ATOM	8244	CA	GLN	30	253.030	160.927	-4.103	1.00	82.51	IS9	ATOM	8297	OH	TYR	35	246.161	154.769	-2.188	1.00	71.64	IS9
ATOM	8245	CB	GLN	30	252.960	159.410	-4.140	1.00	88.22	IS9	ATOM	8298	C	TYR	35	250.093	155.115	-7.360	1.00	101.56	IS9
ATOM	8246	CG	GLN	30	253.467	158.783	-2.885	1.00	88.22	IS9	ATOM	8299	O	TYR	35	249.424	154.199	-6.878	1.00	101.56	IS9
ATOM	8247	CD	GLN	30	253.752	157.324	-3.061	1.00	88.22	IS9	ATOM	8300	N	PHE	36	250.329	155.240	-8.662	1.00	82.04	IS9
ATOM	8248	OE1	GLN	30	252.864	156.547	-3.407	1.00	88.22	IS9	ATOM	8301	CA	PHE	36	249.786	154.319	-9.651	1.00	82.04	IS9
ATOM	8249	NE2	GLN	30	255.001	156.933	-2.829	1.00	88.22	IS9	ATOM	8302	CB	PHE	36	248.859	155.111	-10.573	1.00	63.77	IS9
ATOM	8250	C	GLN	30	252.591	161.480	-5.434	1.00	82.51	IS9	ATOM	8303	CG	PHE	36	247.714	155.774	-9.837	1.00	63.77	IS9
ATOM	8251	O	GLN	30	251.494	162.019	-5.571	1.00	82.51	IS9	ATOM	8304	CD1	PHE	36	247.198	157.000	-10.261	1.00	63.77	IS9
ATOM	8252	N	ASP	31	253.460	161.345	-6.420	1.00	83.92	IS9	ATOM	8305	CD2	PHE	36	247.159	155.174	-8.698	1.00	63.77	IS9
ATOM	8253	CA	ASP	31	253.149	161.846	-7.736	1.00	83.92	IS9	ATOM	8306	CE1	PHE	36	246.151	157.618	-9.556	1.00	63.77	IS9
ATOM	8254	CB	ASP	31	254.421	161.943	-8.565	1.00	112.15	IS9	ATOM	8307	CE2	PHE	36	246.116	155.784	-7.992	1.00	63.77	IS9
ATOM	8255	CG	ASP	31	254.300	162.944	-9.677	1.00	112.15	IS9	ATOM	8308	CZ	PHE	36	245.613	157.008	-8.422	1.00	63.77	IS9
ATOM	8256	OD1	ASP	31	253.420	162.757	-10.546	1.00	112.15	IS9	ATOM	8309	C	PHE	36	250.887	153.589	-10.435	1.00	82.04	IS9
ATOM	8257	OD2	ASP	31	255.079	163.922	-9.673	1.00	112.15	IS9	ATOM	8310	O	PHE	36	251.176	152.414	-10.176	1.00	82.04	IS9
ATOM	8258	C	ASP	31	252.163	160.891	-8.387	1.00	83.92	IS9	ATOM	8311	N	GLN	37	251.504	154.275	-11.387	1.00	128.15	IS9
ATOM	8259	O	ASP	31	252.251	159.680	-8.197	1.00	83.92	IS9	ATOM	8312	CA	GLN	37	252.584	153.677	-12.170	1.00	128.15	IS9
ATOM	8260	N	PHE	32	251.218	161.439	-9.143	1.00	104.42	IS9	ATOM	8313	CB	GLN	37	253.722	153.232	-11.245	1.00	114.38	IS9
ATOM	8261	CA	PHE	32	250.210	160.635	-9.827	1.00	104.42	IS9	ATOM	8314	CG	GLN	37	254.752	152.333	-11.920	1.00	114.38	IS9
ATOM	8262	CB	PHE	32	249.639	161.419	-11.004	1.00	88.24	IS9	ATOM	8315	CD	GLN	37	255.803	151.821	-10.955	1.00	114.38	IS9
ATOM	8263	CG	PHE	32	248.412	160.808	-11.601	1.00	88.24	IS9	ATOM	8316	OE1	GLN	37	255.486	151.407	-9.840	1.00	114.38	IS9
ATOM	8264	CD1	PHE	32	247.241	160.710	-10.859	1.00	88.24	IS9	ATOM	8317	NE2	GLN	37	257.060	151.833	-11.384	1.00	114.38	IS9
ATOM	8265	CD2	PHE	32	248.417	160.354	-12.913	1.00	88.24	IS9	ATOM	8318	C	GLN	37	252.164	152.493	-13.031	1.00	128.15	IS9
ATOM	8266	CE1	PHE	32	246.094	160.174	-11.414	1.00	88.24	IS9	ATOM	8319	O	GLN	37	251.924	152.642	-14.232	1.00	128.15	IS9
ATOM	8267	CE2	PHE	32	247.270	159.813	-13.481	1.00	88.24	IS9	ATOM	8320	N	GLY	38	252.091	151.318	-12.411	1.00	102.84	IS9
ATOM	8268	CZ	PHE	32	246.104	159.723	-12.730	1.00	88.24	IS9	ATOM	8321	CA	GLY	38	251.729	150.117	-13.138	1.00	102.84	IS9
ATOM	8269	C	PHE	32	250.815	159.339	-10.344	1.00	104.42	IS9	ATOM	8322	C	GLY	38	250.338	150.118	-13.743	1.00	102.84	IS9
ATOM	8270	O	PHE	32	250.373	158.244	-9.999	1.00	104.42	IS9	ATOM	8323	O	GLY	38	250.171	149.960	-14.952	1.00	102.84	IS9
ATOM	8271	N	ASN	33	251.844	159.482	-11.169	1.00	64.50	IS9	ATOM	8324	N	LEU	39	249.336	150.301	-12.895	1.00	71.55	IS9
ATOM	8272	CA	ASN	33	252.530	158.350	-11.765	1.00	64.50	IS9	ATOM	8325	CA	LEU	39	247.948	150.299	-13.325	1.00	71.55	IS9
ATOM	8273	CB	ASN	33	253.390	158.836	-12.933	1.00	100.56	IS9	ATOM	8326	CB	LEU	39	247.096	150.897	-12.211	1.00	66.72	IS9
ATOM	8274	CG	ASN	33	252.574	159.557	-13.996	1.00	100.56	IS9	ATOM	8327	CG	LEU	39	247.534	150.361	-10.845	1.00	66.72	IS9
ATOM	8275	OD1	ASN	33	251.765	160.433	-13.686	1.00	100.56	IS9	ATOM	8328	CD1	LEU	39	246.623	150.910	-9.763	1.00	66.72	IS9
ATOM	8276	ND2	ASN	33	252.790	159.196	-15.256	1.00	100.56	IS9	ATOM	8329	CD2	LEU	39	247.505	148.842	-10.850	1.00	66.72	IS9
ATOM	8277	C	ASN	33	253.382	157.607	-10.745	1.00	64.50	IS9	ATOM	8330	C	LEU	39	247.697	151.035	-14.640	1.00	71.55	IS9
ATOM	8278	O	ASN	33	254.290	156.864	-11.105	1.00	64.50	IS9	ATOM	8331	O	LEU	39	247.690	152.258	-14.674	1.00	71.55	IS9
ATOM	8279	N	GLU	34	253.094	157.806	-9.468	1.00	90.10	IS9	ATOM	8332	N	VAL	40	247.484	150.281	-15.717	1.00	66.27	IS9
ATOM	8280	CA	GLU	34	253.841	157.119	-8.432	1.00	90.10	IS9	ATOM	8333	CA	VAL	40	247.229	150.867	-17.032	1.00	66.27	IS9
ATOM	8281	CB	GLU	34	254.553	158.119	-7.522	1.00	147.20	IS9	ATOM	8334	CB	VAL	40	246.921	149.793	-18.098	1.00	63.49	IS9
ATOM	8282	CG	GLU	34	255.491	157.468	-6.517	1.00	147.20	IS9	ATOM	8335	CG1	VAL	40	246.765	150.451	-19.455	1.00	63.49	IS9
ATOM	8283	CD	GLU	34	256.697	156.813	-7.173	1.00	147.20	IS9	ATOM	8336	CG2	VAL	40	248.023	148.752	-18.143	1.00	63.49	IS9
ATOM	8284	OE1	GLU	34	256.505	156.020	-8.120	1.00	147.20	IS9	ATOM	8337	C	VAL	40	246.031	151.795	-16.973	1.00	66.27	IS9
ATOM	8285	OE2	GLU	34	257.834	157.088	-6.732	1.00	147.20	IS9	ATOM	8338	O	VAL	40	246.066	152.907	-17.493	1.00	66.27	IS9
ATOM	8286	C	GLU	34	252.868	156.279	-7.620	1.00	90.10	IS9	ATOM	8339	N	ARG	41	244.966	151.321	-16.338	1.00	82.30	IS9

ATOM	8340	CA	ARG	41	243.729	152.080	-16.200	1.00	82.30	IS9	ATOM	8393	CG	PRO	48	238.512	164.183	-15.322	1.00	69.26	IS9
ATOM	8341	CB	ARG	41	242.797	151.343	-15.236	1.00	75.15	IS9	ATOM	8394	C	PRO	48	238.622	166.327	-17.728	1.00	80.57	IS9
ATOM	8342	CG	ARG	41	241.358	151.826	-15.220	1.00	75.15	IS9	ATOM	8395	O	PRO	48	238.057	167.312	-18.208	1.00	80.57	IS9
ATOM	8343	CD	ARG	41	240.568	151.050	-14.176	1.00	75.15	IS9	ATOM	8396	N	LEU	49	239.921	166.300	-17.440	1.00	65.78	IS9
ATOM	8344	NE	ARG	41	239.164	151.443	-14.146	1.00	75.15	IS9	ATOM	8397	CA	LEU	49	240.796	167.443	-17.703	1.00	65.78	IS9
ATOM	8345	CZ	ARG	41	238.709	152.602	-13.675	1.00	75.15	IS9	ATOM	8398	CB	LEU	49	242.153	167.270	-17.025	1.00	72.46	IS9
ATOM	8346	NH1	ARG	41	239.548	153.507	-13.180	1.00	75.15	IS9	ATOM	8399	CG	LEU	49	242.331	167.835	-15.623	1.00	72.46	IS9
ATOM	8347	NH2	ARG	41	237.405	152.857	-13.708	1.00	75.15	IS9	ATOM	8400	CD1	LEU	49	243.760	167.589	-15.174	1.00	72.46	IS9
ATOM	8348	C	ARG	41	243.993	153.494	-15.683	1.00	82.30	IS9	ATOM	8401	CD2	LEU	49	242.010	169.323	-15.624	1.00	72.46	IS9
ATOM	8349	O	ARG	41	243.323	154.453	-16.078	1.00	82.30	IS9	ATOM	8402	C	LEU	49	241.026	167.562	-19.198	1.00	65.78	IS9
ATOM	8350	N	ALA	42	244.985	153.605	-14.805	1.00	69.88	IS9	ATOM	8403	O	LEU	49	240.817	168.619	-19.778	1.00	65.78	IS9
ATOM	8351	CA	ALA	42	245.353	154.871	-14.184	1.00	69.88	IS9	ATOM	8404	N	ARG	50	241.470	166.468	-19.808	1.00	85.71	IS9
ATOM	8352	CB	ALA	42	246.789	154.809	-13.699	1.00	72.28	IS9	ATOM	8405	CA	ARG	50	241.724	166.429	-21.240	1.00	85.71	IS9
ATOM	8353	C	ALA	42	245.149	156.116	-15.033	1.00	69.88	IS9	ATOM	8406	CB	ARG	50	242.053	165.002	-21.679	1.00	143.32	IS9
ATOM	8354	O	ALA	42	244.500	157.063	-14.594	1.00	69.88	IS9	ATOM	8407	CG	ARG	50	243.279	164.409	-21.024	1.00	143.32	IS9
ATOM	8355	N	VAL	43	245.699	156.130	-16.240	1.00	62.91	IS9	ATOM	8408	CD	ARG	50	243.299	162.895	-21.192	1.00	143.32	IS9
ATOM	8356	CA	VAL	43	245.551	157.305	-17.097	1.00	62.91	IS9	ATOM	8409	NE	ARG	50	244.455	162.294	-20.533	1.00	143.32	IS9
ATOM	8357	CB	VAL	43	245.784	156.970	-18.583	1.00	104.62	IS9	ATOM	8410	CZ	ARG	50	245.654	162.159	-21.093	1.00	143.32	IS9
ATOM	8358	CG1	VAL	43	245.627	158.235	-19.422	1.00	104.62	IS9	ATOM	8411	NH1	ARG	50	245.862	162.575	-22.338	1.00	143.32	IS9
ATOM	8359	CG2	VAL	43	247.173	156.363	-18.774	1.00	104.62	IS9	ATOM	8412	NH2	ARG	50	246.650	161.614	-20.403	1.00	143.32	IS9
ATOM	8360	C	VAL	43	244.165	157.924	-16.959	1.00	62.91	IS9	ATOM	8413	C	ARG	50	240.495	166.905	-22.004	1.00	85.71	IS9
ATOM	8361	O	VAL	43	244.015	158.984	-16.355	1.00	62.91	IS9	ATOM	8414	O	ARG	50	240.609	167.487	-23.083	1.00	85.71	IS9
ATOM	8362	N	ALA	44	243.157	157.261	-17.515	1.00	85.16	IS9	ATOM	8415	N	ALA	51	239.319	166.652	-21.437	1.00	75.79	IS9
ATOM	8363	CA	ALA	44	241.793	157.766	-17.433	1.00	85.16	IS9	ATOM	8416	CA	ALA	51	238.064	167.037	-22.072	1.00	75.79	IS9
ATOM	8364	CB	ALA	44	240.821	156.742	-17.980	1.00	82.88	IS9	ATOM	8417	CB	ALA	51	236.896	166.554	-21.249	1.00	36.04	IS9
ATOM	8365	C	ALA	44	241.488	158.056	-15.974	1.00	85.16	IS9	ATOM	8418	C	ALA	51	237.958	168.532	-22.269	1.00	75.79	IS9
ATOM	8366	O	ALA	44	241.247	157.147	-15.185	1.00	85.16	IS9	ATOM	8419	O	ALA	51	237.370	168.994	-23.249	1.00	75.79	IS9
ATOM	8367	N	ALA	45	241.519	159.335	-15.633	1.00	96.59	IS9	ATOM	8420	N	VAL	52	238.531	169.284	-21.334	1.00	120.34	IS9
ATOM	8368	CA	ALA	45	241.282	159.816	-14.278	1.00	96.59	IS9	ATOM	8421	CA	VAL	52	238.487	170.737	-21.390	1.00	120.34	IS9
ATOM	8369	CB	ALA	45	242.320	159.246	-13.313	1.00	34.42	IS9	ATOM	8422	CB	VAL	52	237.470	171.280	-20.355	1.00	65.87	IS9
ATOM	8370	C	ALA	45	241.496	161.304	-14.429	1.00	96.59	IS9	ATOM	8423	CG1	VAL	52	236.689	172.435	-20.946	1.00	65.87	IS9
ATOM	8371	O	ALA	45	241.124	162.109	-13.571	1.00	96.59	IS9	ATOM	8424	CG2	VAL	52	236.522	170.181	-19.932	1.00	65.87	IS9
ATOM	8372	N	LEU	46	242.120	161.642	-15.551	1.00	61.20	IS9	ATOM	8425	C	VAL	52	239.866	171.376	-21.151	1.00	120.34	IS9
ATOM	8373	CA	LEU	46	242.438	163.010	-15.902	1.00	61.20	IS9	ATOM	8426	O	VAL	52	239.961	172.492	-20.641	1.00	120.34	IS9
ATOM	8374	CB	LEU	46	243.950	163.170	-16.047	1.00	50.36	IS9	ATOM	8427	N	ASP	53	240.926	170.654	-21.517	1.00	87.73	IS9
ATOM	8375	CG	LEU	46	244.739	162.707	-14.813	1.00	50.36	IS9	ATOM	8428	CA	ASP	53	242.321	171.121	-21.388	1.00	87.73	IS9
ATOM	8376	CD1	LEU	46	246.194	162.428	-15.198	1.00	50.36	IS9	ATOM	8429	CB	ASP	53	242.440	172.477	-22.077	1.00	136.92	IS9
ATOM	8377	CD2	LEU	46	244.630	163.756	-13.703	1.00	50.36	IS9	ATOM	8430	CG	ASP	53	242.051	172.402	-23.546	1.00	136.92	IS9
ATOM	8378	C	LEU	46	241.752	163.294	-17.218	1.00	61.20	IS9	ATOM	8431	OD1	ASP	53	240.970	171.846	-23.844	1.00	136.92	IS9
ATOM	8379	O	LEU	46	241.910	164.371	-17.785	1.00	61.20	IS9	ATOM	8432	OD2	ASP	53	242.820	172.889	-24.401	1.00	136.92	IS9
ATOM	8380	N	GLU	47	240.993	162.318	-17.713	1.00	75.38	IS9	ATOM	8433	C	ASP	53	242.975	171.145	-19.988	1.00	87.73	IS9
ATOM	8381	CA	GLU	47	240.277	162.523	-18.959	1.00	75.38	IS9	ATOM	8434	O	ASP	53	242.597	171.915	-19.103	1.00	87.73	IS9
ATOM	8382	CB	GLU	47	239.469	161.286	-19.355	1.00	158.92	IS9	ATOM	8435	N	ALA	54	243.982	170.288	-19.826	1.00	112.03	IS9
ATOM	8383	CG	GLU	47	238.739	161.474	-20.682	1.00	158.92	IS9	ATOM	8436	CA	ALA	54	244.710	170.128	-18.570	1.00	112.03	IS9
ATOM	8384	CD	GLU	47	237.978	160.241	-21.134	1.00	158.92	IS9	ATOM	8437	CB	ALA	54	244.855	168.640	-18.262	1.00	123.81	IS9
ATOM	8385	OE1	GLU	47	237.181	159.704	-20.336	1.00	158.92	IS9	ATOM	8438	C	ALA	54	246.090	170.795	-18.549	1.00	112.03	IS9
ATOM	8386	OE2	GLU	47	238.171	159.814	-22.294	1.00	158.92	IS9	ATOM	8439	O	ALA	54	246.600	171.210	-19.592	1.00	112.03	IS9
ATOM	8387	C	GLU	47	239.348	163.724	-18.791	1.00	75.38	IS9	ATOM	8440	N	LEU	55	246.685	170.860	-17.352	1.00	115.61	IS9
ATOM	8388	O	GLU	47	239.180	164.509	-19.720	1.00	75.38	IS9	ATOM	8441	CA	LEU	55	247.999	171.476	-17.121	1.00	115.61	IS9
ATOM	8389	N	PRO	48	238.732	163.887	-17.602	1.00	80.57	IS9	ATOM	8442	CB	LEU	55	249.113	170.675	-17.807	1.00	101.01	IS9
ATOM	8390	CD	PRO	48	238.832	163.130	-16.340	1.00	69.26	IS9	ATOM	8443	CG	LEU	55	250.598	171.016	-17.556	1.00	101.01	IS9
ATOM	8391	CA	PRO	48	237.848	165.043	-17.437	1.00	80.57	IS9	ATOM	8444	CD1	LEU	55	250.797	172.520	-17.513	1.00	101.01	IS9
ATOM	8392	CB	PRO	48	237.393	164.928	-15.980	1.00	69.26	IS9	ATOM	8445	CD2	LEU	55	251.082	170.382	-16.261	1.00	101.01	IS9

ATOM	8446	C	LEU	55	247.975	172.895	-17.673	1.00115.61	IS9	ATOM	8499	N	ILE	62	245.802	166.210	-4.665	1.00 81.51	IS9
ATOM	8447	O	LEU	55	248.018	173.865	-16.912	1.00115.61	IS9	ATOM	8500	CA	ILE	62	244.779	165.203	-4.419	1.00 81.51	IS9
ATOM	8448	N	GLY	56	247.929	172.998	-19.002	1.00122.86	IS9	ATOM	8501	CB	ILE	62	244.584	164.339	-5.694	1.00100.91	IS9
ATOM	8449	CA	GLY	56	247.861	174.287	-19.668	1.00122.86	IS9	ATOM	8502	CG2	ILE	62	243.662	163.168	-5.410	1.00100.91	IS9
ATOM	8450	C	GLY	56	246.523	174.868	-19.272	1.00122.86	IS9	ATOM	8503	CG1	ILE	62	244.017	165.202	-6.824	1.00100.91	IS9
ATOM	8451	O	GLY	56	245.788	175.451	-20.072	1.00122.86	IS9	ATOM	8504	CD1	ILE	62	243.939	164.492	-8.159	1.00100.91	IS9
ATOM	8452	N	ARG	57	246.239	174.663	-17.993	1.00152.01	IS9	ATOM	8505	C	ILE	62	245.014	164.269	-3.236	1.00 81.51	IS9
ATOM	8453	CA	ARG	57	245.043	175.072	-17.293	1.00152.01	IS9	ATOM	8506	O	ILE	62	246.157	163.946	-2.891	1.00 81.51	IS9
ATOM	8454	CB	ARG	57	243.781	174.843	-18.144	1.00113.73	IS9	ATOM	8507	N	THR	63	243.901	163.842	-2.635	1.00 88.77	IS9
ATOM	8455	CG	ARG	57	243.357	176.035	-19.011	1.00113.73	IS9	ATOM	8508	CA	THR	63	243.894	162.916	-1.503	1.00 88.77	IS9
ATOM	8456	CD	ARG	57	242.742	177.153	-18.184	1.00113.73	IS9	ATOM	8509	CB	THR	63	243.466	163.612	-0.197	1.00134.55	IS9
ATOM	8457	NE	ARG	57	243.523	177.431	-16.983	1.00113.73	IS9	ATOM	8510	OG1	THR	63	244.437	164.600	0.164	1.00134.55	IS9
ATOM	8458	CZ	ARG	57	243.296	178.448	-16.160	1.00113.73	IS9	ATOM	8511	CG2	THR	63	243.335	162.591	0.927	1.00134.55	IS9
ATOM	8459	NH1	ARG	57	242.308	179.293	-16.411	1.00113.73	IS9	ATOM	8512	C	THR	63	242.887	161.793	-1.773	1.00 88.77	IS9
ATOM	8460	NH2	ARG	57	244.052	178.616	-15.082	1.00113.73	IS9	ATOM	8513	O	THR	63	241.810	162.047	-2.319	1.00 88.77	IS9
ATOM	8461	C	ARG	57	245.020	174.165	-16.064	1.00152.01	IS9	ATOM	8514	N	VAL	64	243.240	160.564	-1.389	1.00 60.09	IS9
ATOM	8462	O	ARG	57	244.713	172.974	-16.164	1.00152.01	IS9	ATOM	8515	CA	VAL	64	242.367	159.401	-1.568	1.00 60.09	IS9
ATOM	8463	N	PHE	58	245.380	174.730	-14.916	1.00 92.72	IS9	ATOM	8516	CB	VAL	64	242.753	158.555	-2.799	1.00 56.96	IS9
ATOM	8464	CA	PHE	58	245.383	174.014	-13.641	1.00 92.72	IS9	ATOM	8517	CG1	VAL	64	242.353	159.269	-4.084	1.00 56.96	IS9
ATOM	8465	CB	PHE	58	244.050	173.287	-13.398	1.00 81.67	IS9	ATOM	8518	CG2	VAL	64	244.241	158.266	-2.781	1.00 56.96	IS9
ATOM	8466	CG	PHE	58	242.836	174.098	-13.722	1.00 81.67	IS9	ATOM	8519	C	VAL	64	242.418	158.470	-0.372	1.00 60.09	IS9
ATOM	8467	CD1	PHE	58	242.369	174.184	-15.029	1.00 81.67	IS9	ATOM	8520	O	VAL	64	243.489	158.046	0.044	1.00 60.09	IS9
ATOM	8468	CD2	PHE	58	242.153	174.775	-12.722	1.00 81.67	IS9	ATOM	8521	N	ARG	65	241.253	158.146	0.172	1.00 76.15	IS9
ATOM	8469	CE1	PHE	58	241.242	174.931	-15.344	1.00 81.67	IS9	ATOM	8522	CA	ARG	65	241.157	157.246	1.315	1.00 76.15	IS9
ATOM	8470	CE2	PHE	58	241.019	175.529	-13.023	1.00 81.67	IS9	ATOM	8523	CB	ARG	65	240.790	158.025	2.578	1.00138.65	IS9
ATOM	8471	CZ	PHE	58	240.564	175.605	-14.341	1.00 81.67	IS9	ATOM	8524	CG	ARG	65	241.787	159.079	3.010	1.00138.65	IS9
ATOM	8472	C	PHE	58	246.480	172.991	-13.401	1.00 92.72	IS9	ATOM	8525	CD	ARG	65	241.143	160.014	4.031	1.00138.65	IS9
ATOM	8473	O	PHE	58	247.086	172.434	-14.317	1.00 92.72	IS9	ATOM	8526	NE	ARG	65	241.957	160.204	5.229	1.00138.65	IS9
ATOM	8474	N	ASP	59	246.679	172.757	-12.114	1.00101.90	IS9	ATOM	8527	CZ	ARG	65	242.229	159.247	6.112	1.00138.65	IS9
ATOM	8475	CA	ASP	59	247.614	171.802	-11.551	1.00101.90	IS9	ATOM	8528	NH1	ARG	65	241.753	158.019	5.937	1.00138.65	IS9
ATOM	8476	CB	ASP	59	248.726	172.528	-10.798	1.00166.25	IS9	ATOM	8529	NH2	ARG	65	242.978	159.517	7.174	1.00138.65	IS9
ATOM	8477	CG	ASP	59	249.363	171.666	-9.733	1.00166.25	IS9	ATOM	8530	C	ARG	65	240.060	156.217	1.041	1.00 76.15	IS9
ATOM	8478	OD1	ASP	59	249.655	170.486	-10.028	1.00166.25	IS9	ATOM	8531	O	ARG	65	238.951	156.579	0.612	1.00 76.15	IS9
ATOM	8479	OD2	ASP	59	249.574	172.168	-8.605	1.00166.25	IS9	ATOM	8532	N	GLY	66	240.368	154.942	1.268	1.00 62.13	IS9
ATOM	8480	C	ASP	59	246.661	171.131	-10.574	1.00101.90	IS9	ATOM	8533	CA	GLY	66	239.373	153.898	1.072	1.00 62.13	IS9
ATOM	8481	O	ASP	59	245.530	171.598	-10.424	1.00101.90	IS9	ATOM	8534	C	GLY	66	239.293	153.168	-0.261	1.00 62.13	IS9
ATOM	8482	N	ALA	60	247.065	170.064	-9.898	1.00 78.64	IS9	ATOM	8535	O	GLY	66	239.581	153.713	-1.323	1.00 62.13	IS9
ATOM	8483	CA	ALA	60	246.111	169.447	-8.985	1.00 78.64	IS9	ATOM	8536	N	GLY	67	238.873	151.912	-0.190	1.00 62.15	IS9
ATOM	8484	CB	ALA	60	245.163	168.532	-9.769	1.00 47.96	IS9	ATOM	8537	CA	GLY	67	238.741	151.105	-1.380	1.00 62.15	IS9
ATOM	8485	C	ALA	60	246.684	168.698	-7.798	1.00 78.64	IS9	ATOM	8538	C	GLY	67	240.055	150.571	-1.904	1.00 62.15	IS9
ATOM	8486	O	ALA	60	247.554	167.838	-7.933	1.00 78.64	IS9	ATOM	8539	O	GLY	67	240.843	149.972	-1.182	1.00 62.15	IS9
ATOM	8487	N	TYR	61	246.179	169.043	-6.624	1.00 94.91	IS9	ATOM	8540	N	GLY	68	240.279	150.777	-3.190	1.00 62.65	IS9
ATOM	8488	CA	TYR	61	246.600	168.391	-5.402	1.00 94.91	IS9	ATOM	8541	CA	GLY	68	241.498	150.314	-3.816	1.00 62.65	IS9
ATOM	8489	CB	TYR	61	246.760	169.417	-4.285	1.00 55.80	IS9	ATOM	8542	C	GLY	68	241.767	151.237	-4.980	1.00 62.65	IS9
ATOM	8490	CG	TYR	61	247.199	168.810	-2.980	1.00 55.80	IS9	ATOM	8543	O	GLY	68	240.863	151.931	-5.456	1.00 62.65	IS9
ATOM	8491	CD1	TYR	61	248.381	168.083	-2.893	1.00 55.80	IS9	ATOM	8544	N	LYS	69	243.014	151.274	-5.426	1.00 68.84	IS9
ATOM	8492	CE1	TYR	61	248.774	167.513	-1.689	1.00 55.80	IS9	ATOM	8545	CA	LYS	69	243.382	152.111	-6.549	1.00 68.84	IS9
ATOM	8493	CD2	TYR	61	246.422	168.955	-1.830	1.00 55.80	IS9	ATOM	8546	CB	LYS	69	244.866	151.895	-6.837	1.00 66.81	IS9
ATOM	8494	CE2	TYR	61	246.804	168.392	-0.625	1.00 55.80	IS9	ATOM	8547	CG	LYS	69	245.715	152.145	-5.588	1.00 66.81	IS9
ATOM	8495	CZ	TYR	61	247.975	167.672	-0.559	1.00 55.80	IS9	ATOM	8548	CD	LYS	69	247.191	151.829	-5.770	1.00 66.81	IS9
ATOM	8496	OH	TYR	61	248.327	167.089	0.632	1.00 55.80	IS9	ATOM	8549	CE	LYS	69	247.949	152.172	-4.490	1.00 66.81	IS9
ATOM	8497	C	TYR	61	245.465	167.422	-5.103	1.00 94.91	IS9	ATOM	8550	NZ	LYS	69	249.415	151.909	-4.552	1.00 66.81	IS9
ATOM	8498	O	TYR	61	244.294	167.770	-5.273	1.00 94.91	IS9	ATOM	8551	C	LYS	69	242.475	151.646	-7.684	1.00 68.84	IS9

ATOM	8552	O	LYS	69	242.015	150.513	-7.663	1.00	68.84	IS9	ATOM	8605	CD	LYS	77	237.503	159.528	-14.931	1.00	94.75	IS9
ATOM	8553	N	SER	70	242.201	152.512	-8.654	1.00	72.37	IS9	ATOM	8606	CE	LYS	77	236.133	158.868	-14.814	1.00	94.75	IS9
ATOM	8554	CA	SER	70	241.290	152.190	-9.774	1.00	72.37	IS9	ATOM	8607	NZ	LYS	77	235.561	158.527	-16.150	1.00	94.75	IS9
ATOM	8555	CB	SER	70	241.362	150.709	-10.199	1.00	60.95	IS9	ATOM	8608	C	LYS	77	236.559	162.577	-11.450	1.00	63.16	IS9
ATOM	8556	OG	SER	70	240.279	149.954	-9.680	1.00	60.95	IS9	ATOM	8609	O	LYS	77	236.428	163.693	-11.967	1.00	63.16	IS9
ATOM	8557	C	SER	70	239.889	152.524	-9.269	1.00	72.37	IS9	ATOM	8610	N	LEU	78	235.712	162.089	-10.548	1.00	92.21	IS9
ATOM	8558	O	SER	70	239.046	153.037	-10.006	1.00	72.37	IS9	ATOM	8611	CA	LEU	78	234.563	162.861	-10.108	1.00	92.21	IS9
ATOM	8559	N	GLY	71	239.642	152.210	-8.004	1.00	53.92	IS9	ATOM	8612	CB	LEU	78	233.779	162.111	-9.034	1.00	49.65	IS9
ATOM	8560	CA	GLY	71	238.378	152.565	-7.420	1.00	53.92	IS9	ATOM	8613	CG	LEU	78	232.268	162.007	-9.289	1.00	49.65	IS9
ATOM	8561	C	GLY	71	238.624	154.038	-7.158	1.00	53.92	IS9	ATOM	8614	CD1	LEU	78	231.603	161.589	-7.982	1.00	49.65	IS9
ATOM	8562	O	GLY	71	237.792	154.901	-7.454	1.00	53.92	IS9	ATOM	8615	CD2	LEU	78	231.688	163.329	-9.803	1.00	49.65	IS9
ATOM	8563	N	GLN	72	239.809	154.319	-6.621	1.00	63.76	IS9	ATOM	8616	C	LEU	78	235.029	164.188	-9.554	1.00	92.21	IS9
ATOM	8564	CA	GLN	72	240.221	155.680	-6.316	1.00	63.76	IS9	ATOM	8617	O	LEU	78	234.520	165.240	-9.942	1.00	92.21	IS9
ATOM	8565	CB	GLN	72	241.532	155.658	-5.538	1.00	49.42	IS9	ATOM	8618	N	GLY	79	235.996	164.133	-8.641	1.00	71.96	IS9
ATOM	8566	CG	GLN	72	241.464	154.750	-4.323	1.00	49.42	IS9	ATOM	8619	CA	GLY	79	236.520	165.355	-8.063	1.00	71.96	IS9
ATOM	8567	CD	GLN	72	242.729	154.780	-3.487	1.00	49.42	IS9	ATOM	8620	C	GLY	79	236.937	166.307	-9.167	1.00	71.96	IS9
ATOM	8568	OE1	GLN	72	243.833	154.760	-4.024	1.00	49.42	IS9	ATOM	8621	O	GLY	79	236.385	167.406	-9.298	1.00	71.96	IS9
ATOM	8569	NE2	GLN	72	242.572	154.810	-2.163	1.00	49.42	IS9	ATOM	8622	N	ILE	80	237.905	165.873	-9.970	1.00	57.29	IS9
ATOM	8570	C	GLN	72	240.384	156.486	-7.603	1.00	63.76	IS9	ATOM	8623	CA	ILE	80	238.402	166.673	-11.077	1.00	57.29	IS9
ATOM	8571	O	GLN	72	240.086	157.684	-7.640	1.00	63.76	IS9	ATOM	8624	CB	ILE	80	239.315	165.827	-12.015	1.00	47.19	IS9
ATOM	8572	N	ILE	73	240.860	155.830	-8.658	1.00	61.77	IS9	ATOM	8625	CG2	ILE	80	239.580	166.570	-13.332	1.00	47.19	IS9
ATOM	8573	CA	ILE	73	241.024	156.496	-9.946	1.00	61.77	IS9	ATOM	8626	CG1	ILE	80	240.636	165.530	-11.298	1.00	47.19	IS9
ATOM	8574	CB	ILE	73	241.367	155.503	-11.053	1.00	49.22	IS9	ATOM	8627	CD1	ILE	80	241.713	165.004	-12.185	1.00	47.19	IS9
ATOM	8575	CG2	ILE	73	241.325	156.185	-12.399	1.00	49.22	IS9	ATOM	8628	C	ILE	80	237.230	167.248	-11.857	1.00	57.29	IS9
ATOM	8576	CG1	ILE	73	242.745	154.911	-10.822	1.00	49.22	IS9	ATOM	8629	O	ILE	80	237.172	168.451	-12.113	1.00	57.29	IS9
ATOM	8577	CD1	ILE	73	243.107	153.884	-11.885	1.00	49.22	IS9	ATOM	8630	N	ALA	81	236.286	166.389	-12.219	1.00	66.43	IS9
ATOM	8578	C	ILE	73	239.702	157.141	-10.336	1.00	61.77	IS9	ATOM	8631	CA	ALA	81	235.114	166.837	-12.958	1.00	66.43	IS9
ATOM	8579	O	ILE	73	239.653	158.295	-10.771	1.00	61.77	IS9	ATOM	8632	CB	ALA	81	234.139	165.686	-13.140	1.00	112.21	IS9
ATOM	8580	N	ASP	74	238.628	156.373	-10.179	1.00	78.67	IS9	ATOM	8633	C	ALA	81	234.438	167.980	-12.206	1.00	66.43	IS9
ATOM	8581	CA	ASP	74	237.294	156.839	-10.523	1.00	78.67	IS9	ATOM	8634	O	ALA	81	234.354	169.103	-12.705	1.00	66.43	IS9
ATOM	8582	CB	ASP	74	236.294	155.685	-10.432	1.00	122.45	IS9	ATOM	8635	N	ARG	82	233.963	167.688	-11.003	1.00	86.57	IS9
ATOM	8583	CG	ASP	74	236.456	154.680	-11.560	1.00	122.45	IS9	ATOM	8636	CA	ARG	82	233.297	168.690	-10.184	1.00	86.57	IS9
ATOM	8584	OD1	ASP	74	236.255	155.063	-12.734	1.00	122.45	IS9	ATOM	8637	CB	ARG	82	232.965	168.095	-8.818	1.00	92.11	IS9
ATOM	8585	OD2	ASP	74	236.784	153.509	-11.273	1.00	122.45	IS9	ATOM	8638	CG	ARG	82	231.826	167.091	-8.866	1.00	92.11	IS9
ATOM	8586	C	ASP	74	236.823	158.012	-9.672	1.00	78.67	IS9	ATOM	8639	CD	ARG	82	231.705	166.333	-7.563	1.00	92.11	IS9
ATOM	8587	O	ASP	74	236.251	158.969	-10.195	1.00	78.67	IS9	ATOM	8640	NE	ARG	82	230.389	165.719	-7.416	1.00	92.11	IS9
ATOM	8588	N	ALA	75	237.050	157.944	-8.366	1.00	65.67	IS9	ATOM	8641	CZ	ARG	82	229.977	165.096	-6.315	1.00	92.11	IS9
ATOM	8589	CA	ALA	75	236.640	159.040	-7.501	1.00	65.67	IS9	ATOM	8642	NH1	ARG	82	230.787	165.002	-5.266	1.00	92.11	IS9
ATOM	8590	CB	ALA	75	236.970	158.725	-6.066	1.00	27.25	IS9	ATOM	8643	NH2	ARG	82	228.750	164.588	-6.253	1.00	92.11	IS9
ATOM	8591	C	ALA	75	237.398	160.280	-7.952	1.00	65.67	IS9	ATOM	8644	C	ARG	82	234.140	169.952	-10.023	1.00	86.57	IS9
ATOM	8592	O	ALA	75	236.810	161.352	-8.158	1.00	65.67	IS9	ATOM	8645	O	ARG	82	233.664	171.066	-10.270	1.00	86.57	IS9
ATOM	8593	N	ILE	76	238.710	160.115	-8.109	1.00	55.90	IS9	ATOM	8646	N	ALA	83	235.393	169.778	-9.614	1.00	75.30	IS9
ATOM	8594	CA	ILE	76	239.571	161.196	-8.551	1.00	55.90	IS9	ATOM	8647	CA	ALA	83	236.291	170.916	-9.436	1.00	75.30	IS9
ATOM	8595	CB	ILE	76	240.976	160.678	-8.896	1.00	53.00	IS9	ATOM	8648	CB	ALA	83	237.679	170.438	-9.057	1.00	68.13	IS9
ATOM	8596	CG2	ILE	76	241.807	161.801	-9.490	1.00	53.00	IS9	ATOM	8649	C	ALA	83	236.362	171.779	-10.694	1.00	75.30	IS9
ATOM	8597	CG1	ILE	76	241.650	160.129	-7.638	1.00	53.00	IS9	ATOM	8650	O	ALA	83	236.825	172.912	-10.647	1.00	75.30	IS9
ATOM	8598	CD1	ILE	76	243.061	159.627	-7.865	1.00	53.00	IS9	ATOM	8651	N	LEU	84	235.929	171.243	-11.827	1.00	94.98	IS9
ATOM	8599	C	ILE	76	238.966	161.872	-9.779	1.00	55.90	IS9	ATOM	8652	CA	LEU	84	235.938	172.036	-13.041	1.00	94.98	IS9
ATOM	8600	O	ILE	76	239.074	163.084	-9.935	1.00	55.90	IS9	ATOM	8653	CB	LEU	84	236.071	171.157	-14.282	1.00	102.41	IS9
ATOM	8601	N	LYS	77	238.336	161.089	-10.652	1.00	63.16	IS9	ATOM	8654	CG	LEU	84	237.507	171.080	-14.811	1.00	102.41	IS9
ATOM	8602	CA	LYS	77	237.708	161.655	-11.841	1.00	63.16	IS9	ATOM	8655	CD1	LEU	84	238.343	170.195	-13.907	1.00	102.41	IS9
ATOM	8603	CB	LYS	77	237.127	160.566	-12.733	1.00	94.75	IS9	ATOM	8656	CD2	LEU	84	237.510	170.544	-16.231	1.00	102.41	IS9
ATOM	8604	CG	LYS	77	238.113	159.815	-13.568	1.00	94.75	IS9	ATOM	8657	C	LEU	84	234.659	172.858	-13.099	1.00	94.98	IS9

ATOM	8658	O	LEU	84	234.684	174.004	-13.540	1.00 94.98	IS9
ATOM	8659	N	VAL	85	233.546	172.274	-12.653	1.00114.05	IS9
ATOM	8660	CA	VAL	85	232.266	172.985	-12.621	1.00114.05	IS9
ATOM	8661	CB	VAL	85	231.137	172.098	-12.076	1.00107.46	IS9
ATOM	8662	CG1	VAL	85	229.845	172.906	-11.961	1.00107.46	IS9
ATOM	8663	CG2	VAL	85	230.946	170.908	-12.986	1.00107.46	IS9
ATOM	8664	C	VAL	85	232.472	174.157	-11.669	1.00114.05	IS9
ATOM	8665	O	VAL	85	231.991	175.272	-11.903	1.00114.05	IS9
ATOM	8666	N	GLN	86	233.177	173.871	-10.575	1.00135.99	IS9
ATOM	8667	CA	GLN	86	233.537	174.886	-9.596	1.00135.99	IS9
ATOM	8668	CB	GLN	86	234.254	174.251	-8.407	1.00113.91	IS9
ATOM	8669	CG	GLN	86	233.426	174.114	-7.149	1.00113.91	IS9
ATOM	8670	CD	GLN	86	233.571	175.308	-6.229	1.00113.91	IS9
ATOM	8671	OE1	GLN	86	233.173	176.424	-6.569	1.00113.91	IS9
ATOM	8672	NE2	GLN	86	234.152	175.079	-5.054	1.00113.91	IS9
ATOM	8673	C	GLN	86	234.542	175.660	-10.420	1.00135.99	IS9
ATOM	8674	O	GLN	86	235.032	175.138	-11.419	1.00135.99	IS9
ATOM	8675	N	TYR	87	234.868	176.881	-10.027	1.00140.29	IS9
ATOM	8676	CA	TYR	87	235.825	177.650	-10.811	1.00140.29	IS9
ATOM	8677	CB	TYR	87	237.053	176.788	-11.150	1.00111.46	IS9
ATOM	8678	CG	TYR	87	237.998	177.434	-12.132	1.00111.46	IS9
ATOM	8679	CD1	TYR	87	239.138	178.108	-11.693	1.00111.46	IS9
ATOM	8680	CE1	TYR	87	239.977	178.758	-12.589	1.00111.46	IS9
ATOM	8681	CD2	TYR	87	237.721	177.423	-13.501	1.00111.46	IS9
ATOM	8682	CE2	TYR	87	238.548	178.071	-14.406	1.00111.46	IS9
ATOM	8683	CZ	TYR	87	239.674	178.737	-13.946	1.00111.46	IS9
ATOM	8684	OH	TYR	87	240.495	179.388	-14.839	1.00111.46	IS9
ATOM	8685	C	TYR	87	235.145	178.096	-12.105	1.00140.29	IS9
ATOM	8686	O	TYR	87	235.157	179.279	-12.446	1.00140.29	IS9
ATOM	8687	N	ASN	88	234.559	177.143	-12.824	1.00104.70	IS9
ATOM	8688	CA	ASN	88	233.886	177.449	-14.076	1.00104.70	IS9
ATOM	8689	CB	ASN	88	234.876	177.390	-15.239	1.00 81.37	IS9
ATOM	8690	CG	ASN	88	234.229	177.749	-16.573	1.00 81.37	IS9
ATOM	8691	OD1	ASN	88	233.040	177.503	-16.785	1.00 81.37	IS9
ATOM	8692	ND2	ASN	88	235.014	178.321	-17.484	1.00 81.37	IS9
ATOM	8693	C	ASN	88	232.729	176.515	-14.401	1.00104.70	IS9
ATOM	8694	O	ASN	88	232.902	175.304	-14.471	1.00104.70	IS9
ATOM	8695	N	PRO	89	231.524	177.066	-14.597	1.00 91.39	IS9
ATOM	8696	CD	PRO	89	231.069	178.419	-14.232	1.00 94.16	IS9
ATOM	8697	CA	PRO	89	230.386	176.208	-14.930	1.00 91.39	IS9
ATOM	8698	CB	PRO	89	229.190	177.053	-14.505	1.00 94.16	IS9
ATOM	8699	CG	PRO	89	229.660	178.443	-14.780	1.00 94.16	IS9
ATOM	8700	C	PRO	89	230.410	175.911	-16.439	1.00 91.39	IS9
ATOM	8701	O	PRO	89	229.611	176.443	-17.214	1.00 91.39	IS9
ATOM	8702	N	ASP	90	231.356	175.071	-16.848	1.00113.77	IS9
ATOM	8703	CA	ASP	90	231.510	174.696	-18.250	1.00113.77	IS9
ATOM	8704	CB	ASP	90	232.942	174.997	-18.725	1.00122.96	IS9
ATOM	8705	CG	ASP	90	234.001	174.135	-18.027	1.00122.96	IS9
ATOM	8706	OD1	ASP	90	233.905	173.944	-16.797	1.00122.96	IS9
ATOM	8707	OD2	ASP	90	234.940	173.666	-18.711	1.00122.96	IS9
ATOM	8708	C	ASP	90	231.207	173.216	-18.435	1.00113.77	IS9
ATOM	8709	O	ASP	90	231.406	172.660	-19.515	1.00113.77	IS9
ATOM	8710	N	TYR	91	230.716	172.585	-17.374	1.00128.60	IS9
ATOM	8711	CA	TYR	91	230.409	171.167	-17.419	1.00128.60	IS9
ATOM	8712	CB	TYR	91	229.828	170.708	-16.080	1.00185.78	IS9
ATOM	8713	CG	TYR	91	228.421	171.174	-15.776	1.00185.78	IS9
ATOM	8714	CD1	TYR	91	227.327	170.680	-16.489	1.00185.78	IS9
ATOM	8715	CE1	TYR	91	226.030	171.067	-16.175	1.00185.78	IS9
ATOM	8716	CD2	TYR	91	228.178	172.075	-14.739	1.00185.78	IS9
ATOM	8717	CE2	TYR	91	226.885	172.469	-14.415	1.00185.78	IS9
ATOM	8718	CZ	TYR	91	225.818	171.961	-15.136	1.00185.78	IS9
ATOM	8719	OH	TYR	91	224.539	172.348	-14.815	1.00185.78	IS9
ATOM	8720	C	TYR	91	229.466	170.804	-18.554	1.00128.60	IS9
ATOM	8721	O	TYR	91	229.417	169.649	-18.974	1.00128.60	IS9
ATOM	8722	N	ARG	92	228.718	171.786	-19.049	1.00 79.14	IS9
ATOM	8723	CA	ARG	92	227.793	171.545	-20.153	1.00 79.14	IS9
ATOM	8724	CB	ARG	92	227.350	172.853	-20.800	1.00193.82	IS9
ATOM	8725	CG	ARG	92	226.626	173.832	-19.911	1.00193.82	IS9
ATOM	8726	CD	ARG	92	226.046	174.925	-20.794	1.00193.82	IS9
ATOM	8727	NE	ARG	92	225.518	176.064	-20.054	1.00193.82	IS9
ATOM	8728	CZ	ARG	92	224.933	177.111	-20.629	1.00193.82	IS9
ATOM	8729	NH1	ARG	92	224.802	177.155	-21.950	1.00193.82	IS9
ATOM	8730	NH2	ARG	92	224.486	178.116	-19.886	1.00193.82	IS9
ATOM	8731	C	ARG	92	228.493	170.719	-21.217	1.00 79.14	IS9
ATOM	8732	O	ARG	92	227.848	170.073	-22.040	1.00 79.14	IS9
ATOM	8733	N	ALA	93	229.822	170.756	-21.197	1.00 93.59	IS9
ATOM	8734	CA	ALA	93	230.631	170.022	-22.159	1.00 93.59	IS9
ATOM	8735	CB	ALA	93	231.929	170.779	-22.440	1.00 58.44	IS9
ATOM	8736	C	ALA	93	230.958	168.617	-21.691	1.00 93.59	IS9
ATOM	8737	O	ALA	93	230.958	167.686	-22.491	1.00 93.59	IS9
ATOM	8738	N	LYS	94	231.248	168.455	-20.405	1.00111.20	IS9
ATOM	8739	CA	LYS	94	231.590	167.134	-19.915	1.00111.20	IS9
ATOM	8740	CB	LYS	94	232.929	167.175	-19.184	1.00 94.03	IS9
ATOM	8741	CG	LYS	94	233.044	168.201	-18.086	1.00 94.03	IS9
ATOM	8742	CD	LYS	94	234.413	168.064	-17.448	1.00 94.03	IS9
ATOM	8743	CE	LYS	94	234.526	168.859	-16.160	1.00 94.03	IS9
ATOM	8744	NZ	LYS	94	235.757	168.479	-15.396	1.00 94.03	IS9
ATOM	8745	C	LYS	94	230.540	166.436	-19.058	1.00111.20	IS9
ATOM	8746	O	LYS	94	230.849	165.471	-18.354	1.00111.20	IS9
ATOM	8747	N	LEU	95	229.302	166.918	-19.115	1.00 98.88	IS9
ATOM	8748	CA	LEU	95	228.218	166.283	-18.375	1.00 98.88	IS9
ATOM	8749	CB	LEU	95	227.349	167.301	-17.627	1.00130.94	IS9
ATOM	8750	CG	LEU	95	226.090	166.758	-16.911	1.00130.94	IS9
ATOM	8751	CD1	LEU	95	224.880	166.731	-17.845	1.00130.94	IS9
ATOM	8752	CD2	LEU	95	226.383	165.362	-16.353	1.00130.94	IS9
ATOM	8753	C	LEU	95	227.367	165.566	-19.396	1.00 98.88	IS9
ATOM	8754	O	LEU	95	227.500	164.360	-19.572	1.00 98.88	IS9
ATOM	8755	N	LYS	96	226.507	166.325	-20.073	1.00157.54	IS9
ATOM	8756	CA	LYS	96	225.619	165.778	-21.093	1.00157.54	IS9
ATOM	8757	CB	LYS	96	225.338	166.820	-22.179	1.00141.65	IS9
ATOM	8758	CG	LYS	96	224.825	168.157	-21.670	1.00141.65	IS9
ATOM	8759	CD	LYS	96	224.608	169.132	-22.823	1.00141.65	IS9
ATOM	8760	CE	LYS	96	223.608	168.586	-23.835	1.00141.65	IS9
ATOM	8761	NZ	LYS	96	223.413	169.517	-24.978	1.00141.65	IS9
ATOM	8762	C	LYS	96	226.309	164.575	-21.711	1.00157.54	IS9
ATOM	8763	O	LYS	96	225.707	163.515	-21.876	1.00157.54	IS9

ATOM	8764	N	PRO	97	227.594	164.729	-22.067	1.00 92.15	IS9	ATOM	8817	NH2	ARG	103	230.499	155.468	-4.091	1.00 63.48	IS9
ATOM	8765	CD	PRO	97	228.303	165.989	-22.360	1.00124.20	IS9	ATOM	8818	C	ARG	103	227.941	157.593	-9.709	1.00 92.26	IS9
ATOM	8766	CA	PRO	97	228.313	163.607	-22.659	1.00 92.15	IS9	ATOM	8819	O	ARG	103	226.885	157.367	-9.118	1.00 92.26	IS9
ATOM	8767	CB	PRO	97	228.949	164.245	-23.876	1.00124.20	IS9	ATOM	8820	N	ASP	104	228.511	156.703	-10.516	1.00 88.99	IS9
ATOM	8768	CG	PRO	97	229.444	165.527	-23.286	1.00124.20	IS9	ATOM	8821	CA	ASP	104	227.877	155.402	-10.687	1.00 88.99	IS9
ATOM	8769	C	PRO	97	229.356	163.110	-21.665	1.00 92.15	IS9	ATOM	8822	CB	ASP	104	228.677	154.509	-11.631	1.00 96.85	IS9
ATOM	8770	O	PRO	97	229.794	163.863	-20.796	1.00 92.15	IS9	ATOM	8823	CG	ASP	104	229.919	153.968	-10.993	1.00 96.85	IS9
ATOM	8771	N	LEU	98	229.757	161.849	-21.803	1.00106.30	IS9	ATOM	8824	OD1	ASP	104	230.705	154.780	-10.471	1.00 96.85	IS9
ATOM	8772	CA	LEU	98	230.758	161.250	-20.928	1.00106.30	IS9	ATOM	8825	OD2	ASP	104	230.111	152.736	-11.014	1.00 96.85	IS9
ATOM	8773	CB	LEU	98	232.158	161.756	-21.319	1.00101.21	IS9	ATOM	8826	C	ASP	104	227.816	154.794	-9.299	1.00 88.99	IS9
ATOM	8774	CG	LEU	98	232.318	163.140	-21.976	1.00101.21	IS9	ATOM	8827	O	ASP	104	228.829	154.694	-8.613	1.00 88.99	IS9
ATOM	8775	CD1	LEU	98	233.772	163.549	-21.989	1.00101.21	IS9	ATOM	8828	N	ALA	105	226.618	154.408	-8.881	1.00 69.25	IS9
ATOM	8776	CD2	LEU	98	231.801	163.107	-23.400	1.00101.21	IS9	ATOM	8829	CA	ALA	105	226.428	153.854	-7.551	1.00 69.25	IS9
ATOM	8777	C	LEU	98	230.493	161.511	-19.442	1.00106.30	IS9	ATOM	8830	CB	ALA	105	225.113	154.352	-6.984	1.00 95.78	IS9
ATOM	8778	O	LEU	98	231.297	161.141	-18.592	1.00106.30	IS9	ATOM	8831	C	ALA	105	226.459	152.338	-7.505	1.00 69.25	IS9
ATOM	8779	N	GLY	99	229.355	162.137	-19.148	1.00107.21	IS9	ATOM	8832	O	ALA	105	225.802	151.737	-6.656	1.00 69.25	IS9
ATOM	8780	CA	GLY	99	228.962	162.464	-17.784	1.00107.21	IS9	ATOM	8833	N	ARG	106	227.232	151.719	-8.390	1.00 85.66	IS9
ATOM	8781	C	GLY	99	229.906	162.133	-16.642	1.00107.21	IS9	ATOM	8834	CA	ARG	106	227.275	150.270	-8.419	1.00 85.66	IS9
ATOM	8782	O	GLY	99	229.608	161.256	-15.828	1.00107.21	IS9	ATOM	8835	CB	ARG	106	228.253	149.812	-9.488	1.00 67.27	IS9
ATOM	8783	N	PHE	100	231.041	162.827	-16.572	1.00 74.93	IS9	ATOM	8836	CG	ARG	106	227.630	150.070	-10.861	1.00 67.27	IS9
ATOM	8784	CA	PHE	100	232.003	162.589	-15.496	1.00 74.93	IS9	ATOM	8837	CD	ARG	106	228.307	149.329	-11.968	1.00 67.27	IS9
ATOM	8785	CB	PHE	100	233.308	163.338	-15.750	1.00 75.81	IS9	ATOM	8838	NE	ARG	106	229.536	149.996	-12.362	1.00 67.27	IS9
ATOM	8786	CG	PHE	100	234.073	162.837	-16.929	1.00 75.81	IS9	ATOM	8839	CZ	ARG	106	230.527	149.403	-13.018	1.00 67.27	IS9
ATOM	8787	CD1	PHE	100	234.183	163.607	-18.079	1.00 75.81	IS9	ATOM	8840	NH1	ARG	106	230.424	148.120	-13.350	1.00 67.27	IS9
ATOM	8788	CD2	PHE	100	234.702	161.601	-16.889	1.00 75.81	IS9	ATOM	8841	NH2	ARG	106	231.621	150.090	-13.338	1.00 67.27	IS9
ATOM	8789	CE1	PHE	100	234.912	163.152	-19.168	1.00 75.81	IS9	ATOM	8842	C	ARG	106	227.485	149.600	-7.065	1.00 85.66	IS9
ATOM	8790	CE2	PHE	100	235.433	161.140	-17.979	1.00 75.81	IS9	ATOM	8843	O	ARG	106	226.507	149.114	-6.498	1.00 85.66	IS9
ATOM	8791	CZ	PHE	100	235.537	161.919	-19.119	1.00 75.81	IS9	ATOM	8844	N	VAL	107	228.700	149.537	-6.532	1.00 43.98	IS9
ATOM	8792	C	PHE	100	231.388	163.094	-14.205	1.00 74.93	IS9	ATOM	8845	CA	VAL	107	228.858	148.946	-5.191	1.00 43.98	IS9
ATOM	8793	O	PHE	100	231.842	162.774	-13.101	1.00 74.93	IS9	ATOM	8846	CB	VAL	107	227.897	149.641	-4.187	1.00 38.28	IS9
ATOM	8794	N	LEU	101	230.337	163.884	-14.358	1.00 69.45	IS9	ATOM	8847	CG1	VAL	107	227.884	148.910	-2.858	1.00 38.28	IS9
ATOM	8795	CA	LEU	101	229.659	164.447	-13.215	1.00 69.45	IS9	ATOM	8848	CG2	VAL	107	228.296	151.077	-4.005	1.00 38.28	IS9
ATOM	8796	CB	LEU	101	228.909	165.703	-13.635	1.00 82.91	IS9	ATOM	8849	C	VAL	107	228.666	147.431	-4.992	1.00 43.98	IS9
ATOM	8797	CG	LEU	101	229.866	166.771	-14.156	1.00 82.91	IS9	ATOM	8850	O	VAL	107	227.775	146.803	-5.563	1.00 43.98	IS9
ATOM	8798	CD1	LEU	101	229.072	167.897	-14.780	1.00 82.91	IS9	ATOM	8851	N	VAL	108	229.489	146.873	-4.113	1.00 52.46	IS9
ATOM	8799	CD2	LEU	101	230.758	167.258	-13.010	1.00 82.91	IS9	ATOM	8852	CA	VAL	108	229.464	145.454	-3.780	1.00 52.46	IS9
ATOM	8800	C	LEU	101	228.714	163.451	-12.583	1.00 69.45	IS9	ATOM	8853	CB	VAL	108	230.601	145.110	-2.805	1.00 18.96	IS9
ATOM	8801	O	LEU	101	227.975	163.790	-11.662	1.00 69.45	IS9	ATOM	8854	CG1	VAL	108	230.429	143.729	-2.253	1.00 18.96	IS9
ATOM	8802	N	THR	102	228.734	162.219	-13.077	1.00 59.11	IS9	ATOM	8855	CG2	VAL	108	231.914	145.227	-3.507	1.00 18.96	IS9
ATOM	8803	CA	THR	102	227.881	161.174	-12.520	1.00 59.11	IS9	ATOM	8856	C	VAL	108	228.165	144.997	-3.141	1.00 52.46	IS9
ATOM	8804	CB	THR	102	227.350	160.226	-13.614	1.00 71.38	IS9	ATOM	8857	O	VAL	108	227.789	145.495	-2.074	1.00 52.46	IS9
ATOM	8805	OG1	THR	102	226.533	160.958	-14.535	1.00 71.38	IS9	ATOM	8858	N	GLU	109	227.511	144.017	-3.773	1.00 58.69	IS9
ATOM	8806	CG2	THR	102	226.526	159.112	-12.990	1.00 71.38	IS9	ATOM	8859	CA	GLU	109	226.252	143.468	-3.274	1.00 58.69	IS9
ATOM	8807	C	THR	102	228.663	160.335	-11.521	1.00 59.11	IS9	ATOM	8860	CB	GLU	109	225.567	142.642	-4.358	1.00 58.87	IS9
ATOM	8808	O	THR	102	229.880	160.186	-11.634	1.00 59.11	IS9	ATOM	8861	CG	GLU	109	224.236	142.086	-3.886	1.00 58.87	IS9
ATOM	8809	N	ARG	103	227.967	159.801	-10.530	1.00 92.26	IS9	ATOM	8862	CD	GLU	109	223.372	141.538	-5.006	1.00 58.87	IS9
ATOM	8810	CA	ARG	103	228.622	158.945	-9.557	1.00 92.26	IS9	ATOM	8863	OE1	GLU	109	223.180	142.247	-6.023	1.00 58.87	IS9
ATOM	8811	CB	ARG	103	228.429	159.467	-8.124	1.00 63.48	IS9	ATOM	8864	OE2	GLU	109	222.875	140.403	-4.861	1.00 58.87	IS9
ATOM	8812	CG	ARG	103	229.444	158.879	-7.153	1.00 63.48	IS9	ATOM	8865	C	GLU	109	226.390	142.624	-1.998	1.00 58.69	IS9
ATOM	8813	CD	ARG	103	228.848	158.209	-5.920	1.00 63.48	IS9	ATOM	8866	O	GLU	109	227.288	141.798	-1.862	1.00 58.69	IS9
ATOM	8814	NE	ARG	103	229.657	157.050	-5.534	1.00 63.48	IS9	ATOM	8867	N	ARG	110	225.477	142.843	-1.065	1.00 61.53	IS9
ATOM	8815	CZ	ARG	103	229.740	156.537	-4.307	1.00 63.48	IS9	ATOM	8868	CA	ARG	110	225.476	142.132	0.205	1.00 61.53	IS9
ATOM	8816	NH1	ARG	103	229.064	157.074	-3.296	1.00 63.48	IS9	ATOM	8869	CB	ARG	110	224.248	142.578	1.010	1.00 71.48	IS9

ATOM	8870	CG	ARG	110	224.270	142.252	2.492	1.00	71.48	IS9	ATOM	8923	CB	HIS	116	228.471	130.812	-2.066	1.00	48.47	IS9
ATOM	8871	CD	ARG	110	224.026	140.794	2.726	1.00	71.48	IS9	ATOM	8924	CG	HIS	116	228.239	129.347	-1.900	1.00	48.47	IS9
ATOM	8872	NE	ARG	110	222.983	140.564	3.714	1.00	71.48	IS9	ATOM	8925	CD2	HIS	116	227.771	128.415	-2.763	1.00	48.47	IS9
ATOM	8873	CZ	ARG	110	221.762	141.080	3.637	1.00	71.48	IS9	ATOM	8926	ND1	HIS	116	228.556	128.669	-0.741	1.00	48.47	IS9
ATOM	8874	NH1	ARG	110	221.427	141.861	2.618	1.00	71.48	IS9	ATOM	8927	CE1	HIS	116	228.298	127.383	-0.899	1.00	48.47	IS9
ATOM	8875	NH2	ARG	110	220.872	140.808	4.580	1.00	71.48	IS9	ATOM	8928	NE2	HIS	116	227.822	127.202	-2.118	1.00	48.47	IS9
ATOM	8876	C	ARG	110	225.447	140.617	0.005	1.00	61.53	IS9	ATOM	8929	C	HIS	116	227.969	133.145	-1.455	1.00	54.71	IS9
ATOM	8877	O	ARG	110	224.848	140.134	-0.949	1.00	61.53	IS9	ATOM	8930	O	HIS	116	227.743	134.038	-0.648	1.00	54.71	IS9
ATOM	8878	N	LYS	111	226.103	139.863	0.883	1.00	49.59	IS9	ATOM	8931	N	LYS	117	228.460	133.391	-2.665	1.00	76.63	IS9
ATOM	8879	CA	LYS	111	226.041	138.416	0.762	1.00	49.59	IS9	ATOM	8932	CA	LYS	117	228.784	134.750	-3.100	1.00	76.63	IS9
ATOM	8880	CB	LYS	111	227.215	137.710	1.422	1.00	42.70	IS9	ATOM	8933	CB	LYS	117	229.558	134.727	-4.435	1.00	99.52	IS9
ATOM	8881	CG	LYS	111	226.794	136.305	1.858	1.00	42.70	IS9	ATOM	8934	CG	LYS	117	231.038	134.359	-4.379	1.00	99.52	IS9
ATOM	8882	CD	LYS	111	227.939	135.364	2.091	1.00	42.70	IS9	ATOM	8935	CD	LYS	117	231.239	132.874	-4.136	1.00	99.52	IS9
ATOM	8883	CE	LYS	111	227.491	134.148	2.923	1.00	42.70	IS9	ATOM	8936	CE	LYS	117	232.717	132.476	-4.220	1.00	99.52	IS9
ATOM	8884	NZ	LYS	111	226.246	133.427	2.466	1.00	42.70	IS9	ATOM	8937	NZ	LYS	117	232.944	131.022	-3.921	1.00	99.52	IS9
ATOM	8885	C	LYS	111	224.781	137.924	1.452	1.00	49.59	IS9	ATOM	8938	C	LYS	117	227.612	135.735	-3.263	1.00	76.63	IS9
ATOM	8886	O	LYS	111	224.584	138.160	2.641	1.00	49.59	IS9	ATOM	8939	O	LYS	117	227.637	136.538	-4.199	1.00	76.63	IS9
ATOM	8887	N	LYS	112	223.946	137.209	0.715	1.00	39.24	IS9	ATOM	8940	N	ALA	118	226.601	135.706	-2.392	1.00	43.20	IS9
ATOM	8888	CA	LYS	112	222.702	136.686	1.254	1.00	39.24	IS9	ATOM	8941	CA	ALA	118	225.488	136.656	-2.539	1.00	43.20	IS9
ATOM	8889	CB	LYS	112	221.701	136.552	0.126	1.00	44.84	IS9	ATOM	8942	CB	ALA	118	225.998	138.052	-2.810	1.00	35.02	IS9
ATOM	8890	CG	LYS	112	221.838	137.639	-0.886	1.00	44.84	IS9	ATOM	8943	C	ALA	118	224.550	136.278	-3.662	1.00	43.20	IS9
ATOM	8891	CD	LYS	112	221.371	138.951	-0.332	1.00	44.84	IS9	ATOM	8944	O	ALA	118	223.383	136.694	-3.697	1.00	43.20	IS9
ATOM	8892	CE	LYS	112	221.623	140.054	-1.350	1.00	44.84	IS9	ATOM	8945	N	ARG	119	225.080	135.529	-4.615	1.00	45.72	IS9
ATOM	8893	NZ	LYS	112	221.280	139.612	-2.743	1.00	44.84	IS9	ATOM	8946	CA	ARG	119	224.280	135.054	-5.712	1.00	45.72	IS9
ATOM	8894	C	LYS	112	222.941	135.324	1.882	1.00	39.24	IS9	ATOM	8947	CB	ARG	119	224.409	135.967	-6.920	1.00	28.36	IS9
ATOM	8895	O	LYS	112	223.864	134.627	1.492	1.00	39.24	IS9	ATOM	8948	CG	ARG	119	223.712	137.281	-6.718	1.00	28.36	IS9
ATOM	8896	N	TYR	113	222.114	134.946	2.855	1.00	63.97	IS9	ATOM	8949	CD	ARG	119	223.268	137.893	-8.034	1.00	28.36	IS9
ATOM	8897	CA	TYR	113	222.279	133.642	3.496	1.00	63.97	IS9	ATOM	8950	NE	ARG	119	222.729	139.235	-7.839	1.00	28.36	IS9
ATOM	8898	CB	TYR	113	221.591	133.584	4.876	1.00	63.54	IS9	ATOM	8951	CZ	ARG	119	222.212	139.986	-8.806	1.00	28.36	IS9
ATOM	8899	CG	TYR	113	220.106	133.885	4.916	1.00	63.54	IS9	ATOM	8952	NH1	ARG	119	222.151	139.540	-10.052	1.00	28.36	IS9
ATOM	8900	CD1	TYR	113	219.169	132.954	4.475	1.00	63.54	IS9	ATOM	8953	NH2	ARG	119	221.753	141.198	-8.532	1.00	28.36	IS9
ATOM	8901	CE1	TYR	113	217.800	133.210	4.566	1.00	63.54	IS9	ATOM	8954	C	ARG	119	224.670	133.637	-6.050	1.00	45.72	IS9
ATOM	8902	CD2	TYR	113	219.638	135.086	5.446	1.00	63.54	IS9	ATOM	8955	O	ARG	119	223.802	132.809	-6.259	1.00	45.72	IS9
ATOM	8903	CE2	TYR	113	218.275	135.350	5.543	1.00	63.54	IS9	ATOM	8956	N	ARG	120	225.958	133.325	-6.087	1.00	60.69	IS9
ATOM	8904	CZ	TYR	113	217.359	134.407	5.104	1.00	63.54	IS9	ATOM	8957	CA	ARG	120	226.282	131.952	-6.412	1.00	60.69	IS9
ATOM	8905	OH	TYR	113	216.008	134.658	5.233	1.00	63.54	IS9	ATOM	8958	CB	ARG	120	227.752	131.588	-6.193	1.00	92.83	IS9
ATOM	8906	C	TYR	113	221.747	132.574	2.564	1.00	63.97	IS9	ATOM	8959	CG	ARG	120	228.022	130.210	-6.784	1.00	92.83	IS9
ATOM	8907	O	TYR	113	220.948	132.861	1.665	1.00	63.97	IS9	ATOM	8960	CD	ARG	120	229.327	129.588	-6.371	1.00	92.83	IS9
ATOM	8908	N	GLY	114	222.207	131.347	2.763	1.00	30.09	IS9	ATOM	8961	NE	ARG	120	230.492	130.360	-6.798	1.00	92.83	IS9
ATOM	8909	CA	GLY	114	221.786	130.287	1.877	1.00	30.09	IS9	ATOM	8962	CZ	ARG	120	231.719	129.853	-6.927	1.00	92.83	IS9
ATOM	8910	C	GLY	114	222.448	130.376	0.508	1.00	30.09	IS9	ATOM	8963	NH1	ARG	120	231.942	128.567	-6.669	1.00	92.83	IS9
ATOM	8911	O	GLY	114	222.285	129.481	-0.298	1.00	30.09	IS9	ATOM	8964	NH2	ARG	120	232.732	130.631	-7.300	1.00	92.83	IS9
ATOM	8912	N	LYS	115	223.203	131.433	0.227	1.00	84.81	IS9	ATOM	8965	C	ARG	120	225.419	131.109	-5.503	1.00	60.69	IS9
ATOM	8913	CA	LYS	115	223.846	131.541	-1.077	1.00	84.81	IS9	ATOM	8966	O	ARG	120	225.425	131.275	-4.282	1.00	60.69	IS9
ATOM	8914	CB	LYS	115	222.977	132.364	-2.032	1.00	66.98	IS9	ATOM	8967	N	ALA	121	224.642	130.230	-6.120	1.00	40.41	IS9
ATOM	8915	CG	LYS	115	221.575	131.838	-2.204	1.00	66.98	IS9	ATOM	8968	CA	ALA	121	223.752	129.354	-5.395	1.00	40.41	IS9
ATOM	8916	CD	LYS	115	220.976	132.333	-3.506	1.00	66.98	IS9	ATOM	8969	CB	ALA	121	222.520	129.126	-6.221	1.00	29.63	IS9
ATOM	8917	CE	LYS	115	219.566	132.906	-3.318	1.00	66.98	IS9	ATOM	8970	C	ALA	121	224.467	128.037	-5.131	1.00	40.41	IS9
ATOM	8918	NZ	LYS	115	219.509	134.161	-2.463	1.00	66.98	IS9	ATOM	8971	O	ALA	121	225.198	127.537	-5.980	1.00	40.41	IS9
ATOM	8919	C	LYS	115	225.246	132.140	-1.045	1.00	84.81	IS9	ATOM	8972	N	PRO	122	224.293	127.469	-3.936	1.00	37.08	IS9
ATOM	8920	O	LYS	115	225.393	133.361	-0.992	1.00	84.81	IS9	ATOM	8973	CD	PRO	122	223.622	127.974	-2.729	1.00	18.78	IS9
ATOM	8921	N	HIS	116	226.263	131.279	-1.110	1.00	54.71	IS9	ATOM	8974	CA	PRO	122	224.968	126.200	-3.672	1.00	37.08	IS9
ATOM	8922	CA	HIS	116	227.681	131.680	-1.103	1.00	54.71	IS9	ATOM	8975	CB	PRO	122	224.363	125.753	-2.350	1.00	18.78	IS9

ATOM	8976	CG	PRO	122	224.175	127.046	-1.639	1.00	18.78	IS9	ATOM	9029	SD	MET	1	156.785	112.459	-82.167	1.00145.42	FS6
ATOM	8977	C	PRO	122	224.624	125.248	-4.784	1.00	37.08	IS9	ATOM	9030	CE	MET	1	157.072	110.959	-83.116	1.00145.42	FS6
ATOM	8978	O	PRO	122	223.591	125.392	-5.426	1.00	37.08	IS9	ATOM	9031	C	MET	1	158.748	114.578	-83.412	1.00141.76	FS6
ATOM	8979	N	GLN	123	225.495	124.278	-5.012	1.00	55.85	IS9	ATOM	9032	O	MET	1	159.837	114.000	-83.446	1.00141.76	FS6
ATOM	8980	CA	GLN	123	225.290	123.275	-6.049	1.00	55.85	IS9	ATOM	9033	N	MET	1	157.773	113.014	-85.187	1.00141.76	FS6
ATOM	8981	CB	GLN	123	226.652	122.737	-6.514	1.00	56.07	IS9	ATOM	9034	CA	MET	1	157.697	114.346	-84.510	1.00141.76	FS6
ATOM	8982	CG	GLN	123	226.599	121.480	-7.358	1.00	56.07	IS9	ATOM	9035	N	ARG	2	158.415	115.432	-82.444	1.00 83.79	FS6
ATOM	8983	CD	GLN	123	227.967	121.055	-7.879	1.00	56.07	IS9	ATOM	9036	CA	ARG	2	159.332	115.762	-81.358	1.00 83.79	FS6
ATOM	8984	OE1	GLN	123	228.623	121.803	-8.605	1.00	56.07	IS9	ATOM	9037	CB	ARG	2	159.576	114.518	-80.488	1.00102.96	FS6
ATOM	8985	NE2	GLN	123	228.398	119.847	-7.515	1.00	56.07	IS9	ATOM	9038	CG	ARG	2	160.317	114.795	-79.183	1.00102.96	FS6
ATOM	8986	C	GLN	123	224.464	122.145	-5.465	1.00	55.85	IS9	ATOM	9039	CD	ARG	2	160.530	113.532	-78.352	1.00102.96	FS6
ATOM	8987	O	GLN	123	224.504	121.916	-4.258	1.00	55.85	IS9	ATOM	9040	NE	ARG	2	159.363	113.157	-77.555	1.00102.96	FS6
ATOM	8988	N	TYR	124	223.692	121.459	-6.301	1.00	61.08	IS9	ATOM	9041	CZ	ARG	2	159.308	112.086	-76.761	1.00102.96	FS6
ATOM	8989	CA	TYR	124	222.919	120.319	-5.818	1.00	61.08	IS9	ATOM	9042	NH1	ARG	2	160.352	111.273	-76.654	1.00102.96	FS6
ATOM	8990	CB	TYR	124	221.436	120.650	-5.747	1.00	62.59	IS9	ATOM	9043	NH2	ARG	2	158.208	111.820	-76.064	1.00102.96	FS6
ATOM	8991	CG	TYR	124	220.825	120.995	-7.063	1.00	62.59	IS9	ATOM	9044	C	ARG	2	160.648	116.287	-81.961	1.00 83.79	FS6
ATOM	8992	CD1	TYR	124	220.618	120.023	-8.033	1.00	62.59	IS9	ATOM	9045	O	ARG	2	161.452	115.515	-82.484	1.00 83.79	FS6
ATOM	8993	CE1	TYR	124	220.052	120.345	-9.255	1.00	62.59	IS9	ATOM	9046	N	ARG	3	160.848	117.604	-81.894	1.00 85.33	FS6
ATOM	8994	CD2	TYR	124	220.453	122.305	-7.345	1.00	62.59	IS9	ATOM	9047	CA	ARG	3	162.040	118.270	-82.436	1.00 85.33	FS6
ATOM	8995	CE2	TYR	124	219.886	122.646	-8.567	1.00	62.59	IS9	ATOM	9048	CB	ARG	3	161.912	119.787	-82.282	1.00116.44	FS6
ATOM	8996	CZ	TYR	124	219.686	121.661	-9.518	1.00	62.59	IS9	ATOM	9049	CG	ARG	3	160.904	120.452	-83.185	1.00116.44	FS6
ATOM	8997	OH	TYR	124	219.115	121.992	-10.732	1.00	62.59	IS9	ATOM	9050	CD	ARG	3	160.853	121.940	-82.887	1.00116.44	FS6
ATOM	8998	C	TYR	124	223.158	119.103	-6.710	1.00	61.08	IS9	ATOM	9051	NE	ARG	3	159.937	122.659	-83.767	1.00116.44	FS6
ATOM	8999	O	TYR	124	223.285	119.215	-7.941	1.00	61.08	IS9	ATOM	9052	CZ	ARG	3	159.634	123.949	-83.635	1.00116.44	FS6
ATOM	9000	N	SER	125	223.235	117.940	-6.073	1.00	80.04	IS9	ATOM	9053	NH1	ARG	3	160.176	124.660	-82.653	1.00116.44	FS6
ATOM	9001	CA	SER	125	223.486	116.686	-6.768	1.00	80.04	IS9	ATOM	9054	NH2	ARG	3	158.792	124.530	-84.483	1.00116.44	FS6
ATOM	9002	CB	SER	125	223.672	115.560	-5.767	1.00141.93		IS9	ATOM	9055	C	ARG	3	163.395	117.856	-81.845	1.00 85.33	FS6
ATOM	9003	OG	SER	125	222.413	115.109	-5.296	1.00141.93		IS9	ATOM	9056	O	ARG	3	163.552	117.731	-80.626	1.00 85.33	FS6
ATOM	9004	C	SER	125	222.359	116.287	-7.690	1.00	80.04	IS9	ATOM	9057	N	TYR	4	164.381	117.682	-82.724	1.00 83.87	FS6
ATOM	9005	O	SER	125	221.661	117.128	-8.253	1.00	80.04	IS9	ATOM	9058	CA	TYR	4	165.733	117.313	-82.317	1.00 83.87	FS6
ATOM	9006	N	LYS	126	222.189	114.975	-7.817	1.00	64.22	IS9	ATOM	9059	CB	TYR	4	166.015	115.851	-82.667	1.00 74.59	FS6
ATOM	9007	CA	LYS	126	221.156	114.382	-8.653	1.00	64.22	IS9	ATOM	9060	CG	TYR	4	165.179	114.856	-81.895	1.00 74.59	FS6
ATOM	9008	CB	LYS	126	221.295	112.854	-8.637	1.00	63.37	IS9	ATOM	9061	CD1	TYR	4	165.301	114.733	-80.512	1.00 74.59	FS6
ATOM	9009	CG	LYS	126	222.459	112.272	-9.462	1.00	63.37	IS9	ATOM	9062	CE1	TYR	4	164.529	113.814	-79.800	1.00 74.59	FS6
ATOM	9010	CD	LYS	126	223.822	112.807	-9.063	1.00	63.37	IS9	ATOM	9063	CD2	TYR	4	164.262	114.036	-82.548	1.00 74.59	FS6
ATOM	9011	CE	LYS	126	224.934	112.090	-9.818	1.00	63.37	IS9	ATOM	9064	CE2	TYR	4	163.484	113.117	-81.845	1.00 74.59	FS6
ATOM	9012	NZ	LYS	126	225.085	110.670	-9.398	1.00	63.37	IS9	ATOM	9065	CZ	TYR	4	163.622	113.012	-80.474	1.00 74.59	FS6
ATOM	9013	C	LYS	126	219.766	114.788	-8.168	1.00	64.22	IS9	ATOM	9066	OH	TYR	4	162.850	112.102	-79.789	1.00 74.59	FS6
ATOM	9014	O	LYS	126	219.087	114.030	-7.471	1.00	64.22	IS9	ATOM	9067	C	TYR	4	166.782	118.202	-82.989	1.00 83.87	FS6
ATOM	9015	N	ARG	127	219.359	115.999	-8.540	1.00101.57		IS9	ATOM	9068	O	TYR	4	166.472	118.982	-83.885	1.00 83.87	FS6
ATOM	9016	CA	ARG	127	218.059	116.531	-8.162	1.00101.57		IS9	ATOM	9069	N	GLU	5	168.021	118.087	-82.529	1.00 67.30	FS6
ATOM	9017	CB	ARG	127	217.880	117.945	-8.728	1.00130.08		IS9	ATOM	9070	CA	GLU	5	169.145	118.839	-83.076	1.00 67.30	FS6
ATOM	9018	CG	ARG	127	217.007	118.864	-7.878	1.00130.08		IS9	ATOM	9071	CB	GLU	5	169.489	120.023	-82.178	1.00 68.84	FS6
ATOM	9019	CD	ARG	127	216.905	120.273	-8.473	1.00130.08		IS9	ATOM	9072	CG	GLU	5	168.453	121.124	-82.237	1.00 68.84	FS6
ATOM	9020	NE	ARG	127	216.923	121.312	-7.440	1.00130.08		IS9	ATOM	9073	CD	GLU	5	168.830	122.335	-81.397	1.00 68.84	FS6
ATOM	9021	CZ	ARG	127	216.871	122.621	-7.681	1.00130.08		IS9	ATOM	9074	OE1	GLU	5	169.995	122.788	-81.481	1.00 68.84	FS6
ATOM	9022	NH1	ARG	127	216.795	123.070	-8.930	1.00130.08		IS9	ATOM	9075	OE2	GLU	5	167.957	122.843	-80.659	1.00 68.84	FS6
ATOM	9023	NH2	ARG	127	216.902	123.484	-6.670	1.00130.08		IS9	ATOM	9076	C	GLU	5	170.291	117.842	-83.124	1.00 67.30	FS6
ATOM	9024	C	ARG	127	216.994	115.612	-8.739	1.00101.57		IS9	ATOM	9077	O	GLU	5	170.844	117.473	-82.089	1.00 67.30	FS6
ATOM	9025	O	ARG	127	217.367	114.631	-9.424	1.00101.57		IS9	ATOM	9078	N	VAL	6	170.639	117.414	-84.334	1.00 97.08	FS6
ATOM	9026	OXT	ARG	127	215.801	115.888	-8.506	1.00159.15		IS9	ATOM	9079	CA	VAL	6	171.665	116.404	-84.540	1.00 97.08	FS6
ATOM	9027	CB	MET	1	156.294	114.558	-83.933	1.00145.42		FS6	ATOM	9080	CB	VAL	6	171.538	115.825	-85.940	1.00 47.76	FS6
ATOM	9028	CG	MET	1	155.678	113.323	-83.294	1.00145.42		FS6	ATOM	9081	CG1	VAL	6	172.446	114.610	-86.099	1.00 47.76	FS6

ATOM	9082	CG2	VAL	6	170.112	115.437	-86.181	1.00	47.76	FS6	ATOM	9135	OD1	ASN	13	192.254	115.842	-92.467	1.00	83.28	FS6
ATOM	9083	C	VAL	6	173.145	116.694	-84.283	1.00	97.08	FS6	ATOM	9136	ND2	ASN	13	190.105	115.256	-92.805	1.00	83.28	FS6
ATOM	9084	O	VAL	6	173.769	116.010	-83.471	1.00	97.08	FS6	ATOM	9137	C	ASN	13	189.243	116.329	-96.027	1.00	93.15	FS6
ATOM	9085	N	ASN	7	173.725	117.674	-84.965	1.00	64.72	FS6	ATOM	9138	O	ASN	13	189.894	115.772	-96.908	1.00	93.15	FS6
ATOM	9086	CA	ASN	7	175.152	117.955	-84.774	1.00	64.72	FS6	ATOM	9139	N	LEU	14	187.915	116.285	-95.972	1.00	89.16	FS6
ATOM	9087	CB	ASN	7	175.493	118.163	-83.298	1.00	61.53	FS6	ATOM	9140	CA	LEU	14	187.138	115.588	-96.984	1.00	89.16	FS6
ATOM	9088	CG	ASN	7	174.840	119.379	-82.715	1.00	61.53	FS6	ATOM	9141	CB	LEU	14	185.722	115.317	-96.480	1.00	71.35	FS6
ATOM	9089	OD1	ASN	7	175.218	120.523	-83.019	1.00	61.53	FS6	ATOM	9142	CG	LEU	14	185.581	114.204	-95.449	1.00	71.35	FS6
ATOM	9090	ND2	ASN	7	173.846	119.149	-81.864	1.00	61.53	FS6	ATOM	9143	CD1	LEU	14	184.119	114.003	-95.095	1.00	71.35	FS6
ATOM	9091	C	ASN	7	176.010	116.791	-85.266	1.00	64.72	FS6	ATOM	9144	CD2	LEU	14	186.162	112.926	-96.020	1.00	71.35	FS6
ATOM	9092	O	ASN	7	175.936	115.684	-84.725	1.00	64.72	FS6	ATOM	9145	C	LEU	14	187.065	116.447	-98.239	1.00	89.16	FS6
ATOM	9093	N	ILE	8	176.817	117.034	-86.292	1.00	74.03	FS6	ATOM	9146	O	LEU	14	186.494	117.536	-98.213	1.00	89.16	FS6
ATOM	9094	CA	ILE	8	177.704	116.000	-86.793	1.00	74.03	FS6	ATOM	9147	N	ASP	15	187.644	115.971	-99.338	1.00	81.34	FS6
ATOM	9095	CB	ILE	8	177.162	115.337	-88.061	1.00	56.31	FS6	ATOM	9148	CA	ASP	15	187.601	116.737	-100.578	1.00	81.34	FS6
ATOM	9096	CG2	ILE	8	178.072	114.194	-88.463	1.00	56.31	FS6	ATOM	9149	CB	ASP	15	188.422	116.054	-101.682	1.00	149.24	FS6
ATOM	9097	CG1	ILE	8	175.760	114.786	-87.787	1.00	56.31	FS6	ATOM	9150	CG	ASP	15	187.797	114.760	-102.172	1.00	149.24	FS6
ATOM	9098	CD1	ILE	8	175.167	113.943	-88.908	1.00	56.31	FS6	ATOM	9151	OD1	ASP	15	186.640	114.791	-102.643	1.00	149.24	FS6
ATOM	9099	C	ILE	8	179.065	116.610	-87.073	1.00	74.03	FS6	ATOM	9152	OD2	ASP	15	188.473	113.712	-102.096	1.00	149.24	FS6
ATOM	9100	O	ILE	8	179.178	117.810	-87.332	1.00	74.03	FS6	ATOM	9153	C	ASP	15	186.151	116.892	-101.026	1.00	81.34	FS6
ATOM	9101	N	VAL	9	180.104	115.786	-86.992	1.00	108.70	FS6	ATOM	9154	O	ASP	15	185.309	116.032	-100.755	1.00	81.34	FS6
ATOM	9102	CA	VAL	9	181.458	116.259	-87.228	1.00	108.70	FS6	ATOM	9155	N	GLN	16	185.878	117.994	-101.716	1.00	103.20	FS6
ATOM	9103	CB	VAL	9	182.162	116.561	-85.891	1.00	66.42	FS6	ATOM	9156	CA	GLN	16	184.542	118.322	-102.205	1.00	103.20	FS6
ATOM	9104	CG1	VAL	9	183.518	117.207	-86.154	1.00	66.42	FS6	ATOM	9157	CB	GLN	16	184.656	119.189	-103.459	1.00	140.32	FS6
ATOM	9105	CG2	VAL	9	181.293	117.465	-85.041	1.00	66.42	FS6	ATOM	9158	CG	GLN	16	183.367	119.883	-103.800	1.00	140.32	FS6
ATOM	9106	C	VAL	9	182.265	115.212	-87.995	1.00	108.70	FS6	ATOM	9159	CD	GLN	16	182.805	120.611	-102.602	1.00	140.32	FS6
ATOM	9107	O	VAL	9	182.266	114.029	-87.631	1.00	108.70	FS6	ATOM	9160	OE1	GLN	16	183.434	121.525	-102.067	1.00	140.32	FS6
ATOM	9108	N	LEU	10	182.949	115.637	-89.056	1.00	73.64	FS6	ATOM	9161	NE2	GLN	16	181.621	120.198	-102.160	1.00	140.32	FS6
ATOM	9109	CA	LEU	10	183.742	114.686	-89.832	1.00	73.64	FS6	ATOM	9162	C	GLN	16	183.631	117.127	-102.495	1.00	103.20	FS6
ATOM	9110	CB	LEU	10	182.922	114.170	-91.023	1.00	65.91	FS6	ATOM	9163	O	GLN	16	182.465	117.113	-102.099	1.00	103.20	FS6
ATOM	9111	CG	LEU	10	181.728	115.022	-91.470	1.00	65.91	FS6	ATOM	9164	N	SER	17	184.167	116.132	-103.192	1.00	93.38	FS6
ATOM	9112	CD1	LEU	10	182.216	116.260	-92.221	1.00	65.91	FS6	ATOM	9165	CA	SER	17	183.400	114.943	-103.537	1.00	93.38	FS6
ATOM	9113	CD2	LEU	10	180.814	114.186	-92.344	1.00	65.91	FS6	ATOM	9166	CB	SER	17	184.213	114.052	-104.476	1.00	112.78	FS6
ATOM	9114	C	LEU	10	185.095	115.215	-90.302	1.00	73.64	FS6	ATOM	9167	OG	SER	17	184.731	114.797	-105.564	1.00	112.78	FS6
ATOM	9115	O	LEU	10	185.436	116.380	-90.055	1.00	73.64	FS6	ATOM	9168	C	SER	17	183.052	114.165	-102.276	1.00	93.38	FS6
ATOM	9116	N	ASN	11	185.867	114.340	-90.956	1.00	72.04	FS6	ATOM	9169	O	SER	17	181.892	113.834	-102.034	1.00	93.38	FS6
ATOM	9117	CA	ASN	11	187.194	114.690	-91.473	1.00	72.04	FS6	ATOM	9170	N	GLN	18	184.078	113.874	-101.483	1.00	105.12	FS6
ATOM	9118	CB	ASN	11	187.630	113.699	-92.548	1.00	100.75	FS6	ATOM	9171	CA	GLN	18	183.934	113.134	-100.235	1.00	105.12	FS6
ATOM	9119	CG	ASN	11	187.977	112.350	-91.984	1.00	100.75	FS6	ATOM	9172	CB	GLN	18	185.301	113.005	-99.562	1.00	121.32	FS6
ATOM	9120	OD1	ASN	11	188.953	112.214	-91.252	1.00	100.75	FS6	ATOM	9173	CG	GLN	18	186.280	112.111	-100.306	1.00	121.32	FS6
ATOM	9121	ND2	ASN	11	187.178	111.339	-92.313	1.00	100.75	FS6	ATOM	9174	CD	GLN	18	187.700	112.251	-99.792	1.00	121.32	FS6
ATOM	9122	C	ASN	11	187.175	116.077	-92.076	1.00	72.04	FS6	ATOM	9175	OE1	GLN	18	188.554	111.399	-100.043	1.00	121.32	FS6
ATOM	9123	O	ASN	11	186.522	116.307	-93.088	1.00	72.04	FS6	ATOM	9176	NE2	GLN	18	187.964	113.338	-99.076	1.00	121.32	FS6
ATOM	9124	N	PRO	12	187.888	117.026	-91.463	1.00	78.10	FS6	ATOM	9177	C	GLN	18	182.955	113.798	-99.273	1.00	105.12	FS6
ATOM	9125	CD	PRO	12	188.764	116.929	-90.284	1.00	52.30	FS6	ATOM	9178	O	GLN	18	182.043	113.148	-98.755	1.00	105.12	FS6
ATOM	9126	CA	PRO	12	187.895	118.382	-92.013	1.00	78.10	FS6	ATOM	9179	N	LEU	19	183.162	115.090	-99.035	1.00	88.16	FS6
ATOM	9127	CB	PRO	12	188.548	119.196	-90.898	1.00	52.30	FS6	ATOM	9180	CA	LEU	19	182.308	115.862	-98.142	1.00	88.16	FS6
ATOM	9128	CG	PRO	12	189.543	118.237	-90.344	1.00	52.30	FS6	ATOM	9181	CB	LEU	19	182.759	117.325	-98.112	1.00	87.18	FS6
ATOM	9129	C	PRO	12	188.694	118.415	-93.307	1.00	78.10	FS6	ATOM	9182	CG	LEU	19	181.963	118.331	-97.267	1.00	87.18	FS6
ATOM	9130	O	PRO	12	188.886	119.470	-93.915	1.00	78.10	FS6	ATOM	9183	CD1	LEU	19	182.772	119.610	-97.161	1.00	87.18	FS6
ATOM	9131	N	ASN	13	189.145	117.243	-93.726	1.00	93.15	FS6	ATOM	9184	CD2	LEU	19	180.594	118.621	-97.881	1.00	87.18	FS6
ATOM	9132	CA	ASN	13	189.941	117.116	-94.927	1.00	93.15	FS6	ATOM	9185	C	LEU	19	180.854	115.786	-98.584	1.00	88.16	FS6
ATOM	9133	CB	ASN	13	191.274	116.473	-94.563	1.00	83.28	FS6	ATOM	9186	O	LEU	19	179.957	115.602	-97.761	1.00	88.16	FS6
ATOM	9134	CG	ASN	13	191.250	115.829	-93.183	1.00	83.28	FS6	ATOM	9187	N	ALA	20	180.623	115.943	-99.882	1.00	89.28	FS6

ATOM	9188	CA	ALA	20	179.273	115.890	-100.425	1.00	89.28	FS6	ATOM	9241	C	ILE	26	171.899	111.461	-94.277	1.00 85.33	FS6
ATOM	9189	CB	ALA	20	179.277	116.400	-101.853	1.00	82.99	FS6	ATOM	9242	O	ILE	26	171.004	110.926	-93.621	1.00 85.33	FS6
ATOM	9190	C	ALA	20	178.714	114.464	-100.366	1.00	89.28	FS6	ATOM	9243	N	GLN	27	171.667	112.258	-95.319	1.00 88.45	FS6
ATOM	9191	O	ALA	20	177.504	114.261	-100.259	1.00	89.28	FS6	ATOM	9244	CA	GLN	27	170.318	112.558	-95.792	1.00 88.45	FS6
ATOM	9192	N	LEU	21	179.606	113.483	-100.442	1.00	92.92	FS6	ATOM	9245	CB	GLN	27	170.381	113.284	-97.133	1.00125.26	FS6
ATOM	9193	CA	LEU	21	179.218	112.079	-100.379	1.00	92.92	FS6	ATOM	9246	CG	GLN	27	170.883	114.704	-97.019	1.00125.26	FS6
ATOM	9194	CB	LEU	21	180.439	111.179	-100.584	1.00	67.09	FS6	ATOM	9247	CD	GLN	27	169.947	115.580	-96.210	1.00125.26	FS6
ATOM	9195	CG	LEU	21	180.357	109.752	-100.025	1.00	67.09	FS6	ATOM	9248	OE1	GLN	27	170.255	116.739	-95.929	1.00125.26	FS6
ATOM	9196	CD1	LEU	21	179.191	109.010	-100.652	1.00	67.09	FS6	ATOM	9249	NE2	GLN	27	168.792	115.031	-95.837	1.00125.26	FS6
ATOM	9197	CD2	LEU	21	181.663	109.017	-100.299	1.00	67.09	FS6	ATOM	9250	C	GLN	27	169.476	111.299	-95.931	1.00 88.45	FS6
ATOM	9198	C	LEU	21	178.607	111.763	-99.023	1.00	92.92	FS6	ATOM	9251	O	GLN	27	168.318	111.271	-95.506	1.00 88.45	FS6
ATOM	9199	O	LEU	21	177.499	111.227	-98.932	1.00	92.92	FS6	ATOM	9252	N	ARG	28	170.049	110.263	-96.540	1.00 92.62	FS6
ATOM	9200	N	GLU	22	179.353	112.087	-97.971	1.00	106.65	FS6	ATOM	9253	CA	ARG	28	169.333	109.006	-96.694	1.00 92.62	FS6
ATOM	9201	CA	GLU	22	178.913	111.838	-96.605	1.00	106.65	FS6	ATOM	9254	CB	ARG	28	170.141	108.003	-97.518	1.00129.10	FS6
ATOM	9202	CB	GLU	22	179.965	112.363	-95.627	1.00	98.38	FS6	ATOM	9255	CG	ARG	28	169.939	108.079	-99.024	1.00129.10	FS6
ATOM	9203	CG	GLU	22	181.266	111.603	-95.733	1.00	98.38	FS6	ATOM	9256	CD	ARG	28	170.545	106.838	-99.672	1.00129.10	FS6
ATOM	9204	CD	GLU	22	181.052	110.114	-95.527	1.00	98.38	FS6	ATOM	9257	NE	ARG	28	170.267	106.725	-101.102	1.00129.10	FS6
ATOM	9205	OE1	GLU	22	181.914	109.314	-95.949	1.00	98.38	FS6	ATOM	9258	CZ	ARG	28	170.863	107.445	-102.050	1.00129.10	FS6
ATOM	9206	OE2	GLU	22	180.016	109.746	-94.932	1.00	98.38	FS6	ATOM	9259	NH1	ARG	28	171.786	108.344	-101.728	1.00129.10	FS6
ATOM	9207	C	GLU	22	177.550	112.445	-96.296	1.00	106.65	FS6	ATOM	9260	NH2	ARG	28	170.536	107.262	-103.326	1.00129.10	FS6
ATOM	9208	O	GLU	22	176.707	111.807	-95.660	1.00	106.65	FS6	ATOM	9261	C	ARG	28	169.099	108.441	-95.301	1.00 92.62	FS6
ATOM	9209	N	LYS	23	177.335	113.671	-96.759	1.00	74.71	FS6	ATOM	9262	O	ARG	28	168.011	107.961	-94.987	1.00 92.62	FS6
ATOM	9210	CA	LYS	23	176.077	114.362	-96.525	1.00	74.71	FS6	ATOM	9263	N	ALA	29	170.129	108.511	-94.464	1.00102.20	FS6
ATOM	9211	CB	LYS	23	176.169	115.806	-97.010	1.00	64.82	FS6	ATOM	9264	CA	ALA	29	170.041	108.008	-93.097	1.00102.20	FS6
ATOM	9212	CG	LYS	23	177.297	116.586	-96.381	1.00	64.82	FS6	ATOM	9265	CB	ALA	29	171.324	108.306	-92.345	1.00 72.28	FS6
ATOM	9213	CD	LYS	23	177.303	118.023	-96.867	1.00	64.82	FS6	ATOM	9266	C	ALA	29	168.868	108.670	-92.403	1.00102.20	FS6
ATOM	9214	CE	LYS	23	176.003	118.735	-96.502	1.00	64.82	FS6	ATOM	9267	O	ALA	29	167.924	107.996	-91.984	1.00102.20	FS6
ATOM	9215	NZ	LYS	23	176.005	120.151	-96.971	1.00	64.82	FS6	ATOM	9268	N	LEU	30	168.936	109.992	-92.281	1.00 68.11	FS6
ATOM	9216	C	LYS	23	174.913	113.664	-97.213	1.00	74.71	FS6	ATOM	9269	CA	LEU	30	167.859	110.733	-91.650	1.00 68.11	FS6
ATOM	9217	O	LYS	23	173.753	113.953	-96.924	1.00	74.71	FS6	ATOM	9270	CB	LEU	30	167.953	112.222	-91.981	1.00 60.96	FS6
ATOM	9218	N	GLU	24	175.222	112.754	-98.129	1.00	89.19	FS6	ATOM	9271	CG	LEU	30	169.120	112.978	-91.354	1.00 60.96	FS6
ATOM	9219	CA	GLU	24	174.183	112.022	-98.838	1.00	89.19	FS6	ATOM	9272	CD1	LEU	30	169.034	114.447	-91.710	1.00 60.96	FS6
ATOM	9220	CB	GLU	24	174.654	111.649	-100.240	1.00	159.40	FS6	ATOM	9273	CD2	LEU	30	169.075	112.811	-89.841	1.00 60.96	FS6
ATOM	9221	CG	GLU	24	173.667	110.785	-100.993	1.00	159.40	FS6	ATOM	9274	C	LEU	30	166.558	110.173	-92.191	1.00 68.11	FS6
ATOM	9222	CD	GLU	24	174.012	110.658	-102.459	1.00	159.40	FS6	ATOM	9275	O	LEU	30	165.844	109.458	-91.491	1.00 68.11	FS6
ATOM	9223	OE1	GLU	24	175.171	110.306	-102.771	1.00	159.40	FS6	ATOM	9276	N	GLU	31	166.272	110.480	-93.450	1.00 84.07	FS6
ATOM	9224	OE2	GLU	24	173.120	110.905	-103.297	1.00	159.40	FS6	ATOM	9277	CA	GLU	31	165.058	110.007	-94.095	1.00 84.07	FS6
ATOM	9225	C	GLU	24	173.808	110.766	-98.063	1.00	89.19	FS6	ATOM	9278	CB	GLU	31	165.190	110.138	-95.617	1.00174.76	FS6
ATOM	9226	O	GLU	24	172.636	110.394	-98.001	1.00	89.19	FS6	ATOM	9279	CG	GLU	31	165.175	111.575	-96.128	1.00174.76	FS6
ATOM	9227	N	ILE	25	174.808	110.112	-97.477	1.00	85.17	FS6	ATOM	9280	CD	GLU	31	163.789	112.198	-96.081	1.00174.76	FS6
ATOM	9228	CA	ILE	25	174.569	108.911	-96.685	1.00	85.17	FS6	ATOM	9281	OE1	GLU	31	162.907	111.748	-96.846	1.00174.76	FS6
ATOM	9229	CB	ILE	25	175.888	108.221	-96.310	1.00	93.60	FS6	ATOM	9282	OE2	GLU	31	163.578	113.133	-95.280	1.00174.76	FS6
ATOM	9230	CG2	ILE	25	175.623	106.779	-95.919	1.00	93.60	FS6	ATOM	9283	C	GLU	31	164.745	108.559	-93.725	1.00 84.07	FS6
ATOM	9231	CG1	ILE	25	176.839	108.244	-97.506	1.00	93.60	FS6	ATOM	9284	O	GLU	31	163.624	108.240	-93.327	1.00 84.07	FS6
ATOM	9232	CD1	ILE	25	178.171	107.574	-97.241	1.00	93.60	FS6	ATOM	9285	N	ASN	32	165.743	107.690	-93.846	1.00 75.39	FS6
ATOM	9233	C	ILE	25	173.845	109.355	-95.408	1.00	85.17	FS6	ATOM	9286	CA	ASN	32	165.571	106.277	-93.540	1.00 75.39	FS6
ATOM	9234	O	ILE	25	173.167	108.565	-94.749	1.00	85.17	FS6	ATOM	9287	CB	ASN	32	166.923	105.562	-93.547	1.00138.11	FS6
ATOM	9235	N	ILE	26	174.011	110.635	-95.078	1.00	85.33	FS6	ATOM	9288	CG	ASN	32	167.269	104.988	-94.902	1.00138.11	FS6
ATOM	9236	CA	ILE	26	173.369	111.244	-93.922	1.00	85.33	FS6	ATOM	9289	OD1	ASN	32	168.328	104.382	-95.079	1.00138.11	FS6
ATOM	9237	CB	ILE	26	173.987	112.624	-93.595	1.00	60.30	FS6	ATOM	9290	ND2	ASN	32	166.374	105.168	-95.868	1.00138.11	FS6
ATOM	9238	CG2	ILE	26	172.975	113.478	-92.834	1.00	60.30	FS6	ATOM	9291	C	ASN	32	164.874	105.990	-92.218	1.00 75.39	FS6
ATOM	9239	CG1	ILE	26	175.287	112.459	-92.795	1.00	60.30	FS6	ATOM	9292	O	ASN	32	164.212	104.958	-92.079	1.00 75.39	FS6
ATOM	9240	CD1	ILE	26	175.960	113.781	-92.429	1.00	60.30	FS6	ATOM	9293	N	TYR	33	165.022	106.888	-91.247	1.00 91.23	FS6

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ATOM   9294  CA  TYR    33     164.406 106.683 -89.942  1.00 91.23      FS6
ATOM   9295  CB  TYR    33     165.431 106.920 -88.831  1.00 68.69      FS6
ATOM   9296  CG  TYR    33     166.489 105.844 -88.803  1.00 68.69      FS6
ATOM   9297  CD1 TYR    33     167.639 105.949 -89.581  1.00 68.69      FS6
ATOM   9298  CE1 TYR    33     168.559 104.905 -89.649  1.00 68.69      FS6
ATOM   9299  CD2 TYR    33     166.287 104.669 -88.081  1.00 68.69      FS6
ATOM   9300  CE2 TYR    33     167.195 103.622 -88.141  1.00 68.69      FS6
ATOM   9301  CZ  TYR    33     168.326 103.745 -88.928  1.00 68.69      FS6
ATOM   9302  OH  TYR    33     169.206 102.694 -89.015  1.00 68.69      FS6
ATOM   9303  C   TYR    33     163.166 107.513 -89.689  1.00 91.23      FS6
ATOM   9304  O   TYR    33     162.402 107.226 -88.771  1.00 91.23      FS6
ATOM   9305  N   GLY    34     162.955 108.533 -90.509  1.00 70.33      FS6
ATOM   9306  CA  GLY    34     161.785 109.368 -90.334  1.00 70.33      FS6
ATOM   9307  C   GLY    34     162.196 110.784 -90.003  1.00 70.33      FS6
ATOM   9308  O   GLY    34     161.354 111.657 -89.781  1.00 70.33      FS6
ATOM   9309  N   ALA    35     163.502 111.014 -89.966  1.00111.68      FS6
ATOM   9310  CA  ALA    35     164.018 112.338 -89.665  1.00111.68      FS6
ATOM   9311  CB  ALA    35     165.525 112.285 -89.501  1.00 90.32      FS6
ATOM   9312  C   ALA    35     163.647 113.305 -90.779  1.00111.68      FS6
ATOM   9313  O   ALA    35     164.156 113.213 -91.896  1.00111.68      FS6
ATOM   9314  N   ARG    36     162.750 114.230 -90.471  1.00 60.21      FS6
ATOM   9315  CA  ARG    36     162.315 115.220 -91.440  1.00 60.21      FS6
ATOM   9316  CB  ARG    36     160.800 115.387 -91.336  1.00103.56      FS6
ATOM   9317  CG  ARG    36     160.260 116.684 -91.887  1.00103.56      FS6
ATOM   9318  CD  ARG    36     158.790 116.829 -91.548  1.00103.56      FS6
ATOM   9319  NE  ARG    36     158.313 118.180 -91.810  1.00103.56      FS6
ATOM   9320  CZ  ARG    36     158.792 119.264 -91.209  1.00103.56      FS6
ATOM   9321  NH1 ARG    36     159.762 119.148 -90.311  1.00103.56      FS6
ATOM   9322  NH2 ARG    36     158.306 120.464 -91.508  1.00103.56      FS6
ATOM   9323  C   ARG    36     163.029 116.546 -91.152  1.00 60.21      FS6
ATOM   9324  O   ARG    36     162.688 117.237 -90.191  1.00 60.21      FS6
ATOM   9325  N   VAL    37     164.006 116.907 -91.985  1.00 58.30      FS6
ATOM   9326  CA  VAL    37     164.770 118.147 -91.783  1.00 58.30      FS6
ATOM   9327  CB  VAL    37     165.883 118.300 -92.847  1.00 63.61      FS6
ATOM   9328  CG1 VAL    37     166.674 119.577 -92.584  1.00 63.61      FS6
ATOM   9329  CG2 VAL    37     166.804 117.079 -92.835  1.00 63.61      FS6
ATOM   9330  C   VAL    37     163.959 119.446 -91.791  1.00 58.30      FS6
ATOM   9331  O   VAL    37     163.557 119.914 -92.855  1.00 58.30      FS6
ATOM   9332  N   GLU    38     163.742 120.032 -90.610  1.00 81.50      FS6
ATOM   9333  CA  GLU    38     162.996 121.295 -90.479  1.00 81.50      FS6
ATOM   9334  CB  GLU    38     162.616 121.569 -89.022  1.00 99.03      FS6
ATOM   9335  CG  GLU    38     161.429 120.783 -88.506  1.00 99.03      FS6
ATOM   9336  CD  GLU    38     160.788 121.452 -87.304  1.00 99.03      FS6
ATOM   9337  OE1 GLU    38     159.824 120.890 -86.744  1.00 99.03      FS6
ATOM   9338  OE2 GLU    38     161.247 122.550 -86.925  1.00 99.03      FS6
ATOM   9339  C   GLU    38     163.801 122.486 -90.994  1.00 81.50      FS6
ATOM   9340  O   GLU    38     163.242 123.519 -91.360  1.00 81.50      FS6
ATOM   9341  N   LYS    39     165.119 122.337 -90.984  1.00 72.92      FS6
ATOM   9342  CA  LYS    39     166.036 123.357 -91.472  1.00 72.92      FS6
ATOM   9343  CB  LYS    39     165.695 124.745 -90.916  1.00103.20      FS6
ATOM   9344  CG  LYS    39     166.143 125.029 -89.509  1.00103.20      FS6
ATOM   9345  CD  LYS    39     166.035 126.523 -89.267  1.00103.20      FS6
ATOM   9346  CE  LYS    39     166.371 126.890 -87.841  1.00103.20      FS6
ATOM   9347  NZ  LYS    39     166.387 128.364 -87.638  1.00103.20      FS6
ATOM   9348  C   LYS    39     167.447 122.953 -91.083  1.00 72.92      FS6
ATOM   9349  O   LYS    39     167.630 122.120 -90.200  1.00 72.92      FS6
ATOM   9350  N   VAL    40     168.447 123.530 -91.739  1.00 76.50      FS6
ATOM   9351  CA  VAL    40     169.816 123.149 -91.441  1.00 76.50      FS6
ATOM   9352  CB  VAL    40     170.283 122.030 -92.405  1.00 86.92      FS6
ATOM   9353  CG1 VAL    40     170.177 122.515 -93.830  1.00 86.92      FS6
ATOM   9354  CG2 VAL    40     171.712 121.606 -92.087  1.00 86.92      FS6
ATOM   9355  C   VAL    40     170.810 124.289 -91.505  1.00 76.50      FS6
ATOM   9356  O   VAL    40     170.606 125.272 -92.209  1.00 76.50      FS6
ATOM   9357  N   GLU    41     171.879 124.145 -90.733  1.00 84.28      FS6
ATOM   9358  CA  GLU    41     172.958 125.113 -90.695  1.00 84.28      FS6
ATOM   9359  CB  GLU    41     173.075 125.759 -89.322  1.00102.22      FS6
ATOM   9360  CG  GLU    41     171.983 126.757 -89.032  1.00102.22      FS6
ATOM   9361  CD  GLU    41     172.202 127.480 -87.723  1.00102.22      FS6
ATOM   9362  OE1 GLU    41     173.312 128.023 -87.529  1.00102.22      FS6
ATOM   9363  OE2 GLU    41     171.263 127.512 -86.896  1.00102.22      FS6
ATOM   9364  C   GLU    41     174.207 124.320 -90.991  1.00 84.28      FS6
ATOM   9365  O   GLU    41     174.179 123.089 -90.997  1.00 84.28      FS6
ATOM   9366  N   GLU    42     175.303 125.016 -91.238  1.00117.33      FS6
ATOM   9367  CA  GLU    42     176.545 124.339 -91.545  1.00117.33      FS6
ATOM   9368  CB  GLU    42     176.489 123.790 -92.968  1.00122.55      FS6
ATOM   9369  CG  GLU    42     177.730 123.048 -93.418  1.00122.55      FS6
ATOM   9370  CD  GLU    42     177.477 122.231 -94.675  1.00122.55      FS6
ATOM   9371  OE1 GLU    42     178.448 121.689 -95.248  1.00122.55      FS6
ATOM   9372  OE2 GLU    42     176.301 122.126 -95.087  1.00122.55      FS6
ATOM   9373  C   GLU    42     177.692 125.313 -91.399  1.00117.33      FS6
ATOM   9374  O   GLU    42     178.018 126.041 -92.335  1.00117.33      FS6
ATOM   9375  N   LEU    43     178.284 125.344 -90.211  1.00 82.78      FS6
ATOM   9376  CA  LEU    43     179.404 126.233 -89.965  1.00 82.78      FS6
ATOM   9377  CB  LEU    43     179.696 126.337 -88.466  1.00 82.20      FS6
ATOM   9378  CG  LEU    43     178.600 126.889 -87.548  1.00 82.20      FS6
ATOM   9379  CD1 LEU    43     178.170 128.265 -88.023  1.00 82.20      FS6
ATOM   9380  CD2 LEU    43     177.418 125.936 -87.529  1.00 82.20      FS6
ATOM   9381  C   LEU    43     180.593 125.626 -90.690  1.00 82.78      FS6
ATOM   9382  O   LEU    43     181.454 126.345 -91.209  1.00 82.78      FS6
ATOM   9383  N   GLY    44     180.616 124.295 -90.727  1.00 90.31      FS6
ATOM   9384  CA  GLY    44     181.682 123.570 -91.395  1.00 90.31      FS6
ATOM   9385  C   GLY    44     183.087 124.074 -91.119  1.00 90.31      FS6
ATOM   9386  O   GLY    44     183.492 125.121 -91.630  1.00 90.31      FS6
ATOM   9387  N   LEU    45     183.832 123.317 -90.319  1.00106.43      FS6
ATOM   9388  CA  LEU    45     185.207 123.658 -89.960  1.00106.43      FS6
ATOM   9389  CB  LEU    45     185.984 124.165 -91.177  1.00 64.12      FS6
ATOM   9390  CG  LEU    45     186.369 123.104 -92.205  1.00 64.12      FS6
ATOM   9391  CD1 LEU    45     186.029 123.610 -93.609  1.00 64.12      FS6
ATOM   9392  CD2 LEU    45     187.854 122.761 -92.069  1.00 64.12      FS6
ATOM   9393  C   LEU    45     185.335 124.681 -88.849  1.00106.43      FS6
ATOM   9394  O   LEU    45     184.852 125.807 -88.958  1.00106.43      FS6
ATOM   9395  N   ARG    46     185.996 124.266 -87.775  1.00 89.07      FS6
ATOM   9396  CA  ARG    46     186.252 125.125 -86.632  1.00 89.07      FS6
ATOM   9397  CB  ARG    46     185.092 125.106 -85.641  1.00140.30      FS6
ATOM   9398  CG  ARG    46     183.990 126.094 -85.959  1.00140.30      FS6
ATOM   9399  CD  ARG    46     183.132 126.309 -84.734  1.00140.30      FS6
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ATOM	9400	NE	ARG	46	182.018	127.213	-84.985	1.00140.30	FS6	ATOM	9453	CG1	ILE	52	187.764	116.034	-81.435	1.00 71.12	FS6
ATOM	9401	CZ	ARG	46	181.123	127.559	-84.065	1.00140.30	FS6	ATOM	9454	CD1	ILE	52	186.352	116.585	-81.544	1.00 71.12	FS6
ATOM	9402	NH1	ARG	46	181.216	127.076	-82.834	1.00140.30	FS6	ATOM	9455	C	ILE	52	189.981	113.712	-83.573	1.00 73.99	FS6
ATOM	9403	NH2	ARG	46	180.131	128.383	-84.374	1.00140.30	FS6	ATOM	9456	O	ILE	52	190.026	114.182	-84.713	1.00 73.99	FS6
ATOM	9404	C	ARG	46	187.503	124.598	-85.972	1.00 89.07	FS6	ATOM	9457	N	ALA	53	190.281	112.447	-83.297	1.00 95.97	FS6
ATOM	9405	O	ARG	46	187.909	123.463	-86.223	1.00 89.07	FS6	ATOM	9458	CA	ALA	53	190.709	111.529	-84.338	1.00 95.97	FS6
ATOM	9406	N	ARG	47	188.108	125.422	-85.130	1.00 80.97	FS6	ATOM	9459	CB	ALA	53	189.656	111.447	-85.436	1.00 60.53	FS6
ATOM	9407	CA	ARG	47	189.333	125.045	-84.444	1.00 80.97	FS6	ATOM	9460	C	ALA	53	192.024	112.084	-84.893	1.00 95.97	FS6
ATOM	9408	CB	ARG	47	189.699	126.118	-83.411	1.00164.00	FS6	ATOM	9461	O	ALA	53	192.164	112.300	-86.100	1.00 95.97	FS6
ATOM	9409	CG	ARG	47	189.994	127.485	-84.015	1.00164.00	FS6	ATOM	9462	N	LYS	54	192.974	112.329	-83.989	1.00 79.84	FS6
ATOM	9410	CD	ARG	47	191.136	127.409	-85.027	1.00164.00	FS6	ATOM	9463	CA	LYS	54	194.294	112.867	-84.332	1.00 79.84	FS6
ATOM	9411	NE	ARG	47	191.373	128.681	-85.710	1.00164.00	FS6	ATOM	9464	CB	LYS	54	195.024	111.927	-85.291	1.00103.08	FS6
ATOM	9412	CZ	ARG	47	192.228	128.844	-86.718	1.00164.00	FS6	ATOM	9465	CG	LYS	54	194.814	110.449	-85.007	1.00103.08	FS6
ATOM	9413	NH1	ARG	47	192.937	127.815	-87.167	1.00164.00	FS6	ATOM	9466	CD	LYS	54	195.185	110.090	-83.583	1.00103.08	FS6
ATOM	9414	NH2	ARG	47	192.375	130.037	-87.281	1.00164.00	FS6	ATOM	9467	CE	LYS	54	194.953	108.610	-83.314	1.00103.08	FS6
ATOM	9415	C	ARG	47	189.323	123.674	-83.764	1.00 80.97	FS6	ATOM	9468	NZ	LYS	54	195.232	108.268	-81.891	1.00103.08	FS6
ATOM	9416	O	ARG	47	190.041	122.762	-84.180	1.00 80.97	FS6	ATOM	9469	C	LYS	54	194.193	114.248	-84.972	1.00 79.84	FS6
ATOM	9417	N	LEU	48	188.492	123.546	-82.732	1.00 63.01	FS6	ATOM	9470	O	LYS	54	195.074	115.089	-84.806	1.00 79.84	FS6
ATOM	9418	CA	LEU	48	188.370	122.348	-81.891	1.00 63.01	FS6	ATOM	9471	N	ASP	55	193.106	114.476	-85.699	1.00 65.84	FS6
ATOM	9419	CB	LEU	48	188.841	121.057	-82.565	1.00 48.91	FS6	ATOM	9472	CA	ASP	55	192.873	115.738	-86.390	1.00 65.84	FS6
ATOM	9420	CG	LEU	48	187.886	120.331	-83.519	1.00 48.91	FS6	ATOM	9473	CB	ASP	55	191.622	115.610	-87.254	1.00103.26	FS6
ATOM	9421	CD1	LEU	48	188.130	118.809	-83.446	1.00 48.91	FS6	ATOM	9474	CG	ASP	55	191.693	116.453	-88.499	1.00103.26	FS6
ATOM	9422	CD2	LEU	48	186.442	120.634	-83.142	1.00 48.91	FS6	ATOM	9475	OD1	ASP	55	191.810	117.691	-88.373	1.00103.26	FS6
ATOM	9423	C	LEU	48	189.231	122.591	-80.664	1.00 63.01	FS6	ATOM	9476	OD2	ASP	55	191.638	115.868	-89.602	1.00103.26	FS6
ATOM	9424	O	LEU	48	190.401	122.980	-80.770	1.00 63.01	FS6	ATOM	9477	C	ASP	55	192.722	116.942	-85.452	1.00 65.84	FS6
ATOM	9425	N	ALA	49	188.627	122.382	-79.501	1.00 59.69	FS6	ATOM	9478	O	ASP	55	192.068	116.850	-84.413	1.00 65.84	FS6
ATOM	9426	CA	ALA	49	189.292	122.589	-78.226	1.00 59.69	FS6	ATOM	9479	N	PRO	56	193.333	118.086	-85.812	1.00 66.37	FS6
ATOM	9427	CB	ALA	49	188.291	122.412	-77.101	1.00 72.13	FS6	ATOM	9480	CD	PRO	56	194.368	118.191	-86.856	1.00101.45	FS6
ATOM	9428	C	ALA	49	190.433	121.610	-78.054	1.00 59.69	FS6	ATOM	9481	CA	PRO	56	193.286	119.328	-85.034	1.00 66.37	FS6
ATOM	9429	O	ALA	49	191.373	121.843	-77.295	1.00 59.69	FS6	ATOM	9482	CB	PRO	56	194.631	119.958	-85.335	1.00101.45	FS6
ATOM	9430	N	TYR	50	190.355	120.518	-78.788	1.00 42.26	FS6	ATOM	9483	CG	PRO	56	194.774	119.662	-86.773	1.00101.45	FS6
ATOM	9431	CA	TYR	50	191.358	119.488	-78.669	1.00 42.26	FS6	ATOM	9484	C	PRO	56	192.129	120.234	-85.465	1.00 66.37	FS6
ATOM	9432	CB	TYR	50	191.120	118.696	-77.380	1.00 47.43	FS6	ATOM	9485	O	PRO	56	192.131	121.434	-85.167	1.00 66.37	FS6
ATOM	9433	CG	TYR	50	189.711	118.126	-77.273	1.00 47.43	FS6	ATOM	9486	N	GLN	57	191.155	119.651	-86.167	1.00 59.84	FS6
ATOM	9434	CD1	TYR	50	188.658	118.891	-76.756	1.00 47.43	FS6	ATOM	9487	CA	GLN	57	189.978	120.377	-86.659	1.00 59.84	FS6
ATOM	9435	CE1	TYR	50	187.367	118.375	-76.672	1.00 47.43	FS6	ATOM	9488	CB	GLN	57	190.321	121.138	-87.944	1.00129.48	FS6
ATOM	9436	CD2	TYR	50	189.431	116.831	-77.706	1.00 47.43	FS6	ATOM	9489	CG	GLN	57	191.280	122.299	-87.765	1.00129.48	FS6
ATOM	9437	CE2	TYR	50	188.140	116.301	-77.629	1.00 47.43	FS6	ATOM	9490	CD	GLN	57	191.737	122.876	-89.087	1.00129.48	FS6
ATOM	9438	CZ	TYR	50	187.113	117.077	-77.110	1.00 47.43	FS6	ATOM	9491	OE1	GLN	57	192.448	123.879	-89.127	1.00129.48	FS6
ATOM	9439	OH	TYR	50	185.839	116.547	-77.026	1.00 47.43	FS6	ATOM	9492	NE2	GLN	57	191.337	122.239	-90.179	1.00129.48	FS6
ATOM	9440	C	TYR	50	191.273	118.538	-79.849	1.00 42.26	FS6	ATOM	9493	C	GLN	57	188.799	119.445	-86.951	1.00 59.84	FS6
ATOM	9441	O	TYR	50	190.203	118.345	-80.435	1.00 42.26	FS6	ATOM	9494	O	GLN	57	188.930	118.216	-86.935	1.00 59.84	FS6
ATOM	9442	N	PRO	51	192.396	117.900	-80.190	1.00 48.96	FS6	ATOM	9495	N	GLY	58	187.647	120.042	-87.231	1.00 68.89	FS6
ATOM	9443	CD	PRO	51	193.594	117.646	-79.375	1.00 86.71	FS6	ATOM	9496	CA	GLY	58	186.467	119.254	-87.532	1.00 68.89	FS6
ATOM	9444	CA	PRO	51	192.343	116.981	-81.319	1.00 48.96	FS6	ATOM	9497	C	GLY	58	185.521	120.000	-88.452	1.00 68.89	FS6
ATOM	9445	CB	PRO	51	193.669	116.236	-81.214	1.00 86.71	FS6	ATOM	9498	O	GLY	58	185.548	121.228	-88.512	1.00 68.89	FS6
ATOM	9446	CG	PRO	51	193.913	116.218	-79.741	1.00 86.71	FS6	ATOM	9499	N	TYR	59	184.689	119.260	-89.174	1.00 88.63	FS6
ATOM	9447	C	PRO	51	191.154	116.049	-81.181	1.00 48.96	FS6	ATOM	9500	CA	TYR	59	183.730	119.868	-90.082	1.00 88.63	FS6
ATOM	9448	O	PRO	51	190.664	115.830	-80.074	1.00 48.96	FS6	ATOM	9501	CB	TYR	59	183.837	119.237	-91.462	1.00 77.10	FS6
ATOM	9449	N	ILE	52	190.687	115.541	-82.318	1.00 73.99	FS6	ATOM	9502	CG	TYR	59	183.102	120.010	-92.526	1.00 77.10	FS6
ATOM	9450	CA	ILE	52	189.592	114.582	-82.390	1.00 73.99	FS6	ATOM	9503	CD1	TYR	59	183.558	121.257	-92.937	1.00 77.10	FS6
ATOM	9451	CB	ILE	52	188.220	115.248	-82.664	1.00 71.12	FS6	ATOM	9504	CE1	TYR	59	182.889	121.976	-93.903	1.00 77.10	FS6
ATOM	9452	CG2	ILE	52	187.180	114.180	-82.990	1.00 71.12	FS6	ATOM	9505	CD2	TYR	59	181.944	119.500	-93.115	1.00 77.10	FS6

ATOM	9506	CE2	TYR	59	181.264	120.217	-94.088	1.00	77.10	FS6	ATOM	9559	CG	GLN	64	165.199	121.699	-85.860	1.00	81.60	FS6
ATOM	9507	CZ	TYR	59	181.746	121.455	-94.478	1.00	77.10	FS6	ATOM	9560	CD	GLN	64	164.764	123.078	-85.450	1.00	81.60	FS6
ATOM	9508	OH	TYR	59	181.102	122.173	-95.460	1.00	77.10	FS6	ATOM	9561	OE1	GLN	64	165.481	123.779	-84.726	1.00	81.60	FS6
ATOM	9509	C	TYR	59	182.341	119.625	-89.518	1.00	88.63	FS6	ATOM	9562	NE2	GLN	64	163.584	123.487	-85.910	1.00	81.60	FS6
ATOM	9510	O	TYR	59	181.805	118.519	-89.621	1.00	88.63	FS6	ATOM	9563	C	GLN	64	165.954	119.446	-87.486	1.00	84.01	FS6
ATOM	9511	N	PHE	60	181.760	120.668	-88.933	1.00	76.12	FS6	ATOM	9564	O	GLN	64	165.423	119.774	-88.539	1.00	84.01	FS6
ATOM	9512	CA	PHE	60	180.445	120.575	-88.309	1.00	76.12	FS6	ATOM	9565	N	VAL	65	165.609	118.340	-86.838	1.00	78.72	FS6
ATOM	9513	CB	PHE	60	180.313	121.625	-87.208	1.00	90.60	FS6	ATOM	9566	CA	VAL	65	164.605	117.450	-87.409	1.00	78.72	FS6
ATOM	9514	CG	PHE	60	181.313	121.477	-86.103	1.00	90.60	FS6	ATOM	9567	CB	VAL	65	165.221	116.077	-87.761	1.00	80.28	FS6
ATOM	9515	CD1	PHE	60	182.596	121.990	-86.235	1.00	90.60	FS6	ATOM	9568	CG1	VAL	65	166.436	116.265	-88.642	1.00	80.28	FS6
ATOM	9516	CD2	PHE	60	180.970	120.825	-84.926	1.00	90.60	FS6	ATOM	9569	CG2	VAL	65	165.588	115.330	-86.493	1.00	80.28	FS6
ATOM	9517	CE1	PHE	60	183.526	121.859	-85.209	1.00	90.60	FS6	ATOM	9570	C	VAL	65	163.369	117.174	-86.568	1.00	78.72	FS6
ATOM	9518	CE2	PHE	60	181.887	120.686	-83.895	1.00	90.60	FS6	ATOM	9571	O	VAL	65	163.122	117.813	-85.551	1.00	78.72	FS6
ATOM	9519	CZ	PHE	60	183.170	121.205	-84.036	1.00	90.60	FS6	ATOM	9572	N	GLU	66	162.595	116.208	-87.050	1.00	78.26	FS6
ATOM	9520	C	PHE	60	179.236	120.688	-89.226	1.00	76.12	FS6	ATOM	9573	CA	GLU	66	161.381	115.719	-86.418	1.00	78.26	FS6
ATOM	9521	O	PHE	60	179.324	121.150	-90.355	1.00	76.12	FS6	ATOM	9574	CB	GLU	66	160.146	116.428	-86.959	1.00	139.23	FS6
ATOM	9522	N	LEU	61	178.099	120.261	-88.695	1.00	111.17	FS6	ATOM	9575	CG	GLU	66	160.006	117.856	-86.490	1.00	139.23	FS6
ATOM	9523	CA	LEU	61	176.823	120.288	-89.390	1.00	111.17	FS6	ATOM	9576	CD	GLU	66	158.565	118.332	-86.527	1.00	139.23	FS6
ATOM	9524	CB	LEU	61	176.594	118.958	-90.110	1.00	93.58	FS6	ATOM	9577	OE1	GLU	66	157.959	118.318	-87.621	1.00	139.23	FS6
ATOM	9525	CG	LEU	61	177.407	118.710	-91.384	1.00	93.58	FS6	ATOM	9578	OE2	GLU	66	158.041	118.718	-85.459	1.00	139.23	FS6
ATOM	9526	CD1	LEU	61	177.259	117.259	-91.821	1.00	93.58	FS6	ATOM	9579	C	GLU	66	161.356	114.258	-86.827	1.00	78.26	FS6
ATOM	9527	CD2	LEU	61	176.930	119.659	-92.480	1.00	93.58	FS6	ATOM	9580	O	GLU	66	161.625	113.938	-87.986	1.00	78.26	FS6
ATOM	9528	C	LEU	61	175.759	120.494	-88.316	1.00	111.17	FS6	ATOM	9581	N	MET	67	161.047	113.368	-85.889	1.00	59.54	FS6
ATOM	9529	O	LEU	61	176.051	120.365	-87.130	1.00	111.17	FS6	ATOM	9582	CA	MET	67	161.035	111.936	-86.195	1.00	59.54	FS6
ATOM	9530	N	TRP	62	174.531	120.811	-88.715	1.00	113.06	FS6	ATOM	9583	CB	MET	67	162.467	111.467	-86.429	1.00	79.78	FS6
ATOM	9531	CA	TRP	62	173.473	121.023	-87.735	1.00	113.06	FS6	ATOM	9584	CG	MET	67	163.359	111.759	-85.231	1.00	79.78	FS6
ATOM	9532	CB	TRP	62	172.974	122.461	-87.803	1.00	119.37	FS6	ATOM	9585	SD	MET	67	165.091	111.395	-85.483	1.00	79.78	FS6
ATOM	9533	CG	TRP	62	172.051	122.801	-86.690	1.00	119.37	FS6	ATOM	9586	CE	MET	67	165.087	109.593	-85.306	1.00	79.78	FS6
ATOM	9534	CD2	TRP	62	170.844	123.559	-86.783	1.00	119.37	FS6	ATOM	9587	C	MET	67	160.447	111.145	-85.038	1.00	59.54	FS6
ATOM	9535	CE2	TRP	62	170.313	123.658	-85.481	1.00	119.37	FS6	ATOM	9588	O	MET	67	160.122	111.702	-83.997	1.00	59.54	FS6
ATOM	9536	CE3	TRP	62	170.159	124.166	-87.843	1.00	119.37	FS6	ATOM	9589	N	PRO	68	160.295	109.832	-85.206	1.00	84.58	FS6
ATOM	9537	CD1	TRP	62	172.201	122.477	-85.373	1.00	119.37	FS6	ATOM	9590	CD	PRO	68	160.280	109.044	-86.448	1.00	86.27	FS6
ATOM	9538	NE1	TRP	62	171.161	122.988	-84.639	1.00	119.37	FS6	ATOM	9591	CA	PRO	68	159.740	109.068	-84.087	1.00	84.58	FS6
ATOM	9539	CZ2	TRP	62	169.127	124.341	-85.208	1.00	119.37	FS6	ATOM	9592	CB	PRO	68	159.479	107.698	-84.703	1.00	86.27	FS6
ATOM	9540	CZ3	TRP	62	168.981	124.846	-87.572	1.00	119.37	FS6	ATOM	9593	CG	PRO	68	159.209	108.031	-86.155	1.00	86.27	FS6
ATOM	9541	CH2	TRP	62	168.477	124.927	-86.263	1.00	119.37	FS6	ATOM	9594	C	PRO	68	160.786	109.014	-82.964	1.00	84.58	FS6
ATOM	9542	C	TRP	62	172.310	120.049	-87.897	1.00	113.06	FS6	ATOM	9595	O	PRO	68	161.952	108.697	-83.208	1.00	84.58	FS6
ATOM	9543	O	TRP	62	172.317	118.978	-87.290	1.00	113.06	FS6	ATOM	9596	N	GLU	69	160.378	109.337	-81.743	1.00	68.34	FS6
ATOM	9544	N	TYR	63	171.311	120.417	-88.695	1.00	79.72	FS6	ATOM	9597	CA	GLU	69	161.296	109.318	-80.612	1.00	68.34	FS6
ATOM	9545	CA	TYR	63	170.154	119.548	-88.941	1.00	79.72	FS6	ATOM	9598	CB	GLU	69	160.556	109.689	-79.331	1.00	113.66	FS6
ATOM	9546	CB	TYR	63	170.581	118.101	-89.201	1.00	100.91	FS6	ATOM	9599	CG	GLU	69	159.365	110.595	-79.564	1.00	113.66	FS6
ATOM	9547	CG	TYR	63	171.518	117.845	-90.349	1.00	100.91	FS6	ATOM	9600	CD	GLU	69	158.121	109.823	-79.953	1.00	113.66	FS6
ATOM	9548	CD1	TYR	63	172.697	118.570	-90.500	1.00	100.91	FS6	ATOM	9601	OE1	GLU	69	158.191	108.994	-80.886	1.00	113.66	FS6
ATOM	9549	CE1	TYR	63	173.628	118.238	-91.485	1.00	100.91	FS6	ATOM	9602	OE2	GLU	69	157.067	110.047	-79.323	1.00	113.66	FS6
ATOM	9550	CD2	TYR	63	171.284	116.785	-91.218	1.00	100.91	FS6	ATOM	9603	C	GLU	69	161.909	107.928	-80.471	1.00	68.34	FS6
ATOM	9551	CE2	TYR	63	172.201	116.444	-92.200	1.00	100.91	FS6	ATOM	9604	O	GLU	69	163.091	107.786	-80.157	1.00	68.34	FS6
ATOM	9552	CZ	TYR	63	173.376	117.170	-92.330	1.00	100.91	FS6	ATOM	9605	N	ASP	70	161.099	106.905	-80.720	1.00	67.14	FS6
ATOM	9553	OH	TYR	63	174.304	116.812	-93.289	1.00	100.91	FS6	ATOM	9606	CA	ASP	70	161.552	105.522	-80.628	1.00	67.14	FS6
ATOM	9554	C	TYR	63	169.114	119.475	-87.823	1.00	79.72	FS6	ATOM	9607	CB	ASP	70	160.352	104.588	-80.740	1.00	111.12	FS6
ATOM	9555	O	TYR	63	169.207	118.613	-86.946	1.00	79.72	FS6	ATOM	9608	CG	ASP	70	159.566	104.815	-82.012	1.00	111.12	FS6
ATOM	9556	N	GLN	64	168.122	120.357	-87.857	1.00	84.01	FS6	ATOM	9609	OD1	ASP	70	159.240	105.988	-82.304	1.00	111.12	FS6
ATOM	9557	CA	GLN	64	167.042	120.324	-86.874	1.00	84.01	FS6	ATOM	9610	OD2	ASP	70	159.271	103.825	-82.715	1.00	111.12	FS6
ATOM	9558	CB	GLN	64	166.485	121.719	-86.635	1.00	81.60	FS6	ATOM	9611	C	ASP	70	162.566	105.174	-81.721	1.00	67.14	FS6

ATOM	9612	O	ASP	70	162.832	103.997	-81.984	1.00 67.14	FS6	ATOM	9665	NE	ARG	77	171.838	101.191	-82.017	1.00145.59	FS6
ATOM	9613	N	ARG	71	163.137	106.196	-82.350	1.00 72.04	FS6	ATOM	9666	CZ	ARG	77	172.753	101.177	-81.050	1.00145.59	FS6
ATOM	9614	CA	ARG	71	164.095	105.980	-83.426	1.00 72.04	FS6	ATOM	9667	NH1	ARG	77	174.024	100.923	-81.339	1.00145.59	FS6
ATOM	9615	CB	ARG	71	163.455	106.356	-84.765	1.00127.59	FS6	ATOM	9668	NH2	ARG	77	172.400	101.427	-79.794	1.00145.59	FS6
ATOM	9616	CG	ARG	71	162.090	105.727	-84.989	1.00127.59	FS6	ATOM	9669	C	ARG	77	174.049	104.237	-85.469	1.00 74.13	FS6
ATOM	9617	CD	ARG	71	162.179	104.378	-85.674	1.00127.59	FS6	ATOM	9670	O	ARG	77	175.143	103.703	-85.618	1.00 74.13	FS6
ATOM	9618	NE	ARG	71	162.271	104.530	-87.123	1.00127.59	FS6	ATOM	9671	N	GLU	78	173.281	104.634	-86.480	1.00 89.07	FS6
ATOM	9619	CZ	ARG	71	162.263	103.518	-87.983	1.00127.59	FS6	ATOM	9672	CA	GLU	78	173.665	104.453	-87.877	1.00 89.07	FS6
ATOM	9620	NH1	ARG	71	162.170	102.270	-87.542	1.00127.59	FS6	ATOM	9673	CB	GLU	78	172.409	104.521	-88.761	1.00100.75	FS6
ATOM	9621	NH2	ARG	71	162.340	103.756	-89.287	1.00127.59	FS6	ATOM	9674	CG	GLU	78	172.634	104.363	-90.271	1.00100.75	FS6
ATOM	9622	C	ARG	71	165.356	106.801	-83.225	1.00 72.04	FS6	ATOM	9675	CD	GLU	78	172.688	102.908	-90.749	1.00100.75	FS6
ATOM	9623	O	ARG	71	166.427	106.421	-83.687	1.00 72.04	FS6	ATOM	9676	OE1	GLU	78	173.731	102.498	-91.300	1.00100.75	FS6
ATOM	9624	N	VAL	72	165.219	107.926	-82.533	1.00 69.88	FS6	ATOM	9677	OE2	GLU	78	171.687	102.175	-90.589	1.00100.75	FS6
ATOM	9625	CA	VAL	72	166.340	108.817	-82.282	1.00 69.88	FS6	ATOM	9678	C	GLU	78	174.692	105.501	-88.324	1.00 89.07	FS6
ATOM	9626	CB	VAL	72	166.062	109.721	-81.082	1.00 67.92	FS6	ATOM	9679	O	GLU	78	175.616	105.191	-89.073	1.00 89.07	FS6
ATOM	9627	CG1	VAL	72	166.899	110.980	-81.175	1.00 67.92	FS6	ATOM	9680	N	LEU	79	174.540	106.735	-87.854	1.00 63.64	FS6
ATOM	9628	CG2	VAL	72	164.601	110.064	-81.033	1.00 67.92	FS6	ATOM	9681	CA	LEU	79	175.460	107.806	-88.235	1.00 63.64	FS6
ATOM	9629	C	VAL	72	167.634	108.052	-82.035	1.00 69.88	FS6	ATOM	9682	CB	LEU	79	175.007	109.152	-87.672	1.00 51.23	FS6
ATOM	9630	O	VAL	72	168.630	108.278	-82.718	1.00 69.88	FS6	ATOM	9683	CG	LEU	79	173.548	109.552	-87.831	1.00 51.23	FS6
ATOM	9631	N	ASN	73	167.635	107.145	-81.064	1.00 70.06	FS6	ATOM	9684	CD1	LEU	79	173.418	111.079	-87.676	1.00 51.23	FS6
ATOM	9632	CA	ASN	73	168.844	106.374	-80.792	1.00 70.06	FS6	ATOM	9685	CD2	LEU	79	173.051	109.096	-89.201	1.00 51.23	FS6
ATOM	9633	CB	ASN	73	168.586	105.353	-79.679	1.00 70.75	FS6	ATOM	9686	C	LEU	79	176.896	107.582	-87.781	1.00 63.64	FS6
ATOM	9634	CG	ASN	73	168.837	105.932	-78.287	1.00 70.75	FS6	ATOM	9687	O	LEU	79	177.840	107.887	-88.510	1.00 63.64	FS6
ATOM	9635	OD1	ASN	73	169.966	105.918	-77.791	1.00 70.75	FS6	ATOM	9688	N	ARG	80	177.068	107.068	-86.571	1.00 97.44	FS6
ATOM	9636	ND2	ASN	73	167.787	106.462	-77.664	1.00 70.75	FS6	ATOM	9689	CA	ARG	80	178.407	106.854	-86.044	1.00 97.44	FS6
ATOM	9637	C	ASN	73	169.333	105.691	-82.070	1.00 70.06	FS6	ATOM	9690	CB	ARG	80	178.324	106.388	-84.581	1.00 55.29	FS6
ATOM	9638	O	ASN	73	170.360	106.090	-82.621	1.00 70.06	FS6	ATOM	9691	CG	ARG	80	177.518	107.308	-83.647	1.00 55.29	FS6
ATOM	9639	N	ASP	74	168.596	104.688	-82.550	1.00 69.10	FS6	ATOM	9692	CD	ARG	80	177.319	106.633	-82.267	1.00 55.29	FS6
ATOM	9640	CA	ASP	74	168.960	103.975	-83.781	1.00 69.10	FS6	ATOM	9693	NE	ARG	80	176.237	107.223	-81.477	1.00 55.29	FS6
ATOM	9641	CB	ASP	74	167.754	103.223	-84.334	1.00137.97	FS6	ATOM	9694	CZ	ARG	80	176.210	108.485	-81.059	1.00 55.29	FS6
ATOM	9642	CG	ASP	74	167.389	102.026	-83.498	1.00137.97	FS6	ATOM	9695	NH1	ARG	80	177.220	109.302	-81.349	1.00 55.29	FS6
ATOM	9643	OD1	ASP	74	167.238	102.190	-82.268	1.00137.97	FS6	ATOM	9696	NH2	ARG	80	175.162	108.934	-80.369	1.00 55.29	FS6
ATOM	9644	OD2	ASP	74	167.251	100.923	-84.070	1.00137.97	FS6	ATOM	9697	C	ARG	80	179.205	105.854	-86.892	1.00 97.44	FS6
ATOM	9645	C	ASP	74	169.501	104.898	-84.871	1.00 69.10	FS6	ATOM	9698	O	ARG	80	180.435	105.775	-86.778	1.00 97.44	FS6
ATOM	9646	O	ASP	74	170.469	104.563	-85.548	1.00 69.10	FS6	ATOM	9699	N	ILE	81	178.504	105.114	-87.754	1.00 80.75	FS6
ATOM	9647	N	LEU	75	168.875	106.056	-85.050	1.00 53.46	FS6	ATOM	9700	CA	ILE	81	179.128	104.114	-88.631	1.00 80.75	FS6
ATOM	9648	CA	LEU	75	169.332	106.992	-86.065	1.00 53.46	FS6	ATOM	9701	CB	ILE	81	178.071	103.383	-89.465	1.00 67.75	FS6
ATOM	9649	CB	LEU	75	168.542	108.304	-85.989	1.00 73.52	FS6	ATOM	9702	CG2	ILE	81	178.722	102.294	-90.288	1.00 67.75	FS6
ATOM	9650	CG	LEU	75	168.932	109.493	-86.879	1.00 73.52	FS6	ATOM	9703	CG1	ILE	81	177.031	102.763	-88.544	1.00 67.75	FS6
ATOM	9651	CD1	LEU	75	170.057	110.272	-86.242	1.00 73.52	FS6	ATOM	9704	CD1	ILE	81	175.902	102.113	-89.277	1.00 67.75	FS6
ATOM	9652	CD2	LEU	75	169.330	109.007	-88.260	1.00 73.52	FS6	ATOM	9705	C	ILE	81	180.166	104.691	-89.604	1.00 80.75	FS6
ATOM	9653	C	LEU	75	170.820	107.254	-85.876	1.00 53.46	FS6	ATOM	9706	O	ILE	81	181.255	104.130	-89.784	1.00 80.75	FS6
ATOM	9654	O	LEU	75	171.630	106.905	-86.737	1.00 53.46	FS6	ATOM	9707	N	ARG	82	179.812	105.801	-90.243	1.00109.80	FS6
ATOM	9655	N	ALA	76	171.184	107.852	-84.746	1.00 79.57	FS6	ATOM	9708	CA	ARG	82	180.704	106.458	-91.186	1.00109.80	FS6
ATOM	9656	CA	ALA	76	172.589	108.150	-84.476	1.00 79.57	FS6	ATOM	9709	CB	ARG	82	180.083	107.777	-91.660	1.00121.49	FS6
ATOM	9657	CB	ALA	76	172.736	108.845	-83.125	1.00 54.49	FS6	ATOM	9710	CG	ARG	82	178.806	107.627	-92.492	1.00121.49	FS6
ATOM	9658	C	ALA	76	173.418	106.871	-84.506	1.00 79.57	FS6	ATOM	9711	CD	ARG	82	179.121	107.256	-93.930	1.00121.49	FS6
ATOM	9659	O	ALA	76	174.581	106.881	-84.903	1.00 79.57	FS6	ATOM	9712	NE	ARG	82	179.832	105.986	-94.033	1.00121.49	FS6
ATOM	9660	N	ARG	77	172.813	105.770	-84.085	1.00 74.13	FS6	ATOM	9713	CZ	ARG	82	180.556	105.620	-95.087	1.00121.49	FS6
ATOM	9661	CA	ARG	77	173.501	104.492	-84.082	1.00 74.13	FS6	ATOM	9714	NH1	ARG	82	180.669	106.430	-96.134	1.00121.49	FS6
ATOM	9662	CB	ARG	77	172.539	103.371	-83.704	1.00145.59	FS6	ATOM	9715	NH2	ARG	82	181.169	104.445	-95.093	1.00121.49	FS6
ATOM	9663	CG	ARG	77	173.082	101.983	-83.965	1.00145.59	FS6	ATOM	9716	C	ARG	82	182.047	106.726	-90.513	1.00109.80	FS6
ATOM	9664	CD	ARG	77	172.127	100.943	-83.427	1.00145.59	FS6	ATOM	9717	O	ARG	82	182.107	107.374	-89.468	1.00109.80	FS6

ATOM	9718	N	ASP	83	183.120	106.217	-91.114	1.00	63.20	FS6	ATOM	9771	CA	MET	89	175.060	114.295	-80.780	1.00	65.82	FS6
ATOM	9719	CA	ASP	83	184.467	106.394	-90.582	1.00	63.20	FS6	ATOM	9772	CB	MET	89	175.854	115.341	-79.990	1.00	73.30	FS6
ATOM	9720	CB	ASP	83	185.464	105.535	-91.361	1.00	164.90	FS6	ATOM	9773	CG	MET	89	175.361	115.518	-78.558	1.00	73.30	FS6
ATOM	9721	CG	ASP	83	185.016	104.093	-91.484	1.00	164.90	FS6	ATOM	9774	SD	MET	89	176.260	116.781	-77.617	1.00	73.30	FS6
ATOM	9722	OD1	ASP	83	184.587	103.520	-90.459	1.00	164.90	FS6	ATOM	9775	CE	MET	89	175.209	118.220	-77.913	1.00	73.30	FS6
ATOM	9723	OD2	ASP	83	185.094	103.531	-92.600	1.00	164.90	FS6	ATOM	9776	C	MET	89	173.628	114.784	-80.984	1.00	65.82	FS6
ATOM	9724	C	ASP	83	184.902	107.851	-90.642	1.00	63.20	FS6	ATOM	9777	O	MET	89	173.387	115.985	-81.095	1.00	65.82	FS6
ATOM	9725	O	ASP	83	185.854	108.251	-89.974	1.00	63.20	FS6	ATOM	9778	N	VAL	90	172.681	113.849	-81.029	1.00	88.48	FS6
ATOM	9726	N	ASN	84	184.212	108.644	-91.447	1.00	82.88	FS6	ATOM	9779	CA	VAL	90	171.266	114.190	-81.194	1.00	88.48	FS6
ATOM	9727	CA	ASN	84	184.549	110.050	-91.562	1.00	82.88	FS6	ATOM	9780	CB	VAL	90	170.423	112.939	-81.546	1.00	75.68	FS6
ATOM	9728	CB	ASN	84	184.214	110.547	-92.957	1.00	104.43	FS6	ATOM	9781	CG1	VAL	90	169.000	113.353	-81.855	1.00	75.68	FS6
ATOM	9729	CG	ASN	84	184.963	109.787	-94.016	1.00	104.43	FS6	ATOM	9782	CG2	VAL	90	171.042	112.192	-82.722	1.00	75.68	FS6
ATOM	9730	OD1	ASN	84	186.188	109.857	-94.089	1.00	104.43	FS6	ATOM	9783	C	VAL	90	170.750	114.791	-79.874	1.00	88.48	FS6
ATOM	9731	ND2	ASN	84	184.237	109.033	-94.832	1.00	104.43	FS6	ATOM	9784	O	VAL	90	170.898	114.198	-78.802	1.00	88.48	FS6
ATOM	9732	C	ASN	84	183.775	110.816	-90.512	1.00	82.88	FS6	ATOM	9785	N	VAL	91	170.124	115.956	-79.955	1.00	69.27	FS6
ATOM	9733	O	ASN	84	184.215	111.868	-90.043	1.00	82.88	FS6	ATOM	9786	CA	VAL	91	169.655	116.632	-78.757	1.00	69.27	FS6
ATOM	9734	N	VAL	85	182.614	110.278	-90.150	1.00	82.06	FS6	ATOM	9787	CB	VAL	91	170.626	117.783	-78.432	1.00	51.76	FS6
ATOM	9735	CA	VAL	85	181.785	110.882	-89.115	1.00	82.06	FS6	ATOM	9788	CG1	VAL	91	169.987	118.803	-77.512	1.00	51.76	FS6
ATOM	9736	CB	VAL	85	180.369	110.274	-89.090	1.00	65.37	FS6	ATOM	9789	CG2	VAL	91	171.879	117.205	-77.805	1.00	51.76	FS6
ATOM	9737	CG1	VAL	85	179.740	110.487	-87.731	1.00	65.37	FS6	ATOM	9790	C	VAL	91	168.237	117.171	-78.869	1.00	69.27	FS6
ATOM	9738	CG2	VAL	85	179.507	110.919	-90.159	1.00	65.37	FS6	ATOM	9791	O	VAL	91	167.918	117.872	-79.825	1.00	69.27	FS6
ATOM	9739	C	VAL	85	182.481	110.564	-87.800	1.00	82.06	FS6	ATOM	9792	N	LYS	92	167.388	116.854	-77.890	1.00	63.78	FS6
ATOM	9740	O	VAL	85	182.647	109.395	-87.437	1.00	82.06	FS6	ATOM	9793	CA	LYS	92	166.009	117.340	-77.911	1.00	63.78	FS6
ATOM	9741	N	ARG	86	182.898	111.599	-87.089	1.00	70.95	FS6	ATOM	9794	CB	LYS	92	165.214	116.823	-76.713	1.00	102.37	FS6
ATOM	9742	CA	ARG	86	183.583	111.375	-85.834	1.00	70.95	FS6	ATOM	9795	CG	LYS	92	164.861	115.351	-76.804	1.00	102.37	FS6
ATOM	9743	CB	ARG	86	184.999	111.952	-85.924	1.00	94.63	FS6	ATOM	9796	CD	LYS	92	163.834	114.939	-75.754	1.00	102.37	FS6
ATOM	9744	CG	ARG	86	185.109	113.173	-86.823	1.00	94.63	FS6	ATOM	9797	CE	LYS	92	164.379	115.032	-74.328	1.00	102.37	FS6
ATOM	9745	CD	ARG	86	186.568	113.564	-87.081	1.00	94.63	FS6	ATOM	9798	NZ	LYS	92	164.747	116.422	-73.914	1.00	102.37	FS6
ATOM	9746	NE	ARG	86	187.330	112.482	-87.699	1.00	94.63	FS6	ATOM	9799	C	LYS	92	166.001	118.857	-77.906	1.00	63.78	FS6
ATOM	9747	CZ	ARG	86	188.491	112.649	-88.324	1.00	94.63	FS6	ATOM	9800	O	LYS	92	166.696	119.494	-77.114	1.00	63.78	FS6
ATOM	9748	NH1	ARG	86	189.035	113.857	-88.422	1.00	94.63	FS6	ATOM	9801	N	SER	93	165.218	119.434	-78.806	1.00	60.79	FS6
ATOM	9749	NH2	ARG	86	189.112	111.604	-88.851	1.00	94.63	FS6	ATOM	9802	CA	SER	93	165.136	120.879	-78.903	1.00	60.79	FS6
ATOM	9750	C	ARG	86	182.845	111.921	-84.616	1.00	70.95	FS6	ATOM	9803	CB	SER	93	164.188	121.259	-80.037	1.00	113.48	FS6
ATOM	9751	O	ARG	86	183.407	111.981	-83.522	1.00	70.95	FS6	ATOM	9804	OG	SER	93	164.497	120.527	-81.208	1.00	113.48	FS6
ATOM	9752	N	ARG	87	181.581	112.293	-84.804	1.00	110.13	FS6	ATOM	9805	C	SER	93	164.631	121.478	-77.596	1.00	60.79	FS6
ATOM	9753	CA	ARG	87	180.764	112.830	-83.719	1.00	110.13	FS6	ATOM	9806	O	SER	93	163.941	120.809	-76.828	1.00	60.79	FS6
ATOM	9754	CB	ARG	87	181.295	114.186	-83.278	1.00	51.99	FS6	ATOM	9807	N	GLN	94	164.975	122.739	-77.349	1.00	54.35	FS6
ATOM	9755	CG	ARG	87	182.424	114.121	-82.269	1.00	51.99	FS6	ATOM	9808	CA	GLN	94	164.529	123.438	-76.149	1.00	54.35	FS6
ATOM	9756	CD	ARG	87	181.976	113.657	-80.880	1.00	51.99	FS6	ATOM	9809	CB	GLN	94	165.474	123.170	-74.984	1.00	139.52	FS6
ATOM	9757	NE	ARG	87	182.989	114.064	-79.910	1.00	51.99	FS6	ATOM	9810	CG	GLN	94	165.420	121.761	-74.456	1.00	139.52	FS6
ATOM	9758	CZ	ARG	87	184.154	113.447	-79.733	1.00	51.99	FS6	ATOM	9811	CD	GLN	94	166.376	121.543	-73.302	1.00	139.52	FS6
ATOM	9759	NH1	ARG	87	184.456	112.365	-80.442	1.00	51.99	FS6	ATOM	9812	OE1	GLN	94	166.458	120.443	-72.750	1.00	139.52	FS6
ATOM	9760	NH2	ARG	87	185.047	113.957	-78.893	1.00	51.99	FS6	ATOM	9813	NE2	GLN	94	167.108	122.591	-72.928	1.00	139.52	FS6
ATOM	9761	C	ARG	87	179.311	112.997	-84.108	1.00	110.13	FS6	ATOM	9814	C	GLN	94	164.443	124.940	-76.364	1.00	54.35	FS6
ATOM	9762	O	ARG	87	179.002	113.631	-85.114	1.00	110.13	FS6	ATOM	9815	O	GLN	94	165.207	125.510	-77.137	1.00	54.35	FS6
ATOM	9763	N	VAL	88	178.424	112.438	-83.293	1.00	81.51	FS6	ATOM	9816	N	GLU	95	163.504	125.581	-75.679	1.00	67.41	FS6
ATOM	9764	CA	VAL	88	176.988	112.528	-83.532	1.00	81.51	FS6	ATOM	9817	CA	GLU	95	163.355	127.024	-75.780	1.00	67.41	FS6
ATOM	9765	CB	VAL	88	176.423	111.225	-84.096	1.00	74.71	FS6	ATOM	9818	CB	GLU	95	162.175	127.500	-74.935	1.00	164.13	FS6
ATOM	9766	CG1	VAL	88	174.942	111.395	-84.399	1.00	74.71	FS6	ATOM	9819	CG	GLU	95	160.952	126.601	-74.966	1.00	164.13	FS6
ATOM	9767	CG2	VAL	88	177.200	110.817	-85.327	1.00	74.71	FS6	ATOM	9820	CD	GLU	95	160.297	126.545	-76.327	1.00	164.13	FS6
ATOM	9768	C	VAL	88	176.291	112.774	-82.209	1.00	81.51	FS6	ATOM	9821	OE1	GLU	95	160.053	127.624	-76.908	1.00	164.13	FS6
ATOM	9769	O	VAL	88	176.242	111.879	-81.363	1.00	81.51	FS6	ATOM	9822	OE2	GLU	95	160.018	125.426	-76.809	1.00	164.13	FS6
ATOM	9770	N	MET	89	175.748	113.974	-82.027	1.00	65.82	FS6	ATOM	9823	C	GLU	95	164.641	127.613	-75.201	1.00	67.41	FS6

ATOM	9824	O	GLU	95	165.094	127.206	-74.127	1.00	67.41	FS6	ATOM	9877	CB	ASP	4	138.320	114.910	-31.519	1.00 65.78	HS8
ATOM	9825	N	PRO	96	165.253	128.573	-75.902	1.00	56.66	FS6	ATOM	9878	CG	ASP	4	137.421	115.402	-30.410	1.00 65.78	HS8
ATOM	9826	CD	PRO	96	164.781	129.312	-77.080	1.00	66.89	FS6	ATOM	9879	OD1	ASP	4	137.804	115.275	-29.228	1.00 65.78	HS8
ATOM	9827	CA	PRO	96	166.486	129.168	-75.378	1.00	56.66	FS6	ATOM	9880	OD2	ASP	4	136.322	115.915	-30.728	1.00 65.78	HS8
ATOM	9828	CB	PRO	96	166.832	130.208	-76.436	1.00	66.89	FS6	ATOM	9881	C	ASP	4	137.791	116.950	-32.792	1.00 44.47	HS8
ATOM	9829	CG	PRO	96	165.488	130.640	-76.913	1.00	66.89	FS6	ATOM	9882	O	ASP	4	138.625	117.610	-32.168	1.00 44.47	HS8
ATOM	9830	C	PRO	96	166.248	129.793	-73.997	1.00	56.66	FS6	ATOM	9883	N	PRO	5	136.750	117.518	-33.405	1.00 52.55	HS8
ATOM	9831	O	PRO	96	165.104	129.983	-73.593	1.00	56.66	FS6	ATOM	9884	CD	PRO	5	135.806	116.758	-34.228	1.00 29.13	HS8
ATOM	9832	N	PHE	97	167.318	130.105	-73.274	1.00	81.01	FS6	ATOM	9885	CA	PRO	5	136.445	118.945	-33.477	1.00 52.55	HS8
ATOM	9833	CA	PHE	97	167.178	130.708	-71.955	1.00	81.01	FS6	ATOM	9886	CB	PRO	5	135.203	118.975	-34.346	1.00 29.13	HS8
ATOM	9834	CB	PHE	97	167.850	129.846	-70.892	1.00	66.82	FS6	ATOM	9887	CG	PRO	5	135.382	117.785	-35.219	1.00 29.13	HS8
ATOM	9835	CG	PHE	97	167.300	130.060	-69.515	1.00	66.82	FS6	ATOM	9888	C	PRO	5	136.226	119.624	-32.136	1.00 52.55	HS8
ATOM	9836	CD1	PHE	97	166.133	129.406	-69.111	1.00	66.82	FS6	ATOM	9889	O	PRO	5	136.572	120.789	-31.968	1.00 52.55	HS8
ATOM	9837	CD2	PHE	97	167.915	130.953	-68.636	1.00	66.82	FS6	ATOM	9890	N	ILE	6	135.634	118.915	-31.186	1.00 50.16	HS8
ATOM	9838	CE1	PHE	97	165.578	129.638	-67.850	1.00	66.82	FS6	ATOM	9891	CA	ILE	6	135.415	119.516	-29.882	1.00 50.16	HS8
ATOM	9839	CE2	PHE	97	167.373	131.198	-67.374	1.00	66.82	FS6	ATOM	9892	CB	ILE	6	134.547	118.612	-28.982	1.00 26.49	HS8
ATOM	9840	CZ	PHE	97	166.197	130.537	-66.978	1.00	66.82	FS6	ATOM	9893	CG2	ILE	6	134.365	119.262	-27.607	1.00 26.49	HS8
ATOM	9841	C	PHE	97	167.802	132.097	-71.945	1.00	81.01	FS6	ATOM	9894	CG1	ILE	6	133.198	118.374	-29.660	1.00 26.49	HS8
ATOM	9842	O	PHE	97	168.740	132.365	-72.690	1.00	81.01	FS6	ATOM	9895	CD1	ILE	6	132.480	119.638	-30.024	1.00 26.49	HS8
ATOM	9843	N	LEU	98	167.288	132.968	-71.082	1.00	125.27	FS6	ATOM	9896	C	ILE	6	136.772	119.739	-29.231	1.00 50.16	HS8
ATOM	9844	CA	LEU	98	167.759	134.348	-70.973	1.00	125.27	FS6	ATOM	9897	O	ILE	6	137.062	120.814	-28.694	1.00 50.16	HS8
ATOM	9845	CB	LEU	98	169.235	134.400	-70.555	1.00	58.92	FS6	ATOM	9898	N	ALA	7	137.606	118.711	-29.285	1.00 51.57	HS8
ATOM	9846	CG	LEU	98	169.747	135.798	-70.178	1.00	58.92	FS6	ATOM	9899	CA	ALA	7	138.928	118.818	-28.717	1.00 51.57	HS8
ATOM	9847	CD1	LEU	98	169.856	135.921	-68.669	1.00	58.92	FS6	ATOM	9900	CB	ALA	7	139.650	117.519	-28.879	1.00 19.81	HS8
ATOM	9848	CD2	LEU	98	171.105	136.044	-70.803	1.00	58.92	FS6	ATOM	9901	C	ALA	7	139.645	119.926	-29.477	1.00 51.57	HS8
ATOM	9849	C	LEU	98	167.579	135.048	-72.322	1.00	125.27	FS6	ATOM	9902	O	ALA	7	140.287	120.795	-28.887	1.00 51.57	HS8
ATOM	9850	O	LEU	98	166.451	135.508	-72.595	1.00	125.27	FS6	ATOM	9903	N	ASP	8	139.520	119.910	-30.797	1.00 50.93	HS8
ATOM	9851	OXT	LEU	98	168.549	135.112	-73.107	1.00	58.92	FS6	ATOM	9904	CA	ASP	8	140.168	120.936	-31.586	1.00 50.93	HS8
ATOM	9852	CB	MET	1	139.898	114.642	-41.771	1.00	88.16	HS8	ATOM	9905	CB	ASP	8	139.762	120.846	-33.039	1.00 55.17	HS8
ATOM	9853	CG	MET	1	138.453	114.864	-41.344	1.00	88.16	HS8	ATOM	9906	CG	ASP	8	140.520	121.818	-33.883	1.00 55.17	HS8
ATOM	9854	SD	MET	1	137.631	113.313	-40.829	1.00	88.16	HS8	ATOM	9907	OD1	ASP	8	141.756	121.665	-33.987	1.00 55.17	HS8
ATOM	9855	CE	MET	1	137.302	112.485	-42.454	1.00	88.16	HS8	ATOM	9908	OD2	ASP	8	139.894	122.744	-34.425	1.00 55.17	HS8
ATOM	9856	C	MET	1	140.873	115.749	-39.758	1.00	103.75	HS8	ATOM	9909	C	ASP	8	139.828	122.326	-31.077	1.00 50.93	HS8
ATOM	9857	O	MET	1	141.721	115.136	-39.105	1.00	103.75	HS8	ATOM	9910	O	ASP	8	140.719	123.115	-30.774	1.00 50.93	HS8
ATOM	9858	N	MET	1	142.279	115.328	-41.689	1.00	103.75	HS8	ATOM	9911	N	MET	9	138.535	122.620	-30.990	1.00 58.00	HS8
ATOM	9859	CA	MET	1	140.891	115.697	-41.275	1.00	103.75	HS8	ATOM	9912	CA	MET	9	138.075	123.911	-30.511	1.00 58.00	HS8
ATOM	9860	N	LEU	2	139.922	116.481	-39.190	1.00	50.04	HS8	ATOM	9913	CB	MET	9	136.557	123.930	-30.429	1.00 47.09	HS8
ATOM	9861	CA	LEU	2	139.845	116.570	-37.738	1.00	50.04	HS8	ATOM	9914	CG	MET	9	136.021	125.119	-29.648	1.00 47.09	HS8
ATOM	9862	CB	LEU	2	139.020	117.785	-37.316	1.00	49.54	HS8	ATOM	9915	SD	MET	9	134.226	125.195	-29.562	1.00 47.09	HS8
ATOM	9863	CG	LEU	2	139.575	119.164	-37.662	1.00	49.54	HS8	ATOM	9916	CE	MET	9	133.900	124.029	-28.207	1.00 47.09	HS8
ATOM	9864	CD1	LEU	2	138.737	120.247	-36.958	1.00	49.54	HS8	ATOM	9917	C	MET	9	138.646	124.255	-29.140	1.00 58.00	HS8
ATOM	9865	CD2	LEU	2	141.026	119.246	-37.232	1.00	49.54	HS8	ATOM	9918	O	MET	9	139.257	125.304	-28.951	1.00 58.00	HS8
ATOM	9866	C	LEU	2	139.262	115.297	-37.114	1.00	50.04	HS8	ATOM	9919	N	LEU	10	138.450	123.372	-28.176	1.00 40.47	HS8
ATOM	9867	O	LEU	2	138.134	114.900	-37.390	1.00	50.04	HS8	ATOM	9920	CA	LEU	10	138.943	123.638	-26.837	1.00 40.47	HS8
ATOM	9868	N	THR	3	140.049	114.645	-36.276	1.00	58.27	HS8	ATOM	9921	CB	LEU	10	138.738	122.414	-25.951	1.00 40.65	HS8
ATOM	9869	CA	THR	3	139.580	113.437	-35.642	1.00	58.27	HS8	ATOM	9922	CG	LEU	10	137.305	121.926	-25.806	1.00 40.65	HS8
ATOM	9870	CB	THR	3	140.781	112.613	-35.108	1.00	43.06	HS8	ATOM	9923	CD1	LEU	10	137.320	120.535	-25.245	1.00 40.65	HS8
ATOM	9871	OG1	THR	3	141.365	113.257	-33.975	1.00	43.06	HS8	ATOM	9924	CD2	LEU	10	136.515	122.873	-24.912	1.00 40.65	HS8
ATOM	9872	CG2	THR	3	141.847	112.523	-36.171	1.00	43.06	HS8	ATOM	9925	C	LEU	10	140.419	123.990	-26.866	1.00 40.47	HS8
ATOM	9873	C	THR	3	138.593	113.806	-34.524	1.00	58.27	HS8	ATOM	9926	O	LEU	10	140.913	124.727	-26.006	1.00 40.47	HS8
ATOM	9874	O	THR	3	137.675	113.041	-34.215	1.00	58.27	HS8	ATOM	9927	N	THR	11	141.127	123.456	-27.854	1.00 45.04	HS8
ATOM	9875	N	ASP	4	138.768	114.985	-33.933	1.00	44.47	HS8	ATOM	9928	CA	THR	11	142.557	123.698	-27.953	1.00 45.04	HS8
ATOM	9876	CA	ASP	4	137.880	115.434	-32.872	1.00	44.47	HS8	ATOM	9929	CB	THR	11	143.241	122.551	-28.712	1.00 47.19	HS8

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ATOM   9930  OG1 THR    11     143.167 121.361 -27.910  1.00 47.19      HS8
ATOM   9931  CG2 THR    11     144.706 122.880 -28.981  1.00 47.19      HS8
ATOM   9932  C   THR    11     142.861 125.048 -28.578  1.00 45.04      HS8
ATOM   9933  O   THR    11     143.778 125.752 -28.140  1.00 45.04      HS8
ATOM   9934  N   ARG    12     142.091 125.408 -29.600  1.00 40.14      HS8
ATOM   9935  CA  ARG    12     142.246 126.706 -30.228  1.00 40.14      HS8
ATOM   9936  CB  ARG    12     141.184 126.898 -31.301  1.00 42.60      HS8
ATOM   9937  CG  ARG    12     141.484 126.151 -32.583  1.00 42.60      HS8
ATOM   9938  CD  ARG    12     140.210 125.735 -33.307  1.00 42.60      HS8
ATOM   9939  NE  ARG    12     140.444 125.263 -34.678  1.00 42.60      HS8
ATOM   9940  CZ  ARG    12     140.768 126.061 -35.690  1.00 42.60      HS8
ATOM   9941  NH1 ARG    12     140.891 127.365 -35.474  1.00 42.60      HS8
ATOM   9942  NH2 ARG    12     140.974 125.566 -36.906  1.00 42.60      HS8
ATOM   9943  C   ARG    12     142.063 127.706 -29.084  1.00 40.14      HS8
ATOM   9944  O   ARG    12     142.912 128.579 -28.884  1.00 40.14      HS8
ATOM   9945  N   ILE    13     140.979 127.556 -28.313  1.00 34.96      HS8
ATOM   9946  CA  ILE    13     140.742 128.451 -27.183  1.00 34.96      HS8
ATOM   9947  CB  ILE    13     139.464 128.086 -26.378  1.00 22.05      HS8
ATOM   9948  CG2 ILE    13     139.402 128.873 -25.079  1.00 22.05      HS8
ATOM   9949  CG1 ILE    13     138.218 128.427 -27.186  1.00 22.05      HS8
ATOM   9950  CD1 ILE    13     137.483 127.222 -27.738  1.00 22.05      HS8
ATOM   9951  C   ILE    13     141.945 128.388 -26.254  1.00 34.96      HS8
ATOM   9952  O   ILE    13     142.541 129.415 -25.919  1.00 34.96      HS8
ATOM   9953  N   ARG    14     142.331 127.190 -25.847  1.00 40.63      HS8
ATOM   9954  CA  ARG    14     143.473 127.099 -24.949  1.00 40.63      HS8
ATOM   9955  CB  ARG    14     143.869 125.648 -24.686  1.00 27.50      HS8
ATOM   9956  CG  ARG    14     144.789 125.540 -23.504  1.00 27.50      HS8
ATOM   9957  CD  ARG    14     145.318 124.129 -23.284  1.00 27.50      HS8
ATOM   9958  NE  ARG    14     144.280 123.120 -23.253  1.00 27.50      HS8
ATOM   9959  CZ  ARG    14     143.933 122.384 -24.308  1.00 27.50      HS8
ATOM   9960  NH1 ARG    14     144.547 122.546 -25.474  1.00 27.50      HS8
ATOM   9961  NH2 ARG    14     142.965 121.473 -24.205  1.00 27.50      HS8
ATOM   9962  C   ARG    14     144.688 127.856 -25.492  1.00 40.63      HS8
ATOM   9963  O   ARG    14     145.267 128.682 -24.784  1.00 40.63      HS8
ATOM   9964  N   ASN    15     145.069 127.589 -26.743  1.00 50.88      HS8
ATOM   9965  CA  ASN    15     146.234 128.249 -27.334  1.00 50.88      HS8
ATOM   9966  CB  ASN    15     146.525 127.697 -28.733  1.00 48.16      HS8
ATOM   9967  CG  ASN    15     146.982 126.245 -28.715  1.00 48.16      HS8
ATOM   9968  OD1 ASN    15     147.667 125.809 -27.794  1.00 48.16      HS8
ATOM   9969  ND2 ASN    15     146.620 125.497 -29.753  1.00 48.16      HS8
ATOM   9970  C   ASN    15     146.119 129.770 -27.427  1.00 50.88      HS8
ATOM   9971  O   ASN    15     146.994 130.502 -26.956  1.00 50.88      HS8
ATOM   9972  N   ALA    16     145.042 130.239 -28.049  1.00 32.97      HS8
ATOM   9973  CA  ALA    16     144.802 131.668 -28.222  1.00 32.97      HS8
ATOM   9974  CB  ALA    16     143.442 131.895 -28.915  1.00 16.89      HS8
ATOM   9975  C   ALA    16     144.856 132.424 -26.904  1.00 32.97      HS8
ATOM   9976  O   ALA    16     145.405 133.514 -26.846  1.00 32.97      HS8
ATOM   9977  N   THR    17     144.290 131.868 -25.841  1.00 40.78      HS8
ATOM   9978  CA  THR    17     144.335 132.588 -24.582  1.00 40.78      HS8
ATOM   9979  CB  THR    17     143.410 131.994 -23.529  1.00 42.27      HS8
ATOM   9980  OG1 THR    17     143.700 130.601 -23.355  1.00 42.27      HS8
ATOM   9981  CG2 THR    17     141.984 132.188 -23.935  1.00 42.27      HS8
ATOM   9982  C   THR    17     145.723 132.624 -23.979  1.00 40.78      HS8
ATOM   9983  O   THR    17     146.077 133.578 -23.284  1.00 40.78      HS8
ATOM   9984  N   ARG    18     146.513 131.587 -24.230  1.00 49.64      HS8
ATOM   9985  CA  ARG    18     147.848 131.550 -23.668  1.00 49.64      HS8
ATOM   9986  CB  ARG    18     148.465 130.165 -23.847  1.00 74.44      HS8
ATOM   9987  CG  ARG    18     148.230 129.277 -22.641  1.00 74.44      HS8
ATOM   9988  CD  ARG    18     146.779 129.360 -22.214  1.00 74.44      HS8
ATOM   9989  NE  ARG    18     146.561 128.985 -20.819  1.00 74.44      HS8
ATOM   9990  CZ  ARG    18     145.394 129.130 -20.188  1.00 74.44      HS8
ATOM   9991  NH1 ARG    18     144.348 129.641 -20.834  1.00 74.44      HS8
ATOM   9992  NH2 ARG    18     145.270 128.777 -18.910  1.00 74.44      HS8
ATOM   9993  C   ARG    18     148.727 132.638 -24.244  1.00 49.64      HS8
ATOM   9994  O   ARG    18     149.759 132.959 -23.668  1.00 49.64      HS8
ATOM   9995  N   VAL    19     148.317 133.211 -25.373  1.00 56.06      HS8
ATOM   9996  CA  VAL    19     149.065 134.302 -25.983  1.00 56.06      HS8
ATOM   9997  CB  VAL    19     149.391 134.045 -27.452  1.00 33.47      HS8
ATOM   9998  CG1 VAL    19     150.592 133.161 -27.560  1.00 33.47      HS8
ATOM   9999  CG2 VAL    19     148.227 133.425 -28.136  1.00 33.47      HS8
ATOM  10000  C   VAL    19     148.259 135.591 -25.886  1.00 56.06      HS8
ATOM  10001  O   VAL    19     148.733 136.662 -26.267  1.00 56.06      HS8
ATOM  10002  N   TYR    20     147.028 135.473 -25.394  1.00 42.33      HS8
ATOM  10003  CA  TYR    20     146.161 136.623 -25.187  1.00 42.33      HS8
ATOM  10004  CB  TYR    20     146.945 137.684 -24.445  1.00 33.55      HS8
ATOM  10005  CG  TYR    20     147.424 137.197 -23.116  1.00 33.55      HS8
ATOM  10006  CD1 TYR    20     146.667 137.408 -21.967  1.00 33.55      HS8
ATOM  10007  CE1 TYR    20     147.101 136.968 -20.740  1.00 33.55      HS8
ATOM  10008  CD2 TYR    20     148.632 136.524 -23.003  1.00 33.55      HS8
ATOM  10009  CE2 TYR    20     149.086 136.075 -21.779  1.00 33.55      HS8
ATOM  10010  CZ  TYR    20     148.312 136.303 -20.649  1.00 33.55      HS8
ATOM  10011  OH  TYR    20     148.753 135.868 -19.423  1.00 33.55      HS8
ATOM  10012  C   TYR    20     145.456 137.263 -26.367  1.00 42.33      HS8
ATOM  10013  O   TYR    20     145.275 138.477 -26.382  1.00 42.33      HS8
ATOM  10014  N   LYS    21     145.056 136.464 -27.349  1.00 35.23      HS8
ATOM  10015  CA  LYS    21     144.329 136.991 -28.498  1.00 35.23      HS8
ATOM  10016  CB  LYS    21     143.877 135.846 -29.402  1.00 53.29      HS8
ATOM  10017  CG  LYS    21     144.987 134.965 -29.903  1.00 53.29      HS8
ATOM  10018  CD  LYS    21     145.815 135.711 -30.916  1.00 53.29      HS8
ATOM  10019  CE  LYS    21     147.063 134.948 -31.289  1.00 53.29      HS8
ATOM  10020  NZ  LYS    21     147.834 135.705 -32.302  1.00 53.29      HS8
ATOM  10021  C   LYS    21     143.087 137.678 -27.940  1.00 35.23      HS8
ATOM  10022  O   LYS    21     142.686 137.402 -26.818  1.00 35.23      HS8
ATOM  10023  N   GLU    22     142.473 138.576 -28.698  1.00 60.26      HS8
ATOM  10024  CA  GLU    22     141.254 139.207 -28.218  1.00 60.26      HS8
ATOM  10025  CB  GLU    22     141.085 140.608 -28.794  1.00116.34      HS8
ATOM  10026  CG  GLU    22     141.488 141.696 -27.820  1.00116.34      HS8
ATOM  10027  CD  GLU    22     140.766 143.006 -28.078  1.00116.34      HS8
ATOM  10028  OE1 GLU    22     139.515 143.001 -28.115  1.00116.34      HS8
ATOM  10029  OE2 GLU    22     141.447 144.042 -28.234  1.00116.34      HS8
ATOM  10030  C   GLU    22     140.083 138.321 -28.637  1.00 60.26      HS8
ATOM  10031  O   GLU    22     139.046 138.283 -27.973  1.00 60.26      HS8
ATOM  10032  N   SER    23     140.253 137.596 -29.736  1.00 40.52      HS8
ATOM  10033  CA  SER    23     139.214 136.705 -30.227  1.00 40.52      HS8
ATOM  10034  CB  SER    23     138.309 137.443 -31.201  1.00 65.68      HS8
ATOM  10035  OG  SER    23     139.019 137.785 -32.379  1.00 65.68      HS8
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ATOM  10036  C   SER  23     139.882 135.545 -30.948  1.00 40.52      HS8
ATOM  10037  O   SER  23     141.102 135.479 -31.006  1.00 40.52      HS8
ATOM  10038  N   THR  24     139.093 134.638 -31.506  1.00 60.08      HS8
ATOM  10039  CA  THR  24     139.664 133.511 -32.227  1.00 60.08      HS8
ATOM  10040  CB  THR  24     140.395 132.578 -31.285  1.00 48.62      HS8
ATOM  10041  OG1 THR  24     140.571 131.304 -31.918  1.00 48.62      HS8
ATOM  10042  CG2 THR  24     139.610 132.419 -30.016  1.00 48.62      HS8
ATOM  10043  C   THR  24     138.625 132.704 -32.991  1.00 60.08      HS8
ATOM  10044  O   THR  24     137.513 132.492 -32.509  1.00 60.08      HS8
ATOM  10045  N   ASP  25     139.001 132.242 -34.180  1.00 44.73      HS8
ATOM  10046  CA  ASP  25     138.096 131.487 -35.024  1.00 44.73      HS8
ATOM  10047  CB  ASP  25     138.318 131.873 -36.474  1.00 65.34      HS8
ATOM  10048  CG  ASP  25     138.016 133.320 -36.719  1.00 65.34      HS8
ATOM  10049  OD1 ASP  25     137.677 134.015 -35.736  1.00 65.34      HS8
ATOM  10050  OD2 ASP  25     138.113 133.764 -37.884  1.00 65.34      HS8
ATOM  10051  C   ASP  25     138.199 129.984 -34.881  1.00 44.73      HS8
ATOM  10052  O   ASP  25     139.285 129.429 -34.723  1.00 44.73      HS8
ATOM  10053  N   VAL  26     137.043 129.333 -34.941  1.00 49.03      HS8
ATOM  10054  CA  VAL  26     136.955 127.887 -34.833  1.00 49.03      HS8
ATOM  10055  CB  VAL  26     136.616 127.440 -33.378  1.00 41.51      HS8
ATOM  10056  CG1 VAL  26     135.501 128.272 -32.811  1.00 41.51      HS8
ATOM  10057  CG2 VAL  26     136.192 125.993 -33.369  1.00 41.51      HS8
ATOM  10058  C   VAL  26     135.865 127.419 -35.784  1.00 49.03      HS8
ATOM  10059  O   VAL  26     134.742 127.917 -35.740  1.00 49.03      HS8
ATOM  10060  N   PRO  27     136.195 126.473 -36.678  1.00 53.20      HS8
ATOM  10061  CD  PRO  27     137.490 125.781 -36.805  1.00 51.48      HS8
ATOM  10062  CA  PRO  27     135.238 125.937 -37.644  1.00 53.20      HS8
ATOM  10063  CB  PRO  27     135.912 124.657 -38.105  1.00 51.48      HS8
ATOM  10064  CG  PRO  27     137.331 125.048 -38.124  1.00 51.48      HS8
ATOM  10065  C   PRO  27     133.904 125.684 -36.960  1.00 53.20      HS8
ATOM  10066  O   PRO  27     133.830 124.956 -35.962  1.00 53.20      HS8
ATOM  10067  N   ALA  28     132.859 126.294 -37.517  1.00 55.88      HS8
ATOM  10068  CA  ALA  28     131.497 126.217 -36.996  1.00 55.88      HS8
ATOM  10069  CB  ALA  28     130.677 127.316 -37.633  1.00 55.32      HS8
ATOM  10070  C   ALA  28     130.765 124.875 -37.133  1.00 55.88      HS8
ATOM  10071  O   ALA  28     130.848 124.208 -38.159  1.00 55.88      HS8
ATOM  10072  N   SER  29     130.051 124.502 -36.075  1.00 41.37      HS8
ATOM  10073  CA  SER  29     129.265 123.272 -36.021  1.00 41.37      HS8
ATOM  10074  CB  SER  29     130.146 122.076 -35.678  1.00 55.99      HS8
ATOM  10075  OG  SER  29     130.274 121.925 -34.270  1.00 55.99      HS8
ATOM  10076  C   SER  29     128.259 123.493 -34.890  1.00 41.37      HS8
ATOM  10077  O   SER  29     128.635 124.015 -33.824  1.00 41.37      HS8
ATOM  10078  N   ARG  30     126.996 123.111 -35.116  1.00 42.22      HS8
ATOM  10079  CA  ARG  30     125.939 123.291 -34.111  1.00 42.22      HS8
ATOM  10080  CB  ARG  30     124.722 122.424 -34.444  1.00121.29      HS8
ATOM  10081  CG  ARG  30     123.866 122.913 -35.613  1.00121.29      HS8
ATOM  10082  CD  ARG  30     123.079 124.179 -35.272  1.00121.29      HS8
ATOM  10083  NE  ARG  30     122.020 124.449 -36.247  1.00121.29      HS8
ATOM  10084  CZ  ARG  30     121.216 125.510 -36.215  1.00121.29      HS8
ATOM  10085  NH1 ARG  30     121.342 126.418 -35.254  1.00121.29      HS8
ATOM  10086  NH2 ARG  30     120.278 125.661 -37.142  1.00121.29      HS8
ATOM  10087  C   ARG  30     126.450 122.931 -32.718  1.00 42.22      HS8
ATOM  10088  O   ARG  30     126.544 123.783 -31.837  1.00 42.22      HS8
ATOM  10089  N   PHE  31     126.793 121.660 -32.536  1.00 35.10      HS8
ATOM  10090  CA  PHE  31     127.304 121.160 -31.270  1.00 35.10      HS8
ATOM  10091  CB  PHE  31     127.900 119.767 -31.493  1.00 39.87      HS8
ATOM  10092  CG  PHE  31     128.354 119.088 -30.245  1.00 39.87      HS8
ATOM  10093  CD1 PHE  31     127.682 119.272 -29.047  1.00 39.87      HS8
ATOM  10094  CD2 PHE  31     129.447 118.255 -30.270  1.00 39.87      HS8
ATOM  10095  CE1 PHE  31     128.100 118.634 -27.883  1.00 39.87      HS8
ATOM  10096  CE2 PHE  31     129.870 117.616 -29.122  1.00 39.87      HS8
ATOM  10097  CZ  PHE  31     129.194 117.807 -27.924  1.00 39.87      HS8
ATOM  10098  C   PHE  31     128.344 122.110 -30.680  1.00 35.10      HS8
ATOM  10099  O   PHE  31     128.283 122.456 -29.487  1.00 35.10      HS8
ATOM  10100  N   LYS  32     129.297 122.540 -31.505  1.00 32.99      HS8
ATOM  10101  CA  LYS  32     130.316 123.462 -31.009  1.00 32.99      HS8
ATOM  10102  CB  LYS  32     131.264 123.895 -32.133  1.00 47.63      HS8
ATOM  10103  CG  LYS  32     132.438 122.954 -32.376  1.00 47.63      HS8
ATOM  10104  CD  LYS  32     133.085 123.249 -33.727  1.00 47.63      HS8
ATOM  10105  CE  LYS  32     134.131 122.196 -34.100  1.00 47.63      HS8
ATOM  10106  NZ  LYS  32     134.514 122.208 -35.549  1.00 47.63      HS8
ATOM  10107  C   LYS  32     129.615 124.678 -30.416  1.00 32.99      HS8
ATOM  10108  O   LYS  32     129.861 125.053 -29.259  1.00 32.99      HS8
ATOM  10109  N   GLU  33     128.724 125.271 -31.212  1.00 51.46      HS8
ATOM  10110  CA  GLU  33     127.970 126.447 -30.796  1.00 51.46      HS8
ATOM  10111  CB  GLU  33     126.959 126.816 -31.881  1.00 58.99      HS8
ATOM  10112  CG  GLU  33     126.413 128.228 -31.792  1.00 58.99      HS8
ATOM  10113  CD  GLU  33     125.603 128.641 -33.035  1.00 58.99      HS8
ATOM  10114  OE1 GLU  33     124.971 127.760 -33.683  1.00 58.99      HS8
ATOM  10115  OE2 GLU  33     125.585 129.859 -33.350  1.00 58.99      HS8
ATOM  10116  C   GLU  33     127.276 126.199 -29.452  1.00 51.46      HS8
ATOM  10117  O   GLU  33     127.264 127.080 -28.586  1.00 51.46      HS8
ATOM  10118  N   GLU  34     126.723 124.998 -29.266  1.00 37.81      HS8
ATOM  10119  CA  GLU  34     126.052 124.647 -28.009  1.00 37.81      HS8
ATOM  10120  CB  GLU  34     125.513 123.215 -28.055  1.00 85.66      HS8
ATOM  10121  CG  GLU  34     124.440 122.987 -29.103  1.00 85.66      HS8
ATOM  10122  CD  GLU  34     123.178 123.804 -28.860  1.00 85.66      HS8
ATOM  10123  OE1 GLU  34     122.320 123.840 -29.772  1.00 85.66      HS8
ATOM  10124  OE2 GLU  34     123.035 124.400 -27.767  1.00 85.66      HS8
ATOM  10125  C   GLU  34     127.024 124.780 -26.843  1.00 37.81      HS8
ATOM  10126  O   GLU  34     126.731 125.451 -25.864  1.00 37.81      HS8
ATOM  10127  N   ILE  35     128.184 124.142 -26.961  1.00 42.59      HS8
ATOM  10128  CA  ILE  35     129.210 124.199 -25.921  1.00 42.59      HS8
ATOM  10129  CB  ILE  35     130.475 123.406 -26.374  1.00 38.02      HS8
ATOM  10130  CG2 ILE  35     131.511 123.343 -25.263  1.00 38.02      HS8
ATOM  10131  CG1 ILE  35     130.066 121.975 -26.724  1.00 38.02      HS8
ATOM  10132  CD1 ILE  35     131.154 121.153 -27.343  1.00 38.02      HS8
ATOM  10133  C   ILE  35     129.557 125.664 -25.626  1.00 42.59      HS8
ATOM  10134  O   ILE  35     129.507 126.112 -24.469  1.00 42.59      HS8
ATOM  10135  N   LEU  36     129.888 126.412 -26.674  1.00 38.81      HS8
ATOM  10136  CA  LEU  36     130.221 127.831 -26.520  1.00 38.81      HS8
ATOM  10137  CB  LEU  36     130.340 128.493 -27.899  1.00 34.68      HS8
ATOM  10138  CG  LEU  36     131.526 127.973 -28.744  1.00 34.68      HS8
ATOM  10139  CD1 LEU  36     131.392 128.453 -30.202  1.00 34.68      HS8
ATOM  10140  CD2 LEU  36     132.855 128.432 -28.114  1.00 34.68      HS8
ATOM  10141  C   LEU  36     129.180 128.555 -25.655  1.00 38.81      HS8
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ATOM	10142	O	LEU	36	129.545	129.299	-24.738	1.00	38.81	HS8	ATOM	10195	N	GLY	43	130.549	132.808	-18.125	1.00	51.91	HS8
ATOM	10143	N	ARG	37	127.893	128.320	-25.945	1.00	44.08	HS8	ATOM	10196	CA	GLY	43	131.488	133.909	-17.996	1.00	51.91	HS8
ATOM	10144	CA	ARG	37	126.794	128.915	-25.182	1.00	44.08	HS8	ATOM	10197	C	GLY	43	132.916	133.591	-18.371	1.00	51.91	HS8
ATOM	10145	CB	ARG	37	125.479	128.178	-25.435	1.00	97.00	HS8	ATOM	10198	O	GLY	43	133.819	134.391	-18.130	1.00	51.91	HS8
ATOM	10146	CG	ARG	37	124.591	128.751	-26.521	1.00	97.00	HS8	ATOM	10199	N	PHE	44	133.122	132.418	-18.962	1.00	49.02	HS8
ATOM	10147	CD	ARG	37	123.162	128.942	-26.011	1.00	97.00	HS8	ATOM	10200	CA	PHE	44	134.451	131.993	-19.377	1.00	49.02	HS8
ATOM	10148	NE	ARG	37	122.207	129.120	-27.103	1.00	97.00	HS8	ATOM	10201	CB	PHE	44	134.467	130.482	-19.634	1.00	33.73	HS8
ATOM	10149	CZ	ARG	37	120.959	129.558	-26.946	1.00	97.00	HS8	ATOM	10202	CG	PHE	44	134.513	129.670	-18.379	1.00	33.73	HS8
ATOM	10150	NH1	ARG	37	120.522	129.872	-25.729	1.00	97.00	HS8	ATOM	10203	CD1	PHE	44	135.593	129.779	-17.514	1.00	33.73	HS8
ATOM	10151	NH2	ARG	37	120.142	129.666	-27.998	1.00	97.00	HS8	ATOM	10204	CD2	PHE	44	133.476	128.815	-18.048	1.00	33.73	HS8
ATOM	10152	C	ARG	37	127.105	128.825	-23.695	1.00	44.08	HS8	ATOM	10205	CE1	PHE	44	135.644	129.047	-16.334	1.00	33.73	HS8
ATOM	10153	O	ARG	37	126.991	129.814	-22.968	1.00	44.08	HS8	ATOM	10206	CE2	PHE	44	133.513	128.075	-16.872	1.00	33.73	HS8
ATOM	10154	N	ILE	38	127.492	127.633	-23.244	1.00	44.27	HS8	ATOM	10207	CZ	PHE	44	134.604	128.193	-16.012	1.00	33.73	HS8
ATOM	10155	CA	ILE	38	127.814	127.435	-21.838	1.00	44.27	HS8	ATOM	10208	C	PHE	44	134.916	132.761	-20.599	1.00	49.02	HS8
ATOM	10156	CB	ILE	38	128.133	125.964	-21.504	1.00	53.37	HS8	ATOM	10209	O	PHE	44	136.089	133.070	-20.721	1.00	49.02	HS8
ATOM	10157	CG2	ILE	38	128.487	125.825	-20.022	1.00	53.37	HS8	ATOM	10210	N	ILE	45	134.014	133.070	-21.512	1.00	41.76	HS8
ATOM	10158	CG1	ILE	38	126.924	125.094	-21.787	1.00	53.37	HS8	ATOM	10211	CA	ILE	45	134.424	133.851	-22.662	1.00	41.76	HS8
ATOM	10159	CD1	ILE	38	126.513	125.134	-23.212	1.00	53.37	HS8	ATOM	10212	CB	ILE	45	134.222	133.075	-23.976	1.00	33.93	HS8
ATOM	10160	C	ILE	38	129.035	128.261	-21.481	1.00	44.27	HS8	ATOM	10213	CG2	ILE	45	135.163	131.871	-24.007	1.00	33.93	HS8
ATOM	10161	O	ILE	38	129.039	128.979	-20.476	1.00	44.27	HS8	ATOM	10214	CG1	ILE	45	132.766	132.637	-24.115	1.00	33.93	HS8
ATOM	10162	N	LEU	39	130.080	128.154	-22.295	1.00	46.06	HS8	ATOM	10215	CD1	ILE	45	132.528	131.686	-25.275	1.00	33.93	HS8
ATOM	10163	CA	LEU	39	131.270	128.925	-21.997	1.00	46.06	HS8	ATOM	10216	C	ILE	45	133.585	135.116	-22.655	1.00	41.76	HS8
ATOM	10164	CB	LEU	39	132.280	128.866	-23.150	1.00	43.92	HS8	ATOM	10217	O	ILE	45	132.707	135.267	-21.814	1.00	41.76	HS8
ATOM	10165	CG	LEU	39	133.139	127.610	-23.259	1.00	43.92	HS8	ATOM	10218	N	LYS	46	133.859	136.058	-23.541	1.00	73.41	HS8
ATOM	10166	CD1	LEU	39	133.716	127.252	-21.901	1.00	43.92	HS8	ATOM	10219	CA	LYS	46	133.032	137.253	-23.547	1.00	73.41	HS8
ATOM	10167	CD2	LEU	39	132.272	126.488	-23.768	1.00	43.92	HS8	ATOM	10220	CB	LYS	46	133.715	138.428	-24.251	1.00	53.64	HS8
ATOM	10168	C	LEU	39	130.861	130.369	-21.736	1.00	46.06	HS8	ATOM	10221	CG	LYS	46	134.854	139.064	-23.494	1.00	53.64	HS8
ATOM	10169	O	LEU	39	131.254	130.954	-20.728	1.00	46.06	HS8	ATOM	10222	CD	LYS	46	134.842	140.555	-23.746	1.00	53.64	HS8
ATOM	10170	N	ALA	40	130.058	130.930	-22.640	1.00	49.75	HS8	ATOM	10223	CE	LYS	46	136.176	141.195	-23.434	1.00	53.64	HS8
ATOM	10171	CA	ALA	40	129.606	132.306	-22.514	1.00	49.75	HS8	ATOM	10224	NZ	LYS	46	137.180	140.777	-24.458	1.00	53.64	HS8
ATOM	10172	CB	ALA	40	128.730	132.657	-23.682	1.00	68.47	HS8	ATOM	10225	C	LYS	46	131.790	136.884	-24.320	1.00	73.41	HS8
ATOM	10173	C	ALA	40	128.846	132.504	-21.206	1.00	49.75	HS8	ATOM	10226	O	LYS	46	130.744	137.488	-24.149	1.00	73.41	HS8
ATOM	10174	O	ALA	40	129.311	133.210	-20.303	1.00	49.75	HS8	ATOM	10227	N	GLY	47	131.913	135.874	-25.169	1.00	50.06	HS8
ATOM	10175	N	ARG	41	127.674	131.876	-21.110	1.00	37.86	HS8	ATOM	10228	CA	GLY	47	130.795	135.459	-25.988	1.00	50.06	HS8
ATOM	10176	CA	ARG	41	126.836	131.949	-19.915	1.00	37.86	HS8	ATOM	10229	C	GLY	47	131.335	135.004	-27.324	1.00	50.06	HS8
ATOM	10177	CB	ARG	41	125.796	130.835	-19.951	1.00	53.71	HS8	ATOM	10230	O	GLY	47	132.546	134.950	-27.515	1.00	50.06	HS8
ATOM	10178	CG	ARG	41	124.850	130.831	-18.769	1.00	53.71	HS8	ATOM	10231	N	TYR	48	130.458	134.666	-28.255	1.00	51.29	HS8
ATOM	10179	CD	ARG	41	123.980	129.592	-18.792	1.00	53.71	HS8	ATOM	10232	CA	TYR	48	130.917	134.213	-29.550	1.00	51.29	HS8
ATOM	10180	NE	ARG	41	123.407	129.332	-20.109	1.00	53.71	HS8	ATOM	10233	CB	TYR	48	130.829	132.698	-29.641	1.00	58.21	HS8
ATOM	10181	CZ	ARG	41	123.505	128.162	-20.735	1.00	53.71	HS8	ATOM	10234	CG	TYR	48	129.425	132.165	-29.743	1.00	58.21	HS8
ATOM	10182	NH1	ARG	41	124.153	127.154	-20.157	1.00	53.71	HS8	ATOM	10235	CD1	TYR	48	128.612	132.054	-28.615	1.00	58.21	HS8
ATOM	10183	NH2	ARG	41	122.957	127.990	-21.933	1.00	53.71	HS8	ATOM	10236	CE1	TYR	48	127.301	131.569	-28.712	1.00	58.21	HS8
ATOM	10184	C	ARG	41	127.645	131.818	-18.627	1.00	37.86	HS8	ATOM	10237	CD2	TYR	48	128.904	131.781	-30.974	1.00	58.21	HS8
ATOM	10185	O	ARG	41	127.360	132.477	-17.639	1.00	37.86	HS8	ATOM	10238	CE2	TYR	48	127.601	131.296	-31.089	1.00	58.21	HS8
ATOM	10186	N	GLU	42	128.656	130.959	-18.637	1.00	47.98	HS8	ATOM	10239	CZ	TYR	48	126.803	131.193	-29.956	1.00	58.21	HS8
ATOM	10187	CA	GLU	42	129.468	130.748	-17.452	1.00	47.98	HS8	ATOM	10240	OH	TYR	48	125.510	130.729	-30.080	1.00	58.21	HS8
ATOM	10188	CB	GLU	42	130.123	129.374	-17.519	1.00	77.80	HS8	ATOM	10241	C	TYR	48	130.046	134.836	-30.613	1.00	51.29	HS8
ATOM	10189	CG	GLU	42	129.129	128.250	-17.417	1.00	77.80	HS8	ATOM	10242	O	TYR	48	129.115	135.561	-30.290	1.00	51.29	HS8
ATOM	10190	CD	GLU	42	128.163	128.467	-16.270	1.00	77.80	HS8	ATOM	10243	N	GLU	49	130.331	134.544	-31.876	1.00	39.53	HS8
ATOM	10191	OE1	GLU	42	128.630	128.696	-15.125	1.00	77.80	HS8	ATOM	10244	CA	GLU	49	129.561	135.109	-32.969	1.00	39.53	HS8
ATOM	10192	OE2	GLU	42	126.935	128.409	-16.518	1.00	77.80	HS8	ATOM	10245	CB	GLU	49	129.966	136.562	-33.173	1.00	134.09	HS8
ATOM	10193	C	GLU	42	130.520	131.824	-17.231	1.00	47.98	HS8	ATOM	10246	CG	GLU	49	129.588	137.126	-34.513	1.00	134.09	HS8
ATOM	10194	O	GLU	42	131.293	131.756	-16.271	1.00	47.98	HS8	ATOM	10247	CD	GLU	49	130.063	138.551	-34.678	1.00	134.09	HS8

ATOM	10248	OE1	GLU	49	131.242	138.823	-34.361	1.00134.09	HS8	ATOM	10301	CD	LYS	56	134.505	127.841	-47.232	1.00 81.52	HS8
ATOM	10249	OE2	GLU	49	129.263	139.399	-35.128	1.00134.09	HS8	ATOM	10302	CE	LYS	56	134.532	126.857	-48.389	1.00 81.52	HS8
ATOM	10250	C	GLU	49	129.827	134.311	-34.228	1.00 39.53	HS8	ATOM	10303	NZ	LYS	56	134.768	127.551	-49.683	1.00 81.52	HS8
ATOM	10251	O	GLU	49	130.945	133.860	-34.443	1.00 39.53	HS8	ATOM	10304	C	LYS	56	132.717	129.619	-43.441	1.00 55.35	HS8
ATOM	10252	N	ARG	50	128.797	134.114	-35.046	1.00 54.71	HS8	ATOM	10305	O	LYS	56	133.270	130.607	-42.971	1.00 55.35	HS8
ATOM	10253	CA	ARG	50	128.948	133.377	-36.298	1.00 54.71	HS8	ATOM	10306	N	PRO	57	131.787	128.943	-42.763	1.00 43.35	HS8
ATOM	10254	CB	ARG	50	127.597	132.886	-36.793	1.00 56.12	HS8	ATOM	10307	CD	PRO	57	131.022	127.809	-43.311	1.00 32.80	HS8
ATOM	10255	CG	ARG	50	127.037	131.692	-36.068	1.00 56.12	HS8	ATOM	10308	CA	PRO	57	131.313	129.291	-41.419	1.00 43.35	HS8
ATOM	10256	CD	ARG	50	125.573	131.554	-36.415	1.00 56.12	HS8	ATOM	10309	CB	PRO	57	130.008	128.534	-41.323	1.00 32.80	HS8
ATOM	10257	NE	ARG	50	125.010	130.250	-36.095	1.00 56.12	HS8	ATOM	10310	CG	PRO	57	130.332	127.278	-42.086	1.00 32.80	HS8
ATOM	10258	CZ	ARG	50	123.732	129.938	-36.297	1.00 56.12	HS8	ATOM	10311	C	PRO	57	132.213	128.974	-40.233	1.00 43.35	HS8
ATOM	10259	NH1	ARG	50	122.906	130.845	-36.810	1.00 56.12	HS8	ATOM	10312	O	PRO	57	132.580	127.828	-40.012	1.00 43.35	HS8
ATOM	10260	NH2	ARG	50	123.277	128.724	-36.001	1.00 56.12	HS8	ATOM	10313	N	TYR	58	132.548	130.001	-39.463	1.00 42.37	HS8
ATOM	10261	C	ARG	50	129.530	134.327	-37.333	1.00 54.71	HS8	ATOM	10314	CA	TYR	58	133.353	129.839	-38.260	1.00 42.37	HS8
ATOM	10262	O	ARG	50	128.968	135.385	-37.584	1.00 54.71	HS8	ATOM	10315	CB	TYR	58	134.679	130.582	-38.368	1.00 62.94	HS8
ATOM	10263	N	VAL	51	130.648	133.952	-37.939	1.00 54.24	HS8	ATOM	10316	CG	TYR	58	135.645	129.878	-39.265	1.00 62.94	HS8
ATOM	10264	CA	VAL	51	131.295	134.796	-38.936	1.00 54.24	HS8	ATOM	10317	CD1	TYR	58	135.456	129.884	-40.643	1.00 62.94	HS8
ATOM	10265	CB	VAL	51	132.641	135.338	-38.402	1.00 58.48	HS8	ATOM	10318	CE1	TYR	58	136.281	129.172	-41.477	1.00 62.94	HS8
ATOM	10266	CG1	VAL	51	133.151	136.418	-39.307	1.00 58.48	HS8	ATOM	10319	CD2	TYR	58	136.700	129.137	-38.740	1.00 62.94	HS8
ATOM	10267	CG2	VAL	51	132.478	135.890	-37.010	1.00 58.48	HS8	ATOM	10320	CE2	TYR	58	137.531	128.416	-39.567	1.00 62.94	HS8
ATOM	10268	C	VAL	51	131.575	133.949	-40.169	1.00 54.24	HS8	ATOM	10321	CZ	TYR	58	137.312	128.439	-40.939	1.00 62.94	HS8
ATOM	10269	O	VAL	51	131.519	132.727	-40.105	1.00 54.24	HS8	ATOM	10322	OH	TYR	58	138.115	127.722	-41.788	1.00 62.94	HS8
ATOM	10270	N	ASP	52	131.853	134.579	-41.301	1.00 71.16	HS8	ATOM	10323	C	TYR	58	132.591	130.380	-37.074	1.00 42.37	HS8
ATOM	10271	CA	ASP	52	132.177	133.810	-42.494	1.00 71.16	HS8	ATOM	10324	O	TYR	58	131.436	130.790	-37.201	1.00 42.37	HS8
ATOM	10272	CB	ASP	52	131.222	134.129	-43.648	1.00 78.62	HS8	ATOM	10325	N	LEU	59	133.240	130.366	-35.919	1.00 42.66	HS8
ATOM	10273	CG	ASP	52	130.028	133.175	-43.713	1.00 78.62	HS8	ATOM	10326	CA	LEU	59	132.633	130.883	-34.712	1.00 42.66	HS8
ATOM	10274	OD1	ASP	52	128.916	133.568	-43.293	1.00 78.62	HS8	ATOM	10327	CB	LEU	59	132.196	129.749	-33.790	1.00 40.99	HS8
ATOM	10275	OD2	ASP	52	130.195	132.027	-44.185	1.00 78.62	HS8	ATOM	10328	CG	LEU	59	131.027	128.892	-34.281	1.00 40.99	HS8
ATOM	10276	C	ASP	52	133.610	134.123	-42.906	1.00 71.16	HS8	ATOM	10329	CD1	LEU	59	130.853	127.711	-33.343	1.00 40.99	HS8
ATOM	10277	O	ASP	52	133.990	135.286	-43.015	1.00 71.16	HS8	ATOM	10330	CD2	LEU	59	129.747	129.719	-34.340	1.00 40.99	HS8
ATOM	10278	N	VAL	53	134.407	133.078	-43.104	1.00 62.28	HS8	ATOM	10331	C	LEU	59	133.692	131.716	-34.039	1.00 42.66	HS8
ATOM	10279	CA	VAL	53	135.800	133.212	-43.515	1.00 62.28	HS8	ATOM	10332	O	LEU	59	134.613	131.179	-33.438	1.00 42.66	HS8
ATOM	10280	CB	VAL	53	136.757	132.589	-42.502	1.00 49.66	HS8	ATOM	10333	N	ARG	60	133.583	133.033	-34.169	1.00 38.60	HS8
ATOM	10281	CG1	VAL	53	138.170	132.701	-43.015	1.00 49.66	HS8	ATOM	10334	CA	ARG	60	134.552	133.914	-33.558	1.00 38.60	HS8
ATOM	10282	CG2	VAL	53	136.622	133.273	-41.163	1.00 49.66	HS8	ATOM	10335	CB	ARG	60	134.339	135.345	-34.017	1.00 61.69	HS8
ATOM	10283	C	VAL	53	135.980	132.451	-44.816	1.00 62.28	HS8	ATOM	10336	CG	ARG	60	135.373	136.296	-33.477	1.00 61.69	HS8
ATOM	10284	O	VAL	53	135.563	131.299	-44.921	1.00 62.28	HS8	ATOM	10337	CD	ARG	60	135.713	137.282	-34.541	1.00 61.69	HS8
ATOM	10285	N	ASP	54	136.601	133.085	-45.803	1.00 88.30	HS8	ATOM	10338	NE	ARG	60	135.851	136.575	-35.803	1.00 61.69	HS8
ATOM	10286	CA	ASP	54	136.823	132.433	-47.087	1.00 88.30	HS8	ATOM	10339	CZ	ARG	60	136.181	137.152	-36.947	1.00 61.69	HS8
ATOM	10287	CB	ASP	54	137.929	131.381	-46.957	1.00172.16	HS8	ATOM	10340	NH1	ARG	60	136.409	138.458	-36.985	1.00 61.69	HS8
ATOM	10288	CG	ASP	54	138.197	130.647	-48.261	1.00172.16	HS8	ATOM	10341	NH2	ARG	60	136.278	136.424	-38.052	1.00 61.69	HS8
ATOM	10289	OD1	ASP	54	138.743	131.272	-49.198	1.00172.16	HS8	ATOM	10342	C	ARG	60	134.335	133.816	-32.067	1.00 38.60	HS8
ATOM	10290	OD2	ASP	54	137.850	129.447	-48.348	1.00172.16	HS8	ATOM	10343	O	ARG	60	133.257	134.123	-31.570	1.00 38.60	HS8
ATOM	10291	C	ASP	54	135.532	131.769	-47.573	1.00 88.30	HS8	ATOM	10344	N	VAL	61	135.357	133.368	-31.355	1.00 43.44	HS8
ATOM	10292	O	ASP	54	135.557	130.789	-48.324	1.00 88.30	HS8	ATOM	10345	CA	VAL	61	135.258	133.233	-29.917	1.00 43.44	HS8
ATOM	10293	N	GLY	55	134.401	132.303	-47.127	1.00 65.51	HS8	ATOM	10346	CB	VAL	61	135.885	131.898	-29.447	1.00 22.22	HS8
ATOM	10294	CA	GLY	55	133.121	131.755	-47.541	1.00 65.51	HS8	ATOM	10347	CG1	VAL	61	135.802	131.789	-27.925	1.00 22.22	HS8
ATOM	10295	C	GLY	55	132.624	130.601	-46.697	1.00 65.51	HS8	ATOM	10348	CG2	VAL	61	135.172	130.727	-30.112	1.00 22.22	HS8
ATOM	10296	O	GLY	55	131.531	130.080	-46.932	1.00 65.51	HS8	ATOM	10349	C	VAL	61	135.963	134.399	-29.238	1.00 43.44	HS8
ATOM	10297	N	LYS	56	133.428	130.201	-45.715	1.00 55.35	HS8	ATOM	10350	O	VAL	61	137.196	134.467	-29.216	1.00 43.44	HS8
ATOM	10298	CA	LYS	56	133.069	129.103	-44.830	1.00 55.35	HS8	ATOM	10351	N	TYR	62	135.176	135.322	-28.696	1.00 35.56	HS8
ATOM	10299	CB	LYS	56	134.214	128.091	-44.744	1.00 81.52	HS8	ATOM	10352	CA	TYR	62	135.733	136.483	-28.006	1.00 35.56	HS8
ATOM	10300	CG	LYS	56	134.286	127.127	-45.915	1.00 81.52	HS8	ATOM	10353	CB	TYR	62	134.695	137.602	-27.950	1.00 40.93	HS8

ATOM	10354	CG	TYR	62	134.446	138.179	-29.323	1.00	40.93	HS8	ATOM	10407	CD	ARG	68	149.670	145.981	-16.458	1.00	70.40	HS8
ATOM	10355	CD1	TYR	62	135.348	139.071	-29.899	1.00	40.93	HS8	ATOM	10408	NE	ARG	68	150.702	146.114	-17.477	1.00	70.40	HS8
ATOM	10356	CE1	TYR	62	135.191	139.504	-31.205	1.00	40.93	HS8	ATOM	10409	CZ	ARG	68	151.935	146.538	-17.237	1.00	70.40	HS8
ATOM	10357	CD2	TYR	62	133.375	137.747	-30.093	1.00	40.93	HS8	ATOM	10410	NH1	ARG	68	152.295	146.874	-16.001	1.00	70.40	HS8
ATOM	10358	CE2	TYR	62	133.215	138.175	-31.400	1.00	40.93	HS8	ATOM	10411	NH2	ARG	68	152.811	146.614	-18.232	1.00	70.40	HS8
ATOM	10359	CZ	TYR	62	134.127	139.048	-31.949	1.00	40.93	HS8	ATOM	10412	C	ARG	68	147.514	143.373	-14.311	1.00	40.49	HS8
ATOM	10360	OH	TYR	62	133.979	139.434	-33.260	1.00	40.93	HS8	ATOM	10413	O	ARG	68	146.805	143.530	-13.317	1.00	40.49	HS8
ATOM	10361	C	TYR	62	136.246	136.143	-26.609	1.00	35.56	HS8	ATOM	10414	N	ARG	69	148.751	142.885	-14.243	1.00	50.15	HS8
ATOM	10362	O	TYR	62	135.482	136.014	-25.654	1.00	35.56	HS8	ATOM	10415	CA	ARG	69	149.323	142.506	-12.953	1.00	50.15	HS8
ATOM	10363	N	LEU	63	137.563	135.990	-26.518	1.00	37.76	HS8	ATOM	10416	CB	ARG	69	149.598	140.995	-12.914	1.00	94.86	HS8
ATOM	10364	CA	LEU	63	138.223	135.653	-25.272	1.00	37.76	HS8	ATOM	10417	CG	ARG	69	148.330	140.151	-13.070	1.00	94.86	HS8
ATOM	10365	CB	LEU	63	139.650	135.225	-25.557	1.00	43.64	HS8	ATOM	10418	CD	ARG	69	148.513	138.691	-12.666	1.00	94.86	HS8
ATOM	10366	CG	LEU	63	139.769	133.783	-26.039	1.00	43.64	HS8	ATOM	10419	NE	ARG	69	149.620	138.051	-13.367	1.00	94.86	HS8
ATOM	10367	CD1	LEU	63	138.693	133.448	-27.051	1.00	43.64	HS8	ATOM	10420	CZ	ARG	69	150.854	137.949	-12.880	1.00	94.86	HS8
ATOM	10368	CD2	LEU	63	141.162	133.602	-26.612	1.00	43.64	HS8	ATOM	10421	NH1	ARG	69	151.136	138.440	-11.681	1.00	94.86	HS8
ATOM	10369	C	LEU	63	138.216	136.785	-24.271	1.00	37.76	HS8	ATOM	10422	NH2	ARG	69	151.812	137.368	-13.596	1.00	94.86	HS8
ATOM	10370	O	LEU	63	138.015	137.950	-24.636	1.00	37.76	HS8	ATOM	10423	C	ARG	69	150.579	143.295	-12.575	1.00	50.15	HS8
ATOM	10371	N	LYS	64	138.465	136.428	-23.011	1.00	44.04	HS8	ATOM	10424	O	ARG	69	151.049	144.141	-13.337	1.00	50.15	HS8
ATOM	10372	CA	LYS	64	138.458	137.384	-21.906	1.00	44.04	HS8	ATOM	10425	N	GLN	70	151.111	143.018	-11.389	1.00	53.06	HS8
ATOM	10373	CB	LYS	64	137.035	137.443	-21.323	1.00	46.06	HS8	ATOM	10426	CA	GLN	70	152.288	143.713	-10.870	1.00	53.06	HS8
ATOM	10374	CG	LYS	64	136.855	137.182	-19.827	1.00	46.06	HS8	ATOM	10427	CB	GLN	70	152.089	144.015	-9.385	1.00	85.35	HS8
ATOM	10375	CD	LYS	64	135.349	137.077	-19.532	1.00	46.06	HS8	ATOM	10428	CG	GLN	70	150.867	144.846	-9.099	1.00	85.35	HS8
ATOM	10376	CE	LYS	64	135.011	137.284	-18.071	1.00	46.06	HS8	ATOM	10429	CD	GLN	70	151.013	146.253	-9.619	1.00	85.35	HS8
ATOM	10377	NZ	LYS	64	133.539	137.403	-17.906	1.00	46.06	HS8	ATOM	10430	OE1	GLN	70	151.485	147.143	-8.910	1.00	85.35	HS8
ATOM	10378	C	LYS	64	139.490	137.005	-20.850	1.00	44.04	HS8	ATOM	10431	NE2	GLN	70	150.628	146.462	-10.873	1.00	85.35	HS8
ATOM	10379	O	LYS	64	139.685	135.828	-20.572	1.00	44.04	HS8	ATOM	10432	C	GLN	70	153.586	142.937	-11.043	1.00	53.06	HS8
ATOM	10380	N	TYR	65	140.145	138.009	-20.272	1.00	46.94	HS8	ATOM	10433	O	GLN	70	153.586	141.776	-11.480	1.00	53.06	HS8
ATOM	10381	CA	TYR	65	141.191	137.778	-19.287	1.00	46.94	HS8	ATOM	10434	N	GLY	71	154.687	143.602	-10.684	1.00	52.48	HS8
ATOM	10382	CB	TYR	65	142.566	138.070	-19.899	1.00	35.89	HS8	ATOM	10435	CA	GLY	71	156.012	143.016	-10.776	1.00	52.48	HS8
ATOM	10383	CG	TYR	65	142.767	137.439	-21.259	1.00	35.89	HS8	ATOM	10436	C	GLY	71	156.327	142.505	-12.163	1.00	52.48	HS8
ATOM	10384	CD1	TYR	65	142.264	138.049	-22.406	1.00	35.89	HS8	ATOM	10437	O	GLY	71	155.690	142.911	-13.133	1.00	52.48	HS8
ATOM	10385	CE1	TYR	65	142.365	137.459	-23.645	1.00	35.89	HS8	ATOM	10438	N	PRO	72	157.326	141.626	-12.294	1.00	49.13	HS8
ATOM	10386	CD2	TYR	65	143.393	136.201	-21.395	1.00	35.89	HS8	ATOM	10439	CD	PRO	72	158.218	141.159	-11.223	1.00	32.03	HS8
ATOM	10387	CE2	TYR	65	143.502	135.593	-22.643	1.00	35.89	HS8	ATOM	10440	CA	PRO	72	157.720	141.054	-13.583	1.00	49.13	HS8
ATOM	10388	CZ	TYR	65	142.980	136.237	-23.768	1.00	35.89	HS8	ATOM	10441	CB	PRO	72	158.907	140.187	-13.221	1.00	32.03	HS8
ATOM	10389	OH	TYR	65	143.067	135.659	-25.021	1.00	35.89	HS8	ATOM	10442	CG	PRO	72	158.696	139.882	-11.774	1.00	32.03	HS8
ATOM	10390	C	TYR	65	141.033	138.627	-18.053	1.00	46.94	HS8	ATOM	10443	C	PRO	72	156.580	140.234	-14.144	1.00	49.13	HS8
ATOM	10391	O	TYR	65	140.133	139.451	-17.963	1.00	46.94	HS8	ATOM	10444	O	PRO	72	155.806	139.633	-13.394	1.00	49.13	HS8
ATOM	10392	N	GLY	66	141.935	138.424	-17.100	1.00	60.77	HS8	ATOM	10445	N	ASP	73	156.480	140.187	-15.462	1.00	57.59	HS8
ATOM	10393	CA	GLY	66	141.904	139.193	-15.875	1.00	60.77	HS8	ATOM	10446	CA	ASP	73	155.392	139.451	-16.092	1.00	57.59	HS8
ATOM	10394	C	GLY	66	142.538	140.558	-16.073	1.00	60.77	HS8	ATOM	10447	CB	ASP	73	155.420	137.967	-15.725	1.00	71.06	HS8
ATOM	10395	O	GLY	66	142.845	140.965	-17.198	1.00	60.77	HS8	ATOM	10448	CG	ASP	73	154.439	137.151	-16.555	1.00	71.06	HS8
ATOM	10396	N	PRO	67	142.757	141.300	-14.990	1.00	54.28	HS8	ATOM	10449	OD1	ASP	73	154.210	135.962	-16.231	1.00	71.06	HS8
ATOM	10397	CD	PRO	67	142.363	141.076	-13.590	1.00	28.08	HS8	ATOM	10450	OD2	ASP	73	153.901	137.709	-17.543	1.00	71.06	HS8
ATOM	10398	CA	PRO	67	143.361	142.614	-15.146	1.00	54.28	HS8	ATOM	10451	C	ASP	73	154.090	140.055	-15.607	1.00	57.59	HS8
ATOM	10399	CB	PRO	67	142.870	143.330	-13.906	1.00	28.08	HS8	ATOM	10452	O	ASP	73	153.430	139.518	-14.719	1.00	57.59	HS8
ATOM	10400	CG	PRO	67	142.977	142.262	-12.887	1.00	28.08	HS8	ATOM	10453	N	PRO	74	153.715	141.203	-16.171	1.00	55.46	HS8
ATOM	10401	C	PRO	67	144.882	142.521	-15.204	1.00	54.28	HS8	ATOM	10454	CD	PRO	74	154.402	141.997	-17.197	1.00	50.10	HS8
ATOM	10402	O	PRO	67	145.459	141.465	-14.911	1.00	54.28	HS8	ATOM	10455	CA	PRO	74	152.478	141.854	-15.768	1.00	55.46	HS8
ATOM	10403	N	ARG	68	145.514	143.630	-15.587	1.00	40.49	HS8	ATOM	10456	CB	PRO	74	152.674	143.272	-16.269	1.00	50.10	HS8
ATOM	10404	CA	ARG	68	146.970	143.738	-15.679	1.00	40.49	HS8	ATOM	10457	CG	PRO	74	153.355	143.031	-17.557	1.00	50.10	HS8
ATOM	10405	CB	ARG	68	147.350	145.179	-16.004	1.00	70.40	HS8	ATOM	10458	C	PRO	74	151.308	141.161	-16.456	1.00	55.46	HS8
ATOM	10406	CG	ARG	68	148.433	145.331	-17.041	1.00	70.40	HS8	ATOM	10459	O	PRO	74	150.161	141.628	-16.371	1.00	55.46	HS8

ATOM	10460	N	ARG	75	151.599	140.054	-17.141	1.00	49.03	HS8	ATOM	10513	CB	HIS	81	142.675	128.228	-14.800	1.00	55.62	HS8
ATOM	10461	CA	ARG	75	150.557	139.328	-17.850	1.00	49.03	HS8	ATOM	10514	CG	HIS	81	142.488	129.493	-14.043	1.00	55.62	HS8
ATOM	10462	CB	ARG	75	151.108	138.063	-18.490	1.00	53.81	HS8	ATOM	10515	CD2	HIS	81	143.351	130.217	-13.293	1.00	55.62	HS8
ATOM	10463	CG	ARG	75	151.752	138.315	-19.834	1.00	53.81	HS8	ATOM	10516	ND1	HIS	81	141.287	130.164	-14.009	1.00	55.62	HS8
ATOM	10464	CD	ARG	75	152.217	137.022	-20.464	1.00	53.81	HS8	ATOM	10517	CE1	HIS	81	141.418	131.249	-13.267	1.00	55.62	HS8
ATOM	10465	NE	ARG	75	153.171	136.326	-19.609	1.00	53.81	HS8	ATOM	10518	NE2	HIS	81	142.660	131.304	-12.821	1.00	55.62	HS8
ATOM	10466	CZ	ARG	75	153.752	135.180	-19.938	1.00	53.81	HS8	ATOM	10519	C	HIS	81	142.930	127.065	-16.914	1.00	41.52	HS8
ATOM	10467	NH1	ARG	75	153.470	134.611	-21.105	1.00	53.81	HS8	ATOM	10520	O	HIS	81	144.008	126.782	-17.422	1.00	41.52	HS8
ATOM	10468	NH2	ARG	75	154.605	134.600	-19.104	1.00	53.81	HS8	ATOM	10521	N	HIS	82	141.907	126.236	-16.869	1.00	44.10	HS8
ATOM	10469	C	ARG	75	149.395	138.985	-16.948	1.00	49.03	HS8	ATOM	10522	CA	HIS	82	141.996	124.869	-17.329	1.00	44.10	HS8
ATOM	10470	O	ARG	75	149.573	138.500	-15.827	1.00	49.03	HS8	ATOM	10523	CB	HIS	82	141.876	123.999	-16.084	1.00	59.41	HS8
ATOM	10471	N	PRO	76	148.175	139.232	-17.437	1.00	42.27	HS8	ATOM	10524	CG	HIS	82	142.084	122.542	-16.316	1.00	59.41	HS8
ATOM	10472	CD	PRO	76	147.953	139.593	-18.841	1.00	35.12	HS8	ATOM	10525	CD2	HIS	82	141.201	121.517	-16.377	1.00	59.41	HS8
ATOM	10473	CA	PRO	76	146.897	138.999	-16.769	1.00	42.27	HS8	ATOM	10526	ND1	HIS	82	143.334	121.982	-16.440	1.00	59.41	HS8
ATOM	10474	CB	PRO	76	145.870	139.368	-17.838	1.00	35.12	HS8	ATOM	10527	CE1	HIS	82	143.215	120.672	-16.564	1.00	59.41	HS8
ATOM	10475	CG	PRO	76	146.612	140.235	-18.775	1.00	35.12	HS8	ATOM	10528	NE2	HIS	82	141.931	120.364	-16.528	1.00	59.41	HS8
ATOM	10476	C	PRO	76	146.705	137.557	-16.338	1.00	42.27	HS8	ATOM	10529	C	HIS	82	140.844	124.615	-18.288	1.00	44.10	HS8
ATOM	10477	O	PRO	76	147.408	136.647	-16.790	1.00	42.27	HS8	ATOM	10530	O	HIS	82	139.804	125.267	-18.196	1.00	44.10	HS8
ATOM	10478	N	GLU	77	145.728	137.354	-15.463	1.00	48.72	HS8	ATOM	10531	N	ILE	83	141.031	123.681	-19.210	1.00	35.36	HS8
ATOM	10479	CA	GLU	77	145.398	136.015	-15.020	1.00	48.72	HS8	ATOM	10532	CA	ILE	83	139.992	123.320	-20.169	1.00	35.36	HS8
ATOM	10480	CB	GLU	77	144.755	136.030	-13.642	1.00	91.67	HS8	ATOM	10533	CB	ILE	83	139.676	124.482	-21.116	1.00	22.93	HS8
ATOM	10481	CG	GLU	77	144.683	134.655	-13.040	1.00	91.67	HS8	ATOM	10534	CG2	ILE	83	140.941	124.966	-21.796	1.00	22.93	HS8
ATOM	10482	CD	GLU	77	143.803	134.591	-11.815	1.00	91.67	HS8	ATOM	10535	CG1	ILE	83	138.666	124.047	-22.174	1.00	22.93	HS8
ATOM	10483	OE1	GLU	77	143.917	135.478	-10.938	1.00	91.67	HS8	ATOM	10536	CD1	ILE	83	138.506	125.062	-23.325	1.00	22.93	HS8
ATOM	10484	OE2	GLU	77	143.003	133.637	-11.721	1.00	91.67	HS8	ATOM	10537	C	ILE	83	140.513	122.151	-20.984	1.00	35.36	HS8
ATOM	10485	C	GLU	77	144.380	135.573	-16.057	1.00	48.72	HS8	ATOM	10538	O	ILE	83	141.469	122.310	-21.736	1.00	35.36	HS8
ATOM	10486	O	GLU	77	143.666	136.401	-16.624	1.00	48.72	HS8	ATOM	10539	N	ARG	84	139.908	120.975	-20.829	1.00	41.82	HS8
ATOM	10487	N	GLN	78	144.334	134.279	-16.335	1.00	60.87	HS8	ATOM	10540	CA	ARG	84	140.370	119.813	-21.575	1.00	41.82	HS8
ATOM	10488	CA	GLN	78	143.384	133.766	-17.310	1.00	60.87	HS8	ATOM	10541	CB	ARG	84	141.505	119.141	-20.840	1.00	63.21	HS8
ATOM	10489	CB	GLN	78	143.804	132.378	-17.794	1.00	53.13	HS8	ATOM	10542	CG	ARG	84	141.067	118.392	-19.626	1.00	63.21	HS8
ATOM	10490	CG	GLN	78	145.151	132.313	-18.448	1.00	53.13	HS8	ATOM	10543	CD	ARG	84	141.943	117.192	-19.481	1.00	63.21	HS8
ATOM	10491	CD	GLN	78	145.173	132.958	-19.814	1.00	53.13	HS8	ATOM	10544	NE	ARG	84	141.660	116.464	-18.260	1.00	63.21	HS8
ATOM	10492	OE1	GLN	78	144.211	132.863	-20.575	1.00	53.13	HS8	ATOM	10545	CZ	ARG	84	142.288	115.348	-17.899	1.00	63.21	HS8
ATOM	10493	NE2	GLN	78	146.288	133.602	-20.144	1.00	53.13	HS8	ATOM	10546	NH1	ARG	84	143.241	114.826	-18.673	1.00	63.21	HS8
ATOM	10494	C	GLN	78	142.032	133.640	-16.630	1.00	60.87	HS8	ATOM	10547	NH2	ARG	84	141.968	114.757	-16.753	1.00	63.21	HS8
ATOM	10495	O	GLN	78	141.953	133.536	-15.398	1.00	60.87	HS8	ATOM	10548	C	ARG	84	139.315	118.768	-21.839	1.00	41.82	HS8
ATOM	10496	N	VAL	79	140.973	133.666	-17.434	1.00	54.57	HS8	ATOM	10549	O	ARG	84	138.441	118.541	-21.014	1.00	41.82	HS8
ATOM	10497	CA	VAL	79	139.632	133.483	-16.908	1.00	54.57	HS8	ATOM	10550	N	ARG	85	139.418	118.113	-22.989	1.00	50.61	HS8
ATOM	10498	CB	VAL	79	138.607	134.269	-17.728	1.00	51.26	HS8	ATOM	10551	CA	ARG	85	138.465	117.081	-23.346	1.00	50.61	HS8
ATOM	10499	CG1	VAL	79	137.210	134.066	-17.174	1.00	51.26	HS8	ATOM	10552	CB	ARG	85	138.698	116.570	-24.757	1.00	43.11	HS8
ATOM	10500	CG2	VAL	79	138.975	135.739	-17.697	1.00	51.26	HS8	ATOM	10553	CG	ARG	85	138.032	117.401	-25.795	1.00	43.11	HS8
ATOM	10501	C	VAL	79	139.442	131.975	-17.054	1.00	54.57	HS8	ATOM	10554	CD	ARG	85	137.290	116.546	-26.795	1.00	43.11	HS8
ATOM	10502	O	VAL	79	138.856	131.327	-16.189	1.00	54.57	HS8	ATOM	10555	NE	ARG	85	136.033	116.031	-26.281	1.00	43.11	HS8
ATOM	10503	N	ILE	80	139.974	131.432	-18.153	1.00	39.27	HS8	ATOM	10556	CZ	ARG	85	135.164	115.363	-27.031	1.00	43.11	HS8
ATOM	10504	CA	ILE	80	139.965	129.994	-18.436	1.00	39.27	HS8	ATOM	10557	NH1	ARG	85	135.438	115.147	-28.307	1.00	43.11	HS8
ATOM	10505	CB	ILE	80	139.826	129.700	-19.938	1.00	25.62	HS8	ATOM	10558	NH2	ARG	85	134.023	114.913	-26.514	1.00	43.11	HS8
ATOM	10506	CG2	ILE	80	140.104	128.223	-20.206	1.00	25.62	HS8	ATOM	10559	C	ARG	85	138.567	115.908	-22.413	1.00	50.61	HS8
ATOM	10507	CG1	ILE	80	138.449	130.121	-20.440	1.00	25.62	HS8	ATOM	10560	O	ARG	85	139.635	115.615	-21.871	1.00	50.61	HS8
ATOM	10508	CD1	ILE	80	138.185	129.743	-21.893	1.00	25.62	HS8	ATOM	10561	N	ILE	86	137.449	115.227	-22.231	1.00	48.08	HS8
ATOM	10509	C	ILE	80	141.332	129.425	-17.997	1.00	39.27	HS8	ATOM	10562	CA	ILE	86	137.439	114.063	-21.389	1.00	48.08	HS8
ATOM	10510	O	ILE	80	142.300	129.417	-18.765	1.00	39.27	HS8	ATOM	10563	CB	ILE	86	136.571	114.300	-20.169	1.00	36.24	HS8
ATOM	10511	N	HIS	81	141.426	128.962	-16.762	1.00	41.52	HS8	ATOM	10564	CG2	ILE	86	136.433	113.026	-19.361	1.00	36.24	HS8
ATOM	10512	CA	HIS	81	142.682	128.414	-16.302	1.00	41.52	HS8	ATOM	10565	CG1	ILE	86	137.246	115.388	-19.330	1.00	36.24	HS8

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ATOM  10566  CD1 ILE   86     136.519 115.771 -18.087  1.00 36.24      HS8
ATOM  10567  C   ILE   86     136.949 112.940 -22.260  1.00 48.08      HS8
ATOM  10568  O   ILE   86     137.696 112.012 -22.549  1.00 48.08      HS8
ATOM  10569  N   SER   87     135.710 113.020 -22.711  1.00 33.34      HS8
ATOM  10570  CA  SER   87     135.218 111.992 -23.603  1.00 33.34      HS8
ATOM  10571  CB  SER   87     133.719 112.169 -23.841  1.00 41.41      HS8
ATOM  10572  OG  SER   87     133.214 111.153 -24.691  1.00 41.41      HS8
ATOM  10573  C   SER   87     136.001 112.270 -24.886  1.00 33.34      HS8
ATOM  10574  O   SER   87     136.184 113.430 -25.247  1.00 33.34      HS8
ATOM  10575  N   LYS   88     136.503 111.224 -25.542  1.00 22.28      HS8
ATOM  10576  CA  LYS   88     137.258 111.375 -26.801  1.00 22.28      HS8
ATOM  10577  CB  LYS   88     138.772 111.403 -26.568  1.00 42.35      HS8
ATOM  10578  CG  LYS   88     139.265 112.139 -25.355  1.00 42.35      HS8
ATOM  10579  CD  LYS   88     140.717 112.455 -25.576  1.00 42.35      HS8
ATOM  10580  CE  LYS   88     141.405 112.776 -24.290  1.00 42.35      HS8
ATOM  10581  NZ  LYS   88     141.464 111.551 -23.454  1.00 42.35      HS8
ATOM  10582  C   LYS   88     136.979 110.201 -27.726  1.00 22.28      HS8
ATOM  10583  O   LYS   88     136.788 109.079 -27.266  1.00 22.28      HS8
ATOM  10584  N   PRO   89     137.002 110.434 -29.046  1.00 29.04      HS8
ATOM  10585  CD  PRO   89     137.595 111.607 -29.699  1.00 29.83      HS8
ATOM  10586  CA  PRO   89     136.745 109.361 -30.018  1.00 29.04      HS8
ATOM  10587  CB  PRO   89     137.139 109.993 -31.342  1.00 29.83      HS8
ATOM  10588  CG  PRO   89     138.165 111.006 -30.938  1.00 29.83      HS8
ATOM  10589  C   PRO   89     137.607 108.180 -29.645  1.00 29.04      HS8
ATOM  10590  O   PRO   89     138.762 108.353 -29.258  1.00 29.04      HS8
ATOM  10591  N   GLY   90     137.076 106.974 -29.738  1.00 49.52      HS8
ATOM  10592  CA  GLY   90     137.896 105.860 -29.307  1.00 49.52      HS8
ATOM  10593  C   GLY   90     138.300 106.175 -27.870  1.00 49.52      HS8
ATOM  10594  O   GLY   90     139.432 106.554 -27.582  1.00 49.52      HS8
ATOM  10595  N   ARG   91     137.306 106.061 -26.995  1.00 50.03      HS8
ATOM  10596  CA  ARG   91     137.378 106.284 -25.553  1.00 50.03      HS8
ATOM  10597  CB  ARG   91     138.746 106.738 -25.114  1.00 37.25      HS8
ATOM  10598  CG  ARG   91     139.266 105.953 -23.924  1.00 37.25      HS8
ATOM  10599  CD  ARG   91     138.376 106.020 -22.679  1.00 37.25      HS8
ATOM  10600  NE  ARG   91     139.173 105.769 -21.465  1.00 37.25      HS8
ATOM  10601  CZ  ARG   91     138.664 105.412 -20.289  1.00 37.25      HS8
ATOM  10602  NH1 ARG   91     137.344 105.258 -20.158  1.00 37.25      HS8
ATOM  10603  NH2 ARG   91     139.462 105.205 -19.250  1.00 37.25      HS8
ATOM  10604  C   ARG   91     136.340 107.280 -25.073  1.00 50.03      HS8
ATOM  10605  O   ARG   91     136.666 108.372 -24.603  1.00 50.03      HS8
ATOM  10606  N   ARG   92     135.082 106.881 -25.204  1.00 32.12      HS8
ATOM  10607  CA  ARG   92     133.961 107.688 -24.775  1.00 32.12      HS8
ATOM  10608  CB  ARG   92     132.688 107.172 -25.433  1.00 50.29      HS8
ATOM  10609  CG  ARG   92     132.180 108.051 -26.558  1.00 50.29      HS8
ATOM  10610  CD  ARG   92     133.222 108.332 -27.612  1.00 50.29      HS8
ATOM  10611  NE  ARG   92     133.039 109.685 -28.125  1.00 50.29      HS8
ATOM  10612  CZ  ARG   92     133.107 110.009 -29.412  1.00 50.29      HS8
ATOM  10613  NH1 ARG   92     133.352 109.070 -30.320  1.00 50.29      HS8
ATOM  10614  NH2 ARG   92     132.934 111.266 -29.798  1.00 50.29      HS8
ATOM  10615  C   ARG   92     133.821 107.625 -23.257  1.00 32.12      HS8
ATOM  10616  O   ARG   92     134.206 106.634 -22.619  1.00 32.12      HS8
ATOM  10617  N   VAL   93     133.273 108.684 -22.671  1.00 39.05      HS8
ATOM  10618  CA  VAL   93     133.095 108.718 -21.228  1.00 39.05      HS8
ATOM  10619  CB  VAL   93     134.081 109.674 -20.602  1.00 17.64      HS8
ATOM  10620  CG1 VAL   93     133.728 109.933 -19.159  1.00 17.64      HS8
ATOM  10621  CG2 VAL   93     135.435 109.082 -20.687  1.00 17.64      HS8
ATOM  10622  C   VAL   93     131.687 109.116 -20.844  1.00 39.05      HS8
ATOM  10623  O   VAL   93     131.299 110.263 -21.012  1.00 39.05      HS8
ATOM  10624  N   TYR   94     130.934 108.166 -20.303  1.00 42.70      HS8
ATOM  10625  CA  TYR   94     129.551 108.412 -19.919  1.00 42.70      HS8
ATOM  10626  CB  TYR   94     128.666 107.417 -20.655  1.00 34.51      HS8
ATOM  10627  CG  TYR   94     128.851 107.421 -22.156  1.00 34.51      HS8
ATOM  10628  CD1 TYR   94     129.143 106.251 -22.854  1.00 34.51      HS8
ATOM  10629  CE1 TYR   94     129.266 106.250 -24.243  1.00 34.51      HS8
ATOM  10630  CD2 TYR   94     128.686 108.588 -22.883  1.00 34.51      HS8
ATOM  10631  CE2 TYR   94     128.799 108.594 -24.259  1.00 34.51      HS8
ATOM  10632  CZ  TYR   94     129.092 107.430 -24.933  1.00 34.51      HS8
ATOM  10633  OH  TYR   94     129.233 107.497 -26.303  1.00 34.51      HS8
ATOM  10634  C   TYR   94     129.287 108.299 -18.413  1.00 42.70      HS8
ATOM  10635  O   TYR   94     129.605 107.293 -17.791  1.00 42.70      HS8
ATOM  10636  N   VAL   95     128.697 109.324 -17.818  1.00 44.71      HS8
ATOM  10637  CA  VAL   95     128.403 109.241 -16.400  1.00 44.71      HS8
ATOM  10638  CB  VAL   95     129.056 110.364 -15.619  1.00 39.75      HS8
ATOM  10639  CG1 VAL   95     130.549 110.220 -15.680  1.00 39.75      HS8
ATOM  10640  CG2 VAL   95     128.634 111.690 -16.191  1.00 39.75      HS8
ATOM  10641  C   VAL   95     126.914 109.308 -16.142  1.00 44.71      HS8
ATOM  10642  O   VAL   95     126.175 109.932 -16.907  1.00 44.71      HS8
ATOM  10643  N   GLY   96     126.485 108.632 -15.074  1.00 47.52      HS8
ATOM  10644  CA  GLY   96     125.091 108.641 -14.658  1.00 47.52      HS8
ATOM  10645  C   GLY   96     124.980 109.866 -13.770  1.00 47.52      HS8
ATOM  10646  O   GLY   96     125.979 110.319 -13.218  1.00 47.52      HS8
ATOM  10647  N   VAL   97     123.786 110.411 -13.614  1.00 67.57      HS8
ATOM  10648  CA  VAL   97     123.649 111.620 -12.817  1.00 67.57      HS8
ATOM  10649  CB  VAL   97     122.174 112.038 -12.699  1.00 48.30      HS8
ATOM  10650  CG1 VAL   97     121.437 111.067 -11.833  1.00 48.30      HS8
ATOM  10651  CG2 VAL   97     122.083 113.457 -12.189  1.00 48.30      HS8
ATOM  10652  C   VAL   97     124.279 111.521 -11.435  1.00 67.57      HS8
ATOM  10653  O   VAL   97     124.571 112.537 -10.804  1.00 67.57      HS8
ATOM  10654  N   LYS   98     124.505 110.299 -10.968  1.00 55.74      HS8
ATOM  10655  CA  LYS   98     125.132 110.106  -9.661  1.00 55.74      HS8
ATOM  10656  CB  LYS   98     124.609 108.831  -8.984  1.00136.53      HS8
ATOM  10657  CG  LYS   98     123.167 108.912  -8.461  1.00136.53      HS8
ATOM  10658  CD  LYS   98     122.149 108.949  -9.599  1.00136.53      HS8
ATOM  10659  CE  LYS   98     120.704 109.129  -9.108  1.00136.53      HS8
ATOM  10660  NZ  LYS   98     120.112 107.912  -8.485  1.00136.53      HS8
ATOM  10661  C   LYS   98     126.662 110.033  -9.786  1.00 55.74      HS8
ATOM  10662  O   LYS   98     127.366 109.970  -8.778  1.00 55.74      HS8
ATOM  10663  N   GLU   99     127.162 110.056 -11.023  1.00 66.34      HS8
ATOM  10664  CA  GLU   99     128.597 109.980 -11.309  1.00 66.34      HS8
ATOM  10665  CB  GLU   99     128.875 108.869 -12.326  1.00 98.27      HS8
ATOM  10666  CG  GLU   99     128.516 107.458 -11.889  1.00 98.27      HS8
ATOM  10667  CD  GLU   99     128.830 106.422 -12.967  1.00 98.27      HS8
ATOM  10668  OE1 GLU   99     128.200 106.458 -14.047  1.00 98.27      HS8
ATOM  10669  OE2 GLU   99     129.718 105.574 -12.737  1.00 98.27      HS8
ATOM  10670  C   GLU   99     129.172 111.289 -11.866  1.00 66.34      HS8
ATOM  10671  O   GLU   99     130.363 111.374 -12.170  1.00 66.34      HS8
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ATOM	10672	N	ILE	100	128.332	112.301	-12.031	1.00	52.27	HS8	ATOM	10725	C	ARG	105	133.808	122.879	-6.027	1.00	60.67	HS8
ATOM	10673	CA	ILE	100	128.808	113.572	-12.547	1.00	52.27	HS8	ATOM	10726	O	ARG	105	133.517	123.825	-5.302	1.00	60.67	HS8
ATOM	10674	CB	ILE	100	127.663	114.557	-12.722	1.00	47.23	HS8	ATOM	10727	N	GLY	106	133.293	122.717	-7.238	1.00	54.32	HS8
ATOM	10675	CG2	ILE	100	128.204	115.865	-13.243	1.00	47.23	HS8	ATOM	10728	CA	GLY	106	132.308	123.657	-7.732	1.00	54.32	HS8
ATOM	10676	CG1	ILE	100	126.623	113.986	-13.688	1.00	47.23	HS8	ATOM	10729	C	GLY	106	132.841	124.967	-8.279	1.00	54.32	HS8
ATOM	10677	CD1	ILE	100	125.387	114.857	-13.848	1.00	47.23	HS8	ATOM	10730	O	GLY	106	132.089	125.716	-8.904	1.00	54.32	HS8
ATOM	10678	C	ILE	100	129.807	114.158	-11.560	1.00	52.27	HS8	ATOM	10731	N	LEU	107	134.114	125.275	-8.058	1.00	47.50	HS8
ATOM	10679	O	ILE	100	129.488	114.400	-10.402	1.00	52.27	HS8	ATOM	10732	CA	LEU	107	134.639	126.518	-8.598	1.00	47.50	HS8
ATOM	10680	N	PRO	101	131.036	114.408	-12.011	1.00	48.53	HS8	ATOM	10733	CB	LEU	107	135.989	126.863	-7.970	1.00	46.83	HS8
ATOM	10681	CD	PRO	101	131.554	114.197	-13.372	1.00	44.83	HS8	ATOM	10734	CG	LEU	107	136.046	126.962	-6.443	1.00	46.83	HS8
ATOM	10682	CA	PRO	101	132.074	114.965	-11.144	1.00	48.53	HS8	ATOM	10735	CD1	LEU	107	137.296	127.718	-6.010	1.00	46.83	HS8
ATOM	10683	CB	PRO	101	133.330	114.721	-11.950	1.00	44.83	HS8	ATOM	10736	CD2	LEU	107	134.813	127.690	-5.943	1.00	46.83	HS8
ATOM	10684	CG	PRO	101	132.835	114.988	-13.348	1.00	44.83	HS8	ATOM	10737	C	LEU	107	134.785	126.374	-10.108	1.00	47.50	HS8
ATOM	10685	C	PRO	101	131.896	116.442	-10.816	1.00	48.53	HS8	ATOM	10738	O	LEU	107	134.792	127.365	-10.828	1.00	47.50	HS8
ATOM	10686	O	PRO	101	131.331	117.194	-11.605	1.00	48.53	HS8	ATOM	10739	N	GLY	108	134.904	125.136	-10.580	1.00	38.79	HS8
ATOM	10687	N	ARG	102	132.378	116.847	-9.645	1.00	55.66	HS8	ATOM	10740	CA	GLY	108	135.032	124.884	-12.004	1.00	38.79	HS8
ATOM	10688	CA	ARG	102	132.315	118.239	-9.227	1.00	55.66	HS8	ATOM	10741	C	GLY	108	133.807	124.139	-12.482	1.00	38.79	HS8
ATOM	10689	CB	ARG	102	132.016	118.365	-7.736	1.00	111.01	HS8	ATOM	10742	O	GLY	108	133.028	123.687	-11.663	1.00	38.79	HS8
ATOM	10690	CG	ARG	102	130.699	117.780	-7.323	1.00	111.01	HS8	ATOM	10743	N	ILE	109	133.618	123.984	-13.785	1.00	31.77	HS8
ATOM	10691	CD	ARG	102	130.247	118.335	-5.989	1.00	111.01	HS8	ATOM	10744	CA	ILE	109	132.436	123.285	-14.278	1.00	31.77	HS8
ATOM	10692	NE	ARG	102	128.975	117.744	-5.591	1.00	111.01	HS8	ATOM	10745	CB	ILE	109	131.560	124.220	-15.092	1.00	32.92	HS8
ATOM	10693	CZ	ARG	102	128.844	116.510	-5.114	1.00	111.01	HS8	ATOM	10746	CG2	ILE	109	131.208	125.421	-14.279	1.00	32.92	HS8
ATOM	10694	NH1	ARG	102	129.914	115.736	-4.964	1.00	111.01	HS8	ATOM	10747	CG1	ILE	109	132.308	124.670	-16.343	1.00	32.92	HS8
ATOM	10695	NH2	ARG	102	127.640	116.042	-4.807	1.00	111.01	HS8	ATOM	10748	CD1	ILE	109	131.421	125.336	-17.331	1.00	32.92	HS8
ATOM	10696	C	ARG	102	133.686	118.830	-9.509	1.00	55.66	HS8	ATOM	10749	C	ILE	109	132.765	122.100	-15.170	1.00	31.77	HS8
ATOM	10697	O	ARG	102	134.678	118.477	-8.864	1.00	55.66	HS8	ATOM	10750	O	ILE	109	133.931	121.839	-15.453	1.00	31.77	HS8
ATOM	10698	N	VAL	103	133.741	119.728	-10.481	1.00	49.13	HS8	ATOM	10751	N	ALA	110	131.739	121.396	-15.642	1.00	40.21	HS8
ATOM	10699	CA	VAL	103	134.988	120.371	-10.858	1.00	49.13	HS8	ATOM	10752	CA	ALA	110	131.981	120.257	-16.507	1.00	40.21	HS8
ATOM	10700	CB	VAL	103	134.815	121.048	-12.215	1.00	41.39	HS8	ATOM	10753	CB	ALA	110	132.119	119.024	-15.681	1.00	7.11	HS8
ATOM	10701	CG1	VAL	103	136.111	121.683	-12.640	1.00	41.39	HS8	ATOM	10754	C	ALA	110	130.934	120.028	-17.578	1.00	40.21	HS8
ATOM	10702	CG2	VAL	103	134.323	120.020	-13.241	1.00	41.39	HS8	ATOM	10755	O	ALA	110	130.140	119.113	-17.478	1.00	40.21	HS8
ATOM	10703	C	VAL	103	135.418	121.391	-9.803	1.00	49.13	HS8	ATOM	10756	N	ILE	111	130.936	120.843	-18.619	1.00	39.41	HS8
ATOM	10704	O	VAL	103	134.602	122.178	-9.330	1.00	49.13	HS8	ATOM	10757	CA	ILE	111	129.978	120.684	-19.706	1.00	39.41	HS8
ATOM	10705	N	ARG	104	136.700	121.355	-9.444	1.00	61.78	HS8	ATOM	10758	CB	ILE	111	130.501	121.372	-20.968	1.00	28.95	HS8
ATOM	10706	CA	ARG	104	137.296	122.239	-8.430	1.00	61.78	HS8	ATOM	10759	CG2	ILE	111	129.478	121.275	-22.078	1.00	28.95	HS8
ATOM	10707	CB	ARG	104	137.840	123.513	-9.071	1.00	53.89	HS8	ATOM	10760	CG1	ILE	111	130.825	122.830	-20.659	1.00	28.95	HS8
ATOM	10708	CG	ARG	104	138.885	123.276	-10.127	1.00	53.89	HS8	ATOM	10761	CD1	ILE	111	131.430	123.561	-21.821	1.00	28.95	HS8
ATOM	10709	CD	ARG	104	140.256	123.010	-9.546	1.00	53.89	HS8	ATOM	10762	C	ILE	111	129.710	119.218	-20.048	1.00	39.41	HS8
ATOM	10710	NE	ARG	104	141.100	124.194	-9.637	1.00	53.89	HS8	ATOM	10763	O	ILE	111	130.632	118.481	-20.352	1.00	39.41	HS8
ATOM	10711	CZ	ARG	104	142.431	124.172	-9.638	1.00	53.89	HS8	ATOM	10764	N	LEU	112	128.448	118.807	-19.995	1.00	37.25	HS8
ATOM	10712	NH1	ARG	104	143.088	123.017	-9.551	1.00	53.89	HS8	ATOM	10765	CA	LEU	112	128.042	117.437	-20.323	1.00	37.25	HS8
ATOM	10713	NH2	ARG	104	143.109	125.307	-9.746	1.00	53.89	HS8	ATOM	10766	CB	LEU	112	127.267	116.786	-19.169	1.00	35.71	HS8
ATOM	10714	C	ARG	104	136.321	122.619	-7.323	1.00	61.78	HS8	ATOM	10767	CG	LEU	112	127.961	116.041	-18.036	1.00	35.71	HS8
ATOM	10715	O	ARG	104	136.080	123.807	-7.078	1.00	61.78	HS8	ATOM	10768	CD1	LEU	112	127.727	116.770	-16.720	1.00	35.71	HS8
ATOM	10716	N	ARG	105	135.771	121.607	-6.653	1.00	60.67	HS8	ATOM	10769	CD2	LEU	112	127.417	114.635	-17.953	1.00	35.71	HS8
ATOM	10717	CA	ARG	105	134.819	121.838	-5.580	1.00	60.67	HS8	ATOM	10770	C	LEU	112	127.107	117.466	-21.516	1.00	37.25	HS8
ATOM	10718	CB	ARG	105	135.534	122.337	-4.325	1.00	61.03	HS8	ATOM	10771	O	LEU	112	126.619	118.527	-21.896	1.00	37.25	HS8
ATOM	10719	CG	ARG	105	135.504	121.375	-3.148	1.00	61.03	HS8	ATOM	10772	N	SER	113	126.848	116.298	-22.093	1.00	36.32	HS8
ATOM	10720	CD	ARG	105	136.214	120.058	-3.470	1.00	61.03	HS8	ATOM	10773	CA	SER	113	125.916	116.191	-23.207	1.00	36.32	HS8
ATOM	10721	NE	ARG	105	136.800	119.449	-2.273	1.00	61.03	HS8	ATOM	10774	CB	SER	113	126.638	115.873	-24.502	1.00	24.76	HS8
ATOM	10722	CZ	ARG	105	136.118	118.798	-1.339	1.00	61.03	HS8	ATOM	10775	OG	SER	113	125.689	115.703	-25.536	1.00	24.76	HS8
ATOM	10723	NH1	ARG	105	134.804	118.648	-1.452	1.00	61.03	HS8	ATOM	10776	C	SER	113	124.904	115.084	-22.907	1.00	36.32	HS8
ATOM	10724	NH2	ARG	105	136.749	118.314	-0.279	1.00	61.03	HS8	ATOM	10777	O	SER	113	125.225	113.901	-22.979	1.00	36.32	HS8

ATOM	10778	N	THR	114	123.681	115.496	-22.577	1.00	39.54	HS8	ATOM	10831	OD2	ASP	121	129.668	120.440	-11.539	1.00	70.24	HS8
ATOM	10779	CA	THR	114	122.584	114.600	-22.219	1.00	39.54	HS8	ATOM	10832	C	ASP	121	126.446	120.002	-13.289	1.00	71.76	HS8
ATOM	10780	CB	THR	114	121.924	115.061	-20.931	1.00	44.51	HS8	ATOM	10833	O	ASP	121	126.054	119.145	-12.513	1.00	71.76	HS8
ATOM	10781	OG1	THR	114	121.118	116.210	-21.224	1.00	44.51	HS8	ATOM	10834	N	ARG	122	125.938	121.228	-13.295	1.00	49.46	HS8
ATOM	10782	CG2	THR	114	122.980	115.452	-19.885	1.00	44.51	HS8	ATOM	10835	CA	ARG	122	124.866	121.591	-12.366	1.00	49.46	HS8
ATOM	10783	C	THR	114	121.500	114.650	-23.273	1.00	39.54	HS8	ATOM	10836	CB	ARG	122	125.062	122.991	-11.791	1.00	96.81	HS8
ATOM	10784	O	THR	114	121.500	115.551	-24.102	1.00	39.54	HS8	ATOM	10837	CG	ARG	122	125.886	123.052	-10.531	1.00	96.81	HS8
ATOM	10785	N	SER	115	120.558	113.707	-23.226	1.00	66.21	HS8	ATOM	10838	CD	ARG	122	125.705	124.411	-9.864	1.00	96.81	HS8
ATOM	10786	CA	SER	115	119.463	113.705	-24.193	1.00	66.21	HS8	ATOM	10839	NE	ARG	122	126.631	124.634	-8.754	1.00	96.81	HS8
ATOM	10787	CB	SER	115	118.650	112.409	-24.127	1.00	37.56	HS8	ATOM	10840	CZ	ARG	122	127.954	124.752	-8.885	1.00	96.81	HS8
ATOM	10788	OG	SER	115	118.169	112.153	-22.820	1.00	37.56	HS8	ATOM	10841	NH1	ARG	122	128.527	124.669	-10.084	1.00	96.81	HS8
ATOM	10789	C	SER	115	118.560	114.902	-23.935	1.00	66.21	HS8	ATOM	10842	NH2	ARG	122	128.710	124.954	-7.813	1.00	96.81	HS8
ATOM	10790	O	SER	115	117.662	115.196	-24.727	1.00	66.21	HS8	ATOM	10843	C	ARG	122	123.529	121.547	-13.078	1.00	49.46	HS8
ATOM	10791	N	LYS	116	118.790	115.579	-22.812	1.00	49.29	HS8	ATOM	10844	O	ARG	122	122.566	120.992	-12.559	1.00	49.46	HS8
ATOM	10792	CA	LYS	116	118.043	116.784	-22.486	1.00	49.29	HS8	ATOM	10845	N	GLU	123	123.466	122.151	-14.261	1.00	45.18	HS8
ATOM	10793	CB	LYS	116	117.832	116.931	-20.984	1.00	69.90	HS8	ATOM	10846	CA	GLU	123	122.236	122.153	-15.035	1.00	45.18	HS8
ATOM	10794	CG	LYS	116	116.500	116.458	-20.443	1.00	69.90	HS8	ATOM	10847	CB	GLU	123	122.485	122.687	-16.449	1.00	81.11	HS8
ATOM	10795	CD	LYS	116	116.417	116.850	-18.972	1.00	69.90	HS8	ATOM	10848	CG	GLU	123	123.369	123.930	-16.483	1.00	81.11	HS8
ATOM	10796	CE	LYS	116	115.127	116.399	-18.299	1.00	69.90	HS8	ATOM	10849	CD	GLU	123	123.378	124.625	-17.835	1.00	81.11	HS8
ATOM	10797	NZ	LYS	116	115.071	116.883	-16.875	1.00	69.90	HS8	ATOM	10850	OE1	GLU	123	123.431	123.926	-18.875	1.00	81.11	HS8
ATOM	10798	C	LYS	116	118.890	117.960	-22.974	1.00	49.29	HS8	ATOM	10851	OE2	GLU	123	123.343	125.878	-17.853	1.00	81.11	HS8
ATOM	10799	O	LYS	116	118.602	119.122	-22.649	1.00	49.29	HS8	ATOM	10852	C	GLU	123	121.887	120.682	-15.060	1.00	45.18	HS8
ATOM	10800	N	GLY	117	119.952	117.644	-23.724	1.00	46.36	HS8	ATOM	10853	O	GLU	123	120.932	120.260	-14.430	1.00	45.18	HS8
ATOM	10801	CA	GLY	117	120.833	118.668	-24.276	1.00	46.36	HS8	ATOM	10854	N	ALA	124	122.662	119.887	-15.784	1.00	62.71	HS8
ATOM	10802	C	GLY	117	122.122	118.969	-23.523	1.00	46.36	HS8	ATOM	10855	CA	ALA	124	122.414	118.458	-15.775	1.00	62.71	HS8
ATOM	10803	O	GLY	117	122.306	118.536	-22.388	1.00	46.36	HS8	ATOM	10856	CB	ALA	124	123.472	117.741	-16.582	1.00	43.64	HS8
ATOM	10804	N	VAL	118	123.014	119.726	-24.151	1.00	39.53	HS8	ATOM	10857	C	ALA	124	122.631	118.222	-14.295	1.00	62.71	HS8
ATOM	10805	CA	VAL	118	124.287	120.060	-23.523	1.00	39.53	HS8	ATOM	10858	O	ALA	124	123.542	118.817	-13.733	1.00	62.71	HS8
ATOM	10806	CB	VAL	118	125.182	120.887	-24.483	1.00	28.71	HS8	ATOM	10859	N	ARG	125	121.800	117.403	-13.661	1.00	57.78	HS8
ATOM	10807	CG1	VAL	118	126.412	121.367	-23.760	1.00	28.71	HS8	ATOM	10860	CA	ARG	125	121.914	117.126	-12.221	1.00	57.78	HS8
ATOM	10808	CG2	VAL	118	125.586	120.030	-25.693	1.00	28.71	HS8	ATOM	10861	CB	ARG	125	123.139	117.778	-11.594	1.00	67.86	HS8
ATOM	10809	C	VAL	118	124.074	120.843	-22.233	1.00	39.53	HS8	ATOM	10862	CG	ARG	125	123.544	117.207	-10.267	1.00	67.86	HS8
ATOM	10810	O	VAL	118	123.405	121.860	-22.237	1.00	39.53	HS8	ATOM	10863	CD	ARG	125	124.823	117.880	-9.796	1.00	67.86	HS8
ATOM	10811	N	LEU	119	124.648	120.384	-21.128	1.00	43.07	HS8	ATOM	10864	NE	ARG	125	125.554	117.093	-8.808	1.00	67.86	HS8
ATOM	10812	CA	LEU	119	124.453	121.087	-19.867	1.00	43.07	HS8	ATOM	10865	CZ	ARG	125	126.129	115.915	-9.057	1.00	67.86	HS8
ATOM	10813	CB	LEU	119	123.367	120.415	-19.038	1.00	38.43	HS8	ATOM	10866	NH1	ARG	125	126.063	115.377	-10.272	1.00	67.86	HS8
ATOM	10814	CG	LEU	119	122.086	120.009	-19.743	1.00	38.43	HS8	ATOM	10867	NH2	ARG	125	126.770	115.264	-8.086	1.00	67.86	HS8
ATOM	10815	CD1	LEU	119	121.280	119.085	-18.843	1.00	38.43	HS8	ATOM	10868	C	ARG	125	120.685	117.713	-11.578	1.00	57.78	HS8
ATOM	10816	CD2	LEU	119	121.311	121.243	-20.116	1.00	38.43	HS8	ATOM	10869	O	ARG	125	120.046	117.072	-10.745	1.00	57.78	HS8
ATOM	10817	C	LEU	119	125.708	121.087	-19.036	1.00	43.07	HS8	ATOM	10870	N	LYS	126	120.372	118.953	-11.948	1.00	61.04	HS8
ATOM	10818	O	LEU	119	126.612	120.290	-19.258	1.00	43.07	HS8	ATOM	10871	CA	LYS	126	119.177	119.606	-11.445	1.00	61.04	HS8
ATOM	10819	N	THR	120	125.751	121.978	-18.060	1.00	31.14	HS8	ATOM	10872	CB	LYS	126	119.172	121.096	-11.778	1.00	100.10	HS8
ATOM	10820	CA	THR	120	126.887	122.037	-17.175	1.00	31.14	HS8	ATOM	10873	CG	LYS	126	118.008	121.821	-11.140	1.00	100.10	HS8
ATOM	10821	CB	THR	120	126.964	123.370	-16.468	1.00	39.13	HS8	ATOM	10874	CD	LYS	126	117.771	123.197	-11.737	1.00	100.10	HS8
ATOM	10822	OG1	THR	120	125.912	123.448	-15.499	1.00	39.13	HS8	ATOM	10875	CE	LYS	126	116.490	123.814	-11.168	1.00	100.10	HS8
ATOM	10823	CG2	THR	120	126.830	124.502	-17.478	1.00	39.13	HS8	ATOM	10876	NZ	LYS	126	116.136	125.118	-11.806	1.00	100.10	HS8
ATOM	10824	C	THR	120	126.653	120.964	-16.122	1.00	31.14	HS8	ATOM	10877	C	LYS	126	118.077	118.885	-12.223	1.00	61.04	HS8
ATOM	10825	O	THR	120	125.565	120.400	-16.025	1.00	31.14	HS8	ATOM	10878	O	LYS	126	117.082	118.468	-11.645	1.00	61.04	HS8
ATOM	10826	N	ASP	121	127.671	120.696	-15.318	1.00	71.76	HS8	ATOM	10879	N	LEU	127	118.282	118.726	-13.532	1.00	33.65	HS8
ATOM	10827	CA	ASP	121	127.552	119.679	-14.293	1.00	71.76	HS8	ATOM	10880	CA	LEU	127	117.338	118.021	-14.390	1.00	33.65	HS8
ATOM	10828	CB	ASP	121	128.897	119.499	-13.581	1.00	70.24	HS8	ATOM	10881	CB	LEU	127	117.645	118.252	-15.872	1.00	46.79	HS8
ATOM	10829	CG	ASP	121	129.253	120.675	-12.699	1.00	70.24	HS8	ATOM	10882	CG	LEU	127	117.423	119.554	-16.640	1.00	46.79	HS8
ATOM	10830	OD1	ASP	121	129.124	121.830	-13.172	1.00	70.24	HS8	ATOM	10883	CD1	LEU	127	115.941	119.811	-16.822	1.00	46.79	HS8

ATOM	10884	CD2	LEU	127	118.109	120.686	-15.915	1.00	46.79	HS8	ATOM	10937	N	GLU	136	136.186	119.489	-18.997	1.00	51.62	HS8
ATOM	10885	C	LEU	127	117.539	116.530	-14.104	1.00	33.65	HS8	ATOM	10938	CA	GLU	136	136.329	120.217	-17.737	1.00	51.62	HS8
ATOM	10886	O	LEU	127	116.929	115.662	-14.745	1.00	33.65	HS8	ATOM	10939	CB	GLU	136	137.469	119.646	-16.906	1.00	93.73	HS8
ATOM	10887	N	GLY	128	118.420	116.228	-13.158	1.00	45.27	HS8	ATOM	10940	CG	GLU	136	137.150	118.422	-16.110	1.00	93.73	HS8
ATOM	10888	CA	GLY	128	118.681	114.838	-12.845	1.00	45.27	HS8	ATOM	10941	CD	GLU	136	138.414	117.753	-15.619	1.00	93.73	HS8
ATOM	10889	C	GLY	128	118.973	113.954	-14.056	1.00	45.27	HS8	ATOM	10942	OE1	GLU	136	139.357	118.476	-15.230	1.00	93.73	HS8
ATOM	10890	O	GLY	128	118.240	113.012	-14.308	1.00	45.27	HS8	ATOM	10943	OE2	GLU	136	138.464	116.506	-15.622	1.00	93.73	HS8
ATOM	10891	N	VAL	129	120.027	114.252	-14.813	1.00	62.77	HS8	ATOM	10944	C	GLU	136	136.708	121.642	-18.104	1.00	51.62	HS8
ATOM	10892	CA	VAL	129	120.388	113.424	-15.966	1.00	62.77	HS8	ATOM	10945	O	GLU	136	137.212	121.885	-19.184	1.00	51.62	HS8
ATOM	10893	CB	VAL	129	119.838	113.969	-17.318	1.00	29.61	HS8	ATOM	10946	N	VAL	137	136.479	122.579	-17.202	1.00	33.62	HS8
ATOM	10894	CG1	VAL	129	118.347	113.875	-17.335	1.00	29.61	HS8	ATOM	10947	CA	VAL	137	136.832	123.972	-17.439	1.00	33.62	HS8
ATOM	10895	CG2	VAL	129	120.290	115.410	-17.559	1.00	29.61	HS8	ATOM	10948	CB	VAL	137	135.732	124.742	-18.206	1.00	36.43	HS8
ATOM	10896	C	VAL	129	121.893	113.295	-16.109	1.00	62.77	HS8	ATOM	10949	CG1	VAL	137	136.108	126.200	-18.293	1.00	36.43	HS8
ATOM	10897	O	VAL	129	122.648	114.116	-15.592	1.00	62.77	HS8	ATOM	10950	CG2	VAL	137	135.529	124.171	-19.600	1.00	36.43	HS8
ATOM	10898	N	GLY	130	122.317	112.244	-16.800	1.00	42.98	HS8	ATOM	10951	C	VAL	137	136.931	124.617	-16.071	1.00	33.62	HS8
ATOM	10899	CA	GLY	130	123.730	112.014	-17.025	1.00	42.98	HS8	ATOM	10952	O	VAL	137	136.052	124.409	-15.240	1.00	33.62	HS8
ATOM	10900	C	GLY	130	123.955	112.053	-18.526	1.00	42.98	HS8	ATOM	10953	N	TRP	138	137.984	125.382	-15.816	1.00	32.32	HS8
ATOM	10901	O	GLY	130	123.039	112.420	-19.283	1.00	42.98	HS8	ATOM	10954	CA	TRP	138	138.078	126.044	-14.535	1.00	32.32	HS8
ATOM	10902	N	GLY	131	125.153	111.675	-18.965	1.00	47.95	HS8	ATOM	10955	CB	TRP	138	138.123	125.023	-13.397	1.00	57.50	HS8
ATOM	10903	CA	GLY	131	125.439	111.685	-20.389	1.00	47.95	HS8	ATOM	10956	CG	TRP	138	139.136	123.932	-13.486	1.00	57.50	HS8
ATOM	10904	C	GLY	131	126.924	111.675	-20.680	1.00	47.95	HS8	ATOM	10957	CD2	TRP	138	140.521	124.039	-13.183	1.00	57.50	HS8
ATOM	10905	O	GLY	131	127.712	111.398	-19.774	1.00	47.95	HS8	ATOM	10958	CE2	TRP	138	141.061	122.728	-13.200	1.00	57.50	HS8
ATOM	10906	N	GLU	132	127.305	111.962	-21.930	1.00	45.20	HS8	ATOM	10959	CE3	TRP	138	141.361	125.114	-12.889	1.00	57.50	HS8
ATOM	10907	CA	GLU	132	128.714	111.989	-22.329	1.00	45.20	HS8	ATOM	10960	CD1	TRP	138	138.896	122.591	-13.691	1.00	57.50	HS8
ATOM	10908	CB	GLU	132	128.842	112.164	-23.854	1.00	59.73	HS8	ATOM	10961	NE1	TRP	138	140.048	121.861	-13.512	1.00	57.50	HS8
ATOM	10909	CG	GLU	132	130.222	111.815	-24.428	1.00	59.73	HS8	ATOM	10962	CZ2	TRP	138	142.393	122.473	-12.938	1.00	57.50	HS8
ATOM	10910	CD	GLU	132	130.230	111.558	-25.958	1.00	59.73	HS8	ATOM	10963	CZ3	TRP	138	142.682	124.864	-12.628	1.00	57.50	HS8
ATOM	10911	OE1	GLU	132	129.464	110.690	-26.453	1.00	59.73	HS8	ATOM	10964	CH2	TRP	138	143.193	123.552	-12.651	1.00	57.50	HS8
ATOM	10912	OE2	GLU	132	131.027	112.216	-26.670	1.00	59.73	HS8	ATOM	10965	C	TRP	138	139.194	127.059	-14.393	1.00	32.32	HS8
ATOM	10913	C	GLU	132	129.347	113.165	-21.603	1.00	45.20	HS8	ATOM	10966	O	TRP	138	139.619	127.595	-15.434	1.00	32.32	HS8
ATOM	10914	O	GLU	132	128.820	114.269	-21.644	1.00	45.20	HS8	ATOM	10967	OXT	TRP	138	139.595	127.345	-13.246	1.00	86.57	HS8
ATOM	10915	N	LEU	133	130.451	112.907	-20.906	1.00	43.98	HS8	ATOM	10968	CB	ILE	44	229.565	165.000	19.654	1.00	67.55	JS10
ATOM	10916	CA	LEU	133	131.181	113.928	-20.155	1.00	43.98	HS8	ATOM	10969	CG2	ILE	44	230.539	164.574	18.565	1.00	67.55	JS10
ATOM	10917	CB	LEU	133	131.951	113.259	-19.008	1.00	43.68	HS8	ATOM	10970	CG1	ILE	44	228.643	166.154	19.261	1.00	67.55	JS10
ATOM	10918	CG	LEU	133	132.326	114.114	-17.793	1.00	43.68	HS8	ATOM	10971	CD1	ILE	44	227.837	166.746	20.434	1.00	67.55	JS10
ATOM	10919	CD1	LEU	133	132.892	113.245	-16.689	1.00	43.68	HS8	ATOM	10972	C	ILE	44	228.832	162.527	19.302	1.00	130.30	JS10
ATOM	10920	CD2	LEU	133	133.326	115.152	-18.192	1.00	43.68	HS8	ATOM	10973	O	ILE	44	229.373	161.540	19.793	1.00	130.30	JS10
ATOM	10921	C	LEU	133	132.147	114.589	-21.146	1.00	43.98	HS8	ATOM	10974	N	ILE	44	229.017	163.517	21.565	1.00	130.30	JS10
ATOM	10922	O	LEU	133	133.262	114.121	-21.344	1.00	43.98	HS8	ATOM	10975	CA	ILE	44	228.685	163.812	20.142	1.00	130.30	JS10
ATOM	10923	N	ILE	134	131.711	115.677	-21.767	1.00	50.49	HS8	ATOM	10976	N	PRO	45	228.349	162.517	18.041	1.00	103.41	JS10
ATOM	10924	CA	ILE	134	132.501	116.372	-22.779	1.00	50.49	HS8	ATOM	10977	CD	PRO	45	228.087	163.702	17.198	1.00	68.12	JS10
ATOM	10925	CB	ILE	134	131.646	117.424	-23.473	1.00	42.43	HS8	ATOM	10978	CA	PRO	45	228.434	161.330	17.183	1.00	103.41	JS10
ATOM	10926	CG2	ILE	134	132.503	118.319	-24.350	1.00	42.43	HS8	ATOM	10979	CB	PRO	45	229.026	161.895	15.909	1.00	68.12	JS10
ATOM	10927	CG1	ILE	134	130.570	116.712	-24.284	1.00	42.43	HS8	ATOM	10980	CG	PRO	45	228.191	163.137	15.752	1.00	68.12	JS10
ATOM	10928	CD1	ILE	134	129.575	117.638	-24.887	1.00	42.43	HS8	ATOM	10981	C	PRO	45	229.143	160.066	17.666	1.00	103.41	JS10
ATOM	10929	C	ILE	134	133.819	117.019	-22.388	1.00	50.49	HS8	ATOM	10982	O	PRO	45	228.595	159.315	18.482	1.00	103.41	JS10
ATOM	10930	O	ILE	134	134.807	116.867	-23.113	1.00	50.49	HS8	ATOM	10983	N	LEU	46	230.349	159.829	17.157	1.00	75.31	JS10
ATOM	10931	N	CYS	135	133.845	117.755	-21.277	1.00	50.36	HS8	ATOM	10984	CA	LEU	46	231.117	158.635	17.500	1.00	75.31	JS10
ATOM	10932	CA	CYS	135	135.081	118.407	-20.852	1.00	50.36	HS8	ATOM	10985	CB	LEU	46	231.115	158.355	19.008	1.00	68.37	JS10
ATOM	10933	CB	CYS	135	135.506	119.426	-21.899	1.00	56.40	HS8	ATOM	10986	CG	LEU	46	232.191	158.965	19.910	1.00	68.37	JS10
ATOM	10934	SG	CYS	135	134.346	120.781	-22.037	1.00	56.40	HS8	ATOM	10987	CD1	LEU	46	232.140	158.279	21.270	1.00	68.37	JS10
ATOM	10935	C	CYS	135	135.012	119.118	-19.505	1.00	50.36	HS8	ATOM	10988	CD2	LEU	46	233.565	158.775	19.302	1.00	68.37	JS10
ATOM	10936	O	CYS	135	133.935	119.326	-18.951	1.00	50.36	HS8	ATOM	10989	C	LEU	46	230.495	157.444	16.792	1.00	75.31	JS10

ATOM	10990	O	LEU	46	229.273	157.282	16.783	1.00	75.31	JS10	ATOM	11043	C	ARG	52	224.517	139.590	15.249	1.00	67.62	JS10
ATOM	10991	N	PRO	47	231.329	156.585	16.195	1.00	78.57	JS10	ATOM	11044	O	ARG	52	225.494	139.020	15.739	1.00	67.62	JS10
ATOM	10992	CD	PRO	47	232.792	156.496	16.329	1.00	102.82	JS10	ATOM	11045	N	PHE	53	223.317	139.023	15.145	1.00	68.05	JS10
ATOM	10993	CA	PRO	47	230.807	155.416	15.495	1.00	78.57	JS10	ATOM	11046	CA	PHE	53	223.073	137.641	15.537	1.00	68.05	JS10
ATOM	10994	CB	PRO	47	232.074	154.687	15.069	1.00	102.82	JS10	ATOM	11047	CB	PHE	53	222.197	137.571	16.784	1.00	92.91	JS10
ATOM	10995	CG	PRO	47	233.027	155.016	16.176	1.00	102.82	JS10	ATOM	11048	CG	PHE	53	222.794	138.241	17.980	1.00	92.91	JS10
ATOM	10996	C	PRO	47	229.929	154.565	16.405	1.00	78.57	JS10	ATOM	11049	CD1	PHE	53	222.631	139.608	18.186	1.00	92.91	JS10
ATOM	10997	O	PRO	47	229.919	154.746	17.625	1.00	78.57	JS10	ATOM	11050	CD2	PHE	53	223.522	137.507	18.907	1.00	92.91	JS10
ATOM	10998	N	THR	48	229.202	153.634	15.793	1.00	68.28	JS10	ATOM	11051	CE1	PHE	53	223.186	140.235	19.306	1.00	92.91	JS10
ATOM	10999	CA	THR	48	228.314	152.731	16.511	1.00	68.28	JS10	ATOM	11052	CE2	PHE	53	224.081	138.121	20.026	1.00	92.91	JS10
ATOM	11000	CB	THR	48	226.933	152.737	15.887	1.00	52.89	JS10	ATOM	11053	CZ	PHE	53	223.911	139.488	20.226	1.00	92.91	JS10
ATOM	11001	OG1	THR	48	226.445	154.079	15.824	1.00	52.89	JS10	ATOM	11054	C	PHE	53	222.354	136.963	14.389	1.00	68.05	JS10
ATOM	11002	CG2	THR	48	225.993	151.876	16.693	1.00	52.89	JS10	ATOM	11055	O	PHE	53	221.404	137.516	13.836	1.00	68.05	JS10
ATOM	11003	C	THR	48	228.839	151.308	16.410	1.00	68.28	JS10	ATOM	11056	N	THR	54	222.813	135.775	14.019	1.00	68.20	JS10
ATOM	11004	O	THR	48	229.047	150.813	15.308	1.00	68.28	JS10	ATOM	11057	CA	THR	54	222.187	135.041	12.931	1.00	68.20	JS10
ATOM	11005	N	ARG	49	229.067	150.645	17.538	1.00	82.71	JS10	ATOM	11058	CB	THR	54	223.133	134.842	11.752	1.00	59.52	JS10
ATOM	11006	CA	ARG	49	229.539	149.269	17.467	1.00	82.71	JS10	ATOM	11059	OG1	THR	54	223.609	136.112	11.294	1.00	59.52	JS10
ATOM	11007	CB	ARG	49	230.441	148.908	18.657	1.00	94.02	JS10	ATOM	11060	CG2	THR	54	222.401	134.166	10.626	1.00	59.52	JS10
ATOM	11008	CG	ARG	49	231.885	149.399	18.514	1.00	94.02	JS10	ATOM	11061	C	THR	54	221.770	133.684	13.441	1.00	68.20	JS10
ATOM	11009	CD	ARG	49	232.879	148.506	19.257	1.00	94.02	JS10	ATOM	11062	O	THR	54	222.608	132.822	13.709	1.00	68.20	JS10
ATOM	11010	NE	ARG	49	234.239	149.046	19.213	1.00	94.02	JS10	ATOM	11063	N	VAL	55	220.462	133.494	13.547	1.00	54.91	JS10
ATOM	11011	CZ	ARG	49	235.340	148.378	19.567	1.00	94.02	JS10	ATOM	11064	CA	VAL	55	219.913	132.261	14.074	1.00	54.91	JS10
ATOM	11012	NH1	ARG	49	235.266	147.123	19.996	1.00	94.02	JS10	ATOM	11065	CB	VAL	55	219.062	132.584	15.299	1.00	76.43	JS10
ATOM	11013	NH2	ARG	49	236.525	148.973	19.504	1.00	94.02	JS10	ATOM	11066	CG1	VAL	55	218.685	131.319	16.019	1.00	76.43	JS10
ATOM	11014	C	ARG	49	228.337	148.337	17.416	1.00	82.71	JS10	ATOM	11067	CG2	VAL	55	219.814	133.515	16.208	1.00	76.43	JS10
ATOM	11015	O	ARG	49	227.733	148.029	18.439	1.00	82.71	JS10	ATOM	11068	C	VAL	55	219.050	131.487	13.079	1.00	54.91	JS10
ATOM	11016	N	VAL	50	227.993	147.898	16.209	1.00	68.93	JS10	ATOM	11069	O	VAL	55	218.126	132.043	12.523	1.00	54.91	JS10
ATOM	11017	CA	VAL	50	226.861	147.009	16.007	1.00	68.93	JS10	ATOM	11070	N	ILE	56	219.340	130.208	12.858	1.00	47.82	JS10
ATOM	11018	CB	VAL	50	226.318	147.139	14.576	1.00	61.17	JS10	ATOM	11071	CA	ILE	56	218.516	129.409	11.957	1.00	47.82	JS10
ATOM	11019	CG1	VAL	50	225.022	146.377	14.453	1.00	61.17	JS10	ATOM	11072	CB	ILE	56	218.777	127.920	12.159	1.00	27.45	JS10
ATOM	11020	CG2	VAL	50	226.108	148.595	14.226	1.00	61.17	JS10	ATOM	11073	CG2	ILE	56	217.707	127.117	11.449	1.00	27.45	JS10
ATOM	11021	C	VAL	50	227.232	145.546	16.265	1.00	68.93	JS10	ATOM	11074	CG1	ILE	56	220.171	127.551	11.654	1.00	27.45	JS10
ATOM	11022	O	VAL	50	228.350	145.113	15.995	1.00	68.93	JS10	ATOM	11075	CD1	ILE	56	220.589	126.118	11.996	1.00	27.45	JS10
ATOM	11023	N	ARG	51	226.281	144.788	16.791	1.00	65.58	JS10	ATOM	11076	C	ILE	56	217.042	129.673	12.318	1.00	47.82	JS10
ATOM	11024	CA	ARG	51	226.497	143.378	17.092	1.00	65.58	JS10	ATOM	11077	O	ILE	56	216.672	129.542	13.488	1.00	47.82	JS10
ATOM	11025	CB	ARG	51	226.490	143.169	18.606	1.00	76.34	JS10	ATOM	11078	N	ARG	57	216.203	130.030	11.341	1.00	52.06	JS10
ATOM	11026	CG	ARG	51	226.673	141.740	19.049	1.00	76.34	JS10	ATOM	11079	CA	ARG	57	214.798	130.318	11.632	1.00	52.06	JS10
ATOM	11027	CD	ARG	51	226.229	141.573	20.498	1.00	76.34	JS10	ATOM	11080	CB	ARG	57	213.995	130.581	10.365	1.00	40.99	JS10
ATOM	11028	NE	ARG	51	226.917	142.485	21.407	1.00	76.34	JS10	ATOM	11081	CG	ARG	57	214.413	131.798	9.625	1.00	40.99	JS10
ATOM	11029	CZ	ARG	51	228.178	142.334	21.806	1.00	76.34	JS10	ATOM	11082	CD	ARG	57	213.234	132.515	9.038	1.00	40.99	JS10
ATOM	11030	NH1	ARG	51	228.891	141.295	21.381	1.00	76.34	JS10	ATOM	11083	NE	ARG	57	213.626	133.820	8.528	1.00	40.99	JS10
ATOM	11031	NH2	ARG	51	228.735	143.237	22.613	1.00	76.34	JS10	ATOM	11084	CZ	ARG	57	212.811	134.868	8.498	1.00	40.99	JS10
ATOM	11032	C	ARG	51	225.355	142.597	16.459	1.00	65.58	JS10	ATOM	11085	NH1	ARG	57	211.569	134.751	8.949	1.00	40.99	JS10
ATOM	11033	O	ARG	51	224.209	142.717	16.889	1.00	65.58	JS10	ATOM	11086	NH2	ARG	57	213.227	136.035	8.026	1.00	40.99	JS10
ATOM	11034	N	ARG	52	225.654	141.802	15.435	1.00	67.62	JS10	ATOM	11087	C	ARG	57	214.044	129.260	12.416	1.00	52.06	JS10
ATOM	11035	CA	ARG	52	224.610	141.034	14.770	1.00	67.62	JS10	ATOM	11088	O	ARG	57	213.273	129.594	13.317	1.00	52.06	JS10
ATOM	11036	CB	ARG	52	224.789	141.093	13.243	1.00	89.47	JS10	ATOM	11089	N	GLY	58	214.231	127.990	12.077	1.00	49.73	JS10
ATOM	11037	CG	ARG	52	224.589	142.507	12.692	1.00	89.47	JS10	ATOM	11090	CA	GLY	58	213.496	126.962	12.792	1.00	49.73	JS10
ATOM	11038	CD	ARG	52	223.951	142.556	11.306	1.00	89.47	JS10	ATOM	11091	C	GLY	58	214.351	126.027	13.619	1.00	49.73	JS10
ATOM	11039	NE	ARG	52	224.930	142.756	10.240	1.00	89.47	JS10	ATOM	11092	O	GLY	58	215.575	126.126	13.623	1.00	49.73	JS10
ATOM	11040	CZ	ARG	52	225.769	141.821	9.794	1.00	89.47	JS10	ATOM	11093	N	PRO	59	213.727	125.085	14.328	1.00	54.38	JS10
ATOM	11041	NH1	ARG	52	225.755	140.597	10.316	1.00	89.47	JS10	ATOM	11094	CD	PRO	59	212.304	125.054	14.723	1.00	40.55	JS10
ATOM	11042	NH2	ARG	52	226.634	142.113	8.826	1.00	89.47	JS10	ATOM	11095	CA	PRO	59	214.528	124.169	15.140	1.00	54.38	JS10

ATOM	11096	CB	PRO	59	213.611	123.895	16.317	1.00	40.55	JS10	ATOM	11149	CB	SER	65	215.750	130.044	7.305	1.00	70.14	JS10
ATOM	11097	CG	PRO	59	212.244	123.856	15.642	1.00	40.55	JS10	ATOM	11150	OG	SER	65	216.289	128.876	7.903	1.00	70.14	JS10
ATOM	11098	C	PRO	59	215.015	122.870	14.488	1.00	54.38	JS10	ATOM	11151	C	SER	65	217.468	131.863	7.696	1.00	70.39	JS10
ATOM	11099	O	PRO	59	215.207	121.888	15.198	1.00	54.38	JS10	ATOM	11152	O	SER	65	217.226	133.070	7.589	1.00	70.39	JS10
ATOM	11100	N	PHE	60	215.221	122.827	13.169	1.00	58.55	JS10	ATOM	11153	N	ARG	66	218.194	131.376	8.678	1.00	96.29	JS10
ATOM	11101	CA	PHE	60	215.705	121.569	12.577	1.00	58.55	JS10	ATOM	11154	CA	ARG	66	218.886	132.250	9.589	1.00	96.29	JS10
ATOM	11102	CB	PHE	60	214.646	120.501	12.831	1.00	74.66	JS10	ATOM	11155	CB	ARG	66	220.131	132.723	8.849	1.00	59.04	JS10
ATOM	11103	CG	PHE	60	215.204	119.192	13.272	1.00	74.66	JS10	ATOM	11156	CG	ARG	66	220.964	131.566	8.371	1.00	59.04	JS10
ATOM	11104	CD1	PHE	60	214.414	118.291	13.959	1.00	74.66	JS10	ATOM	11157	CD	ARG	66	221.154	130.622	9.526	1.00	59.04	JS10
ATOM	11105	CD2	PHE	60	216.486	118.810	12.920	1.00	74.66	JS10	ATOM	11158	NE	ARG	66	221.727	129.357	9.117	1.00	59.04	JS10
ATOM	11106	CE1	PHE	60	214.891	117.015	14.282	1.00	74.66	JS10	ATOM	11159	CZ	ARG	66	222.944	129.240	8.615	1.00	59.04	JS10
ATOM	11107	CE2	PHE	60	216.972	117.534	13.239	1.00	74.66	JS10	ATOM	11160	NH1	ARG	66	223.689	130.320	8.469	1.00	59.04	JS10
ATOM	11108	CZ	PHE	60	216.169	116.640	13.918	1.00	74.66	JS10	ATOM	11161	NH2	ARG	66	223.418	128.046	8.278	1.00	59.04	JS10
ATOM	11109	C	PHE	60	216.180	121.535	11.092	1.00	58.55	JS10	ATOM	11162	C	ARG	66	218.276	133.436	10.350	1.00	96.29	JS10
ATOM	11110	O	PHE	60	216.833	122.460	10.613	1.00	58.55	JS10	ATOM	11163	O	ARG	66	218.734	133.706	11.459	1.00	96.29	JS10
ATOM	11111	N	LYS	61	215.861	120.455	10.382	1.00	133.43	JS10	ATOM	11164	N	GLU	67	217.297	134.161	9.806	1.00	58.01	JS10
ATOM	11112	CA	LYS	61	216.264	120.277	8.980	1.00	133.43	JS10	ATOM	11165	CA	GLU	67	216.747	135.315	10.553	1.00	58.01	JS10
ATOM	11113	CB	LYS	61	215.105	119.721	8.128	1.00	104.23	JS10	ATOM	11166	CB	GLU	67	215.865	134.822	11.725	1.00	160.04	JS10
ATOM	11114	CG	LYS	61	214.380	118.544	8.714	1.00	104.23	JS10	ATOM	11167	CG	GLU	67	214.506	134.213	11.311	1.00	160.04	JS10
ATOM	11115	CD	LYS	61	215.351	117.630	9.419	1.00	104.23	JS10	ATOM	11168	CD	GLU	67	213.755	133.439	12.432	1.00	160.04	JS10
ATOM	11116	CE	LYS	61	214.678	116.880	10.571	1.00	104.23	JS10	ATOM	11169	OE1	GLU	67	214.402	132.720	13.225	1.00	160.04	JS10
ATOM	11117	NZ	LYS	61	213.891	117.751	11.471	1.00	104.23	JS10	ATOM	11170	OE2	GLU	67	212.505	133.537	12.513	1.00	160.04	JS10
ATOM	11118	C	LYS	61	216.774	121.544	8.296	1.00	133.43	JS10	ATOM	11171	C	GLU	67	217.880	136.236	11.101	1.00	58.01	JS10
ATOM	11119	O	LYS	61	217.929	121.626	7.876	1.00	133.43	JS10	ATOM	11172	O	GLU	67	218.731	135.801	11.878	1.00	58.01	JS10
ATOM	11120	N	HIS	62	215.887	122.520	8.176	1.00	67.38	JS10	ATOM	11173	N	HIS	68	217.905	137.507	10.714	1.00	58.95	JS10
ATOM	11121	CA	HIS	62	216.177	123.790	7.529	1.00	67.38	JS10	ATOM	11174	CA	HIS	68	218.962	138.387	11.215	1.00	58.95	JS10
ATOM	11122	CB	HIS	62	214.931	124.657	7.643	1.00	64.57	JS10	ATOM	11175	CB	HIS	68	219.611	139.145	10.057	1.00	69.11	JS10
ATOM	11123	CG	HIS	62	213.690	123.839	7.810	1.00	64.57	JS10	ATOM	11176	CG	HIS	68	220.759	138.418	9.431	1.00	69.11	JS10
ATOM	11124	CD2	HIS	62	212.925	123.593	8.901	1.00	64.57	JS10	ATOM	11177	CD2	HIS	68	221.598	137.481	9.934	1.00	69.11	JS10
ATOM	11125	ND1	HIS	62	213.228	122.997	6.824	1.00	64.57	JS10	ATOM	11178	ND1	HIS	68	221.148	138.619	8.123	1.00	69.11	JS10
ATOM	11126	CE1	HIS	62	212.241	122.262	7.299	1.00	64.57	JS10	ATOM	11179	CE1	HIS	68	222.173	137.834	7.847	1.00	69.11	JS10
ATOM	11127	NE2	HIS	62	212.039	122.603	8.558	1.00	64.57	JS10	ATOM	11180	NE2	HIS	68	222.466	137.134	8.928	1.00	69.11	JS10
ATOM	11128	C	HIS	62	217.362	124.401	8.226	1.00	67.38	JS10	ATOM	11181	C	HIS	68	218.581	139.390	12.302	1.00	58.95	JS10
ATOM	11129	O	HIS	62	217.378	124.469	9.449	1.00	67.38	JS10	ATOM	11182	O	HIS	68	217.563	140.075	12.217	1.00	58.95	JS10
ATOM	11130	N	LYS	63	218.359	124.813	7.442	1.00	51.57	JS10	ATOM	11183	N	PHE	69	219.436	139.481	13.314	1.00	61.54	JS10
ATOM	11131	CA	LYS	63	219.582	125.401	7.973	1.00	51.57	JS10	ATOM	11184	CA	PHE	69	219.241	140.408	14.426	1.00	61.54	JS10
ATOM	11132	CB	LYS	63	220.726	124.376	7.993	1.00	148.96	JS10	ATOM	11185	CB	PHE	69	218.875	139.639	15.686	1.00	51.43	JS10
ATOM	11133	CG	LYS	63	221.076	123.758	6.635	1.00	148.96	JS10	ATOM	11186	CG	PHE	69	217.546	138.984	15.624	1.00	51.43	JS10
ATOM	11134	CD	LYS	63	222.101	124.578	5.831	1.00	148.96	JS10	ATOM	11187	CD1	PHE	69	217.440	137.600	15.726	1.00	51.43	JS10
ATOM	11135	CE	LYS	63	222.439	123.902	4.485	1.00	148.96	JS10	ATOM	11188	CD2	PHE	69	216.385	139.753	15.528	1.00	51.43	JS10
ATOM	11136	NZ	LYS	63	223.523	124.587	3.703	1.00	148.96	JS10	ATOM	11189	CE1	PHE	69	216.192	136.988	15.741	1.00	51.43	JS10
ATOM	11137	C	LYS	63	220.000	126.587	7.157	1.00	51.57	JS10	ATOM	11190	CE2	PHE	69	215.129	139.154	15.541	1.00	51.43	JS10
ATOM	11138	O	LYS	63	221.117	127.066	7.302	1.00	51.57	JS10	ATOM	11191	CZ	PHE	69	215.028	137.770	15.650	1.00	51.43	JS10
ATOM	11139	N	ASP	64	219.110	127.051	6.287	1.00	55.82	JS10	ATOM	11192	C	PHE	69	220.518	141.183	14.716	1.00	61.54	JS10
ATOM	11140	CA	ASP	64	219.410	128.212	5.463	1.00	55.82	JS10	ATOM	11193	O	PHE	69	221.596	140.781	14.281	1.00	61.54	JS10
ATOM	11141	CB	ASP	64	219.826	127.785	4.058	1.00	102.05	JS10	ATOM	11194	N	GLU	70	220.392	142.282	15.460	1.00	59.13	JS10
ATOM	11142	CG	ASP	64	218.896	126.768	3.465	1.00	102.05	JS10	ATOM	11195	CA	GLU	70	221.556	143.075	15.864	1.00	59.13	JS10
ATOM	11143	OD1	ASP	64	218.644	125.747	4.133	1.00	102.05	JS10	ATOM	11196	CB	GLU	70	222.190	143.777	14.654	1.00	95.16	JS10
ATOM	11144	OD2	ASP	64	218.423	126.985	2.329	1.00	102.05	JS10	ATOM	11197	CG	GLU	70	221.230	144.266	13.599	1.00	95.16	JS10
ATOM	11145	C	ASP	64	218.230	129.163	5.409	1.00	55.82	JS10	ATOM	11198	CD	GLU	70	220.647	145.620	13.915	1.00	95.16	JS10
ATOM	11146	O	ASP	64	217.569	129.295	4.389	1.00	55.82	JS10	ATOM	11199	OE1	GLU	70	219.926	145.736	14.929	1.00	95.16	JS10
ATOM	11147	N	SER	65	218.000	129.838	6.534	1.00	70.39	JS10	ATOM	11200	OE2	GLU	70	220.913	146.569	13.141	1.00	95.16	JS10
ATOM	11148	CA	SER	65	216.912	130.803	6.721	1.00	70.39	JS10	ATOM	11201	C	GLU	70	221.324	144.077	17.005	1.00	59.13	JS10

ATOM	11202	O	GLU	70	220.216	144.574	17.218	1.00 59.13	JS10
ATOM	11203	N	LEU	71	222.390	144.356	17.746	1.00 78.29	JS10
ATOM	11204	CA	LEU	71	222.328	145.279	18.866	1.00 78.29	JS10
ATOM	11205	CB	LEU	71	223.006	144.653	20.080	1.00 40.45	JS10
ATOM	11206	CG	LEU	71	222.130	144.458	21.328	1.00 40.45	JS10
ATOM	11207	CD1	LEU	71	223.004	144.155	22.557	1.00 40.45	JS10
ATOM	11208	CD2	LEU	71	221.285	145.709	21.547	1.00 40.45	JS10
ATOM	11209	C	LEU	71	222.976	146.635	18.578	1.00 78.29	JS10
ATOM	11210	O	LEU	71	224.199	146.768	18.607	1.00 78.29	JS10
ATOM	11211	N	ARG	72	222.150	147.640	18.314	1.00 86.54	JS10
ATOM	11212	CA	ARG	72	222.632	148.992	18.035	1.00 86.54	JS10
ATOM	11213	CB	ARG	72	221.485	149.839	17.489	1.00167.16	JS10
ATOM	11214	CG	ARG	72	220.262	149.812	18.405	1.00167.16	JS10
ATOM	11215	CD	ARG	72	219.340	151.006	18.218	1.00167.16	JS10
ATOM	11216	NE	ARG	72	218.766	151.067	16.879	1.00167.16	JS10
ATOM	11217	CZ	ARG	72	217.817	151.924	16.516	1.00167.16	JS10
ATOM	11218	NH1	ARG	72	217.335	152.791	17.397	1.00167.16	JS10
ATOM	11219	NH2	ARG	72	217.356	151.918	15.272	1.00167.16	JS10
ATOM	11220	C	ARG	72	223.149	149.648	19.320	1.00 86.54	JS10
ATOM	11221	O	ARG	72	222.397	149.793	20.279	1.00 86.54	JS10
ATOM	11222	N	THR	73	224.420	150.043	19.349	1.00 55.91	JS10
ATOM	11223	CA	THR	73	224.983	150.707	20.535	1.00 55.91	JS10
ATOM	11224	CB	THR	73	226.270	150.013	21.055	1.00 63.89	JS10
ATOM	11225	OG1	THR	73	225.948	148.737	21.624	1.00 63.89	JS10
ATOM	11226	CG2	THR	73	226.928	150.854	22.116	1.00 63.89	JS10
ATOM	11227	C	THR	73	225.331	152.155	20.203	1.00 55.91	JS10
ATOM	11228	O	THR	73	226.334	152.424	19.544	1.00 55.91	JS10
ATOM	11229	N	ALA	77	218.575	154.668	18.814	1.00 87.86	JS10
ATOM	11230	CA	ALA	77	217.932	155.285	19.972	1.00 87.86	JS10
ATOM	11231	CB	ALA	77	218.622	154.828	21.268	1.00 34.44	JS10
ATOM	11232	C	ALA	77	217.980	156.805	19.843	1.00 87.86	JS10
ATOM	11233	O	ALA	77	219.017	157.383	19.517	1.00 87.86	JS10
ATOM	11234	N	ALA	78	216.834	157.438	20.064	1.00 96.44	JS10
ATOM	11235	CA	ALA	78	216.724	158.887	19.982	1.00 96.44	JS10
ATOM	11236	CB	ALA	78	215.442	159.280	19.246	1.00 44.78	JS10
ATOM	11237	C	ALA	78	216.683	159.380	21.414	1.00 96.44	JS10
ATOM	11238	O	ALA	78	216.652	160.585	21.686	1.00 96.44	JS10
ATOM	11239	N	ALA	79	216.684	158.425	22.334	1.00 80.12	JS10
ATOM	11240	CA	ALA	79	216.654	158.752	23.741	1.00 80.12	JS10
ATOM	11241	CB	ALA	79	216.345	157.505	24.556	1.00 21.17	JS10
ATOM	11242	C	ALA	79	217.989	159.373	24.160	1.00 80.12	JS10
ATOM	11243	O	ALA	79	218.001	160.427	24.789	1.00 80.12	JS10
ATOM	11244	N	ALA	80	219.111	158.743	23.812	1.00105.74	JS10
ATOM	11245	CA	ALA	80	220.407	159.324	24.175	1.00105.74	JS10
ATOM	11246	CB	ALA	80	221.572	158.421	23.747	1.00 54.83	JS10
ATOM	11247	C	ALA	80	220.525	160.675	23.488	1.00105.74	JS10
ATOM	11248	O	ALA	80	220.830	161.682	24.129	1.00105.74	JS10
ATOM	11249	N	ALA	81	220.280	160.693	22.181	1.00 91.31	JS10
ATOM	11250	CA	ALA	81	220.352	161.933	21.417	1.00 91.31	JS10
ATOM	11251	CB	ALA	81	219.758	161.737	20.017	1.00 95.01	JS10
ATOM	11252	C	ALA	81	219.566	162.988	22.181	1.00 91.31	JS10
ATOM	11253	O	ALA	81	219.925	164.166	22.191	1.00 91.31	JS10
ATOM	11254	N	ALA	82	218.496	162.546	22.831	1.00109.20	JS10
ATOM	11255	CA	ALA	82	217.653	163.435	23.614	1.00109.20	JS10
ATOM	11256	CB	ALA	82	216.353	162.726	23.980	1.00101.55	JS10
ATOM	11257	C	ALA	82	218.397	163.867	24.875	1.00109.20	JS10
ATOM	11258	O	ALA	82	218.682	165.049	25.063	1.00109.20	JS10
ATOM	11259	N	ALA	83	218.708	162.900	25.733	1.00 86.23	JS10
ATOM	11260	CA	ALA	83	219.421	163.169	26.974	1.00 86.23	JS10
ATOM	11261	CB	ALA	83	219.949	161.875	27.565	1.00 40.99	JS10
ATOM	11262	C	ALA	83	220.573	164.119	26.708	1.00 86.23	JS10
ATOM	11263	O	ALA	83	220.711	165.146	27.365	1.00 86.23	JS10
ATOM	11264	N	ALA	84	221.404	163.769	25.737	1.00 93.14	JS10
ATOM	11265	CA	ALA	84	222.537	164.611	25.399	1.00 93.14	JS10
ATOM	11266	CB	ALA	84	223.173	164.140	24.104	1.00 88.51	JS10
ATOM	11267	C	ALA	84	222.078	166.058	25.265	1.00 93.14	JS10
ATOM	11268	O	ALA	84	222.627	166.942	25.917	1.00 93.14	JS10
ATOM	11269	N	ALA	85	221.071	166.294	24.425	1.00101.21	JS10
ATOM	11270	CA	ALA	85	220.546	167.645	24.223	1.00101.21	JS10
ATOM	11271	CB	ALA	85	219.178	167.597	23.494	1.00 57.49	JS10
ATOM	11272	C	ALA	85	220.395	168.324	25.581	1.00101.21	JS10
ATOM	11273	O	ALA	85	220.799	169.473	25.762	1.00101.21	JS10
ATOM	11274	N	ALA	86	219.819	167.595	26.533	1.00117.22	JS10
ATOM	11275	CA	ALA	86	219.614	168.108	27.883	1.00117.22	JS10
ATOM	11276	CB	ALA	86	218.802	167.101	28.708	1.00 67.14	JS10
ATOM	11277	C	ALA	86	220.959	168.394	28.557	1.00117.22	JS10
ATOM	11278	O	ALA	86	221.323	169.557	28.747	1.00117.22	JS10
ATOM	11279	N	ALA	87	221.694	167.336	28.910	1.00 74.84	JS10
ATOM	11280	CA	ALA	87	222.999	167.486	29.552	1.00 74.84	JS10
ATOM	11281	CB	ALA	87	223.808	166.169	29.466	1.00 29.01	JS10
ATOM	11282	C	ALA	87	223.761	168.605	28.863	1.00 74.84	JS10
ATOM	11283	O	ALA	87	224.617	169.241	29.465	1.00 74.84	JS10
ATOM	11284	N	ALA	88	223.432	168.845	27.601	1.00 95.31	JS10
ATOM	11285	CA	ALA	88	224.088	169.880	26.817	1.00 95.31	JS10
ATOM	11286	CB	ALA	88	223.897	169.597	25.325	1.00104.24	JS10
ATOM	11287	C	ALA	88	223.596	171.287	27.147	1.00 95.31	JS10
ATOM	11288	O	ALA	88	224.251	172.023	27.886	1.00 95.31	JS10
ATOM	11289	N	ALA	89	222.446	171.653	26.588	1.00143.07	JS10
ATOM	11290	CA	ALA	89	221.862	172.975	26.799	1.00143.07	JS10
ATOM	11291	CB	ALA	89	220.507	173.060	26.110	1.00 64.70	JS10
ATOM	11292	C	ALA	89	221.715	173.307	28.277	1.00143.07	JS10
ATOM	11293	O	ALA	89	222.003	174.428	28.702	1.00143.07	JS10
ATOM	11294	N	ALA	90	221.260	172.330	29.054	1.00177.77	JS10
ATOM	11295	CA	ALA	90	221.083	172.524	30.486	1.00177.77	JS10
ATOM	11296	CB	ALA	90	220.739	171.198	31.156	1.00 93.93	JS10
ATOM	11297	C	ALA	90	222.363	173.104	31.082	1.00177.77	JS10
ATOM	11298	O	ALA	90	222.349	174.188	31.666	1.00177.77	JS10
ATOM	11299	N	ALA	91	223.466	172.378	30.925	1.00107.87	JS10
ATOM	11300	CA	ALA	91	224.755	172.822	31.439	1.00107.87	JS10
ATOM	11301	CB	ALA	91	225.790	171.714	31.280	1.00 69.52	JS10
ATOM	11302	C	ALA	91	225.204	174.080	30.695	1.00107.87	JS10
ATOM	11303	O	ALA	91	226.160	174.055	29.920	1.00107.87	JS10
ATOM	11304	N	ALA	92	224.497	175.178	30.938	1.00136.61	JS10
ATOM	11305	CA	ALA	92	224.803	176.453	30.308	1.00136.61	JS10
ATOM	11306	CB	ALA	92	223.716	176.801	29.299	1.00 93.78	JS10
ATOM	11307	C	ALA	92	224.914	177.545	31.373	1.00136.61	JS10

ATOM	11308	O	ALA	92	225.971	178.212	31.434	1.00136.61	JS10	ATOM	11361	C	VAL	8	156.341	108.814	37.257	1.00 66.44	DS4
ATOM	11309	OXT	ALA	92	223.942	177.717	32.139	1.00122.85	JS10	ATOM	11362	O	VAL	8	156.289	109.418	36.185	1.00 66.44	DS4
ATOM	11310	C	GLY	2	149.572	96.374	32.423	1.00 90.37	DS4	ATOM	11363	N	CYS	9	156.914	109.341	38.330	1.00130.04	DS4
ATOM	11311	O	GLY	2	148.540	96.635	31.811	1.00 90.37	DS4	ATOM	11364	CA	CYS	9	157.568	110.634	38.225	1.00130.04	DS4
ATOM	11312	N	GLY	2	149.164	93.984	31.878	1.00 90.37	DS4	ATOM	11365	CB	CYS	9	157.871	111.218	39.619	1.00 43.14	DS4
ATOM	11313	CA	GLY	2	150.133	94.967	32.424	1.00 90.37	DS4	ATOM	11366	SG	CYS	9	156.493	112.131	40.369	1.00 43.14	DS4
ATOM	11314	N	ARG	3	150.255	97.280	33.112	1.00 78.72	DS4	ATOM	11367	C	CYS	9	158.854	110.321	37.460	1.00130.04	DS4
ATOM	11315	CA	ARG	3	149.836	98.676	33.198	1.00 78.72	DS4	ATOM	11368	O	CYS	9	159.824	109.828	38.035	1.00130.04	DS4
ATOM	11316	CB	ARG	3	148.642	98.810	34.149	1.00158.32	DS4	ATOM	11369	N	ARG	10	158.821	110.565	36.153	1.00 71.92	DS4
ATOM	11317	CG	ARG	3	147.307	98.430	33.525	1.00158.32	DS4	ATOM	11370	CA	ARG	10	159.947	110.325	35.233	1.00 71.92	DS4
ATOM	11318	CD	ARG	3	146.824	99.500	32.542	1.00158.32	DS4	ATOM	11371	CB	ARG	10	160.583	108.945	35.421	1.00 52.33	DS4
ATOM	11319	NE	ARG	3	146.426	98.955	31.243	1.00158.32	DS4	ATOM	11372	CG	ARG	10	159.847	107.817	34.709	1.00 52.33	DS4
ATOM	11320	CZ	ARG	3	145.702	99.614	30.337	1.00158.32	DS4	ATOM	11373	CD	ARG	10	160.332	106.441	35.169	1.00 52.33	DS4
ATOM	11321	NH1	ARG	3	145.281	100.849	30.581	1.00158.32	DS4	ATOM	11374	NE	ARG	10	161.784	106.291	35.080	1.00 52.33	DS4
ATOM	11322	NH2	ARG	3	145.405	99.041	29.177	1.00158.32	DS4	ATOM	11375	CZ	ARG	10	162.471	106.310	33.944	1.00 52.33	DS4
ATOM	11323	C	ARG	3	151.012	99.518	33.697	1.00 78.72	DS4	ATOM	11376	NH1	ARG	10	161.835	106.473	32.783	1.00 52.33	DS4
ATOM	11324	O	ARG	3	150.901	100.267	34.667	1.00 78.72	DS4	ATOM	11377	NH2	ARG	10	163.787	106.156	33.973	1.00 52.33	DS4
ATOM	11325	N	TYR	4	152.140	99.391	33.014	1.00103.52	DS4	ATOM	11378	C	ARG	10	159.291	110.386	33.865	1.00 71.92	DS4
ATOM	11326	CA	TYR	4	153.348	100.105	33.387	1.00103.52	DS4	ATOM	11379	O	ARG	10	159.907	110.800	32.878	1.00 71.92	DS4
ATOM	11327	CB	TYR	4	153.156	101.619	33.275	1.00 64.26	DS4	ATOM	11380	N	LEU	11	158.045	109.919	33.812	1.00 48.14	DS4
ATOM	11328	CG	TYR	4	154.420	102.358	33.646	1.00 64.26	DS4	ATOM	11381	CA	LEU	11	157.271	110.016	32.599	1.00 48.14	DS4
ATOM	11329	CD1	TYR	4	155.620	102.061	33.014	1.00 64.26	DS4	ATOM	11382	CB	LEU	11	156.007	109.176	32.687	1.00 43.91	DS4
ATOM	11330	CE1	TYR	4	156.806	102.631	33.427	1.00 64.26	DS4	ATOM	11383	CG	LEU	11	156.210	107.682	32.913	1.00 43.91	DS4
ATOM	11331	CD2	TYR	4	154.441	103.265	34.697	1.00 64.26	DS4	ATOM	11384	CD1	LEU	11	154.869	107.054	33.169	1.00 43.91	DS4
ATOM	11332	CE2	TYR	4	155.630	103.846	35.117	1.00 64.26	DS4	ATOM	11385	CD2	LEU	11	156.860	107.037	31.716	1.00 43.91	DS4
ATOM	11333	CZ	TYR	4	156.809	103.518	34.482	1.00 64.26	DS4	ATOM	11386	C	LEU	11	156.936	111.488	32.757	1.00 48.14	DS4
ATOM	11334	OH	TYR	4	158.008	104.035	34.924	1.00 64.26	DS4	ATOM	11387	O	LEU	11	157.176	112.294	31.847	1.00 48.14	DS4
ATOM	11335	C	TYR	4	153.786	99.750	34.808	1.00103.52	DS4	ATOM	11388	N	CYS	12	156.423	111.824	33.952	1.00 56.56	DS4
ATOM	11336	O	TYR	4	154.644	98.883	34.999	1.00103.52	DS4	ATOM	11389	CA	CYS	12	156.063	113.198	34.344	1.00 56.56	DS4
ATOM	11337	N	ILE	5	153.201	100.425	35.795	1.00 88.47	DS4	ATOM	11390	CB	CYS	12	156.088	113.354	35.892	1.00 45.60	DS4
ATOM	11338	CA	ILE	5	153.511	100.187	37.204	1.00 88.47	DS4	ATOM	11391	SG	CYS	12	154.534	113.645	36.935	1.00 45.60	DS4
ATOM	11339	CB	ILE	5	153.638	98.664	37.511	1.00 62.60	DS4	ATOM	11392	C	CYS	12	157.169	114.062	33.742	1.00 56.56	DS4
ATOM	11340	CG2	ILE	5	154.345	98.445	38.824	1.00 62.60	DS4	ATOM	11393	O	CYS	12	156.901	115.048	33.070	1.00 56.56	DS4
ATOM	11341	CG1	ILE	5	152.260	98.017	37.567	1.00 62.60	DS4	ATOM	11394	N	ARG	13	158.418	113.664	33.975	1.00 65.69	DS4
ATOM	11342	CD1	ILE	5	151.601	97.866	36.222	1.00 62.60	DS4	ATOM	11395	CA	ARG	13	159.565	114.397	33.454	1.00 65.69	DS4
ATOM	11343	C	ILE	5	154.777	100.888	37.706	1.00 88.47	DS4	ATOM	11396	CB	ARG	13	160.871	113.879	34.070	1.00 54.60	DS4
ATOM	11344	O	ILE	5	154.807	101.399	38.828	1.00 88.47	DS4	ATOM	11397	CG	ARG	13	160.980	114.188	35.571	1.00 54.60	DS4
ATOM	11345	N	GLY	6	155.816	100.922	36.879	1.00 44.24	DS4	ATOM	11398	CD	ARG	13	162.423	114.375	36.046	1.00 54.60	DS4
ATOM	11346	CA	GLY	6	157.065	101.542	37.290	1.00 44.24	DS4	ATOM	11399	NE	ARG	13	163.028	113.148	36.547	1.00 54.60	DS4
ATOM	11347	C	GLY	6	157.003	102.942	37.876	1.00 44.24	DS4	ATOM	11400	CZ	ARG	13	164.336	112.902	36.546	1.00 54.60	DS4
ATOM	11348	O	GLY	6	155.932	103.530	38.029	1.00 44.24	DS4	ATOM	11401	NH1	ARG	13	165.191	113.797	36.068	1.00 54.60	DS4
ATOM	11349	N	PRO	7	158.161	103.512	38.212	1.00 41.54	DS4	ATOM	11402	NH2	ARG	13	164.793	111.751	37.015	1.00 54.60	DS4
ATOM	11350	CD	PRO	7	159.535	103.103	37.889	1.00 52.44	DS4	ATOM	11403	C	ARG	13	159.645	114.359	31.934	1.00 65.69	DS4
ATOM	11351	CA	PRO	7	158.148	104.857	38.778	1.00 41.54	DS4	ATOM	11404	O	ARG	13	159.287	115.337	31.289	1.00 65.69	DS4
ATOM	11352	CB	PRO	7	159.635	105.168	38.952	1.00 52.44	DS4	ATOM	11405	N	ARG	14	160.100	113.238	31.369	1.00 50.10	DS4
ATOM	11353	CG	PRO	7	160.256	104.436	37.823	1.00 52.44	DS4	ATOM	11406	CA	ARG	14	160.233	113.042	29.910	1.00 50.10	DS4
ATOM	11354	C	PRO	7	157.464	105.796	37.804	1.00 41.54	DS4	ATOM	11407	CB	ARG	14	159.848	111.613	29.528	1.00 51.56	DS4
ATOM	11355	O	PRO	7	157.864	105.875	36.647	1.00 41.54	DS4	ATOM	11408	CG	ARG	14	160.876	110.881	28.665	1.00 51.56	DS4
ATOM	11356	N	VAL	8	156.447	106.513	38.266	1.00 66.44	DS4	ATOM	11409	CD	ARG	14	161.352	111.718	27.488	1.00 51.56	DS4
ATOM	11357	CA	VAL	8	155.714	107.424	37.403	1.00 66.44	DS4	ATOM	11410	NE	ARG	14	162.670	111.314	26.993	1.00 51.56	DS4
ATOM	11358	CB	VAL	8	154.280	107.549	37.882	1.00 86.02	DS4	ATOM	11411	CZ	ARG	14	163.682	110.929	27.767	1.00 51.56	DS4
ATOM	11359	CG1	VAL	8	153.497	108.348	36.904	1.00 86.02	DS4	ATOM	11412	NH1	ARG	14	163.546	110.872	29.081	1.00 51.56	DS4
ATOM	11360	CG2	VAL	8	153.675	106.163	38.031	1.00 86.02	DS4	ATOM	11413	NH2	ARG	14	164.850	110.627	27.233	1.00 51.56	DS4

ATOM	11414	C	ARG	14	159.480	113.996	28.971	1.00	50.10	DS4
ATOM	11415	O	ARG	14	160.071	114.507	28.024	1.00	50.10	DS4
ATOM	11416	N	GLU	15	158.183	114.224	29.179	1.00	58.72	DS4
ATOM	11417	CA	GLU	15	157.493	115.150	28.277	1.00	58.72	DS4
ATOM	11418	CB	GLU	15	156.089	114.665	27.876	1.00	84.95	DS4
ATOM	11419	CG	GLU	15	156.033	113.286	27.274	1.00	84.95	DS4
ATOM	11420	CD	GLU	15	155.939	112.235	28.345	1.00	84.95	DS4
ATOM	11421	OE1	GLU	15	156.021	112.617	29.534	1.00	84.95	DS4
ATOM	11422	OE2	GLU	15	155.783	111.044	28.010	1.00	84.95	DS4
ATOM	11423	C	GLU	15	157.359	116.506	28.919	1.00	58.72	DS4
ATOM	11424	O	GLU	15	156.349	117.169	28.737	1.00	58.72	DS4
ATOM	11425	N	GLY	16	158.381	116.921	29.654	1.00	60.92	DS4
ATOM	11426	CA	GLY	16	158.335	118.207	30.324	1.00	60.92	DS4
ATOM	11427	C	GLY	16	157.068	118.313	31.143	1.00	60.92	DS4
ATOM	11428	O	GLY	16	157.032	117.921	32.304	1.00	60.92	DS4
ATOM	11429	N	VAL	17	156.029	118.845	30.513	1.00	41.17	DS4
ATOM	11430	CA	VAL	17	154.717	119.016	31.115	1.00	41.17	DS4
ATOM	11431	CB	VAL	17	153.609	118.683	30.120	1.00	66.69	DS4
ATOM	11432	CG1	VAL	17	152.276	119.064	30.707	1.00	66.69	DS4
ATOM	11433	CG2	VAL	17	153.854	119.400	28.809	1.00	66.69	DS4
ATOM	11434	C	VAL	17	154.497	118.141	32.331	1.00	41.17	DS4
ATOM	11435	O	VAL	17	154.863	116.970	32.345	1.00	41.17	DS4
ATOM	11436	N	LYS	18	153.875	118.724	33.347	1.00	63.50	DS4
ATOM	11437	CA	LYS	18	153.570	118.022	34.583	1.00	63.50	DS4
ATOM	11438	CB	LYS	18	153.342	119.064	35.677	1.00	67.64	DS4
ATOM	11439	CG	LYS	18	153.120	118.563	37.094	1.00	67.64	DS4
ATOM	11440	CD	LYS	18	153.148	119.780	38.030	1.00	67.64	DS4
ATOM	11441	CE	LYS	18	152.474	119.536	39.374	1.00	67.64	DS4
ATOM	11442	NZ	LYS	18	152.191	120.808	40.120	1.00	67.64	DS4
ATOM	11443	C	LYS	18	152.321	117.155	34.377	1.00	63.50	DS4
ATOM	11444	O	LYS	18	151.210	117.673	34.223	1.00	63.50	DS4
ATOM	11445	N	LEU	19	152.523	115.841	34.322	1.00	88.94	DS4
ATOM	11446	CA	LEU	19	151.429	114.882	34.171	1.00	88.94	DS4
ATOM	11447	CB	LEU	19	151.938	113.583	33.554	1.00	71.46	DS4
ATOM	11448	CG	LEU	19	152.475	113.720	32.134	1.00	71.46	DS4
ATOM	11449	CD1	LEU	19	153.199	112.443	31.726	1.00	71.46	DS4
ATOM	11450	CD2	LEU	19	151.307	114.033	31.201	1.00	71.46	DS4
ATOM	11451	C	LEU	19	151.008	114.616	35.599	1.00	88.94	DS4
ATOM	11452	O	LEU	19	151.865	114.380	36.454	1.00	88.94	DS4
ATOM	11453	N	TYR	20	149.714	114.637	35.889	1.00	64.05	DS4
ATOM	11454	CA	TYR	20	149.333	114.425	37.275	1.00	64.05	DS4
ATOM	11455	CB	TYR	20	148.053	115.196	37.597	1.00	65.15	DS4
ATOM	11456	CG	TYR	20	148.349	116.670	37.704	1.00	65.15	DS4
ATOM	11457	CD1	TYR	20	148.033	117.543	36.667	1.00	65.15	DS4
ATOM	11458	CE1	TYR	20	148.419	118.886	36.709	1.00	65.15	DS4
ATOM	11459	CD2	TYR	20	149.055	117.175	38.803	1.00	65.15	DS4
ATOM	11460	CE2	TYR	20	149.446	118.514	38.863	1.00	65.15	DS4
ATOM	11461	CZ	TYR	20	149.128	119.369	37.808	1.00	65.15	DS4
ATOM	11462	OH	TYR	20	149.527	120.695	37.838	1.00	65.15	DS4
ATOM	11463	C	TYR	20	149.250	112.978	37.709	1.00	64.05	DS4
ATOM	11464	O	TYR	20	148.594	112.634	38.688	1.00	64.05	DS4
ATOM	11465	N	LEU	21	149.957	112.129	36.980	1.00	117.97	DS4
ATOM	11466	CA	LEU	21	149.995	110.721	37.304	1.00	117.97	DS4
ATOM	11467	CB	LEU	21	151.126	110.055	36.546	1.00	61.49	DS4
ATOM	11468	CG	LEU	21	150.993	110.054	35.034	1.00	61.49	DS4
ATOM	11469	CD1	LEU	21	152.328	109.699	34.401	1.00	61.49	DS4
ATOM	11470	CD2	LEU	21	149.894	109.071	34.639	1.00	61.49	DS4
ATOM	11471	C	LEU	21	150.249	110.593	38.792	1.00	117.97	DS4
ATOM	11472	O	LEU	21	151.056	111.337	39.353	1.00	117.97	DS4
ATOM	11473	N	LYS	22	149.551	109.658	39.423	1.00	53.86	DS4
ATOM	11474	CA	LYS	22	149.703	109.419	40.853	1.00	53.86	DS4
ATOM	11475	CB	LYS	22	150.965	108.581	41.112	1.00	66.36	DS4
ATOM	11476	CG	LYS	22	151.265	107.484	40.077	1.00	66.36	DS4
ATOM	11477	CD	LYS	22	150.164	106.438	39.954	1.00	66.36	DS4
ATOM	11478	CE	LYS	22	150.615	105.276	39.068	1.00	66.36	DS4
ATOM	11479	NZ	LYS	22	149.481	104.545	38.454	1.00	66.36	DS4
ATOM	11480	C	LYS	22	149.792	110.733	41.640	1.00	53.86	DS4
ATOM	11481	O	LYS	22	150.798	111.005	42.299	1.00	53.86	DS4
ATOM	11482	N	GLY	23	148.727	111.526	41.566	1.00	74.89	DS4
ATOM	11483	CA	GLY	23	148.676	112.812	42.235	1.00	74.89	DS4
ATOM	11484	C	GLY	23	148.573	112.897	43.753	1.00	74.89	DS4
ATOM	11485	O	GLY	23	148.516	111.894	44.475	1.00	74.89	DS4
ATOM	11486	N	GLU	24	148.529	114.155	44.196	1.00	91.81	DS4
ATOM	11487	CA	GLU	24	148.463	114.615	45.586	1.00	91.81	DS4
ATOM	11488	CB	GLU	24	147.948	113.551	46.553	1.00	181.43	DS4
ATOM	11489	CG	GLU	24	147.335	114.201	47.788	1.00	181.43	DS4
ATOM	11490	CD	GLU	24	146.881	113.212	48.840	1.00	181.43	DS4
ATOM	11491	OE1	GLU	24	146.288	112.176	48.471	1.00	181.43	DS4
ATOM	11492	OE2	GLU	24	147.106	113.485	50.040	1.00	181.43	DS4
ATOM	11493	C	GLU	24	149.883	115.016	45.963	1.00	91.81	DS4
ATOM	11494	O	GLU	24	150.128	116.124	46.446	1.00	91.81	DS4
ATOM	11495	N	ARG	25	150.815	114.099	45.729	1.00	87.95	DS4
ATOM	11496	CA	ARG	25	152.232	114.343	45.974	1.00	87.95	DS4
ATOM	11497	CB	ARG	25	153.030	113.052	45.715	1.00	62.57	DS4
ATOM	11498	CG	ARG	25	154.371	112.847	46.468	1.00	62.57	DS4
ATOM	11499	CD	ARG	25	155.505	113.726	45.972	1.00	62.57	DS4
ATOM	11500	NE	ARG	25	156.803	113.040	45.913	1.00	62.57	DS4
ATOM	11501	CZ	ARG	25	157.463	112.532	46.953	1.00	62.57	DS4
ATOM	11502	NH1	ARG	25	156.960	112.609	48.173	1.00	62.57	DS4
ATOM	11503	NH2	ARG	25	158.650	111.964	46.774	1.00	62.57	DS4
ATOM	11504	C	ARG	25	152.498	115.342	44.857	1.00	87.95	DS4
ATOM	11505	O	ARG	25	153.215	116.324	45.020	1.00	87.95	DS4
ATOM	11506	N	CYS	26	151.859	115.076	43.722	1.00	90.96	DS4
ATOM	11507	CA	CYS	26	151.990	115.883	42.521	1.00	90.96	DS4
ATOM	11508	CB	CYS	26	151.226	115.211	41.361	1.00	43.88	DS4
ATOM	11509	SG	CYS	26	152.162	113.883	40.552	1.00	43.88	DS4
ATOM	11510	C	CYS	26	151.586	117.350	42.639	1.00	90.96	DS4
ATOM	11511	O	CYS	26	151.255	117.977	41.637	1.00	90.96	DS4
ATOM	11512	N	TYR	27	151.615	117.910	43.843	1.00	130.40	DS4
ATOM	11513	CA	TYR	27	151.265	119.316	43.986	1.00	130.40	DS4
ATOM	11514	CB	TYR	27	150.078	119.495	44.923	1.00	55.89	DS4
ATOM	11515	CG	TYR	27	148.810	119.138	44.188	1.00	55.89	DS4
ATOM	11516	CD1	TYR	27	148.457	117.803	43.986	1.00	55.89	DS4
ATOM	11517	CE1	TYR	27	147.411	117.457	43.142	1.00	55.89	DS4
ATOM	11518	CD2	TYR	27	148.060	120.119	43.534	1.00	55.89	DS4
ATOM	11519	CE2	TYR	27	147.012	119.778	42.691	1.00	55.89	DS4

ATOM	11520	CZ	TYR	27	146.704	118.446	42.500	1.00	55.89	DS4	ATOM	11573	O	GLU	34	161.989	119.332	41.975	1.00	68.91	DS4
ATOM	11521	OH	TYR	27	145.709	118.083	41.638	1.00	55.89	DS4	ATOM	11574	N	ARG	35	163.229	120.691	40.654	1.00	62.83	DS4
ATOM	11522	C	TYR	27	152.422	120.192	44.394	1.00	130.40	DS4	ATOM	11575	CA	ARG	35	164.468	119.959	40.787	1.00	62.83	DS4
ATOM	11523	O	TYR	27	152.789	121.102	43.651	1.00	130.40	DS4	ATOM	11576	CB	ARG	35	164.663	119.397	42.196	1.00	176.11	DS4
ATOM	11524	N	SER	28	153.009	119.951	45.556	1.00	61.81	DS4	ATOM	11577	CG	ARG	35	165.819	120.039	42.942	1.00	176.11	DS4
ATOM	11525	CA	SER	28	154.160	120.766	45.916	1.00	61.81	DS4	ATOM	11578	CD	ARG	35	167.140	119.842	42.217	1.00	176.11	DS4
ATOM	11526	CB	SER	28	153.790	121.766	47.009	1.00	152.68	DS4	ATOM	11579	NE	ARG	35	168.236	120.505	42.913	1.00	176.11	DS4
ATOM	11527	OG	SER	28	152.968	122.795	46.473	1.00	152.68	DS4	ATOM	11580	CZ	ARG	35	168.628	120.204	44.147	1.00	176.11	DS4
ATOM	11528	C	SER	28	155.379	119.943	46.321	1.00	61.81	DS4	ATOM	11581	NH1	ARG	35	168.010	119.244	44.823	1.00	176.11	DS4
ATOM	11529	O	SER	28	156.522	120.439	46.296	1.00	61.81	DS4	ATOM	11582	NH2	ARG	35	169.636	120.866	44.704	1.00	176.11	DS4
ATOM	11530	N	PRO	29	155.159	118.680	46.723	1.00	96.70	DS4	ATOM	11583	C	ARG	35	164.252	118.847	39.799	1.00	62.83	DS4
ATOM	11531	CD	PRO	29	153.915	118.089	47.248	1.00	134.71	DS4	ATOM	11584	O	ARG	35	163.416	117.968	40.000	1.00	62.83	DS4
ATOM	11532	CA	PRO	29	156.330	117.878	47.105	1.00	96.70	DS4	ATOM	11585	N	ARG	36	164.975	118.934	38.695	1.00	68.31	DS4
ATOM	11533	CB	PRO	29	155.720	116.692	47.861	1.00	134.71	DS4	ATOM	11586	CA	ARG	36	164.887	117.946	37.650	1.00	68.31	DS4
ATOM	11534	CG	PRO	29	154.291	116.648	47.394	1.00	134.71	DS4	ATOM	11587	CB	ARG	36	164.868	116.560	38.266	1.00	77.24	DS4
ATOM	11535	C	PRO	29	157.226	117.465	45.931	1.00	96.70	DS4	ATOM	11588	CG	ARG	36	165.996	116.286	39.224	1.00	77.24	DS4
ATOM	11536	O	PRO	29	158.438	117.608	46.040	1.00	96.70	DS4	ATOM	11589	CD	ARG	36	165.852	114.871	39.683	1.00	77.24	DS4
ATOM	11537	N	LYS	30	156.625	116.975	44.835	1.00	167.14	DS4	ATOM	11590	NE	ARG	36	167.091	114.337	40.201	1.00	77.24	DS4
ATOM	11538	CA	LYS	30	157.323	116.554	43.594	1.00	167.14	DS4	ATOM	11591	CZ	ARG	36	167.270	113.052	40.461	1.00	77.24	DS4
ATOM	11539	CB	LYS	30	158.684	115.931	43.918	1.00	101.97	DS4	ATOM	11592	NH1	ARG	36	166.278	112.197	40.237	1.00	77.24	DS4
ATOM	11540	CG	LYS	30	159.837	116.936	43.920	1.00	101.97	DS4	ATOM	11593	NH2	ARG	36	168.429	112.628	40.960	1.00	77.24	DS4
ATOM	11541	CD	LYS	30	160.910	116.552	44.948	1.00	101.97	DS4	ATOM	11594	C	ARG	36	163.682	118.107	36.730	1.00	68.31	DS4
ATOM	11542	CE	LYS	30	161.849	117.716	45.248	1.00	101.97	DS4	ATOM	11595	O	ARG	36	162.971	117.142	36.454	1.00	68.31	DS4
ATOM	11543	NZ	LYS	30	162.719	117.421	46.423	1.00	101.97	DS4	ATOM	11596	N	PRO	37	163.406	119.332	36.272	1.00	71.85	DS4
ATOM	11544	C	LYS	30	156.539	115.602	42.659	1.00	167.14	DS4	ATOM	11597	CD	PRO	37	163.713	120.647	36.853	1.00	64.30	DS4
ATOM	11545	O	LYS	30	156.346	114.432	42.974	1.00	167.14	DS4	ATOM	11598	CA	PRO	37	162.255	119.425	35.377	1.00	71.85	DS4
ATOM	11546	N	CYS	31	156.117	116.098	41.498	1.00	33.04	DS4	ATOM	11599	CB	PRO	37	161.969	120.918	35.340	1.00	64.30	DS4
ATOM	11547	CA	CYS	31	155.351	115.303	40.553	1.00	33.04	DS4	ATOM	11600	CG	PRO	37	162.400	121.367	36.693	1.00	64.30	DS4
ATOM	11548	CB	CYS	31	154.141	116.080	40.163	1.00	31.18	DS4	ATOM	11601	C	PRO	37	162.720	118.878	34.025	1.00	71.85	DS4
ATOM	11549	SG	CYS	31	153.492	115.533	38.648	1.00	31.18	DS4	ATOM	11602	O	PRO	37	162.085	119.082	32.988	1.00	71.85	DS4
ATOM	11550	C	CYS	31	156.184	115.078	39.321	1.00	33.04	DS4	ATOM	11603	N	TYR	38	163.855	118.187	34.061	1.00	76.71	DS4
ATOM	11551	O	CYS	31	156.590	113.988	38.991	1.00	33.04	DS4	ATOM	11604	CA	TYR	38	164.445	117.578	32.882	1.00	76.71	DS4
ATOM	11552	N	ALA	32	156.379	116.163	38.608	1.00	137.39	DS4	ATOM	11605	CB	TYR	38	165.955	117.829	32.856	1.00	65.51	DS4
ATOM	11553	CA	ALA	32	157.233	116.232	37.416	1.00	137.39	DS4	ATOM	11606	CG	TYR	38	166.666	117.595	34.167	1.00	65.51	DS4
ATOM	11554	CB	ALA	32	156.407	116.546	36.160	1.00	158.40	DS4	ATOM	11607	CD1	TYR	38	166.909	116.308	34.638	1.00	65.51	DS4
ATOM	11555	C	ALA	32	157.964	117.479	37.884	1.00	137.39	DS4	ATOM	11608	CE1	TYR	38	167.594	116.098	35.833	1.00	65.51	DS4
ATOM	11556	O	ALA	32	158.667	118.171	37.144	1.00	137.39	DS4	ATOM	11609	CD2	TYR	38	167.119	118.668	34.926	1.00	65.51	DS4
ATOM	11557	N	MET	33	157.724	117.711	39.171	1.00	135.12	DS4	ATOM	11610	CE2	TYR	38	167.797	118.470	36.115	1.00	65.51	DS4
ATOM	11558	CA	MET	33	158.183	118.835	39.939	1.00	135.12	DS4	ATOM	11611	CZ	TYR	38	168.034	117.188	36.566	1.00	65.51	DS4
ATOM	11559	CB	MET	33	157.819	118.625	41.404	1.00	200.66	DS4	ATOM	11612	OH	TYR	38	168.707	117.006	37.753	1.00	65.51	DS4
ATOM	11560	CG	MET	33	156.362	118.899	41.730	1.00	200.66	DS4	ATOM	11613	C	TYR	38	164.164	116.088	32.878	1.00	76.71	DS4
ATOM	11561	SD	MET	33	156.182	120.003	43.154	1.00	200.66	DS4	ATOM	11614	O	TYR	38	163.691	115.535	33.863	1.00	76.71	DS4
ATOM	11562	CE	MET	33	157.780	119.784	43.991	1.00	200.66	DS4	ATOM	11615	N	PRO	39	164.461	115.415	31.761	1.00	57.69	DS4
ATOM	11563	C	MET	33	159.584	119.354	39.893	1.00	135.12	DS4	ATOM	11616	CD	PRO	39	165.033	115.967	30.518	1.00	58.38	DS4
ATOM	11564	O	MET	33	160.477	118.835	39.220	1.00	135.12	DS4	ATOM	11617	CA	PRO	39	164.227	113.971	31.637	1.00	57.69	DS4
ATOM	11565	N	GLU	34	159.712	120.418	40.675	1.00	68.91	DS4	ATOM	11618	CB	PRO	39	164.432	113.726	30.152	1.00	58.38	DS4
ATOM	11566	CA	GLU	34	160.908	121.193	40.885	1.00	68.91	DS4	ATOM	11619	CG	PRO	39	165.508	114.731	29.812	1.00	58.38	DS4
ATOM	11567	CB	GLU	34	160.635	122.218	41.986	1.00	112.82	DS4	ATOM	11620	C	PRO	39	165.132	113.106	32.506	1.00	57.69	DS4
ATOM	11568	CG	GLU	34	159.167	122.220	42.495	1.00	112.82	DS4	ATOM	11621	O	PRO	39	166.207	113.527	32.925	1.00	57.69	DS4
ATOM	11569	CD	GLU	34	158.105	122.347	41.385	1.00	112.82	DS4	ATOM	11622	N	PRO	40	164.701	111.874	32.783	1.00	43.51	DS4
ATOM	11570	OE1	GLU	34	156.901	122.407	41.708	1.00	112.82	DS4	ATOM	11623	CD	PRO	40	163.445	111.262	32.319	1.00	42.46	DS4
ATOM	11571	OE2	GLU	34	158.468	122.382	40.192	1.00	112.82	DS4	ATOM	11624	CA	PRO	40	165.459	110.934	33.606	1.00	43.51	DS4
ATOM	11572	C	GLU	34	162.094	120.309	41.223	1.00	68.91	DS4	ATOM	11625	CB	PRO	40	164.443	109.838	33.884	1.00	42.46	DS4

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ATOM  11626  CG  PRO  40     163.671 109.797  32.635  1.00 42.46      DS4
ATOM  11627  C   PRO  40     166.690 110.401  32.897  1.00 43.51      DS4
ATOM  11628  O   PRO  40     166.819 110.540  31.678  1.00 43.51      DS4
ATOM  11629  N   GLY  41     167.596 109.799  33.666  1.00 48.97      DS4
ATOM  11630  CA  GLY  41     168.801 109.229  33.091  1.00 48.97      DS4
ATOM  11631  C   GLY  41     170.032 110.110  33.123  1.00 48.97      DS4
ATOM  11632  O   GLY  41     169.981 111.272  33.517  1.00 48.97      DS4
ATOM  11633  N   GLN  42     171.139 109.525  32.680  1.00 48.89      DS4
ATOM  11634  CA  GLN  42     172.456 110.150  32.619  1.00 48.89      DS4
ATOM  11635  CB  GLN  42     173.409 109.207  31.896  1.00 69.99      DS4
ATOM  11636  CG  GLN  42     174.848 109.329  32.278  1.00 69.99      DS4
ATOM  11637  CD  GLN  42     175.672 108.174  31.731  1.00 69.99      DS4
ATOM  11638  OE1 GLN  42     176.131 108.207  30.590  1.00 69.99      DS4
ATOM  11639  NE2 GLN  42     175.844 107.130  32.543  1.00 69.99      DS4
ATOM  11640  C   GLN  42     172.519 111.510  31.939  1.00 48.89      DS4
ATOM  11641  O   GLN  42     173.055 112.466  32.498  1.00 48.89      DS4
ATOM  11642  N   HIS  43     171.959 111.601  30.737  1.00 71.25      DS4
ATOM  11643  CA  HIS  43     172.004 112.834  29.947  1.00 71.25      DS4
ATOM  11644  CB  HIS  43     172.110 112.463  28.475  1.00 61.52      DS4
ATOM  11645  CG  HIS  43     172.929 111.240  28.231  1.00 61.52      DS4
ATOM  11646  CD2 HIS  43     172.565 109.969  27.948  1.00 61.52      DS4
ATOM  11647  ND1 HIS  43     174.303 111.240  28.316  1.00 61.52      DS4
ATOM  11648  CE1 HIS  43     174.752 110.017  28.094  1.00 61.52      DS4
ATOM  11649  NE2 HIS  43     173.717 109.228  27.868  1.00 61.52      DS4
ATOM  11650  C   HIS  43     170.851 113.812  30.115  1.00 71.25      DS4
ATOM  11651  O   HIS  43     170.721 114.760  29.338  1.00 71.25      DS4
ATOM  11652  N   GLY  44     170.015 113.589  31.117  1.00 70.11      DS4
ATOM  11653  CA  GLY  44     168.887 114.477  31.322  1.00 70.11      DS4
ATOM  11654  C   GLY  44     169.185 115.966  31.218  1.00 70.11      DS4
ATOM  11655  O   GLY  44     168.345 116.743  30.752  1.00 70.11      DS4
ATOM  11656  N   GLN  45     170.389 116.363  31.615  1.00 66.04      DS4
ATOM  11657  CA  GLN  45     170.757 117.771  31.615  1.00 66.04      DS4
ATOM  11658  CB  GLN  45     171.509 118.063  32.909  1.00 80.40      DS4
ATOM  11659  CG  GLN  45     170.682 117.704  34.134  1.00 80.40      DS4
ATOM  11660  CD  GLN  45     171.476 117.745  35.417  1.00 80.40      DS4
ATOM  11661  OE1 GLN  45     171.992 118.792  35.807  1.00 80.40      DS4
ATOM  11662  NE2 GLN  45     171.579 116.599  36.086  1.00 80.40      DS4
ATOM  11663  C   GLN  45     171.512 118.349  30.413  1.00 66.04      DS4
ATOM  11664  O   GLN  45     171.632 119.570  30.292  1.00 66.04      DS4
ATOM  11665  N   LYS  46     172.007 117.497  29.520  1.00 57.43      DS4
ATOM  11666  CA  LYS  46     172.722 117.983  28.341  1.00 57.43      DS4
ATOM  11667  CB  LYS  46     173.404 116.823  27.627  1.00 66.26      DS4
ATOM  11668  CG  LYS  46     174.376 116.067  28.506  1.00 66.26      DS4
ATOM  11669  CD  LYS  46     175.117 115.005  27.725  1.00 66.26      DS4
ATOM  11670  CE  LYS  46     176.063 114.236  28.614  1.00 66.26      DS4
ATOM  11671  NZ  LYS  46     176.760 113.179  27.837  1.00 66.26      DS4
ATOM  11672  C   LYS  46     171.792 118.714  27.366  1.00 57.43      DS4
ATOM  11673  O   LYS  46     170.571 118.622  27.465  1.00 57.43      DS4
ATOM  11674  N   ARG  47     172.381 119.442  26.424  1.00 75.75      DS4
ATOM  11675  CA  ARG  47     171.619 120.201  25.440  1.00 75.75      DS4
ATOM  11676  CB  ARG  47     172.587 120.877  24.463  1.00174.09      DS4
ATOM  11677  CG  ARG  47     173.408 121.963  25.155  1.00174.09      DS4
ATOM  11678  CD  ARG  47     174.746 122.253  24.494  1.00174.09      DS4
ATOM  11679  NE  ARG  47     175.555 123.126  25.346  1.00174.09      DS4
ATOM  11680  CZ  ARG  47     176.813 123.477  25.094  1.00174.09      DS4
ATOM  11681  NH1 ARG  47     177.426 123.032  24.005  1.00174.09      DS4
ATOM  11682  NH2 ARG  47     177.460 124.272  25.939  1.00174.09      DS4
ATOM  11683  C   ARG  47     170.584 119.351  24.709  1.00 75.75      DS4
ATOM  11684  O   ARG  47     170.837 118.201  24.340  1.00 75.75      DS4
ATOM  11685  N   ALA  48     169.413 119.944  24.510  1.00 95.77      DS4
ATOM  11686  CA  ALA  48     168.279 119.292  23.869  1.00 95.77      DS4
ATOM  11687  CB  ALA  48     167.138 120.282  23.745  1.00 79.83      DS4
ATOM  11688  C   ALA  48     168.492 118.608  22.525  1.00 95.77      DS4
ATOM  11689  O   ALA  48     168.614 117.386  22.462  1.00 95.77      DS4
ATOM  11690  N   ARG  49     168.514 119.408  21.460  1.00 71.91      DS4
ATOM  11691  CA  ARG  49     168.644 118.934  20.075  1.00 71.91      DS4
ATOM  11692  CB  ARG  49     169.223 117.520  19.981  1.00124.70      DS4
ATOM  11693  CG  ARG  49     170.724 117.449  19.917  1.00124.70      DS4
ATOM  11694  CD  ARG  49     171.145 116.288  19.028  1.00124.70      DS4
ATOM  11695  NE  ARG  49     172.586 116.054  19.062  1.00124.70      DS4
ATOM  11696  CZ  ARG  49     173.251 115.605  20.127  1.00124.70      DS4
ATOM  11697  NH1 ARG  49     172.604 115.334  21.257  1.00124.70      DS4
ATOM  11698  NH2 ARG  49     174.569 115.435  20.067  1.00124.70      DS4
ATOM  11699  C   ARG  49     167.253 118.924  19.449  1.00 71.91      DS4
ATOM  11700  O   ARG  49     166.364 118.193  19.903  1.00 71.91      DS4
ATOM  11701  N   ARG  50     167.073 119.745  18.417  1.00 64.02      DS4
ATOM  11702  CA  ARG  50     165.802 119.855  17.715  1.00 64.02      DS4
ATOM  11703  CB  ARG  50     166.017 120.497  16.347  1.00178.60      DS4
ATOM  11704  CG  ARG  50     164.758 120.643  15.514  1.00178.60      DS4
ATOM  11705  CD  ARG  50     165.119 121.104  14.116  1.00178.60      DS4
ATOM  11706  NE  ARG  50     165.878 122.351  14.140  1.00178.60      DS4
ATOM  11707  CZ  ARG  50     166.592 122.807  13.116  1.00178.60      DS4
ATOM  11708  NH1 ARG  50     166.645 122.112  11.987  1.00178.60      DS4
ATOM  11709  NH2 ARG  50     167.254 123.955  13.219  1.00178.60      DS4
ATOM  11710  C   ARG  50     165.204 118.470  17.539  1.00 64.02      DS4
ATOM  11711  O   ARG  50     165.853 117.565  17.015  1.00 64.02      DS4
ATOM  11712  N   PRO  51     163.959 118.277  17.987  1.00 51.77      DS4
ATOM  11713  CD  PRO  51     163.122 119.107  18.863  1.00 55.14      DS4
ATOM  11714  CA  PRO  51     163.373 116.949  17.825  1.00 51.77      DS4
ATOM  11715  CB  PRO  51     162.246 116.932  18.860  1.00 55.14      DS4
ATOM  11716  CG  PRO  51     162.582 118.074  19.796  1.00 55.14      DS4
ATOM  11717  C   PRO  51     162.835 116.832  16.418  1.00 51.77      DS4
ATOM  11718  O   PRO  51     162.469 117.842  15.815  1.00 51.77      DS4
ATOM  11719  N   SER  52     162.784 115.605  15.908  1.00 47.85      DS4
ATOM  11720  CA  SER  52     162.255 115.339  14.573  1.00 47.85      DS4
ATOM  11721  CB  SER  52     162.660 113.932  14.122  1.00 55.61      DS4
ATOM  11722  OG  SER  52     162.113 112.934  14.968  1.00 55.61      DS4
ATOM  11723  C   SER  52     160.723 115.441  14.589  1.00 47.85      DS4
ATOM  11724  O   SER  52     160.099 115.350  15.653  1.00 47.85      DS4
ATOM  11725  N   ASP  53     160.123 115.640  13.417  1.00 55.62      DS4
ATOM  11726  CA  ASP  53     158.668 115.715  13.324  1.00 55.62      DS4
ATOM  11727  CB  ASP  53     158.204 115.697  11.868  1.00 96.94      DS4
ATOM  11728  CG  ASP  53     158.676 116.899  11.086  1.00 96.94      DS4
ATOM  11729  OD1 ASP  53     159.893 117.188  11.117  1.00 96.94      DS4
ATOM  11730  OD2 ASP  53     157.829 117.545  10.428  1.00 96.94      DS4
ATOM  11731  C   ASP  53     158.119 114.476  14.025  1.00 55.62      DS4
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ATOM	11732	O	ASP	53	157.091	114.536	14.704	1.00	55.62	DS4
ATOM	11733	N	TYR	54	158.815	113.352	13.861	1.00	37.47	DS4
ATOM	11734	CA	TYR	54	158.388	112.109	14.484	1.00	37.47	DS4
ATOM	11735	CB	TYR	54	159.333	110.967	14.135	1.00	45.15	DS4
ATOM	11736	CG	TYR	54	158.830	109.649	14.654	1.00	45.15	DS4
ATOM	11737	CD1	TYR	54	157.641	109.115	14.177	1.00	45.15	DS4
ATOM	11738	CE1	TYR	54	157.115	107.945	14.718	1.00	45.15	DS4
ATOM	11739	CD2	TYR	54	159.494	108.977	15.684	1.00	45.15	DS4
ATOM	11740	CE2	TYR	54	158.982	107.804	16.237	1.00	45.15	DS4
ATOM	11741	CZ	TYR	54	157.787	107.291	15.749	1.00	45.15	DS4
ATOM	11742	OH	TYR	54	157.241	106.129	16.279	1.00	45.15	DS4
ATOM	11743	C	TYR	54	158.362	112.277	15.989	1.00	37.47	DS4
ATOM	11744	O	TYR	54	157.313	112.161	16.617	1.00	37.47	DS4
ATOM	11745	N	ALA	55	159.531	112.548	16.556	1.00	35.35	DS4
ATOM	11746	CA	ALA	55	159.674	112.747	17.994	1.00	35.35	DS4
ATOM	11747	CB	ALA	55	160.982	113.380	18.286	1.00	17.47	DS4
ATOM	11748	C	ALA	55	158.579	113.637	18.529	1.00	35.35	DS4
ATOM	11749	O	ALA	55	157.961	113.345	19.542	1.00	35.35	DS4
ATOM	11750	N	VAL	56	158.354	114.745	17.846	1.00	47.33	DS4
ATOM	11751	CA	VAL	56	157.330	115.661	18.279	1.00	47.33	DS4
ATOM	11752	CB	VAL	56	157.169	116.796	17.278	1.00	28.64	DS4
ATOM	11753	CG1	VAL	56	156.055	117.699	17.707	1.00	28.64	DS4
ATOM	11754	CG2	VAL	56	158.451	117.578	17.200	1.00	28.64	DS4
ATOM	11755	C	VAL	56	156.021	114.913	18.436	1.00	47.33	DS4
ATOM	11756	O	VAL	56	155.487	114.815	19.544	1.00	47.33	DS4
ATOM	11757	N	ARG	57	155.514	114.372	17.334	1.00	54.91	DS4
ATOM	11758	CA	ARG	57	154.260	113.629	17.369	1.00	54.91	DS4
ATOM	11759	CB	ARG	57	153.795	113.297	15.948	1.00	41.04	DS4
ATOM	11760	CG	ARG	57	153.400	114.525	15.174	1.00	41.04	DS4
ATOM	11761	CD	ARG	57	153.339	114.310	13.673	1.00	41.04	DS4
ATOM	11762	NE	ARG	57	153.068	115.582	13.004	1.00	41.04	DS4
ATOM	11763	CZ	ARG	57	153.866	116.651	13.066	1.00	41.04	DS4
ATOM	11764	NH1	ARG	57	154.997	116.597	13.762	1.00	41.04	DS4
ATOM	11765	NH2	ARG	57	153.520	117.791	12.466	1.00	41.04	DS4
ATOM	11766	C	ARG	57	154.328	112.359	18.215	1.00	54.91	DS4
ATOM	11767	O	ARG	57	153.298	111.848	18.638	1.00	54.91	DS4
ATOM	11768	N	LEU	58	155.523	111.837	18.467	1.00	54.02	DS4
ATOM	11769	CA	LEU	58	155.622	110.647	19.306	1.00	54.02	DS4
ATOM	11770	CB	LEU	58	157.059	110.117	19.364	1.00	40.17	DS4
ATOM	11771	CG	LEU	58	157.203	108.613	19.659	1.00	40.17	DS4
ATOM	11772	CD1	LEU	58	158.632	108.316	20.034	1.00	40.17	DS4
ATOM	11773	CD2	LEU	58	156.291	108.174	20.778	1.00	40.17	DS4
ATOM	11774	C	LEU	58	155.219	111.100	20.709	1.00	54.02	DS4
ATOM	11775	O	LEU	58	154.202	110.661	21.262	1.00	54.02	DS4
ATOM	11776	N	ARG	59	156.030	111.999	21.261	1.00	54.94	DS4
ATOM	11777	CA	ARG	59	155.812	112.542	22.592	1.00	54.94	DS4
ATOM	11778	CB	ARG	59	156.734	113.729	22.826	1.00	59.49	DS4
ATOM	11779	CG	ARG	59	158.147	113.523	22.364	1.00	59.49	DS4
ATOM	11780	CD	ARG	59	158.662	112.180	22.791	1.00	59.49	DS4
ATOM	11781	NE	ARG	59	158.643	112.037	24.234	1.00	59.49	DS4
ATOM	11782	CZ	ARG	59	158.805	110.880	24.861	1.00	59.49	DS4
ATOM	11783	NH1	ARG	59	158.993	109.754	24.171	1.00	59.49	DS4
ATOM	11784	NH2	ARG	59	158.782	110.855	26.185	1.00	59.49	DS4
ATOM	11785	C	ARG	59	154.374	112.981	22.878	1.00	54.94	DS4
ATOM	11786	O	ARG	59	153.815	112.639	23.925	1.00	54.94	DS4
ATOM	11787	N	GLU	60	153.776	113.747	21.968	1.00	56.68	DS4
ATOM	11788	CA	GLU	60	152.422	114.213	22.205	1.00	56.68	DS4
ATOM	11789	CB	GLU	60	151.894	114.995	21.011	1.00	79.69	DS4
ATOM	11790	CG	GLU	60	151.012	116.168	21.414	1.00	79.69	DS4
ATOM	11791	CD	GLU	60	151.719	117.124	22.364	1.00	79.69	DS4
ATOM	11792	OE1	GLU	60	152.881	117.489	22.088	1.00	79.69	DS4
ATOM	11793	OE2	GLU	60	151.115	117.520	23.382	1.00	79.69	DS4
ATOM	11794	C	GLU	60	151.535	113.015	22.492	1.00	56.68	DS4
ATOM	11795	O	GLU	60	150.887	112.963	23.538	1.00	56.68	DS4
ATOM	11796	N	LYS	61	151.505	112.047	21.578	1.00	43.22	DS4
ATOM	11797	CA	LYS	61	150.696	110.856	21.795	1.00	43.22	DS4
ATOM	11798	CB	LYS	61	150.977	109.779	20.763	1.00	55.14	DS4
ATOM	11799	CG	LYS	61	150.401	108.431	21.181	1.00	55.14	DS4
ATOM	11800	CD	LYS	61	151.015	107.286	20.400	1.00	55.14	DS4
ATOM	11801	CE	LYS	61	152.184	106.653	21.142	1.00	55.14	DS4
ATOM	11802	NZ	LYS	61	151.749	105.819	22.299	1.00	55.14	DS4
ATOM	11803	C	LYS	61	151.087	110.289	23.130	1.00	43.22	DS4
ATOM	11804	O	LYS	61	150.301	110.263	24.054	1.00	43.22	DS4
ATOM	11805	N	GLN	62	152.327	109.830	23.214	1.00	53.81	DS4
ATOM	11806	CA	GLN	62	152.855	109.239	24.431	1.00	53.81	DS4
ATOM	11807	CB	GLN	62	154.367	109.155	24.313	1.00	143.51	DS4
ATOM	11808	CG	GLN	62	155.045	108.693	25.558	1.00	143.51	DS4
ATOM	11809	CD	GLN	62	156.326	109.453	25.796	1.00	143.51	DS4
ATOM	11810	OE1	GLN	62	156.334	110.690	25.799	1.00	143.51	DS4
ATOM	11811	NE2	GLN	62	157.419	108.726	26.001	1.00	143.51	DS4
ATOM	11812	C	GLN	62	152.438	110.001	25.702	1.00	53.81	DS4
ATOM	11813	O	GLN	62	152.209	109.406	26.745	1.00	53.81	DS4
ATOM	11814	N	LYS	63	152.330	111.318	25.615	1.00	64.82	DS4
ATOM	11815	CA	LYS	63	151.908	112.119	26.764	1.00	64.82	DS4
ATOM	11816	CB	LYS	63	152.122	113.600	26.469	1.00	45.49	DS4
ATOM	11817	CG	LYS	63	151.893	114.509	27.643	1.00	45.49	DS4
ATOM	11818	CD	LYS	63	151.720	115.942	27.174	1.00	45.49	DS4
ATOM	11819	CE	LYS	63	152.923	116.434	26.382	1.00	45.49	DS4
ATOM	11820	NZ	LYS	63	152.581	117.694	25.646	1.00	45.49	DS4
ATOM	11821	C	LYS	63	150.417	111.860	27.036	1.00	64.82	DS4
ATOM	11822	O	LYS	63	150.052	111.277	28.057	1.00	64.82	DS4
ATOM	11823	N	LEU	64	149.564	112.294	26.110	1.00	47.97	DS4
ATOM	11824	CA	LEU	64	148.117	112.105	26.227	1.00	47.97	DS4
ATOM	11825	CB	LEU	64	147.454	112.196	24.855	1.00	40.99	DS4
ATOM	11826	CG	LEU	64	145.995	112.637	24.697	1.00	40.99	DS4
ATOM	11827	CD1	LEU	64	145.505	112.105	23.366	1.00	40.99	DS4
ATOM	11828	CD2	LEU	64	145.111	112.108	25.814	1.00	40.99	DS4
ATOM	11829	C	LEU	64	147.833	110.729	26.792	1.00	47.97	DS4
ATOM	11830	O	LEU	64	147.080	110.583	27.750	1.00	47.97	DS4
ATOM	11831	N	ARG	65	148.450	109.719	26.194	1.00	61.07	DS4
ATOM	11832	CA	ARG	65	148.253	108.342	26.621	1.00	61.07	DS4
ATOM	11833	CB	ARG	65	148.956	107.380	25.659	1.00	61.15	DS4
ATOM	11834	CG	ARG	65	149.236	106.019	26.258	1.00	61.15	DS4
ATOM	11835	CD	ARG	65	149.236	104.939	25.207	1.00	61.15	DS4
ATOM	11836	NE	ARG	65	150.223	103.903	25.495	1.00	61.15	DS4
ATOM	11837	CZ	ARG	65	151.534	104.115	25.490	1.00	61.15	DS4

ATOM	11838	NH1	ARG	65	152.004	105.322	25.219	1.00	61.15	DS4	ATOM	11891	N	GLU	72	148.940	100.646	24.976	1.00	40.44	DS4
ATOM	11839	NH2	ARG	65	152.378	103.122	25.728	1.00	61.15	DS4	ATOM	11892	CA	GLU	72	148.902	101.117	23.612	1.00	40.44	DS4
ATOM	11840	C	ARG	65	148.677	108.025	28.046	1.00	61.07	DS4	ATOM	11893	CB	GLU	72	150.247	100.943	22.926	1.00	64.54	DS4
ATOM	11841	O	ARG	65	147.958	107.338	28.769	1.00	61.07	DS4	ATOM	11894	CG	GLU	72	150.248	101.459	21.491	1.00	64.54	DS4
ATOM	11842	N	ARG	66	149.839	108.505	28.460	1.00	59.42	DS4	ATOM	11895	CD	GLU	72	150.066	102.968	21.381	1.00	64.54	DS4
ATOM	11843	CA	ARG	66	150.278	108.209	29.813	1.00	59.42	DS4	ATOM	11896	OE1	GLU	72	150.005	103.481	20.246	1.00	64.54	DS4
ATOM	11844	CB	ARG	66	151.739	108.610	29.985	1.00	54.95	DS4	ATOM	11897	OE2	GLU	72	149.992	103.647	22.423	1.00	64.54	DS4
ATOM	11845	CG	ARG	66	152.678	107.669	29.252	1.00	54.95	DS4	ATOM	11898	C	GLU	72	147.822	100.288	22.908	1.00	40.44	DS4
ATOM	11846	CD	ARG	66	154.084	108.216	29.191	1.00	54.95	DS4	ATOM	11899	O	GLU	72	147.133	100.802	22.032	1.00	40.44	DS4
ATOM	11847	NE	ARG	66	155.058	107.217	28.761	1.00	54.95	DS4	ATOM	11900	N	ARG	73	147.657	99.020	23.303	1.00	58.75	DS4
ATOM	11848	CZ	ARG	66	156.348	107.481	28.556	1.00	54.95	DS4	ATOM	11901	CA	ARG	73	146.629	98.157	22.692	1.00	58.75	DS4
ATOM	11849	NH1	ARG	66	156.816	108.715	28.737	1.00	54.95	DS4	ATOM	11902	CB	ARG	73	146.355	96.850	23.498	1.00	116.70	DS4
ATOM	11850	NH2	ARG	66	157.178	106.512	28.185	1.00	54.95	DS4	ATOM	11903	CG	ARG	73	147.562	96.037	24.042	1.00	116.70	DS4
ATOM	11851	C	ARG	66	149.386	108.883	30.848	1.00	59.42	DS4	ATOM	11904	CD	ARG	73	147.298	94.483	24.229	1.00	116.70	DS4
ATOM	11852	O	ARG	66	149.287	108.431	31.982	1.00	59.42	DS4	ATOM	11905	NE	ARG	73	146.490	94.060	25.389	1.00	116.70	DS4
ATOM	11853	N	ILE	67	148.714	109.951	30.444	1.00	52.44	DS4	ATOM	11906	CZ	ARG	73	146.362	92.792	25.805	1.00	116.70	DS4
ATOM	11854	CA	ILE	67	147.826	110.662	31.346	1.00	52.44	DS4	ATOM	11907	NH1	ARG	73	146.984	91.808	25.169	1.00	116.70	DS4
ATOM	11855	CB	ILE	67	147.192	111.875	30.649	1.00	48.41	DS4	ATOM	11908	NH2	ARG	73	145.609	92.495	26.859	1.00	116.70	DS4
ATOM	11856	CG2	ILE	67	145.867	112.242	31.298	1.00	48.41	DS4	ATOM	11909	C	ARG	73	145.334	98.967	22.694	1.00	58.75	DS4
ATOM	11857	CG1	ILE	67	148.175	113.045	30.692	1.00	48.41	DS4	ATOM	11910	O	ARG	73	144.775	99.294	21.651	1.00	58.75	DS4
ATOM	11858	CD1	ILE	67	147.598	114.334	30.141	1.00	48.41	DS4	ATOM	11911	N	GLN	74	144.879	99.309	23.892	1.00	51.48	DS4
ATOM	11859	C	ILE	67	146.727	109.754	31.869	1.00	52.44	DS4	ATOM	11912	CA	GLN	74	143.639	100.038	24.046	1.00	51.48	DS4
ATOM	11860	O	ILE	67	146.428	109.760	33.061	1.00	52.44	DS4	ATOM	11913	CB	GLN	74	143.263	100.113	25.521	1.00	55.99	DS4
ATOM	11861	N	TYR	68	146.118	108.980	30.979	1.00	53.25	DS4	ATOM	11914	CG	GLN	74	143.271	98.776	26.243	1.00	55.99	DS4
ATOM	11862	CA	TYR	68	145.056	108.067	31.383	1.00	53.25	DS4	ATOM	11915	CD	GLN	74	142.404	98.802	27.484	1.00	55.99	DS4
ATOM	11863	CB	TYR	68	143.966	108.021	30.313	1.00	52.16	DS4	ATOM	11916	OE1	GLN	74	141.247	98.381	27.459	1.00	55.99	DS4
ATOM	11864	CG	TYR	68	143.349	109.366	30.014	1.00	52.16	DS4	ATOM	11917	NE2	GLN	74	142.950	99.323	28.575	1.00	55.99	DS4
ATOM	11865	CD1	TYR	68	143.995	110.283	29.192	1.00	52.16	DS4	ATOM	11918	C	GLN	74	143.672	101.432	23.450	1.00	51.48	DS4
ATOM	11866	CE1	TYR	68	143.446	111.534	28.945	1.00	52.16	DS4	ATOM	11919	O	GLN	74	142.835	101.765	22.607	1.00	51.48	DS4
ATOM	11867	CD2	TYR	68	142.133	109.736	30.582	1.00	52.16	DS4	ATOM	11920	N	PHE	75	144.629	102.248	23.882	1.00	46.91	DS4
ATOM	11868	CE2	TYR	68	141.581	110.982	30.343	1.00	52.16	DS4	ATOM	11921	CA	PHE	75	144.736	103.619	23.375	1.00	46.91	DS4
ATOM	11869	CZ	TYR	68	142.245	111.875	29.527	1.00	52.16	DS4	ATOM	11922	CB	PHE	75	146.111	104.208	23.681	1.00	52.63	DS4
ATOM	11870	OH	TYR	68	141.722	113.123	29.324	1.00	52.16	DS4	ATOM	11923	CG	PHE	75	146.187	105.687	23.468	1.00	52.63	DS4
ATOM	11871	C	TYR	68	145.601	106.658	31.633	1.00	53.25	DS4	ATOM	11924	CD1	PHE	75	145.747	106.563	24.451	1.00	52.63	DS4
ATOM	11872	O	TYR	68	144.845	105.678	31.663	1.00	53.25	DS4	ATOM	11925	CD2	PHE	75	146.693	106.205	22.285	1.00	52.63	DS4
ATOM	11873	N	GLY	69	146.917	106.563	31.801	1.00	47.57	DS4	ATOM	11926	CE1	PHE	75	145.815	107.941	24.262	1.00	52.63	DS4
ATOM	11874	CA	GLY	69	147.556	105.282	32.053	1.00	47.57	DS4	ATOM	11927	CE2	PHE	75	146.766	107.576	22.082	1.00	52.63	DS4
ATOM	11875	C	GLY	69	147.030	104.084	31.283	1.00	47.57	DS4	ATOM	11928	CZ	PHE	75	146.325	108.449	23.078	1.00	52.63	DS4
ATOM	11876	O	GLY	69	146.946	102.989	31.829	1.00	47.57	DS4	ATOM	11929	C	PHE	75	144.506	103.679	21.870	1.00	46.91	DS4
ATOM	11877	N	ILE	70	146.679	104.281	30.018	1.00	51.02	DS4	ATOM	11930	O	PHE	75	143.743	104.505	21.371	1.00	46.91	DS4
ATOM	11878	CA	ILE	70	146.180	103.192	29.188	1.00	51.02	DS4	ATOM	11931	N	ARG	76	145.170	102.793	21.145	1.00	47.93	DS4
ATOM	11879	CB	ILE	70	145.104	103.684	28.183	1.00	65.58	DS4	ATOM	11932	CA	ARG	76	145.023	102.763	19.703	1.00	47.93	DS4
ATOM	11880	CG2	ILE	70	144.761	102.585	27.190	1.00	65.58	DS4	ATOM	11933	CB	ARG	76	146.008	101.759	19.099	1.00	86.17	DS4
ATOM	11881	CG1	ILE	70	143.826	104.064	28.915	1.00	65.58	DS4	ATOM	11934	CG	ARG	76	145.985	101.710	17.590	1.00	86.17	DS4
ATOM	11882	CD1	ILE	70	142.689	104.341	27.966	1.00	65.58	DS4	ATOM	11935	CD	ARG	76	146.242	103.086	17.035	1.00	86.17	DS4
ATOM	11883	C	ILE	70	147.311	102.541	28.389	1.00	51.02	DS4	ATOM	11936	NE	ARG	76	146.169	103.129	15.579	1.00	86.17	DS4
ATOM	11884	O	ILE	70	148.323	103.176	28.082	1.00	51.02	DS4	ATOM	11937	CZ	ARG	76	146.981	102.462	14.768	1.00	86.17	DS4
ATOM	11885	N	SER	71	147.133	101.269	28.055	1.00	50.76	DS4	ATOM	11938	NH1	ARG	76	147.935	101.685	15.271	1.00	86.17	DS4
ATOM	11886	CA	SER	71	148.121	100.549	27.263	1.00	50.76	DS4	ATOM	11939	NH2	ARG	76	146.847	102.593	13.456	1.00	86.17	DS4
ATOM	11887	CB	SER	71	147.739	99.079	27.154	1.00	50.74	DS4	ATOM	11940	C	ARG	76	143.588	102.412	19.293	1.00	47.93	DS4
ATOM	11888	OG	SER	71	146.549	98.952	26.388	1.00	50.74	DS4	ATOM	11941	O	ARG	76	142.971	103.120	18.496	1.00	47.93	DS4
ATOM	11889	C	SER	71	148.079	101.140	25.861	1.00	50.76	DS4	ATOM	11942	N	ASN	77	143.056	101.325	19.845	1.00	43.58	DS4
ATOM	11890	O	SER	71	147.277	102.033	25.581	1.00	50.76	DS4	ATOM	11943	CA	ASN	77	141.712	100.899	19.493	1.00	43.58	DS4

ATOM	11944	CB	ASN	77	141.273	99.721	20.352	1.00	60.03	DS4
ATOM	11945	CG	ASN	77	142.060	98.476	20.061	1.00	60.03	DS4
ATOM	11946	OD1	ASN	77	142.448	98.230	18.917	1.00	60.03	DS4
ATOM	11947	ND2	ASN	77	142.291	97.668	21.088	1.00	60.03	DS4
ATOM	11948	C	ASN	77	140.740	102.036	19.678	1.00	43.58	DS4
ATOM	11949	O	ASN	77	139.927	102.337	18.791	1.00	43.58	DS4
ATOM	11950	N	LEU	78	140.814	102.655	20.849	1.00	51.76	DS4
ATOM	11951	CA	LEU	78	139.949	103.766	21.146	1.00	51.76	DS4
ATOM	11952	CB	LEU	78	140.324	104.379	22.478	1.00	27.71	DS4
ATOM	11953	CG	LEU	78	139.308	104.236	23.603	1.00	27.71	DS4
ATOM	11954	CD1	LEU	78	139.605	105.323	24.643	1.00	27.71	DS4
ATOM	11955	CD2	LEU	78	137.888	104.385	23.070	1.00	27.71	DS4
ATOM	11956	C	LEU	78	140.127	104.790	20.047	1.00	51.76	DS4
ATOM	11957	O	LEU	78	139.149	105.308	19.512	1.00	51.76	DS4
ATOM	11958	N	PHE	79	141.378	105.071	19.695	1.00	41.85	DS4
ATOM	11959	CA	PHE	79	141.626	106.046	18.646	1.00	41.85	DS4
ATOM	11960	CB	PHE	79	143.112	106.202	18.343	1.00	42.40	DS4
ATOM	11961	CG	PHE	79	143.369	107.153	17.223	1.00	42.40	DS4
ATOM	11962	CD1	PHE	79	143.190	108.516	17.407	1.00	42.40	DS4
ATOM	11963	CD2	PHE	79	143.668	106.680	15.950	1.00	42.40	DS4
ATOM	11964	CE1	PHE	79	143.297	109.397	16.336	1.00	42.40	DS4
ATOM	11965	CE2	PHE	79	143.777	107.547	14.870	1.00	42.40	DS4
ATOM	11966	CZ	PHE	79	143.590	108.908	15.059	1.00	42.40	DS4
ATOM	11967	C	PHE	79	140.902	105.722	17.340	1.00	41.85	DS4
ATOM	11968	O	PHE	79	140.206	106.562	16.790	1.00	41.85	DS4
ATOM	11969	N	GLU	80	141.074	104.511	16.833	1.00	40.78	DS4
ATOM	11970	CA	GLU	80	140.405	104.141	15.598	1.00	40.78	DS4
ATOM	11971	CB	GLU	80	140.821	102.732	15.184	1.00	90.02	DS4
ATOM	11972	CG	GLU	80	142.338	102.563	15.085	1.00	90.02	DS4
ATOM	11973	CD	GLU	80	142.960	103.338	13.922	1.00	90.02	DS4
ATOM	11974	OE1	GLU	80	144.208	103.439	13.870	1.00	90.02	DS4
ATOM	11975	OE2	GLU	80	142.206	103.837	13.054	1.00	90.02	DS4
ATOM	11976	C	GLU	80	138.896	104.233	15.808	1.00	40.78	DS4
ATOM	11977	O	GLU	80	138.164	104.592	14.893	1.00	40.78	DS4
ATOM	11978	N	GLU	81	138.444	103.923	17.025	1.00	51.59	DS4
ATOM	11979	CA	GLU	81	137.018	103.983	17.381	1.00	51.59	DS4
ATOM	11980	CB	GLU	81	136.833	103.718	18.885	1.00	77.41	DS4
ATOM	11981	CG	GLU	81	135.773	102.680	19.267	1.00	77.41	DS4
ATOM	11982	CD	GLU	81	134.417	103.278	19.607	1.00	77.41	DS4
ATOM	11983	OE1	GLU	81	133.800	103.927	18.729	1.00	77.41	DS4
ATOM	11984	OE2	GLU	81	133.962	103.091	20.756	1.00	77.41	DS4
ATOM	11985	C	GLU	81	136.571	105.401	17.076	1.00	51.59	DS4
ATOM	11986	O	GLU	81	135.647	105.638	16.303	1.00	51.59	DS4
ATOM	11987	N	ALA	82	137.258	106.343	17.703	1.00	51.36	DS4
ATOM	11988	CA	ALA	82	136.961	107.743	17.528	1.00	51.36	DS4
ATOM	11989	CB	ALA	82	137.915	108.576	18.358	1.00	45.11	DS4
ATOM	11990	C	ALA	82	137.099	108.096	16.071	1.00	51.36	DS4
ATOM	11991	O	ALA	82	136.208	108.689	15.486	1.00	51.36	DS4
ATOM	11992	N	SER	83	138.220	107.705	15.483	1.00	55.03	DS4
ATOM	11993	CA	SER	83	138.510	108.013	14.088	1.00	55.03	DS4
ATOM	11994	CB	SER	83	139.811	107.334	13.650	1.00	74.80	DS4
ATOM	11995	OG	SER	83	140.889	107.635	14.523	1.00	74.80	DS4
ATOM	11996	C	SER	83	137.415	107.590	13.137	1.00	55.03	DS4
ATOM	11997	O	SER	83	137.275	108.154	12.059	1.00	55.03	DS4
ATOM	11998	N	LYS	84	136.621	106.610	13.545	1.00	36.76	DS4
ATOM	11999	CA	LYS	84	135.590	106.086	12.669	1.00	36.76	DS4
ATOM	12000	CB	LYS	84	135.447	104.586	12.915	1.00	83.01	DS4
ATOM	12001	CG	LYS	84	134.638	103.855	11.878	1.00	83.01	DS4
ATOM	12002	CD	LYS	84	134.493	102.392	12.257	1.00	83.01	DS4
ATOM	12003	CE	LYS	84	133.418	101.702	11.416	1.00	83.01	DS4
ATOM	12004	NZ	LYS	84	133.065	100.345	11.942	1.00	83.01	DS4
ATOM	12005	C	LYS	84	134.229	106.755	12.729	1.00	36.76	DS4
ATOM	12006	O	LYS	84	133.537	106.810	11.718	1.00	36.76	DS4
ATOM	12007	N	LYS	85	133.832	107.273	13.885	1.00	54.28	DS4
ATOM	12008	CA	LYS	85	132.519	107.905	13.990	1.00	54.28	DS4
ATOM	12009	CB	LYS	85	132.034	107.858	15.433	1.00	64.92	DS4
ATOM	12010	CG	LYS	85	133.085	108.232	16.451	1.00	64.92	DS4
ATOM	12011	CD	LYS	85	132.493	108.199	17.853	1.00	64.92	DS4
ATOM	12012	CE	LYS	85	131.903	106.842	18.183	1.00	64.92	DS4
ATOM	12013	NZ	LYS	85	131.038	106.940	19.378	1.00	64.92	DS4
ATOM	12014	C	LYS	85	132.434	109.341	13.470	1.00	54.28	DS4
ATOM	12015	O	LYS	85	133.453	109.962	13.151	1.00	54.28	DS4
ATOM	12016	N	LYS	86	131.206	109.856	13.383	1.00	56.75	DS4
ATOM	12017	CA	LYS	86	130.950	111.216	12.910	1.00	56.75	DS4
ATOM	12018	CB	LYS	86	129.439	111.501	12.877	1.00	66.06	DS4
ATOM	12019	CG	LYS	86	128.596	110.498	12.083	1.00	66.06	DS4
ATOM	12020	CD	LYS	86	128.697	110.716	10.578	1.00	66.06	DS4
ATOM	12021	CE	LYS	86	128.238	109.482	9.793	1.00	66.06	DS4
ATOM	12022	NZ	LYS	86	128.201	109.706	8.308	1.00	66.06	DS4
ATOM	12023	C	LYS	86	131.608	112.173	13.885	1.00	56.75	DS4
ATOM	12024	O	LYS	86	131.858	111.816	15.032	1.00	56.75	DS4
ATOM	12025	N	GLY	87	131.901	113.387	13.439	1.00	76.33	DS4
ATOM	12026	CA	GLY	87	132.495	114.351	14.345	1.00	76.33	DS4
ATOM	12027	C	GLY	87	134.001	114.356	14.450	1.00	76.33	DS4
ATOM	12028	O	GLY	87	134.655	113.317	14.337	1.00	76.33	DS4
ATOM	12029	N	VAL	88	134.537	115.550	14.684	1.00	43.61	DS4
ATOM	12030	CA	VAL	88	135.970	115.759	14.806	1.00	43.61	DS4
ATOM	12031	CB	VAL	88	136.280	117.152	15.368	1.00	42.44	DS4
ATOM	12032	CG1	VAL	88	137.789	117.311	15.568	1.00	42.44	DS4
ATOM	12033	CG2	VAL	88	135.768	118.206	14.412	1.00	42.44	DS4
ATOM	12034	C	VAL	88	136.662	114.714	15.668	1.00	43.61	DS4
ATOM	12035	O	VAL	88	136.438	114.607	16.869	1.00	43.61	DS4
ATOM	12036	N	THR	89	137.530	113.952	15.026	1.00	47.47	DS4
ATOM	12037	CA	THR	89	138.249	112.903	15.705	1.00	47.47	DS4
ATOM	12038	CB	THR	89	139.275	112.289	14.762	1.00	50.88	DS4
ATOM	12039	OG1	THR	89	138.573	111.592	13.731	1.00	50.88	DS4
ATOM	12040	CG2	THR	89	140.179	111.324	15.499	1.00	50.88	DS4
ATOM	12041	C	THR	89	138.921	113.359	16.983	1.00	47.47	DS4
ATOM	12042	O	THR	89	138.719	112.766	18.031	1.00	47.47	DS4
ATOM	12043	N	GLY	90	139.713	114.414	16.906	1.00	51.19	DS4
ATOM	12044	CA	GLY	90	140.389	114.885	18.098	1.00	51.19	DS4
ATOM	12045	C	GLY	90	139.513	114.970	19.332	1.00	51.19	DS4
ATOM	12046	O	GLY	90	139.861	114.424	20.374	1.00	51.19	DS4
ATOM	12047	N	SER	91	138.380	115.655	19.227	1.00	54.99	DS4
ATOM	12048	CA	SER	91	137.496	115.794	20.368	1.00	54.99	DS4
ATOM	12049	CB	SER	91	136.352	116.746	20.044	1.00	128.05	DS4

ATOM	12050	OG	SER	91	135.447	116.137	19.145	1.00128.05		DS4
ATOM	12051	C	SER	91	136.933	114.439	20.758	1.00 54.99		DS4
ATOM	12052	O	SER	91	137.045	114.029	21.903	1.00 54.99		DS4
ATOM	12053	N	VAL	92	136.332	113.747	19.798	1.00 46.90		DS4
ATOM	12054	CA	VAL	92	135.748	112.433	20.039	1.00 46.90		DS4
ATOM	12055	CB	VAL	92	135.407	111.713	18.729	1.00 28.34		DS4
ATOM	12056	CG1	VAL	92	134.957	110.310	19.013	1.00 28.34		DS4
ATOM	12057	CG2	VAL	92	134.312	112.450	18.016	1.00 28.34		DS4
ATOM	12058	C	VAL	92	136.672	111.527	20.823	1.00 46.90		DS4
ATOM	12059	O	VAL	92	136.244	110.850	21.766	1.00 46.90		DS4
ATOM	12060	N	PHE	93	137.934	111.503	20.417	1.00 47.48		DS4
ATOM	12061	CA	PHE	93	138.923	110.681	21.079	1.00 47.48		DS4
ATOM	12062	CB	PHE	93	140.280	110.871	20.424	1.00 43.04		DS4
ATOM	12063	CG	PHE	93	141.320	109.924	20.921	1.00 43.04		DS4
ATOM	12064	CD1	PHE	93	142.630	110.348	21.100	1.00 43.04		DS4
ATOM	12065	CD2	PHE	93	140.991	108.598	21.203	1.00 43.04		DS4
ATOM	12066	CE1	PHE	93	143.604	109.469	21.558	1.00 43.04		DS4
ATOM	12067	CE2	PHE	93	141.949	107.710	21.659	1.00 43.04		DS4
ATOM	12068	CZ	PHE	93	143.267	108.146	21.839	1.00 43.04		DS4
ATOM	12069	C	PHE	93	138.998	111.084	22.546	1.00 47.48		DS4
ATOM	12070	O	PHE	93	138.969	110.237	23.429	1.00 47.48		DS4
ATOM	12071	N	LEU	94	139.104	112.385	22.795	1.00 50.12		DS4
ATOM	12072	CA	LEU	94	139.152	112.897	24.155	1.00 50.12		DS4
ATOM	12073	CB	LEU	94	139.175	114.422	24.142	1.00 66.89		DS4
ATOM	12074	CG	LEU	94	140.526	115.131	24.127	1.00 66.89		DS4
ATOM	12075	CD1	LEU	94	140.705	115.821	25.456	1.00 66.89		DS4
ATOM	12076	CD2	LEU	94	141.658	114.158	23.878	1.00 66.89		DS4
ATOM	12077	C	LEU	94	137.905	112.405	24.882	1.00 50.12		DS4
ATOM	12078	O	LEU	94	137.981	111.825	25.964	1.00 50.12		DS4
ATOM	12079	N	GLY	95	136.751	112.629	24.272	1.00 55.02		DS4
ATOM	12080	CA	GLY	95	135.506	112.197	24.874	1.00 55.02		DS4
ATOM	12081	C	GLY	95	135.507	110.741	25.302	1.00 55.02		DS4
ATOM	12082	O	GLY	95	135.114	110.422	26.424	1.00 55.02		DS4
ATOM	12083	N	LEU	96	135.953	109.851	24.420	1.00 45.26		DS4
ATOM	12084	CA	LEU	96	135.980	108.427	24.737	1.00 45.26		DS4
ATOM	12085	CB	LEU	96	136.320	107.621	23.483	1.00 39.73		DS4
ATOM	12086	CG	LEU	96	135.103	107.134	22.682	1.00 39.73		DS4
ATOM	12087	CD1	LEU	96	133.972	108.155	22.694	1.00 39.73		DS4
ATOM	12088	CD2	LEU	96	135.551	106.849	21.273	1.00 39.73		DS4
ATOM	12089	C	LEU	96	136.926	108.069	25.878	1.00 45.26		DS4
ATOM	12090	O	LEU	96	136.586	107.255	26.740	1.00 45.26		DS4
ATOM	12091	N	LEU	97	138.111	108.664	25.889	1.00 49.34		DS4
ATOM	12092	CA	LEU	97	139.055	108.395	26.961	1.00 49.34		DS4
ATOM	12093	CB	LEU	97	140.379	109.132	26.730	1.00 43.33		DS4
ATOM	12094	CG	LEU	97	141.356	108.631	25.672	1.00 43.33		DS4
ATOM	12095	CD1	LEU	97	142.302	109.757	25.282	1.00 43.33		DS4
ATOM	12096	CD2	LEU	97	142.121	107.450	26.211	1.00 43.33		DS4
ATOM	12097	C	LEU	97	138.430	108.896	28.254	1.00 49.34		DS4
ATOM	12098	O	LEU	97	138.505	108.238	29.291	1.00 49.34		DS4
ATOM	12099	N	GLU	98	137.802	110.064	28.180	1.00 55.60		DS4
ATOM	12100	CA	GLU	98	137.173	110.674	29.343	1.00 55.60		DS4
ATOM	12101	CB	GLU	98	136.789	112.112	29.009	1.00 48.23		DS4
ATOM	12102	CG	GLU	98	136.942	113.062	30.160	1.00 48.23		DS4
ATOM	12103	CD	GLU	98	138.385	113.195	30.619	1.00 48.23		DS4
ATOM	12104	OE1	GLU	98	139.246	113.574	29.804	1.00 48.23		DS4
ATOM	12105	OE2	GLU	98	138.669	112.926	31.803	1.00 48.23		DS4
ATOM	12106	C	GLU	98	135.941	109.894	29.815	1.00 55.60		DS4
ATOM	12107	O	GLU	98	135.438	110.123	30.913	1.00 55.60		DS4
ATOM	12108	N	SER	99	135.468	108.975	28.980	1.00 42.76		DS4
ATOM	12109	CA	SER	99	134.311	108.165	29.301	1.00 42.76		DS4
ATOM	12110	CB	SER	99	133.504	107.867	28.050	1.00 49.03		DS4
ATOM	12111	OG	SER	99	132.761	108.989	27.645	1.00 49.03		DS4
ATOM	12112	C	SER	99	134.646	106.845	29.971	1.00 42.76		DS4
ATOM	12113	O	SER	99	133.762	105.999	30.159	1.00 42.76		DS4
ATOM	12114	N	ARG	100	135.911	106.639	30.316	1.00 48.77		DS4
ATOM	12115	CA	ARG	100	136.287	105.400	30.987	1.00 48.77		DS4
ATOM	12116	CB	ARG	100	137.800	105.178	30.910	1.00 60.20		DS4
ATOM	12117	CG	ARG	100	138.305	104.738	29.550	1.00 60.20		DS4
ATOM	12118	CD	ARG	100	139.814	104.803	29.505	1.00 60.20		DS4
ATOM	12119	NE	ARG	100	140.458	103.911	30.470	1.00 60.20		DS4
ATOM	12120	CZ	ARG	100	140.763	102.639	30.225	1.00 60.20		DS4
ATOM	12121	NH1	ARG	100	140.483	102.101	29.042	1.00 60.20		DS4
ATOM	12122	NH2	ARG	100	141.352	101.905	31.159	1.00 60.20		DS4
ATOM	12123	C	ARG	100	135.866	105.505	32.444	1.00 48.77		DS4
ATOM	12124	O	ARG	100	136.135	106.523	33.088	1.00 48.77		DS4
ATOM	12125	N	LEU	101	135.193	104.474	32.956	1.00 54.79		DS4
ATOM	12126	CA	LEU	101	134.764	104.459	34.362	1.00 54.79		DS4
ATOM	12127	CB	LEU	101	134.308	103.059	34.765	1.00 49.47		DS4
ATOM	12128	CG	LEU	101	134.026	102.878	36.250	1.00 49.47		DS4
ATOM	12129	CD1	LEU	101	132.911	103.822	36.669	1.00 49.47		DS4
ATOM	12130	CD2	LEU	101	133.638	101.437	36.507	1.00 49.47		DS4
ATOM	12131	C	LEU	101	135.985	104.850	35.178	1.00 54.79		DS4
ATOM	12132	O	LEU	101	135.914	105.629	36.119	1.00 54.79		DS4
ATOM	12133	N	ASP	102	137.102	104.267	34.778	1.00 48.35		DS4
ATOM	12134	CA	ASP	102	138.421	104.520	35.338	1.00 48.35		DS4
ATOM	12135	CB	ASP	102	139.440	104.219	34.225	1.00 84.26		DS4
ATOM	12136	CG	ASP	102	140.761	103.708	34.740	1.00 84.26		DS4
ATOM	12137	OD1	ASP	102	141.581	103.288	33.895	1.00 84.26		DS4
ATOM	12138	OD2	ASP	102	140.983	103.724	35.969	1.00 84.26		DS4
ATOM	12139	C	ASP	102	138.494	106.013	35.707	1.00 48.35		DS4
ATOM	12140	O	ASP	102	138.471	106.403	36.878	1.00 48.35		DS4
ATOM	12141	N	ASN	103	138.574	106.821	34.654	1.00 56.39		DS4
ATOM	12142	CA	ASN	103	138.671	108.269	34.706	1.00 56.39		DS4
ATOM	12143	CB	ASN	103	138.624	108.795	33.280	1.00 49.39		DS4
ATOM	12144	CG	ASN	103	138.885	110.280	33.187	1.00 49.39		DS4
ATOM	12145	OD1	ASN	103	140.010	110.755	33.425	1.00 49.39		DS4
ATOM	12146	ND2	ASN	103	137.841	111.029	32.824	1.00 49.39		DS4
ATOM	12147	C	ASN	103	137.597	108.963	35.530	1.00 56.39		DS4
ATOM	12148	O	ASN	103	137.914	109.754	36.418	1.00 56.39		DS4
ATOM	12149	N	VAL	104	136.329	108.686	35.226	1.00 41.76		DS4
ATOM	12150	CA	VAL	104	135.224	109.313	35.945	1.00 41.76		DS4
ATOM	12151	CB	VAL	104	133.871	108.755	35.508	1.00 33.15		DS4
ATOM	12152	CG1	VAL	104	132.767	109.513	36.226	1.00 33.15		DS4
ATOM	12153	CG2	VAL	104	133.700	108.894	34.008	1.00 33.15		DS4
ATOM	12154	C	VAL	104	135.334	109.146	37.455	1.00 41.76		DS4
ATOM	12155	O	VAL	104	135.022	110.061	38.216	1.00 41.76		DS4

ATOM	12156	N	VAL	105	135.756	107.975	37.900	1.00	41.25	DS4
ATOM	12157	CA	VAL	105	135.914	107.766	39.323	1.00	41.25	DS4
ATOM	12158	CB	VAL	105	136.345	106.325	39.628	1.00	47.15	DS4
ATOM	12159	CG1	VAL	105	136.989	106.234	41.006	1.00	47.15	DS4
ATOM	12160	CG2	VAL	105	135.132	105.426	39.563	1.00	47.15	DS4
ATOM	12161	C	VAL	105	136.977	108.740	39.815	1.00	41.25	DS4
ATOM	12162	O	VAL	105	136.886	109.281	40.918	1.00	41.25	DS4
ATOM	12163	N	TYR	106	137.992	108.966	38.996	1.00	54.52	DS4
ATOM	12164	CA	TYR	106	139.047	109.887	39.372	1.00	54.52	DS4
ATOM	12165	CB	TYR	106	140.229	109.739	38.422	1.00	52.80	DS4
ATOM	12166	CG	TYR	106	141.153	110.932	38.394	1.00	52.80	DS4
ATOM	12167	CD1	TYR	106	142.106	111.127	39.395	1.00	52.80	DS4
ATOM	12168	CE1	TYR	106	142.934	112.240	39.389	1.00	52.80	DS4
ATOM	12169	CD2	TYR	106	141.050	111.888	37.379	1.00	52.80	DS4
ATOM	12170	CE2	TYR	106	141.866	113.003	37.366	1.00	52.80	DS4
ATOM	12171	CZ	TYR	106	142.805	113.176	38.371	1.00	52.80	DS4
ATOM	12172	OH	TYR	106	143.611	114.292	38.360	1.00	52.80	DS4
ATOM	12173	C	TYR	106	138.498	111.301	39.300	1.00	54.52	DS4
ATOM	12174	O	TYR	106	138.771	112.131	40.165	1.00	54.52	DS4
ATOM	12175	N	ARG	107	137.722	111.569	38.257	1.00	65.61	DS4
ATOM	12176	CA	ARG	107	137.123	112.880	38.064	1.00	65.61	DS4
ATOM	12177	CB	ARG	107	136.285	112.894	36.788	1.00	65.16	DS4
ATOM	12178	CG	ARG	107	137.084	112.890	35.509	1.00	65.16	DS4
ATOM	12179	CD	ARG	107	137.850	114.187	35.334	1.00	65.16	DS4
ATOM	12180	NE	ARG	107	138.478	114.282	34.021	1.00	65.16	DS4
ATOM	12181	CZ	ARG	107	139.325	115.242	33.669	1.00	65.16	DS4
ATOM	12182	NH1	ARG	107	139.645	116.192	34.538	1.00	65.16	DS4
ATOM	12183	NH2	ARG	107	139.856	115.249	32.453	1.00	65.16	DS4
ATOM	12184	C	ARG	107	136.239	113.289	39.236	1.00	65.61	DS4
ATOM	12185	O	ARG	107	136.321	114.420	39.706	1.00	65.61	DS4
ATOM	12186	N	LEU	108	135.396	112.373	39.707	1.00	53.21	DS4
ATOM	12187	CA	LEU	108	134.493	112.680	40.812	1.00	53.21	DS4
ATOM	12188	CB	LEU	108	133.365	111.656	40.866	1.00	46.20	DS4
ATOM	12189	CG	LEU	108	132.457	111.787	39.648	1.00	46.20	DS4
ATOM	12190	CD1	LEU	108	131.296	110.828	39.786	1.00	46.20	DS4
ATOM	12191	CD2	LEU	108	131.958	113.217	39.524	1.00	46.20	DS4
ATOM	12192	C	LEU	108	135.148	112.798	42.186	1.00	53.21	DS4
ATOM	12193	O	LEU	108	134.500	113.159	43.163	1.00	53.21	DS4
ATOM	12194	N	GLY	109	136.431	112.491	42.270	1.00	58.87	DS4
ATOM	12195	CA	GLY	109	137.099	112.613	43.541	1.00	58.87	DS4
ATOM	12196	C	GLY	109	137.113	111.372	44.401	1.00	58.87	DS4
ATOM	12197	O	GLY	109	137.789	111.359	45.433	1.00	58.87	DS4
ATOM	12198	N	PHE	110	136.394	110.324	44.020	1.00	55.02	DS4
ATOM	12199	CA	PHE	110	136.411	109.126	44.851	1.00	55.02	DS4
ATOM	12200	CB	PHE	110	135.529	108.036	44.254	1.00	54.55	DS4
ATOM	12201	CG	PHE	110	134.146	108.495	43.937	1.00	54.55	DS4
ATOM	12202	CD1	PHE	110	133.619	109.621	44.549	1.00	54.55	DS4
ATOM	12203	CD2	PHE	110	133.373	107.810	43.013	1.00	54.55	DS4
ATOM	12204	CE1	PHE	110	132.337	110.067	44.241	1.00	54.55	DS4
ATOM	12205	CE2	PHE	110	132.088	108.243	42.694	1.00	54.55	DS4
ATOM	12206	CZ	PHE	110	131.567	109.376	43.307	1.00	54.55	DS4
ATOM	12207	C	PHE	110	137.844	108.634	44.972	1.00	55.02	DS4
ATOM	12208	O	PHE	110	138.219	108.012	45.970	1.00	55.02	DS4
ATOM	12209	N	ALA	111	138.645	108.936	43.952	1.00	45.94	DS4
ATOM	12210	CA	ALA	111	140.049	108.536	43.941	1.00	45.94	DS4
ATOM	12211	CB	ALA	111	140.317	107.665	42.760	1.00	41.55	DS4
ATOM	12212	C	ALA	111	140.960	109.747	43.896	1.00	45.94	DS4
ATOM	12213	O	ALA	111	140.605	110.784	43.342	1.00	45.94	DS4
ATOM	12214	N	VAL	112	142.135	109.626	44.491	1.00	50.71	DS4
ATOM	12215	CA	VAL	112	143.082	110.728	44.475	1.00	50.71	DS4
ATOM	12216	CB	VAL	112	144.167	110.508	45.531	1.00	51.50	DS4
ATOM	12217	CG1	VAL	112	145.363	111.398	45.267	1.00	51.50	DS4
ATOM	12218	CG2	VAL	112	143.594	110.807	46.887	1.00	51.50	DS4
ATOM	12219	C	VAL	112	143.713	110.842	43.076	1.00	50.71	DS4
ATOM	12220	O	VAL	112	144.018	111.941	42.601	1.00	50.71	DS4
ATOM	12221	N	THR	113	143.905	109.704	42.414	1.00	61.92	DS4
ATOM	12222	CA	THR	113	144.486	109.710	41.079	1.00	61.92	DS4
ATOM	12223	CB	THR	113	146.001	109.532	41.119	1.00	68.81	DS4
ATOM	12224	OG1	THR	113	146.315	108.144	41.267	1.00	68.81	DS4
ATOM	12225	CG2	THR	113	146.585	110.315	42.277	1.00	68.81	DS4
ATOM	12226	C	THR	113	143.907	108.620	40.199	1.00	61.92	DS4
ATOM	12227	O	THR	113	143.246	107.703	40.682	1.00	61.92	DS4
ATOM	12228	N	ARG	114	144.168	108.729	38.901	1.00	50.48	DS4
ATOM	12229	CA	ARG	114	143.662	107.770	37.934	1.00	50.48	DS4
ATOM	12230	CB	ARG	114	144.183	108.122	36.544	1.00	47.53	DS4
ATOM	12231	CG	ARG	114	143.632	109.432	36.020	1.00	47.53	DS4
ATOM	12232	CD	ARG	114	143.068	109.253	34.620	1.00	47.53	DS4
ATOM	12233	NE	ARG	114	142.440	110.464	34.100	1.00	47.53	DS4
ATOM	12234	CZ	ARG	114	143.046	111.644	34.031	1.00	47.53	DS4
ATOM	12235	NH1	ARG	114	144.300	111.776	34.452	1.00	47.53	DS4
ATOM	12236	NH2	ARG	114	142.394	112.692	33.540	1.00	47.53	DS4
ATOM	12237	C	ARG	114	143.992	106.322	38.288	1.00	50.48	DS4
ATOM	12238	O	ARG	114	143.184	105.418	38.056	1.00	50.48	DS4
ATOM	12239	N	ARG	115	145.164	106.091	38.861	1.00	56.61	DS4
ATOM	12240	CA	ARG	115	145.518	104.732	39.226	1.00	56.61	DS4
ATOM	12241	CB	ARG	115	146.991	104.643	39.605	1.00	101.13	DS4
ATOM	12242	CG	ARG	115	147.499	103.216	39.797	1.00	101.13	DS4
ATOM	12243	CD	ARG	115	147.469	102.347	38.511	1.00	101.13	DS4
ATOM	12244	NE	ARG	115	148.263	101.115	38.667	1.00	101.13	DS4
ATOM	12245	CZ	ARG	115	148.325	100.121	37.780	1.00	101.13	DS4
ATOM	12246	NH1	ARG	115	147.637	100.179	36.647	1.00	101.13	DS4
ATOM	12247	NH2	ARG	115	149.086	99.064	38.027	1.00	101.13	DS4
ATOM	12248	C	ARG	115	144.638	104.209	40.367	1.00	56.61	DS4
ATOM	12249	O	ARG	115	144.215	103.048	40.317	1.00	56.61	DS4
ATOM	12250	N	GLN	116	144.357	105.047	41.379	1.00	54.23	DS4
ATOM	12251	CA	GLN	116	143.504	104.641	42.511	1.00	54.23	DS4
ATOM	12252	CB	GLN	116	143.298	105.745	43.552	1.00	178.18	DS4
ATOM	12253	CG	GLN	116	144.501	106.120	44.346	1.00	178.18	DS4
ATOM	12254	CD	GLN	116	145.523	106.804	43.486	1.00	178.18	DS4
ATOM	12255	OE1	GLN	116	146.145	106.184	42.621	1.00	178.18	DS4
ATOM	12256	NE2	GLN	116	145.696	108.102	43.704	1.00	178.18	DS4
ATOM	12257	C	GLN	116	142.154	104.349	41.942	1.00	54.23	DS4
ATOM	12258	O	GLN	116	141.511	103.369	42.300	1.00	54.23	DS4
ATOM	12259	N	ALA	117	141.708	105.229	41.063	1.00	47.49	DS4
ATOM	12260	CA	ALA	117	140.419	105.032	40.454	1.00	47.49	DS4
ATOM	12261	CB	ALA	117	140.208	106.032	39.335	1.00	58.31	DS4

ATOM	12262	C	ALA	117	140.459	103.618	39.907	1.00	47.49	DS4	ATOM	12315	ND1	HIS	123	140.848	95.075	44.352	1.00	56.89	DS4
ATOM	12263	O	ALA	117	139.572	102.802	40.190	1.00	47.49	DS4	ATOM	12316	CE1	HIS	123	142.168	95.105	44.415	1.00	56.89	DS4
ATOM	12264	N	ARG	118	141.514	103.318	39.155	1.00	51.01	DS4	ATOM	12317	NE2	HIS	123	142.535	96.270	44.916	1.00	56.89	DS4
ATOM	12265	CA	ARG	118	141.630	101.996	38.580	1.00	51.01	DS4	ATOM	12318	C	HIS	123	136.577	96.359	44.088	1.00	52.03	DS4
ATOM	12266	CB	ARG	118	142.976	101.801	37.867	1.00	54.03	DS4	ATOM	12319	O	HIS	123	136.219	96.713	45.208	1.00	52.03	DS4
ATOM	12267	CG	ARG	118	142.923	100.697	36.793	1.00	54.03	DS4	ATOM	12320	N	GLY	124	135.737	96.254	43.066	1.00	58.55	DS4
ATOM	12268	CD	ARG	118	144.296	100.316	36.246	1.00	54.03	DS4	ATOM	12321	CA	GLY	124	134.312	96.516	43.217	1.00	58.55	DS4
ATOM	12269	NE	ARG	118	144.169	99.304	35.202	1.00	54.03	DS4	ATOM	12322	C	GLY	124	133.838	97.589	44.186	1.00	58.55	DS4
ATOM	12270	CZ	ARG	118	143.906	99.578	33.928	1.00	54.03	DS4	ATOM	12323	O	GLY	124	132.723	97.519	44.701	1.00	58.55	DS4
ATOM	12271	NH1	ARG	118	143.785	98.597	33.046	1.00	54.03	DS4	ATOM	12324	N	HIS	125	134.672	98.589	44.437	1.00	51.22	DS4
ATOM	12272	NH2	ARG	118	143.797	100.838	33.528	1.00	54.03	DS4	ATOM	12325	CA	HIS	125	134.295	99.668	45.328	1.00	51.22	DS4
ATOM	12273	C	ARG	118	141.462	100.966	39.682	1.00	51.01	DS4	ATOM	12326	CB	HIS	125	135.539	100.391	45.838	1.00	51.86	DS4
ATOM	12274	O	ARG	118	140.512	100.192	39.664	1.00	51.01	DS4	ATOM	12327	CG	HIS	125	136.407	99.557	46.721	1.00	51.86	DS4
ATOM	12275	N	GLN	119	142.351	100.971	40.664	1.00	55.00	DS4	ATOM	12328	CD2	HIS	125	137.740	99.325	46.699	1.00	51.86	DS4
ATOM	12276	CA	GLN	119	142.233	99.988	41.730	1.00	55.00	DS4	ATOM	12329	ND1	HIS	125	135.919	98.878	47.814	1.00	51.86	DS4
ATOM	12277	CB	GLN	119	143.329	100.151	42.773	1.00	48.00	DS4	ATOM	12330	CE1	HIS	125	136.914	98.264	48.430	1.00	51.86	DS4
ATOM	12278	CG	GLN	119	143.412	98.942	43.683	1.00	48.00	DS4	ATOM	12331	NE2	HIS	125	138.030	98.520	47.774	1.00	51.86	DS4
ATOM	12279	CD	GLN	119	144.565	99.015	44.640	1.00	48.00	DS4	ATOM	12332	C	HIS	125	133.411	100.669	44.590	1.00	51.22	DS4
ATOM	12280	OE1	GLN	119	144.466	99.617	45.711	1.00	48.00	DS4	ATOM	12333	O	HIS	125	132.828	101.559	45.203	1.00	51.22	DS4
ATOM	12281	NE2	GLN	119	145.684	98.415	44.253	1.00	48.00	DS4	ATOM	12334	N	ILE	126	133.308	100.532	43.273	1.00	43.27	DS4
ATOM	12282	C	GLN	119	140.890	100.007	42.438	1.00	55.00	DS4	ATOM	12335	CA	ILE	126	132.502	101.464	42.495	1.00	43.27	DS4
ATOM	12283	O	GLN	119	140.389	98.957	42.844	1.00	55.00	DS4	ATOM	12336	CB	ILE	126	133.325	102.071	41.326	1.00	40.45	DS4
ATOM	12284	N	LEU	120	140.309	101.189	42.603	1.00	54.36	DS4	ATOM	12337	CG2	ILE	126	132.433	102.952	40.451	1.00	40.45	DS4
ATOM	12285	CA	LEU	120	139.021	101.272	43.265	1.00	54.36	DS4	ATOM	12338	CG1	ILE	126	134.528	102.852	41.882	1.00	40.45	DS4
ATOM	12286	CB	LEU	120	138.556	102.731	43.362	1.00	44.00	DS4	ATOM	12339	CD1	ILE	126	134.176	104.097	42.687	1.00	40.45	DS4
ATOM	12287	CG	LEU	120	139.298	103.512	44.468	1.00	44.00	DS4	ATOM	12340	C	ILE	126	131.228	100.854	41.930	1.00	43.27	DS4
ATOM	12288	CD1	LEU	120	138.780	104.953	44.602	1.00	44.00	DS4	ATOM	12341	O	ILE	126	131.158	99.656	41.662	1.00	43.27	DS4
ATOM	12289	CD2	LEU	120	139.118	102.760	45.786	1.00	44.00	DS4	ATOM	12342	N	THR	127	130.231	101.709	41.736	1.00	51.68	DS4
ATOM	12290	C	LEU	120	138.040	100.438	42.464	1.00	54.36	DS4	ATOM	12343	CA	THR	127	128.933	101.313	41.217	1.00	51.68	DS4
ATOM	12291	O	LEU	120	137.255	99.662	43.013	1.00	54.36	DS4	ATOM	12344	CB	THR	127	127.864	101.549	42.285	1.00	76.95	DS4
ATOM	12292	N	VAL	121	138.118	100.563	41.150	1.00	56.40	DS4	ATOM	12345	OG1	THR	127	127.834	100.423	43.158	1.00	76.95	DS4
ATOM	12293	CA	VAL	121	137.215	99.821	40.302	1.00	56.40	DS4	ATOM	12346	CG2	THR	127	126.489	101.778	41.662	1.00	76.95	DS4
ATOM	12294	CB	VAL	121	137.246	100.372	38.878	1.00	35.82	DS4	ATOM	12347	C	THR	127	128.531	102.080	39.957	1.00	51.68	DS4
ATOM	12295	CG1	VAL	121	136.290	99.593	37.999	1.00	35.82	DS4	ATOM	12348	O	THR	127	128.947	103.215	39.749	1.00	51.68	DS4
ATOM	12296	CG2	VAL	121	136.849	101.846	38.903	1.00	35.82	DS4	ATOM	12349	N	VAL	128	127.724	101.446	39.115	1.00	49.66	DS4
ATOM	12297	C	VAL	121	137.520	98.332	40.301	1.00	56.40	DS4	ATOM	12350	CA	VAL	128	127.235	102.091	37.913	1.00	49.66	DS4
ATOM	12298	O	VAL	121	136.601	97.518	40.362	1.00	56.40	DS4	ATOM	12351	CB	VAL	128	127.961	101.583	36.660	1.00	42.33	DS4
ATOM	12299	N	ARG	122	138.801	97.974	40.242	1.00	55.00	DS4	ATOM	12352	CG1	VAL	128	127.478	102.346	35.429	1.00	42.33	DS4
ATOM	12300	CA	ARG	122	139.200	96.570	40.232	1.00	55.00	DS4	ATOM	12353	CG2	VAL	128	129.458	101.760	36.828	1.00	42.33	DS4
ATOM	12301	CB	ARG	122	140.716	96.434	40.303	1.00	158.59	DS4	ATOM	12354	C	VAL	128	125.739	101.782	37.818	1.00	49.66	DS4
ATOM	12302	CG	ARG	122	141.497	97.266	39.322	1.00	158.59	DS4	ATOM	12355	O	VAL	128	125.330	100.681	37.420	1.00	49.66	DS4
ATOM	12303	CD	ARG	122	142.951	97.274	39.755	1.00	158.59	DS4	ATOM	12356	N	ASN	129	124.929	102.762	38.212	1.00	60.12	DS4
ATOM	12304	NE	ARG	122	143.792	98.152	38.950	1.00	158.59	DS4	ATOM	12357	CA	ASN	129	123.484	102.617	38.196	1.00	60.12	DS4
ATOM	12305	CZ	ARG	122	145.018	98.525	39.304	1.00	158.59	DS4	ATOM	12358	CB	ASN	129	122.994	102.395	36.774	1.00	59.14	DS4
ATOM	12306	NH1	ARG	122	145.536	98.096	40.450	1.00	158.59	DS4	ATOM	12359	CG	ASN	129	123.510	103.442	35.824	1.00	59.14	DS4
ATOM	12307	NH2	ARG	122	145.728	99.321	38.517	1.00	158.59	DS4	ATOM	12360	OD1	ASN	129	123.659	104.617	36.190	1.00	59.14	DS4
ATOM	12308	C	ARG	122	138.609	95.869	41.453	1.00	55.00	DS4	ATOM	12361	ND2	ASN	129	123.777	103.033	34.588	1.00	59.14	DS4
ATOM	12309	O	ARG	122	138.210	94.706	41.381	1.00	55.00	DS4	ATOM	12362	C	ASN	129	123.087	101.436	39.064	1.00	60.12	DS4
ATOM	12310	N	HIS	123	138.563	96.581	42.579	1.00	52.03	DS4	ATOM	12363	O	ASN	129	122.166	100.686	38.732	1.00	60.12	DS4
ATOM	12311	CA	HIS	123	138.042	96.024	43.818	1.00	52.03	DS4	ATOM	12364	N	GLY	130	123.790	101.278	40.181	1.00	64.45	DS4
ATOM	12312	CB	HIS	123	138.878	96.506	44.992	1.00	56.89	DS4	ATOM	12365	CA	GLY	130	123.504	100.178	41.078	1.00	64.45	DS4
ATOM	12313	CG	HIS	123	140.341	96.260	44.835	1.00	56.89	DS4	ATOM	12366	C	GLY	130	124.541	99.087	40.914	1.00	64.45	DS4
ATOM	12314	CD2	HIS	123	141.411	97.012	45.181	1.00	56.89	DS4	ATOM	12367	O	GLY	130	125.549	99.086	41.611	1.00	64.45	DS4

ATOM	12368	N	ARG	131	124.298	98.165	39.988	1.00	69.95	DS4	ATOM	12421	CA	SER	137	137.883	100.299	30.790	1.00	48.74	DS4
ATOM	12369	CA	ARG	131	125.218	97.061	39.731	1.00	69.95	DS4	ATOM	12422	CB	SER	137	138.562	99.289	29.865	1.00	51.27	DS4
ATOM	12370	CB	ARG	131	124.982	96.500	38.327	1.00	145.29	DS4	ATOM	12423	OG	SER	137	138.010	97.990	30.040	1.00	51.27	DS4
ATOM	12371	CG	ARG	131	123.608	95.890	38.124	1.00	145.29	DS4	ATOM	12424	C	SER	137	136.426	100.479	30.407	1.00	48.74	DS4
ATOM	12372	CD	ARG	131	123.389	95.522	36.668	1.00	145.29	DS4	ATOM	12425	O	SER	137	136.116	100.896	29.292	1.00	48.74	DS4
ATOM	12373	NE	ARG	131	122.082	94.907	36.436	1.00	145.29	DS4	ATOM	12426	N	TYR	138	135.533	100.176	31.337	1.00	52.69	DS4
ATOM	12374	CZ	ARG	131	121.619	94.563	35.235	1.00	145.29	DS4	ATOM	12427	CA	TYR	138	134.099	100.300	31.095	1.00	52.69	DS4
ATOM	12375	NH1	ARG	131	122.356	94.776	34.149	1.00	145.29	DS4	ATOM	12428	CB	TYR	138	133.348	100.005	32.393	1.00	53.33	DS4
ATOM	12376	NH2	ARG	131	120.422	94.000	35.117	1.00	145.29	DS4	ATOM	12429	CG	TYR	138	131.858	100.185	32.297	1.00	53.33	DS4
ATOM	12377	C	ARG	131	126.659	97.532	39.859	1.00	69.95	DS4	ATOM	12430	CD1	TYR	138	131.018	99.095	32.124	1.00	53.33	DS4
ATOM	12378	O	ARG	131	126.988	98.653	39.454	1.00	69.95	DS4	ATOM	12431	CE1	TYR	138	129.645	99.258	32.055	1.00	53.33	DS4
ATOM	12379	N	ARG	132	127.515	96.693	40.437	1.00	58.32	DS4	ATOM	12432	CD2	TYR	138	131.287	101.452	32.395	1.00	53.33	DS4
ATOM	12380	CA	ARG	132	128.912	97.073	40.576	1.00	58.32	DS4	ATOM	12433	CE2	TYR	138	129.915	101.629	32.325	1.00	53.33	DS4
ATOM	12381	CB	ARG	132	129.560	96.398	41.787	1.00	120.45	DS4	ATOM	12434	CZ	TYR	138	129.098	100.530	32.156	1.00	53.33	DS4
ATOM	12382	CG	ARG	132	129.901	94.938	41.601	1.00	120.45	DS4	ATOM	12435	OH	TYR	138	127.733	100.701	32.076	1.00	53.33	DS4
ATOM	12383	CD	ARG	132	130.769	94.438	42.750	1.00	120.45	DS4	ATOM	12436	C	TYR	138	133.729	101.702	30.590	1.00	52.69	DS4
ATOM	12384	NE	ARG	132	130.952	92.991	42.705	1.00	120.45	DS4	ATOM	12437	O	TYR	138	134.218	102.712	31.113	1.00	52.69	DS4
ATOM	12385	CZ	ARG	132	129.966	92.107	42.842	1.00	120.45	DS4	ATOM	12438	N	ARG	139	132.856	101.783	29.594	1.00	40.34	DS4
ATOM	12386	NH1	ARG	132	128.719	92.519	43.039	1.00	120.45	DS4	ATOM	12439	CA	ARG	139	132.488	103.099	29.083	1.00	40.34	DS4
ATOM	12387	NH2	ARG	132	130.225	90.809	42.768	1.00	120.45	DS4	ATOM	12440	CB	ARG	139	132.334	103.070	27.565	1.00	44.17	DS4
ATOM	12388	C	ARG	132	129.666	96.690	39.312	1.00	58.32	DS4	ATOM	12441	CG	ARG	139	131.874	104.381	26.955	1.00	44.17	DS4
ATOM	12389	O	ARG	132	129.432	95.637	38.732	1.00	58.32	DS4	ATOM	12442	CD	ARG	139	131.860	104.297	25.440	1.00	44.17	DS4
ATOM	12390	N	VAL	133	130.566	97.561	38.883	1.00	47.28	DS4	ATOM	12443	NE	ARG	139	133.196	104.100	24.880	1.00	44.17	DS4
ATOM	12391	CA	VAL	133	131.353	97.319	37.690	1.00	47.28	DS4	ATOM	12444	CZ	ARG	139	133.435	103.791	23.604	1.00	44.17	DS4
ATOM	12392	CB	VAL	133	131.027	98.368	36.633	1.00	36.92	DS4	ATOM	12445	NH1	ARG	139	132.430	103.638	22.750	1.00	44.17	DS4
ATOM	12393	CG1	VAL	133	131.915	98.177	35.441	1.00	36.92	DS4	ATOM	12446	NH2	ARG	139	134.680	103.641	23.174	1.00	44.17	DS4
ATOM	12394	CG2	VAL	133	129.555	98.269	36.238	1.00	36.92	DS4	ATOM	12447	C	ARG	139	131.217	103.649	29.685	1.00	40.34	DS4
ATOM	12395	C	VAL	133	132.830	97.403	38.048	1.00	47.28	DS4	ATOM	12448	O	ARG	139	130.128	103.115	29.473	1.00	40.34	DS4
ATOM	12396	O	VAL	133	133.278	98.418	38.570	1.00	47.28	DS4	ATOM	12449	N	VAL	140	131.367	104.740	30.421	1.00	51.81	DS4
ATOM	12397	N	ASP	134	133.594	96.350	37.781	1.00	61.79	DS4	ATOM	12450	CA	VAL	140	130.244	105.414	31.056	1.00	51.81	DS4
ATOM	12398	CA	ASP	134	135.012	96.381	38.118	1.00	61.79	DS4	ATOM	12451	CB	VAL	140	130.779	106.391	32.103	1.00	59.76	DS4
ATOM	12399	CB	ASP	134	135.399	95.136	38.907	1.00	73.52	DS4	ATOM	12452	CG1	VAL	140	129.649	107.103	32.802	1.00	59.76	DS4
ATOM	12400	CG	ASP	134	135.322	93.883	38.074	1.00	73.52	DS4	ATOM	12453	CG2	VAL	140	131.644	105.636	33.090	1.00	59.76	DS4
ATOM	12401	OD1	ASP	134	134.202	93.394	37.845	1.00	73.52	DS4	ATOM	12454	C	VAL	140	129.440	106.187	30.006	1.00	51.81	DS4
ATOM	12402	OD2	ASP	134	136.387	93.394	37.634	1.00	73.52	DS4	ATOM	12455	O	VAL	140	130.015	106.956	29.241	1.00	51.81	DS4
ATOM	12403	C	ASP	134	135.927	96.489	36.901	1.00	61.79	DS4	ATOM	12456	N	ARG	141	128.128	105.965	29.942	1.00	46.93	DS4
ATOM	12404	O	ASP	134	137.104	96.127	36.971	1.00	61.79	DS4	ATOM	12457	CA	ARG	141	127.271	106.689	28.990	1.00	46.93	DS4
ATOM	12405	N	LEU	135	135.396	96.996	35.794	1.00	49.69	DS4	ATOM	12458	CB	ARG	141	126.079	105.838	28.529	1.00	115.49	DS4
ATOM	12406	CA	LEU	135	136.181	97.123	34.573	1.00	49.69	DS4	ATOM	12459	CG	ARG	141	126.410	104.496	27.934	1.00	115.49	DS4
ATOM	12407	CB	LEU	135	135.337	96.658	33.394	1.00	38.77	DS4	ATOM	12460	CD	ARG	141	127.159	104.626	26.628	1.00	115.49	DS4
ATOM	12408	CG	LEU	135	134.562	95.410	33.812	1.00	38.77	DS4	ATOM	12461	NE	ARG	141	127.626	103.320	26.171	1.00	115.49	DS4
ATOM	12409	CD1	LEU	135	133.472	95.123	32.817	1.00	38.77	DS4	ATOM	12462	CZ	ARG	141	128.415	103.125	25.118	1.00	115.49	DS4
ATOM	12410	CD2	LEU	135	135.516	94.243	33.948	1.00	38.77	DS4	ATOM	12463	NH1	ARG	141	128.836	104.154	24.393	1.00	115.49	DS4
ATOM	12411	C	LEU	135	136.617	98.565	34.387	1.00	49.69	DS4	ATOM	12464	NH2	ARG	141	128.791	101.893	24.799	1.00	115.49	DS4
ATOM	12412	O	LEU	135	135.826	99.425	34.016	1.00	49.69	DS4	ATOM	12465	C	ARG	141	126.704	107.896	29.747	1.00	46.93	DS4
ATOM	12413	N	PRO	136	137.890	98.846	34.643	1.00	42.85	DS4	ATOM	12466	O	ARG	141	126.726	107.920	30.975	1.00	46.93	DS4
ATOM	12414	CD	PRO	136	138.936	97.908	35.054	1.00	66.57	DS4	ATOM	12467	N	PRO	142	126.198	108.916	29.031	1.00	56.64	DS4
ATOM	12415	CA	PRO	136	138.434	100.192	34.512	1.00	42.85	DS4	ATOM	12468	CD	PRO	142	126.398	109.241	27.610	1.00	54.07	DS4
ATOM	12416	CB	PRO	136	139.912	100.008	34.825	1.00	66.57	DS4	ATOM	12469	CA	PRO	142	125.640	110.072	29.745	1.00	56.64	DS4
ATOM	12417	CG	PRO	136	139.921	98.834	35.722	1.00	66.57	DS4	ATOM	12470	CB	PRO	142	125.397	111.084	28.630	1.00	54.07	DS4
ATOM	12418	C	PRO	136	138.246	100.742	33.129	1.00	42.85	DS4	ATOM	12471	CG	PRO	142	126.473	110.753	27.649	1.00	54.07	DS4
ATOM	12419	O	PRO	136	138.299	101.944	32.929	1.00	42.85	DS4	ATOM	12472	C	PRO	142	124.347	109.679	30.467	1.00	56.64	DS4
ATOM	12420	N	SER	137	138.031	99.862	32.165	1.00	48.74	DS4	ATOM	12473	O	PRO	142	123.474	109.021	29.900	1.00	56.64	DS4

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ATOM  12474  N   GLY  143     124.235 110.080  31.724  1.00 70.81      DS4
ATOM  12475  CA  GLY  143     123.060 109.746  32.495  1.00 70.81      DS4
ATOM  12476  C   GLY  143     123.315 108.547  33.383  1.00 70.81      DS4
ATOM  12477  O   GLY  143     122.380 107.836  33.728  1.00 70.81      DS4
ATOM  12478  N   ASP  144     124.570 108.310  33.758  1.00 44.10      DS4
ATOM  12479  CA  ASP  144     124.889 107.171  34.613  1.00 44.10      DS4
ATOM  12480  CB  ASP  144     126.110 106.407  34.101  1.00 68.41      DS4
ATOM  12481  CG  ASP  144     125.828 105.612  32.842  1.00 68.41      DS4
ATOM  12482  OD1 ASP  144     124.707 105.071  32.721  1.00 68.41      DS4
ATOM  12483  OD2 ASP  144     126.738 105.506  31.985  1.00 68.41      DS4
ATOM  12484  C   ASP  144     125.196 107.631  36.019  1.00 44.10      DS4
ATOM  12485  O   ASP  144     125.846 108.661  36.203  1.00 44.10      DS4
ATOM  12486  N   GLU  145     124.723 106.873  37.009  1.00 47.40      DS4
ATOM  12487  CA  GLU  145     124.988 107.190  38.408  1.00 47.40      DS4
ATOM  12488  CB  GLU  145     123.829 106.766  39.306  1.00177.59      DS4
ATOM  12489  CG  GLU  145     122.661 107.722  39.347  1.00177.59      DS4
ATOM  12490  CD  GLU  145     121.737 107.424  40.511  1.00177.59      DS4
ATOM  12491  OE1 GLU  145     121.220 106.287  40.584  1.00177.59      DS4
ATOM  12492  OE2 GLU  145     121.534 108.323  41.355  1.00177.59      DS4
ATOM  12493  C   GLU  145     126.218 106.405  38.808  1.00 47.40      DS4
ATOM  12494  O   GLU  145     126.187 105.179  38.869  1.00 47.40      DS4
ATOM  12495  N   ILE  146     127.303 107.106  39.078  1.00 70.72      DS4
ATOM  12496  CA  ILE  146     128.539 106.452  39.464  1.00 70.72      DS4
ATOM  12497  CB  ILE  146     129.689 107.006  38.623  1.00 68.93      DS4
ATOM  12498  CG2 ILE  146     131.012 106.359  39.024  1.00 68.93      DS4
ATOM  12499  CG1 ILE  146     129.357 106.767  37.150  1.00 68.93      DS4
ATOM  12500  CD1 ILE  146     130.179 107.582  36.184  1.00 68.93      DS4
ATOM  12501  C   ILE  146     128.773 106.695  40.952  1.00 70.72      DS4
ATOM  12502  O   ILE  146     129.201 107.781  41.353  1.00 70.72      DS4
ATOM  12503  N   ALA  147     128.488 105.682  41.769  1.00 61.84      DS4
ATOM  12504  CA  ALA  147     128.630 105.824  43.213  1.00 61.84      DS4
ATOM  12505  CB  ALA  147     127.263 105.736  43.864  1.00 87.07      DS4
ATOM  12506  C   ALA  147     129.574 104.856  43.901  1.00 61.84      DS4
ATOM  12507  O   ALA  147     129.986 103.850  43.334  1.00 61.84      DS4
ATOM  12508  N   VAL  148     129.906 105.181  45.144  1.00 55.29      DS4
ATOM  12509  CA  VAL  148     130.776 104.349  45.952  1.00 55.29      DS4
ATOM  12510  CB  VAL  148     131.369 105.149  47.130  1.00 50.51      DS4
ATOM  12511  CG1 VAL  148     132.399 104.323  47.854  1.00 50.51      DS4
ATOM  12512  CG2 VAL  148     131.997 106.441  46.620  1.00 50.51      DS4
ATOM  12513  C   VAL  148     129.904 103.218  46.491  1.00 55.29      DS4
ATOM  12514  O   VAL  148     128.719 103.415  46.781  1.00 55.29      DS4
ATOM  12515  N   ALA  149     130.486 102.032  46.608  1.00 60.71      DS4
ATOM  12516  CA  ALA  149     129.766 100.865  47.099  1.00 60.71      DS4
ATOM  12517  CB  ALA  149     130.676  99.647  47.046  1.00 71.73      DS4
ATOM  12518  C   ALA  149     129.255 101.073  48.522  1.00 60.71      DS4
ATOM  12519  O   ALA  149     129.952 101.638  49.365  1.00 60.71      DS4
ATOM  12520  N   GLU  150     128.036 100.614  48.786  1.00 62.21      DS4
ATOM  12521  CA  GLU  150     127.455 100.749  50.111  1.00 62.21      DS4
ATOM  12522  CB  GLU  150     126.206  99.880  50.247  1.00165.37      DS4
ATOM  12523  CG  GLU  150     125.318  99.875  49.022  1.00165.37      DS4
ATOM  12524  CD  GLU  150     126.017  99.285  47.807  1.00165.37      DS4
ATOM  12525  OE1 GLU  150     126.446  98.113  47.875  1.00165.37      DS4
ATOM  12526  OE2 GLU  150     126.142  99.997  46.788  1.00165.37      DS4
ATOM  12527  C   GLU  150     128.528 100.235  51.049  1.00 62.21      DS4
ATOM  12528  O   GLU  150     129.172 101.000  51.771  1.00 62.21      DS4
ATOM  12529  N   LYS  151     128.747  98.928  50.991  1.00 52.71      DS4
ATOM  12530  CA  LYS  151     129.730  98.274  51.831  1.00 52.71      DS4
ATOM  12531  CB  LYS  151     129.988  96.859  51.312  1.00 94.89      DS4
ATOM  12532  CG  LYS  151     128.728  96.015  51.179  1.00 94.89      DS4
ATOM  12533  CD  LYS  151     127.881  96.462  49.996  1.00 94.89      DS4
ATOM  12534  CE  LYS  151     126.485  95.847  50.034  1.00 94.89      DS4
ATOM  12535  NZ  LYS  151     125.646  96.403  51.142  1.00 94.89      DS4
ATOM  12536  C   LYS  151     131.047  99.037  51.913  1.00 52.71      DS4
ATOM  12537  O   LYS  151     131.682  99.078  52.969  1.00 52.71      DS4
ATOM  12538  N   SER  152     131.445  99.662  50.809  1.00 57.82      DS4
ATOM  12539  CA  SER  152     132.717 100.382  50.754  1.00 57.82      DS4
ATOM  12540  CB  SER  152     133.217 100.447  49.305  1.00 86.04      DS4
ATOM  12541  OG  SER  152     133.358  99.157  48.735  1.00 86.04      DS4
ATOM  12542  C   SER  152     132.704 101.789  51.330  1.00 57.82      DS4
ATOM  12543  O   SER  152     133.765 102.350  51.622  1.00 57.82      DS4
ATOM  12544  N   ARG  153     131.515 102.360  51.493  1.00 65.02      DS4
ATOM  12545  CA  ARG  153     131.398 103.723  52.007  1.00 65.02      DS4
ATOM  12546  CB  ARG  153     129.931 104.151  52.036  1.00126.69      DS4
ATOM  12547  CG  ARG  153     129.543 105.019  50.860  1.00126.69      DS4
ATOM  12548  CD  ARG  153     128.089 105.413  50.918  1.00126.69      DS4
ATOM  12549  NE  ARG  153     127.224 104.260  50.695  1.00126.69      DS4
ATOM  12550  CZ  ARG  153     125.897 104.324  50.646  1.00126.69      DS4
ATOM  12551  NH1 ARG  153     125.285 105.494  50.805  1.00126.69      DS4
ATOM  12552  NH2 ARG  153     125.181 103.222  50.433  1.00126.69      DS4
ATOM  12553  C   ARG  153     132.031 103.961  53.373  1.00 65.02      DS4
ATOM  12554  O   ARG  153     132.159 105.106  53.807  1.00 65.02      DS4
ATOM  12555  N   ASN  154     132.439 102.885  54.040  1.00 87.45      DS4
ATOM  12556  CA  ASN  154     133.048 102.991  55.361  1.00 87.45      DS4
ATOM  12557  CB  ASN  154     132.526 101.890  56.286  1.00157.16      DS4
ATOM  12558  CG  ASN  154     131.018 101.849  56.347  1.00157.16      DS4
ATOM  12559  OD1 ASN  154     130.362 101.318  55.450  1.00157.16      DS4
ATOM  12560  ND2 ASN  154     130.454 102.423  57.404  1.00157.16      DS4
ATOM  12561  C   ASN  154     134.554 102.878  55.291  1.00 87.45      DS4
ATOM  12562  O   ASN  154     135.208 102.672  56.307  1.00 87.45      DS4
ATOM  12563  N   LEU  155     135.112 103.014  54.098  1.00 77.58      DS4
ATOM  12564  CA  LEU  155     136.556 102.894  53.944  1.00 77.58      DS4
ATOM  12565  CB  LEU  155     136.875 102.380  52.540  1.00 81.74      DS4
ATOM  12566  CG  LEU  155     136.227 101.007  52.319  1.00 81.74      DS4
ATOM  12567  CD1 LEU  155     136.171 100.659  50.843  1.00 81.74      DS4
ATOM  12568  CD2 LEU  155     137.001  99.964  53.117  1.00 81.74      DS4
ATOM  12569  C   LEU  155     137.282 104.200  54.223  1.00 77.58      DS4
ATOM  12570  O   LEU  155     137.016 105.223  53.579  1.00 77.58      DS4
ATOM  12571  N   GLU  156     138.190 104.157  55.198  1.00 61.83      DS4
ATOM  12572  CA  GLU  156     138.969 105.332  55.586  1.00 61.83      DS4
ATOM  12573  CB  GLU  156     140.318 104.916  56.174  1.00150.53      DS4
ATOM  12574  CG  GLU  156     140.224 104.127  57.462  1.00150.53      DS4
ATOM  12575  CD  GLU  156     141.590 103.778  58.019  1.00150.53      DS4
ATOM  12576  OE1 GLU  156     142.386 104.712  58.251  1.00150.53      DS4
ATOM  12577  OE2 GLU  156     141.865 102.575  58.222  1.00150.53      DS4
ATOM  12578  C   GLU  156     139.208 106.205  54.367  1.00 61.83      DS4
ATOM  12579  O   GLU  156     138.669 107.307  54.256  1.00 61.83      DS4
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ATOM  12580  N   LEU  157     140.010 105.671  53.451  1.00 66.10      DS4
ATOM  12581  CA  LEU  157     140.372 106.333  52.204  1.00 66.10      DS4
ATOM  12582  CB  LEU  157     141.039 105.319  51.272  1.00 89.78      DS4
ATOM  12583  CG  LEU  157     141.877 105.830  50.101  1.00 89.78      DS4
ATOM  12584  CD1 LEU  157     142.421 104.631  49.341  1.00 89.78      DS4
ATOM  12585  CD2 LEU  157     141.045 106.712  49.190  1.00 89.78      DS4
ATOM  12586  C   LEU  157     139.188 106.978  51.493  1.00 66.10      DS4
ATOM  12587  O   LEU  157     139.213 108.169  51.204  1.00 66.10      DS4
ATOM  12588  N   ILE  158     138.157 106.200  51.195  1.00 76.00      DS4
ATOM  12589  CA  ILE  158     137.008 106.770  50.512  1.00 76.00      DS4
ATOM  12590  CB  ILE  158     135.936 105.714  50.255  1.00 56.31      DS4
ATOM  12591  CG2 ILE  158     134.677 106.354  49.710  1.00 56.31      DS4
ATOM  12592  CG1 ILE  158     136.486 104.717  49.236  1.00 56.31      DS4
ATOM  12593  CD1 ILE  158     135.592 103.551  48.964  1.00 56.31      DS4
ATOM  12594  C   ILE  158     136.459 107.930  51.320  1.00 76.00      DS4
ATOM  12595  O   ILE  158     135.980 108.917  50.755  1.00 76.00      DS4
ATOM  12596  N   ARG  159     136.548 107.822  52.643  1.00 69.23      DS4
ATOM  12597  CA  ARG  159     136.100 108.904  53.515  1.00 69.23      DS4
ATOM  12598  CB  ARG  159     136.088 108.447  54.970  1.00147.31      DS4
ATOM  12599  CG  ARG  159     135.049 107.396  55.262  1.00147.31      DS4
ATOM  12600  CD  ARG  159     135.103 106.979  56.709  1.00147.31      DS4
ATOM  12601  NE  ARG  159     133.971 106.130  57.052  1.00147.31      DS4
ATOM  12602  CZ  ARG  159     133.789 105.577  58.245  1.00147.31      DS4
ATOM  12603  NH1 ARG  159     134.671 105.783  59.214  1.00147.31      DS4
ATOM  12604  NH2 ARG  159     132.721 104.822  58.471  1.00147.31      DS4
ATOM  12605  C   ARG  159     137.092 110.046  53.335  1.00 69.23      DS4
ATOM  12606  O   ARG  159     136.744 111.104  52.802  1.00 69.23      DS4
ATOM  12607  N   GLN  160     138.329 109.812  53.767  1.00 57.80      DS4
ATOM  12608  CA  GLN  160     139.400 110.799  53.643  1.00 57.80      DS4
ATOM  12609  CB  GLN  160     140.773 110.121  53.767  1.00108.75      DS4
ATOM  12610  CG  GLN  160     141.119 109.663  55.185  1.00108.75      DS4
ATOM  12611  CD  GLN  160     142.374 108.800  55.251  1.00108.75      DS4
ATOM  12612  OE1 GLN  160     143.441 109.188  54.765  1.00108.75      DS4
ATOM  12613  NE2 GLN  160     142.249 107.623  55.864  1.00108.75      DS4
ATOM  12614  C   GLN  160     139.310 111.514  52.302  1.00 57.80      DS4
ATOM  12615  O   GLN  160     139.609 112.707  52.201  1.00 57.80      DS4
ATOM  12616  N   ASN  161     138.877 110.783  51.278  1.00 68.35      DS4
ATOM  12617  CA  ASN  161     138.753 111.334  49.934  1.00 68.35      DS4
ATOM  12618  CB  ASN  161     138.804 110.219  48.895  1.00 67.74      DS4
ATOM  12619  CG  ASN  161     140.212 109.883  48.470  1.00 67.74      DS4
ATOM  12620  OD1 ASN  161     141.187 110.226  49.152  1.00 67.74      DS4
ATOM  12621  ND2 ASN  161     140.330 109.193  47.339  1.00 67.74      DS4
ATOM  12622  C   ASN  161     137.493 112.139  49.717  1.00 68.35      DS4
ATOM  12623  O   ASN  161     137.547 113.363  49.612  1.00 68.35      DS4
ATOM  12624  N   LEU  162     136.356 111.458  49.640  1.00 75.26      DS4
ATOM  12625  CA  LEU  162     135.107 112.155  49.402  1.00 75.26      DS4
ATOM  12626  CB  LEU  162     133.927 111.198  49.507  1.00 92.06      DS4
ATOM  12627  CG  LEU  162     132.731 111.668  48.674  1.00 92.06      DS4
ATOM  12628  CD1 LEU  162     132.525 110.733  47.504  1.00 92.06      DS4
ATOM  12629  CD2 LEU  162     131.484 111.711  49.526  1.00 92.06      DS4
ATOM  12630  C   LEU  162     134.953 113.307  50.389  1.00 75.26      DS4
ATOM  12631  O   LEU  162     134.204 114.252  50.140  1.00 75.26      DS4
ATOM  12632  N   GLU  163     135.675 113.229  51.503  1.00 96.83      DS4
ATOM  12633  CA  GLU  163     135.639 114.287  52.507  1.00 96.83      DS4
ATOM  12634  CB  GLU  163     136.460 113.889  53.735  1.00115.16      DS4
ATOM  12635  CG  GLU  163     136.616 115.002  54.765  1.00115.16      DS4
ATOM  12636  CD  GLU  163     135.295 115.419  55.388  1.00115.16      DS4
ATOM  12637  OE1 GLU  163     135.285 116.407  56.150  1.00115.16      DS4
ATOM  12638  OE2 GLU  163     134.268 114.757  55.122  1.00115.16      DS4
ATOM  12639  C   GLU  163     136.236 115.551  51.897  1.00 96.83      DS4
ATOM  12640  O   GLU  163     135.555 116.561  51.722  1.00 96.83      DS4
ATOM  12641  N   ALA  164     137.522 115.475  51.577  1.00 78.18      DS4
ATOM  12642  CA  ALA  164     138.251 116.584  50.974  1.00 78.18      DS4
ATOM  12643  CB  ALA  164     139.656 116.129  50.629  1.00 43.22      DS4
ATOM  12644  C   ALA  164     137.562 117.111  49.716  1.00 78.18      DS4
ATOM  12645  O   ALA  164     138.000 118.094  49.126  1.00 78.18      DS4
ATOM  12646  N   MET  165     136.487 116.448  49.311  1.00 52.58      DS4
ATOM  12647  CA  MET  165     135.745 116.828  48.118  1.00 52.58      DS4
ATOM  12648  CB  MET  165     135.224 115.573  47.416  1.00 84.12      DS4
ATOM  12649  CG  MET  165     136.095 115.109  46.277  1.00 84.12      DS4
ATOM  12650  SD  MET  165     136.170 116.403  45.036  1.00 84.12      DS4
ATOM  12651  CE  MET  165     134.593 116.177  44.234  1.00 84.12      DS4
ATOM  12652  C   MET  165     134.575 117.754  48.398  1.00 52.58      DS4
ATOM  12653  O   MET  165     133.877 118.167  47.472  1.00 52.58      DS4
ATOM  12654  N   LYS  166     134.345 118.063  49.671  1.00 81.04      DS4
ATOM  12655  CA  LYS  166     133.243 118.937  50.057  1.00 81.04      DS4
ATOM  12656  CB  LYS  166     133.177 119.051  51.581  1.00102.58      DS4
ATOM  12657  CG  LYS  166     132.735 117.764  52.261  1.00102.58      DS4
ATOM  12658  CD  LYS  166     132.776 117.863  53.783  1.00102.58      DS4
ATOM  12659  CE  LYS  166     132.283 116.566  54.429  1.00102.58      DS4
ATOM  12660  NZ  LYS  166     132.312 116.606  55.923  1.00102.58      DS4
ATOM  12661  C   LYS  166     133.399 120.315  49.430  1.00 81.04      DS4
ATOM  12662  O   LYS  166     134.371 121.018  49.699  1.00 81.04      DS4
ATOM  12663  N   GLY  167     132.440 120.688  48.584  1.00129.50      DS4
ATOM  12664  CA  GLY  167     132.484 121.978  47.913  1.00129.50      DS4
ATOM  12665  C   GLY  167     133.754 122.195  47.105  1.00129.50      DS4
ATOM  12666  O   GLY  167     134.498 123.140  47.371  1.00129.50      DS4
ATOM  12667  N   ARG  168     134.000 121.334  46.116  1.00107.37      DS4
ATOM  12668  CA  ARG  168     135.196 121.441  45.290  1.00107.37      DS4
ATOM  12669  CB  ARG  168     136.105 120.235  45.532  1.00151.06      DS4
ATOM  12670  CG  ARG  168     136.572 120.155  46.968  1.00151.06      DS4
ATOM  12671  CD  ARG  168     137.017 121.537  47.427  1.00151.06      DS4
ATOM  12672  NE  ARG  168     136.913 121.720  48.872  1.00151.06      DS4
ATOM  12673  CZ  ARG  168     136.798 122.907  49.465  1.00151.06      DS4
ATOM  12674  NH1 ARG  168     136.768 124.017  48.734  1.00151.06      DS4
ATOM  12675  NH2 ARG  168     136.714 122.989  50.789  1.00151.06      DS4
ATOM  12676  C   ARG  168     134.951 121.615  43.798  1.00107.37      DS4
ATOM  12677  O   ARG  168     135.898 121.820  43.036  1.00107.37      DS4
ATOM  12678  N   LYS  169     133.690 121.552  43.381  1.00 88.87      DS4
ATOM  12679  CA  LYS  169     133.336 121.719  41.971  1.00 88.87      DS4
ATOM  12680  CB  LYS  169     133.753 123.108  41.468  1.00103.61      DS4
ATOM  12681  CG  LYS  169     132.827 124.236  41.891  1.00103.61      DS4
ATOM  12682  CD  LYS  169     133.182 125.542  41.184  1.00103.61      DS4
ATOM  12683  CE  LYS  169     132.155 126.639  41.468  1.00103.61      DS4
ATOM  12684  NZ  LYS  169     132.463 127.908  40.747  1.00103.61      DS4
ATOM  12685  C   LYS  169     133.956 120.664  41.065  1.00 88.87      DS4
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ATOM  12686  O   LYS  169     135.171 120.487  41.039  1.00 88.87      DS4
ATOM  12687  N   VAL  170     133.115 119.969  40.311  1.00 72.68      DS4
ATOM  12688  CA  VAL  170     133.599 118.945  39.399  1.00 72.68      DS4
ATOM  12689  CB  VAL  170     132.910 117.585  39.683  1.00 80.04      DS4
ATOM  12690  CG1 VAL  170     131.552 117.521  38.993  1.00 80.04      DS4
ATOM  12691  CG2 VAL  170     133.812 116.451  39.246  1.00 80.04      DS4
ATOM  12692  C   VAL  170     133.292 119.419  37.979  1.00 72.68      DS4
ATOM  12693  O   VAL  170     132.479 120.321  37.791  1.00 72.68      DS4
ATOM  12694  N   GLY  171     133.946 118.817  36.991  1.00 47.49      DS4
ATOM  12695  CA  GLY  171     133.737 119.212  35.603  1.00 47.49      DS4
ATOM  12696  C   GLY  171     132.301 119.544  35.226  1.00 47.49      DS4
ATOM  12697  O   GLY  171     131.378 118.906  35.716  1.00 47.49      DS4
ATOM  12698  N   PRO  172     132.077 120.531  34.346  1.00 49.32      DS4
ATOM  12699  CD  PRO  172     133.093 121.281  33.586  1.00 51.71      DS4
ATOM  12700  CA  PRO  172     130.719 120.918  33.931  1.00 49.32      DS4
ATOM  12701  CB  PRO  172     130.961 122.116  33.010  1.00 51.71      DS4
ATOM  12702  CG  PRO  172     132.293 121.779  32.391  1.00 51.71      DS4
ATOM  12703  C   PRO  172     129.944 119.809  33.227  1.00 49.32      DS4
ATOM  12704  O   PRO  172     128.759 119.976  32.912  1.00 49.32      DS4
ATOM  12705  N   TRP  173     130.618 118.691  32.962  1.00 56.21      DS4
ATOM  12706  CA  TRP  173     129.978 117.557  32.294  1.00 56.21      DS4
ATOM  12707  CB  TRP  173     130.921 116.952  31.219  1.00 46.81      DS4
ATOM  12708  CG  TRP  173     132.138 116.203  31.734  1.00 46.81      DS4
ATOM  12709  CD2 TRP  173     133.426 116.752  32.038  1.00 46.81      DS4
ATOM  12710  CE2 TRP  173     134.228 115.698  32.521  1.00 46.81      DS4
ATOM  12711  CE3 TRP  173     133.980 118.034  31.946  1.00 46.81      DS4
ATOM  12712  CD1 TRP  173     132.213 114.872  32.035  1.00 46.81      DS4
ATOM  12713  NE1 TRP  173     133.462 114.562  32.510  1.00 46.81      DS4
ATOM  12714  CZ2 TRP  173     135.556 115.884  32.919  1.00 46.81      DS4
ATOM  12715  CZ3 TRP  173     135.306 118.223  32.340  1.00 46.81      DS4
ATOM  12716  CH2 TRP  173     136.078 117.151  32.819  1.00 46.81      DS4
ATOM  12717  C   TRP  173     129.619 116.537  33.369  1.00 56.21      DS4
ATOM  12718  O   TRP  173     128.988 115.512  33.100  1.00 56.21      DS4
ATOM  12719  N   LEU  174     130.007 116.865  34.598  1.00 66.46      DS4
ATOM  12720  CA  LEU  174     129.761 116.024  35.758  1.00 66.46      DS4
ATOM  12721  CB  LEU  174     131.087 115.662  36.421  1.00 44.87      DS4
ATOM  12722  CG  LEU  174     132.134 115.015  35.534  1.00 44.87      DS4
ATOM  12723  CD1 LEU  174     133.418 114.796  36.329  1.00 44.87      DS4
ATOM  12724  CD2 LEU  174     131.589 113.700  35.017  1.00 44.87      DS4
ATOM  12725  C   LEU  174     128.875 116.696  36.807  1.00 66.46      DS4
ATOM  12726  O   LEU  174     128.580 117.892  36.739  1.00 66.46      DS4
ATOM  12727  N   SER  175     128.469 115.896  37.784  1.00 69.88      DS4
ATOM  12728  CA  SER  175     127.653 116.344  38.900  1.00 69.88      DS4
ATOM  12729  CB  SER  175     126.167 116.190  38.586  1.00 90.33      DS4
ATOM  12730  OG  SER  175     125.803 114.826  38.535  1.00 90.33      DS4
ATOM  12731  C   SER  175     128.046 115.403  40.023  1.00 69.88      DS4
ATOM  12732  O   SER  175     128.106 114.192  39.825  1.00 69.88      DS4
ATOM  12733  N   LEU  176     128.341 115.944  41.195  1.00 80.37      DS4
ATOM  12734  CA  LEU  176     128.735 115.083  42.293  1.00 80.37      DS4
ATOM  12735  CB  LEU  176     130.241 115.182  42.525  1.00 57.05      DS4
ATOM  12736  CG  LEU  176     130.891 114.261  43.566  1.00 57.05      DS4
ATOM  12737  CD1 LEU  176     131.110 115.033  44.840  1.00 57.05      DS4
ATOM  12738  CD2 LEU  176     130.039 113.001  43.790  1.00 57.05      DS4
ATOM  12739  C   LEU  176     127.996 115.394  43.577  1.00 80.37      DS4
ATOM  12740  O   LEU  176     128.033 116.517  44.072  1.00 80.37      DS4
ATOM  12741  N   ASP  177     127.316 114.381  44.103  1.00 91.86      DS4
ATOM  12742  CA  ASP  177     126.566 114.506  45.343  1.00 91.86      DS4
ATOM  12743  CB  ASP  177     125.244 113.754  45.222  1.00124.58      DS4
ATOM  12744  CG  ASP  177     124.610 113.482  46.558  1.00124.58      DS4
ATOM  12745  OD1 ASP  177     124.971 112.465  47.186  1.00124.58      DS4
ATOM  12746  OD2 ASP  177     123.761 114.289  46.987  1.00124.58      DS4
ATOM  12747  C   ASP  177     127.410 113.928  46.468  1.00 91.86      DS4
ATOM  12748  O   ASP  177     127.339 112.738  46.762  1.00 91.86      DS4
ATOM  12749  N   VAL  178     128.220 114.775  47.090  1.00 63.72      DS4
ATOM  12750  CA  VAL  178     129.085 114.329  48.165  1.00 63.72      DS4
ATOM  12751  CB  VAL  178     129.841 115.496  48.779  1.00 54.16      DS4
ATOM  12752  CG1 VAL  178     130.987 114.974  49.650  1.00 54.16      DS4
ATOM  12753  CG2 VAL  178     130.357 116.403  47.687  1.00 54.16      DS4
ATOM  12754  C   VAL  178     128.248 113.670  49.244  1.00 63.72      DS4
ATOM  12755  O   VAL  178     128.762 112.948  50.099  1.00 63.72      DS4
ATOM  12756  N   GLU  179     126.950 113.937  49.198  1.00 83.47      DS4
ATOM  12757  CA  GLU  179     126.007 113.364  50.145  1.00 83.47      DS4
ATOM  12758  CB  GLU  179     124.583 113.810  49.775  1.00178.86      DS4
ATOM  12759  CG  GLU  179     123.439 113.028  50.424  1.00178.86      DS4
ATOM  12760  CD  GLU  179     123.314 113.265  51.917  1.00178.86      DS4
ATOM  12761  OE1 GLU  179     122.391 112.681  52.529  1.00178.86      DS4
ATOM  12762  OE2 GLU  179     124.132 114.032  52.474  1.00178.86      DS4
ATOM  12763  C   GLU  179     126.115 111.840  50.115  1.00 83.47      DS4
ATOM  12764  O   GLU  179     126.912 111.258  50.847  1.00 83.47      DS4
ATOM  12765  N   GLY  180     125.318 111.209  49.256  1.00117.94      DS4
ATOM  12766  CA  GLY  180     125.315 109.761  49.147  1.00117.94      DS4
ATOM  12767  C   GLY  180     126.531 109.204  48.442  1.00117.94      DS4
ATOM  12768  O   GLY  180     126.507 108.075  47.951  1.00117.94      DS4
ATOM  12769  N   MET  181     127.598 109.995  48.403  1.00 69.69      DS4
ATOM  12770  CA  MET  181     128.830 109.583  47.750  1.00 69.69      DS4
ATOM  12771  CB  MET  181     129.554 108.534  48.587  1.00 77.45      DS4
ATOM  12772  CG  MET  181     129.858 108.993  49.991  1.00 77.45      DS4
ATOM  12773  SD  MET  181     130.921 107.860  50.879  1.00 77.45      DS4
ATOM  12774  CE  MET  181     132.433 108.771  50.962  1.00 77.45      DS4
ATOM  12775  C   MET  181     128.516 109.014  46.378  1.00 69.69      DS4
ATOM  12776  O   MET  181     128.853 107.871  46.073  1.00 69.69      DS4
ATOM  12777  N   LYS  182     127.855 109.820  45.559  1.00 76.18      DS4
ATOM  12778  CA  LYS  182     127.497 109.409  44.216  1.00 76.18      DS4
ATOM  12779  CB  LYS  182     126.121 108.743  44.218  1.00 68.24      DS4
ATOM  12780  CG  LYS  182     124.993 109.652  44.645  1.00 68.24      DS4
ATOM  12781  CD  LYS  182     123.632 109.114  44.213  1.00 68.24      DS4
ATOM  12782  CE  LYS  182     123.042 108.110  45.207  1.00 68.24      DS4
ATOM  12783  NZ  LYS  182     123.767 106.792  45.258  1.00 68.24      DS4
ATOM  12784  C   LYS  182     127.484 110.617  43.277  1.00 76.18      DS4
ATOM  12785  O   LYS  182     126.922 111.666  43.602  1.00 76.18      DS4
ATOM  12786  N   GLY  183     128.118 110.466  42.118  1.00 63.60      DS4
ATOM  12787  CA  GLY  183     128.143 111.539  41.140  1.00 63.60      DS4
ATOM  12788  C   GLY  183     127.353 111.047  39.951  1.00 63.60      DS4
ATOM  12789  O   GLY  183     126.917 109.900  39.956  1.00 63.60      DS4
ATOM  12790  N   LYS  184     127.151 111.895  38.947  1.00 58.64      DS4
ATOM  12791  CA  LYS  184     126.412 111.488  37.752  1.00 58.64      DS4
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ATOM	12792	CB	LYS	184	124.976	112.008	37.792	1.00	76.42	DS4	ATOM	12845	CA	ASP	190	134.265	118.562	24.756	1.00	65.23	DS4
ATOM	12793	CG	LYS	184	123.979	111.095	37.090	1.00	76.42	DS4	ATOM	12846	CB	ASP	190	133.450	119.790	24.323	1.00	147.53	DS4
ATOM	12794	CD	LYS	184	122.539	111.545	37.329	1.00	76.42	DS4	ATOM	12847	CG	ASP	190	133.534	120.062	22.832	1.00	147.53	DS4
ATOM	12795	CE	LYS	184	122.185	111.530	38.821	1.00	76.42	DS4	ATOM	12848	OD1	ASP	190	134.660	120.189	22.301	1.00	147.53	DS4
ATOM	12796	NZ	LYS	184	120.822	112.087	39.114	1.00	76.42	DS4	ATOM	12849	OD2	ASP	190	132.465	120.159	22.193	1.00	147.53	DS4
ATOM	12797	C	LYS	184	127.115	111.992	36.496	1.00	58.64	DS4	ATOM	12850	C	ASP	190	135.735	118.947	24.955	1.00	65.23	DS4
ATOM	12798	O	LYS	184	127.674	113.086	36.476	1.00	58.64	DS4	ATOM	12851	O	ASP	190	136.201	119.056	26.088	1.00	65.23	DS4
ATOM	12799	N	PHE	185	127.098	111.176	35.451	1.00	51.57	DS4	ATOM	12852	N	ARG	191	136.468	119.162	23.867	1.00	56.21	DS4
ATOM	12800	CA	PHE	185	127.743	111.525	34.189	1.00	51.57	DS4	ATOM	12853	CA	ARG	191	137.875	119.523	23.993	1.00	56.21	DS4
ATOM	12801	CB	PHE	185	128.170	110.244	33.454	1.00	52.88	DS4	ATOM	12854	CB	ARG	191	138.525	119.747	22.635	1.00	75.19	DS4
ATOM	12802	CG	PHE	185	129.273	110.453	32.463	1.00	52.88	DS4	ATOM	12855	CG	ARG	191	140.023	119.931	22.755	1.00	75.19	DS4
ATOM	12803	CD1	PHE	185	130.520	110.898	32.881	1.00	52.88	DS4	ATOM	12856	CD	ARG	191	140.671	118.665	23.327	1.00	75.19	DS4
ATOM	12804	CD2	PHE	185	129.068	110.214	31.114	1.00	52.88	DS4	ATOM	12857	NE	ARG	191	142.069	118.856	23.719	1.00	75.19	DS4
ATOM	12805	CE1	PHE	185	131.557	111.104	31.962	1.00	52.88	DS4	ATOM	12858	CZ	ARG	191	142.465	119.545	24.788	1.00	75.19	DS4
ATOM	12806	CE2	PHE	185	130.095	110.418	30.194	1.00	52.88	DS4	ATOM	12859	NH1	ARG	191	141.571	120.122	25.582	1.00	75.19	DS4
ATOM	12807	CZ	PHE	185	131.342	110.864	30.619	1.00	52.88	DS4	ATOM	12860	NH2	ARG	191	143.756	119.645	25.073	1.00	75.19	DS4
ATOM	12808	C	PHE	185	126.728	112.308	33.360	1.00	51.57	DS4	ATOM	12861	C	ARG	191	137.997	120.788	24.802	1.00	56.21	DS4
ATOM	12809	O	PHE	185	125.897	111.726	32.663	1.00	51.57	DS4	ATOM	12862	O	ARG	191	138.904	120.926	25.623	1.00	56.21	DS4
ATOM	12810	N	LEU	186	126.800	113.630	33.441	1.00	44.31	DS4	ATOM	12863	N	GLU	192	137.070	121.713	24.569	1.00	61.92	DS4
ATOM	12811	CA	LEU	186	125.865	114.478	32.719	1.00	44.31	DS4	ATOM	12864	CA	GLU	192	137.075	122.981	25.279	1.00	61.92	DS4
ATOM	12812	CB	LEU	186	126.085	115.941	33.128	1.00	36.56	DS4	ATOM	12865	CB	GLU	192	136.206	123.995	24.538	1.00	107.50	DS4
ATOM	12813	CG	LEU	186	126.093	116.157	34.656	1.00	36.56	DS4	ATOM	12866	CG	GLU	192	135.164	123.357	23.642	1.00	107.50	DS4
ATOM	12814	CD1	LEU	186	126.485	117.568	34.998	1.00	36.56	DS4	ATOM	12867	CD	GLU	192	135.265	123.842	22.204	1.00	107.50	DS4
ATOM	12815	CD2	LEU	186	124.734	115.878	35.213	1.00	36.56	DS4	ATOM	12868	OE1	GLU	192	136.369	123.721	21.630	1.00	107.50	DS4
ATOM	12816	C	LEU	186	125.943	114.287	31.206	1.00	44.31	DS4	ATOM	12869	OE2	GLU	192	134.251	124.339	21.653	1.00	107.50	DS4
ATOM	12817	O	LEU	186	124.986	113.823	30.606	1.00	44.31	DS4	ATOM	12870	C	GLU	192	136.623	122.833	26.731	1.00	61.92	DS4
ATOM	12818	N	ARG	187	127.070	114.633	30.592	1.00	63.86	DS4	ATOM	12871	O	GLU	192	136.455	123.827	27.432	1.00	61.92	DS4
ATOM	12819	CA	ARG	187	127.233	114.461	29.145	1.00	63.86	DS4	ATOM	12872	N	ASP	193	136.432	121.590	27.175	1.00	57.91	DS4
ATOM	12820	CB	ARG	187	126.493	115.571	28.388	1.00	171.08	DS4	ATOM	12873	CA	ASP	193	136.030	121.298	28.555	1.00	57.91	DS4
ATOM	12821	CG	ARG	187	124.972	115.435	28.455	1.00	171.08	DS4	ATOM	12874	CB	ASP	193	134.973	120.191	28.592	1.00	84.39	DS4
ATOM	12822	CD	ARG	187	124.224	116.578	27.772	1.00	171.08	DS4	ATOM	12875	CG	ASP	193	133.583	120.691	28.250	1.00	84.39	DS4
ATOM	12823	NE	ARG	187	122.774	116.452	27.943	1.00	171.08	DS4	ATOM	12876	OD1	ASP	193	132.961	121.356	29.110	1.00	84.39	DS4
ATOM	12824	CZ	ARG	187	121.874	117.270	27.404	1.00	171.08	DS4	ATOM	12877	OD2	ASP	193	133.108	120.425	27.123	1.00	84.39	DS4
ATOM	12825	NH1	ARG	187	122.265	118.289	26.649	1.00	171.08	DS4	ATOM	12878	C	ASP	193	137.278	120.821	29.282	1.00	57.91	DS4
ATOM	12826	NH2	ARG	187	120.578	117.069	27.618	1.00	171.08	DS4	ATOM	12879	O	ASP	193	137.515	121.159	30.442	1.00	57.91	DS4
ATOM	12827	C	ARG	187	128.709	114.427	28.737	1.00	63.86	DS4	ATOM	12880	N	LEU	194	138.068	120.020	28.573	1.00	60.25	DS4
ATOM	12828	O	ARG	187	129.587	114.818	29.518	1.00	63.86	DS4	ATOM	12881	CA	LEU	194	139.308	119.473	29.100	1.00	60.25	DS4
ATOM	12829	N	LEU	188	128.985	113.950	27.523	1.00	56.55	DS4	ATOM	12882	CB	LEU	194	139.737	118.244	28.294	1.00	52.69	DS4
ATOM	12830	CA	LEU	188	130.363	113.863	27.016	1.00	56.55	DS4	ATOM	12883	CG	LEU	194	138.927	116.951	28.365	1.00	52.69	DS4
ATOM	12831	CB	LEU	188	130.369	113.338	25.579	1.00	41.23	DS4	ATOM	12884	CD1	LEU	194	138.901	116.447	29.796	1.00	52.69	DS4
ATOM	12832	CG	LEU	188	130.061	111.856	25.399	1.00	41.23	DS4	ATOM	12885	CD2	LEU	194	137.524	117.192	27.871	1.00	52.69	DS4
ATOM	12833	CD1	LEU	188	129.899	111.535	23.940	1.00	41.23	DS4	ATOM	12886	C	LEU	194	140.388	120.532	28.981	1.00	60.25	DS4
ATOM	12834	CD2	LEU	188	131.183	111.042	26.011	1.00	41.23	DS4	ATOM	12887	O	LEU	194	140.285	121.438	28.157	1.00	60.25	DS4
ATOM	12835	C	LEU	188	131.124	115.180	27.031	1.00	56.55	DS4	ATOM	12888	N	ALA	195	141.426	120.418	29.798	1.00	58.32	DS4
ATOM	12836	O	LEU	188	130.666	116.171	26.465	1.00	56.55	DS4	ATOM	12889	CA	ALA	195	142.531	121.364	29.751	1.00	58.32	DS4
ATOM	12837	N	PRO	189	132.301	115.208	27.668	1.00	55.38	DS4	ATOM	12890	CB	ALA	195	142.475	122.292	30.934	1.00	42.85	DS4
ATOM	12838	CD	PRO	189	132.954	114.139	28.437	1.00	48.03	DS4	ATOM	12891	C	ALA	195	143.821	120.571	29.778	1.00	58.32	DS4
ATOM	12839	CA	PRO	189	133.090	116.444	27.713	1.00	55.38	DS4	ATOM	12892	O	ALA	195	144.744	120.888	30.522	1.00	58.32	DS4
ATOM	12840	CB	PRO	189	134.203	116.114	28.705	1.00	48.03	DS4	ATOM	12893	N	LEU	196	143.871	119.526	28.966	1.00	47.09	DS4
ATOM	12841	CG	PRO	189	134.377	114.649	28.537	1.00	48.03	DS4	ATOM	12894	CA	LEU	196	145.040	118.672	28.891	1.00	47.09	DS4
ATOM	12842	C	PRO	189	133.630	116.790	26.323	1.00	55.38	DS4	ATOM	12895	CB	LEU	196	144.675	117.395	28.146	1.00	69.63	DS4
ATOM	12843	O	PRO	189	133.904	115.902	25.514	1.00	55.38	DS4	ATOM	12896	CG	LEU	196	143.540	116.589	28.778	1.00	69.63	DS4
ATOM	12844	N	ASP	190	133.766	118.082	26.046	1.00	65.23	DS4	ATOM	12897	CD1	LEU	196	143.017	115.553	27.803	1.00	69.63	DS4

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ATOM  12898  CD2 LEU  196     144.057 115.927  30.044  1.00 69.63      DS4
ATOM  12899  C   LEU  196     146.146 119.394  28.145  1.00 47.09      DS4
ATOM  12900  O   LEU  196     145.877 120.133  27.207  1.00 47.09      DS4
ATOM  12901  N   PRO  197     147.404 119.199  28.558  1.00 60.99      DS4
ATOM  12902  CD  PRO  197     147.844 118.367  29.689  1.00 37.95      DS4
ATOM  12903  CA  PRO  197     148.558 119.835  27.911  1.00 60.99      DS4
ATOM  12904  CB  PRO  197     149.665 119.647  28.936  1.00 37.95      DS4
ATOM  12905  CG  PRO  197     149.355 118.290  29.458  1.00 37.95      DS4
ATOM  12906  C   PRO  197     148.851 119.058  26.638  1.00 60.99      DS4
ATOM  12907  O   PRO  197     149.991 118.662  26.379  1.00 60.99      DS4
ATOM  12908  N   VAL  198     147.813 118.834  25.848  1.00 48.13      DS4
ATOM  12909  CA  VAL  198     147.961 118.054  24.638  1.00 48.13      DS4
ATOM  12910  CB  VAL  198     147.293 116.679  24.808  1.00 59.82      DS4
ATOM  12911  CG1 VAL  198     147.334 115.905  23.504  1.00 59.82      DS4
ATOM  12912  CG2 VAL  198     147.987 115.910  25.911  1.00 59.82      DS4
ATOM  12913  C   VAL  198     147.370 118.712  23.419  1.00 48.13      DS4
ATOM  12914  O   VAL  198     146.412 119.477  23.513  1.00 48.13      DS4
ATOM  12915  N   ASN  199     147.962 118.406  22.271  1.00 50.36      DS4
ATOM  12916  CA  ASN  199     147.492 118.920  20.999  1.00 50.36      DS4
ATOM  12917  CB  ASN  199     148.626 119.613  20.258  1.00 62.15      DS4
ATOM  12918  CG  ASN  199     148.157 120.253  18.982  1.00 62.15      DS4
ATOM  12919  OD1 ASN  199     147.305 119.702  18.280  1.00 62.15      DS4
ATOM  12920  ND2 ASN  199     148.712 121.413  18.659  1.00 62.15      DS4
ATOM  12921  C   ASN  199     147.025 117.696  20.208  1.00 50.36      DS4
ATOM  12922  O   ASN  199     147.810 117.063  19.503  1.00 50.36      DS4
ATOM  12923  N   GLU  200     145.757 117.338  20.329  1.00 58.24      DS4
ATOM  12924  CA  GLU  200     145.286 116.166  19.612  1.00 58.24      DS4
ATOM  12925  CB  GLU  200     143.765 116.007  19.747  1.00 83.67      DS4
ATOM  12926  CG  GLU  200     142.969 117.206  19.291  1.00 83.67      DS4
ATOM  12927  CD  GLU  200     142.495 118.080  20.441  1.00 83.67      DS4
ATOM  12928  OE1 GLU  200     143.330 118.505  21.273  1.00 83.67      DS4
ATOM  12929  OE2 GLU  200     141.275 118.347  20.501  1.00 83.67      DS4
ATOM  12930  C   GLU  200     145.684 116.183  18.132  1.00 58.24      DS4
ATOM  12931  O   GLU  200     145.898 115.114  17.542  1.00 58.24      DS4
ATOM  12932  N   ASN  201     145.805 117.372  17.530  1.00 50.44      DS4
ATOM  12933  CA  ASN  201     146.173 117.430  16.111  1.00 50.44      DS4
ATOM  12934  CB  ASN  201     146.369 118.871  15.639  1.00 81.85      DS4
ATOM  12935  CG  ASN  201     145.891 119.088  14.202  1.00 81.85      DS4
ATOM  12936  OD1 ASN  201     144.688 119.020  13.919  1.00 81.85      DS4
ATOM  12937  ND2 ASN  201     146.829 119.351  13.292  1.00 81.85      DS4
ATOM  12938  C   ASN  201     147.460 116.638  15.898  1.00 50.44      DS4
ATOM  12939  O   ASN  201     147.558 115.833  14.967  1.00 50.44      DS4
ATOM  12940  N   LEU  202     148.439 116.863  16.775  1.00 46.50      DS4
ATOM  12941  CA  LEU  202     149.709 116.154  16.703  1.00 46.50      DS4
ATOM  12942  CB  LEU  202     150.674 116.659  17.767  1.00 60.92      DS4
ATOM  12943  CG  LEU  202     151.402 117.955  17.434  1.00 60.92      DS4
ATOM  12944  CD1 LEU  202     152.103 117.797  16.100  1.00 60.92      DS4
ATOM  12945  CD2 LEU  202     150.417 119.102  17.365  1.00 60.92      DS4
ATOM  12946  C   LEU  202     149.501 114.664  16.905  1.00 46.50      DS4
ATOM  12947  O   LEU  202     150.233 113.851  16.339  1.00 46.50      DS4
ATOM  12948  N   VAL  203     148.511 114.292  17.713  1.00 43.80      DS4
ATOM  12949  CA  VAL  203     148.265 112.875  17.957  1.00 43.80      DS4
ATOM  12950  CB  VAL  203     147.326 112.642  19.170  1.00 49.42      DS4
ATOM  12951  CG1 VAL  203     146.975 111.168  19.281  1.00 49.42      DS4
ATOM  12952  CG2 VAL  203     148.009 113.092  20.451  1.00 49.42      DS4
ATOM  12953  C   VAL  203     147.645 112.221  16.739  1.00 43.80      DS4
ATOM  12954  O   VAL  203     148.010 111.112  16.365  1.00 43.80      DS4
ATOM  12955  N   ILE  204     146.701 112.915  16.119  1.00 43.64      DS4
ATOM  12956  CA  ILE  204     146.031 112.364  14.955  1.00 43.64      DS4
ATOM  12957  CB  ILE  204     144.919 113.295  14.477  1.00 61.96      DS4
ATOM  12958  CG2 ILE  204     144.308 112.764  13.191  1.00 61.96      DS4
ATOM  12959  CG1 ILE  204     143.869 113.425  15.579  1.00 61.96      DS4
ATOM  12960  CD1 ILE  204     142.700 114.317  15.206  1.00 61.96      DS4
ATOM  12961  C   ILE  204     147.033 112.164  13.842  1.00 43.64      DS4
ATOM  12962  O   ILE  204     146.997 111.164  13.131  1.00 43.64      DS4
ATOM  12963  N   GLU  205     147.937 113.125  13.706  1.00 55.08      DS4
ATOM  12964  CA  GLU  205     148.952 113.066  12.675  1.00 55.08      DS4
ATOM  12965  CB  GLU  205     149.769 114.351  12.667  1.00 77.59      DS4
ATOM  12966  CG  GLU  205     149.012 115.527  12.112  1.00 77.59      DS4
ATOM  12967  CD  GLU  205     149.804 116.810  12.188  1.00 77.59      DS4
ATOM  12968  OE1 GLU  205     149.361 117.817  11.584  1.00 77.59      DS4
ATOM  12969  OE2 GLU  205     150.863 116.811  12.858  1.00 77.59      DS4
ATOM  12970  C   GLU  205     149.863 111.888  12.904  1.00 55.08      DS4
ATOM  12971  O   GLU  205     150.291 111.238  11.962  1.00 55.08      DS4
ATOM  12972  N   PHE  206     150.157 111.610  14.163  1.00 54.31      DS4
ATOM  12973  CA  PHE  206     151.042 110.507  14.488  1.00 54.31      DS4
ATOM  12974  CB  PHE  206     151.166 110.364  15.991  1.00 32.80      DS4
ATOM  12975  CG  PHE  206     151.970 109.190  16.414  1.00 32.80      DS4
ATOM  12976  CD1 PHE  206     153.349 109.288  16.528  1.00 32.80      DS4
ATOM  12977  CD2 PHE  206     151.345 107.997  16.744  1.00 32.80      DS4
ATOM  12978  CE1 PHE  206     154.108 108.208  16.977  1.00 32.80      DS4
ATOM  12979  CE2 PHE  206     152.084 106.903  17.195  1.00 32.80      DS4
ATOM  12980  CZ  PHE  206     153.470 107.006  17.315  1.00 32.80      DS4
ATOM  12981  C   PHE  206     150.549 109.201  13.910  1.00 54.31      DS4
ATOM  12982  O   PHE  206     151.311 108.467  13.302  1.00 54.31      DS4
ATOM  12983  N   TYR  207     149.277 108.901  14.114  1.00 49.90      DS4
ATOM  12984  CA  TYR  207     148.729 107.670  13.595  1.00 49.90      DS4
ATOM  12985  CB  TYR  207     147.435 107.309  14.319  1.00 53.02      DS4
ATOM  12986  CG  TYR  207     147.676 106.873  15.739  1.00 53.02      DS4
ATOM  12987  CD1 TYR  207     147.110 107.563  16.802  1.00 53.02      DS4
ATOM  12988  CE1 TYR  207     147.385 107.204  18.123  1.00 53.02      DS4
ATOM  12989  CD2 TYR  207     148.524 105.797  16.029  1.00 53.02      DS4
ATOM  12990  CE2 TYR  207     148.802 105.431  17.352  1.00 53.02      DS4
ATOM  12991  CZ  TYR  207     148.229 106.146  18.386  1.00 53.02      DS4
ATOM  12992  OH  TYR  207     148.511 105.832  19.685  1.00 53.02      DS4
ATOM  12993  C   TYR  207     148.500 107.769  12.101  1.00 49.90      DS4
ATOM  12994  O   TYR  207     148.216 106.759  11.454  1.00 49.90      DS4
ATOM  12995  N   SER  208     148.621 108.979  11.551  1.00 49.96      DS4
ATOM  12996  CA  SER  208     148.460 109.177  10.107  1.00 49.96      DS4
ATOM  12997  CB  SER  208     148.565 110.652   9.729  1.00118.65      DS4
ATOM  12998  OG  SER  208     147.408 111.356  10.131  1.00118.65      DS4
ATOM  12999  C   SER  208     149.570 108.405   9.423  1.00 49.96      DS4
ATOM  13000  O   SER  208     149.300 107.544   8.591  1.00 49.96      DS4
ATOM  13001  N   ARG  209     150.816 108.708   9.784  1.00 95.70      DS4
ATOM  13002  CA  ARG  209     151.976 108.020   9.222  1.00 95.70      DS4
ATOM  13003  CB  ARG  209     153.218 108.256  10.091  1.00 82.26      DS4
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ATOM	13004	CG	ARG	209	154.289	107.165	9.982	1.00	82.26	DS4	ATOM	13057	CD2	LEU	9	147.196	99.321	-21.513	1.00	38.31	LS12
ATOM	13005	CD	ARG	209	155.354	107.311	11.056	1.00	82.26	DS4	ATOM	13058	C	LEU	9	144.619	97.690	-24.037	1.00	38.37	LS12
ATOM	13006	NE	ARG	209	156.512	108.060	10.582	1.00	82.26	DS4	ATOM	13059	O	LEU	9	144.669	96.731	-23.287	1.00	38.37	LS12
ATOM	13007	CZ	ARG	209	157.503	107.529	9.870	1.00	82.26	DS4	ATOM	13060	N	VAL	10	143.642	97.869	-24.912	1.00	46.18	LS12
ATOM	13008	NH1	ARG	209	157.478	106.239	9.552	1.00	82.26	DS4	ATOM	13061	CA	VAL	10	142.545	96.926	-25.012	1.00	46.18	LS12
ATOM	13009	NH2	ARG	209	158.520	108.286	9.479	1.00	82.26	DS4	ATOM	13062	CB	VAL	10	141.386	97.516	-25.795	1.00	29.16	LS12
ATOM	13010	C	ARG	209	151.694	106.527	9.156	1.00	95.70	DS4	ATOM	13063	CG1	VAL	10	140.352	96.444	-26.046	1.00	29.16	LS12
ATOM	13011	O	ARG	209	151.815	105.959	8.046	1.00	95.70	DS4	ATOM	13064	CG2	VAL	10	140.772	98.658	-25.012	1.00	29.16	LS12
ATOM	13012	OXT	ARG	209	151.360	105.952	10.221	1.00	82.26	DS4	ATOM	13065	C	VAL	10	142.985	95.663	-25.712	1.00	46.18	LS12
ATOM	13013	CB	PRO	4	150.067	101.576	-25.080	1.00	24.93	LS12	ATOM	13066	O	VAL	10	142.514	94.571	-25.403	1.00	46.18	LS12
ATOM	13014	CG	PRO	4	150.028	101.570	-23.532	1.00	24.93	LS12	ATOM	13067	N	ARG	11	143.892	95.823	-26.665	1.00	49.31	LS12
ATOM	13015	C	PRO	4	148.829	103.706	-25.499	1.00	21.67	LS12	ATOM	13068	CA	ARG	11	144.390	94.702	-27.438	1.00	49.31	LS12
ATOM	13016	O	PRO	4	148.324	104.274	-24.541	1.00	21.67	LS12	ATOM	13069	CB	ARG	11	144.986	95.191	-28.755	1.00	38.63	LS12
ATOM	13017	N	PRO	4	150.926	103.642	-24.219	1.00	21.67	LS12	ATOM	13070	CG	ARG	11	144.034	95.911	-29.661	1.00	38.63	LS12
ATOM	13018	CD	PRO	4	151.083	102.625	-23.155	1.00	24.93	LS12	ATOM	13071	CD	ARG	11	144.593	95.969	-31.068	1.00	38.63	LS12
ATOM	13019	CA	PRO	4	150.199	103.061	-25.369	1.00	21.67	LS12	ATOM	13072	NE	ARG	11	145.857	96.704	-31.140	1.00	38.63	LS12
ATOM	13020	N	THR	5	148.220	103.608	-26.675	1.00	21.49	LS12	ATOM	13073	CZ	ARG	11	147.007	96.181	-31.556	1.00	38.63	LS12
ATOM	13021	CA	THR	5	146.901	104.191	-26.886	1.00	21.49	LS12	ATOM	13074	NH1	ARG	11	147.058	94.910	-31.936	1.00	38.63	LS12
ATOM	13022	CB	THR	5	146.497	104.154	-28.347	1.00	18.30	LS12	ATOM	13075	NH2	ARG	11	148.100	96.927	-31.609	1.00	38.63	LS12
ATOM	13023	OG1	THR	5	146.263	102.797	-28.729	1.00	18.30	LS12	ATOM	13076	C	ARG	11	145.455	93.911	-26.706	1.00	49.31	LS12
ATOM	13024	CG2	THR	5	147.573	104.736	-29.213	1.00	18.30	LS12	ATOM	13077	O	ARG	11	145.507	92.690	-26.822	1.00	49.31	LS12
ATOM	13025	C	THR	5	145.923	103.329	-26.112	1.00	21.49	LS12	ATOM	13078	N	LYS	12	146.307	94.603	-25.954	1.00	43.64	LS12
ATOM	13026	O	THR	5	146.285	102.239	-25.689	1.00	21.49	LS12	ATOM	13079	CA	LYS	12	147.407	93.938	-25.258	1.00	43.64	LS12
ATOM	13027	N	ILE	6	144.694	103.810	-25.914	1.00	37.71	LS12	ATOM	13080	CB	LYS	12	148.721	94.456	-25.825	1.00	76.30	LS12
ATOM	13028	CA	ILE	6	143.694	103.034	-25.175	1.00	37.71	LS12	ATOM	13081	CG	LYS	12	148.802	94.249	-27.328	1.00	76.30	LS12
ATOM	13029	CB	ILE	6	142.391	103.862	-24.865	1.00	28.70	LS12	ATOM	13082	CD	LYS	12	150.077	94.809	-27.921	1.00	76.30	LS12
ATOM	13030	CG2	ILE	6	141.209	102.944	-24.574	1.00	28.70	LS12	ATOM	13083	CE	LYS	12	150.283	94.311	-29.341	1.00	76.30	LS12
ATOM	13031	CG1	ILE	6	142.585	104.698	-23.614	1.00	28.70	LS12	ATOM	13084	NZ	LYS	12	151.502	94.934	-29.949	1.00	76.30	LS12
ATOM	13032	CD1	ILE	6	142.826	103.864	-22.413	1.00	28.70	LS12	ATOM	13085	C	LYS	12	147.392	94.061	-23.738	1.00	43.64	LS12
ATOM	13033	C	ILE	6	143.322	101.816	-25.994	1.00	37.71	LS12	ATOM	13086	O	LYS	12	147.953	93.226	-23.029	1.00	43.64	LS12
ATOM	13034	O	ILE	6	142.930	100.805	-25.443	1.00	37.71	LS12	ATOM	13087	N	GLY	13	146.752	95.101	-23.229	1.00	34.18	LS12
ATOM	13035	N	ASN	7	143.451	101.901	-27.310	1.00	41.66	LS12	ATOM	13088	CA	GLY	13	146.680	95.250	-21.792	1.00	34.18	LS12
ATOM	13036	CA	ASN	7	143.103	100.751	-28.130	1.00	41.66	LS12	ATOM	13089	C	GLY	13	148.034	95.324	-21.139	1.00	34.18	LS12
ATOM	13037	CB	ASN	7	142.954	101.148	-29.584	1.00	46.75	LS12	ATOM	13090	O	GLY	13	149.063	95.253	-21.808	1.00	34.18	LS12
ATOM	13038	CG	ASN	7	142.327	100.066	-30.406	1.00	46.75	LS12	ATOM	13091	N	ARG	14	148.026	95.478	-19.820	1.00	37.98	LS12
ATOM	13039	OD1	ASN	7	141.227	99.624	-30.116	1.00	46.75	LS12	ATOM	13092	CA	ARG	14	149.256	95.572	-19.051	1.00	37.98	LS12
ATOM	13040	ND2	ASN	7	143.021	99.632	-31.440	1.00	46.75	LS12	ATOM	13093	CB	ARG	14	149.037	96.534	-17.904	1.00	40.40	LS12
ATOM	13041	C	ASN	7	144.170	99.673	-28.006	1.00	41.66	LS12	ATOM	13094	CG	ARG	14	148.668	97.931	-18.368	1.00	40.40	LS12
ATOM	13042	O	ASN	7	143.871	98.474	-28.052	1.00	41.66	LS12	ATOM	13095	CD	ARG	14	149.824	98.623	-19.054	1.00	40.40	LS12
ATOM	13043	N	GLN	8	145.419	100.102	-27.853	1.00	47.37	LS12	ATOM	13096	NE	ARG	14	149.520	100.022	-19.330	1.00	40.40	LS12
ATOM	13044	CA	GLN	8	146.506	99.155	-27.695	1.00	47.37	LS12	ATOM	13097	CZ	ARG	14	150.411	100.932	-19.721	1.00	40.40	LS12
ATOM	13045	CB	GLN	8	147.854	99.861	-27.742	1.00	42.15	LS12	ATOM	13098	NH1	ARG	14	151.683	100.598	-19.893	1.00	40.40	LS12
ATOM	13046	CG	GLN	8	148.166	100.484	-29.074	1.00	42.15	LS12	ATOM	13099	NH2	ARG	14	150.034	102.186	-19.931	1.00	40.40	LS12
ATOM	13047	CD	GLN	8	149.494	101.213	-29.069	1.00	42.15	LS12	ATOM	13100	C	ARG	14	149.674	94.206	-18.534	1.00	37.98	LS12
ATOM	13048	OE1	GLN	8	149.730	102.108	-28.241	1.00	42.15	LS12	ATOM	13101	O	ARG	14	148.856	93.302	-18.452	1.00	37.98	LS12
ATOM	13049	NE2	GLN	8	150.371	100.844	-30.003	1.00	42.15	LS12	ATOM	13102	N	GLU	15	150.951	94.047	-18.210	1.00	35.19	LS12
ATOM	13050	C	GLN	8	146.333	98.494	-26.346	1.00	47.37	LS12	ATOM	13103	CA	GLU	15	151.456	92.774	-17.703	1.00	35.19	LS12
ATOM	13051	O	GLN	8	146.584	97.301	-26.197	1.00	47.37	LS12	ATOM	13104	CB	GLU	15	152.753	92.398	-18.398	1.00	89.26	LS12
ATOM	13052	N	LEU	9	145.903	99.272	-25.359	1.00	38.37	LS12	ATOM	13105	CG	GLU	15	153.290	91.059	-17.963	1.00	89.26	LS12
ATOM	13053	CA	LEU	9	145.697	98.736	-24.022	1.00	38.37	LS12	ATOM	13106	CD	GLU	15	154.630	90.750	-18.584	1.00	89.26	LS12
ATOM	13054	CB	LEU	9	145.333	99.845	-23.045	1.00	38.31	LS12	ATOM	13107	OE1	GLU	15	155.642	91.324	-18.134	1.00	89.26	LS12
ATOM	13055	CG	LEU	9	146.626	100.390	-22.446	1.00	38.31	LS12	ATOM	13108	OE2	GLU	15	154.670	89.940	-19.533	1.00	89.26	LS12
ATOM	13056	CD1	LEU	9	146.397	101.687	-21.707	1.00	38.31	LS12	ATOM	13109	C	GLU	15	151.710	92.857	-16.210	1.00	35.19	LS12

ATOM	13110	O	GLU	15	152.484	93.700	-15.768	1.00	35.19	LS12	ATOM	13163	CA	LYS	22	165.251	85.023	-2.697	1.00	53.64	LS12
ATOM	13111	N	LYS	16	151.063	91.983	-15.438	1.00	38.69	LS12	ATOM	13164	CB	LYS	22	165.602	86.451	-2.289	1.00	78.03	LS12
ATOM	13112	CA	LYS	16	151.224	91.975	-13.989	1.00	38.69	LS12	ATOM	13165	CG	LYS	22	165.265	87.420	-3.402	1.00	78.03	LS12
ATOM	13113	CB	LYS	16	150.343	90.909	-13.353	1.00	47.00	LS12	ATOM	13166	CD	LYS	22	165.747	88.829	-3.147	1.00	78.03	LS12
ATOM	13114	CG	LYS	16	148.853	91.050	-13.579	1.00	47.00	LS12	ATOM	13167	CE	LYS	22	165.461	89.703	-4.369	1.00	78.03	LS12
ATOM	13115	CD	LYS	16	148.242	92.103	-12.691	1.00	47.00	LS12	ATOM	13168	NZ	LYS	22	165.937	91.115	-4.210	1.00	78.03	LS12
ATOM	13116	CE	LYS	16	146.722	92.041	-12.754	1.00	47.00	LS12	ATOM	13169	C	LYS	22	165.684	84.012	-1.651	1.00	53.64	LS12
ATOM	13117	NZ	LYS	16	146.182	90.732	-12.286	1.00	47.00	LS12	ATOM	13170	O	LYS	22	166.769	84.105	-1.085	1.00	53.64	LS12
ATOM	13118	C	LYS	16	152.657	91.658	-13.632	1.00	38.69	LS12	ATOM	13171	N	VAL	23	164.821	83.022	-1.437	1.00	47.00	LS12
ATOM	13119	O	LYS	16	153.349	90.976	-14.377	1.00	38.69	LS12	ATOM	13172	CA	VAL	23	165.043	81.998	-0.435	1.00	47.00	LS12
ATOM	13120	N	VAL	17	153.113	92.139	-12.487	1.00	80.51	LS12	ATOM	13173	CB	VAL	23	164.486	82.469	0.935	1.00	42.43	LS12
ATOM	13121	CA	VAL	17	154.473	91.839	-12.065	1.00	80.51	LS12	ATOM	13174	CG1	VAL	23	164.491	81.335	1.946	1.00	42.43	LS12
ATOM	13122	CB	VAL	17	155.008	92.933	-11.130	1.00	88.52	LS12	ATOM	13175	CG2	VAL	23	165.337	83.587	1.462	1.00	42.43	LS12
ATOM	13123	CG1	VAL	17	156.293	92.472	-10.462	1.00	88.52	LS12	ATOM	13176	C	VAL	23	164.417	80.652	-0.802	1.00	47.00	LS12
ATOM	13124	CG2	VAL	17	155.255	94.202	-11.930	1.00	88.52	LS12	ATOM	13177	O	VAL	23	163.463	80.188	-0.168	1.00	47.00	LS12
ATOM	13125	C	VAL	17	154.496	90.495	-11.338	1.00	80.51	LS12	ATOM	13178	N	PRO	24	164.918	80.024	-1.869	1.00	44.71	LS12
ATOM	13126	O	VAL	17	153.536	90.138	-10.658	1.00	80.51	LS12	ATOM	13179	CD	PRO	24	165.705	80.605	-2.977	1.00	36.19	LS12
ATOM	13127	N	ARG	18	155.579	89.741	-11.492	1.00	67.67	LS12	ATOM	13180	CA	PRO	24	164.332	78.721	-2.220	1.00	44.71	LS12
ATOM	13128	CA	ARG	18	155.699	88.444	-10.820	1.00	67.67	LS12	ATOM	13181	CB	PRO	24	165.020	78.380	-3.521	1.00	36.19	LS12
ATOM	13129	CB	ARG	18	155.823	87.308	-11.843	1.00	141.95	LS12	ATOM	13182	CG	PRO	24	165.266	79.780	-4.148	1.00	36.19	LS12
ATOM	13130	CG	ARG	18	155.177	87.590	-13.201	1.00	141.95	LS12	ATOM	13183	C	PRO	24	164.593	77.687	-1.101	1.00	44.71	LS12
ATOM	13131	CD	ARG	18	153.652	87.682	-13.156	1.00	141.95	LS12	ATOM	13184	O	PRO	24	165.653	77.039	-1.017	1.00	44.71	LS12
ATOM	13132	NE	ARG	18	153.124	88.293	-14.381	1.00	141.95	LS12	ATOM	13185	N	ALA	25	163.608	77.635	-0.201	1.00	72.87	LS12
ATOM	13133	CZ	ARG	18	151.839	88.315	-14.727	1.00	141.95	LS12	ATOM	13186	CA	ALA	25	163.502	76.749	0.972	1.00	72.87	LS12
ATOM	13134	NH1	ARG	18	150.930	87.750	-13.942	1.00	141.95	LS12	ATOM	13187	CB	ALA	25	163.452	77.586	2.290	1.00	20.49	LS12
ATOM	13135	NH2	ARG	18	151.457	88.915	-15.851	1.00	141.95	LS12	ATOM	13188	C	ALA	25	162.107	76.275	0.628	1.00	72.87	LS12
ATOM	13136	C	ARG	18	156.961	88.510	-9.969	1.00	67.67	LS12	ATOM	13189	O	ALA	25	161.256	76.113	1.501	1.00	72.87	LS12
ATOM	13137	O	ARG	18	158.051	88.729	-10.485	1.00	67.67	LS12	ATOM	13190	N	LEU	26	161.920	76.099	-0.685	1.00	54.25	LS12
ATOM	13138	N	LYS	19	156.821	88.332	-8.663	1.00	70.41	LS12	ATOM	13191	CA	LEU	26	160.668	75.741	-1.345	1.00	54.25	LS12
ATOM	13139	CA	LYS	19	157.992	88.400	-7.795	1.00	70.41	LS12	ATOM	13192	CB	LEU	26	160.726	74.389	-2.071	1.00	69.11	LS12
ATOM	13140	CB	LYS	19	157.610	88.912	-6.404	1.00	134.58	LS12	ATOM	13193	CG	LEU	26	161.345	73.115	-1.533	1.00	69.11	LS12
ATOM	13141	CG	LYS	19	157.201	90.377	-6.411	1.00	134.58	LS12	ATOM	13194	CD1	LEU	26	160.952	71.929	-2.422	1.00	69.11	LS12
ATOM	13142	CD	LYS	19	158.238	91.225	-7.144	1.00	134.58	LS12	ATOM	13195	CD2	LEU	26	162.850	73.294	-1.512	1.00	69.11	LS12
ATOM	13143	CE	LYS	19	157.768	92.654	-7.291	1.00	134.58	LS12	ATOM	13196	C	LEU	26	159.455	75.809	-0.481	1.00	54.25	LS12
ATOM	13144	NZ	LYS	19	158.752	93.496	-8.029	1.00	134.58	LS12	ATOM	13197	O	LEU	26	159.391	76.665	0.389	1.00	54.25	LS12
ATOM	13145	C	LYS	19	158.762	87.095	-7.677	1.00	70.41	LS12	ATOM	13198	N	LYS	27	158.495	74.923	-0.739	1.00	143.57	LS12
ATOM	13146	O	LYS	19	158.190	86.002	-7.756	1.00	70.41	LS12	ATOM	13199	CA	LYS	27	157.237	74.899	-0.004	1.00	143.57	LS12
ATOM	13147	N	LYS	20	160.069	87.233	-7.470	1.00	53.66	LS12	ATOM	13200	CB	LYS	27	157.057	73.569	0.749	1.00	133.32	LS12
ATOM	13148	CA	LYS	20	160.963	86.094	-7.383	1.00	53.66	LS12	ATOM	13201	CG	LYS	27	158.259	73.069	1.527	1.00	133.32	LS12
ATOM	13149	CB	LYS	20	162.089	86.269	-8.396	1.00	92.59	LS12	ATOM	13202	CD	LYS	27	157.843	71.968	2.499	1.00	133.32	LS12
ATOM	13150	CG	LYS	20	162.760	84.984	-8.814	1.00	92.59	LS12	ATOM	13203	CE	LYS	27	157.125	70.811	1.800	1.00	133.32	LS12
ATOM	13151	CD	LYS	20	163.298	85.143	-10.223	1.00	92.59	LS12	ATOM	13204	NZ	LYS	27	156.668	69.763	2.768	1.00	133.32	LS12
ATOM	13152	CE	LYS	20	162.185	85.572	-11.194	1.00	92.59	LS12	ATOM	13205	C	LYS	27	157.163	76.088	0.947	1.00	143.57	LS12
ATOM	13153	NZ	LYS	20	162.652	85.764	-12.596	1.00	92.59	LS12	ATOM	13206	O	LYS	27	156.910	75.938	2.145	1.00	143.57	LS12
ATOM	13154	C	LYS	20	161.552	85.903	-6.002	1.00	53.66	LS12	ATOM	13207	N	GLY	28	157.403	77.267	0.370	1.00	57.14	LS12
ATOM	13155	O	LYS	20	162.251	86.775	-5.494	1.00	53.66	LS12	ATOM	13208	CA	GLY	28	157.395	78.523	1.097	1.00	57.14	LS12
ATOM	13156	N	SER	21	161.289	84.743	-5.410	1.00	52.61	LS12	ATOM	13209	C	GLY	28	157.378	78.333	2.587	1.00	57.14	LS12
ATOM	13157	CA	SER	21	161.807	84.452	-4.087	1.00	52.61	LS12	ATOM	13210	O	GLY	28	156.443	78.762	3.273	1.00	57.14	LS12
ATOM	13158	CB	SER	21	161.427	83.055	-3.643	1.00	52.54	LS12	ATOM	13211	N	ALA	29	158.413	77.675	3.088	1.00	47.18	LS12
ATOM	13159	OG	SER	21	161.991	82.808	-2.372	1.00	52.54	LS12	ATOM	13212	CA	ALA	29	158.501	77.409	4.510	1.00	47.18	LS12
ATOM	13160	C	SER	21	163.306	84.561	-4.031	1.00	52.61	LS12	ATOM	13213	CB	ALA	29	159.152	76.067	4.742	1.00	83.24	LS12
ATOM	13161	O	SER	21	163.995	84.331	-5.020	1.00	52.61	LS12	ATOM	13214	C	ALA	29	159.273	78.498	5.214	1.00	47.18	LS12
ATOM	13162	N	LYS	22	163.816	84.911	-2.863	1.00	53.64	LS12	ATOM	13215	O	ALA	29	160.139	79.142	4.633	1.00	47.18	LS12

ATOM	13216	N	PRO	30	158.934	78.749	6.472	1.00	37.70	LS12	ATOM	13269	CB	CYS	36	176.991	70.580	9.052	1.00	70.35	LS12
ATOM	13217	CD	PRO	30	157.747	78.254	7.182	1.00	25.78	LS12	ATOM	13270	SG	CYS	36	176.149	71.896	9.954	1.00	70.35	LS12
ATOM	13218	CA	PRO	30	159.630	79.782	7.238	1.00	37.70	LS12	ATOM	13271	C	CYS	36	177.001	69.073	7.048	1.00	53.58	LS12
ATOM	13219	CB	PRO	30	158.743	79.967	8.471	1.00	25.78	LS12	ATOM	13272	O	CYS	36	177.165	67.919	7.447	1.00	53.58	LS12
ATOM	13220	CG	PRO	30	158.059	78.625	8.606	1.00	25.78	LS12	ATOM	13273	N	THR	37	177.485	69.536	5.905	1.00	69.50	LS12
ATOM	13221	C	PRO	30	161.040	79.324	7.592	1.00	37.70	LS12	ATOM	13274	CA	THR	37	178.269	68.752	4.965	1.00	69.50	LS12
ATOM	13222	O	PRO	30	161.964	80.140	7.661	1.00	37.70	LS12	ATOM	13275	CB	THR	37	177.448	68.500	3.705	1.00	70.41	LS12
ATOM	13223	N	PHE	31	161.195	78.020	7.813	1.00	59.39	LS12	ATOM	13276	OG1	THR	37	176.343	67.647	4.032	1.00	70.41	LS12
ATOM	13224	CA	PHE	31	162.492	77.434	8.148	1.00	59.39	LS12	ATOM	13277	CG2	THR	37	178.301	67.871	2.619	1.00	70.41	LS12
ATOM	13225	CB	PHE	31	162.658	77.274	9.652	1.00	37.56	LS12	ATOM	13278	C	THR	37	179.457	69.623	4.611	1.00	69.50	LS12
ATOM	13226	CG	PHE	31	162.348	78.501	10.420	1.00	37.56	LS12	ATOM	13279	O	THR	37	179.693	69.915	3.441	1.00	69.50	LS12
ATOM	13227	CD1	PHE	31	163.216	79.576	10.405	1.00	37.56	LS12	ATOM	13280	N	VAL	38	180.177	70.043	5.645	1.00	52.73	LS12
ATOM	13228	CD2	PHE	31	161.162	78.595	11.138	1.00	37.56	LS12	ATOM	13281	CA	VAL	38	181.336	70.928	5.549	1.00	52.73	LS12
ATOM	13229	CE1	PHE	31	162.902	80.724	11.090	1.00	37.56	LS12	ATOM	13282	CB	VAL	38	181.643	71.408	4.114	1.00	58.12	LS12
ATOM	13230	CE2	PHE	31	160.840	79.733	11.826	1.00	37.56	LS12	ATOM	13283	CG1	VAL	38	182.545	72.624	4.167	1.00	58.12	LS12
ATOM	13231	CZ	PHE	31	161.703	80.802	11.807	1.00	37.56	LS12	ATOM	13284	CG2	VAL	38	182.342	70.319	3.332	1.00	58.12	LS12
ATOM	13232	C	PHE	31	162.593	76.057	7.533	1.00	59.39	LS12	ATOM	13285	C	VAL	38	180.999	72.168	6.349	1.00	52.73	LS12
ATOM	13233	O	PHE	31	161.587	75.473	7.124	1.00	59.39	LS12	ATOM	13286	O	VAL	38	179.929	72.748	6.176	1.00	52.73	LS12
ATOM	13234	N	ARG	32	163.809	75.524	7.500	1.00	40.54	LS12	ATOM	13287	N	VAL	39	181.920	72.571	7.217	1.00	41.53	LS12
ATOM	13235	CA	ARG	32	164.026	74.203	6.933	1.00	40.54	LS12	ATOM	13288	CA	VAL	39	181.740	73.754	8.043	1.00	41.53	LS12
ATOM	13236	CB	ARG	32	164.290	74.333	5.427	1.00	70.85	LS12	ATOM	13289	CB	VAL	39	181.576	73.346	9.515	1.00	32.07	LS12
ATOM	13237	CG	ARG	32	163.496	73.363	4.577	1.00	70.85	LS12	ATOM	13290	CG1	VAL	39	181.488	74.567	10.398	1.00	32.07	LS12
ATOM	13238	CD	ARG	32	162.019	73.403	4.948	1.00	70.85	LS12	ATOM	13291	CG2	VAL	39	180.316	72.496	9.669	1.00	32.07	LS12
ATOM	13239	NE	ARG	32	161.354	72.142	4.630	1.00	70.85	LS12	ATOM	13292	C	VAL	39	182.992	74.591	7.837	1.00	41.53	LS12
ATOM	13240	CZ	ARG	32	160.910	71.808	3.421	1.00	70.85	LS12	ATOM	13293	O	VAL	39	183.890	74.583	8.657	1.00	41.53	LS12
ATOM	13241	NH1	ARG	32	161.047	72.651	2.404	1.00	70.85	LS12	ATOM	13294	N	ARG	40	183.029	75.310	6.720	1.00	53.57	LS12
ATOM	13242	NH2	ARG	32	160.348	70.619	3.226	1.00	70.85	LS12	ATOM	13295	CA	ARG	40	184.168	76.134	6.313	1.00	53.57	LS12
ATOM	13243	C	ARG	32	165.212	73.583	7.640	1.00	40.54	LS12	ATOM	13296	CB	ARG	40	184.059	76.388	4.807	1.00	117.50	LS12
ATOM	13244	O	ARG	32	166.180	74.276	7.918	1.00	40.54	LS12	ATOM	13297	CG	ARG	40	185.292	76.962	4.154	1.00	117.50	LS12
ATOM	13245	N	ARG	33	165.148	72.294	7.960	1.00	49.75	LS12	ATOM	13298	CD	ARG	40	185.254	76.682	2.671	1.00	117.50	LS12
ATOM	13246	CA	ARG	33	166.292	71.678	8.629	1.00	49.75	LS12	ATOM	13299	NE	ARG	40	185.102	75.250	2.422	1.00	117.50	LS12
ATOM	13247	CB	ARG	33	165.852	70.774	9.780	1.00	72.37	LS12	ATOM	13300	CZ	ARG	40	185.060	74.694	1.213	1.00	117.50	LS12
ATOM	13248	CG	ARG	33	165.152	69.543	9.320	1.00	72.37	LS12	ATOM	13301	NH1	ARG	40	185.158	75.454	0.127	1.00	117.50	LS12
ATOM	13249	CD	ARG	33	165.305	68.410	10.299	1.00	72.37	LS12	ATOM	13302	NH2	ARG	40	184.924	73.377	1.089	1.00	117.50	LS12
ATOM	13250	NE	ARG	33	164.794	67.186	9.696	1.00	72.37	LS12	ATOM	13303	C	ARG	40	184.373	77.463	7.046	1.00	53.57	LS12
ATOM	13251	CZ	ARG	33	164.762	65.998	10.289	1.00	72.37	LS12	ATOM	13304	O	ARG	40	183.675	77.766	8.020	1.00	53.57	LS12
ATOM	13252	NH1	ARG	33	165.220	65.845	11.531	1.00	72.37	LS12	ATOM	13305	N	THR	41	185.350	78.235	6.556	1.00	80.85	LS12
ATOM	13253	NH2	ARG	33	164.255	64.959	9.637	1.00	72.37	LS12	ATOM	13306	CA	THR	41	185.719	79.544	7.097	1.00	80.85	LS12
ATOM	13254	C	ARG	33	167.156	70.875	7.662	1.00	49.75	LS12	ATOM	13307	CB	THR	41	187.249	79.722	7.210	1.00	96.58	LS12
ATOM	13255	O	ARG	33	166.728	70.508	6.560	1.00	49.75	LS12	ATOM	13308	OG1	THR	41	187.773	78.818	8.188	1.00	96.58	LS12
ATOM	13256	N	GLY	34	168.383	70.610	8.085	1.00	63.40	LS12	ATOM	13309	CG2	THR	41	187.584	81.133	7.633	1.00	96.58	LS12
ATOM	13257	CA	GLY	34	169.297	69.865	7.248	1.00	63.40	LS12	ATOM	13310	C	THR	41	185.184	80.683	6.239	1.00	80.85	LS12
ATOM	13258	C	GLY	34	170.509	69.445	8.043	1.00	63.40	LS12	ATOM	13311	O	THR	41	184.405	81.476	6.731	1.00	80.85	LS12
ATOM	13259	O	GLY	34	170.507	69.532	9.279	1.00	63.40	LS12	ATOM	13312	N	VAL	42	185.609	80.796	4.978	1.00	46.46	LS12
ATOM	13260	N	VAL	35	171.546	68.994	7.342	1.00	55.92	LS12	ATOM	13313	CA	VAL	42	185.095	81.869	4.102	1.00	46.46	LS12
ATOM	13261	CA	VAL	35	172.766	68.552	8.005	1.00	55.92	LS12	ATOM	13314	CB	VAL	42	183.552	81.847	4.076	1.00	44.62	LS12
ATOM	13262	CB	VAL	35	172.965	67.038	7.884	1.00	43.87	LS12	ATOM	13315	CG1	VAL	42	183.020	83.206	3.696	1.00	44.62	LS12
ATOM	13263	CG1	VAL	35	173.971	66.590	8.904	1.00	43.87	LS12	ATOM	13316	CG2	VAL	42	183.059	80.804	3.097	1.00	44.62	LS12
ATOM	13264	CG2	VAL	35	171.658	66.309	8.072	1.00	43.87	LS12	ATOM	13317	C	VAL	42	185.496	83.314	4.437	1.00	46.46	LS12
ATOM	13265	C	VAL	35	174.003	69.210	7.428	1.00	55.92	LS12	ATOM	13318	O	VAL	42	185.256	83.775	5.551	1.00	46.46	LS12
ATOM	13266	O	VAL	35	174.088	69.471	6.231	1.00	55.92	LS12	ATOM	13319	N	THR	43	186.064	84.045	3.474	1.00	56.80	LS12
ATOM	13267	N	CYS	36	174.971	69.470	8.289	1.00	53.58	LS12	ATOM	13320	CA	THR	43	186.453	85.449	3.713	1.00	56.80	LS12
ATOM	13268	CA	CYS	36	176.199	70.085	7.848	1.00	53.58	LS12	ATOM	13321	CB	THR	43	187.848	85.804	3.101	1.00	47.64	LS12

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ATOM  13322  OG1 THR  43     187.720  86.014   1.686  1.00 47.64      LS12
ATOM  13323  CG2 THR  43     188.850  84.693   3.354  1.00 47.64      LS12
ATOM  13324  C   THR  43     185.412  86.380   3.081  1.00 56.80      LS12
ATOM  13325  O   THR  43     184.782  86.022   2.092  1.00 56.80      LS12
ATOM  13326  N   PRO  44     185.228  87.589   3.636  1.00 42.01      LS12
ATOM  13327  CD  PRO  44     185.944  88.184   4.774  1.00 52.50      LS12
ATOM  13328  CA  PRO  44     184.250  88.535   3.097  1.00 42.01      LS12
ATOM  13329  CB  PRO  44     184.188  89.614   4.175  1.00 52.50      LS12
ATOM  13330  CG  PRO  44     185.578  89.646   4.668  1.00 52.50      LS12
ATOM  13331  C   PRO  44     184.645  89.081   1.729  1.00 42.01      LS12
ATOM  13332  O   PRO  44     185.734  88.784   1.239  1.00 42.01      LS12
ATOM  13333  N   LYS  45     183.759  89.890   1.141  1.00 47.71      LS12
ATOM  13334  CA  LYS  45     183.942  90.465  -0.199  1.00 47.71      LS12
ATOM  13335  CB  LYS  45     182.639  90.359  -0.993  1.00179.82      LS12
ATOM  13336  CG  LYS  45     181.996  88.989  -0.960  1.00179.82      LS12
ATOM  13337  CD  LYS  45     180.594  89.022  -1.552  1.00179.82      LS12
ATOM  13338  CE  LYS  45     180.621  88.918  -3.068  1.00179.82      LS12
ATOM  13339  NZ  LYS  45     179.261  88.738  -3.634  1.00179.82      LS12
ATOM  13340  C   LYS  45     184.382  91.916  -0.249  1.00 47.71      LS12
ATOM  13341  O   LYS  45     185.011  92.416   0.676  1.00 47.71      LS12
ATOM  13342  N   LYS  46     183.998  92.577  -1.347  1.00 89.84      LS12
ATOM  13343  CA  LYS  46     184.316  93.987  -1.641  1.00 89.84      LS12
ATOM  13344  CB  LYS  46     183.002  94.797  -1.878  1.00 58.81      LS12
ATOM  13345  CG  LYS  46     182.150  94.319  -3.138  1.00 58.81      LS12
ATOM  13346  CD  LYS  46     180.773  95.080  -3.359  1.00 58.81      LS12
ATOM  13347  CE  LYS  46     179.869  94.446  -4.461  1.00 58.81      LS12
ATOM  13348  NZ  LYS  46     180.239  94.722  -5.890  1.00 58.81      LS12
ATOM  13349  C   LYS  46     185.247  94.569  -0.562  1.00 89.84      LS12
ATOM  13350  O   LYS  46     186.450  94.343  -0.652  1.00 89.84      LS12
ATOM  13351  N   PRO  47     184.747  95.331   0.436  1.00 73.97      LS12
ATOM  13352  CD  PRO  47     183.448  95.970   0.720  1.00 28.83      LS12
ATOM  13353  CA  PRO  47     185.745  95.799   1.405  1.00 73.97      LS12
ATOM  13354  CB  PRO  47     185.286  97.213   1.724  1.00 28.83      LS12
ATOM  13355  CG  PRO  47     183.815  97.038   1.833  1.00 28.83      LS12
ATOM  13356  C   PRO  47     185.528  94.841   2.569  1.00 73.97      LS12
ATOM  13357  O   PRO  47     184.745  93.898   2.432  1.00 73.97      LS12
ATOM  13358  N   ASN  48     186.184  95.051   3.700  1.00 48.70      LS12
ATOM  13359  CA  ASN  48     185.988  94.131   4.820  1.00 48.70      LS12
ATOM  13360  CB  ASN  48     184.526  93.747   4.956  1.00 48.60      LS12
ATOM  13361  CG  ASN  48     183.694  94.888   5.407  1.00 48.60      LS12
ATOM  13362  OD1 ASN  48     182.471  94.813   5.386  1.00 48.60      LS12
ATOM  13363  ND2 ASN  48     184.354  95.975   5.833  1.00 48.60      LS12
ATOM  13364  C   ASN  48     186.785  92.846   4.766  1.00 48.70      LS12
ATOM  13365  O   ASN  48     186.854  92.171   3.736  1.00 48.70      LS12
ATOM  13366  N   SER  49     187.361  92.503   5.910  1.00 49.24      LS12
ATOM  13367  CA  SER  49     188.161  91.308   6.037  1.00 49.24      LS12
ATOM  13368  CB  SER  49     189.635  91.686   6.088  1.00 64.18      LS12
ATOM  13369  OG  SER  49     190.426  90.572   6.434  1.00 64.18      LS12
ATOM  13370  C   SER  49     187.744  90.635   7.327  1.00 49.24      LS12
ATOM  13371  O   SER  49     187.570  91.298   8.341  1.00 49.24      LS12
ATOM  13372  N   ALA  50     187.566  89.324   7.281  1.00 48.18      LS12
ATOM  13373  CA  ALA  50     187.172  88.577   8.459  1.00 48.18      LS12
ATOM  13374  CB  ALA  50     185.870  89.115   8.997  1.00 60.34      LS12
ATOM  13375  C   ALA  50     187.016  87.123   8.050  1.00 48.18      LS12
ATOM  13376  O   ALA  50     187.031  86.818   6.862  1.00 48.18      LS12
ATOM  13377  N   LEU  51     186.881  86.213   9.008  1.00 42.63      LS12
ATOM  13378  CA  LEU  51     186.731  84.818   8.628  1.00 42.63      LS12
ATOM  13379  CB  LEU  51     187.756  83.953   9.367  1.00 69.16      LS12
ATOM  13380  CG  LEU  51     189.247  84.245   9.127  1.00 69.16      LS12
ATOM  13381  CD1 LEU  51     190.093  83.267   9.916  1.00 69.16      LS12
ATOM  13382  CD2 LEU  51     189.580  84.128   7.652  1.00 69.16      LS12
ATOM  13383  C   LEU  51     185.319  84.366   8.945  1.00 42.63      LS12
ATOM  13384  O   LEU  51     185.113  83.582   9.868  1.00 42.63      LS12
ATOM  13385  N   ARG  52     184.345  84.858   8.178  1.00 55.51      LS12
ATOM  13386  CA  ARG  52     182.935  84.520   8.406  1.00 55.51      LS12
ATOM  13387  CB  ARG  52     182.054  85.121   7.296  1.00 64.21      LS12
ATOM  13388  CG  ARG  52     181.738  86.599   7.455  1.00 64.21      LS12
ATOM  13389  CD  ARG  52     182.998  87.401   7.348  1.00 64.21      LS12
ATOM  13390  NE  ARG  52     182.961  88.607   8.174  1.00 64.21      LS12
ATOM  13391  CZ  ARG  52     182.291  89.710   7.870  1.00 64.21      LS12
ATOM  13392  NH1 ARG  52     181.575  89.777   6.745  1.00 64.21      LS12
ATOM  13393  NH2 ARG  52     182.369  90.758   8.678  1.00 64.21      LS12
ATOM  13394  C   ARG  52     182.639  83.026   8.512  1.00 55.51      LS12
ATOM  13395  O   ARG  52     182.707  82.316   7.525  1.00 55.51      LS12
ATOM  13396  N   LYS  53     182.282  82.541   9.695  1.00 50.61      LS12
ATOM  13397  CA  LYS  53     181.979  81.116   9.823  1.00 50.61      LS12
ATOM  13398  CB  LYS  53     181.804  80.729  11.294  1.00 49.23      LS12
ATOM  13399  CG  LYS  53     182.731  81.485  12.241  1.00 49.23      LS12
ATOM  13400  CD  LYS  53     184.190  81.249  11.939  1.00 49.23      LS12
ATOM  13401  CE  LYS  53     185.010  82.496  12.223  1.00 49.23      LS12
ATOM  13402  NZ  LYS  53     184.751  83.066  13.558  1.00 49.23      LS12
ATOM  13403  C   LYS  53     180.710  80.765   9.024  1.00 50.61      LS12
ATOM  13404  O   LYS  53     179.645  81.359   9.209  1.00 50.61      LS12
ATOM  13405  N   VAL  54     180.839  79.783   8.141  1.00 67.65      LS12
ATOM  13406  CA  VAL  54     179.746  79.355   7.291  1.00 67.65      LS12
ATOM  13407  CB  VAL  54     180.033  79.794   5.857  1.00 59.08      LS12
ATOM  13408  CG1 VAL  54     178.859  79.477   4.954  1.00 59.08      LS12
ATOM  13409  CG2 VAL  54     180.344  81.268   5.840  1.00 59.08      LS12
ATOM  13410  C   VAL  54     179.622  77.837   7.317  1.00 67.65      LS12
ATOM  13411  O   VAL  54     180.580  77.147   7.660  1.00 67.65      LS12
ATOM  13412  N   ALA  55     178.447  77.318   6.960  1.00 53.16      LS12
ATOM  13413  CA  ALA  55     178.224  75.865   6.904  1.00 53.16      LS12
ATOM  13414  CB  ALA  55     177.433  75.398   8.104  1.00 38.46      LS12
ATOM  13415  C   ALA  55     177.482  75.500   5.616  1.00 53.16      LS12
ATOM  13416  O   ALA  55     176.631  76.258   5.139  1.00 53.16      LS12
ATOM  13417  N   LYS  56     177.813  74.347   5.045  1.00 46.78      LS12
ATOM  13418  CA  LYS  56     177.179  73.915   3.807  1.00 46.78      LS12
ATOM  13419  CB  LYS  56     178.226  73.362   2.846  1.00 76.61      LS12
ATOM  13420  CG  LYS  56     177.683  72.948   1.502  1.00 76.61      LS12
ATOM  13421  CD  LYS  56     178.822  72.549   0.579  1.00 76.61      LS12
ATOM  13422  CE  LYS  56     178.314  71.755  -0.613  1.00 76.61      LS12
ATOM  13423  NZ  LYS  56     179.427  71.326  -1.505  1.00 76.61      LS12
ATOM  13424  C   LYS  56     176.168  72.852   4.167  1.00 46.78      LS12
ATOM  13425  O   LYS  56     176.490  71.673   4.265  1.00 46.78      LS12
ATOM  13426  N   VAL  57     174.934  73.298   4.354  1.00 37.07      LS12
ATOM  13427  CA  VAL  57     173.813  72.456   4.755  1.00 37.07      LS12
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ATOM	13428	CB	VAL	57	172.758	73.328	5.467	1.00	41.59	LS12	ATOM	13481	N	GLU	64	170.785	71.434	-0.463	1.00	50.53	LS12
ATOM	13429	CG1	VAL	57	172.187	72.600	6.663	1.00	41.59	LS12	ATOM	13482	CA	GLU	64	172.220	71.507	-0.199	1.00	50.53	LS12
ATOM	13430	CG2	VAL	57	173.383	74.666	5.869	1.00	41.59	LS12	ATOM	13483	CB	GLU	64	172.997	70.519	-1.086	1.00	137.95	LS12
ATOM	13431	C	VAL	57	173.092	71.724	3.631	1.00	37.07	LS12	ATOM	13484	CG	GLU	64	172.750	69.023	-0.820	1.00	137.95	LS12
ATOM	13432	O	VAL	57	172.831	72.302	2.590	1.00	37.07	LS12	ATOM	13485	CD	GLU	64	171.342	68.546	-1.187	1.00	137.95	LS12
ATOM	13433	N	ARG	58	172.770	70.454	3.846	1.00	54.46	LS12	ATOM	13486	OE1	GLU	64	170.385	68.858	-0.444	1.00	137.95	LS12
ATOM	13434	CA	ARG	58	171.988	69.680	2.875	1.00	54.46	LS12	ATOM	13487	OE2	GLU	64	171.194	67.857	-2.221	1.00	137.95	LS12
ATOM	13435	CB	ARG	58	172.504	68.250	2.760	1.00	95.73	LS12	ATOM	13488	C	GLU	64	172.676	72.934	-0.497	1.00	50.53	LS12
ATOM	13436	CG	ARG	58	171.534	67.323	2.058	1.00	95.73	LS12	ATOM	13489	O	GLU	64	173.079	73.260	-1.613	1.00	50.53	LS12
ATOM	13437	CD	ARG	58	172.270	66.182	1.394	1.00	95.73	LS12	ATOM	13490	N	VAL	65	172.616	73.787	0.514	1.00	62.19	LS12
ATOM	13438	NE	ARG	58	173.184	65.524	2.316	1.00	95.73	LS12	ATOM	13491	CA	VAL	65	172.998	75.172	0.332	1.00	62.19	LS12
ATOM	13439	CZ	ARG	58	174.087	64.618	1.954	1.00	95.73	LS12	ATOM	13492	CB	VAL	65	171.737	76.050	0.337	1.00	67.77	LS12
ATOM	13440	NH1	ARG	58	174.197	64.258	0.679	1.00	95.73	LS12	ATOM	13493	CG1	VAL	65	171.195	76.163	1.750	1.00	67.77	LS12
ATOM	13441	NH2	ARG	58	174.884	64.076	2.867	1.00	95.73	LS12	ATOM	13494	CG2	VAL	65	172.040	77.408	-0.263	1.00	67.77	LS12
ATOM	13442	C	ARG	58	170.575	69.685	3.479	1.00	54.46	LS12	ATOM	13495	C	VAL	65	173.970	75.644	1.414	1.00	62.19	LS12
ATOM	13443	O	ARG	58	170.366	69.156	4.575	1.00	54.46	LS12	ATOM	13496	O	VAL	65	174.258	74.928	2.367	1.00	62.19	LS12
ATOM	13444	N	LEU	59	169.611	70.285	2.786	1.00	69.34	LS12	ATOM	13497	N	THR	66	174.477	76.856	1.249	1.00	51.03	LS12
ATOM	13445	CA	LEU	59	168.260	70.393	3.344	1.00	69.34	LS12	ATOM	13498	CA	THR	66	175.411	77.443	2.194	1.00	51.03	LS12
ATOM	13446	CB	LEU	59	167.543	71.627	2.774	1.00	66.66	LS12	ATOM	13499	CB	THR	66	176.508	78.234	1.433	1.00	65.58	LS12
ATOM	13447	CG	LEU	59	168.131	72.990	3.138	1.00	66.66	LS12	ATOM	13500	OG1	THR	66	177.791	77.813	1.898	1.00	65.58	LS12
ATOM	13448	CD1	LEU	59	168.367	73.053	4.641	1.00	66.66	LS12	ATOM	13501	CG2	THR	66	176.369	79.743	1.644	1.00	65.58	LS12
ATOM	13449	CD2	LEU	59	169.441	73.189	2.390	1.00	66.66	LS12	ATOM	13502	C	THR	66	174.638	78.366	3.140	1.00	51.03	LS12
ATOM	13450	C	LEU	59	167.337	69.202	3.201	1.00	69.34	LS12	ATOM	13503	O	THR	66	173.798	79.154	2.701	1.00	51.03	LS12
ATOM	13451	O	LEU	59	167.611	68.272	2.452	1.00	69.34	LS12	ATOM	13504	N	ALA	67	174.917	78.269	4.432	1.00	53.60	LS12
ATOM	13452	N	THR	60	166.235	69.238	3.943	1.00	63.05	LS12	ATOM	13505	CA	ALA	67	174.227	79.094	5.415	1.00	53.60	LS12
ATOM	13453	CA	THR	60	165.246	68.172	3.870	1.00	63.05	LS12	ATOM	13506	CB	ALA	67	173.200	78.258	6.175	1.00	21.81	LS12
ATOM	13454	CB	THR	60	164.215	68.258	4.996	1.00	65.40	LS12	ATOM	13507	C	ALA	67	175.217	79.689	6.392	1.00	53.60	LS12
ATOM	13455	OG1	THR	60	163.487	69.487	4.871	1.00	65.40	LS12	ATOM	13508	O	ALA	67	176.189	79.034	6.770	1.00	53.60	LS12
ATOM	13456	CG2	THR	60	164.893	68.198	6.347	1.00	65.40	LS12	ATOM	13509	N	TYR	68	174.956	80.922	6.816	1.00	50.15	LS12
ATOM	13457	C	THR	60	164.504	68.410	2.574	1.00	63.05	LS12	ATOM	13510	CA	TYR	68	175.829	81.611	7.754	1.00	50.15	LS12
ATOM	13458	O	THR	60	163.870	67.513	2.032	1.00	63.05	LS12	ATOM	13511	CB	TYR	68	175.627	83.112	7.639	1.00	62.42	LS12
ATOM	13459	N	SER	61	164.582	69.649	2.104	1.00	48.98	LS12	ATOM	13512	CG	TYR	68	176.615	83.914	8.449	1.00	62.42	LS12
ATOM	13460	CA	SER	61	163.940	70.065	0.871	1.00	48.98	LS12	ATOM	13513	CD1	TYR	68	177.892	84.179	7.957	1.00	62.42	LS12
ATOM	13461	CB	SER	61	163.778	71.578	0.860	1.00	54.44	LS12	ATOM	13514	CE1	TYR	68	178.806	84.925	8.681	1.00	62.42	LS12
ATOM	13462	OG	SER	61	165.041	72.215	0.804	1.00	54.44	LS12	ATOM	13515	CD2	TYR	68	176.279	84.416	9.700	1.00	62.42	LS12
ATOM	13463	C	SER	61	164.812	69.642	-0.300	1.00	48.98	LS12	ATOM	13516	CE2	TYR	68	177.191	85.168	10.442	1.00	62.42	LS12
ATOM	13464	O	SER	61	164.563	70.028	-1.443	1.00	48.98	LS12	ATOM	13517	CZ	TYR	68	178.450	85.421	9.920	1.00	62.42	LS12
ATOM	13465	N	GLY	62	165.842	68.854	0.004	1.00	72.94	LS12	ATOM	13518	OH	TYR	68	179.344	86.201	10.619	1.00	62.42	LS12
ATOM	13466	CA	GLY	62	166.755	68.369	-1.014	1.00	72.94	LS12	ATOM	13519	C	TYR	68	175.566	81.210	9.198	1.00	50.15	LS12
ATOM	13467	C	GLY	62	167.410	69.461	-1.834	1.00	72.94	LS12	ATOM	13520	O	TYR	68	174.418	81.072	9.600	1.00	50.15	LS12
ATOM	13468	O	GLY	62	167.263	69.488	-3.052	1.00	72.94	LS12	ATOM	13521	N	ILE	69	176.628	81.023	9.977	1.00	52.46	LS12
ATOM	13469	N	TYR	63	168.136	70.361	-1.179	1.00	99.75	LS12	ATOM	13522	CA	ILE	69	176.470	80.676	11.388	1.00	52.46	LS12
ATOM	13470	CA	TYR	63	168.800	71.447	-1.890	1.00	99.75	LS12	ATOM	13523	CB	ILE	69	177.445	79.584	11.857	1.00	45.35	LS12
ATOM	13471	CB	TYR	63	168.176	72.787	-1.519	1.00	76.75	LS12	ATOM	13524	CG2	ILE	69	177.049	79.135	13.256	1.00	45.35	LS12
ATOM	13472	CG	TYR	63	167.223	73.303	-2.565	1.00	76.75	LS12	ATOM	13525	CG1	ILE	69	177.393	78.378	10.903	1.00	45.35	LS12
ATOM	13473	CD1	TYR	63	165.976	72.713	-2.753	1.00	76.75	LS12	ATOM	13526	CD1	ILE	69	178.408	77.281	11.199	1.00	45.35	LS12
ATOM	13474	CE1	TYR	63	165.102	73.179	-3.730	1.00	76.75	LS12	ATOM	13527	C	ILE	69	176.783	81.944	12.140	1.00	52.46	LS12
ATOM	13475	CD2	TYR	63	167.577	74.377	-3.384	1.00	76.75	LS12	ATOM	13528	O	ILE	69	177.936	82.267	12.373	1.00	52.46	LS12
ATOM	13476	CE2	TYR	63	166.711	74.852	-4.365	1.00	76.75	LS12	ATOM	13529	N	PRO	70	175.745	82.677	12.538	1.00	56.58	LS12
ATOM	13477	CZ	TYR	63	165.477	74.250	-4.531	1.00	76.75	LS12	ATOM	13530	CD	PRO	70	174.362	82.165	12.596	1.00	37.88	LS12
ATOM	13478	OH	TYR	63	164.610	74.728	-5.485	1.00	76.75	LS12	ATOM	13531	CA	PRO	70	175.856	83.940	13.263	1.00	56.58	LS12
ATOM	13479	C	TYR	63	170.310	71.536	-1.706	1.00	99.75	LS12	ATOM	13532	CB	PRO	70	174.437	84.466	13.201	1.00	37.88	LS12
ATOM	13480	O	TYR	63	171.038	71.703	-2.689	1.00	99.75	LS12	ATOM	13533	CG	PRO	70	173.656	83.190	13.484	1.00	37.88	LS12

ATOM	13534	C	PRO	70	176.298	83.719	14.695	1.00	56.58	LS12	ATOM	13587	O	GLN	77	178.725	69.800	14.250	1.00	107.13	LS12
ATOM	13535	O	PRO	70	176.249	82.601	15.185	1.00	56.58	LS12	ATOM	13588	N	GLU	78	179.962	71.069	12.855	1.00	64.02	LS12
ATOM	13536	N	GLY	71	176.731	84.784	15.360	1.00	55.16	LS12	ATOM	13589	CA	GLU	78	180.690	69.925	12.312	1.00	64.02	LS12
ATOM	13537	CA	GLY	71	177.121	84.660	16.752	1.00	55.16	LS12	ATOM	13590	CB	GLU	78	181.339	69.146	13.464	1.00	102.56	LS12
ATOM	13538	C	GLY	71	178.589	84.660	17.118	1.00	55.16	LS12	ATOM	13591	CG	GLU	78	180.988	67.670	13.546	1.00	102.56	LS12
ATOM	13539	O	GLY	71	179.460	84.403	16.285	1.00	55.16	LS12	ATOM	13592	CD	GLU	78	180.715	67.213	14.974	1.00	102.56	LS12
ATOM	13540	N	GLU	72	178.846	84.966	18.388	1.00	70.24	LS12	ATOM	13593	OE1	GLU	78	181.502	67.578	15.879	1.00	102.56	LS12
ATOM	13541	CA	GLU	72	180.192	84.990	18.957	1.00	70.24	LS12	ATOM	13594	OE2	GLU	78	179.716	66.483	15.188	1.00	102.56	LS12
ATOM	13542	CB	GLU	72	180.191	85.737	20.297	1.00	92.94	LS12	ATOM	13595	C	GLU	78	179.594	69.106	11.602	1.00	64.02	LS12
ATOM	13543	CG	GLU	72	180.356	87.245	20.217	1.00	92.94	LS12	ATOM	13596	O	GLU	78	178.448	69.547	11.558	1.00	64.02	LS12
ATOM	13544	CD	GLU	72	181.719	87.641	19.687	1.00	92.94	LS12	ATOM	13597	N	HIS	79	179.943	67.960	11.023	1.00	56.92	LS12
ATOM	13545	OE1	GLU	72	182.075	88.839	19.774	1.00	92.94	LS12	ATOM	13598	CA	HIS	79	179.004	67.044	10.346	1.00	56.92	LS12
ATOM	13546	OE2	GLU	72	182.430	86.745	19.177	1.00	92.94	LS12	ATOM	13599	CB	HIS	79	179.770	65.712	10.239	1.00	92.79	LS12
ATOM	13547	C	GLU	72	180.627	83.549	19.201	1.00	70.24	LS12	ATOM	13600	CG	HIS	79	179.007	64.579	9.629	1.00	92.79	LS12
ATOM	13548	O	GLU	72	180.226	82.927	20.189	1.00	70.24	LS12	ATOM	13601	CD2	HIS	79	179.285	63.803	8.553	1.00	92.79	LS12
ATOM	13549	N	GLY	73	181.435	83.014	18.296	1.00	56.72	LS12	ATOM	13602	ND1	HIS	79	177.850	64.072	10.178	1.00	92.79	LS12
ATOM	13550	CA	GLY	73	181.895	81.650	18.453	1.00	56.72	LS12	ATOM	13603	CE1	HIS	79	177.446	63.032	9.468	1.00	92.79	LS12
ATOM	13551	C	GLY	73	180.741	80.681	18.583	1.00	56.72	LS12	ATOM	13604	NE2	HIS	79	178.300	62.849	8.478	1.00	92.79	LS12
ATOM	13552	O	GLY	73	180.057	80.426	17.603	1.00	56.72	LS12	ATOM	13605	C	HIS	79	177.629	66.895	11.120	1.00	56.92	LS12
ATOM	13553	N	HIS	74	180.517	80.151	19.787	1.00	166.43	LS12	ATOM	13606	O	HIS	79	177.250	65.802	11.537	1.00	56.92	LS12
ATOM	13554	CA	HIS	74	179.434	79.195	20.020	1.00	166.43	LS12	ATOM	13607	N	SER	80	176.862	67.979	11.271	1.00	68.33	LS12
ATOM	13555	CB	HIS	74	178.071	79.894	19.817	1.00	112.93	LS12	ATOM	13608	CA	SER	80	175.624	67.923	12.068	1.00	68.33	LS12
ATOM	13556	CG	HIS	74	176.945	78.976	19.429	1.00	112.93	LS12	ATOM	13609	CB	SER	80	175.911	68.506	13.445	1.00	44.83	LS12
ATOM	13557	CD2	HIS	74	176.863	77.625	19.369	1.00	112.93	LS12	ATOM	13610	OG	SER	80	176.399	69.833	13.318	1.00	44.83	LS12
ATOM	13558	ND1	HIS	74	175.733	79.447	18.971	1.00	112.93	LS12	ATOM	13611	C	SER	80	174.318	68.563	11.570	1.00	68.33	LS12
ATOM	13559	CE1	HIS	74	174.959	78.431	18.637	1.00	112.93	LS12	ATOM	13612	O	SER	80	174.265	69.206	10.516	1.00	68.33	LS12
ATOM	13560	NE2	HIS	74	175.621	77.313	18.869	1.00	112.93	LS12	ATOM	13613	N	VAL	81	173.275	68.400	12.391	1.00	78.71	LS12
ATOM	13561	C	HIS	74	179.598	78.021	19.058	1.00	166.43	LS12	ATOM	13614	CA	VAL	81	171.923	68.887	12.106	1.00	78.71	LS12
ATOM	13562	O	HIS	74	179.685	76.859	19.467	1.00	166.43	LS12	ATOM	13615	CB	VAL	81	170.881	67.987	12.761	1.00	42.89	LS12
ATOM	13563	N	ASN	75	179.638	78.360	17.777	1.00	58.02	LS12	ATOM	13616	CG1	VAL	81	169.480	68.473	12.409	1.00	42.89	LS12
ATOM	13564	CA	ASN	75	179.770	77.420	16.686	1.00	58.02	LS12	ATOM	13617	CG2	VAL	81	171.087	66.562	12.312	1.00	42.89	LS12
ATOM	13565	CB	ASN	75	180.672	78.047	15.612	1.00	40.29	LS12	ATOM	13618	C	VAL	81	171.617	70.313	12.542	1.00	78.71	LS12
ATOM	13566	CG	ASN	75	180.779	77.200	14.358	1.00	40.29	LS12	ATOM	13619	O	VAL	81	171.847	70.693	13.691	1.00	78.71	LS12
ATOM	13567	OD1	ASN	75	180.440	76.024	14.361	1.00	40.29	LS12	ATOM	13620	N	VAL	82	171.044	71.087	11.624	1.00	58.90	LS12
ATOM	13568	ND2	ASN	75	181.271	77.795	13.283	1.00	40.29	LS12	ATOM	13621	CA	VAL	82	170.734	72.473	11.902	1.00	58.90	LS12
ATOM	13569	C	ASN	75	180.297	76.037	17.093	1.00	58.02	LS12	ATOM	13622	CB	VAL	82	171.835	73.360	11.352	1.00	54.67	LS12
ATOM	13570	O	ASN	75	181.452	75.892	17.487	1.00	58.02	LS12	ATOM	13623	CG1	VAL	82	171.733	74.714	11.962	1.00	54.67	LS12
ATOM	13571	N	LEU	76	179.424	75.037	17.045	1.00	44.54	LS12	ATOM	13624	CG2	VAL	82	173.181	72.762	11.635	1.00	54.67	LS12
ATOM	13572	CA	LEU	76	179.827	73.661	17.305	1.00	44.54	LS12	ATOM	13625	C	VAL	82	169.417	72.919	11.272	1.00	58.90	LS12
ATOM	13573	CB	LEU	76	178.906	72.985	18.329	1.00	55.64	LS12	ATOM	13626	O	VAL	82	168.864	72.220	10.417	1.00	58.90	LS12
ATOM	13574	CG	LEU	76	177.380	73.115	18.302	1.00	55.64	LS12	ATOM	13627	N	LEU	83	168.919	74.082	11.706	1.00	45.16	LS12
ATOM	13575	CD1	LEU	76	176.781	72.123	19.271	1.00	55.64	LS12	ATOM	13628	CA	LEU	83	167.687	74.676	11.165	1.00	45.16	LS12
ATOM	13576	CD2	LEU	76	176.962	74.515	18.679	1.00	55.64	LS12	ATOM	13629	CB	LEU	83	166.702	75.038	12.277	1.00	47.71	LS12
ATOM	13577	C	LEU	76	179.661	73.066	15.901	1.00	44.54	LS12	ATOM	13630	CG	LEU	83	165.334	75.575	11.843	1.00	47.71	LS12
ATOM	13578	O	LEU	76	180.603	73.026	15.105	1.00	44.54	LS12	ATOM	13631	CD1	LEU	83	164.605	74.502	11.036	1.00	47.71	LS12
ATOM	13579	N	GLN	77	178.466	72.612	15.576	1.00	107.13	LS12	ATOM	13632	CD2	LEU	83	164.499	75.947	13.055	1.00	47.71	LS12
ATOM	13580	CA	GLN	77	178.254	72.141	14.227	1.00	107.13	LS12	ATOM	13633	C	LEU	83	168.058	75.951	10.418	1.00	45.16	LS12
ATOM	13581	CB	GLN	77	178.563	73.294	13.281	1.00	72.68	LS12	ATOM	13634	O	LEU	83	168.771	76.813	10.938	1.00	45.16	LS12
ATOM	13582	CG	GLN	77	177.801	74.540	13.645	1.00	72.68	LS12	ATOM	13635	N	ILE	84	167.571	76.058	9.191	1.00	47.53	LS12
ATOM	13583	CD	GLN	77	176.319	74.361	13.435	1.00	72.68	LS12	ATOM	13636	CA	ILE	84	167.829	77.204	8.333	1.00	47.53	LS12
ATOM	13584	OE1	GLN	77	175.794	74.687	12.370	1.00	72.68	LS12	ATOM	13637	CB	ILE	84	168.086	76.721	6.897	1.00	58.83	LS12
ATOM	13585	NE2	GLN	77	175.632	73.821	14.441	1.00	72.68	LS12	ATOM	13638	CG2	ILE	84	167.784	77.800	5.886	1.00	58.83	LS12
ATOM	13586	C	GLN	77	179.008	70.899	13.776	1.00	107.13	LS12	ATOM	13639	CG1	ILE	84	169.525	76.259	6.788	1.00	58.83	LS12

ATOM	13640	CD1	ILE	84	169.916	75.927	5.386	1.00	58.83	LS12	ATOM	13693	OD1	ASP	91	180.202	92.746	3.048	1.00	56.43	LS12
ATOM	13641	C	ILE	84	166.656	78.176	8.370	1.00	47.53	LS12	ATOM	13694	OD2	ASP	91	181.226	92.189	4.971	1.00	56.43	LS12
ATOM	13642	O	ILE	84	165.487	77.768	8.371	1.00	47.53	LS12	ATOM	13695	C	ASP	91	179.899	88.866	1.848	1.00	57.77	LS12
ATOM	13643	N	ARG	85	166.973	79.465	8.375	1.00	60.13	LS12	ATOM	13696	O	ASP	91	181.069	88.654	1.570	1.00	57.77	LS12
ATOM	13644	CA	ARG	85	165.945	80.491	8.453	1.00	60.13	LS12	ATOM	13697	N	LEU	92	178.950	87.959	1.677	1.00	46.26	LS12
ATOM	13645	CB	ARG	85	166.173	81.342	9.674	1.00	60.51	LS12	ATOM	13698	CA	LEU	92	179.246	86.653	1.117	1.00	46.26	LS12
ATOM	13646	CG	ARG	85	167.405	82.145	9.460	1.00	60.51	LS12	ATOM	13699	CB	LEU	92	179.328	85.599	2.218	1.00	35.77	LS12
ATOM	13647	CD	ARG	85	167.166	83.571	9.772	1.00	60.51	LS12	ATOM	13700	CG	LEU	92	180.073	85.921	3.514	1.00	35.77	LS12
ATOM	13648	NE	ARG	85	167.153	83.738	11.209	1.00	60.51	LS12	ATOM	13701	CD1	LEU	92	179.940	84.740	4.453	1.00	35.77	LS12
ATOM	13649	CZ	ARG	85	167.876	84.645	11.841	1.00	60.51	LS12	ATOM	13702	CD2	LEU	92	181.534	86.223	3.243	1.00	35.77	LS12
ATOM	13650	NH1	ARG	85	168.664	85.466	11.147	1.00	60.51	LS12	ATOM	13703	C	LEU	92	178.122	86.278	0.178	1.00	46.26	LS12
ATOM	13651	NH2	ARG	85	167.809	84.715	13.166	1.00	60.51	LS12	ATOM	13704	O	LEU	92	177.034	85.907	0.621	1.00	46.26	LS12
ATOM	13652	C	ARG	85	165.888	81.439	7.277	1.00	60.13	LS12	ATOM	13705	N	PRO	93	178.370	86.334	-1.135	1.00	58.99	LS12
ATOM	13653	O	ARG	85	164.848	82.042	7.024	1.00	60.13	LS12	ATOM	13706	CD	PRO	93	179.694	86.210	-1.771	1.00	86.29	LS12
ATOM	13654	N	GLY	86	166.990	81.626	6.570	1.00	35.23	LS12	ATOM	13707	CA	PRO	93	177.319	85.986	-2.090	1.00	58.99	LS12
ATOM	13655	CA	GLY	86	166.911	82.565	5.466	1.00	35.23	LS12	ATOM	13708	CB	PRO	93	177.956	86.339	-3.408	1.00	86.29	LS12
ATOM	13656	C	GLY	86	167.334	83.973	5.875	1.00	35.23	LS12	ATOM	13709	CG	PRO	93	179.345	85.787	-3.200	1.00	86.29	LS12
ATOM	13657	O	GLY	86	166.870	84.533	6.866	1.00	35.23	LS12	ATOM	13710	C	PRO	93	177.082	84.491	-1.968	1.00	58.99	LS12
ATOM	13658	N	GLY	87	168.235	84.545	5.091	1.00	44.38	LS12	ATOM	13711	O	PRO	93	177.855	83.794	-1.308	1.00	58.99	LS12
ATOM	13659	CA	GLY	87	168.750	85.863	5.371	1.00	44.38	LS12	ATOM	13712	N	GLY	94	176.035	83.991	-2.610	1.00	89.84	LS12
ATOM	13660	C	GLY	87	170.109	85.920	4.718	1.00	44.38	LS12	ATOM	13713	CA	GLY	94	175.768	82.569	-2.535	1.00	89.84	LS12
ATOM	13661	O	GLY	87	171.047	85.253	5.139	1.00	44.38	LS12	ATOM	13714	C	GLY	94	175.488	82.204	-1.098	1.00	89.84	LS12
ATOM	13662	N	ARG	88	170.210	86.707	3.662	1.00	45.59	LS12	ATOM	13715	O	GLY	94	175.285	81.041	-0.756	1.00	89.84	LS12
ATOM	13663	CA	ARG	88	171.460	86.829	2.952	1.00	45.59	LS12	ATOM	13716	N	VAL	95	175.492	83.216	-0.244	1.00	43.92	LS12
ATOM	13664	CB	ARG	88	171.294	87.750	1.735	1.00	103.46	LS12	ATOM	13717	CA	VAL	95	175.203	83.004	1.162	1.00	43.92	LS12
ATOM	13665	CG	ARG	88	170.135	87.354	0.817	1.00	103.46	LS12	ATOM	13718	CB	VAL	95	176.351	83.484	2.054	1.00	47.41	LS12
ATOM	13666	CD	ARG	88	170.598	86.901	-0.578	1.00	103.46	LS12	ATOM	13719	CG1	VAL	95	176.032	83.183	3.510	1.00	47.41	LS12
ATOM	13667	NE	ARG	88	169.478	86.455	-1.415	1.00	103.46	LS12	ATOM	13720	CG2	VAL	95	177.619	82.824	1.642	1.00	47.41	LS12
ATOM	13668	CZ	ARG	88	169.591	86.028	-2.671	1.00	103.46	LS12	ATOM	13721	C	VAL	95	173.929	83.742	1.578	1.00	43.92	LS12
ATOM	13669	NH1	ARG	88	170.780	85.983	-3.256	1.00	103.46	LS12	ATOM	13722	O	VAL	95	173.974	84.885	2.027	1.00	43.92	LS12
ATOM	13670	NH2	ARG	88	168.514	85.647	-3.346	1.00	103.46	LS12	ATOM	13723	N	ARG	96	172.797	83.085	1.385	1.00	66.12	LS12
ATOM	13671	C	ARG	88	172.463	87.417	3.914	1.00	45.59	LS12	ATOM	13724	CA	ARG	96	171.505	83.619	1.786	1.00	66.12	LS12
ATOM	13672	O	ARG	88	172.093	87.986	4.924	1.00	45.59	LS12	ATOM	13725	CB	ARG	96	170.488	83.298	0.708	1.00	63.15	LS12
ATOM	13673	N	VAL	89	173.737	87.221	3.612	1.00	53.30	LS12	ATOM	13726	CG	ARG	96	171.026	83.699	-0.646	1.00	63.15	LS12
ATOM	13674	CA	VAL	89	174.825	87.790	4.385	1.00	53.30	LS12	ATOM	13727	CD	ARG	96	170.661	82.741	-1.737	1.00	63.15	LS12
ATOM	13675	CB	VAL	89	175.819	86.721	4.829	1.00	50.58	LS12	ATOM	13728	NE	ARG	96	169.666	83.305	-2.635	1.00	63.15	LS12
ATOM	13676	CG1	VAL	89	177.149	87.348	5.168	1.00	50.58	LS12	ATOM	13729	CZ	ARG	96	169.380	82.811	-3.836	1.00	63.15	LS12
ATOM	13677	CG2	VAL	89	175.271	86.018	6.053	1.00	50.58	LS12	ATOM	13730	NH1	ARG	96	170.020	81.737	-4.291	1.00	63.15	LS12
ATOM	13678	C	VAL	89	175.413	88.680	3.310	1.00	53.30	LS12	ATOM	13731	NH2	ARG	96	168.444	83.385	-4.582	1.00	63.15	LS12
ATOM	13679	O	VAL	89	175.877	88.194	2.292	1.00	53.30	LS12	ATOM	13732	C	ARG	96	171.294	82.781	3.038	1.00	66.12	LS12
ATOM	13680	N	LYS	90	175.344	89.985	3.526	1.00	39.34	LS12	ATOM	13733	O	ARG	96	172.270	82.290	3.592	1.00	66.12	LS12
ATOM	13681	CA	LYS	90	175.798	90.964	2.552	1.00	39.34	LS12	ATOM	13734	N	TYR	97	170.072	82.602	3.505	1.00	41.70	LS12
ATOM	13682	CB	LYS	90	175.787	92.358	3.169	1.00	60.42	LS12	ATOM	13735	CA	TYR	97	169.853	81.765	4.697	1.00	41.70	LS12
ATOM	13683	CG	LYS	90	175.313	93.430	2.220	1.00	60.42	LS12	ATOM	13736	CB	TYR	97	169.716	80.302	4.281	1.00	46.76	LS12
ATOM	13684	CD	LYS	90	176.123	93.442	0.955	1.00	60.42	LS12	ATOM	13737	CG	TYR	97	169.180	80.092	2.889	1.00	46.76	LS12
ATOM	13685	CE	LYS	90	175.564	94.435	-0.037	1.00	60.42	LS12	ATOM	13738	CD1	TYR	97	170.041	79.940	1.816	1.00	46.76	LS12
ATOM	13686	NZ	LYS	90	175.749	95.846	0.421	1.00	60.42	LS12	ATOM	13739	CE1	TYR	97	169.558	79.727	0.532	1.00	46.76	LS12
ATOM	13687	C	LYS	90	177.156	90.708	1.961	1.00	39.34	LS12	ATOM	13740	CD2	TYR	97	167.810	80.031	2.646	1.00	46.76	LS12
ATOM	13688	O	LYS	90	177.317	90.752	0.746	1.00	39.34	LS12	ATOM	13741	CE2	TYR	97	167.314	79.816	1.364	1.00	46.76	LS12
ATOM	13689	N	ASP	91	178.123	90.441	2.831	1.00	57.77	LS12	ATOM	13742	CZ	TYR	97	168.198	79.661	0.314	1.00	46.76	LS12
ATOM	13690	CA	ASP	91	179.509	90.206	2.443	1.00	57.77	LS12	ATOM	13743	OH	TYR	97	167.727	79.394	-0.950	1.00	46.76	LS12
ATOM	13691	CB	ASP	91	180.408	90.449	3.640	1.00	56.43	LS12	ATOM	13744	C	TYR	97	170.857	81.814	5.879	1.00	41.70	LS12
ATOM	13692	CG	ASP	91	180.622	91.907	3.904	1.00	56.43	LS12	ATOM	13745	O	TYR	97	172.063	81.678	5.708	1.00	41.70	LS12

ATOM	13746	N	HIS	98	170.335	81.986	7.090	1.00	43.28	LS12	ATOM	13799	CD2	TYR	104	166.582	70.268	15.555	1.00	43.62	LS12
ATOM	13747	CA	HIS	98	171.157	82.002	8.301	1.00	43.28	LS12	ATOM	13800	CE2	TYR	104	165.282	70.239	15.089	1.00	43.62	LS12
ATOM	13748	CB	HIS	98	170.774	83.145	9.229	1.00	45.61	LS12	ATOM	13801	CZ	TYR	104	164.955	70.920	13.934	1.00	43.62	LS12
ATOM	13749	CG	HIS	98	171.546	84.401	9.013	1.00	45.61	LS12	ATOM	13802	OH	TYR	104	163.646	70.904	13.517	1.00	43.62	LS12
ATOM	13750	CD2	HIS	98	172.256	85.166	9.875	1.00	45.61	LS12	ATOM	13803	C	TYR	104	170.397	71.214	17.510	1.00	58.86	LS12
ATOM	13751	ND1	HIS	98	171.564	85.064	7.807	1.00	45.61	LS12	ATOM	13804	O	TYR	104	170.618	71.643	18.644	1.00	58.86	LS12
ATOM	13752	CE1	HIS	98	172.248	86.188	7.938	1.00	45.61	LS12	ATOM	13805	N	ASP	105	171.362	70.801	16.699	1.00	55.42	LS12
ATOM	13753	NE2	HIS	98	172.677	86.275	9.184	1.00	45.61	LS12	ATOM	13806	CA	ASP	105	172.751	70.787	17.137	1.00	55.42	LS12
ATOM	13754	C	HIS	98	170.857	80.732	9.071	1.00	43.28	LS12	ATOM	13807	CB	ASP	105	173.552	69.867	16.217	1.00	80.13	LS12
ATOM	13755	O	HIS	98	169.753	80.203	8.992	1.00	43.28	LS12	ATOM	13808	CG	ASP	105	173.021	68.437	16.228	1.00	80.13	LS12
ATOM	13756	N	ILE	99	171.827	80.249	9.828	1.00	52.26	LS12	ATOM	13809	OD1	ASP	105	173.308	67.685	15.270	1.00	80.13	LS12
ATOM	13757	CA	ILE	99	171.604	79.076	10.653	1.00	52.26	LS12	ATOM	13810	OD2	ASP	105	172.323	68.070	17.202	1.00	80.13	LS12
ATOM	13758	CB	ILE	99	172.917	78.342	10.914	1.00	59.41	LS12	ATOM	13811	C	ASP	105	173.395	72.173	17.244	1.00	55.42	LS12
ATOM	13759	CG2	ILE	99	172.789	77.489	12.151	1.00	59.41	LS12	ATOM	13812	O	ASP	105	174.559	72.296	17.621	1.00	55.42	LS12
ATOM	13760	CG1	ILE	99	173.292	77.523	9.669	1.00	59.41	LS12	ATOM	13813	N	ALA	106	172.637	73.212	16.908	1.00	71.74	LS12
ATOM	13761	CD1	ILE	99	174.646	76.835	9.731	1.00	59.41	LS12	ATOM	13814	CA	ALA	106	173.121	74.586	17.031	1.00	71.74	LS12
ATOM	13762	C	ILE	99	171.001	79.589	11.963	1.00	52.26	LS12	ATOM	13815	CB	ALA	106	172.233	75.523	16.230	1.00	67.01	LS12
ATOM	13763	O	ILE	99	171.364	80.664	12.444	1.00	52.26	LS12	ATOM	13816	C	ALA	106	172.975	74.850	18.530	1.00	71.74	LS12
ATOM	13764	N	VAL	100	170.063	78.847	12.530	1.00	50.49	LS12	ATOM	13817	O	ALA	106	172.240	74.125	19.196	1.00	71.74	LS12
ATOM	13765	CA	VAL	100	169.423	79.274	13.769	1.00	50.49	LS12	ATOM	13818	N	ALA	107	173.621	75.873	19.080	1.00	49.19	LS12
ATOM	13766	CB	VAL	100	167.937	78.917	13.758	1.00	34.53	LS12	ATOM	13819	CA	ALA	107	173.506	76.054	20.522	1.00	49.19	LS12
ATOM	13767	CG1	VAL	100	167.360	79.049	15.154	1.00	34.53	LS12	ATOM	13820	CB	ALA	107	174.428	75.046	21.205	1.00	46.28	LS12
ATOM	13768	CG2	VAL	100	167.206	79.810	12.780	1.00	34.53	LS12	ATOM	13821	C	ALA	107	173.721	77.436	21.148	1.00	49.19	LS12
ATOM	13769	C	VAL	100	170.053	78.663	15.012	1.00	50.49	LS12	ATOM	13822	O	ALA	107	174.848	77.909	21.263	1.00	49.19	LS12
ATOM	13770	O	VAL	100	170.006	77.449	15.218	1.00	50.49	LS12	ATOM	13823	N	GLY	108	172.642	78.060	21.606	1.00	93.75	LS12
ATOM	13771	N	ARG	101	170.628	79.510	15.853	1.00	55.49	LS12	ATOM	13824	CA	GLY	108	172.759	79.365	22.238	1.00	93.75	LS12
ATOM	13772	CA	ARG	101	171.260	79.030	17.069	1.00	55.49	LS12	ATOM	13825	C	GLY	108	173.987	80.127	21.784	1.00	93.75	LS12
ATOM	13773	CB	ARG	101	172.153	80.116	17.653	1.00	76.19	LS12	ATOM	13826	O	GLY	108	174.306	80.112	20.607	1.00	93.75	LS12
ATOM	13774	CG	ARG	101	172.799	80.947	16.579	1.00	76.19	LS12	ATOM	13827	N	VAL	109	174.674	80.793	22.704	1.00	64.62	LS12
ATOM	13775	CD	ARG	101	174.210	81.335	16.926	1.00	76.19	LS12	ATOM	13828	CA	VAL	109	175.874	81.553	22.356	1.00	64.62	LS12
ATOM	13776	NE	ARG	101	175.169	80.274	16.638	1.00	76.19	LS12	ATOM	13829	CB	VAL	109	175.554	82.911	21.619	1.00	42.16	LS12
ATOM	13777	CZ	ARG	101	176.475	80.370	16.878	1.00	76.19	LS12	ATOM	13830	CG1	VAL	109	176.855	83.658	21.299	1.00	42.16	LS12
ATOM	13778	NH1	ARG	101	176.983	81.475	17.409	1.00	76.19	LS12	ATOM	13831	CG2	VAL	109	174.809	82.660	20.318	1.00	42.16	LS12
ATOM	13779	NH2	ARG	101	177.277	79.350	16.616	1.00	76.19	LS12	ATOM	13832	C	VAL	109	176.698	81.867	23.600	1.00	64.62	LS12
ATOM	13780	C	ARG	101	170.179	78.653	18.062	1.00	55.49	LS12	ATOM	13833	O	VAL	109	176.897	83.027	23.962	1.00	64.62	LS12
ATOM	13781	O	ARG	101	169.106	79.241	18.059	1.00	55.49	LS12	ATOM	13834	N	LYS	110	177.167	80.820	24.259	1.00	116.79	LS12
ATOM	13782	N	GLY	102	170.449	77.660	18.900	1.00	62.30	LS12	ATOM	13835	CA	LYS	110	177.996	80.976	25.440	1.00	116.79	LS12
ATOM	13783	CA	GLY	102	169.459	77.270	19.882	1.00	62.30	LS12	ATOM	13836	CB	LYS	110	179.423	81.304	24.998	1.00	143.81	LS12
ATOM	13784	C	GLY	102	168.503	76.206	19.391	1.00	62.30	LS12	ATOM	13837	CG	LYS	110	179.896	80.513	23.778	1.00	143.81	LS12
ATOM	13785	O	GLY	102	167.594	75.793	20.124	1.00	62.30	LS12	ATOM	13838	CD	LYS	110	179.833	79.003	24.005	1.00	143.81	LS12
ATOM	13786	N	VAL	103	168.682	75.766	18.151	1.00	55.98	LS12	ATOM	13839	CE	LYS	110	180.505	78.237	22.860	1.00	143.81	LS12
ATOM	13787	CA	VAL	103	167.821	74.723	17.610	1.00	55.98	LS12	ATOM	13840	NZ	LYS	110	180.413	76.748	23.003	1.00	143.81	LS12
ATOM	13788	CB	VAL	103	166.917	75.246	16.470	1.00	44.72	LS12	ATOM	13841	C	LYS	110	177.498	82.045	26.423	1.00	116.79	LS12
ATOM	13789	CG1	VAL	103	166.148	74.086	15.850	1.00	44.72	LS12	ATOM	13842	O	LYS	110	176.445	81.893	27.049	1.00	116.79	LS12
ATOM	13790	CG2	VAL	103	165.933	76.275	17.011	1.00	44.72	LS12	ATOM	13843	N	ASP	111	178.262	83.128	26.544	1.00	61.17	LS12
ATOM	13791	C	VAL	103	168.678	73.578	17.094	1.00	55.98	LS12	ATOM	13844	CA	ASP	111	177.935	84.209	27.466	1.00	61.17	LS12
ATOM	13792	O	VAL	103	169.704	73.802	16.450	1.00	55.98	LS12	ATOM	13845	CB	ASP	111	179.226	84.832	28.007	1.00	118.84	LS12
ATOM	13793	N	TYR	104	168.249	72.351	17.383	1.00	58.86	LS12	ATOM	13846	CG	ASP	111	179.891	83.983	29.071	1.00	118.84	LS12
ATOM	13794	CA	TYR	104	168.978	71.158	16.972	1.00	58.86	LS12	ATOM	13847	OD1	ASP	111	179.244	83.703	30.106	1.00	118.84	LS12
ATOM	13795	CB	TYR	104	168.981	71.039	15.446	1.00	43.62	LS12	ATOM	13848	OD2	ASP	111	181.066	83.609	28.871	1.00	118.84	LS12
ATOM	13796	CG	TYR	104	167.579	70.975	14.883	1.00	43.62	LS12	ATOM	13849	C	ASP	111	177.058	85.339	26.930	1.00	61.17	LS12
ATOM	13797	CD1	TYR	104	167.234	71.656	13.706	1.00	43.62	LS12	ATOM	13850	O	ASP	111	177.049	86.430	27.506	1.00	61.17	LS12
ATOM	13798	CE1	TYR	104	165.926	71.633	13.227	1.00	43.62	LS12	ATOM	13851	N	ARG	112	176.336	85.109	25.838	1.00	68.60	LS12

ATOM	13852	CA	ARG	112	175.482	86.158	25.274	1.00	68.60	LS12	ATOM	13905	CB	LYS	118	168.645	86.660	17.859	1.00	42.46	LS12
ATOM	13853	CB	ARG	112	174.611	85.592	24.151	1.00	57.24	LS12	ATOM	13906	CG	LYS	118	167.538	87.698	17.834	1.00	42.46	LS12
ATOM	13854	CG	ARG	112	174.819	86.217	22.795	1.00	57.24	LS12	ATOM	13907	CD	LYS	118	168.049	89.005	17.259	1.00	42.46	LS12
ATOM	13855	CD	ARG	112	174.333	87.631	22.741	1.00	57.24	LS12	ATOM	13908	CE	LYS	118	166.915	89.932	16.841	1.00	42.46	LS12
ATOM	13856	NE	ARG	112	174.726	88.227	21.472	1.00	57.24	LS12	ATOM	13909	NZ	LYS	118	167.423	91.224	16.291	1.00	42.46	LS12
ATOM	13857	CZ	ARG	112	174.452	89.476	21.110	1.00	57.24	LS12	ATOM	13910	C	LYS	118	169.439	84.764	19.297	1.00	65.89	LS12
ATOM	13858	NH1	ARG	112	173.771	90.279	21.927	1.00	57.24	LS12	ATOM	13911	O	LYS	118	169.478	84.736	20.532	1.00	65.89	LS12
ATOM	13859	NH2	ARG	112	174.861	89.925	19.928	1.00	57.24	LS12	ATOM	13912	N	TYR	119	170.409	84.232	18.576	1.00	58.04	LS12
ATOM	13860	C	ARG	112	174.581	86.706	26.367	1.00	68.60	LS12	ATOM	13913	CA	TYR	119	171.529	83.607	19.294	1.00	58.04	LS12
ATOM	13861	O	ARG	112	173.792	85.968	26.952	1.00	68.60	LS12	ATOM	13914	CB	TYR	119	172.305	84.680	20.028	1.00	47.64	LS12
ATOM	13862	N	LYS	113	174.700	87.995	26.652	1.00	65.58	LS12	ATOM	13915	CG	TYR	119	172.702	85.801	19.125	1.00	47.64	LS12
ATOM	13863	CA	LYS	113	173.861	88.585	27.682	1.00	65.58	LS12	ATOM	13916	CD1	TYR	119	172.509	87.117	19.505	1.00	47.64	LS12
ATOM	13864	CB	LYS	113	174.719	89.089	28.844	1.00	91.82	LS12	ATOM	13917	CE1	TYR	119	172.894	88.159	18.682	1.00	47.64	LS12
ATOM	13865	CG	LYS	113	175.480	87.942	29.510	1.00	91.82	LS12	ATOM	13918	CD2	TYR	119	173.289	85.546	17.896	1.00	47.64	LS12
ATOM	13866	CD	LYS	113	175.910	88.259	30.928	1.00	91.82	LS12	ATOM	13919	CE2	TYR	119	173.683	86.580	17.063	1.00	47.64	LS12
ATOM	13867	CE	LYS	113	174.723	88.270	31.870	1.00	91.82	LS12	ATOM	13920	CZ	TYR	119	173.481	87.887	17.461	1.00	47.64	LS12
ATOM	13868	NZ	LYS	113	175.105	88.644	33.258	1.00	91.82	LS12	ATOM	13921	OH	TYR	119	173.834	88.931	16.638	1.00	47.64	LS12
ATOM	13869	C	LYS	113	172.949	89.678	27.155	1.00	65.58	LS12	ATOM	13922	C	TYR	119	171.116	82.520	20.302	1.00	58.04	LS12
ATOM	13870	O	LYS	113	171.885	89.907	27.714	1.00	65.58	LS12	ATOM	13923	O	TYR	119	171.956	81.970	21.001	1.00	58.04	LS12
ATOM	13871	N	LYS	114	173.345	90.332	26.066	1.00	88.61	LS12	ATOM	13924	N	GLY	120	169.817	82.252	20.382	1.00	57.31	LS12
ATOM	13872	CA	LYS	114	172.516	91.381	25.480	1.00	88.61	LS12	ATOM	13925	CA	GLY	120	169.267	81.234	21.263	1.00	57.31	LS12
ATOM	13873	CB	LYS	114	173.341	92.317	24.607	1.00	75.32	LS12	ATOM	13926	C	GLY	120	169.724	81.027	22.699	1.00	57.31	LS12
ATOM	13874	CG	LYS	114	174.174	93.338	25.382	1.00	75.32	LS12	ATOM	13927	O	GLY	120	169.351	80.028	23.300	1.00	57.31	LS12
ATOM	13875	CD	LYS	114	173.422	94.622	25.660	1.00	75.32	LS12	ATOM	13928	N	THR	121	170.505	81.925	23.280	1.00	38.48	LS12
ATOM	13876	CE	LYS	114	174.353	95.680	26.239	1.00	75.32	LS12	ATOM	13929	CA	THR	121	170.927	81.704	24.665	1.00	38.48	LS12
ATOM	13877	NZ	LYS	114	173.636	96.980	26.452	1.00	75.32	LS12	ATOM	13930	CB	THR	121	172.132	82.599	25.069	1.00	44.63	LS12
ATOM	13878	C	LYS	114	171.394	90.785	24.651	1.00	88.61	LS12	ATOM	13931	OG1	THR	121	171.657	83.863	25.543	1.00	44.63	LS12
ATOM	13879	O	LYS	114	170.530	90.094	25.187	1.00	88.61	LS12	ATOM	13932	CG2	THR	121	173.055	82.828	23.888	1.00	44.63	LS12
ATOM	13880	N	SER	115	171.413	91.041	23.347	1.00	76.01	LS12	ATOM	13933	C	THR	121	169.771	82.002	25.619	1.00	38.48	LS12
ATOM	13881	CA	SER	115	170.369	90.552	22.451	1.00	76.01	LS12	ATOM	13934	O	THR	121	169.194	83.094	25.592	1.00	38.48	LS12
ATOM	13882	CB	SER	115	170.890	90.495	21.022	1.00	105.25	LS12	ATOM	13935	N	LYS	122	169.427	81.031	26.463	1.00	55.18	LS12
ATOM	13883	OG	SER	115	171.131	91.814	20.544	1.00	105.25	LS12	ATOM	13936	CA	LYS	122	168.335	81.222	27.413	1.00	55.18	LS12
ATOM	13884	C	SER	115	169.747	89.217	22.830	1.00	76.01	LS12	ATOM	13937	CB	LYS	122	168.032	79.914	28.135	1.00	49.28	LS12
ATOM	13885	O	SER	115	168.630	89.185	23.328	1.00	76.01	LS12	ATOM	13938	CG	LYS	122	167.659	78.769	27.205	1.00	49.28	LS12
ATOM	13886	N	ARG	116	170.450	88.112	22.629	1.00	67.86	LS12	ATOM	13939	CD	LYS	122	166.670	77.819	27.883	1.00	49.28	LS12
ATOM	13887	CA	ARG	116	169.876	86.805	22.975	1.00	67.86	LS12	ATOM	13940	CE	LYS	122	166.472	76.517	27.105	1.00	49.28	LS12
ATOM	13888	CB	ARG	116	169.530	86.732	24.463	1.00	54.96	LS12	ATOM	13941	NZ	LYS	122	165.713	76.654	25.825	1.00	49.28	LS12
ATOM	13889	CG	ARG	116	170.717	87.039	25.397	1.00	54.96	LS12	ATOM	13942	C	LYS	122	168.681	82.319	28.422	1.00	55.18	LS12
ATOM	13890	CD	ARG	116	170.478	86.549	26.827	1.00	54.96	LS12	ATOM	13943	O	LYS	122	169.809	82.816	28.451	1.00	55.18	LS12
ATOM	13891	NE	ARG	116	169.211	85.826	26.956	1.00	54.96	LS12	ATOM	13944	N	LYS	123	167.720	82.701	29.254	1.00	66.59	LS12
ATOM	13892	CZ	ARG	116	168.168	86.257	27.662	1.00	54.96	LS12	ATOM	13945	CA	LYS	123	167.979	83.758	30.225	1.00	66.59	LS12
ATOM	13893	NH1	ARG	116	168.232	87.409	28.321	1.00	54.96	LS12	ATOM	13946	CB	LYS	123	166.670	84.332	30.754	1.00	59.97	LS12
ATOM	13894	NH2	ARG	116	167.049	85.550	27.683	1.00	54.96	LS12	ATOM	13947	CG	LYS	123	166.878	85.600	31.551	1.00	59.97	LS12
ATOM	13895	C	ARG	116	168.625	86.711	22.142	1.00	67.86	LS12	ATOM	13948	CD	LYS	123	165.566	86.295	31.814	1.00	59.97	LS12
ATOM	13896	O	ARG	116	168.541	87.377	21.118	1.00	67.86	LS12	ATOM	13949	CE	LYS	123	165.807	87.692	32.346	1.00	59.97	LS12
ATOM	13897	N	SER	117	167.654	85.915	22.580	1.00	50.03	LS12	ATOM	13950	NZ	LYS	123	164.526	88.428	32.529	1.00	59.97	LS12
ATOM	13898	CA	SER	117	166.375	85.715	21.861	1.00	50.03	LS12	ATOM	13951	C	LYS	123	168.853	83.343	31.406	1.00	66.59	LS12
ATOM	13899	CB	SER	117	165.598	87.015	21.730	1.00	60.14	LS12	ATOM	13952	O	LYS	123	168.552	82.374	32.117	1.00	66.59	LS12
ATOM	13900	OG	SER	117	164.373	86.826	21.054	1.00	60.14	LS12	ATOM	13953	N	PRO	124	169.947	84.090	31.640	1.00	81.80	LS12
ATOM	13901	C	SER	117	166.695	85.175	20.493	1.00	50.03	LS12	ATOM	13954	CD	PRO	124	170.265	85.400	31.049	1.00	54.42	LS12
ATOM	13902	O	SER	117	166.058	84.249	19.999	1.00	50.03	LS12	ATOM	13955	CA	PRO	124	170.862	83.793	32.742	1.00	81.80	LS12
ATOM	13903	N	LYS	118	167.676	85.811	19.879	1.00	65.89	LS12	ATOM	13956	CB	PRO	124	171.854	84.952	32.681	1.00	54.42	LS12
ATOM	13904	CA	LYS	118	168.242	85.416	18.615	1.00	65.89	LS12	ATOM	13957	CG	PRO	124	171.034	86.070	32.158	1.00	54.42	LS12

ATOM	13958	C	PRO	124	170.077	83.746	34.040	1.00 81.80	LS12	ATOM	14011	N	LEU	13	122.324	44.310	4.780	1.00 57.83	TS20
ATOM	13959	O	PRO	124	169.844	84.775	34.672	1.00 81.80	LS12	ATOM	14012	CA	LEU	13	122.901	43.432	3.772	1.00 57.83	TS20
ATOM	13960	N	LYS	125	169.662	82.538	34.416	1.00166.00	LS12	ATOM	14013	CB	LEU	13	123.676	42.321	4.476	1.00 34.27	TS20
ATOM	13961	CA	LYS	125	168.873	82.312	35.623	1.00166.00	LS12	ATOM	14014	CG	LEU	13	125.196	42.249	4.416	1.00 34.27	TS20
ATOM	13962	CB	LYS	125	168.384	80.859	35.670	1.00125.84	LS12	ATOM	14015	CD1	LEU	13	125.688	41.196	5.376	1.00 34.27	TS20
ATOM	13963	CG	LYS	125	167.373	80.512	34.586	1.00125.84	LS12	ATOM	14016	CD2	LEU	13	125.638	41.916	2.986	1.00 34.27	TS20
ATOM	13964	CD	LYS	125	166.863	79.086	34.733	1.00125.84	LS12	ATOM	14017	C	LEU	13	121.610	42.855	3.179	1.00 57.83	TS20
ATOM	13965	CE	LYS	125	165.771	78.778	33.715	1.00125.84	LS12	ATOM	14018	O	LEU	13	121.589	42.247	2.106	1.00 57.83	TS20
ATOM	13966	NZ	LYS	125	165.251	77.386	33.839	1.00125.84	LS12	ATOM	14019	N	LYS	14	120.536	43.045	3.946	1.00 40.41	TS20
ATOM	13967	C	LYS	125	169.589	82.647	36.924	1.00166.00	LS12	ATOM	14020	CA	LYS	14	119.210	42.612	3.567	1.00 40.41	TS20
ATOM	13968	O	LYS	125	169.569	81.863	37.872	1.00166.00	LS12	ATOM	14021	CB	LYS	14	118.187	42.967	4.658	1.00 42.94	TS20
ATOM	13969	N	GLU	126	170.221	83.814	36.969	1.00106.42	LS12	ATOM	14022	CG	LYS	14	116.801	42.408	4.328	1.00 42.94	TS20
ATOM	13970	CA	GLU	126	170.907	84.238	38.174	1.00106.42	LS12	ATOM	14023	CD	LYS	14	115.622	43.071	5.037	1.00 42.94	TS20
ATOM	13971	CB	GLU	126	171.996	85.268	37.844	1.00140.40	LS12	ATOM	14024	CE	LYS	14	115.328	42.465	6.398	1.00 42.94	TS20
ATOM	13972	CG	GLU	126	171.697	86.203	36.677	1.00140.40	LS12	ATOM	14025	NZ	LYS	14	113.971	42.871	6.876	1.00 42.94	TS20
ATOM	13973	CD	GLU	126	170.651	87.252	36.998	1.00140.40	LS12	ATOM	14026	C	LYS	14	118.901	43.386	2.298	1.00 40.41	TS20
ATOM	13974	OE1	GLU	126	170.839	88.005	37.979	1.00140.40	LS12	ATOM	14027	O	LYS	14	118.379	42.848	1.322	1.00 40.41	TS20
ATOM	13975	OE2	GLU	126	169.644	87.327	36.262	1.00140.40	LS12	ATOM	14028	N	ARG	15	119.253	44.665	2.321	1.00 51.11	TS20
ATOM	13976	C	GLU	126	169.905	84.807	39.173	1.00106.42	LS12	ATOM	14029	CA	ARG	15	119.030	45.527	1.183	1.00 51.11	TS20
ATOM	13977	O	GLU	126	169.597	85.999	39.162	1.00106.42	LS12	ATOM	14030	CB	ARG	15	119.677	46.869	1.433	1.00 35.24	TS20
ATOM	13978	N	ALA	127	169.388	83.930	40.029	1.00174.96	LS12	ATOM	14031	CG	ARG	15	118.783	47.856	2.157	1.00 35.24	TS20
ATOM	13979	CA	ALA	127	168.420	84.314	41.050	1.00174.96	LS12	ATOM	14032	CD	ARG	15	117.577	48.246	1.309	1.00 35.24	TS20
ATOM	13980	CB	ALA	127	167.643	83.083	41.523	1.00 89.05	LS12	ATOM	14033	NE	ARG	15	116.787	49.306	1.940	1.00 35.24	TS20
ATOM	13981	C	ALA	127	169.120	84.980	42.233	1.00174.96	LS12	ATOM	14034	CZ	ARG	15	115.606	49.724	1.495	1.00 35.24	TS20
ATOM	13982	O	ALA	127	170.351	85.198	42.147	1.00174.96	LS12	ATOM	14035	NH1	ARG	15	115.066	49.174	0.410	1.00 35.24	TS20
ATOM	13983	OXT	ALA	127	168.425	85.279	43.229	1.00118.12	LS12	ATOM	14036	NH2	ARG	15	114.964	50.696	2.132	1.00 35.24	TS20
ATOM	13984	CB	ASN	9	129.106	42.420	9.924	1.00 78.13	TS20	ATOM	14037	C	ARG	15	119.566	44.914	-0.096	1.00 51.11	TS20
ATOM	13985	CG	ASN	9	129.957	43.494	10.554	1.00 78.13	TS20	ATOM	14038	O	ARG	15	118.846	44.800	-1.082	1.00 51.11	TS20
ATOM	13986	OD1	ASN	9	131.176	43.543	10.348	1.00 78.13	TS20	ATOM	14039	N	HIS	16	120.823	44.506	-0.098	1.00 46.29	TS20
ATOM	13987	ND2	ASN	9	129.319	44.379	11.315	1.00 78.13	TS20	ATOM	14040	CA	HIS	16	121.359	43.895	-1.309	1.00 46.29	TS20
ATOM	13988	C	ASN	9	127.211	43.789	9.107	1.00 82.12	TS20	ATOM	14041	CB	HIS	16	122.823	43.528	-1.106	1.00 59.43	TS20
ATOM	13989	O	ASN	9	126.593	43.542	10.135	1.00 82.12	TS20	ATOM	14042	CG	HIS	16	123.496	43.043	-2.346	1.00 59.43	TS20
ATOM	13990	N	ASN	9	129.312	43.666	7.792	1.00 82.12	TS20	ATOM	14043	CD2	HIS	16	124.352	43.661	-3.190	1.00 59.43	TS20
ATOM	13991	CA	ASN	9	128.376	42.917	8.682	1.00 82.12	TS20	ATOM	14044	ND1	HIS	16	123.319	41.771	-2.841	1.00 59.43	TS20
ATOM	13992	N	LEU	10	126.935	44.829	8.326	1.00 71.27	TS20	ATOM	14045	CE1	HIS	16	124.046	41.622	-3.934	1.00 59.43	TS20
ATOM	13993	CA	LEU	10	125.812	45.703	8.623	1.00 71.27	TS20	ATOM	14046	NE2	HIS	16	124.683	42.755	-4.168	1.00 59.43	TS20
ATOM	13994	CB	LEU	10	125.917	47.028	7.863	1.00138.83	TS20	ATOM	14047	C	HIS	16	120.539	42.646	-1.660	1.00 46.29	TS20
ATOM	13995	CG	LEU	10	127.142	47.906	8.130	1.00138.83	TS20	ATOM	14048	O	HIS	16	120.171	42.425	-2.812	1.00 46.29	TS20
ATOM	13996	CD1	LEU	10	126.933	49.269	7.476	1.00138.83	TS20	ATOM	14049	N	ARG	17	120.256	41.842	-0.641	1.00 38.93	TS20
ATOM	13997	CD2	LEU	10	127.357	48.073	9.630	1.00138.83	TS20	ATOM	14050	CA	ARG	17	119.474	40.626	-0.765	1.00 38.93	TS20
ATOM	13998	C	LEU	10	124.611	44.915	8.132	1.00 71.27	TS20	ATOM	14051	CB	ARG	17	119.140	40.138	0.638	1.00 38.43	TS20
ATOM	13999	O	LEU	10	124.503	44.609	6.943	1.00 71.27	TS20	ATOM	14052	CG	ARG	17	119.455	38.697	0.944	1.00 38.43	TS20
ATOM	14000	N	SER	11	123.716	44.570	9.049	1.00 50.51	TS20	ATOM	14053	CD	ARG	17	119.066	38.384	2.405	1.00 38.43	TS20
ATOM	14001	CA	SER	11	122.556	43.795	8.673	1.00 50.51	TS20	ATOM	14054	NE	ARG	17	119.989	38.967	3.375	1.00 38.43	TS20
ATOM	14002	CB	SER	11	121.681	43.518	9.902	1.00 61.87	TS20	ATOM	14055	CZ	ARG	17	119.649	39.342	4.604	1.00 38.43	TS20
ATOM	14003	OG	SER	11	122.334	42.601	10.777	1.00 61.87	TS20	ATOM	14056	NH1	ARG	17	118.397	39.201	5.021	1.00 38.43	TS20
ATOM	14004	C	SER	11	121.764	44.405	7.526	1.00 50.51	TS20	ATOM	14057	NH2	ARG	17	120.567	39.860	5.420	1.00 38.43	TS20
ATOM	14005	O	SER	11	120.844	43.781	7.027	1.00 50.51	TS20	ATOM	14058	C	ARG	17	118.174	40.940	-1.516	1.00 38.93	TS20
ATOM	14006	N	ALA	12	122.118	45.615	7.102	1.00 56.49	TS20	ATOM	14059	O	ARG	17	117.795	40.266	-2.482	1.00 38.93	TS20
ATOM	14007	CA	ALA	12	121.471	46.242	5.938	1.00 56.49	TS20	ATOM	14060	N	GLN	18	117.486	41.979	-1.067	1.00 35.20	TS20
ATOM	14008	CB	ALA	12	121.655	47.735	5.976	1.00100.39	TS20	ATOM	14061	CA	GLN	18	116.224	42.352	-1.687	1.00 35.20	TS20
ATOM	14009	C	ALA	12	122.188	45.632	4.698	1.00 56.49	TS20	ATOM	14062	CB	GLN	18	115.555	43.432	-0.846	1.00 55.05	TS20
ATOM	14010	O	ALA	12	122.639	46.313	3.763	1.00 56.49	TS20	ATOM	14063	CG	GLN	18	115.503	43.025	0.610	1.00 55.05	TS20

ATOM	14064	CD	GLN	18	114.664	43.931	1.455	1.00	55.05	TS20	ATOM	14117	CG	LEU	24	116.667	37.709	-9.634	1.00	66.62	TS20
ATOM	14065	OE1	GLN	18	114.990	45.104	1.654	1.00	55.05	TS20	ATOM	14118	CD1	LEU	24	116.653	36.480	-8.742	1.00	66.62	TS20
ATOM	14066	NE2	GLN	18	113.569	43.398	1.964	1.00	55.05	TS20	ATOM	14119	CD2	LEU	24	117.609	37.488	-10.806	1.00	66.62	TS20
ATOM	14067	C	GLN	18	116.427	42.812	-3.119	1.00	35.20	TS20	ATOM	14120	C	LEU	24	113.661	39.458	-11.457	1.00	45.65	TS20
ATOM	14068	O	GLN	18	115.823	42.266	-4.042	1.00	35.20	TS20	ATOM	14121	O	LEU	24	113.202	38.925	-12.469	1.00	45.65	TS20
ATOM	14069	N	SER	19	117.293	43.806	-3.296	1.00	46.68	TS20	ATOM	14122	N	ARG	25	112.949	40.264	-10.677	1.00	43.72	TS20
ATOM	14070	CA	SER	19	117.591	44.335	-4.614	1.00	46.68	TS20	ATOM	14123	CA	ARG	25	111.549	40.513	-10.944	1.00	43.72	TS20
ATOM	14071	CB	SER	19	118.894	45.119	-4.590	1.00	68.61	TS20	ATOM	14124	CB	ARG	25	110.879	41.087	-9.711	1.00	80.58	TS20
ATOM	14072	OG	SER	19	119.990	44.227	-4.575	1.00	68.61	TS20	ATOM	14125	CG	ARG	25	109.369	41.013	-9.768	1.00	80.58	TS20
ATOM	14073	C	SER	19	117.725	43.200	-5.623	1.00	46.68	TS20	ATOM	14126	CD	ARG	25	108.874	40.017	-8.742	1.00	80.58	TS20
ATOM	14074	O	SER	19	117.269	43.321	-6.761	1.00	46.68	TS20	ATOM	14127	NE	ARG	25	109.447	40.313	-7.431	1.00	80.58	TS20
ATOM	14075	N	LEU	20	118.350	42.096	-5.221	1.00	41.62	TS20	ATOM	14128	CZ	ARG	25	109.370	39.509	-6.374	1.00	80.58	TS20
ATOM	14076	CA	LEU	20	118.503	40.982	-6.142	1.00	41.62	TS20	ATOM	14129	NH1	ARG	25	108.737	38.342	-6.462	1.00	80.58	TS20
ATOM	14077	CB	LEU	20	119.359	39.897	-5.534	1.00	52.51	TS20	ATOM	14130	NH2	ARG	25	109.937	39.875	-5.225	1.00	80.58	TS20
ATOM	14078	CG	LEU	20	120.840	40.120	-5.801	1.00	52.51	TS20	ATOM	14131	C	ARG	25	111.319	41.447	-12.116	1.00	43.72	TS20
ATOM	14079	CD1	LEU	20	121.265	41.450	-5.242	1.00	52.51	TS20	ATOM	14132	O	ARG	25	110.437	41.200	-12.935	1.00	43.72	TS20
ATOM	14080	CD2	LEU	20	121.642	39.007	-5.168	1.00	52.51	TS20	ATOM	14133	N	ASN	26	112.105	42.520	-12.194	1.00	58.37	TS20
ATOM	14081	C	LEU	20	117.164	40.405	-6.550	1.00	41.62	TS20	ATOM	14134	CA	ASN	26	111.969	43.500	-13.276	1.00	58.37	TS20
ATOM	14082	O	LEU	20	116.906	40.220	-7.738	1.00	41.62	TS20	ATOM	14135	CB	ASN	26	112.762	44.768	-12.965	1.00	58.09	TS20
ATOM	14083	N	LYS	21	116.299	40.119	-5.586	1.00	54.34	TS20	ATOM	14136	CG	ASN	26	112.233	45.506	-11.768	1.00	58.09	TS20
ATOM	14084	CA	LYS	21	115.002	39.563	-5.948	1.00	54.34	TS20	ATOM	14137	OD1	ASN	26	111.029	45.742	-11.657	1.00	58.09	TS20
ATOM	14085	CB	LYS	21	114.122	39.333	-4.720	1.00	63.11	TS20	ATOM	14138	ND2	ASN	26	113.130	45.891	-10.863	1.00	58.09	TS20
ATOM	14086	CG	LYS	21	114.749	38.537	-3.591	1.00	63.11	TS20	ATOM	14139	C	ASN	26	112.449	42.958	-14.614	1.00	58.37	TS20
ATOM	14087	CD	LYS	21	113.664	38.200	-2.586	1.00	63.11	TS20	ATOM	14140	O	ASN	26	111.769	43.117	-15.633	1.00	58.37	TS20
ATOM	14088	CE	LYS	21	114.197	37.972	-1.182	1.00	63.11	TS20	ATOM	14141	N	LYS	27	113.632	42.341	-14.602	1.00	62.58	TS20
ATOM	14089	NZ	LYS	21	113.058	37.786	-0.221	1.00	63.11	TS20	ATOM	14142	CA	LYS	27	114.232	41.765	-15.802	1.00	62.58	TS20
ATOM	14090	C	LYS	21	114.314	40.558	-6.870	1.00	54.34	TS20	ATOM	14143	CB	LYS	27	115.401	40.857	-15.421	1.00	112.27	TS20
ATOM	14091	O	LYS	21	113.770	40.191	-7.911	1.00	54.34	TS20	ATOM	14144	CG	LYS	27	116.543	41.583	-14.751	1.00	112.27	TS20
ATOM	14092	N	ARG	22	114.350	41.829	-6.486	1.00	50.28	TS20	ATOM	14145	CD	LYS	27	117.066	42.696	-15.655	1.00	112.27	TS20
ATOM	14093	CA	ARG	22	113.719	42.881	-7.277	1.00	50.28	TS20	ATOM	14146	CE	LYS	27	118.225	43.467	-15.031	1.00	112.27	TS20
ATOM	14094	CB	ARG	22	113.946	44.228	-6.603	1.00	65.39	TS20	ATOM	14147	NZ	LYS	27	118.747	44.510	-15.968	1.00	112.27	TS20
ATOM	14095	CG	ARG	22	113.076	44.420	-5.397	1.00	65.39	TS20	ATOM	14148	C	LYS	27	113.189	40.953	-16.547	1.00	62.58	TS20
ATOM	14096	CD	ARG	22	113.504	45.602	-4.581	1.00	65.39	TS20	ATOM	14149	O	LYS	27	113.105	40.967	-17.777	1.00	62.58	TS20
ATOM	14097	NE	ARG	22	112.472	45.901	-3.608	1.00	65.39	TS20	ATOM	14150	N	ALA	28	112.383	40.248	-15.774	1.00	45.83	TS20
ATOM	14098	CZ	ARG	22	111.301	46.431	-3.939	1.00	65.39	TS20	ATOM	14151	CA	ALA	28	111.356	39.417	-16.337	1.00	45.83	TS20
ATOM	14099	NH1	ARG	22	111.055	46.719	-5.210	1.00	65.39	TS20	ATOM	14152	CB	ALA	28	110.840	38.480	-15.267	1.00	57.67	TS20
ATOM	14100	NH2	ARG	22	110.370	46.643	-3.013	1.00	65.39	TS20	ATOM	14153	C	ALA	28	110.213	40.250	-16.937	1.00	45.83	TS20
ATOM	14101	C	ARG	22	114.232	42.905	-8.711	1.00	50.28	TS20	ATOM	14154	O	ALA	28	109.779	39.992	-18.068	1.00	45.83	TS20
ATOM	14102	O	ARG	22	113.446	43.017	-9.658	1.00	50.28	TS20	ATOM	14155	N	LYS	29	109.724	41.241	-16.191	1.00	40.84	TS20
ATOM	14103	N	ARG	23	115.551	42.798	-8.862	1.00	50.18	TS20	ATOM	14156	CA	LYS	29	108.629	42.082	-16.679	1.00	40.84	TS20
ATOM	14104	CA	ARG	23	116.167	42.784	-10.183	1.00	50.18	TS20	ATOM	14157	CB	LYS	29	108.371	43.243	-15.714	1.00	98.08	TS20
ATOM	14105	CB	ARG	23	117.687	42.631	-10.068	1.00	69.16	TS20	ATOM	14158	CG	LYS	29	107.976	42.835	-14.309	1.00	98.08	TS20
ATOM	14106	CG	ARG	23	118.391	42.256	-11.368	1.00	69.16	TS20	ATOM	14159	CD	LYS	29	106.668	42.093	-14.311	1.00	98.08	TS20
ATOM	14107	CD	ARG	23	119.913	42.328	-11.201	1.00	69.16	TS20	ATOM	14160	CE	LYS	29	106.329	41.575	-12.931	1.00	98.08	TS20
ATOM	14108	NE	ARG	23	120.651	41.557	-12.205	1.00	69.16	TS20	ATOM	14161	NZ	LYS	29	105.318	40.478	-13.023	1.00	98.08	TS20
ATOM	14109	CZ	ARG	23	120.552	40.237	-12.366	1.00	69.16	TS20	ATOM	14162	C	LYS	29	108.937	42.652	-18.065	1.00	40.84	TS20
ATOM	14110	NH1	ARG	23	119.743	39.524	-11.591	1.00	69.16	TS20	ATOM	14163	O	LYS	29	108.163	42.474	-19.018	1.00	40.84	TS20
ATOM	14111	NH2	ARG	23	121.265	39.623	-13.300	1.00	69.16	TS20	ATOM	14164	N	LYS	30	110.084	43.326	-18.156	1.00	54.77	TS20
ATOM	14112	C	ARG	23	115.586	41.622	-10.970	1.00	50.18	TS20	ATOM	14165	CA	LYS	30	110.537	43.967	-19.383	1.00	54.77	TS20
ATOM	14113	O	ARG	23	115.071	41.804	-12.071	1.00	50.18	TS20	ATOM	14166	CB	LYS	30	111.817	44.749	-19.127	1.00	68.44	TS20
ATOM	14114	N	LEU	24	115.638	40.431	-10.386	1.00	45.65	TS20	ATOM	14167	CG	LYS	30	111.710	45.793	-18.042	1.00	68.44	TS20
ATOM	14115	CA	LEU	24	115.117	39.249	-11.058	1.00	45.65	TS20	ATOM	14168	CD	LYS	30	113.085	46.369	-17.763	1.00	68.44	TS20
ATOM	14116	CB	LEU	24	115.253	38.015	-10.153	1.00	66.62	TS20	ATOM	14169	CE	LYS	30	113.121	47.190	-16.487	1.00	68.44	TS20

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ATOM	14276	CB	GLN	45	105.638	42.699	-40.677	1.00120.95	TS20	ATOM	14329	CA	ALA	52	98.774	41.701	-34.665	1.00 70.07	TS20
ATOM	14277	CG	GLN	45	106.913	43.378	-40.282	1.00120.95	TS20	ATOM	14330	CB	ALA	52	99.042	42.528	-35.913	1.00 59.02	TS20
ATOM	14278	CD	GLN	45	107.413	44.270	-41.380	1.00120.95	TS20	ATOM	14331	C	ALA	52	98.256	42.594	-33.537	1.00 70.07	TS20
ATOM	14279	OE1	GLN	45	107.402	43.890	-42.549	1.00120.95	TS20	ATOM	14332	O	ALA	52	98.963	42.855	-32.562	1.00 70.07	TS20
ATOM	14280	NE2	GLN	45	107.861	45.465	-41.018	1.00120.95	TS20	ATOM	14333	N	LEU	53	97.019	43.056	-33.661	1.00 52.44	TS20
ATOM	14281	C	GLN	45	103.589	43.046	-42.007	1.00 77.97	TS20	ATOM	14334	CA	LEU	53	96.451	43.922	-32.640	1.00 52.44	TS20
ATOM	14282	O	GLN	45	103.202	43.733	-42.950	1.00 77.97	TS20	ATOM	14335	CB	LEU	53	95.125	44.509	-33.125	1.00 48.17	TS20
ATOM	14283	N	GLU	46	103.284	41.758	-41.868	1.00 66.71	TS20	ATOM	14336	CG	LEU	53	95.326	45.732	-34.031	1.00 48.17	TS20
ATOM	14284	CA	GLU	46	102.455	41.060	-42.840	1.00 66.71	TS20	ATOM	14337	CD1	LEU	53	94.118	45.958	-34.905	1.00 48.17	TS20
ATOM	14285	CB	GLU	46	102.563	39.542	-42.668	1.00 91.95	TS20	ATOM	14338	CD2	LEU	53	95.612	46.967	-33.167	1.00 48.17	TS20
ATOM	14286	CG	GLU	46	103.974	38.996	-42.658	1.00 91.95	TS20	ATOM	14339	C	LEU	53	96.260	43.173	-31.335	1.00 52.44	TS20
ATOM	14287	CD	GLU	46	104.577	38.971	-41.269	1.00 91.95	TS20	ATOM	14340	O	LEU	53	96.622	43.683	-30.267	1.00 52.44	TS20
ATOM	14288	OE1	GLU	46	104.045	38.240	-40.403	1.00 91.95	TS20	ATOM	14341	N	LYS	54	95.700	41.963	-31.427	1.00 65.52	TS20
ATOM	14289	OE2	GLU	46	105.581	39.682	-41.051	1.00 91.95	TS20	ATOM	14342	CA	LYS	54	95.463	41.122	-30.249	1.00 65.52	TS20
ATOM	14290	C	GLU	46	101.002	41.462	-42.680	1.00 66.71	TS20	ATOM	14343	CB	LYS	54	95.193	39.672	-30.663	1.00117.29	TS20
ATOM	14291	O	GLU	46	100.103	40.665	-42.948	1.00 66.71	TS20	ATOM	14344	CG	LYS	54	93.873	39.468	-31.385	1.00117.29	TS20
ATOM	14292	N	GLY	47	100.769	42.692	-42.231	1.00 80.25	TS20	ATOM	14345	CD	LYS	54	93.746	38.066	-31.971	1.00117.29	TS20
ATOM	14293	CA	GLY	47	99.406	43.175	-42.052	1.00 80.25	TS20	ATOM	14346	CE	LYS	54	92.444	37.909	-32.749	1.00117.29	TS20
ATOM	14294	C	GLY	47	98.419	42.193	-41.433	1.00 80.25	TS20	ATOM	14347	NZ	LYS	54	92.370	36.602	-33.454	1.00117.29	TS20
ATOM	14295	O	GLY	47	97.277	42.082	-41.883	1.00 80.25	TS20	ATOM	14348	C	LYS	54	96.687	41.175	-29.354	1.00 65.52	TS20
ATOM	14296	N	LYS	48	98.866	41.474	-40.405	1.00 67.71	TS20	ATOM	14349	O	LYS	54	96.598	41.560	-28.189	1.00 65.52	TS20
ATOM	14297	CA	LYS	48	98.031	40.513	-39.696	1.00 67.71	TS20	ATOM	14350	N	ILE	55	97.833	40.793	-29.913	1.00 52.49	TS20
ATOM	14298	CB	LYS	48	98.920	39.563	-38.900	1.00 90.40	TS20	ATOM	14351	CA	ILE	55	99.080	40.813	-29.172	1.00 52.49	TS20
ATOM	14299	CG	LYS	48	99.856	38.728	-39.745	1.00 90.40	TS20	ATOM	14352	CB	ILE	55	100.243	40.285	-30.029	1.00 44.29	TS20
ATOM	14300	CD	LYS	48	99.089	37.706	-40.559	1.00 90.40	TS20	ATOM	14353	CG2	ILE	55	101.581	40.754	-29.458	1.00 44.29	TS20
ATOM	14301	CE	LYS	48	100.030	36.725	-41.235	1.00 90.40	TS20	ATOM	14354	CG1	ILE	55	100.162	38.756	-30.096	1.00 44.29	TS20
ATOM	14302	NZ	LYS	48	99.261	35.681	-41.967	1.00 90.40	TS20	ATOM	14355	CD1	ILE	55	101.470	38.069	-30.546	1.00 44.29	TS20
ATOM	14303	C	LYS	48	97.130	41.302	-38.746	1.00 67.71	TS20	ATOM	14356	C	ILE	55	99.388	42.231	-28.711	1.00 52.49	TS20
ATOM	14304	O	LYS	48	97.166	41.118	-37.535	1.00 67.71	TS20	ATOM	14357	O	ILE	55	99.798	42.450	-27.566	1.00 52.49	TS20
ATOM	14305	N	ALA	49	96.325	42.187	-39.312	1.00 61.97	TS20	ATOM	14358	N	MET	56	99.189	43.201	-29.598	1.00 52.92	TS20
ATOM	14306	CA	ALA	49	95.430	43.037	-38.538	1.00 61.97	TS20	ATOM	14359	CA	MET	56	99.449	44.578	-29.225	1.00 52.92	TS20
ATOM	14307	CB	ALA	49	94.204	43.394	-39.379	1.00114.99	TS20	ATOM	14360	CB	MET	56	98.948	45.531	-30.296	1.00 69.53	TS20
ATOM	14308	C	ALA	49	94.986	42.462	-37.198	1.00 61.97	TS20	ATOM	14361	CG	MET	56	99.245	46.971	-29.949	1.00 69.53	TS20
ATOM	14309	O	ALA	49	95.454	42.906	-36.147	1.00 61.97	TS20	ATOM	14362	SD	MET	56	98.099	48.125	-30.703	1.00 69.53	TS20
ATOM	14310	N	GLU	50	94.076	41.488	-37.242	1.00 86.98	TS20	ATOM	14363	CE	MET	56	99.079	48.680	-32.072	1.00 69.53	TS20
ATOM	14311	CA	GLU	50	93.549	40.862	-36.030	1.00 86.98	TS20	ATOM	14364	C	MET	56	98.753	44.895	-27.897	1.00 52.92	TS20
ATOM	14312	CB	GLU	50	92.730	39.617	-36.367	1.00137.67	TS20	ATOM	14365	O	MET	56	99.314	45.575	-27.040	1.00 52.92	TS20
ATOM	14313	CG	GLU	50	91.314	39.901	-36.822	1.00137.67	TS20	ATOM	14366	N	ARG	57	97.534	44.393	-27.722	1.00 49.51	TS20
ATOM	14314	CD	GLU	50	90.318	38.903	-36.250	1.00137.67	TS20	ATOM	14367	CA	ARG	57	96.790	44.642	-26.490	1.00 49.51	TS20
ATOM	14315	OE1	GLU	50	90.487	37.686	-36.484	1.00137.67	TS20	ATOM	14368	CB	ARG	57	95.359	44.144	-26.636	1.00 76.56	TS20
ATOM	14316	OE2	GLU	50	89.366	39.336	-35.565	1.00137.67	TS20	ATOM	14369	CG	ARG	57	94.436	45.167	-27.249	1.00 76.56	TS20
ATOM	14317	C	GLU	50	94.621	40.475	-35.035	1.00 86.98	TS20	ATOM	14370	CD	ARG	57	93.120	44.536	-27.627	1.00 76.56	TS20
ATOM	14318	O	GLU	50	94.857	41.181	-34.052	1.00 86.98	TS20	ATOM	14371	NE	ARG	57	93.275	43.670	-28.789	1.00 76.56	TS20
ATOM	14319	N	GLU	51	95.258	39.340	-35.300	1.00 69.64	TS20	ATOM	14372	CZ	ARG	57	92.282	42.992	-29.350	1.00 76.56	TS20
ATOM	14320	CA	GLU	51	96.308	38.819	-34.439	1.00 69.64	TS20	ATOM	14373	NH1	ARG	57	91.054	43.075	-28.850	1.00 76.56	TS20
ATOM	14321	CB	GLU	51	97.041	37.684	-35.159	1.00159.16	TS20	ATOM	14374	NH2	ARG	57	92.509	42.249	-30.426	1.00 76.56	TS20
ATOM	14322	CG	GLU	51	97.196	37.905	-36.653	1.00159.16	TS20	ATOM	14375	C	ARG	57	97.435	44.048	-25.236	1.00 49.51	TS20
ATOM	14323	CD	GLU	51	97.310	36.605	-37.437	1.00159.16	TS20	ATOM	14376	O	ARG	57	97.417	44.664	-24.174	1.00 49.51	TS20
ATOM	14324	OE1	GLU	51	98.238	35.812	-37.160	1.00159.16	TS20	ATOM	14377	N	LYS	58	97.993	42.850	-25.337	1.00 56.71	TS20
ATOM	14325	OE2	GLU	51	96.468	36.377	-38.333	1.00159.16	TS20	ATOM	14378	CA	LYS	58	98.648	42.287	-24.172	1.00 56.71	TS20
ATOM	14326	C	GLU	51	97.277	39.912	-34.001	1.00 69.64	TS20	ATOM	14379	CB	LYS	58	99.175	40.878	-24.460	1.00 96.73	TS20
ATOM	14327	O	GLU	51	97.500	40.115	-32.801	1.00 69.64	TS20	ATOM	14380	CG	LYS	58	98.079	39.909	-24.850	1.00 96.73	TS20
ATOM	14328	N	ALA	52	97.833	40.632	-34.969	1.00 70.07	TS20	ATOM	14381	CD	LYS	58	98.565	38.467	-24.980	1.00 96.73	TS20

ATOM	14382	CE	LYS	58	97.394	37.543	-25.361	1.00	96.73	TS20	ATOM	14435	CE	LYS	65	97.779	43.422	-15.932	1.00	44.27	TS20
ATOM	14383	NZ	LYS	58	97.731	36.084	-25.400	1.00	96.73	TS20	ATOM	14436	NZ	LYS	65	97.544	41.980	-15.704	1.00	44.27	TS20
ATOM	14384	C	LYS	58	99.797	43.250	-23.889	1.00	56.71	TS20	ATOM	14437	C	LYS	65	102.480	47.146	-14.883	1.00	50.08	TS20
ATOM	14385	O	LYS	58	99.951	43.744	-22.767	1.00	56.71	TS20	ATOM	14438	O	LYS	65	102.561	47.351	-13.673	1.00	50.08	TS20
ATOM	14386	N	ALA	59	100.579	43.534	-24.931	1.00	45.28	TS20	ATOM	14439	N	ALA	66	103.545	47.025	-15.669	1.00	53.87	TS20
ATOM	14387	CA	ALA	59	101.709	44.445	-24.822	1.00	45.28	TS20	ATOM	14440	CA	ALA	66	104.886	47.192	-15.120	1.00	53.87	TS20
ATOM	14388	CB	ALA	59	102.201	44.824	-26.201	1.00	62.43	TS20	ATOM	14441	CB	ALA	66	105.926	47.107	-16.228	1.00	30.55	TS20
ATOM	14389	C	ALA	59	101.309	45.700	-24.048	1.00	45.28	TS20	ATOM	14442	C	ALA	66	104.903	48.572	-14.469	1.00	53.87	TS20
ATOM	14390	O	ALA	59	101.951	46.065	-23.058	1.00	45.28	TS20	ATOM	14443	O	ALA	66	105.482	48.772	-13.403	1.00	53.87	TS20
ATOM	14391	N	GLU	60	100.249	46.363	-24.494	1.00	37.77	TS20	ATOM	14444	N	ALA	67	104.227	49.513	-15.114	1.00	38.87	TS20
ATOM	14392	CA	GLU	60	99.819	47.551	-23.797	1.00	37.77	TS20	ATOM	14445	CA	ALA	67	104.153	50.863	-14.608	1.00	38.87	TS20
ATOM	14393	CB	GLU	60	98.524	48.101	-24.391	1.00	44.30	TS20	ATOM	14446	CB	ALA	67	103.436	51.760	-15.597	1.00	40.57	TS20
ATOM	14394	CG	GLU	60	98.072	49.397	-23.737	1.00	44.30	TS20	ATOM	14447	C	ALA	67	103.451	50.891	-13.264	1.00	38.87	TS20
ATOM	14395	CD	GLU	60	96.801	49.958	-24.348	1.00	44.30	TS20	ATOM	14448	O	ALA	67	103.667	51.810	-12.466	1.00	38.87	TS20
ATOM	14396	OE1	GLU	60	96.414	51.082	-23.970	1.00	44.30	TS20	ATOM	14449	N	LYS	68	102.608	49.893	-13.006	1.00	40.25	TS20
ATOM	14397	OE2	GLU	60	96.177	49.282	-25.196	1.00	44.30	TS20	ATOM	14450	CA	LYS	68	101.903	49.827	-11.729	1.00	40.25	TS20
ATOM	14398	C	GLU	60	99.629	47.208	-22.318	1.00	37.77	TS20	ATOM	14451	CB	LYS	68	101.119	48.518	-11.590	1.00	79.73	TS20
ATOM	14399	O	GLU	60	100.237	47.837	-21.451	1.00	37.77	TS20	ATOM	14452	CG	LYS	68	99.870	48.399	-12.442	1.00	79.73	TS20
ATOM	14400	N	SER	61	98.817	46.195	-22.028	1.00	48.56	TS20	ATOM	14453	CD	LYS	68	98.625	48.896	-11.714	1.00	79.73	TS20
ATOM	14401	CA	SER	61	98.569	45.778	-20.644	1.00	48.56	TS20	ATOM	14454	CE	LYS	68	98.619	50.420	-11.506	1.00	79.73	TS20
ATOM	14402	CB	SER	61	97.717	44.506	-20.626	1.00	80.13	TS20	ATOM	14455	NZ	LYS	68	97.285	50.977	-11.059	1.00	79.73	TS20
ATOM	14403	OG	SER	61	98.022	43.698	-19.505	1.00	80.13	TS20	ATOM	14456	C	LYS	68	102.933	49.901	-10.615	1.00	40.25	TS20
ATOM	14404	C	SER	61	99.839	45.543	-19.799	1.00	48.56	TS20	ATOM	14457	O	LYS	68	102.749	50.610	-9.642	1.00	40.25	TS20
ATOM	14405	O	SER	61	100.027	46.149	-18.733	1.00	48.56	TS20	ATOM	14458	N	GLY	69	104.025	49.164	-10.762	1.00	58.95	TS20
ATOM	14406	N	LEU	62	100.705	44.653	-20.260	1.00	54.05	TS20	ATOM	14459	CA	GLY	69	105.039	49.183	-9.733	1.00	58.95	TS20
ATOM	14407	CA	LEU	62	101.910	44.377	-19.501	1.00	54.05	TS20	ATOM	14460	C	GLY	69	106.192	50.088	-10.097	1.00	58.95	TS20
ATOM	14408	CB	LEU	62	102.808	43.403	-20.258	1.00	36.72	TS20	ATOM	14461	O	GLY	69	105.992	51.171	-10.664	1.00	58.95	TS20
ATOM	14409	CG	LEU	62	102.246	41.983	-20.381	1.00	36.72	TS20	ATOM	14462	N	SER	70	107.405	49.653	-9.768	1.00	37.13	TS20
ATOM	14410	CD1	LEU	62	103.311	41.038	-20.953	1.00	36.72	TS20	ATOM	14463	CA	SER	70	108.581	50.442	-10.082	1.00	37.13	TS20
ATOM	14411	CD2	LEU	62	101.795	41.512	-19.010	1.00	36.72	TS20	ATOM	14464	CB	SER	70	109.414	50.685	-8.818	1.00	52.31	TS20
ATOM	14412	C	LEU	62	102.669	45.657	-19.202	1.00	54.05	TS20	ATOM	14465	OG	SER	70	110.181	49.554	-8.478	1.00	52.31	TS20
ATOM	14413	O	LEU	62	103.223	45.834	-18.112	1.00	54.05	TS20	ATOM	14466	C	SER	70	109.442	49.819	-11.185	1.00	37.13	TS20
ATOM	14414	N	ILE	63	102.692	46.553	-20.178	1.00	42.56	TS20	ATOM	14467	O	SER	70	110.521	50.318	-11.471	1.00	37.13	TS20
ATOM	14415	CA	ILE	63	103.386	47.814	-20.014	1.00	42.56	TS20	ATOM	14468	N	THR	71	108.956	48.754	-11.823	1.00	59.06	TS20
ATOM	14416	CB	ILE	63	103.379	48.582	-21.344	1.00	42.44	TS20	ATOM	14469	CA	THR	71	109.700	48.094	-12.900	1.00	59.06	TS20
ATOM	14417	CG2	ILE	63	104.012	49.956	-21.172	1.00	42.44	TS20	ATOM	14470	CB	THR	71	108.883	46.978	-13.547	1.00	48.32	TS20
ATOM	14418	CG1	ILE	63	104.129	47.750	-22.393	1.00	42.44	TS20	ATOM	14471	OG1	THR	71	108.162	46.289	-12.525	1.00	48.32	TS20
ATOM	14419	CD1	ILE	63	104.136	48.346	-23.790	1.00	42.44	TS20	ATOM	14472	CG2	THR	71	109.800	45.984	-14.267	1.00	48.32	TS20
ATOM	14420	C	ILE	63	102.717	48.615	-18.900	1.00	42.56	TS20	ATOM	14473	C	THR	71	110.020	49.114	-13.971	1.00	59.06	TS20
ATOM	14421	O	ILE	63	103.318	48.857	-17.855	1.00	42.56	TS20	ATOM	14474	O	THR	71	111.023	49.015	-14.675	1.00	59.06	TS20
ATOM	14422	N	ASP	64	101.465	49.005	-19.112	1.00	45.19	TS20	ATOM	14475	N	LEU	72	109.139	50.092	-14.080	1.00	76.19	TS20
ATOM	14423	CA	ASP	64	100.751	49.759	-18.097	1.00	45.19	TS20	ATOM	14476	CA	LEU	72	109.268	51.184	-15.026	1.00	76.19	TS20
ATOM	14424	CB	ASP	64	99.261	49.852	-18.442	1.00	95.28	TS20	ATOM	14477	CB	LEU	72	109.493	50.691	-16.467	1.00	52.48	TS20
ATOM	14425	CG	ASP	64	98.948	50.990	-19.411	1.00	95.28	TS20	ATOM	14478	CG	LEU	72	108.429	50.003	-17.342	1.00	52.48	TS20
ATOM	14426	OD1	ASP	64	99.141	52.171	-19.044	1.00	95.28	TS20	ATOM	14479	CD1	LEU	72	107.199	50.851	-17.554	1.00	52.48	TS20
ATOM	14427	OD2	ASP	64	98.503	50.710	-20.543	1.00	95.28	TS20	ATOM	14480	CD2	LEU	72	109.066	49.725	-18.687	1.00	52.48	TS20
ATOM	14428	C	ASP	64	100.932	49.073	-16.747	1.00	45.19	TS20	ATOM	14481	C	LEU	72	107.917	51.798	-14.941	1.00	76.19	TS20
ATOM	14429	O	ASP	64	101.040	49.732	-15.712	1.00	45.19	TS20	ATOM	14482	O	LEU	72	106.969	51.093	-14.611	1.00	76.19	TS20
ATOM	14430	N	LYS	65	100.982	47.743	-16.764	1.00	50.08	TS20	ATOM	14483	N	HIS	73	107.809	53.097	-15.188	1.00	86.39	TS20
ATOM	14431	CA	LYS	65	101.135	46.975	-15.540	1.00	50.08	TS20	ATOM	14484	CA	HIS	73	106.486	53.687	-15.190	1.00	86.39	TS20
ATOM	14432	CB	LYS	65	100.911	45.504	-15.809	1.00	44.27	TS20	ATOM	14485	CB	HIS	73	105.667	53.313	-13.920	1.00	109.59	TS20
ATOM	14433	CG	LYS	65	99.486	45.173	-16.044	1.00	44.27	TS20	ATOM	14486	CG	HIS	73	106.351	53.548	-12.607	1.00	109.59	TS20
ATOM	14434	CD	LYS	65	99.247	43.713	-15.838	1.00	44.27	TS20	ATOM	14487	CD2	HIS	73	105.893	54.112	-11.463	1.00	109.59	TS20

ATOM	14488	ND1	HIS	73	107.616	53.083	-12.324	1.00109.59	TS20	ATOM	14541	NE	ARG	80	109.833	51.051	-22.333	1.00 68.32	TS20
ATOM	14489	CE1	HIS	73	107.909	53.351	-11.063	1.00109.59	TS20	ATOM	14542	CZ	ARG	80	110.838	50.284	-21.930	1.00 68.32	TS20
ATOM	14490	NE2	HIS	73	106.880	53.973	-10.518	1.00109.59	TS20	ATOM	14543	NH1	ARG	80	110.869	48.990	-22.252	1.00 68.32	TS20
ATOM	14491	C	HIS	73	106.306	55.148	-15.489	1.00 86.39	TS20	ATOM	14544	NH2	ARG	80	111.815	50.820	-21.208	1.00 68.32	TS20
ATOM	14492	O	HIS	73	107.193	55.976	-15.227	1.00 86.39	TS20	ATOM	14545	C	ARG	80	105.218	52.199	-25.902	1.00 49.64	TS20
ATOM	14493	N	LYS	74	105.122	55.414	-16.055	1.00 81.63	TS20	ATOM	14546	O	ARG	80	105.224	51.903	-27.105	1.00 49.64	TS20
ATOM	14494	CA	LYS	74	104.669	56.727	-16.453	1.00 81.63	TS20	ATOM	14547	N	LYS	81	104.115	52.450	-25.204	1.00 43.91	TS20
ATOM	14495	CB	LYS	74	104.380	57.579	-15.220	1.00 91.06	TS20	ATOM	14548	CA	LYS	81	102.804	52.366	-25.810	1.00 43.91	TS20
ATOM	14496	CG	LYS	74	103.132	57.164	-14.478	1.00 91.06	TS20	ATOM	14549	CB	LYS	81	101.755	52.855	-24.812	1.00 54.80	TS20
ATOM	14497	CD	LYS	74	101.900	57.321	-15.367	1.00 91.06	TS20	ATOM	14550	CG	LYS	81	101.612	51.901	-23.620	1.00 54.80	TS20
ATOM	14498	CE	LYS	74	100.667	56.650	-14.757	1.00 91.06	TS20	ATOM	14551	CD	LYS	81	100.858	52.518	-22.458	1.00 54.80	TS20
ATOM	14499	NZ	LYS	74	99.488	56.635	-15.676	1.00 91.06	TS20	ATOM	14552	CE	LYS	81	99.472	52.966	-22.876	1.00 54.80	TS20
ATOM	14500	C	LYS	74	105.732	57.367	-17.306	1.00 81.63	TS20	ATOM	14553	NZ	LYS	81	98.753	53.637	-21.751	1.00 54.80	TS20
ATOM	14501	O	LYS	74	106.860	57.570	-16.856	1.00 81.63	TS20	ATOM	14554	C	LYS	81	102.725	53.124	-27.128	1.00 43.91	TS20
ATOM	14502	N	ASN	75	105.368	57.694	-18.540	1.00 52.94	TS20	ATOM	14555	O	LYS	81	102.138	52.625	-28.094	1.00 43.91	TS20
ATOM	14503	CA	ASN	75	106.307	58.295	-19.480	1.00 52.94	TS20	ATOM	14556	N	SER	82	103.335	54.309	-27.180	1.00 52.18	TS20
ATOM	14504	CB	ASN	75	107.309	59.199	-18.749	1.00 45.41	TS20	ATOM	14557	CA	SER	82	103.334	55.123	-28.398	1.00 52.18	TS20
ATOM	14505	CG	ASN	75	106.636	60.355	-18.023	1.00 45.41	TS20	ATOM	14558	CB	SER	82	103.947	56.484	-28.141	1.00 46.44	TS20
ATOM	14506	OD1	ASN	75	105.567	60.203	-17.434	1.00 45.41	TS20	ATOM	14559	OG	SER	82	103.637	56.884	-26.836	1.00 46.44	TS20
ATOM	14507	ND2	ASN	75	107.273	61.520	-18.057	1.00 45.41	TS20	ATOM	14560	C	SER	82	104.127	54.457	-29.496	1.00 52.18	TS20
ATOM	14508	C	ASN	75	107.016	57.089	-20.058	1.00 52.94	TS20	ATOM	14561	O	SER	82	103.564	54.048	-30.500	1.00 52.18	TS20
ATOM	14509	O	ASN	75	106.887	56.782	-21.248	1.00 52.94	TS20	ATOM	14562	N	ARG	83	105.437	54.342	-29.314	1.00 53.87	TS20
ATOM	14510	N	ALA	76	107.746	56.400	-19.181	1.00 52.46	TS20	ATOM	14563	CA	ARG	83	106.257	53.730	-30.349	1.00 53.87	TS20
ATOM	14511	CA	ALA	76	108.470	55.190	-19.534	1.00 52.46	TS20	ATOM	14564	CB	ARG	83	107.720	53.599	-29.897	1.00110.08	TS20
ATOM	14512	CB	ALA	76	108.950	54.502	-18.281	1.00 47.29	TS20	ATOM	14565	CG	ARG	83	107.936	53.548	-28.392	1.00110.08	TS20
ATOM	14513	C	ALA	76	107.482	54.299	-20.266	1.00 52.46	TS20	ATOM	14566	CD	ARG	83	108.000	54.945	-27.789	1.00110.08	TS20
ATOM	14514	O	ALA	76	107.714	53.892	-21.405	1.00 52.46	TS20	ATOM	14567	NE	ARG	83	109.364	55.426	-27.549	1.00110.08	TS20
ATOM	14515	N	ALA	77	106.366	54.016	-19.600	1.00 45.82	TS20	ATOM	14568	CZ	ARG	83	110.256	55.693	-28.497	1.00110.08	TS20
ATOM	14516	CA	ALA	77	105.317	53.188	-20.173	1.00 45.82	TS20	ATOM	14569	NH1	ARG	83	109.942	55.524	-29.776	1.00110.08	TS20
ATOM	14517	CB	ALA	77	104.354	52.771	-19.105	1.00 34.74	TS20	ATOM	14570	NH2	ARG	83	111.458	56.147	-28.161	1.00110.08	TS20
ATOM	14518	C	ALA	77	104.576	53.930	-21.269	1.00 45.82	TS20	ATOM	14571	C	ARG	83	105.720	52.371	-30.797	1.00 53.87	TS20
ATOM	14519	O	ALA	77	104.264	53.343	-22.305	1.00 45.82	TS20	ATOM	14572	O	ARG	83	106.079	51.883	-31.874	1.00 53.87	TS20
ATOM	14520	N	ALA	78	104.286	55.210	-21.047	1.00 45.43	TS20	ATOM	14573	N	LEU	84	104.861	51.760	-29.981	1.00 52.28	TS20
ATOM	14521	CA	ALA	78	103.584	56.000	-22.055	1.00 45.43	TS20	ATOM	14574	CA	LEU	84	104.280	50.465	-30.329	1.00 52.28	TS20
ATOM	14522	CB	ALA	78	103.483	57.418	-21.620	1.00 24.31	TS20	ATOM	14575	CB	LEU	84	103.917	49.662	-29.079	1.00 42.34	TS20
ATOM	14523	C	ALA	78	104.317	55.922	-23.389	1.00 45.43	TS20	ATOM	14576	CG	LEU	84	103.914	48.125	-29.203	1.00 42.34	TS20
ATOM	14524	O	ALA	78	103.698	55.697	-24.438	1.00 45.43	TS20	ATOM	14577	CD1	LEU	84	102.869	47.552	-28.231	1.00 42.34	TS20
ATOM	14525	N	ARG	79	105.637	56.108	-23.342	1.00 49.23	TS20	ATOM	14578	CD2	LEU	84	103.592	47.686	-30.629	1.00 42.34	TS20
ATOM	14526	CA	ARG	79	106.469	56.034	-24.544	1.00 49.23	TS20	ATOM	14579	C	LEU	84	103.026	50.676	-31.163	1.00 52.28	TS20
ATOM	14527	CB	ARG	79	107.953	56.051	-24.203	1.00 59.33	TS20	ATOM	14580	O	LEU	84	102.932	50.170	-32.273	1.00 52.28	TS20
ATOM	14528	CG	ARG	79	108.589	57.404	-24.059	1.00 59.33	TS20	ATOM	14581	N	MET	85	102.054	51.412	-30.633	1.00 64.21	TS20
ATOM	14529	CD	ARG	79	109.911	57.392	-24.771	1.00 59.33	TS20	ATOM	14582	CA	MET	85	100.836	51.653	-31.396	1.00 64.21	TS20
ATOM	14530	NE	ARG	79	110.558	56.084	-24.698	1.00 59.33	TS20	ATOM	14583	CB	MET	85	99.859	52.529	-30.593	1.00 63.35	TS20
ATOM	14531	CZ	ARG	79	111.121	55.563	-23.606	1.00 59.33	TS20	ATOM	14584	CG	MET	85	99.509	51.954	-29.214	1.00 63.35	TS20
ATOM	14532	NH1	ARG	79	111.133	56.230	-22.445	1.00 59.33	TS20	ATOM	14585	SD	MET	85	98.150	52.766	-28.295	1.00 63.35	TS20
ATOM	14533	NH2	ARG	79	111.696	54.367	-23.690	1.00 59.33	TS20	ATOM	14586	CE	MET	85	97.292	51.351	-27.632	1.00 63.35	TS20
ATOM	14534	C	ARG	79	106.211	54.733	-25.250	1.00 49.23	TS20	ATOM	14587	C	MET	85	101.244	52.327	-32.714	1.00 64.21	TS20
ATOM	14535	O	ARG	79	105.655	54.703	-26.344	1.00 49.23	TS20	ATOM	14588	O	MET	85	100.820	51.919	-33.797	1.00 64.21	TS20
ATOM	14536	N	ARG	80	106.655	53.659	-24.605	1.00 49.64	TS20	ATOM	14589	N	ARG	86	102.093	53.345	-32.604	1.00 57.41	TS20
ATOM	14537	CA	ARG	80	106.506	52.309	-25.121	1.00 49.64	TS20	ATOM	14590	CA	ARG	86	102.610	54.087	-33.747	1.00 57.41	TS20
ATOM	14538	CB	ARG	80	106.460	51.311	-23.971	1.00 68.32	TS20	ATOM	14591	CB	ARG	86	103.813	54.920	-33.299	1.00133.90	TS20
ATOM	14539	CG	ARG	80	107.546	51.519	-22.945	1.00 68.32	TS20	ATOM	14592	CG	ARG	86	104.071	56.176	-34.094	1.00133.90	TS20
ATOM	14540	CD	ARG	80	108.713	50.588	-23.135	1.00 68.32	TS20	ATOM	14593	CD	ARG	86	103.218	57.319	-33.588	1.00133.90	TS20

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ATOM  14594  NE  ARG   86     103.529  58.572 -34.273  1.00133.90      TS20
ATOM  14595  CZ  ARG   86     102.964  59.744 -33.988  1.00133.90      TS20
ATOM  14596  NH1 ARG   86     102.051  59.833 -33.026  1.00133.90      TS20
ATOM  14597  NH2 ARG   86     103.311  60.832 -34.666  1.00133.90      TS20
ATOM  14598  C   ARG   86     103.062  53.059 -34.785  1.00 57.41      TS20
ATOM  14599  O   ARG   86     102.409  52.843 -35.807  1.00 57.41      TS20
ATOM  14600  N   LYS   87     104.185  52.415 -34.491  1.00 43.70      TS20
ATOM  14601  CA  LYS   87     104.769  51.406 -35.355  1.00 43.70      TS20
ATOM  14602  CB  LYS   87     105.859  50.671 -34.587  1.00 66.36      TS20
ATOM  14603  CG  LYS   87     107.063  50.271 -35.424  1.00 66.36      TS20
ATOM  14604  CD  LYS   87     108.229  49.890 -34.516  1.00 66.36      TS20
ATOM  14605  CE  LYS   87     108.499  50.998 -33.503  1.00 66.36      TS20
ATOM  14606  NZ  LYS   87     109.516  50.616 -32.490  1.00 66.36      TS20
ATOM  14607  C   LYS   87     103.760  50.396 -35.909  1.00 43.70      TS20
ATOM  14608  O   LYS   87     103.810  50.048 -37.091  1.00 43.70      TS20
ATOM  14609  N   VAL   88     102.844  49.919 -35.072  1.00 52.70      TS20
ATOM  14610  CA  VAL   88     101.882  48.935 -35.543  1.00 52.70      TS20
ATOM  14611  CB  VAL   88     101.078  48.324 -34.377  1.00 56.40      TS20
ATOM  14612  CG1 VAL   88      99.963  47.421 -34.914  1.00 56.40      TS20
ATOM  14613  CG2 VAL   88     102.008  47.501 -33.489  1.00 56.40      TS20
ATOM  14614  C   VAL   88     100.954  49.534 -36.583  1.00 52.70      TS20
ATOM  14615  O   VAL   88     100.801  48.971 -37.667  1.00 52.70      TS20
ATOM  14616  N   ARG   89     100.346  50.673 -36.264  1.00 67.00      TS20
ATOM  14617  CA  ARG   89      99.449  51.362 -37.200  1.00 67.00      TS20
ATOM  14618  CB  ARG   89      99.099  52.756 -36.693  1.00 74.32      TS20
ATOM  14619  CG  ARG   89      97.875  52.837 -35.842  1.00 74.32      TS20
ATOM  14620  CD  ARG   89      96.779  53.578 -36.566  1.00 74.32      TS20
ATOM  14621  NE  ARG   89      95.780  54.035 -35.611  1.00 74.32      TS20
ATOM  14622  CZ  ARG   89      94.616  54.573 -35.945  1.00 74.32      TS20
ATOM  14623  NH1 ARG   89      94.300  54.721 -37.227  1.00 74.32      TS20
ATOM  14624  NH2 ARG   89      93.768  54.951 -34.998  1.00 74.32      TS20
ATOM  14625  C   ARG   89     100.129  51.531 -38.544  1.00 67.00      TS20
ATOM  14626  O   ARG   89      99.604  51.119 -39.580  1.00 67.00      TS20
ATOM  14627  N   GLN   90     101.296  52.166 -38.514  1.00 72.93      TS20
ATOM  14628  CA  GLN   90     102.059  52.397 -39.723  1.00 72.93      TS20
ATOM  14629  CB  GLN   90     103.398  53.037 -39.374  1.00128.31      TS20
ATOM  14630  CG  GLN   90     103.239  54.430 -38.795  1.00128.31      TS20
ATOM  14631  CD  GLN   90     104.555  55.038 -38.362  1.00128.31      TS20
ATOM  14632  OE1 GLN   90     105.521  55.058 -39.125  1.00128.31      TS20
ATOM  14633  NE2 GLN   90     104.599  55.545 -37.134  1.00128.31      TS20
ATOM  14634  C   GLN   90     102.257  51.094 -40.487  1.00 72.93      TS20
ATOM  14635  O   GLN   90     101.934  51.012 -41.671  1.00 72.93      TS20
ATOM  14636  N   LEU   91     102.761  50.063 -39.816  1.00 55.87      TS20
ATOM  14637  CA  LEU   91     102.964  48.792 -40.497  1.00 55.87      TS20
ATOM  14638  CB  LEU   91     103.578  47.764 -39.554  1.00 78.58      TS20
ATOM  14639  CG  LEU   91     105.070  47.867 -39.246  1.00 78.58      TS20
ATOM  14640  CD1 LEU   91     105.564  46.458 -38.902  1.00 78.58      TS20
ATOM  14641  CD2 LEU   91     105.845  48.407 -40.442  1.00 78.58      TS20
ATOM  14642  C   LEU   91     101.668  48.231 -41.077  1.00 55.87      TS20
ATOM  14643  O   LEU   91     101.648  47.685 -42.183  1.00 55.87      TS20
ATOM  14644  N   LEU   92     100.583  48.359 -40.331  1.00 71.22      TS20
ATOM  14645  CA  LEU   92      99.326  47.846 -40.814  1.00 71.22      TS20
ATOM  14646  CB  LEU   92      98.254  48.003 -39.747  1.00 50.89      TS20
ATOM  14647  CG  LEU   92      98.372  46.900 -38.696  1.00 50.89      TS20
ATOM  14648  CD1 LEU   92      97.242  47.011 -37.680  1.00 50.89      TS20
ATOM  14649  CD2 LEU   92      98.326  45.542 -39.402  1.00 50.89      TS20
ATOM  14650  C   LEU   92      98.916  48.511 -42.116  1.00 71.22      TS20
ATOM  14651  O   LEU   92      98.023  48.028 -42.816  1.00 71.22      TS20
ATOM  14652  N   GLU   93      99.569  49.620 -42.447  1.00 70.43      TS20
ATOM  14653  CA  GLU   93      99.276  50.301 -43.703  1.00 70.43      TS20
ATOM  14654  CB  GLU   93      99.723  51.757 -43.652  1.00134.04      TS20
ATOM  14655  CG  GLU   93      98.824  52.580 -42.763  1.00134.04      TS20
ATOM  14656  CD  GLU   93      97.384  52.092 -42.818  1.00134.04      TS20
ATOM  14657  OE1 GLU   93      96.838  51.968 -43.936  1.00134.04      TS20
ATOM  14658  OE2 GLU   93      96.805  51.823 -41.745  1.00134.04      TS20
ATOM  14659  C   GLU   93      99.999  49.543 -44.802  1.00 70.43      TS20
ATOM  14660  O   GLU   93     100.876  50.064 -45.492  1.00 70.43      TS20
ATOM  14661  N   ALA   94      99.617  48.277 -44.908  1.00100.76      TS20
ATOM  14662  CA  ALA   94     100.145  47.341 -45.879  1.00100.76      TS20
ATOM  14663  CB  ALA   94     100.935  46.267 -45.171  1.00 74.57      TS20
ATOM  14664  C   ALA   94      98.894  46.742 -46.494  1.00100.76      TS20
ATOM  14665  O   ALA   94      98.938  45.676 -47.115  1.00100.76      TS20
ATOM  14666  N   ALA   95      97.787  47.461 -46.289  1.00122.19      TS20
ATOM  14667  CA  ALA   95      96.440  47.104 -46.745  1.00122.19      TS20
ATOM  14668  CB  ALA   95      96.493  46.117 -47.921  1.00105.21      TS20
ATOM  14669  C   ALA   95      95.691  46.480 -45.567  1.00122.19      TS20
ATOM  14670  O   ALA   95      94.481  46.238 -45.631  1.00122.19      TS20
ATOM  14671  N   GLY   96      96.434  46.236 -44.489  1.00 67.61      TS20
ATOM  14672  CA  GLY   96      95.874  45.631 -43.297  1.00 67.61      TS20
ATOM  14673  C   GLY   96      94.403  45.893 -43.059  1.00 67.61      TS20
ATOM  14674  O   GLY   96      93.581  44.970 -43.094  1.00 67.61      TS20
ATOM  14675  N   ALA   97      94.063  47.155 -42.826  1.00 78.83      TS20
ATOM  14676  CA  ALA   97      92.678  47.511 -42.553  1.00 78.83      TS20
ATOM  14677  CB  ALA   97      91.762  46.977 -43.664  1.00 29.22      TS20
ATOM  14678  C   ALA   97      92.350  46.830 -41.232  1.00 78.83      TS20
ATOM  14679  O   ALA   97      91.655  45.822 -41.233  1.00 78.83      TS20
ATOM  14680  N   PRO   98      92.844  47.379 -40.092  1.00 96.87      TS20
ATOM  14681  CD  PRO   98      93.312  48.772 -39.996  1.00 99.21      TS20
ATOM  14682  CA  PRO   98      92.624  46.838 -38.740  1.00 96.87      TS20
ATOM  14683  CB  PRO   98      92.757  48.073 -37.826  1.00 99.21      TS20
ATOM  14684  CG  PRO   98      92.610  49.240 -38.741  1.00 99.21      TS20
ATOM  14685  C   PRO   98      91.295  46.113 -38.578  1.00 96.87      TS20
ATOM  14686  O   PRO   98      90.376  46.594 -37.908  1.00 96.87      TS20
ATOM  14687  N   LEU   99      91.228  44.937 -39.200  1.00154.55      TS20
ATOM  14688  CA  LEU   99      90.040  44.100 -39.201  1.00154.55      TS20
ATOM  14689  CB  LEU   99      90.156  43.021 -40.287  1.00130.79      TS20
ATOM  14690  CG  LEU   99      90.212  43.508 -41.742  1.00130.79      TS20
ATOM  14691  CD1 LEU   99      90.439  42.333 -42.680  1.00130.79      TS20
ATOM  14692  CD2 LEU   99      88.921  44.233 -42.088  1.00130.79      TS20
ATOM  14693  C   LEU   99      89.776  43.448 -37.860  1.00154.55      TS20
ATOM  14694  O   LEU   99      89.214  42.356 -37.799  1.00154.55      TS20
ATOM  14695  N   ILE  100      90.191  44.110 -36.786  1.00 94.85      TS20
ATOM  14696  CA  ILE  100      89.942  43.585 -35.453  1.00 94.85      TS20
ATOM  14697  CB  ILE  100      91.135  42.759 -34.922  1.00126.67      TS20
ATOM  14698  CG2 ILE  100      92.249  43.673 -34.488  1.00126.67      TS20
ATOM  14699  CG1 ILE  100      90.696  41.921 -33.718  1.00126.67      TS20
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ATOM	14700	CD1	ILE	100	91.782	41.038	-33.154	1.00	126.67	TS20	ATOM	14753	CA	ASP	4	251.766	123.909	1.223	1.00	48.20	VTHX
ATOM	14701	C	ILE	100	89.671	44.746	-34.509	1.00	94.85	TS20	ATOM	14754	CB	ASP	4	252.857	124.235	0.204	1.00	92.67	VTHX
ATOM	14702	O	ILE	100	89.139	44.563	-33.410	1.00	94.85	TS20	ATOM	14755	CG	ASP	4	254.235	123.981	0.738	1.00	92.67	VTHX
ATOM	14703	N	GLY	101	90.030	45.947	-34.950	1.00	150.38	TS20	ATOM	14756	OD1	ASP	4	254.627	124.689	1.688	1.00	92.67	VTHX
ATOM	14704	CA	GLY	101	89.823	47.124	-34.128	1.00	150.38	TS20	ATOM	14757	OD2	ASP	4	254.919	123.074	0.215	1.00	92.67	VTHX
ATOM	14705	C	GLY	101	90.348	46.910	-32.723	1.00	150.38	TS20	ATOM	14758	C	ASP	4	252.008	124.695	2.502	1.00	48.20	VTHX
ATOM	14706	O	GLY	101	90.090	47.717	-31.828	1.00	150.38	TS20	ATOM	14759	O	ASP	4	252.264	125.904	2.467	1.00	48.20	VTHX
ATOM	14707	N	GLY	102	91.083	45.813	-32.545	1.00	83.94	TS20	ATOM	14760	N	ARG	5	251.974	123.987	3.629	1.00	64.45	VTHX
ATOM	14708	CA	GLY	102	91.655	45.469	-31.260	1.00	83.94	TS20	ATOM	14761	CA	ARG	5	252.131	124.642	4.915	1.00	64.45	VTHX
ATOM	14709	C	GLY	102	91.703	46.644	-30.313	1.00	83.94	TS20	ATOM	14762	CB	ARG	5	251.747	123.695	6.067	1.00	120.91	VTHX
ATOM	14710	O	GLY	102	90.764	46.871	-29.554	1.00	83.94	TS20	ATOM	14763	CG	ARG	5	252.638	122.485	6.286	1.00	120.91	VTHX
ATOM	14711	N	GLY	103	92.781	47.415	-30.371	1.00	67.65	TS20	ATOM	14764	CD	ARG	5	252.301	121.830	7.635	1.00	120.91	VTHX
ATOM	14712	CA	GLY	103	92.898	48.548	-29.478	1.00	67.65	TS20	ATOM	14765	NE	ARG	5	253.248	120.789	8.047	1.00	120.91	VTHX
ATOM	14713	C	GLY	103	93.447	49.791	-30.128	1.00	67.65	TS20	ATOM	14766	CZ	ARG	5	253.335	120.295	9.284	1.00	120.91	VTHX
ATOM	14714	O	GLY	103	94.488	50.310	-29.725	1.00	67.65	TS20	ATOM	14767	NH1	ARG	5	252.535	120.741	10.249	1.00	120.91	VTHX
ATOM	14715	N	LEU	104	92.761	50.270	-31.151	1.00	67.33	TS20	ATOM	14768	NH2	ARG	5	254.226	119.351	9.560	1.00	120.91	VTHX
ATOM	14716	CA	LEU	104	93.211	51.473	-31.806	1.00	67.33	TS20	ATOM	14769	C	ARG	5	253.489	125.275	5.174	1.00	64.45	VTHX
ATOM	14717	CB	LEU	104	93.710	51.159	-33.207	1.00	51.95	TS20	ATOM	14770	O	ARG	5	253.746	125.749	6.278	1.00	64.45	VTHX
ATOM	14718	CG	LEU	104	95.157	50.681	-33.092	1.00	51.95	TS20	ATOM	14771	N	ARG	6	254.359	125.309	4.172	1.00	54.36	VTHX
ATOM	14719	CD1	LEU	104	95.726	50.352	-34.452	1.00	51.95	TS20	ATOM	14772	CA	ARG	6	255.654	125.936	4.381	1.00	54.36	VTHX
ATOM	14720	CD2	LEU	104	95.978	51.780	-32.405	1.00	51.95	TS20	ATOM	14773	CB	ARG	6	256.732	124.874	4.630	1.00	74.51	VTHX
ATOM	14721	C	LEU	104	92.127	52.520	-31.820	1.00	67.33	TS20	ATOM	14774	CG	ARG	6	257.053	124.006	3.452	1.00	74.51	VTHX
ATOM	14722	O	LEU	104	91.392	52.647	-30.854	1.00	67.33	TS20	ATOM	14775	CD	ARG	6	258.406	123.328	3.628	1.00	74.51	VTHX
ATOM	14723	N	SER	105	92.006	53.274	-32.900	1.00	68.47	TS20	ATOM	14776	NE	ARG	6	258.334	122.126	4.445	1.00	74.51	VTHX
ATOM	14724	CA	SER	105	91.005	54.324	-32.922	1.00	68.47	TS20	ATOM	14777	CZ	ARG	6	259.361	121.311	4.650	1.00	74.51	VTHX
ATOM	14725	CB	SER	105	91.546	55.543	-32.159	1.00	51.82	TS20	ATOM	14778	NH1	ARG	6	260.537	121.580	4.102	1.00	74.51	VTHX
ATOM	14726	OG	SER	105	90.576	56.167	-31.346	1.00	51.82	TS20	ATOM	14779	NH2	ARG	6	259.206	120.212	5.381	1.00	74.51	VTHX
ATOM	14727	C	SER	105	90.728	54.702	-34.359	1.00	68.47	TS20	ATOM	14780	C	ARG	6	256.072	126.907	3.263	1.00	54.36	VTHX
ATOM	14728	O	SER	105	91.263	55.687	-34.844	1.00	68.47	TS20	ATOM	14781	O	ARG	6	257.147	126.796	2.671	1.00	54.36	VTHX
ATOM	14729	N	ALA	106	89.909	53.921	-35.049	1.00	101.49	TS20	ATOM	14782	N	THR	7	255.196	127.871	2.998	1.00	33.56	VTHX
ATOM	14730	CA	ALA	106	89.594	54.236	-36.435	1.00	101.49	TS20	ATOM	14783	CA	THR	7	255.423	128.908	2.000	1.00	33.56	VTHX
ATOM	14731	CB	ALA	106	88.548	53.282	-36.970	1.00	104.15	TS20	ATOM	14784	CB	THR	7	254.996	128.472	0.565	1.00	71.15	VTHX
ATOM	14732	C	ALA	106	89.080	55.668	-36.497	1.00	101.49	TS20	ATOM	14785	OG1	THR	7	253.598	128.166	0.537	1.00	71.15	VTHX
ATOM	14733	O	ALA	106	89.460	56.393	-37.445	1.00	101.49	TS20	ATOM	14786	CG2	THR	7	255.780	127.264	0.118	1.00	71.15	VTHX
ATOM	14734	OXT	ALA	106	88.299	56.040	-35.591	1.00	133.22	TS20	ATOM	14787	C	THR	7	254.590	130.114	2.414	1.00	33.56	VTHX
ATOM	14735	C	GLY	1	249.434	126.855	-1.893	1.00	55.32	VTHX	ATOM	14788	O	THR	7	253.722	130.006	3.256	1.00	33.56	VTHX
ATOM	14736	O	GLY	1	250.036	126.304	-0.965	1.00	55.32	VTHX	ATOM	14789	N	ARG	8	254.865	131.265	1.821	1.00	48.05	VTHX
ATOM	14737	N	GLY	1	250.904	125.678	-3.533	1.00	55.32	VTHX	ATOM	14790	CA	ARG	8	254.145	132.491	2.141	1.00	48.05	VTHX
ATOM	14738	CA	GLY	1	249.991	126.838	-3.303	1.00	55.32	VTHX	ATOM	14791	CB	ARG	8	254.433	133.539	1.056	1.00	114.98	VTHX
ATOM	14739	N	LYS	2	248.274	127.484	-1.729	1.00	51.89	VTHX	ATOM	14792	CG	ARG	8	254.038	134.960	1.404	1.00	114.98	VTHX
ATOM	14740	CA	LYS	2	247.639	127.584	-0.422	1.00	51.89	VTHX	ATOM	14793	CD	ARG	8	254.976	135.561	2.435	1.00	114.98	VTHX
ATOM	14741	CB	LYS	2	246.155	127.900	-0.593	1.00	57.25	VTHX	ATOM	14794	NE	ARG	8	254.370	136.720	3.088	1.00	114.98	VTHX
ATOM	14742	CG	LYS	2	245.892	129.273	-1.199	1.00	57.25	VTHX	ATOM	14795	CZ	ARG	8	254.941	137.418	4.064	1.00	114.98	VTHX
ATOM	14743	CD	LYS	2	244.460	129.446	-1.703	1.00	57.25	VTHX	ATOM	14796	NH1	ARG	8	256.147	137.083	4.507	1.00	114.98	VTHX
ATOM	14744	CE	LYS	2	244.335	130.747	-2.493	1.00	57.25	VTHX	ATOM	14797	NH2	ARG	8	254.292	138.438	4.613	1.00	114.98	VTHX
ATOM	14745	NZ	LYS	2	243.065	130.882	-3.258	1.00	57.25	VTHX	ATOM	14798	C	ARG	8	252.647	132.179	2.192	1.00	48.05	VTHX
ATOM	14746	C	LYS	2	247.809	126.297	0.363	1.00	51.89	VTHX	ATOM	14799	O	ARG	8	252.052	132.096	3.268	1.00	48.05	VTHX
ATOM	14747	O	LYS	2	247.861	126.306	1.586	1.00	51.89	VTHX	ATOM	14800	N	ARG	9	252.064	131.988	1.008	1.00	63.70	VTHX
ATOM	14748	N	GLY	3	247.926	125.186	-0.346	1.00	36.96	VTHX	ATOM	14801	CA	ARG	9	250.645	131.688	0.849	1.00	63.70	VTHX
ATOM	14749	CA	GLY	3	248.054	123.904	0.320	1.00	36.96	VTHX	ATOM	14802	CB	ARG	9	250.330	131.418	-0.624	1.00	96.11	VTHX
ATOM	14750	C	GLY	3	249.308	123.664	1.129	1.00	36.96	VTHX	ATOM	14803	CG	ARG	9	250.221	132.691	-1.435	1.00	96.11	VTHX
ATOM	14751	O	GLY	3	249.237	123.095	2.215	1.00	36.96	VTHX	ATOM	14804	CD	ARG	9	250.068	132.427	-2.913	1.00	96.11	VTHX
ATOM	14752	N	ASP	4	250.450	124.102	0.600	1.00	48.20	VTHX	ATOM	14805	NE	ARG	9	249.686	133.649	-3.617	1.00	96.11	VTHX

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ATOM  14806  CZ  ARG     9     249.609 133.769  -4.940  1.00 96.11      VTHX
ATOM  14807  NH1 ARG     9     249.896 132.738  -5.725  1.00 96.11      VTHX
ATOM  14808  NH2 ARG     9     249.227 134.918  -5.481  1.00 96.11      VTHX
ATOM  14809  C   ARG     9     250.188 130.525   1.699  1.00 63.70      VTHX
ATOM  14810  O   ARG     9     249.052 130.492   2.154  1.00 63.70      VTHX
ATOM  14811  N   GLY    10     251.069 129.560   1.908  1.00 52.11      VTHX
ATOM  14812  CA  GLY    10     250.694 128.433   2.735  1.00 52.11      VTHX
ATOM  14813  C   GLY    10     250.245 128.975   4.076  1.00 52.11      VTHX
ATOM  14814  O   GLY    10     249.063 128.967   4.404  1.00 52.11      VTHX
ATOM  14815  N   LYS    11     251.213 129.467   4.838  1.00 64.08      VTHX
ATOM  14816  CA  LYS    11     250.984 130.037   6.153  1.00 64.08      VTHX
ATOM  14817  CB  LYS    11     252.246 130.774   6.623  1.00 63.47      VTHX
ATOM  14818  CG  LYS    11     253.153 129.968   7.543  1.00 63.47      VTHX
ATOM  14819  CD  LYS    11     253.572 128.651   6.916  1.00 63.47      VTHX
ATOM  14820  CE  LYS    11     254.482 127.884   7.858  1.00 63.47      VTHX
ATOM  14821  NZ  LYS    11     253.860 127.656   9.185  1.00 63.47      VTHX
ATOM  14822  C   LYS    11     249.806 130.994   6.174  1.00 64.08      VTHX
ATOM  14823  O   LYS    11     248.995 130.961   7.090  1.00 64.08      VTHX
ATOM  14824  N   ILE    12     249.717 131.857   5.172  1.00 48.47      VTHX
ATOM  14825  CA  ILE    12     248.624 132.813   5.134  1.00 48.47      VTHX
ATOM  14826  CB  ILE    12     248.698 133.709   3.890  1.00 32.99      VTHX
ATOM  14827  CG2 ILE    12     247.673 134.816   3.987  1.00 32.99      VTHX
ATOM  14828  CG1 ILE    12     250.068 134.362   3.796  1.00 32.99      VTHX
ATOM  14829  CD1 ILE    12     250.284 135.083   2.502  1.00 32.99      VTHX
ATOM  14830  C   ILE    12     247.308 132.052   5.115  1.00 48.47      VTHX
ATOM  14831  O   ILE    12     246.385 132.368   5.853  1.00 48.47      VTHX
ATOM  14832  N   TRP    13     247.225 131.038   4.270  1.00 52.49      VTHX
ATOM  14833  CA  TRP    13     246.014 130.249   4.180  1.00 52.49      VTHX
ATOM  14834  CB  TRP    13     246.209 129.075   3.231  1.00 54.79      VTHX
ATOM  14835  CG  TRP    13     244.927 128.488   2.797  1.00 54.79      VTHX
ATOM  14836  CD2 TRP    13     244.275 127.352   3.363  1.00 54.79      VTHX
ATOM  14837  CE2 TRP    13     243.074 127.163   2.650  1.00 54.79      VTHX
ATOM  14838  CE3 TRP    13     244.587 126.473   4.405  1.00 54.79      VTHX
ATOM  14839  CD1 TRP    13     244.122 128.938   1.794  1.00 54.79      VTHX
ATOM  14840  NE1 TRP    13     243.005 128.145   1.696  1.00 54.79      VTHX
ATOM  14841  CZ2 TRP    13     242.183 126.130   2.944  1.00 54.79      VTHX
ATOM  14842  CZ3 TRP    13     243.702 125.447   4.698  1.00 54.79      VTHX
ATOM  14843  CH2 TRP    13     242.515 125.284   3.969  1.00 54.79      VTHX
ATOM  14844  C   TRP    13     245.675 129.724   5.561  1.00 52.49      VTHX
ATOM  14845  O   TRP    13     244.565 129.902   6.048  1.00 52.49      VTHX
ATOM  14846  N   ARG    14     246.630 129.066   6.194  1.00 45.76      VTHX
ATOM  14847  CA  ARG    14     246.387 128.549   7.522  1.00 45.76      VTHX
ATOM  14848  CB  ARG    14     247.479 127.560   7.923  1.00 80.42      VTHX
ATOM  14849  CG  ARG    14     247.156 126.107   7.641  1.00 80.42      VTHX
ATOM  14850  CD  ARG    14     248.246 125.227   8.230  1.00 80.42      VTHX
ATOM  14851  NE  ARG    14     247.981 123.792   8.106  1.00 80.42      VTHX
ATOM  14852  CZ  ARG    14     248.893 122.845   8.322  1.00 80.42      VTHX
ATOM  14853  NH1 ARG    14     250.127 123.176   8.667  1.00 80.42      VTHX
ATOM  14854  NH2 ARG    14     248.574 121.566   8.198  1.00 80.42      VTHX
ATOM  14855  C   ARG    14     246.324 129.689   8.533  1.00 45.76      VTHX
ATOM  14856  O   ARG    14     246.081 129.462   9.716  1.00 45.76      VTHX
ATOM  14857  N   GLY    15     246.535 130.916   8.075  1.00 45.47      VTHX
ATOM  14858  CA  GLY    15     246.504 132.045   8.990  1.00 45.47      VTHX
ATOM  14859  C   GLY    15     247.584 132.000  10.072  1.00 45.47      VTHX
ATOM  14860  O   GLY    15     247.552 132.774  11.036  1.00 45.47      VTHX
ATOM  14861  N   THR    16     248.546 131.093   9.913  1.00 61.75      VTHX
ATOM  14862  CA  THR    16     249.632 130.954  10.871  1.00 61.75      VTHX
ATOM  14863  CB  THR    16     250.162 129.521  10.932  1.00 67.64      VTHX
ATOM  14864  OG1 THR    16     250.739 129.180   9.667  1.00 67.64      VTHX
ATOM  14865  CG2 THR    16     249.063 128.557  11.264  1.00 67.64      VTHX
ATOM  14866  C   THR    16     250.830 131.840  10.536  1.00 61.75      VTHX
ATOM  14867  O   THR    16     250.819 132.608   9.567  1.00 61.75      VTHX
ATOM  14868  N   TYR    17     251.863 131.697  11.363  1.00 70.72      VTHX
ATOM  14869  CA  TYR    17     253.114 132.430  11.246  1.00 70.72      VTHX
ATOM  14870  CB  TYR    17     253.171 133.562  12.271  1.00 52.50      VTHX
ATOM  14871  CG  TYR    17     252.275 134.721  11.969  1.00 52.50      VTHX
ATOM  14872  CD1 TYR    17     251.109 134.922  12.686  1.00 52.50      VTHX
ATOM  14873  CE1 TYR    17     250.288 136.012  12.427  1.00 52.50      VTHX
ATOM  14874  CD2 TYR    17     252.606 135.634  10.971  1.00 52.50      VTHX
ATOM  14875  CE2 TYR    17     251.798 136.731  10.694  1.00 52.50      VTHX
ATOM  14876  CZ  TYR    17     250.639 136.916  11.429  1.00 52.50      VTHX
ATOM  14877  OH  TYR    17     249.840 138.013  11.183  1.00 52.50      VTHX
ATOM  14878  C   TYR    17     254.263 131.482  11.535  1.00 70.72      VTHX
ATOM  14879  O   TYR    17     254.103 130.511  12.276  1.00 70.72      VTHX
ATOM  14880  N   GLY    18     255.430 131.773  10.974  1.00 70.23      VTHX
ATOM  14881  CA  GLY    18     256.582 130.924  11.218  1.00 70.23      VTHX
ATOM  14882  C   GLY    18     257.768 131.306  10.360  1.00 70.23      VTHX
ATOM  14883  O   GLY    18     257.841 132.428   9.844  1.00 70.23      VTHX
ATOM  14884  N   LYS    19     258.705 130.379  10.204  1.00 89.67      VTHX
ATOM  14885  CA  LYS    19     259.866 130.658   9.386  1.00 89.67      VTHX
ATOM  14886  CB  LYS    19     260.724 129.405   9.198  1.00 63.59      VTHX
ATOM  14887  CG  LYS    19     261.785 129.558   8.100  1.00 63.59      VTHX
ATOM  14888  CD  LYS    19     263.101 128.858   8.441  1.00 63.59      VTHX
ATOM  14889  CE  LYS    19     263.003 127.336   8.426  1.00 63.59      VTHX
ATOM  14890  NZ  LYS    19     264.333 126.714   8.700  1.00 63.59      VTHX
ATOM  14891  C   LYS    19     259.398 131.155   8.031  1.00 89.67      VTHX
ATOM  14892  O   LYS    19     259.774 132.243   7.594  1.00 89.67      VTHX
ATOM  14893  N   TYR    20     258.548 130.368   7.380  1.00 83.73      VTHX
ATOM  14894  CA  TYR    20     258.068 130.733   6.059  1.00 83.73      VTHX
ATOM  14895  CB  TYR    20     257.437 129.515   5.391  1.00 71.80      VTHX
ATOM  14896  CG  TYR    20     258.466 128.440   5.133  1.00 71.80      VTHX
ATOM  14897  CD1 TYR    20     258.709 127.437   6.071  1.00 71.80      VTHX
ATOM  14898  CE1 TYR    20     259.737 126.503   5.887  1.00 71.80      VTHX
ATOM  14899  CD2 TYR    20     259.269 128.483   3.995  1.00 71.80      VTHX
ATOM  14900  CE2 TYR    20     260.300 127.560   3.802  1.00 71.80      VTHX
ATOM  14901  CZ  TYR    20     260.532 126.574   4.753  1.00 71.80      VTHX
ATOM  14902  OH  TYR    20     261.579 125.689   4.587  1.00 71.80      VTHX
ATOM  14903  C   TYR    20     257.148 131.945   6.004  1.00 83.73      VTHX
ATOM  14904  O   TYR    20     256.747 132.383   4.928  1.00 83.73      VTHX
ATOM  14905  N   ARG    21     256.836 132.501   7.165  1.00 60.74      VTHX
ATOM  14906  CA  ARG    21     255.999 133.694   7.238  1.00 60.74      VTHX
ATOM  14907  CB  ARG    21     254.535 133.374   6.964  1.00 63.10      VTHX
ATOM  14908  CG  ARG    21     253.655 134.605   6.929  1.00 63.10      VTHX
ATOM  14909  CD  ARG    21     252.207 134.229   7.083  1.00 63.10      VTHX
ATOM  14910  NE  ARG    21     251.348 135.397   6.946  1.00 63.10      VTHX
ATOM  14911  CZ  ARG    21     250.110 135.470   7.418  1.00 63.10      VTHX
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ATOM	14912	NH1	ARG	21	249.578	134.433	8.063	1.00	63.10	VTHX	ATOM	14965	NE	ARG	4	208.935	140.923	-19.571	1.00	66.98	GS7
ATOM	14913	NH2	ARG	21	249.414	136.586	7.252	1.00	63.10	VTHX	ATOM	14966	CZ	ARG	4	208.635	140.611	-18.309	1.00	66.98	GS7
ATOM	14914	C	ARG	21	256.120	134.267	8.635	1.00	60.74	VTHX	ATOM	14967	NH1	ARG	4	209.573	140.656	-17.374	1.00	66.98	GS7
ATOM	14915	O	ARG	21	255.336	133.940	9.534	1.00	60.74	VTHX	ATOM	14968	NH2	ARG	4	207.384	140.309	-17.963	1.00	66.98	GS7
ATOM	14916	N	PRO	22	257.125	135.125	8.837	1.00	68.21	VTHX	ATOM	14969	C	ARG	4	211.903	140.983	-23.888	1.00	94.77	GS7
ATOM	14917	CD	PRO	22	258.264	135.312	7.925	1.00	85.61	VTHX	ATOM	14970	O	ARG	4	211.817	141.994	-24.582	1.00	94.77	GS7
ATOM	14918	CA	PRO	22	257.388	135.769	10.124	1.00	68.21	VTHX	ATOM	14971	N	ARG	5	212.990	140.654	-23.209	1.00	75.35	GS7
ATOM	14919	CB	PRO	22	258.832	136.252	9.972	1.00	85.61	VTHX	ATOM	14972	CA	ARG	5	214.192	141.471	-23.161	1.00	75.35	GS7
ATOM	14920	CG	PRO	22	259.397	135.358	8.888	1.00	85.61	VTHX	ATOM	14973	CB	ARG	5	215.305	140.669	-22.477	1.00	176.09	GS7
ATOM	14921	C	PRO	22	256.422	136.919	10.416	1.00	68.21	VTHX	ATOM	14974	CG	ARG	5	214.878	139.969	-21.182	1.00	176.09	GS7
ATOM	14922	O	PRO	22	255.915	137.564	9.493	1.00	68.21	VTHX	ATOM	14975	CD	ARG	5	214.677	140.921	-20.000	1.00	176.09	GS7
ATOM	14923	N	ARG	23	256.176	137.156	11.704	1.00	73.00	VTHX	ATOM	14976	NE	ARG	5	213.574	141.861	-20.187	1.00	176.09	GS7
ATOM	14924	CA	ARG	23	255.296	138.228	12.151	1.00	73.00	VTHX	ATOM	14977	CZ	ARG	5	213.113	142.675	-19.238	1.00	176.09	GS7
ATOM	14925	CB	ARG	23	255.439	138.422	13.651	1.00	82.13	VTHX	ATOM	14978	NH1	ARG	5	213.654	142.666	-18.026	1.00	176.09	GS7
ATOM	14926	CG	ARG	23	254.716	137.389	14.445	1.00	82.13	VTHX	ATOM	14979	NH2	ARG	5	212.114	143.506	-19.502	1.00	176.09	GS7
ATOM	14927	CD	ARG	23	253.234	137.706	14.510	1.00	82.13	VTHX	ATOM	14980	C	ARG	5	214.728	142.089	-24.455	1.00	75.35	GS7
ATOM	14928	NE	ARG	23	252.458	136.517	14.829	1.00	82.13	VTHX	ATOM	14981	O	ARG	5	214.083	142.952	-25.052	1.00	75.35	GS7
ATOM	14929	CZ	ARG	23	252.775	135.656	15.789	1.00	82.13	VTHX	ATOM	14982	N	ARG	6	215.921	141.633	-24.851	1.00	119.51	GS7
ATOM	14930	NH1	ARG	23	253.855	135.853	16.531	1.00	82.13	VTHX	ATOM	14983	CA	ARG	6	216.670	142.119	-26.015	1.00	119.51	GS7
ATOM	14931	NH2	ARG	23	252.021	134.586	16.001	1.00	82.13	VTHX	ATOM	14984	CB	ARG	6	215.784	142.954	-26.939	1.00	159.97	GS7
ATOM	14932	C	ARG	23	255.644	139.525	11.450	1.00	73.00	VTHX	ATOM	14985	CG	ARG	6	215.150	142.188	-28.083	1.00	159.97	GS7
ATOM	14933	O	ARG	23	254.829	140.092	10.715	1.00	73.00	VTHX	ATOM	14986	CD	ARG	6	216.156	141.978	-29.206	1.00	159.97	GS7
ATOM	14934	N	LYS	24	256.862	139.992	11.695	1.00	94.33	VTHX	ATOM	14987	NE	ARG	6	215.537	142.123	-30.523	1.00	159.97	GS7
ATOM	14935	CA	LYS	24	257.360	141.218	11.088	1.00	94.33	VTHX	ATOM	14988	CZ	ARG	6	216.212	142.246	-31.663	1.00	159.97	GS7
ATOM	14936	CB	LYS	24	256.646	142.440	11.683	1.00	136.68	VTHX	ATOM	14989	NH1	ARG	6	217.540	142.240	-31.657	1.00	159.97	GS7
ATOM	14937	CG	LYS	24	255.392	142.853	10.918	1.00	136.68	VTHX	ATOM	14990	NH2	ARG	6	215.561	142.390	-32.812	1.00	159.97	GS7
ATOM	14938	CD	LYS	24	255.733	143.195	9.469	1.00	136.68	VTHX	ATOM	14991	C	ARG	6	217.736	143.010	-25.384	1.00	119.51	GS7
ATOM	14939	CE	LYS	24	254.510	143.660	8.700	1.00	136.68	VTHX	ATOM	14992	O	ARG	6	217.457	143.659	-24.380	1.00	119.51	GS7
ATOM	14940	NZ	LYS	24	254.836	144.128	7.324	1.00	136.68	VTHX	ATOM	14993	N	ALA	7	218.947	143.049	-25.935	1.00	139.36	GS7
ATOM	14941	C	LYS	24	258.864	141.339	11.289	1.00	94.33	VTHX	ATOM	14994	CA	ALA	7	219.990	143.897	-25.347	1.00	139.36	GS7
ATOM	14942	O	LYS	24	259.422	140.477	12.005	1.00	94.33	VTHX	ATOM	14995	CB	ALA	7	220.459	143.303	-24.026	1.00	62.82	GS7
ATOM	14943	OXT	LYS	24	259.461	142.285	10.726	1.00	136.68	VTHX	ATOM	14996	C	ALA	7	221.188	144.133	-26.263	1.00	139.36	GS7
ATOM	14944	CB	ALA	2	216.651	137.328	-22.824	1.00	47.16	GS7	ATOM	14997	O	ALA	7	221.165	143.744	-27.433	1.00	139.36	GS7
ATOM	14945	C	ALA	2	214.238	136.681	-22.682	1.00	52.94	GS7	ATOM	14998	N	GLU	8	222.229	144.775	-25.724	1.00	80.40	GS7
ATOM	14946	O	ALA	2	214.258	136.748	-23.902	1.00	52.94	GS7	ATOM	14999	CA	GLU	8	223.452	145.077	-26.481	1.00	80.40	GS7
ATOM	14947	N	ALA	2	216.034	135.554	-21.227	1.00	52.94	GS7	ATOM	15000	CB	GLU	8	223.251	146.319	-27.356	1.00	160.78	GS7
ATOM	14948	CA	ALA	2	215.554	136.799	-21.896	1.00	52.94	GS7	ATOM	15001	CG	GLU	8	222.414	146.065	-28.603	1.00	160.78	GS7
ATOM	14949	N	ARG	3	213.104	136.496	-22.006	1.00	57.16	GS7	ATOM	15002	CD	GLU	8	222.219	147.311	-29.442	1.00	160.78	GS7
ATOM	14950	CA	ARG	3	211.809	136.439	-22.702	1.00	57.16	GS7	ATOM	15003	OE1	GLU	8	221.592	148.268	-28.941	1.00	160.78	GS7
ATOM	14951	CB	ARG	3	210.771	135.597	-21.944	1.00	36.73	GS7	ATOM	15004	OE2	GLU	8	222.695	147.330	-30.599	1.00	160.78	GS7
ATOM	14952	CG	ARG	3	211.047	134.124	-21.665	1.00	36.73	GS7	ATOM	15005	C	GLU	8	224.660	145.282	-25.571	1.00	80.40	GS7
ATOM	14953	CD	ARG	3	209.841	133.559	-20.891	1.00	36.73	GS7	ATOM	15006	O	GLU	8	225.798	145.072	-25.988	1.00	80.40	GS7
ATOM	14954	NE	ARG	3	209.966	132.161	-20.463	1.00	36.73	GS7	ATOM	15007	N	VAL	9	224.400	145.695	-24.334	1.00	73.56	GS7
ATOM	14955	CZ	ARG	3	210.024	131.126	-21.298	1.00	36.73	GS7	ATOM	15008	CA	VAL	9	225.449	145.907	-23.333	1.00	73.56	GS7
ATOM	14956	NH1	ARG	3	209.968	131.333	-22.607	1.00	36.73	GS7	ATOM	15009	CB	VAL	9	225.945	144.540	-22.750	1.00	91.42	GS7
ATOM	14957	NH2	ARG	3	210.141	129.890	-20.832	1.00	36.73	GS7	ATOM	15010	CG1	VAL	9	226.817	144.764	-21.491	1.00	91.42	GS7
ATOM	14958	C	ARG	3	211.316	137.875	-22.617	1.00	57.16	GS7	ATOM	15011	CG2	VAL	9	224.739	143.640	-22.434	1.00	91.42	GS7
ATOM	14959	O	ARG	3	211.033	138.312	-21.517	1.00	57.16	GS7	ATOM	15012	C	VAL	9	226.656	146.665	-23.873	1.00	73.56	GS7
ATOM	14960	N	ARG	4	211.206	138.600	-23.730	1.00	94.77	GS7	ATOM	15013	O	VAL	9	227.764	146.482	-23.378	1.00	73.56	GS7
ATOM	14961	CA	ARG	4	210.740	140.010	-23.746	1.00	94.77	GS7	ATOM	15014	N	ARG	10	226.436	147.515	-24.876	1.00	120.62	GS7
ATOM	14962	CB	ARG	4	209.977	140.412	-22.456	1.00	66.98	GS7	ATOM	15015	CA	ARG	10	227.520	148.288	-25.493	1.00	120.62	GS7
ATOM	14963	CG	ARG	4	210.878	140.587	-21.204	1.00	66.98	GS7	ATOM	15016	CB	ARG	10	227.015	149.613	-26.066	1.00	131.43	GS7
ATOM	14964	CD	ARG	4	210.263	141.351	-20.025	1.00	66.98	GS7	ATOM	15017	CG	ARG	10	225.961	149.519	-27.135	1.00	131.43	GS7

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ATOM  15018  CD  ARG    10     225.730 150.906 -27.699  1.00131.43      GS7
ATOM  15019  NE  ARG    10     224.377 151.087 -28.209  1.00131.43      GS7
ATOM  15020  CZ  ARG    10     223.894 152.248 -28.642  1.00131.43      GS7
ATOM  15021  NH1 ARG    10     224.658 153.334 -28.630  1.00131.43      GS7
ATOM  15022  NH2 ARG    10     222.643 152.326 -29.079  1.00131.43      GS7
ATOM  15023  C   ARG    10     228.633 148.616 -24.514  1.00120.62      GS7
ATOM  15024  O   ARG    10     229.584 147.854 -24.347  1.00120.62      GS7
ATOM  15025  N   GLN    11     228.501 149.767 -23.871  1.00 85.82      GS7
ATOM  15026  CA  GLN    11     229.485 150.220 -22.908  1.00 85.82      GS7
ATOM  15027  CB  GLN    11     229.261 149.541 -21.543  1.00147.04      GS7
ATOM  15028  CG  GLN    11     229.214 148.017 -21.565  1.00147.04      GS7
ATOM  15029  CD  GLN    11     229.336 147.391 -20.179  1.00147.04      GS7
ATOM  15030  OE1 GLN    11     230.351 147.560 -19.497  1.00147.04      GS7
ATOM  15031  NE2 GLN    11     228.303 146.659 -19.762  1.00147.04      GS7
ATOM  15032  C   GLN    11     230.908 149.963 -23.396  1.00 85.82      GS7
ATOM  15033  O   GLN    11     231.242 150.226 -24.555  1.00 85.82      GS7
ATOM  15034  N   LEU    12     231.741 149.442 -22.506  1.00100.90      GS7
ATOM  15035  CA  LEU    12     233.124 149.169 -22.836  1.00100.90      GS7
ATOM  15036  CB  LEU    12     233.215 148.138 -23.966  1.00 43.54      GS7
ATOM  15037  CG  LEU    12     232.669 146.726 -23.727  1.00 43.54      GS7
ATOM  15038  CD1 LEU    12     233.625 145.727 -24.361  1.00 43.54      GS7
ATOM  15039  CD2 LEU    12     232.530 146.427 -22.241  1.00 43.54      GS7
ATOM  15040  C   LEU    12     233.784 150.475 -23.256  1.00100.90      GS7
ATOM  15041  O   LEU    12     233.786 150.836 -24.434  1.00100.90      GS7
ATOM  15042  N   GLN    13     234.321 151.191 -22.274  1.00 78.97      GS7
ATOM  15043  CA  GLN    13     235.001 152.453 -22.521  1.00 78.97      GS7
ATOM  15044  CB  GLN    13     235.518 153.028 -21.202  1.00122.93      GS7
ATOM  15045  CG  GLN    13     234.472 153.051 -20.101  1.00122.93      GS7
ATOM  15046  CD  GLN    13     233.283 153.933 -20.439  1.00122.93      GS7
ATOM  15047  OE1 GLN    13     233.391 155.160 -20.455  1.00122.93      GS7
ATOM  15048  NE2 GLN    13     232.141 153.309 -20.718  1.00122.93      GS7
ATOM  15049  C   GLN    13     236.171 152.167 -23.457  1.00 78.97      GS7
ATOM  15050  O   GLN    13     236.935 151.235 -23.223  1.00 78.97      GS7
ATOM  15051  N   PRO    14     236.331 152.967 -24.526  1.00 65.81      GS7
ATOM  15052  CD  PRO    14     235.664 154.257 -24.770  1.00 77.03      GS7
ATOM  15053  CA  PRO    14     237.432 152.758 -25.478  1.00 65.81      GS7
ATOM  15054  CB  PRO    14     237.493 154.085 -26.224  1.00 77.03      GS7
ATOM  15055  CG  PRO    14     236.070 154.556 -26.189  1.00 77.03      GS7
ATOM  15056  C   PRO    14     238.724 152.469 -24.723  1.00 65.81      GS7
ATOM  15057  O   PRO    14     238.966 153.074 -23.681  1.00 65.81      GS7
ATOM  15058  N   ASP    15     239.548 151.554 -25.228  1.00 74.75      GS7
ATOM  15059  CA  ASP    15     240.793 151.239 -24.532  1.00 74.75      GS7
ATOM  15060  CB  ASP    15     241.597 150.159 -25.271  1.00 76.67      GS7
ATOM  15061  CG  ASP    15     242.512 150.727 -26.334  1.00 76.67      GS7
ATOM  15062  OD1 ASP    15     241.997 151.326 -27.306  1.00 76.67      GS7
ATOM  15063  OD2 ASP    15     243.748 150.568 -26.189  1.00 76.67      GS7
ATOM  15064  C   ASP    15     241.614 152.510 -24.404  1.00 74.75      GS7
ATOM  15065  O   ASP    15     241.606 153.356 -25.297  1.00 74.75      GS7
ATOM  15066  N   LEU    16     242.319 152.639 -23.285  1.00 93.48      GS7
ATOM  15067  CA  LEU    16     243.119 153.823 -23.020  1.00 93.48      GS7
ATOM  15068  CB  LEU    16     243.195 154.070 -21.505  1.00118.14      GS7
ATOM  15069  CG  LEU    16     243.650 152.976 -20.534  1.00118.14      GS7
ATOM  15070  CD1 LEU    16     243.424 153.484 -19.116  1.00118.14      GS7
ATOM  15071  CD2 LEU    16     242.875 151.678 -20.747  1.00118.14      GS7
ATOM  15072  C   LEU    16     244.511 153.816 -23.653  1.00 93.48      GS7
ATOM  15073  O   LEU    16     245.528 153.953 -22.971  1.00 93.48      GS7
ATOM  15074  N   VAL    17     244.525 153.656 -24.974  1.00 75.74      GS7
ATOM  15075  CA  VAL    17     245.738 153.658 -25.781  1.00 75.74      GS7
ATOM  15076  CB  VAL    17     246.494 152.330 -25.725  1.00 55.59      GS7
ATOM  15077  CG1 VAL    17     247.622 152.357 -26.741  1.00 55.59      GS7
ATOM  15078  CG2 VAL    17     247.082 152.126 -24.347  1.00 55.59      GS7
ATOM  15079  C   VAL    17     245.387 153.935 -27.240  1.00 75.74      GS7
ATOM  15080  O   VAL    17     246.040 154.738 -27.902  1.00 75.74      GS7
ATOM  15081  N   TYR    18     244.365 153.264 -27.751  1.00 66.85      GS7
ATOM  15082  CA  TYR    18     243.963 153.501 -29.126  1.00 66.85      GS7
ATOM  15083  CB  TYR    18     244.023 152.219 -29.954  1.00 86.32      GS7
ATOM  15084  CG  TYR    18     245.334 151.482 -29.848  1.00 86.32      GS7
ATOM  15085  CD1 TYR    18     245.596 150.647 -28.763  1.00 86.32      GS7
ATOM  15086  CE1 TYR    18     246.805 149.979 -28.645  1.00 86.32      GS7
ATOM  15087  CD2 TYR    18     246.322 151.633 -30.817  1.00 86.32      GS7
ATOM  15088  CE2 TYR    18     247.538 150.973 -30.706  1.00 86.32      GS7
ATOM  15089  CZ  TYR    18     247.771 150.149 -29.616  1.00 86.32      GS7
ATOM  15090  OH  TYR    18     248.975 149.497 -29.485  1.00 86.32      GS7
ATOM  15091  C   TYR    18     242.549 154.042 -29.134  1.00 66.85      GS7
ATOM  15092  O   TYR    18     241.971 154.261 -30.198  1.00 66.85      GS7
ATOM  15093  N   GLY    19     242.001 154.255 -27.939  1.00 80.08      GS7
ATOM  15094  CA  GLY    19     240.651 154.778 -27.813  1.00 80.08      GS7
ATOM  15095  C   GLY    19     239.657 153.967 -28.615  1.00 80.08      GS7
ATOM  15096  O   GLY    19     238.619 154.474 -29.046  1.00 80.08      GS7
ATOM  15097  N   ASP    20     239.985 152.695 -28.816  1.00 91.66      GS7
ATOM  15098  CA  ASP    20     239.142 151.788 -29.578  1.00 91.66      GS7
ATOM  15099  CB  ASP    20     240.006 150.994 -30.551  1.00135.04      GS7
ATOM  15100  CG  ASP    20     239.196 150.077 -31.422  1.00135.04      GS7
ATOM  15101  OD1 ASP    20     238.251 150.571 -32.077  1.00135.04      GS7
ATOM  15102  OD2 ASP    20     239.507 148.868 -31.453  1.00135.04      GS7
ATOM  15103  C   ASP    20     238.411 150.849 -28.629  1.00 91.66      GS7
ATOM  15104  O   ASP    20     238.942 150.480 -27.584  1.00 91.66      GS7
ATOM  15105  N   VAL    21     237.194 150.459 -28.993  1.00 79.74      GS7
ATOM  15106  CA  VAL    21     236.401 149.578 -28.140  1.00 79.74      GS7
ATOM  15107  CB  VAL    21     234.903 149.852 -28.304  1.00 64.39      GS7
ATOM  15108  CG1 VAL    21     234.664 151.346 -28.405  1.00 64.39      GS7
ATOM  15109  CG2 VAL    21     234.375 149.123 -29.526  1.00 64.39      GS7
ATOM  15110  C   VAL    21     236.645 148.099 -28.418  1.00 79.74      GS7
ATOM  15111  O   VAL    21     236.485 147.255 -27.529  1.00 79.74      GS7
ATOM  15112  N   LEU    22     237.020 147.787 -29.654  1.00 73.96      GS7
ATOM  15113  CA  LEU    22     237.288 146.407 -30.025  1.00 73.96      GS7
ATOM  15114  CB  LEU    22     237.566 146.299 -31.523  1.00 50.25      GS7
ATOM  15115  CG  LEU    22     237.806 144.869 -32.010  1.00 50.25      GS7
ATOM  15116  CD1 LEU    22     236.555 144.048 -31.759  1.00 50.25      GS7
ATOM  15117  CD2 LEU    22     238.170 144.858 -33.486  1.00 50.25      GS7
ATOM  15118  C   LEU    22     238.496 145.912 -29.242  1.00 73.96      GS7
ATOM  15119  O   LEU    22     238.663 144.713 -29.029  1.00 73.96      GS7
ATOM  15120  N   VAL    23     239.345 146.842 -28.816  1.00 62.26      GS7
ATOM  15121  CA  VAL    23     240.521 146.468 -28.044  1.00 62.26      GS7
ATOM  15122  CB  VAL    23     241.539 147.647 -27.928  1.00 45.91      GS7
ATOM  15123  CG1 VAL    23     242.670 147.274 -26.976  1.00 45.91      GS7
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ATOM	15124	CG2	VAL	23	242.115	147.980	-29.299	1.00	45.91	GS7	ATOM	15177	CB	ILE	30	243.369	138.602	-23.058	1.00	43.45	GS7
ATOM	15125	C	VAL	23	240.020	146.062	-26.663	1.00	62.26	GS7	ATOM	15178	CG2	ILE	30	244.672	138.090	-22.435	1.00	43.45	GS7
ATOM	15126	O	VAL	23	240.210	144.923	-26.227	1.00	62.26	GS7	ATOM	15179	CG1	ILE	30	243.452	138.640	-24.592	1.00	43.45	GS7
ATOM	15127	N	THR	24	239.359	146.995	-25.990	1.00	46.70	GS7	ATOM	15180	CD1	ILE	30	244.447	139.616	-25.130	1.00	43.45	GS7
ATOM	15128	CA	THR	24	238.811	146.725	-24.666	1.00	46.70	GS7	ATOM	15181	C	ILE	30	242.178	137.587	-21.100	1.00	39.77	GS7
ATOM	15129	CB	THR	24	237.764	147.782	-24.269	1.00	54.89	GS7	ATOM	15182	O	ILE	30	242.666	136.616	-20.528	1.00	39.77	GS7
ATOM	15130	OG1	THR	24	238.285	149.093	-24.524	1.00	54.89	GS7	ATOM	15183	N	MET	31	241.598	138.596	-20.461	1.00	42.21	GS7
ATOM	15131	CG2	THR	24	237.410	147.645	-22.790	1.00	54.89	GS7	ATOM	15184	CA	MET	31	241.510	138.666	-19.008	1.00	42.21	GS7
ATOM	15132	C	THR	24	238.112	145.366	-24.726	1.00	46.70	GS7	ATOM	15185	CB	MET	31	240.766	139.931	-18.603	1.00	59.77	GS7
ATOM	15133	O	THR	24	238.248	144.527	-23.825	1.00	46.70	GS7	ATOM	15186	CG	MET	31	240.327	139.950	-17.149	1.00	59.77	GS7
ATOM	15134	N	ALA	25	237.365	145.168	-25.809	1.00	43.05	GS7	ATOM	15187	SD	MET	31	239.117	141.246	-16.913	1.00	59.77	GS7
ATOM	15135	CA	ALA	25	236.644	143.934	-26.029	1.00	43.05	GS7	ATOM	15188	CE	MET	31	239.652	141.933	-15.502	1.00	59.77	GS7
ATOM	15136	CB	ALA	25	235.921	143.997	-27.340	1.00	32.02	GS7	ATOM	15189	C	MET	31	240.817	137.485	-18.361	1.00	42.21	GS7
ATOM	15137	C	ALA	25	237.627	142.781	-26.036	1.00	43.05	GS7	ATOM	15190	O	MET	31	239.840	136.961	-18.888	1.00	42.21	GS7
ATOM	15138	O	ALA	25	237.480	141.826	-25.269	1.00	43.05	GS7	ATOM	15191	N	ARG	32	241.318	137.081	-17.200	1.00	52.63	GS7
ATOM	15139	N	PHE	26	238.641	142.882	-26.896	1.00	45.11	GS7	ATOM	15192	CA	ARG	32	240.723	135.978	-16.449	1.00	52.63	GS7
ATOM	15140	CA	PHE	26	239.650	141.836	-27.019	1.00	45.11	GS7	ATOM	15193	CB	ARG	32	241.472	134.679	-16.716	1.00	97.43	GS7
ATOM	15141	CB	PHE	26	240.597	142.142	-28.174	1.00	61.28	GS7	ATOM	15194	CG	ARG	32	242.910	134.724	-16.317	1.00	97.43	GS7
ATOM	15142	CG	PHE	26	241.582	141.044	-28.445	1.00	61.28	GS7	ATOM	15195	CD	ARG	32	243.595	133.409	-16.613	1.00	97.43	GS7
ATOM	15143	CD1	PHE	26	241.143	139.785	-28.838	1.00	61.28	GS7	ATOM	15196	NE	ARG	32	243.571	133.070	-18.035	1.00	97.43	GS7
ATOM	15144	CD2	PHE	26	242.947	141.261	-28.298	1.00	61.28	GS7	ATOM	15197	CZ	ARG	32	244.424	132.222	-18.601	1.00	97.43	GS7
ATOM	15145	CE1	PHE	26	242.049	138.757	-29.079	1.00	61.28	GS7	ATOM	15198	NH1	ARG	32	245.361	131.637	-17.864	1.00	97.43	GS7
ATOM	15146	CE2	PHE	26	243.864	140.239	-28.539	1.00	61.28	GS7	ATOM	15199	NH2	ARG	32	244.346	131.963	-19.899	1.00	97.43	GS7
ATOM	15147	CZ	PHE	26	243.415	138.985	-28.929	1.00	61.28	GS7	ATOM	15200	C	ARG	32	240.770	136.329	-14.964	1.00	52.63	GS7
ATOM	15148	C	PHE	26	240.458	141.651	-25.742	1.00	45.11	GS7	ATOM	15201	O	ARG	32	241.682	137.019	-14.513	1.00	52.63	GS7
ATOM	15149	O	PHE	26	240.878	140.535	-25.415	1.00	45.11	GS7	ATOM	15202	N	ASP	33	239.778	135.859	-14.214	1.00	44.17	GS7
ATOM	15150	N	ILE	27	240.677	142.747	-25.022	1.00	66.26	GS7	ATOM	15203	CA	ASP	33	239.664	136.138	-12.780	1.00	44.17	GS7
ATOM	15151	CA	ILE	27	241.435	142.685	-23.781	1.00	66.26	GS7	ATOM	15204	CB	ASP	33	240.780	135.447	-11.992	1.00	55.97	GS7
ATOM	15152	CB	ILE	27	241.671	144.085	-23.203	1.00	66.65	GS7	ATOM	15205	CG	ASP	33	240.968	133.997	-12.395	1.00	55.97	GS7
ATOM	15153	CG2	ILE	27	242.593	144.002	-22.002	1.00	66.65	GS7	ATOM	15206	OD1	ASP	33	240.001	133.380	-12.872	1.00	55.97	GS7
ATOM	15154	CG1	ILE	27	242.322	144.978	-24.256	1.00	66.65	GS7	ATOM	15207	OD2	ASP	33	242.079	133.457	-12.227	1.00	55.97	GS7
ATOM	15155	CD1	ILE	27	242.456	146.419	-23.819	1.00	66.65	GS7	ATOM	15208	C	ASP	33	239.694	137.643	-12.510	1.00	44.17	GS7
ATOM	15156	C	ILE	27	240.667	141.852	-22.764	1.00	66.26	GS7	ATOM	15209	O	ASP	33	240.233	138.092	-11.510	1.00	44.17	GS7
ATOM	15157	O	ILE	27	241.234	140.965	-22.108	1.00	66.26	GS7	ATOM	15210	N	GLY	34	239.128	138.423	-13.418	1.00	50.55	GS7
ATOM	15158	N	ASN	28	239.371	142.140	-22.645	1.00	63.61	GS7	ATOM	15211	CA	GLY	34	239.086	139.858	-13.212	1.00	50.55	GS7
ATOM	15159	CA	ASN	28	238.506	141.419	-21.713	1.00	63.61	GS7	ATOM	15212	C	GLY	34	240.402	140.613	-13.101	1.00	50.55	GS7
ATOM	15160	CB	ASN	28	237.058	141.893	-21.828	1.00	50.42	GS7	ATOM	15213	O	GLY	34	240.450	141.698	-12.513	1.00	50.55	GS7
ATOM	15161	CG	ASN	28	236.882	143.328	-21.384	1.00	50.42	GS7	ATOM	15214	N	LYS	35	241.457	140.061	-13.692	1.00	46.08	GS7
ATOM	15162	OD1	ASN	28	237.730	143.874	-20.674	1.00	50.42	GS7	ATOM	15215	CA	LYS	35	242.780	140.682	-13.677	1.00	46.08	GS7
ATOM	15163	ND2	ASN	28	235.767	143.945	-21.787	1.00	50.42	GS7	ATOM	15216	CB	LYS	35	243.854	139.604	-13.595	1.00	40.91	GS7
ATOM	15164	C	ASN	28	238.552	139.922	-21.956	1.00	63.61	GS7	ATOM	15217	CG	LYS	35	243.900	138.857	-12.286	1.00	40.91	GS7
ATOM	15165	O	ASN	28	238.632	139.132	-21.013	1.00	63.61	GS7	ATOM	15218	CD	LYS	35	245.183	138.056	-12.203	1.00	40.91	GS7
ATOM	15166	N	LYS	29	238.501	139.534	-23.224	1.00	64.39	GS7	ATOM	15219	CE	LYS	35	245.651	137.855	-10.763	1.00	40.91	GS7
ATOM	15167	CA	LYS	29	238.541	138.125	-23.563	1.00	64.39	GS7	ATOM	15220	NZ	LYS	35	246.909	137.037	-10.702	1.00	40.91	GS7
ATOM	15168	CB	LYS	29	238.326	137.937	-25.062	1.00	70.18	GS7	ATOM	15221	C	LYS	35	243.014	141.539	-14.925	1.00	46.08	GS7
ATOM	15169	CG	LYS	29	236.863	137.769	-25.429	1.00	70.18	GS7	ATOM	15222	O	LYS	35	243.927	141.280	-15.716	1.00	46.08	GS7
ATOM	15170	CD	LYS	29	236.298	136.557	-24.715	1.00	70.18	GS7	ATOM	15223	N	LYS	36	242.194	142.573	-15.078	1.00	58.37	GS7
ATOM	15171	CE	LYS	29	234.876	136.265	-25.125	1.00	70.18	GS7	ATOM	15224	CA	LYS	36	242.263	143.475	-16.220	1.00	58.37	GS7
ATOM	15172	NZ	LYS	29	234.422	135.000	-24.477	1.00	70.18	GS7	ATOM	15225	CB	LYS	36	241.238	144.596	-16.068	1.00	83.86	GS7
ATOM	15173	C	LYS	29	239.840	137.465	-23.120	1.00	64.39	GS7	ATOM	15226	CG	LYS	36	240.654	145.119	-17.372	1.00	83.86	GS7
ATOM	15174	O	LYS	29	239.870	136.265	-22.832	1.00	64.39	GS7	ATOM	15227	CD	LYS	36	239.557	146.145	-17.066	1.00	83.86	GS7
ATOM	15175	N	ILE	30	240.911	138.246	-23.049	1.00	39.77	GS7	ATOM	15228	CE	LYS	36	238.903	146.706	-18.322	1.00	83.86	GS7
ATOM	15176	CA	ILE	30	242.188	137.696	-22.619	1.00	39.77	GS7	ATOM	15229	NZ	LYS	36	238.068	145.692	-19.011	1.00	83.86	GS7

ATOM	15230	C	LYS	36	243.636	144.079	-16.435	1.00	58.37	GS7	ATOM	15283	CE1	PHE	43	245.381	143.528	-28.786	1.00	48.71	GS7
ATOM	15231	O	LYS	36	243.972	144.439	-17.552	1.00	58.37	GS7	ATOM	15284	CE2	PHE	43	245.556	145.757	-27.938	1.00	48.71	GS7
ATOM	15232	N	ASN	37	244.440	144.199	-15.386	1.00	52.07	GS7	ATOM	15285	CZ	PHE	43	245.253	144.897	-28.974	1.00	48.71	GS7
ATOM	15233	CA	ASN	37	245.768	144.785	-15.557	1.00	52.07	GS7	ATOM	15286	C	PHE	43	248.869	143.820	-25.675	1.00	68.05	GS7
ATOM	15234	CB	ASN	37	246.450	144.969	-14.208	1.00	67.24	GS7	ATOM	15287	O	PHE	43	249.527	143.668	-26.709	1.00	68.05	GS7
ATOM	15235	CG	ASN	37	247.206	146.278	-14.112	1.00	67.24	GS7	ATOM	15288	N	TYR	44	248.908	144.921	-24.933	1.00	63.91	GS7
ATOM	15236	OD1	ASN	37	248.037	146.456	-13.223	1.00	67.24	GS7	ATOM	15289	CA	TYR	44	249.768	146.048	-25.267	1.00	63.91	GS7
ATOM	15237	ND2	ASN	37	246.909	147.209	-15.017	1.00	67.24	GS7	ATOM	15290	CB	TYR	44	249.725	147.069	-24.123	1.00	55.37	GS7
ATOM	15238	C	ASN	37	246.607	143.861	-16.421	1.00	52.07	GS7	ATOM	15291	CG	TYR	44	248.384	147.787	-23.982	1.00	55.37	GS7
ATOM	15239	O	ASN	37	246.988	144.207	-17.547	1.00	52.07	GS7	ATOM	15292	CD1	TYR	44	247.811	148.001	-22.719	1.00	55.37	GS7
ATOM	15240	N	LEU	38	246.889	142.681	-15.875	1.00	52.27	GS7	ATOM	15293	CE1	TYR	44	246.585	148.660	-22.579	1.00	55.37	GS7
ATOM	15241	CA	LEU	38	247.669	141.662	-16.565	1.00	52.27	GS7	ATOM	15294	CD2	TYR	44	247.691	148.258	-25.107	1.00	55.37	GS7
ATOM	15242	CB	LEU	38	247.699	140.400	-15.703	1.00	44.30	GS7	ATOM	15295	CE2	TYR	44	246.459	148.919	-24.976	1.00	55.37	GS7
ATOM	15243	CG	LEU	38	247.865	138.988	-16.263	1.00	44.30	GS7	ATOM	15296	CZ	TYR	44	245.914	149.116	-23.709	1.00	55.37	GS7
ATOM	15244	CD1	LEU	38	248.942	138.938	-17.332	1.00	44.30	GS7	ATOM	15297	OH	TYR	44	244.699	149.765	-23.561	1.00	55.37	GS7
ATOM	15245	CD2	LEU	38	248.214	138.060	-15.105	1.00	44.30	GS7	ATOM	15298	C	TYR	44	251.208	145.602	-25.583	1.00	63.91	GS7
ATOM	15246	C	LEU	38	247.054	141.401	-17.939	1.00	52.27	GS7	ATOM	15299	O	TYR	44	251.860	146.175	-26.460	1.00	63.91	GS7
ATOM	15247	O	LEU	38	247.754	141.115	-18.907	1.00	52.27	GS7	ATOM	15300	N	ASP	45	251.699	144.579	-24.885	1.00	59.17	GS7
ATOM	15248	N	ALA	39	245.739	141.524	-18.027	1.00	58.15	GS7	ATOM	15301	CA	ASP	45	253.036	144.072	-25.166	1.00	59.17	GS7
ATOM	15249	CA	ALA	39	245.072	141.327	-19.300	1.00	58.15	GS7	ATOM	15302	CB	ASP	45	253.424	142.934	-24.226	1.00	63.62	GS7
ATOM	15250	CB	ALA	39	243.574	141.422	-19.126	1.00	79.55	GS7	ATOM	15303	CG	ASP	45	253.752	143.411	-22.827	1.00	63.62	GS7
ATOM	15251	C	ALA	39	245.545	142.408	-20.254	1.00	58.15	GS7	ATOM	15304	OD1	ASP	45	253.877	144.638	-22.615	1.00	63.62	GS7
ATOM	15252	O	ALA	39	246.020	142.118	-21.351	1.00	58.15	GS7	ATOM	15305	OD2	ASP	45	253.896	142.547	-21.934	1.00	63.62	GS7
ATOM	15253	N	ALA	40	245.422	143.657	-19.816	1.00	64.46	GS7	ATOM	15306	C	ASP	45	252.989	143.523	-26.580	1.00	59.17	GS7
ATOM	15254	CA	ALA	40	245.805	144.809	-20.620	1.00	64.46	GS7	ATOM	15307	O	ASP	45	253.763	143.931	-27.444	1.00	59.17	GS7
ATOM	15255	CB	ALA	40	245.472	146.095	-19.873	1.00	37.00	GS7	ATOM	15308	N	ALA	46	252.068	142.591	-26.807	1.00	73.50	GS7
ATOM	15256	C	ALA	40	247.277	144.797	-21.020	1.00	64.46	GS7	ATOM	15309	CA	ALA	46	251.900	141.974	-28.115	1.00	73.50	GS7
ATOM	15257	O	ALA	40	247.621	145.114	-22.164	1.00	64.46	GS7	ATOM	15310	CB	ALA	46	250.619	141.152	-28.145	1.00	85.05	GS7
ATOM	15258	N	ARG	41	248.154	144.441	-20.091	1.00	74.66	GS7	ATOM	15311	C	ALA	46	251.852	143.054	-29.184	1.00	73.50	GS7
ATOM	15259	CA	ARG	41	249.560	144.408	-20.443	1.00	74.66	GS7	ATOM	15312	O	ALA	46	252.393	142.889	-30.276	1.00	73.50	GS7
ATOM	15260	CB	ARG	41	250.419	144.082	-19.226	1.00	89.39	GS7	ATOM	15313	N	CYS	47	251.206	144.166	-28.866	1.00	58.68	GS7
ATOM	15261	CG	ARG	41	250.411	145.217	-18.237	1.00	89.39	GS7	ATOM	15314	CA	CYS	47	251.113	145.254	-29.820	1.00	58.68	GS7
ATOM	15262	CD	ARG	41	251.615	145.210	-17.337	1.00	89.39	GS7	ATOM	15315	CB	CYS	47	250.252	146.373	-29.250	1.00	73.10	GS7
ATOM	15263	NE	ARG	41	251.603	144.080	-16.420	1.00	89.39	GS7	ATOM	15316	SG	CYS	47	248.503	145.942	-29.316	1.00	73.10	GS7
ATOM	15264	CZ	ARG	41	252.395	143.985	-15.360	1.00	89.39	GS7	ATOM	15317	C	CYS	47	252.493	145.770	-30.206	1.00	58.68	GS7
ATOM	15265	NH1	ARG	41	253.259	144.961	-15.091	1.00	89.39	GS7	ATOM	15318	O	CYS	47	252.702	146.228	-31.338	1.00	58.68	GS7
ATOM	15266	NH2	ARG	41	252.322	142.921	-14.569	1.00	89.39	GS7	ATOM	15319	N	LYS	48	253.438	145.679	-29.273	1.00	79.30	GS7
ATOM	15267	C	ARG	41	249.770	143.394	-21.550	1.00	74.66	GS7	ATOM	15320	CA	LYS	48	254.800	146.119	-29.532	1.00	79.30	GS7
ATOM	15268	O	ARG	41	250.140	143.759	-22.663	1.00	74.66	GS7	ATOM	15321	CB	LYS	48	255.505	146.440	-28.217	1.00	75.84	GS7
ATOM	15269	N	ILE	42	249.508	142.127	-21.255	1.00	62.16	GS7	ATOM	15322	CG	LYS	48	254.708	147.425	-27.391	1.00	75.84	GS7
ATOM	15270	CA	ILE	42	249.660	141.067	-22.241	1.00	62.16	GS7	ATOM	15323	CD	LYS	48	255.437	147.926	-26.149	1.00	75.84	GS7
ATOM	15271	CB	ILE	42	248.746	139.873	-21.893	1.00	46.52	GS7	ATOM	15324	CE	LYS	48	254.506	148.836	-25.321	1.00	75.84	GS7
ATOM	15272	CG2	ILE	42	248.705	138.871	-23.047	1.00	46.52	GS7	ATOM	15325	NZ	LYS	48	253.880	149.950	-26.113	1.00	75.84	GS7
ATOM	15273	CG1	ILE	42	249.260	139.213	-20.613	1.00	46.52	GS7	ATOM	15326	C	LYS	48	255.566	145.048	-30.304	1.00	79.30	GS7
ATOM	15274	CD1	ILE	42	248.653	137.848	-20.308	1.00	46.52	GS7	ATOM	15327	O	LYS	48	256.376	145.363	-31.170	1.00	79.30	GS7
ATOM	15275	C	ILE	42	249.368	141.534	-23.675	1.00	62.16	GS7	ATOM	15328	N	ILE	49	255.306	143.781	-30.005	1.00	64.45	GS7
ATOM	15276	O	ILE	42	250.133	141.248	-24.596	1.00	62.16	GS7	ATOM	15329	CA	ILE	49	255.986	142.700	-30.703	1.00	64.45	GS7
ATOM	15277	N	PHE	43	248.274	142.262	-23.860	1.00	68.05	GS7	ATOM	15330	CB	ILE	49	255.613	141.337	-30.134	1.00	42.68	GS7
ATOM	15278	CA	PHE	43	247.918	142.749	-25.185	1.00	68.05	GS7	ATOM	15331	CG2	ILE	49	256.277	140.237	-30.965	1.00	42.68	GS7
ATOM	15279	CB	PHE	43	246.526	143.344	-25.183	1.00	48.71	GS7	ATOM	15332	CG1	ILE	49	256.011	141.269	-28.659	1.00	42.68	GS7
ATOM	15280	CG	PHE	43	246.108	143.886	-26.513	1.00	48.71	GS7	ATOM	15333	CD1	ILE	49	255.547	140.015	-27.957	1.00	42.68	GS7
ATOM	15281	CD1	PHE	43	245.808	143.030	-27.559	1.00	48.71	GS7	ATOM	15334	C	ILE	49	255.552	142.720	-32.151	1.00	64.45	GS7
ATOM	15282	CD2	PHE	43	245.984	145.249	-26.711	1.00	48.71	GS7	ATOM	15335	O	ILE	49	256.325	142.393	-33.056	1.00	64.45	GS7

ATOM	15336	N	ILE	50	254.295	143.087	-32.360	1.00 72.24	GS7
ATOM	15337	CA	ILE	50	253.742	143.157	-33.699	1.00 72.24	GS7
ATOM	15338	CB	ILE	50	252.216	143.336	-33.642	1.00 73.48	GS7
ATOM	15339	CG2	ILE	50	251.661	143.666	-35.025	1.00 73.48	GS7
ATOM	15340	CG1	ILE	50	251.587	142.050	-33.089	1.00 73.48	GS7
ATOM	15341	CD1	ILE	50	250.240	142.240	-32.409	1.00 73.48	GS7
ATOM	15342	C	ILE	50	254.400	144.345	-34.369	1.00 72.24	GS7
ATOM	15343	O	ILE	50	254.386	144.470	-35.595	1.00 72.24	GS7
ATOM	15344	N	GLN	51	254.998	145.203	-33.543	1.00 87.81	GS7
ATOM	15345	CA	GLN	51	255.691	146.396	-34.018	1.00 87.81	GS7
ATOM	15346	CB	GLN	51	255.750	147.456	-32.920	1.00106.40	GS7
ATOM	15347	CG	GLN	51	256.118	148.838	-33.419	1.00106.40	GS7
ATOM	15348	CD	GLN	51	255.152	149.333	-34.476	1.00106.40	GS7
ATOM	15349	OE1	GLN	51	255.078	148.777	-35.571	1.00106.40	GS7
ATOM	15350	NE2	GLN	51	254.401	150.378	-34.150	1.00106.40	GS7
ATOM	15351	C	GLN	51	257.103	146.027	-34.442	1.00 87.81	GS7
ATOM	15352	O	GLN	51	257.654	146.629	-35.359	1.00 87.81	GS7
ATOM	15353	N	GLU	52	257.689	145.045	-33.763	1.00 85.85	GS7
ATOM	15354	CA	GLU	52	259.029	144.584	-34.104	1.00 85.85	GS7
ATOM	15355	CB	GLU	52	259.455	143.424	-33.208	1.00130.72	GS7
ATOM	15356	CG	GLU	52	259.517	143.770	-31.735	1.00130.72	GS7
ATOM	15357	CD	GLU	52	260.455	144.924	-31.450	1.00130.72	GS7
ATOM	15358	OE1	GLU	52	260.164	146.057	-31.899	1.00130.72	GS7
ATOM	15359	OE2	GLU	52	261.485	144.691	-30.778	1.00130.72	GS7
ATOM	15360	C	GLU	52	258.938	144.100	-35.528	1.00 85.85	GS7
ATOM	15361	O	GLU	52	259.464	144.728	-36.441	1.00 85.85	GS7
ATOM	15362	N	LYS	53	258.258	142.977	-35.715	1.00 77.12	GS7
ATOM	15363	CA	LYS	53	258.074	142.422	-37.049	1.00 77.12	GS7
ATOM	15364	CB	LYS	53	257.489	141.007	-36.972	1.00 90.03	GS7
ATOM	15365	CG	LYS	53	258.323	140.021	-36.166	1.00 90.03	GS7
ATOM	15366	CD	LYS	53	258.418	140.439	-34.705	1.00 90.03	GS7
ATOM	15367	CE	LYS	53	259.437	139.606	-33.951	1.00 90.03	GS7
ATOM	15368	NZ	LYS	53	259.603	140.066	-32.545	1.00 90.03	GS7
ATOM	15369	C	LYS	53	257.080	143.356	-37.722	1.00 77.12	GS7
ATOM	15370	O	LYS	53	256.558	144.258	-37.074	1.00 77.12	GS7
ATOM	15371	N	THR	54	256.835	143.149	-39.012	1.00 95.33	GS7
ATOM	15372	CA	THR	54	255.880	143.957	-39.785	1.00 95.33	GS7
ATOM	15373	CB	THR	54	254.408	143.684	-39.322	1.00129.31	GS7
ATOM	15374	OG1	THR	54	254.127	144.414	-38.119	1.00129.31	GS7
ATOM	15375	CG2	THR	54	254.198	142.200	-39.052	1.00129.31	GS7
ATOM	15376	C	THR	54	256.092	145.484	-39.804	1.00 95.33	GS7
ATOM	15377	O	THR	54	255.771	146.152	-40.794	1.00 95.33	GS7
ATOM	15378	N	GLY	55	256.622	146.039	-38.722	1.00 84.14	GS7
ATOM	15379	CA	GLY	55	256.818	147.471	-38.682	1.00 84.14	GS7
ATOM	15380	C	GLY	55	255.504	148.213	-38.883	1.00 84.14	GS7
ATOM	15381	O	GLY	55	255.498	149.342	-39.383	1.00 84.14	GS7
ATOM	15382	N	GLN	56	254.392	147.583	-38.498	1.00 92.35	GS7
ATOM	15383	CA	GLN	56	253.066	148.194	-38.625	1.00 92.35	GS7
ATOM	15384	CB	GLN	56	252.109	147.253	-39.338	1.00 95.94	GS7
ATOM	15385	CG	GLN	56	252.576	146.808	-40.688	1.00 95.94	GS7
ATOM	15386	CD	GLN	56	251.570	145.903	-41.361	1.00 95.94	GS7
ATOM	15387	OE1	GLN	56	250.456	146.325	-41.684	1.00 95.94	GS7
ATOM	15388	NE2	GLN	56	251.952	144.646	-41.571	1.00 95.94	GS7
ATOM	15389	C	GLN	56	252.486	148.503	-37.254	1.00 92.35	GS7
ATOM	15390	O	GLN	56	252.794	147.813	-36.282	1.00 92.35	GS7
ATOM	15391	N	GLU	57	251.647	149.534	-37.167	1.00 85.41	GS7
ATOM	15392	CA	GLU	57	251.043	149.861	-35.881	1.00 85.41	GS7
ATOM	15393	CB	GLU	57	250.119	151.081	-35.942	1.00109.94	GS7
ATOM	15394	CG	GLU	57	250.433	152.074	-37.030	1.00109.94	GS7
ATOM	15395	CD	GLU	57	249.838	151.657	-38.356	1.00109.94	GS7
ATOM	15396	OE1	GLU	57	250.156	150.544	-38.828	1.00109.94	GS7
ATOM	15397	OE2	GLU	57	249.049	152.441	-38.925	1.00109.94	GS7
ATOM	15398	C	GLU	57	250.215	148.639	-35.606	1.00 85.41	GS7
ATOM	15399	O	GLU	57	249.524	148.129	-36.493	1.00 85.41	GS7
ATOM	15400	N	PRO	58	250.275	148.141	-34.375	1.00 63.64	GS7
ATOM	15401	CD	PRO	58	250.828	148.776	-33.168	1.00108.50	GS7
ATOM	15402	CA	PRO	58	249.498	146.950	-34.039	1.00 63.64	GS7
ATOM	15403	CB	PRO	58	249.756	146.795	-32.542	1.00108.50	GS7
ATOM	15404	CG	PRO	58	249.942	148.221	-32.088	1.00108.50	GS7
ATOM	15405	C	PRO	58	248.009	147.073	-34.374	1.00 63.64	GS7
ATOM	15406	O	PRO	58	247.462	146.264	-35.120	1.00 63.64	GS7
ATOM	15407	N	LEU	59	247.374	148.107	-33.831	1.00 74.13	GS7
ATOM	15408	CA	LEU	59	245.947	148.329	-34.014	1.00 74.13	GS7
ATOM	15409	CB	LEU	59	245.591	149.781	-33.688	1.00 64.69	GS7
ATOM	15410	CG	LEU	59	244.090	150.092	-33.729	1.00 64.69	GS7
ATOM	15411	CD1	LEU	59	243.319	149.141	-32.827	1.00 64.69	GS7
ATOM	15412	CD2	LEU	59	243.866	151.527	-33.292	1.00 64.69	GS7
ATOM	15413	C	LEU	59	245.345	147.946	-35.365	1.00 74.13	GS7
ATOM	15414	O	LEU	59	244.218	147.456	-35.411	1.00 74.13	GS7
ATOM	15415	N	LYS	60	246.076	148.152	-36.458	1.00 62.24	GS7
ATOM	15416	CA	LYS	60	245.541	147.812	-37.774	1.00 62.24	GS7
ATOM	15417	CB	LYS	60	246.143	148.703	-38.865	1.00130.53	GS7
ATOM	15418	CG	LYS	60	245.446	148.544	-40.214	1.00130.53	GS7
ATOM	15419	CD	LYS	60	246.003	149.485	-41.276	1.00130.53	GS7
ATOM	15420	CE	LYS	60	245.279	149.298	-42.611	1.00130.53	GS7
ATOM	15421	NZ	LYS	60	245.805	150.191	-43.687	1.00130.53	GS7
ATOM	15422	C	LYS	60	245.780	146.345	-38.111	1.00 62.24	GS7
ATOM	15423	O	LYS	60	245.055	145.759	-38.918	1.00 62.24	GS7
ATOM	15424	N	VAL	61	246.803	145.753	-37.506	1.00 73.03	GS7
ATOM	15425	CA	VAL	61	247.079	144.339	-37.735	1.00 73.03	GS7
ATOM	15426	CB	VAL	61	248.467	143.909	-37.188	1.00 57.13	GS7
ATOM	15427	CG1	VAL	61	248.651	142.414	-37.385	1.00 57.13	GS7
ATOM	15428	CG2	VAL	61	249.588	144.686	-37.880	1.00 57.13	GS7
ATOM	15429	C	VAL	61	246.005	143.610	-36.941	1.00 73.03	GS7
ATOM	15430	O	VAL	61	245.492	142.572	-37.359	1.00 73.03	GS7
ATOM	15431	N	PHE	62	245.671	144.177	-35.786	1.00 69.82	GS7
ATOM	15432	CA	PHE	62	244.655	143.610	-34.915	1.00 69.82	GS7
ATOM	15433	CB	PHE	62	244.516	144.448	-33.636	1.00 57.10	GS7
ATOM	15434	CG	PHE	62	243.295	144.118	-32.827	1.00 57.10	GS7
ATOM	15435	CD1	PHE	62	243.079	142.824	-32.363	1.00 57.10	GS7
ATOM	15436	CD2	PHE	62	242.341	145.093	-32.559	1.00 57.10	GS7
ATOM	15437	CE1	PHE	62	241.926	142.507	-31.647	1.00 57.10	GS7
ATOM	15438	CE2	PHE	62	241.190	144.789	-31.847	1.00 57.10	GS7
ATOM	15439	CZ	PHE	62	240.982	143.493	-31.390	1.00 57.10	GS7
ATOM	15440	C	PHE	62	243.334	143.579	-35.664	1.00 69.82	GS7
ATOM	15441	O	PHE	62	242.695	142.528	-35.774	1.00 69.82	GS7

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ATOM  15442  N   LYS   63     242.937 144.737 -36.182  1.00 75.24      GS7
ATOM  15443  CA  LYS   63     241.691 144.844 -36.925  1.00 75.24      GS7
ATOM  15444  CB  LYS   63     241.558 146.228 -37.554  1.00 98.99      GS7
ATOM  15445  CG  LYS   63     241.735 147.390 -36.584  1.00 98.99      GS7
ATOM  15446  CD  LYS   63     240.473 147.725 -35.803  1.00 98.99      GS7
ATOM  15447  CE  LYS   63     240.699 148.956 -34.923  1.00 98.99      GS7
ATOM  15448  NZ  LYS   63     239.447 149.463 -34.299  1.00 98.99      GS7
ATOM  15449  C   LYS   63     241.675 143.788 -38.022  1.00 75.24      GS7
ATOM  15450  O   LYS   63     240.676 143.093 -38.209  1.00 75.24      GS7
ATOM  15451  N   GLN   64     242.783 143.665 -38.744  1.00 81.44      GS7
ATOM  15452  CA  GLN   64     242.866 142.681 -39.812  1.00 81.44      GS7
ATOM  15453  CB  GLN   64     244.204 142.790 -40.537  1.00129.56      GS7
ATOM  15454  CG  GLN   64     244.145 143.663 -41.777  1.00129.56      GS7
ATOM  15455  CD  GLN   64     243.249 143.075 -42.857  1.00129.56      GS7
ATOM  15456  OE1 GLN   64     242.056 142.849 -42.641  1.00129.56      GS7
ATOM  15457  NE2 GLN   64     243.823 142.823 -44.029  1.00129.56      GS7
ATOM  15458  C   GLN   64     242.658 141.258 -39.309  1.00 81.44      GS7
ATOM  15459  O   GLN   64     241.888 140.501 -39.896  1.00 81.44      GS7
ATOM  15460  N   ALA   65     243.339 140.893 -38.227  1.00 79.00      GS7
ATOM  15461  CA  ALA   65     243.196 139.549 -37.669  1.00 79.00      GS7
ATOM  15462  CB  ALA   65     243.912 139.455 -36.327  1.00 80.18      GS7
ATOM  15463  C   ALA   65     241.710 139.264 -37.493  1.00 79.00      GS7
ATOM  15464  O   ALA   65     241.172 138.304 -38.051  1.00 79.00      GS7
ATOM  15465  N   VAL   66     241.055 140.120 -36.714  1.00 66.20      GS7
ATOM  15466  CA  VAL   66     239.625 140.006 -36.455  1.00 66.20      GS7
ATOM  15467  CB  VAL   66     239.076 141.306 -35.850  1.00 50.98      GS7
ATOM  15468  CG1 VAL   66     237.569 141.261 -35.825  1.00 50.98      GS7
ATOM  15469  CG2 VAL   66     239.642 141.509 -34.451  1.00 50.98      GS7
ATOM  15470  C   VAL   66     238.840 139.714 -37.729  1.00 66.20      GS7
ATOM  15471  O   VAL   66     238.340 138.607 -37.924  1.00 66.20      GS7
ATOM  15472  N   GLU   67     238.736 140.723 -38.590  1.00 72.65      GS7
ATOM  15473  CA  GLU   67     238.004 140.612 -39.848  1.00 72.65      GS7
ATOM  15474  CB  GLU   67     238.380 141.767 -40.772  1.00112.03      GS7
ATOM  15475  CG  GLU   67     237.556 141.828 -42.050  1.00112.03      GS7
ATOM  15476  CD  GLU   67     236.166 142.402 -41.829  1.00112.03      GS7
ATOM  15477  OE1 GLU   67     235.416 142.539 -42.820  1.00112.03      GS7
ATOM  15478  OE2 GLU   67     235.826 142.723 -40.669  1.00112.03      GS7
ATOM  15479  C   GLU   67     238.193 139.290 -40.602  1.00 72.65      GS7
ATOM  15480  O   GLU   67     237.335 138.907 -41.394  1.00 72.65      GS7
ATOM  15481  N   ASN   68     239.299 138.592 -40.362  1.00 75.88      GS7
ATOM  15482  CA  ASN   68     239.542 137.333 -41.060  1.00 75.88      GS7
ATOM  15483  CB  ASN   68     241.031 137.149 -41.340  1.00 76.40      GS7
ATOM  15484  CG  ASN   68     241.594 138.238 -42.209  1.00 76.40      GS7
ATOM  15485  OD1 ASN   68     241.061 138.531 -43.277  1.00 76.40      GS7
ATOM  15486  ND2 ASN   68     242.686 138.847 -41.759  1.00 76.40      GS7
ATOM  15487  C   ASN   68     239.046 136.122 -40.291  1.00 75.88      GS7
ATOM  15488  O   ASN   68     238.814 135.056 -40.869  1.00 75.88      GS7
ATOM  15489  N   VAL   69     238.892 136.290 -38.986  1.00 66.77      GS7
ATOM  15490  CA  VAL   69     238.439 135.211 -38.127  1.00 66.77      GS7
ATOM  15491  CB  VAL   69     238.998 135.408 -36.719  1.00 63.11      GS7
ATOM  15492  CG1 VAL   69     238.585 134.260 -35.820  1.00 63.11      GS7
ATOM  15493  CG2 VAL   69     240.504 135.529 -36.791  1.00 63.11      GS7
ATOM  15494  C   VAL   69     236.919 135.131 -38.060  1.00 66.77      GS7
ATOM  15495  O   VAL   69     236.366 134.113 -37.658  1.00 66.77      GS7
ATOM  15496  N   LYS   70     236.250 136.203 -38.469  1.00 50.16      GS7
ATOM  15497  CA  LYS   70     234.789 136.278 -38.442  1.00 50.16      GS7
ATOM  15498  CB  LYS   70     234.330 137.688 -38.823  1.00 48.42      GS7
ATOM  15499  CG  LYS   70     234.824 138.791 -37.916  1.00 48.42      GS7
ATOM  15500  CD  LYS   70     234.140 140.095 -38.266  1.00 48.42      GS7
ATOM  15501  CE  LYS   70     234.349 141.121 -37.172  1.00 48.42      GS7
ATOM  15502  NZ  LYS   70     233.717 142.425 -37.506  1.00 48.42      GS7
ATOM  15503  C   LYS   70     234.068 135.282 -39.348  1.00 50.16      GS7
ATOM  15504  O   LYS   70     234.134 135.386 -40.572  1.00 50.16      GS7
ATOM  15505  N   PRO   71     233.357 134.306 -38.760  1.00 62.87      GS7
ATOM  15506  CD  PRO   71     233.138 134.032 -37.328  1.00 49.27      GS7
ATOM  15507  CA  PRO   71     232.643 133.333 -39.589  1.00 62.87      GS7
ATOM  15508  CB  PRO   71     232.342 132.217 -38.606  1.00 49.27      GS7
ATOM  15509  CG  PRO   71     232.037 132.990 -37.359  1.00 49.27      GS7
ATOM  15510  C   PRO   71     231.379 134.026 -40.080  1.00 62.87      GS7
ATOM  15511  O   PRO   71     230.721 134.717 -39.305  1.00 62.87      GS7
ATOM  15512  N   ARG   72     231.050 133.864 -41.357  1.00 68.70      GS7
ATOM  15513  CA  ARG   72     229.860 134.497 -41.920  1.00 68.70      GS7
ATOM  15514  CB  ARG   72     230.157 134.991 -43.333  1.00140.56      GS7
ATOM  15515  CG  ARG   72     231.131 134.116 -44.060  1.00140.56      GS7
ATOM  15516  CD  ARG   72     231.644 134.780 -45.301  1.00140.56      GS7
ATOM  15517  NE  ARG   72     232.721 133.994 -45.884  1.00140.56      GS7
ATOM  15518  CZ  ARG   72     233.265 134.243 -47.068  1.00140.56      GS7
ATOM  15519  NH1 ARG   72     232.828 135.263 -47.799  1.00140.56      GS7
ATOM  15520  NH2 ARG   72     234.246 133.472 -47.521  1.00140.56      GS7
ATOM  15521  C   ARG   72     228.651 133.564 -41.909  1.00 68.70      GS7
ATOM  15522  O   ARG   72     227.501 134.010 -41.843  1.00 68.70      GS7
ATOM  15523  N   MET   73     228.907 132.268 -41.985  1.00 52.17      GS7
ATOM  15524  CA  MET   73     227.827 131.299 -41.916  1.00 52.17      GS7
ATOM  15525  CB  MET   73     227.695 130.520 -43.222  1.00 69.63      GS7
ATOM  15526  CG  MET   73     227.281 131.366 -44.412  1.00 69.63      GS7
ATOM  15527  SD  MET   73     225.662 132.108 -44.224  1.00 69.63      GS7
ATOM  15528  CE  MET   73     224.627 130.655 -44.400  1.00 69.63      GS7
ATOM  15529  C   MET   73     228.190 130.347 -40.789  1.00 52.17      GS7
ATOM  15530  O   MET   73     229.371 130.076 -40.553  1.00 52.17      GS7
ATOM  15531  N   GLU   74     227.193 129.864 -40.064  1.00 59.51      GS7
ATOM  15532  CA  GLU   74     227.469 128.924 -38.995  1.00 59.51      GS7
ATOM  15533  CB  GLU   74     227.630 129.638 -37.656  1.00 91.85      GS7
ATOM  15534  CG  GLU   74     226.335 130.128 -37.054  1.00 91.85      GS7
ATOM  15535  CD  GLU   74     226.532 130.738 -35.687  1.00 91.85      GS7
ATOM  15536  OE1 GLU   74     227.094 130.054 -34.803  1.00 91.85      GS7
ATOM  15537  OE2 GLU   74     226.124 131.901 -35.499  1.00 91.85      GS7
ATOM  15538  C   GLU   74     226.304 127.970 -38.933  1.00 59.51      GS7
ATOM  15539  O   GLU   74     225.186 128.303 -39.327  1.00 59.51      GS7
ATOM  15540  N   VAL   75     226.570 126.779 -38.432  1.00 51.98      GS7
ATOM  15541  CA  VAL   75     225.552 125.754 -38.326  1.00 51.98      GS7
ATOM  15542  CB  VAL   75     226.183 124.391 -38.692  1.00 64.44      GS7
ATOM  15543  CG1 VAL   75     225.648 123.292 -37.806  1.00 64.44      GS7
ATOM  15544  CG2 VAL   75     225.918 124.093 -40.151  1.00 64.44      GS7
ATOM  15545  C   VAL   75     224.913 125.710 -36.930  1.00 51.98      GS7
ATOM  15546  O   VAL   75     225.601 125.546 -35.924  1.00 51.98      GS7
ATOM  15547  N   ARG   76     223.594 125.869 -36.874  1.00 75.72      GS7
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ATOM	15548	CA	ARG	76	222.864	125.831	-35.608	1.00 75.72	GS7	ATOM	15601	N	ALA	83	214.019	114.345	-36.387	1.00126.85	GS7
ATOM	15549	CB	ARG	76	222.020	127.096	-35.434	1.00133.34	GS7	ATOM	15602	CA	ALA	83	215.433	114.143	-36.660	1.00126.85	GS7
ATOM	15550	CG	ARG	76	222.811	128.379	-35.220	1.00133.34	GS7	ATOM	15603	CB	ALA	83	215.622	113.563	-38.056	1.00 69.18	GS7
ATOM	15551	CD	ARG	76	221.911	129.596	-35.434	1.00133.34	GS7	ATOM	15604	C	ALA	83	216.129	115.484	-36.554	1.00126.85	GS7
ATOM	15552	NE	ARG	76	221.821	130.468	-34.264	1.00133.34	GS7	ATOM	15605	O	ALA	83	215.804	116.420	-37.288	1.00126.85	GS7
ATOM	15553	CZ	ARG	76	220.678	130.926	-33.755	1.00133.34	GS7	ATOM	15606	N	ASN	84	217.078	115.580	-35.631	1.00116.97	GS7
ATOM	15554	NH1	ARG	76	219.516	130.595	-34.311	1.00133.34	GS7	ATOM	15607	CA	ASN	84	217.810	116.823	-35.443	1.00116.97	GS7
ATOM	15555	NH2	ARG	76	220.696	131.714	-32.686	1.00133.34	GS7	ATOM	15608	CB	ASN	84	218.501	116.833	-34.084	1.00111.06	GS7
ATOM	15556	C	ARG	76	221.953	124.608	-35.610	1.00 75.72	GS7	ATOM	15609	CG	ASN	84	219.276	118.105	-33.847	1.00111.06	GS7
ATOM	15557	O	ARG	76	221.091	124.472	-36.477	1.00 75.72	GS7	ATOM	15610	OD1	ASN	84	218.712	119.196	-33.859	1.00111.06	GS7
ATOM	15558	N	SER	77	222.141	123.721	-34.637	1.00115.84	GS7	ATOM	15611	ND2	ASN	84	220.580	117.975	-33.637	1.00111.06	GS7
ATOM	15559	CA	SER	77	221.335	122.507	-34.540	1.00115.84	GS7	ATOM	15612	C	ASN	84	218.841	117.031	-36.551	1.00116.97	GS7
ATOM	15560	CB	SER	77	221.793	121.675	-33.348	1.00 95.82	GS7	ATOM	15613	O	ASN	84	219.615	116.130	-36.875	1.00116.97	GS7
ATOM	15561	OG	SER	77	221.161	120.410	-33.360	1.00 95.82	GS7	ATOM	15614	N	TYR	85	218.845	118.229	-37.128	1.00116.48	GS7
ATOM	15562	C	SER	77	219.843	122.808	-34.408	1.00115.84	GS7	ATOM	15615	CA	TYR	85	219.762	118.560	-38.211	1.00116.48	GS7
ATOM	15563	O	SER	77	219.459	123.854	-33.884	1.00115.84	GS7	ATOM	15616	CB	TYR	85	218.976	118.773	-39.508	1.00113.12	GS7
ATOM	15564	N	ARG	78	219.007	121.881	-34.877	1.00 77.24	GS7	ATOM	15617	CG	TYR	85	218.164	117.577	-39.963	1.00113.12	GS7
ATOM	15565	CA	ARG	78	217.550	122.046	-34.826	1.00 77.24	GS7	ATOM	15618	CD1	TYR	85	217.032	117.749	-40.756	1.00113.12	GS7
ATOM	15566	CB	ARG	78	217.113	123.189	-35.750	1.00133.58	GS7	ATOM	15619	CE1	TYR	85	216.281	116.664	-41.191	1.00113.12	GS7
ATOM	15567	CG	ARG	78	215.637	123.140	-36.103	1.00133.58	GS7	ATOM	15620	CD2	TYR	85	218.531	116.276	-39.614	1.00113.12	GS7
ATOM	15568	CD	ARG	78	215.194	124.333	-36.928	1.00133.58	GS7	ATOM	15621	CE2	TYR	85	217.785	115.178	-40.045	1.00113.12	GS7
ATOM	15569	NE	ARG	78	213.807	124.171	-37.361	1.00133.58	GS7	ATOM	15622	CZ	TYR	85	216.660	115.381	-40.833	1.00113.12	GS7
ATOM	15570	CZ	ARG	78	213.065	125.131	-37.907	1.00133.58	GS7	ATOM	15623	OH	TYR	85	215.912	114.305	-41.263	1.00113.12	GS7
ATOM	15571	NH1	ARG	78	213.569	126.346	-38.092	1.00133.58	GS7	ATOM	15624	C	TYR	85	220.561	119.821	-37.906	1.00116.48	GS7
ATOM	15572	NH2	ARG	78	211.817	124.874	-38.276	1.00133.58	GS7	ATOM	15625	O	TYR	85	220.072	120.724	-37.230	1.00116.48	GS7
ATOM	15573	C	ARG	78	216.794	120.780	-35.220	1.00 77.24	GS7	ATOM	15626	N	GLN	86	221.794	119.873	-38.405	1.00 85.73	GS7
ATOM	15574	O	ARG	78	216.815	120.380	-36.381	1.00 77.24	GS7	ATOM	15627	CA	GLN	86	222.654	121.035	-38.215	1.00 85.73	GS7
ATOM	15575	N	ARG	79	216.115	120.159	-34.258	1.00120.07	GS7	ATOM	15628	CB	GLN	86	224.120	120.613	-38.241	1.00132.90	GS7
ATOM	15576	CA	ARG	79	215.352	118.942	-34.531	1.00120.07	GS7	ATOM	15629	CG	GLN	86	224.497	119.703	-37.087	1.00132.90	GS7
ATOM	15577	CB	ARG	79	214.845	118.322	-33.227	1.00148.96	GS7	ATOM	15630	CD	GLN	86	224.205	120.327	-35.730	1.00132.90	GS7
ATOM	15578	CG	ARG	79	214.002	117.070	-33.433	1.00148.96	GS7	ATOM	15631	OE1	GLN	86	224.237	119.647	-34.702	1.00132.90	GS7
ATOM	15579	CD	ARG	79	213.448	116.558	-32.114	1.00148.96	GS7	ATOM	15632	NE2	GLN	86	223.927	121.627	-35.720	1.00132.90	GS7
ATOM	15580	NE	ARG	79	212.587	115.386	-32.277	1.00148.96	GS7	ATOM	15633	C	GLN	86	222.346	122.011	-39.342	1.00 85.73	GS7
ATOM	15581	CZ	ARG	79	212.983	114.222	-32.785	1.00148.96	GS7	ATOM	15634	O	GLN	86	222.787	121.837	-40.466	1.00 85.73	GS7
ATOM	15582	NH1	ARG	79	214.235	114.058	-33.194	1.00148.96	GS7	ATOM	15635	N	VAL	87	221.578	123.044	-39.024	1.00 68.62	GS7
ATOM	15583	NH2	ARG	79	212.128	113.213	-32.869	1.00148.96	GS7	ATOM	15636	CA	VAL	87	221.155	124.024	-40.013	1.00 68.62	GS7
ATOM	15584	C	ARG	79	214.169	119.249	-35.449	1.00120.07	GS7	ATOM	15637	CB	VAL	87	219.748	124.523	-39.675	1.00 52.61	GS7
ATOM	15585	O	ARG	79	213.427	120.206	-35.218	1.00120.07	GS7	ATOM	15638	CG1	VAL	87	219.190	125.319	-40.834	1.00 52.61	GS7
ATOM	15586	N	VAL	80	213.995	118.434	-36.487	1.00120.52	GS7	ATOM	15639	CG2	VAL	87	218.855	123.338	-39.338	1.00 52.61	GS7
ATOM	15587	CA	VAL	80	212.909	118.641	-37.442	1.00120.52	GS7	ATOM	15640	C	VAL	87	222.058	125.239	-40.230	1.00 68.62	GS7
ATOM	15588	CB	VAL	80	213.430	119.330	-38.736	1.00 95.48	GS7	ATOM	15641	O	VAL	87	222.402	125.960	-39.293	1.00 68.62	GS7
ATOM	15589	CG1	VAL	80	212.264	119.765	-39.616	1.00 95.48	GS7	ATOM	15642	N	PRO	88	222.438	125.488	-41.492	1.00 53.84	GS7
ATOM	15590	CG2	VAL	80	214.294	120.516	-38.375	1.00 95.48	GS7	ATOM	15643	CD	PRO	88	222.113	124.704	-42.700	1.00 53.96	GS7
ATOM	15591	C	VAL	80	212.206	117.341	-37.840	1.00120.52	GS7	ATOM	15644	CA	PRO	88	223.298	126.621	-41.831	1.00 53.84	GS7
ATOM	15592	O	VAL	80	212.855	116.347	-38.181	1.00120.52	GS7	ATOM	15645	CB	PRO	88	223.732	126.301	-43.254	1.00 53.96	GS7
ATOM	15593	N	GLY	81	210.875	117.370	-37.789	1.00139.77	GS7	ATOM	15646	CG	PRO	88	222.504	125.653	-43.819	1.00 53.96	GS7
ATOM	15594	CA	GLY	81	210.063	116.220	-38.159	1.00139.77	GS7	ATOM	15647	C	PRO	88	222.478	127.881	-41.783	1.00 53.84	GS7
ATOM	15595	C	GLY	81	210.321	114.931	-37.400	1.00139.77	GS7	ATOM	15648	O	PRO	88	221.270	127.820	-41.984	1.00 53.84	GS7
ATOM	15596	O	GLY	81	209.539	113.982	-37.498	1.00139.77	GS7	ATOM	15649	N	MET	89	223.128	129.011	-41.508	1.00 59.82	GS7
ATOM	15597	N	GLY	82	211.411	114.895	-36.640	1.00124.92	GS7	ATOM	15650	CA	MET	89	222.454	130.309	-41.485	1.00 59.82	GS7
ATOM	15598	CA	GLY	82	211.756	113.705	-35.886	1.00124.92	GS7	ATOM	15651	CB	MET	89	221.306	130.311	-40.476	1.00137.76	GS7
ATOM	15599	C	GLY	82	213.198	113.329	-36.151	1.00124.92	GS7	ATOM	15652	CG	MET	89	221.663	129.888	-39.077	1.00137.76	GS7
ATOM	15600	O	GLY	82	213.566	112.153	-36.154	1.00124.92	GS7	ATOM	15653	SD	MET	89	220.137	129.774	-38.126	1.00137.76	GS7

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ATOM  15654  CE  MET   89     219.954 131.465 -37.563  1.00137.76      GS7
ATOM  15655  C   MET   89     223.403 131.465 -41.215  1.00 59.82      GS7
ATOM  15656  O   MET   89     224.445 131.284 -40.581  1.00 59.82      GS7
ATOM  15657  N   GLU   90     223.050 132.645 -41.727  1.00 59.56      GS7
ATOM  15658  CA  GLU   90     223.870 133.841 -41.556  1.00 59.56      GS7
ATOM  15659  CB  GLU   90     223.108 135.088 -42.004  1.00140.79      GS7
ATOM  15660  CG  GLU   90     222.817 135.183 -43.487  1.00140.79      GS7
ATOM  15661  CD  GLU   90     221.999 136.424 -43.842  1.00140.79      GS7
ATOM  15662  OE1 GLU   90     221.784 136.666 -45.050  1.00140.79      GS7
ATOM  15663  OE2 GLU   90     221.567 137.155 -42.918  1.00140.79      GS7
ATOM  15664  C   GLU   90     224.261 134.027 -40.095  1.00 59.56      GS7
ATOM  15665  O   GLU   90     223.570 133.559 -39.183  1.00 59.56      GS7
ATOM  15666  N   VAL   91     225.375 134.709 -39.872  1.00 56.82      GS7
ATOM  15667  CA  VAL   91     225.827 134.988 -38.519  1.00 56.82      GS7
ATOM  15668  CB  VAL   91     227.283 134.572 -38.319  1.00 55.84      GS7
ATOM  15669  CG1 VAL   91     227.720 134.911 -36.896  1.00 55.84      GS7
ATOM  15670  CG2 VAL   91     227.440 133.084 -38.598  1.00 55.84      GS7
ATOM  15671  C   VAL   91     225.721 136.490 -38.336  1.00 56.82      GS7
ATOM  15672  O   VAL   91     226.297 137.253 -39.114  1.00 56.82      GS7
ATOM  15673  N   SER   92     224.986 136.920 -37.319  1.00 66.22      GS7
ATOM  15674  CA  SER   92     224.810 138.348 -37.074  1.00 66.22      GS7
ATOM  15675  CB  SER   92     223.860 138.565 -35.912  1.00 79.74      GS7
ATOM  15676  OG  SER   92     224.432 138.050 -34.726  1.00 79.74      GS7
ATOM  15677  C   SER   92     226.126 139.035 -36.755  1.00 66.22      GS7
ATOM  15678  O   SER   92     226.907 138.551 -35.937  1.00 66.22      GS7
ATOM  15679  N   PRO   93     226.381 140.190 -37.386  1.00 53.13      GS7
ATOM  15680  CD  PRO   93     225.427 140.993 -38.164  1.00 59.13      GS7
ATOM  15681  CA  PRO   93     227.613 140.946 -37.159  1.00 53.13      GS7
ATOM  15682  CB  PRO   93     227.303 142.318 -37.770  1.00 59.13      GS7
ATOM  15683  CG  PRO   93     225.812 142.391 -37.751  1.00 59.13      GS7
ATOM  15684  C   PRO   93     228.028 141.034 -35.694  1.00 53.13      GS7
ATOM  15685  O   PRO   93     229.209 141.191 -35.399  1.00 53.13      GS7
ATOM  15686  N   ARG   94     227.071 140.949 -34.777  1.00 49.37      GS7
ATOM  15687  CA  ARG   94     227.416 140.999 -33.361  1.00 49.37      GS7
ATOM  15688  CB  ARG   94     226.157 141.127 -32.502  1.00 52.65      GS7
ATOM  15689  CG  ARG   94     226.323 140.589 -31.083  1.00 52.65      GS7
ATOM  15690  CD  ARG   94     226.713 141.651 -30.096  1.00 52.65      GS7
ATOM  15691  NE  ARG   94     227.406 141.069 -28.947  1.00 52.65      GS7
ATOM  15692  CZ  ARG   94     227.795 141.757 -27.874  1.00 52.65      GS7
ATOM  15693  NH1 ARG   94     227.546 143.061 -27.790  1.00 52.65      GS7
ATOM  15694  NH2 ARG   94     228.469 141.151 -26.902  1.00 52.65      GS7
ATOM  15695  C   ARG   94     228.160 139.714 -32.990  1.00 49.37      GS7
ATOM  15696  O   ARG   94     229.292 139.749 -32.483  1.00 49.37      GS7
ATOM  15697  N   ARG   95     227.517 138.579 -33.249  1.00 51.57      GS7
ATOM  15698  CA  ARG   95     228.099 137.279 -32.942  1.00 51.57      GS7
ATOM  15699  CB  ARG   95     227.078 136.185 -33.269  1.00 48.57      GS7
ATOM  15700  CG  ARG   95     227.514 134.796 -32.891  1.00 48.57      GS7
ATOM  15701  CD  ARG   95     226.380 133.819 -33.002  1.00 48.57      GS7
ATOM  15702  NE  ARG   95     226.879 132.466 -32.830  1.00 48.57      GS7
ATOM  15703  CZ  ARG   95     227.432 132.021 -31.710  1.00 48.57      GS7
ATOM  15704  NH1 ARG   95     227.545 132.825 -30.654  1.00 48.57      GS7
ATOM  15705  NH2 ARG   95     227.897 130.779 -31.652  1.00 48.57      GS7
ATOM  15706  C   ARG   95     229.398 137.064 -33.736  1.00 51.57      GS7
ATOM  15707  O   ARG   95     230.334 136.381 -33.290  1.00 51.57      GS7
ATOM  15708  N   GLN   96     229.435 137.660 -34.921  1.00 51.90      GS7
ATOM  15709  CA  GLN   96     230.584 137.569 -35.800  1.00 51.90      GS7
ATOM  15710  CB  GLN   96     230.355 138.467 -37.006  1.00 66.48      GS7
ATOM  15711  CG  GLN   96     230.668 137.839 -38.345  1.00 66.48      GS7
ATOM  15712  CD  GLN   96     229.975 138.573 -39.477  1.00 66.48      GS7
ATOM  15713  OE1 GLN   96     230.066 139.798 -39.591  1.00 66.48      GS7
ATOM  15714  NE2 GLN   96     229.272 137.825 -40.319  1.00 66.48      GS7
ATOM  15715  C   GLN   96     231.795 138.039 -35.016  1.00 51.90      GS7
ATOM  15716  O   GLN   96     232.799 137.338 -34.922  1.00 51.90      GS7
ATOM  15717  N   GLN   97     231.698 139.230 -34.443  1.00 52.85      GS7
ATOM  15718  CA  GLN   97     232.798 139.758 -33.655  1.00 52.85      GS7
ATOM  15719  CB  GLN   97     232.490 141.175 -33.182  1.00 70.31      GS7
ATOM  15720  CG  GLN   97     233.489 141.722 -32.176  1.00 70.31      GS7
ATOM  15721  CD  GLN   97     233.029 143.043 -31.567  1.00 70.31      GS7
ATOM  15722  OE1 GLN   97     232.956 144.070 -32.258  1.00 70.31      GS7
ATOM  15723  NE2 GLN   97     232.703 143.020 -30.267  1.00 70.31      GS7
ATOM  15724  C   GLN   97     233.032 138.857 -32.449  1.00 52.85      GS7
ATOM  15725  O   GLN   97     234.167 138.438 -32.187  1.00 52.85      GS7
ATOM  15726  N   SER   98     231.955 138.546 -31.727  1.00 57.11      GS7
ATOM  15727  CA  SER   98     232.056 137.703 -30.536  1.00 57.11      GS7
ATOM  15728  CB  SER   98     230.670 137.292 -30.047  1.00 83.09      GS7
ATOM  15729  OG  SER   98     229.945 138.409 -29.580  1.00 83.09      GS7
ATOM  15730  C   SER   98     232.875 136.457 -30.795  1.00 57.11      GS7
ATOM  15731  O   SER   98     233.840 136.173 -30.078  1.00 57.11      GS7
ATOM  15732  N   LEU   99     232.476 135.718 -31.827  1.00 49.56      GS7
ATOM  15733  CA  LEU   99     233.156 134.489 -32.212  1.00 49.56      GS7
ATOM  15734  CB  LEU   99     232.435 133.857 -33.395  1.00 66.24      GS7
ATOM  15735  CG  LEU   99     231.105 133.220 -33.020  1.00 66.24      GS7
ATOM  15736  CD1 LEU   99     230.260 132.990 -34.263  1.00 66.24      GS7
ATOM  15737  CD2 LEU   99     231.386 131.922 -32.284  1.00 66.24      GS7
ATOM  15738  C   LEU   99     234.620 134.720 -32.567  1.00 49.56      GS7
ATOM  15739  O   LEU   99     235.501 133.971 -32.140  1.00 49.56      GS7
ATOM  15740  N   ALA  100     234.870 135.764 -33.349  1.00 49.29      GS7
ATOM  15741  CA  ALA  100     236.225 136.099 -33.763  1.00 49.29      GS7
ATOM  15742  CB  ALA  100     236.184 137.317 -34.699  1.00 46.44      GS7
ATOM  15743  C   ALA  100     237.189 136.359 -32.571  1.00 49.29      GS7
ATOM  15744  O   ALA  100     238.240 135.702 -32.456  1.00 49.29      GS7
ATOM  15745  N   LEU  101     236.835 137.302 -31.693  1.00 50.91      GS7
ATOM  15746  CA  LEU  101     237.694 137.609 -30.553  1.00 50.91      GS7
ATOM  15747  CB  LEU  101     237.120 138.758 -29.722  1.00 50.06      GS7
ATOM  15748  CG  LEU  101     236.548 139.965 -30.483  1.00 50.06      GS7
ATOM  15749  CD1 LEU  101     236.437 141.170 -29.539  1.00 50.06      GS7
ATOM  15750  CD2 LEU  101     237.433 140.318 -31.664  1.00 50.06      GS7
ATOM  15751  C   LEU  101     237.888 136.380 -29.665  1.00 50.91      GS7
ATOM  15752  O   LEU  101     238.991 136.117 -29.167  1.00 50.91      GS7
ATOM  15753  N   ARG  102     236.826 135.612 -29.464  1.00 53.97      GS7
ATOM  15754  CA  ARG  102     236.967 134.437 -28.629  1.00 53.97      GS7
ATOM  15755  CB  ARG  102     235.631 133.721 -28.451  1.00 45.08      GS7
ATOM  15756  CG  ARG  102     235.783 132.434 -27.662  1.00 45.08      GS7
ATOM  15757  CD  ARG  102     234.462 131.754 -27.426  1.00 45.08      GS7
ATOM  15758  NE  ARG  102     233.524 132.676 -26.813  1.00 45.08      GS7
ATOM  15759  CZ  ARG  102     232.293 132.871 -27.261  1.00 45.08      GS7
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ATOM	15760	NH1	ARG	102	231.864	132.194	-28.319	1.00	45.08	GS7	ATOM	15813	CA	ASN	109	246.651	129.962	-26.142	1.00	46.65	GS7
ATOM	15761	NH2	ARG	102	231.506	133.765	-26.671	1.00	45.08	GS7	ATOM	15814	CB	ASN	109	245.670	130.133	-25.007	1.00	61.89	GS7
ATOM	15762	C	ARG	102	237.973	133.486	-29.261	1.00	53.97	GS7	ATOM	15815	CG	ASN	109	245.744	131.500	-24.417	1.00	61.89	GS7
ATOM	15763	O	ARG	102	238.903	133.023	-28.596	1.00	53.97	GS7	ATOM	15816	OD1	ASN	109	246.751	131.863	-23.809	1.00	61.89	GS7
ATOM	15764	N	TRP	103	237.789	133.203	-30.550	1.00	47.53	GS7	ATOM	15817	ND2	ASN	109	244.693	132.290	-24.610	1.00	61.89	GS7
ATOM	15765	CA	TRP	103	238.675	132.288	-31.254	1.00	47.53	GS7	ATOM	15818	C	ASN	109	246.826	128.504	-26.466	1.00	46.65	GS7
ATOM	15766	CB	TRP	103	238.186	132.047	-32.678	1.00	59.18	GS7	ATOM	15819	O	ASN	109	247.062	127.677	-25.575	1.00	46.65	GS7
ATOM	15767	CG	TRP	103	236.899	131.304	-32.762	1.00	59.18	GS7	ATOM	15820	N	GLN	110	246.709	128.188	-27.748	1.00	57.36	GS7
ATOM	15768	CD2	TRP	103	235.997	131.282	-33.874	1.00	59.18	GS7	ATOM	15821	CA	GLN	110	246.890	126.825	-28.199	1.00	57.36	GS7
ATOM	15769	CE2	TRP	103	234.935	130.418	-33.534	1.00	59.18	GS7	ATOM	15822	CB	GLN	110	245.944	126.539	-29.362	1.00	141.57	GS7
ATOM	15770	CE3	TRP	103	235.985	131.909	-35.128	1.00	59.18	GS7	ATOM	15823	CG	GLN	110	244.875	125.521	-29.030	1.00	141.57	GS7
ATOM	15771	CD1	TRP	103	236.366	130.478	-31.819	1.00	59.18	GS7	ATOM	15824	CD	GLN	110	245.378	124.099	-29.179	1.00	141.57	GS7
ATOM	15772	NE1	TRP	103	235.184	129.942	-32.274	1.00	59.18	GS7	ATOM	15825	OE1	GLN	110	244.766	123.153	-28.679	1.00	141.57	GS7
ATOM	15773	CZ2	TRP	103	233.869	130.162	-34.399	1.00	59.18	GS7	ATOM	15826	NE2	GLN	110	246.496	123.939	-29.886	1.00	141.57	GS7
ATOM	15774	CZ3	TRP	103	234.922	131.653	-35.993	1.00	59.18	GS7	ATOM	15827	C	GLN	110	248.348	126.744	-28.631	1.00	57.36	GS7
ATOM	15775	CH2	TRP	103	233.878	130.786	-35.622	1.00	59.18	GS7	ATOM	15828	O	GLN	110	248.978	125.689	-28.553	1.00	57.36	GS7
ATOM	15776	C	TRP	103	240.107	132.789	-31.296	1.00	47.53	GS7	ATOM	15829	N	ARG	111	248.881	127.893	-29.049	1.00	63.05	GS7
ATOM	15777	O	TRP	103	241.054	132.014	-31.160	1.00	47.53	GS7	ATOM	15830	CA	ARG	111	250.263	128.017	-29.503	1.00	63.05	GS7
ATOM	15778	N	LEU	104	240.281	134.085	-31.497	1.00	58.58	GS7	ATOM	15831	CB	ARG	111	250.580	129.471	-29.821	1.00	72.33	GS7
ATOM	15779	CA	LEU	104	241.629	134.603	-31.528	1.00	58.58	GS7	ATOM	15832	CG	ARG	111	250.040	129.913	-31.159	1.00	72.33	GS7
ATOM	15780	CB	LEU	104	241.613	136.118	-31.705	1.00	47.04	GS7	ATOM	15833	CD	ARG	111	249.924	131.422	-31.252	1.00	72.33	GS7
ATOM	15781	CG	LEU	104	241.282	136.481	-33.157	1.00	47.04	GS7	ATOM	15834	NE	ARG	111	250.168	131.882	-32.613	1.00	72.33	GS7
ATOM	15782	CD1	LEU	104	241.255	137.983	-33.363	1.00	47.04	GS7	ATOM	15835	CZ	ARG	111	251.324	131.723	-33.252	1.00	72.33	GS7
ATOM	15783	CD2	LEU	104	242.333	135.836	-34.060	1.00	47.04	GS7	ATOM	15836	NH1	ARG	111	252.349	131.118	-32.662	1.00	72.33	GS7
ATOM	15784	C	LEU	104	242.323	134.209	-30.239	1.00	58.58	GS7	ATOM	15837	NH2	ARG	111	251.457	132.170	-34.488	1.00	72.33	GS7
ATOM	15785	O	LEU	104	243.374	133.581	-30.260	1.00	58.58	GS7	ATOM	15838	C	ARG	111	251.270	127.481	-28.506	1.00	63.05	GS7
ATOM	15786	N	VAL	105	241.715	134.531	-29.109	1.00	47.83	GS7	ATOM	15839	O	ARG	111	250.952	127.249	-27.341	1.00	63.05	GS7
ATOM	15787	CA	VAL	105	242.334	134.199	-27.838	1.00	47.83	GS7	ATOM	15840	N	PRO	112	252.509	127.266	-28.959	1.00	63.88	GS7
ATOM	15788	CB	VAL	105	241.521	134.742	-26.664	1.00	36.51	GS7	ATOM	15841	CD	PRO	112	252.859	127.076	-30.379	1.00	32.83	GS7
ATOM	15789	CG1	VAL	105	242.199	134.350	-25.361	1.00	36.51	GS7	ATOM	15842	CA	PRO	112	253.567	126.745	-28.097	1.00	63.88	GS7
ATOM	15790	CG2	VAL	105	241.387	136.266	-26.781	1.00	36.51	GS7	ATOM	15843	CB	PRO	112	254.328	125.838	-29.036	1.00	32.83	GS7
ATOM	15791	C	VAL	105	242.554	132.715	-27.605	1.00	47.83	GS7	ATOM	15844	CG	PRO	112	254.277	126.594	-30.305	1.00	32.83	GS7
ATOM	15792	O	VAL	105	243.586	132.319	-27.066	1.00	47.83	GS7	ATOM	15845	C	PRO	112	254.488	127.741	-27.382	1.00	63.88	GS7
ATOM	15793	N	GLN	106	241.586	131.895	-27.999	1.00	50.94	GS7	ATOM	15846	O	PRO	112	255.180	127.354	-26.436	1.00	63.88	GS7
ATOM	15794	CA	GLN	106	241.698	130.453	-27.798	1.00	50.94	GS7	ATOM	15847	N	GLU	113	254.529	128.998	-27.824	1.00	46.19	GS7
ATOM	15795	CB	GLN	106	240.355	129.785	-28.083	1.00	96.54	GS7	ATOM	15848	CA	GLU	113	255.382	129.968	-27.154	1.00	46.19	GS7
ATOM	15796	CG	GLN	106	239.258	130.250	-27.141	1.00	96.54	GS7	ATOM	15849	CB	GLU	113	255.146	131.375	-27.688	1.00	75.33	GS7
ATOM	15797	CD	GLN	106	237.905	129.643	-27.452	1.00	96.54	GS7	ATOM	15850	CG	GLU	113	255.457	131.519	-29.150	1.00	75.33	GS7
ATOM	15798	OE1	GLN	106	236.928	129.902	-26.755	1.00	96.54	GS7	ATOM	15851	CD	GLU	113	254.337	131.025	-30.018	1.00	75.33	GS7
ATOM	15799	NE2	GLN	106	237.840	128.831	-28.503	1.00	96.54	GS7	ATOM	15852	OE1	GLU	113	253.575	131.869	-30.530	1.00	75.33	GS7
ATOM	15800	C	GLN	106	242.788	129.867	-28.680	1.00	50.94	GS7	ATOM	15853	OE2	GLU	113	254.212	129.797	-30.175	1.00	75.33	GS7
ATOM	15801	O	GLN	106	243.545	128.994	-28.263	1.00	50.94	GS7	ATOM	15854	C	GLU	113	255.057	129.929	-25.666	1.00	46.19	GS7
ATOM	15802	N	ALA	107	242.869	130.366	-29.904	1.00	67.12	GS7	ATOM	15855	O	GLU	113	253.897	129.778	-25.286	1.00	46.19	GS7
ATOM	15803	CA	ALA	107	243.871	129.908	-30.847	1.00	67.12	GS7	ATOM	15856	N	ARG	114	256.082	130.060	-24.828	1.00	53.85	GS7
ATOM	15804	CB	ALA	107	243.586	130.501	-32.220	1.00	53.59	GS7	ATOM	15857	CA	ARG	114	255.911	130.014	-23.384	1.00	53.85	GS7
ATOM	15805	C	ALA	107	245.250	130.340	-30.348	1.00	67.12	GS7	ATOM	15858	CB	ARG	114	257.259	129.830	-22.682	1.00	51.86	GS7
ATOM	15806	O	ALA	107	246.222	129.594	-30.446	1.00	67.12	GS7	ATOM	15859	CG	ARG	114	258.095	128.623	-23.052	1.00	51.86	GS7
ATOM	15807	N	ALA	108	245.325	131.548	-29.803	1.00	46.76	GS7	ATOM	15860	CD	ARG	114	259.399	128.706	-22.250	1.00	51.86	GS7
ATOM	15808	CA	ALA	108	246.581	132.075	-29.280	1.00	46.76	GS7	ATOM	15861	NE	ARG	114	260.404	127.689	-22.550	1.00	51.86	GS7
ATOM	15809	CB	ALA	108	246.374	133.483	-28.749	1.00	14.67	GS7	ATOM	15862	CZ	ARG	114	260.154	126.387	-22.627	1.00	51.86	GS7
ATOM	15810	C	ALA	108	247.129	131.193	-28.168	1.00	46.76	GS7	ATOM	15863	NH1	ARG	114	258.920	125.930	-22.440	1.00	51.86	GS7
ATOM	15811	O	ALA	108	248.324	130.890	-28.130	1.00	46.76	GS7	ATOM	15864	NH2	ARG	114	261.141	125.534	-22.857	1.00	51.86	GS7
ATOM	15812	N	ASN	109	246.244	130.782	-27.265	1.00	46.65	GS7	ATOM	15865	C	ARG	114	255.269	131.282	-22.825	1.00	53.85	GS7

ATOM	15866	O	ARG	114	254.584	131.227	-21.804	1.00	53.85	GS7	ATOM	15919	N	HIS	122	251.650	136.866	-32.208	1.00	57.93	GS7
ATOM	15867	N	ARG	115	255.497	132.420	-23.476	1.00	55.89	GS7	ATOM	15920	CA	HIS	122	251.781	135.929	-33.306	1.00	57.93	GS7
ATOM	15868	CA	ARG	115	254.958	133.682	-22.983	1.00	55.89	GS7	ATOM	15921	CB	HIS	122	252.468	134.654	-32.823	1.00	81.31	GS7
ATOM	15869	CB	ARG	115	256.018	134.774	-23.101	1.00	131.37	GS7	ATOM	15922	CG	HIS	122	253.951	134.796	-32.685	1.00	81.31	GS7
ATOM	15870	CG	ARG	115	257.264	134.455	-22.301	1.00	131.37	GS7	ATOM	15923	CD2	HIS	122	254.778	135.824	-32.995	1.00	81.31	GS7
ATOM	15871	CD	ARG	115	258.257	135.600	-22.299	1.00	131.37	GS7	ATOM	15924	ND1	HIS	122	254.756	133.793	-32.189	1.00	81.31	GS7
ATOM	15872	NE	ARG	115	259.406	135.291	-21.450	1.00	131.37	GS7	ATOM	15925	CE1	HIS	122	256.014	134.198	-32.199	1.00	81.31	GS7
ATOM	15873	CZ	ARG	115	260.378	136.149	-21.152	1.00	131.37	GS7	ATOM	15926	NE2	HIS	122	256.055	135.427	-32.683	1.00	81.31	GS7
ATOM	15874	NH1	ARG	115	260.351	137.387	-21.634	1.00	131.37	GS7	ATOM	15927	C	HIS	122	250.423	135.609	-33.930	1.00	57.93	GS7
ATOM	15875	NH2	ARG	115	261.378	135.770	-20.366	1.00	131.37	GS7	ATOM	15928	O	HIS	122	250.096	136.135	-34.998	1.00	57.93	GS7
ATOM	15876	C	ARG	115	253.662	134.130	-23.652	1.00	55.89	GS7	ATOM	15929	N	GLU	123	249.635	134.765	-33.260	1.00	51.47	GS7
ATOM	15877	O	ARG	115	253.588	134.303	-24.873	1.00	55.89	GS7	ATOM	15930	CA	GLU	123	248.311	134.378	-33.748	1.00	51.47	GS7
ATOM	15878	N	ALA	116	252.638	134.319	-22.825	1.00	64.28	GS7	ATOM	15931	CB	GLU	123	247.406	133.944	-32.582	1.00	52.35	GS7
ATOM	15879	CA	ALA	116	251.319	134.737	-23.285	1.00	64.28	GS7	ATOM	15932	CG	GLU	123	246.037	133.399	-33.032	1.00	52.35	GS7
ATOM	15880	CB	ALA	116	250.510	135.265	-22.110	1.00	80.55	GS7	ATOM	15933	CD	GLU	123	246.149	132.123	-33.866	1.00	52.35	GS7
ATOM	15881	C	ALA	116	251.357	135.778	-24.394	1.00	64.28	GS7	ATOM	15934	OE1	GLU	123	245.263	131.875	-34.716	1.00	52.35	GS7
ATOM	15882	O	ALA	116	250.846	135.542	-25.491	1.00	64.28	GS7	ATOM	15935	OE2	GLU	123	247.117	131.360	-33.668	1.00	52.35	GS7
ATOM	15883	N	ALA	117	251.957	136.929	-24.112	1.00	62.49	GS7	ATOM	15936	C	GLU	123	247.636	135.516	-34.518	1.00	51.47	GS7
ATOM	15884	CA	ALA	117	252.013	137.990	-25.108	1.00	62.49	GS7	ATOM	15937	O	GLU	123	247.045	135.299	-35.583	1.00	51.47	GS7
ATOM	15885	CB	ALA	117	252.897	139.118	-24.626	1.00	33.66	GS7	ATOM	15938	N	LEU	124	247.719	136.727	-33.977	1.00	54.57	GS7
ATOM	15886	C	ALA	117	252.490	137.500	-26.471	1.00	62.49	GS7	ATOM	15939	CA	LEU	124	247.116	137.872	-34.640	1.00	54.57	GS7
ATOM	15887	O	ALA	117	251.843	137.757	-27.489	1.00	62.49	GS7	ATOM	15940	CB	LEU	124	247.358	139.135	-33.819	1.00	43.69	GS7
ATOM	15888	N	VAL	118	253.614	136.796	-26.504	1.00	64.03	GS7	ATOM	15941	CG	LEU	124	246.549	139.326	-32.544	1.00	43.69	GS7
ATOM	15889	CA	VAL	118	254.120	136.310	-27.780	1.00	64.03	GS7	ATOM	15942	CD1	LEU	124	247.284	140.239	-31.570	1.00	43.69	GS7
ATOM	15890	CB	VAL	118	255.305	135.338	-27.603	1.00	48.41	GS7	ATOM	15943	CD2	LEU	124	245.199	139.898	-32.926	1.00	43.69	GS7
ATOM	15891	CG1	VAL	118	255.764	134.829	-28.969	1.00	48.41	GS7	ATOM	15944	C	LEU	124	247.730	138.035	-36.029	1.00	54.57	GS7
ATOM	15892	CG2	VAL	118	256.448	136.031	-26.858	1.00	48.41	GS7	ATOM	15945	O	LEU	124	247.034	137.996	-37.051	1.00	54.57	GS7
ATOM	15893	C	VAL	118	253.023	135.577	-28.545	1.00	64.03	GS7	ATOM	15946	N	MET	125	249.045	138.224	-36.058	1.00	64.17	GS7
ATOM	15894	O	VAL	118	252.792	135.847	-29.732	1.00	64.03	GS7	ATOM	15947	CA	MET	125	249.752	138.390	-37.315	1.00	64.17	GS7
ATOM	15895	N	ARG	119	252.348	134.654	-27.860	1.00	52.94	GS7	ATOM	15948	CB	MET	125	251.260	138.414	-37.052	1.00	73.56	GS7
ATOM	15896	CA	ARG	119	251.282	133.866	-28.474	1.00	52.94	GS7	ATOM	15949	CG	MET	125	251.662	139.495	-36.039	1.00	73.56	GS7
ATOM	15897	CB	ARG	119	250.628	132.942	-27.442	1.00	56.83	GS7	ATOM	15950	SD	MET	125	253.427	139.602	-35.651	1.00	73.56	GS7
ATOM	15898	CG	ARG	119	251.553	131.901	-26.853	1.00	56.83	GS7	ATOM	15951	CE	MET	125	253.778	137.892	-35.220	1.00	73.56	GS7
ATOM	15899	CD	ARG	119	250.756	130.819	-26.155	1.00	56.83	GS7	ATOM	15952	C	MET	125	249.363	137.249	-38.250	1.00	64.17	GS7
ATOM	15900	NE	ARG	119	249.947	131.343	-25.058	1.00	56.83	GS7	ATOM	15953	O	MET	125	248.972	137.486	-39.389	1.00	64.17	GS7
ATOM	15901	CZ	ARG	119	250.383	131.520	-23.810	1.00	56.83	GS7	ATOM	15954	N	ASP	126	249.448	136.015	-37.759	1.00	62.88	GS7
ATOM	15902	NH1	ARG	119	251.632	131.213	-23.467	1.00	56.83	GS7	ATOM	15955	CA	ASP	126	249.072	134.842	-38.551	1.00	62.88	GS7
ATOM	15903	NH2	ARG	119	249.564	132.023	-22.900	1.00	56.83	GS7	ATOM	15956	CB	ASP	126	249.122	133.586	-37.682	1.00	94.00	GS7
ATOM	15904	C	ARG	119	250.202	134.712	-29.127	1.00	52.94	GS7	ATOM	15957	CG	ASP	126	250.495	132.968	-37.639	1.00	94.00	GS7
ATOM	15905	O	ARG	119	249.685	134.351	-30.182	1.00	52.94	GS7	ATOM	15958	OD1	ASP	126	250.856	132.264	-38.601	1.00	94.00	GS7
ATOM	15906	N	ILE	120	249.859	135.833	-28.504	1.00	49.24	GS7	ATOM	15959	OD2	ASP	126	251.221	133.192	-36.652	1.00	94.00	GS7
ATOM	15907	CA	ILE	120	248.817	136.692	-29.046	1.00	49.24	GS7	ATOM	15960	C	ASP	126	247.664	134.991	-39.131	1.00	62.88	GS7
ATOM	15908	CB	ILE	120	248.258	137.604	-27.953	1.00	55.24	GS7	ATOM	15961	O	ASP	126	247.385	134.556	-40.256	1.00	62.88	GS7
ATOM	15909	CG2	ILE	120	247.236	138.575	-28.528	1.00	55.24	GS7	ATOM	15962	N	ALA	127	246.781	135.599	-38.342	1.00	66.08	GS7
ATOM	15910	CG1	ILE	120	247.611	136.739	-26.878	1.00	55.24	GS7	ATOM	15963	CA	ALA	127	245.399	135.817	-38.741	1.00	66.08	GS7
ATOM	15911	CD1	ILE	120	247.177	137.509	-25.665	1.00	55.24	GS7	ATOM	15964	CB	ALA	127	244.595	136.333	-37.567	1.00	83.32	GS7
ATOM	15912	C	ILE	120	249.279	137.527	-30.238	1.00	49.24	GS7	ATOM	15965	C	ALA	127	245.366	136.821	-39.866	1.00	66.08	GS7
ATOM	15913	O	ILE	120	248.584	137.605	-31.265	1.00	49.24	GS7	ATOM	15966	O	ALA	127	244.634	136.652	-40.837	1.00	66.08	GS7
ATOM	15914	N	ALA	121	250.449	138.147	-30.104	1.00	65.86	GS7	ATOM	15967	N	ALA	128	246.154	137.879	-39.724	1.00	64.47	GS7
ATOM	15915	CA	ALA	121	251.009	138.958	-31.180	1.00	65.86	GS7	ATOM	15968	CA	ALA	128	246.220	138.899	-40.757	1.00	64.47	GS7
ATOM	15916	CB	ALA	121	252.377	139.482	-30.778	1.00	74.80	GS7	ATOM	15969	CB	ALA	128	247.213	139.991	-40.357	1.00	59.06	GS7
ATOM	15917	C	ALA	121	251.125	138.067	-32.410	1.00	65.86	GS7	ATOM	15970	C	ALA	128	246.666	138.206	-42.046	1.00	64.47	GS7
ATOM	15918	O	ALA	121	250.742	138.450	-33.514	1.00	65.86	GS7	ATOM	15971	O	ALA	128	246.099	138.430	-43.119	1.00	64.47	GS7

ATOM	15972	N	GLU	129	247.677	137.351	-41.923	1.00	67.80	GS7	ATOM	16025	CB	LYS	137	238.196	128.063	-35.517	1.00	70.62	GS7
ATOM	15973	CA	GLU	129	248.192	136.614	-43.065	1.00	67.80	GS7	ATOM	16026	CG	LYS	137	236.882	127.981	-34.761	1.00	70.62	GS7
ATOM	15974	CB	GLU	129	249.477	135.860	-42.683	1.00	124.29	GS7	ATOM	16027	CD	LYS	137	236.470	126.530	-34.543	1.00	70.62	GS7
ATOM	15975	CG	GLU	129	250.665	136.769	-42.327	1.00	124.29	GS7	ATOM	16028	CE	LYS	137	235.175	126.416	-33.749	1.00	70.62	GS7
ATOM	15976	CD	GLU	129	251.969	136.004	-42.052	1.00	124.29	GS7	ATOM	16029	NZ	LYS	137	234.709	125.005	-33.622	1.00	70.62	GS7
ATOM	15977	OE1	GLU	129	252.029	135.210	-41.084	1.00	124.29	GS7	ATOM	16030	C	LYS	137	237.191	128.179	-37.802	1.00	49.19	GS7
ATOM	15978	OE2	GLU	129	252.944	136.205	-42.809	1.00	124.29	GS7	ATOM	16031	O	LYS	137	236.233	127.605	-38.327	1.00	49.19	GS7
ATOM	15979	C	GLU	129	247.130	135.634	-43.573	1.00	67.80	GS7	ATOM	16032	N	LYS	138	237.439	129.470	-37.980	1.00	50.27	GS7
ATOM	15980	O	GLU	129	247.033	135.385	-44.772	1.00	67.80	GS7	ATOM	16033	CA	LYS	138	236.568	130.278	-38.815	1.00	50.27	GS7
ATOM	15981	N	GLY	130	246.329	135.093	-42.660	1.00	52.97	GS7	ATOM	16034	CB	LYS	138	237.289	131.553	-39.255	1.00	57.74	GS7
ATOM	15982	CA	GLY	130	245.292	134.152	-43.045	1.00	52.97	GS7	ATOM	16035	CG	LYS	138	236.461	132.479	-40.141	1.00	57.74	GS7
ATOM	15983	C	GLY	130	245.645	132.723	-42.659	1.00	52.97	GS7	ATOM	16036	CD	LYS	138	236.558	132.128	-41.615	1.00	57.74	GS7
ATOM	15984	O	GLY	130	245.599	131.805	-43.491	1.00	52.97	GS7	ATOM	16037	CE	LYS	138	236.144	133.336	-42.459	1.00	57.74	GS7
ATOM	15985	N	LYS	131	245.994	132.524	-41.394	1.00	68.01	GS7	ATOM	16038	NZ	LYS	138	236.229	133.135	-43.943	1.00	57.74	GS7
ATOM	15986	CA	LYS	131	246.358	131.198	-40.927	1.00	68.01	GS7	ATOM	16039	C	LYS	138	236.175	129.457	-40.029	1.00	50.27	GS7
ATOM	15987	CB	LYS	131	247.688	130.793	-41.550	1.00	72.91	GS7	ATOM	16040	O	LYS	138	235.024	129.064	-40.177	1.00	50.27	GS7
ATOM	15988	CG	LYS	131	248.731	131.875	-41.456	1.00	72.91	GS7	ATOM	16041	N	GLU	139	237.158	129.166	-40.871	1.00	87.24	GS7
ATOM	15989	CD	LYS	131	249.902	131.578	-42.369	1.00	72.91	GS7	ATOM	16042	CA	GLU	139	236.937	128.404	-42.091	1.00	87.24	GS7
ATOM	15990	CE	LYS	131	250.903	132.720	-42.356	1.00	72.91	GS7	ATOM	16043	CB	GLU	139	238.255	128.281	-42.853	1.00	105.04	GS7
ATOM	15991	NZ	LYS	131	251.942	132.563	-43.408	1.00	72.91	GS7	ATOM	16044	CG	GLU	139	238.939	129.627	-43.026	1.00	105.04	GS7
ATOM	15992	C	LYS	131	246.451	131.139	-39.411	1.00	68.01	GS7	ATOM	16045	CD	GLU	139	239.906	129.662	-44.189	1.00	105.04	GS7
ATOM	15993	O	LYS	131	246.698	132.147	-38.752	1.00	68.01	GS7	ATOM	16046	OE1	GLU	139	240.911	128.918	-44.157	1.00	105.04	GS7
ATOM	15994	N	GLY	132	246.264	129.944	-38.866	1.00	92.67	GS7	ATOM	16047	OE2	GLU	139	239.649	130.440	-45.136	1.00	105.04	GS7
ATOM	15995	CA	GLY	132	246.310	129.768	-37.430	1.00	92.67	GS7	ATOM	16048	C	GLU	139	236.325	127.028	-41.863	1.00	87.24	GS7
ATOM	15996	C	GLY	132	244.992	129.178	-36.985	1.00	92.67	GS7	ATOM	16049	O	GLU	139	235.491	126.579	-42.652	1.00	87.24	GS7
ATOM	15997	O	GLY	132	244.010	129.233	-37.728	1.00	92.67	GS7	ATOM	16050	N	ASP	140	236.735	126.363	-40.788	1.00	68.43	GS7
ATOM	15998	N	GLY	133	244.964	128.612	-35.783	1.00	75.31	GS7	ATOM	16051	CA	ASP	140	236.206	125.039	-40.476	1.00	68.43	GS7
ATOM	15999	CA	GLY	133	243.741	128.010	-35.275	1.00	75.31	GS7	ATOM	16052	CB	ASP	140	236.799	124.514	-39.168	1.00	140.33	GS7
ATOM	16000	C	GLY	133	242.529	128.888	-35.502	1.00	75.31	GS7	ATOM	16053	CG	ASP	140	236.636	123.017	-39.018	1.00	140.33	GS7
ATOM	16001	O	GLY	133	241.469	128.409	-35.903	1.00	75.31	GS7	ATOM	16054	OD1	ASP	140	237.364	122.280	-39.716	1.00	140.33	GS7
ATOM	16002	N	ALA	134	242.697	130.181	-35.241	1.00	56.40	GS7	ATOM	16055	OD2	ASP	140	235.781	122.582	-38.214	1.00	140.33	GS7
ATOM	16003	CA	ALA	134	241.629	131.151	-35.423	1.00	56.40	GS7	ATOM	16056	C	ASP	140	234.695	125.171	-40.330	1.00	68.43	GS7
ATOM	16004	CB	ALA	134	242.187	132.560	-35.334	1.00	52.94	GS7	ATOM	16057	O	ASP	140	233.925	124.364	-40.854	1.00	68.43	GS7
ATOM	16005	C	ALA	134	240.994	130.933	-36.784	1.00	56.40	GS7	ATOM	16058	N	VAL	141	234.289	126.202	-39.601	1.00	64.75	GS7
ATOM	16006	O	ALA	134	239.823	130.570	-36.884	1.00	56.40	GS7	ATOM	16059	CA	VAL	141	232.885	126.489	-39.384	1.00	64.75	GS7
ATOM	16007	N	VAL	135	241.785	131.145	-37.833	1.00	64.74	GS7	ATOM	16060	CB	VAL	141	232.721	127.759	-38.551	1.00	39.15	GS7
ATOM	16008	CA	VAL	135	241.311	130.984	-39.203	1.00	64.74	GS7	ATOM	16061	CG1	VAL	141	231.323	128.336	-38.741	1.00	39.15	GS7
ATOM	16009	CB	VAL	135	242.424	131.307	-40.198	1.00	97.45	GS7	ATOM	16062	CG2	VAL	141	232.996	127.440	-37.090	1.00	39.15	GS7
ATOM	16010	CG1	VAL	135	241.833	131.506	-41.579	1.00	97.45	GS7	ATOM	16063	C	VAL	141	232.208	126.683	-40.728	1.00	64.75	GS7
ATOM	16011	CG2	VAL	135	243.175	132.544	-39.741	1.00	97.45	GS7	ATOM	16064	O	VAL	141	231.396	125.862	-41.135	1.00	64.75	GS7
ATOM	16012	C	VAL	135	240.781	129.577	-39.484	1.00	64.74	GS7	ATOM	16065	N	GLU	142	232.542	127.771	-41.412	1.00	56.15	GS7
ATOM	16013	O	VAL	135	239.707	129.431	-40.070	1.00	64.74	GS7	ATOM	16066	CA	GLU	142	231.966	128.049	-42.718	1.00	56.15	GS7
ATOM	16014	N	LYS	136	241.533	128.550	-39.076	1.00	61.01	GS7	ATOM	16067	CB	GLU	142	232.778	129.134	-43.429	1.00	77.14	GS7
ATOM	16015	CA	LYS	136	241.105	127.165	-39.278	1.00	61.01	GS7	ATOM	16068	CG	GLU	142	232.760	130.476	-42.719	1.00	77.14	GS7
ATOM	16016	CB	LYS	136	242.011	126.188	-38.528	1.00	117.55	GS7	ATOM	16069	CD	GLU	142	233.426	131.582	-43.516	1.00	77.14	GS7
ATOM	16017	CG	LYS	136	243.425	126.105	-39.067	1.00	117.55	GS7	ATOM	16070	OE1	GLU	142	233.339	132.752	-43.093	1.00	77.14	GS7
ATOM	16018	CD	LYS	136	244.318	125.268	-38.147	1.00	117.55	GS7	ATOM	16071	OE2	GLU	142	234.038	131.289	-44.564	1.00	77.14	GS7
ATOM	16019	CE	LYS	136	245.792	125.342	-38.557	1.00	117.55	GS7	ATOM	16072	C	GLU	142	231.922	126.768	-43.569	1.00	56.15	GS7
ATOM	16020	NZ	LYS	136	246.705	124.728	-37.544	1.00	117.55	GS7	ATOM	16073	O	GLU	142	230.887	126.443	-44.176	1.00	56.15	GS7
ATOM	16021	C	LYS	136	239.685	127.031	-38.749	1.00	61.01	GS7	ATOM	16074	N	ARG	143	233.033	126.034	-43.616	1.00	60.01	GS7
ATOM	16022	O	LYS	136	238.799	126.541	-39.442	1.00	61.01	GS7	ATOM	16075	CA	ARG	143	233.053	124.797	-44.385	1.00	60.01	GS7
ATOM	16023	N	LYS	137	239.475	127.479	-37.517	1.00	49.19	GS7	ATOM	16076	CB	ARG	143	234.381	124.073	-44.193	1.00	141.65	GS7
ATOM	16024	CA	LYS	137	238.163	127.423	-36.906	1.00	49.19	GS7	ATOM	16077	CG	ARG	143	234.575	122.890	-45.117	1.00	141.65	GS7

ATOM	16078	CD	ARG	143	236.037	122.455	-45.151	1.00141.65	GS7	ATOM	16131	N	ALA	150	225.236	122.570	-45.248	1.00108.92	GS7
ATOM	16079	NE	ARG	143	236.582	122.181	-43.821	1.00141.65	GS7	ATOM	16132	CA	ALA	150	224.825	123.653	-46.134	1.00108.92	GS7
ATOM	16080	CZ	ARG	143	236.100	121.269	-42.980	1.00141.65	GS7	ATOM	16133	CB	ALA	150	225.943	124.074	-47.007	1.00105.70	GS7
ATOM	16081	NH1	ARG	143	235.051	120.528	-43.319	1.00141.65	GS7	ATOM	16134	C	ALA	150	223.693	123.223	-47.011	1.00108.92	GS7
ATOM	16082	NH2	ARG	143	236.671	121.095	-41.796	1.00141.65	GS7	ATOM	16135	O	ALA	150	223.684	122.105	-47.524	1.00108.92	GS7
ATOM	16083	C	ARG	143	231.892	123.953	-43.859	1.00 60.01	GS7	ATOM	16136	N	TYR	151	222.743	124.128	-47.198	1.00115.98	GS7
ATOM	16084	O	ARG	143	230.986	123.585	-44.598	1.00 60.01	GS7	ATOM	16137	CA	TYR	151	221.606	123.840	-48.042	1.00115.98	GS7
ATOM	16085	N	MET	144	231.912	123.690	-42.559	1.00 69.16	GS7	ATOM	16138	CB	TYR	151	222.051	123.924	-49.497	1.00143.09	GS7
ATOM	16086	CA	MET	144	230.866	122.914	-41.897	1.00 69.16	GS7	ATOM	16139	CG	TYR	151	223.097	124.998	-49.717	1.00143.09	GS7
ATOM	16087	CB	MET	144	231.018	123.046	-40.379	1.00125.33	GS7	ATOM	16140	CD1	TYR	151	222.764	126.353	-49.660	1.00143.09	GS7
ATOM	16088	CG	MET	144	231.035	121.732	-39.638	1.00125.33	GS7	ATOM	16141	CE1	TYR	151	223.740	127.342	-49.804	1.00143.09	GS7
ATOM	16089	SD	MET	144	229.545	120.768	-39.934	1.00125.33	GS7	ATOM	16142	CD2	TYR	151	224.431	124.658	-49.927	1.00143.09	GS7
ATOM	16090	CE	MET	144	228.677	120.998	-38.370	1.00125.33	GS7	ATOM	16143	CE2	TYR	151	225.412	125.635	-50.072	1.00143.09	GS7
ATOM	16091	C	MET	144	229.485	123.415	-42.312	1.00 69.16	GS7	ATOM	16144	CZ	TYR	151	225.063	126.973	-50.009	1.00143.09	GS7
ATOM	16092	O	MET	144	228.561	122.631	-42.520	1.00 69.16	GS7	ATOM	16145	OH	TYR	151	226.042	127.935	-50.146	1.00143.09	GS7
ATOM	16093	N	ALA	145	229.351	124.731	-42.438	1.00 62.04	GS7	ATOM	16146	C	TYR	151	221.147	122.437	-47.684	1.00115.98	GS7
ATOM	16094	CA	ALA	145	228.075	125.323	-42.810	1.00 62.04	GS7	ATOM	16147	O	TYR	151	221.604	121.864	-46.692	1.00115.98	GS7
ATOM	16095	CB	ALA	145	228.009	126.783	-42.360	1.00 67.28	GS7	ATOM	16148	N	ALA	152	220.252	121.870	-48.477	1.00115.06	GS7
ATOM	16096	C	ALA	145	227.814	125.222	-44.299	1.00 62.04	GS7	ATOM	16149	CA	ALA	152	219.760	120.540	-48.161	1.00115.06	GS7
ATOM	16097	O	ALA	145	227.205	124.264	-44.738	1.00 62.04	GS7	ATOM	16150	CB	ALA	152	220.916	119.530	-48.154	1.00 50.49	GS7
ATOM	16098	N	GLU	146	228.287	126.206	-45.062	1.00130.16	GS7	ATOM	16151	C	ALA	152	219.137	120.636	-46.772	1.00115.06	GS7
ATOM	16099	CA	GLU	146	228.092	126.252	-46.512	1.00130.16	GS7	ATOM	16152	O	ALA	152	218.459	119.720	-46.323	1.00115.06	GS7
ATOM	16100	CB	GLU	146	228.835	127.448	-47.110	1.00180.53	GS7	ATOM	16153	N	HIS	153	219.384	121.759	-46.103	1.00 83.33	GS7
ATOM	16101	CG	GLU	146	228.294	128.797	-46.670	1.00180.53	GS7	ATOM	16154	CA	HIS	153	218.878	122.024	-44.766	1.00 83.33	GS7
ATOM	16102	CD	GLU	146	228.881	129.948	-47.467	1.00180.53	GS7	ATOM	16155	CB	HIS	153	219.842	121.463	-43.713	1.00 87.87	GS7
ATOM	16103	OE1	GLU	146	228.533	131.110	-47.172	1.00180.53	GS7	ATOM	16156	CG	HIS	153	220.025	119.978	-43.797	1.00 87.87	GS7
ATOM	16104	OE2	GLU	146	229.685	129.690	-48.390	1.00180.53	GS7	ATOM	16157	CD2	HIS	153	221.143	119.216	-43.880	1.00 87.87	GS7
ATOM	16105	C	GLU	146	228.485	124.985	-47.275	1.00130.16	GS7	ATOM	16158	ND1	HIS	153	218.963	119.098	-43.824	1.00 87.87	GS7
ATOM	16106	O	GLU	146	228.590	124.998	-48.506	1.00130.16	GS7	ATOM	16159	CE1	HIS	153	219.418	117.860	-43.924	1.00 87.87	GS7
ATOM	16107	N	ALA	147	228.676	123.889	-46.544	1.00 62.39	GS7	ATOM	16160	NE2	HIS	153	220.738	117.903	-43.960	1.00 87.87	GS7
ATOM	16108	CA	ALA	147	229.027	122.612	-47.147	1.00 62.39	GS7	ATOM	16161	C	HIS	153	218.710	123.534	-44.610	1.00 83.33	GS7
ATOM	16109	CB	ALA	147	230.522	122.315	-46.960	1.00127.55	GS7	ATOM	16162	O	HIS	153	219.556	124.221	-44.050	1.00 83.33	GS7
ATOM	16110	C	ALA	147	228.194	121.503	-46.534	1.00 62.39	GS7	ATOM	16163	N	TYR	154	217.606	124.027	-45.154	1.00137.64	GS7
ATOM	16111	O	ALA	147	226.986	121.460	-46.739	1.00 62.39	GS7	ATOM	16164	CA	TYR	154	217.219	125.435	-45.131	1.00137.64	GS7
ATOM	16112	N	ASN	148	228.842	120.613	-45.786	1.00106.35	GS7	ATOM	16165	CB	TYR	154	216.350	125.718	-46.352	1.00102.54	GS7
ATOM	16113	CA	ASN	148	228.150	119.492	-45.165	1.00106.35	GS7	ATOM	16166	CG	TYR	154	215.399	124.569	-46.595	1.00102.54	GS7
ATOM	16114	CB	ASN	148	228.748	119.164	-43.787	1.00185.40	GS7	ATOM	16167	CD1	TYR	154	214.148	124.521	-45.981	1.00102.54	GS7
ATOM	16115	CG	ASN	148	230.026	118.335	-43.876	1.00185.40	GS7	ATOM	16168	CE1	TYR	154	213.349	123.380	-46.079	1.00102.54	GS7
ATOM	16116	OD1	ASN	148	230.067	117.300	-44.546	1.00185.40	GS7	ATOM	16169	CD2	TYR	154	215.819	123.451	-47.322	1.00102.54	GS7
ATOM	16117	ND2	ASN	148	231.071	118.783	-43.186	1.00185.40	GS7	ATOM	16170	CE2	TYR	154	215.033	122.315	-47.421	1.00102.54	GS7
ATOM	16118	C	ASN	148	226.660	119.763	-45.020	1.00106.35	GS7	ATOM	16171	CZ	TYR	154	213.804	122.280	-46.802	1.00102.54	GS7
ATOM	16119	O	ASN	148	225.867	119.390	-45.886	1.00106.35	GS7	ATOM	16172	OH	TYR	154	213.046	121.136	-46.912	1.00102.54	GS7
ATOM	16120	N	ARG	149	226.286	120.439	-43.938	1.00 72.85	GS7	ATOM	16173	C	TYR	154	216.388	125.628	-43.870	1.00137.64	GS7
ATOM	16121	CA	ARG	149	224.889	120.742	-43.679	1.00 72.85	GS7	ATOM	16174	O	TYR	154	216.473	126.665	-43.206	1.00137.64	GS7
ATOM	16122	CB	ARG	149	224.722	121.112	-42.211	1.00136.13	GS7	ATOM	16175	N	ARG	155	215.583	124.609	-43.570	1.00 89.95	GS7
ATOM	16123	CG	ARG	149	225.410	120.147	-41.264	1.00136.13	GS7	ATOM	16176	CA	ARG	155	214.698	124.571	-42.405	1.00 89.95	GS7
ATOM	16124	CD	ARG	149	225.272	118.710	-41.734	1.00136.13	GS7	ATOM	16177	CB	ARG	155	214.956	123.300	-41.588	1.00 99.49	GS7
ATOM	16125	NE	ARG	149	225.755	117.756	-40.739	1.00136.13	GS7	ATOM	16178	CG	ARG	155	214.938	122.021	-42.394	1.00 99.49	GS7
ATOM	16126	CZ	ARG	149	225.075	117.397	-39.650	1.00136.13	GS7	ATOM	16179	CD	ARG	155	215.240	120.840	-41.504	1.00 99.49	GS7
ATOM	16127	NH1	ARG	149	223.872	117.910	-39.415	1.00136.13	GS7	ATOM	16180	NE	ARG	155	215.623	119.663	-42.272	1.00 99.49	GS7
ATOM	16128	NH2	ARG	149	225.594	116.523	-38.792	1.00136.13	GS7	ATOM	16181	CZ	ARG	155	214.833	119.041	-43.139	1.00 99.49	GS7
ATOM	16129	C	ARG	149	224.343	121.853	-44.575	1.00 72.85	GS7	ATOM	16182	NH1	ARG	155	213.602	119.483	-43.353	1.00 99.49	GS7
ATOM	16130	O	ARG	149	223.134	122.050	-44.659	1.00 72.85	GS7	ATOM	16183	NH2	ARG	155	215.278	117.976	-43.793	1.00 99.49	GS7

ATOM	16184	C	ARG	155	214.846	125.776	-41.489	1.00 89.95	GS7	ATOM	16237	N	ALA	15	219.739	124.126	-79.666	1.00 82.76	KS11
ATOM	16185	O	ARG	155	215.480	125.692	-40.433	1.00 89.95	GS7	ATOM	16238	CA	ALA	15	219.481	125.564	-79.493	1.00 82.76	KS11
ATOM	16186	N	TRP	156	214.260	126.893	-41.904	1.00175.22	GS7	ATOM	16239	CB	ALA	15	219.254	126.249	-80.844	1.00 52.34	KS11
ATOM	16187	CA	TRP	156	214.310	128.121	-41.129	1.00175.22	GS7	ATOM	16240	C	ALA	15	218.295	125.831	-78.572	1.00 82.76	KS11
ATOM	16188	CB	TRP	156	215.661	128.823	-41.310	1.00161.08	GS7	ATOM	16241	O	ALA	15	218.479	126.235	-77.426	1.00 82.76	KS11
ATOM	16189	CG	TRP	156	215.972	129.799	-40.210	1.00161.08	GS7	ATOM	16242	N	SER	16	217.080	125.629	-79.080	1.00100.03	KS11
ATOM	16190	CD2	TRP	156	216.086	129.504	-38.809	1.00161.08	GS7	ATOM	16243	CA	SER	16	215.877	125.823	-78.274	1.00100.03	KS11
ATOM	16191	CE2	TRP	156	216.383	130.716	-38.149	1.00161.08	GS7	ATOM	16244	CB	SER	16	214.720	126.320	-79.139	1.00106.33	KS11
ATOM	16192	CE3	TRP	156	215.966	128.330	-38.048	1.00161.08	GS7	ATOM	16245	OG	SER	16	214.301	125.315	-80.046	1.00106.33	KS11
ATOM	16193	CD1	TRP	156	216.199	131.141	-40.338	1.00161.08	GS7	ATOM	16246	C	SER	16	215.537	124.452	-77.697	1.00100.03	KS11
ATOM	16194	NE1	TRP	156	216.446	131.698	-39.104	1.00161.08	GS7	ATOM	16247	O	SER	16	216.174	123.458	-78.045	1.00100.03	KS11
ATOM	16195	CZ2	TRP	156	216.564	130.789	-36.762	1.00161.08	GS7	ATOM	16248	N	GLY	17	214.541	124.386	-76.822	1.00 76.91	KS11
ATOM	16196	CZ3	TRP	156	216.146	128.405	-36.670	1.00161.08	GS7	ATOM	16249	CA	GLY	17	214.188	123.100	-76.248	1.00 76.91	KS11
ATOM	16197	CH2	TRP	156	216.441	129.627	-36.043	1.00161.08	GS7	ATOM	16250	C	GLY	17	213.144	123.116	-75.148	1.00 76.91	KS11
ATOM	16198	C	TRP	156	213.187	129.033	-41.604	1.00175.22	GS7	ATOM	16251	O	GLY	17	212.540	124.151	-74.856	1.00 76.91	KS11
ATOM	16199	O	TRP	156	212.423	128.597	-42.494	1.00175.22	GS7	ATOM	16252	N	ARG	18	212.951	121.955	-74.526	1.00 64.53	KS11
ATOM	16200	OXT	TRP	156	213.081	130.164	-41.082	1.00161.08	GS7	ATOM	16253	CA	ARG	18	211.966	121.785	-73.462	1.00 64.53	KS11
ATOM	16201	CB	LYS	11	225.709	112.844	-82.356	1.00148.51	KS11	ATOM	16254	CB	ARG	18	210.988	120.682	-73.861	1.00 80.56	KS11
ATOM	16202	CG	LYS	11	225.557	112.142	-81.008	1.00148.51	KS11	ATOM	16255	CG	ARG	18	209.550	121.085	-73.723	1.00 80.56	KS11
ATOM	16203	CD	LYS	11	226.680	111.141	-80.761	1.00148.51	KS11	ATOM	16256	CD	ARG	18	208.854	121.162	-75.068	1.00 80.56	KS11
ATOM	16204	CE	LYS	11	226.481	110.417	-79.431	1.00148.51	KS11	ATOM	16257	NE	ARG	18	208.288	119.884	-75.486	1.00 80.56	KS11
ATOM	16205	NZ	LYS	11	227.394	109.241	-79.264	1.00148.51	KS11	ATOM	16258	CZ	ARG	18	207.501	119.743	-76.547	1.00 80.56	KS11
ATOM	16206	C	LYS	11	224.173	114.732	-81.747	1.00130.93	KS11	ATOM	16259	NH1	ARG	18	207.200	120.801	-77.286	1.00 80.56	KS11
ATOM	16207	O	LYS	11	223.819	114.400	-80.614	1.00130.93	KS11	ATOM	16260	NH2	ARG	18	207.001	118.556	-76.866	1.00 80.56	KS11
ATOM	16208	N	LYS	11	224.756	114.289	-84.136	1.00130.93	KS11	ATOM	16261	C	ARG	18	212.594	121.431	-72.109	1.00 64.53	KS11
ATOM	16209	CA	LYS	11	224.492	113.675	-82.802	1.00130.93	KS11	ATOM	16262	O	ARG	18	213.516	120.614	-72.033	1.00 64.53	KS11
ATOM	16210	N	ARG	12	224.290	116.005	-82.120	1.00 78.55	KS11	ATOM	16263	N	ALA	19	212.087	122.050	-71.043	1.00 70.71	KS11
ATOM	16211	CA	ARG	12	224.030	117.088	-81.176	1.00 78.55	KS11	ATOM	16264	CA	ALA	19	212.578	121.790	-69.688	1.00 70.71	KS11
ATOM	16212	CB	ARG	12	225.274	117.322	-80.308	1.00158.50	KS11	ATOM	16265	CB	ALA	19	213.079	123.073	-69.055	1.00 57.68	KS11
ATOM	16213	CG	ARG	12	225.963	116.042	-79.848	1.00158.50	KS11	ATOM	16266	C	ALA	19	211.458	121.199	-68.838	1.00 70.71	KS11
ATOM	16214	CD	ARG	12	227.041	116.307	-78.826	1.00158.50	KS11	ATOM	16267	O	ALA	19	210.553	121.912	-68.411	1.00 70.71	KS11
ATOM	16215	NE	ARG	12	226.482	116.762	-77.557	1.00158.50	KS11	ATOM	16268	N	TYR	20	211.516	119.892	-68.608	1.00 55.54	KS11
ATOM	16216	CZ	ARG	12	226.651	117.982	-77.054	1.00158.50	KS11	ATOM	16269	CA	TYR	20	210.508	119.206	-67.812	1.00 55.54	KS11
ATOM	16217	NH1	ARG	12	227.368	118.887	-77.711	1.00158.50	KS11	ATOM	16270	CB	TYR	20	210.186	117.834	-68.404	1.00 70.32	KS11
ATOM	16218	NH2	ARG	12	226.114	118.294	-75.885	1.00158.50	KS11	ATOM	16271	CG	TYR	20	209.311	117.861	-69.629	1.00 70.32	KS11
ATOM	16219	C	ARG	12	223.607	118.414	-81.816	1.00 78.55	KS11	ATOM	16272	CD1	TYR	20	209.860	117.927	-70.903	1.00 70.32	KS11
ATOM	16220	O	ARG	12	223.275	118.477	-82.999	1.00 78.55	KS11	ATOM	16273	CE1	TYR	20	209.055	117.921	-72.038	1.00 70.32	KS11
ATOM	16221	N	GLN	13	223.627	119.466	-80.997	1.00116.55	KS11	ATOM	16274	CD2	TYR	20	207.928	117.795	-69.514	1.00 70.32	KS11
ATOM	16222	CA	GLN	13	223.266	120.823	-81.401	1.00116.55	KS11	ATOM	16275	CE2	TYR	20	207.116	117.790	-70.635	1.00 70.32	KS11
ATOM	16223	CB	GLN	13	224.026	121.217	-82.666	1.00124.44	KS11	ATOM	16276	CZ	TYR	20	207.687	117.852	-71.897	1.00 70.32	KS11
ATOM	16224	CG	GLN	13	225.530	121.089	-82.498	1.00124.44	KS11	ATOM	16277	OH	TYR	20	206.883	117.843	-73.012	1.00 70.32	KS11
ATOM	16225	CD	GLN	13	226.035	121.786	-81.244	1.00124.44	KS11	ATOM	16278	C	TYR	20	210.941	119.012	-66.365	1.00 55.54	KS11
ATOM	16226	OE1	GLN	13	226.018	123.016	-81.150	1.00124.44	KS11	ATOM	16279	O	TYR	20	211.881	118.256	-66.073	1.00 55.54	KS11
ATOM	16227	NE2	GLN	13	226.480	120.998	-80.268	1.00124.44	KS11	ATOM	16280	N	ILE	21	210.253	119.697	-65.457	1.00 61.13	KS11
ATOM	16228	C	GLN	13	221.770	120.998	-81.604	1.00116.55	KS11	ATOM	16281	CA	ILE	21	210.548	119.576	-64.040	1.00 61.13	KS11
ATOM	16229	O	GLN	13	221.202	120.503	-82.574	1.00116.55	KS11	ATOM	16282	CB	ILE	21	210.553	120.928	-63.342	1.00 47.92	KS11
ATOM	16230	N	VAL	14	221.141	121.715	-80.678	1.00130.94	KS11	ATOM	16283	CG2	ILE	21	210.618	120.731	-61.843	1.00 47.92	KS11
ATOM	16231	CA	VAL	14	219.707	121.949	-80.733	1.00130.94	KS11	ATOM	16284	CG1	ILE	21	211.760	121.738	-63.798	1.00 47.92	KS11
ATOM	16232	CB	VAL	14	219.003	121.269	-79.556	1.00 87.38	KS11	ATOM	16285	CD1	ILE	21	211.796	123.124	-63.197	1.00 47.92	KS11
ATOM	16233	CG1	VAL	14	217.508	121.515	-79.639	1.00 87.38	KS11	ATOM	16286	C	ILE	21	209.487	118.707	-63.400	1.00 61.13	KS11
ATOM	16234	CG2	VAL	14	219.304	119.776	-79.573	1.00 87.38	KS11	ATOM	16287	O	ILE	21	208.305	119.043	-63.389	1.00 61.13	KS11
ATOM	16235	C	VAL	14	219.341	123.426	-80.726	1.00130.94	KS11	ATOM	16288	N	HIS	22	209.932	117.578	-62.875	1.00 39.86	KS11
ATOM	16236	O	VAL	14	218.700	123.906	-81.658	1.00130.94	KS11	ATOM	16289	CA	HIS	22	209.067	116.609	-62.223	1.00 39.86	KS11

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ATOM  16290  CB  HIS    22     209.465 115.203 -62.668  1.00 60.22      KS11
ATOM  16291  CG  HIS    22     208.661 114.110 -62.039  1.00 60.22      KS11
ATOM  16292  CD2 HIS    22     208.847 113.413 -60.893  1.00 60.22      KS11
ATOM  16293  ND1 HIS    22     207.521 113.599 -62.620  1.00 60.22      KS11
ATOM  16294  CE1 HIS    22     207.040 112.630 -61.860  1.00 60.22      KS11
ATOM  16295  NE2 HIS    22     207.827 112.497 -60.807  1.00 60.22      KS11
ATOM  16296  C   HIS    22     209.296 116.751 -60.731  1.00 39.86      KS11
ATOM  16297  O   HIS    22     210.026 115.963 -60.132  1.00 39.86      KS11
ATOM  16298  N   ALA    23     208.697 117.774 -60.136  1.00 60.15      KS11
ATOM  16299  CA  ALA    23     208.841 118.002 -58.710  1.00 60.15      KS11
ATOM  16300  CB  ALA    23     208.406 119.401 -58.375  1.00 48.23      KS11
ATOM  16301  C   ALA    23     207.986 116.987 -57.961  1.00 60.15      KS11
ATOM  16302  O   ALA    23     206.971 116.514 -58.472  1.00 60.15      KS11
ATOM  16303  N   SER    24     208.390 116.648 -56.748  1.00 53.62      KS11
ATOM  16304  CA  SER    24     207.639 115.677 -55.967  1.00 53.62      KS11
ATOM  16305  CB  SER    24     207.918 114.278 -56.494  1.00 21.71      KS11
ATOM  16306  OG  SER    24     208.167 113.393 -55.422  1.00 21.71      KS11
ATOM  16307  C   SER    24     207.969 115.732 -54.477  1.00 53.62      KS11
ATOM  16308  O   SER    24     209.142 115.744 -54.094  1.00 53.62      KS11
ATOM  16309  N   TYR    25     206.935 115.755 -53.638  1.00124.10      KS11
ATOM  16310  CA  TYR    25     207.129 115.814 -52.194  1.00124.10      KS11
ATOM  16311  CB  TYR    25     205.779 115.868 -51.466  1.00120.15      KS11
ATOM  16312  CG  TYR    25     205.231 117.274 -51.365  1.00120.15      KS11
ATOM  16313  CD1 TYR    25     203.892 117.550 -51.644  1.00120.15      KS11
ATOM  16314  CE1 TYR    25     203.403 118.862 -51.608  1.00120.15      KS11
ATOM  16315  CD2 TYR    25     206.071 118.342 -51.037  1.00120.15      KS11
ATOM  16316  CE2 TYR    25     205.597 119.650 -50.999  1.00120.15      KS11
ATOM  16317  CZ  TYR    25     204.264 119.906 -51.288  1.00120.15      KS11
ATOM  16318  OH  TYR    25     203.808 121.206 -51.276  1.00120.15      KS11
ATOM  16319  C   TYR    25     207.948 114.648 -51.691  1.00124.10      KS11
ATOM  16320  O   TYR    25     207.863 114.275 -50.523  1.00124.10      KS11
ATOM  16321  N   ASN    26     208.758 114.084 -52.580  1.00 50.18      KS11
ATOM  16322  CA  ASN    26     209.602 112.958 -52.217  1.00 50.18      KS11
ATOM  16323  CB  ASN    26     208.856 111.649 -52.371  1.00 53.90      KS11
ATOM  16324  CG  ASN    26     209.546 110.534 -51.658  1.00 53.90      KS11
ATOM  16325  OD1 ASN    26     210.067 110.721 -50.560  1.00 53.90      KS11
ATOM  16326  ND2 ASN    26     209.550 109.364 -52.260  1.00 53.90      KS11
ATOM  16327  C   ASN    26     210.938 112.810 -52.920  1.00 50.18      KS11
ATOM  16328  O   ASN    26     211.184 113.374 -53.994  1.00 50.18      KS11
ATOM  16329  N   ASN    27     211.789 112.016 -52.282  1.00150.11      KS11
ATOM  16330  CA  ASN    27     213.130 111.754 -52.751  1.00150.11      KS11
ATOM  16331  CB  ASN    27     213.546 110.343 -52.383  1.00 90.46      KS11
ATOM  16332  CG  ASN    27     213.865 110.230 -50.927  1.00 90.46      KS11
ATOM  16333  OD1 ASN    27     212.968 110.285 -50.083  1.00 90.46      KS11
ATOM  16334  ND2 ASN    27     215.147 110.109 -50.610  1.00 90.46      KS11
ATOM  16335  C   ASN    27     213.412 112.015 -54.202  1.00150.11      KS11
ATOM  16336  O   ASN    27     213.531 111.095 -55.007  1.00150.11      KS11
ATOM  16337  N   THR    28     213.516 113.307 -54.487  1.00 49.15      KS11
ATOM  16338  CA  THR    28     213.832 113.895 -55.780  1.00 49.15      KS11
ATOM  16339  CB  THR    28     214.345 112.878 -56.868  1.00 55.98      KS11
ATOM  16340  OG1 THR    28     213.426 111.791 -57.012  1.00 55.98      KS11
ATOM  16341  CG2 THR    28     215.719 112.369 -56.525  1.00 55.98      KS11
ATOM  16342  C   THR    28     212.758 114.724 -56.429  1.00 49.15      KS11
ATOM  16343  O   THR    28     211.621 114.852 -55.969  1.00 49.15      KS11
ATOM  16344  N   ILE    29     213.217 115.296 -57.525  1.00 77.27      KS11
ATOM  16345  CA  ILE    29     212.493 116.162 -58.407  1.00 77.27      KS11
ATOM  16346  CB  ILE    29     212.538 117.599 -57.867  1.00 58.99      KS11
ATOM  16347  CG2 ILE    29     213.581 117.710 -56.758  1.00 58.99      KS11
ATOM  16348  CG1 ILE    29     212.839 118.573 -58.993  1.00 58.99      KS11
ATOM  16349  CD1 ILE    29     213.146 119.970 -58.502  1.00 58.99      KS11
ATOM  16350  C   ILE    29     213.421 115.964 -59.601  1.00 77.27      KS11
ATOM  16351  O   ILE    29     214.569 116.386 -59.572  1.00 77.27      KS11
ATOM  16352  N   VAL    30     212.939 115.264 -60.619  1.00 47.26      KS11
ATOM  16353  CA  VAL    30     213.739 114.963 -61.800  1.00 47.26      KS11
ATOM  16354  CB  VAL    30     213.292 113.603 -62.420  1.00 35.85      KS11
ATOM  16355  CG1 VAL    30     214.291 113.150 -63.449  1.00 35.85      KS11
ATOM  16356  CG2 VAL    30     213.134 112.550 -61.346  1.00 35.85      KS11
ATOM  16357  C   VAL    30     213.609 116.050 -62.868  1.00 47.26      KS11
ATOM  16358  O   VAL    30     212.565 116.696 -62.978  1.00 47.26      KS11
ATOM  16359  N   THR    31     214.673 116.259 -63.645  1.00 59.16      KS11
ATOM  16360  CA  THR    31     214.639 117.244 -64.730  1.00 59.16      KS11
ATOM  16361  CB  THR    31     215.586 118.407 -64.495  1.00 63.12      KS11
ATOM  16362  OG1 THR    31     215.189 119.117 -63.321  1.00 63.12      KS11
ATOM  16363  CG2 THR    31     215.536 119.349 -65.666  1.00 63.12      KS11
ATOM  16364  C   THR    31     215.045 116.593 -66.040  1.00 59.16      KS11
ATOM  16365  O   THR    31     216.043 115.881 -66.100  1.00 59.16      KS11
ATOM  16366  N   ILE    32     214.266 116.843 -67.086  1.00 45.41      KS11
ATOM  16367  CA  ILE    32     214.536 116.282 -68.402  1.00 45.41      KS11
ATOM  16368  CB  ILE    32     213.496 115.270 -68.808  1.00 39.44      KS11
ATOM  16369  CG2 ILE    32     213.819 114.751 -70.190  1.00 39.44      KS11
ATOM  16370  CG1 ILE    32     213.474 114.110 -67.835  1.00 39.44      KS11
ATOM  16371  CD1 ILE    32     214.606 113.198 -68.003  1.00 39.44      KS11
ATOM  16372  C   ILE    32     214.440 117.376 -69.433  1.00 45.41      KS11
ATOM  16373  O   ILE    32     213.397 118.010 -69.544  1.00 45.41      KS11
ATOM  16374  N   THR    33     215.499 117.585 -70.205  1.00 66.27      KS11
ATOM  16375  CA  THR    33     215.479 118.619 -71.233  1.00 66.27      KS11
ATOM  16376  CB  THR    33     216.772 119.448 -71.154  1.00 54.93      KS11
ATOM  16377  OG1 THR    33     216.850 120.081 -69.868  1.00 54.93      KS11
ATOM  16378  CG2 THR    33     216.794 120.511 -72.225  1.00 54.93      KS11
ATOM  16379  C   THR    33     215.294 117.977 -72.626  1.00 66.27      KS11
ATOM  16380  O   THR    33     215.853 116.911 -72.888  1.00 66.27      KS11
ATOM  16381  N   ASP    34     214.504 118.615 -73.503  1.00 75.20      KS11
ATOM  16382  CA  ASP    34     214.210 118.083 -74.849  1.00 75.20      KS11
ATOM  16383  CB  ASP    34     212.803 117.499 -74.865  1.00159.54      KS11
ATOM  16384  CG  ASP    34     212.626 116.407 -73.856  1.00159.54      KS11
ATOM  16385  OD1 ASP    34     212.810 116.679 -72.654  1.00159.54      KS11
ATOM  16386  OD2 ASP    34     212.305 115.275 -74.262  1.00159.54      KS11
ATOM  16387  C   ASP    34     214.304 119.104 -75.983  1.00 75.20      KS11
ATOM  16388  O   ASP    34     214.630 120.263 -75.745  1.00 75.20      KS11
ATOM  16389  N   PRO    35     214.018 118.678 -77.238  1.00 96.95      KS11
ATOM  16390  CD  PRO    35     214.018 117.254 -77.631  1.00 88.87      KS11
ATOM  16391  CA  PRO    35     214.048 119.517 -78.446  1.00 96.95      KS11
ATOM  16392  CB  PRO    35     214.671 118.586 -79.472  1.00 88.87      KS11
ATOM  16393  CG  PRO    35     213.968 117.307 -79.165  1.00 88.87      KS11
ATOM  16394  C   PRO    35     212.630 119.944 -78.863  1.00 96.95      KS11
ATOM  16395  O   PRO    35     212.399 121.062 -79.335  1.00 96.95      KS11
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ATOM	16396	N	ASP	36	211.701	119.008	-78.710	1.00108.23	KS11	ATOM	16449	CH2	TRP	42	218.620	109.293	-64.361	1.00 46.20	KS11
ATOM	16397	CA	ASP	36	210.291	119.206	-79.013	1.00108.23	KS11	ATOM	16450	C	TRP	42	219.307	114.556	-66.201	1.00 75.69	KS11
ATOM	16398	CB	ASP	36	210.052	119.417	-80.515	1.00 94.09	KS11	ATOM	16451	O	TRP	42	220.443	114.087	-66.225	1.00 75.69	KS11
ATOM	16399	CG	ASP	36	209.890	118.106	-81.287	1.00 94.09	KS11	ATOM	16452	N	SER	43	218.735	114.994	-65.089	1.00 63.73	KS11
ATOM	16400	OD1	ASP	36	209.624	118.174	-82.509	1.00 94.09	KS11	ATOM	16453	CA	SER	43	219.423	114.940	-63.811	1.00 63.73	KS11
ATOM	16401	OD2	ASP	36	210.026	117.014	-80.689	1.00 94.09	KS11	ATOM	16454	CB	SER	43	220.076	116.287	-63.516	1.00 79.37	KS11
ATOM	16402	C	ASP	36	209.607	117.930	-78.544	1.00108.23	KS11	ATOM	16455	OG	SER	43	220.913	116.202	-62.380	1.00 79.37	KS11
ATOM	16403	O	ASP	36	208.469	117.640	-78.921	1.00108.23	KS11	ATOM	16456	C	SER	43	218.399	114.601	-62.731	1.00 63.73	KS11
ATOM	16404	N	GLY	37	210.330	117.152	-77.741	1.00 77.93	KS11	ATOM	16457	O	SER	43	217.272	114.212	-63.045	1.00 63.73	KS11
ATOM	16405	CA	GLY	37	209.761	115.930	-77.224	1.00 77.93	KS11	ATOM	16458	N	SER	44	218.786	114.747	-61.465	1.00 44.19	KS11
ATOM	16406	C	GLY	37	210.735	114.884	-76.728	1.00 77.93	KS11	ATOM	16459	CA	SER	44	217.881	114.455	-60.357	1.00 44.19	KS11
ATOM	16407	O	GLY	37	210.523	114.302	-75.664	1.00 77.93	KS11	ATOM	16460	CB	SER	44	217.214	113.098	-60.551	1.00 43.64	KS11
ATOM	16408	N	ASN	38	211.801	114.629	-77.480	1.00 60.10	KS11	ATOM	16461	OG	SER	44	218.072	112.068	-60.083	1.00 43.64	KS11
ATOM	16409	CA	ASN	38	212.747	113.598	-77.082	1.00 60.10	KS11	ATOM	16462	C	SER	44	218.639	114.404	-59.053	1.00 44.19	KS11
ATOM	16410	CB	ASN	38	213.389	112.981	-78.314	1.00 73.76	KS11	ATOM	16463	O	SER	44	219.861	114.304	-59.045	1.00 44.19	KS11
ATOM	16411	CG	ASN	38	212.446	112.943	-79.486	1.00 73.76	KS11	ATOM	16464	N	GLY	45	217.897	114.431	-57.950	1.00 44.49	KS11
ATOM	16412	OD1	ASN	38	212.159	113.975	-80.087	1.00 73.76	KS11	ATOM	16465	CA	GLY	45	218.513	114.369	-56.631	1.00 44.49	KS11
ATOM	16413	ND2	ASN	38	211.942	111.760	-79.812	1.00 73.76	KS11	ATOM	16466	C	GLY	45	219.531	113.249	-56.543	1.00 44.49	KS11
ATOM	16414	C	ASN	38	213.814	114.083	-76.123	1.00 60.10	KS11	ATOM	16467	O	GLY	45	220.571	113.389	-55.902	1.00 44.49	KS11
ATOM	16415	O	ASN	38	214.555	115.021	-76.392	1.00 60.10	KS11	ATOM	16468	N	GLY	46	219.230	112.128	-57.185	1.00 51.23	KS11
ATOM	16416	N	PRO	39	213.907	113.427	-74.972	1.00 58.35	KS11	ATOM	16469	CA	GLY	46	220.168	111.026	-57.166	1.00 51.23	KS11
ATOM	16417	CD	PRO	39	213.167	112.228	-74.537	1.00 53.00	KS11	ATOM	16470	C	GLY	46	221.395	111.397	-57.987	1.00 51.23	KS11
ATOM	16418	CA	PRO	39	214.904	113.825	-73.985	1.00 58.35	KS11	ATOM	16471	O	GLY	46	222.506	111.487	-57.452	1.00 51.23	KS11
ATOM	16419	CB	PRO	39	214.720	112.779	-72.881	1.00 53.00	KS11	ATOM	16472	N	VAL	47	221.175	111.611	-59.287	1.00 76.66	KS11
ATOM	16420	CG	PRO	39	214.138	111.581	-73.613	1.00 53.00	KS11	ATOM	16473	CA	VAL	47	222.216	111.987	-60.243	1.00 76.66	KS11
ATOM	16421	C	PRO	39	216.344	113.901	-74.505	1.00 58.35	KS11	ATOM	16474	CB	VAL	47	221.631	112.874	-61.374	1.00 52.12	KS11
ATOM	16422	O	PRO	39	216.834	112.981	-75.159	1.00 58.35	KS11	ATOM	16475	CG1	VAL	47	222.742	113.521	-62.193	1.00 52.12	KS11
ATOM	16423	N	ILE	40	217.001	115.023	-74.215	1.00 67.87	KS11	ATOM	16476	CG2	VAL	47	220.746	112.031	-62.270	1.00 52.12	KS11
ATOM	16424	CA	ILE	40	218.397	115.241	-74.585	1.00 67.87	KS11	ATOM	16477	C	VAL	47	223.346	112.732	-59.557	1.00 76.66	KS11
ATOM	16425	CB	ILE	40	218.731	116.722	-74.733	1.00 87.66	KS11	ATOM	16478	O	VAL	47	224.507	112.340	-59.665	1.00 76.66	KS11
ATOM	16426	CG2	ILE	40	220.194	116.887	-75.033	1.00 87.66	KS11	ATOM	16479	N	ILE	48	223.013	113.809	-58.858	1.00 57.32	KS11
ATOM	16427	CG1	ILE	40	217.910	117.343	-75.848	1.00 87.66	KS11	ATOM	16480	CA	ILE	48	224.028	114.560	-58.145	1.00 57.32	KS11
ATOM	16428	CD1	ILE	40	218.068	118.854	-75.917	1.00 87.66	KS11	ATOM	16481	CB	ILE	48	223.707	116.074	-58.133	1.00 72.29	KS11
ATOM	16429	C	ILE	40	219.190	114.734	-73.392	1.00 67.87	KS11	ATOM	16482	CG2	ILE	48	224.314	116.737	-59.339	1.00 72.29	KS11
ATOM	16430	O	ILE	40	219.907	113.739	-73.486	1.00 67.87	KS11	ATOM	16483	CG1	ILE	48	222.200	116.310	-58.138	1.00 72.29	KS11
ATOM	16431	N	THR	41	219.031	115.427	-72.268	1.00 71.23	KS11	ATOM	16484	CD1	ILE	48	221.607	116.476	-56.766	1.00 72.29	KS11
ATOM	16432	CA	THR	41	219.711	115.081	-71.026	1.00 71.23	KS11	ATOM	16485	C	ILE	48	224.126	114.029	-56.720	1.00 57.32	KS11
ATOM	16433	CB	THR	41	220.839	116.067	-70.716	1.00 75.51	KS11	ATOM	16486	O	ILE	48	223.277	114.317	-55.892	1.00 57.32	KS11
ATOM	16434	OG1	THR	41	220.310	117.401	-70.680	1.00 75.51	KS11	ATOM	16487	N	GLY	49	225.146	113.225	-56.446	1.00 74.94	KS11
ATOM	16435	CG2	THR	41	221.923	115.979	-71.765	1.00 75.51	KS11	ATOM	16488	CA	GLY	49	225.325	112.669	-55.111	1.00 74.94	KS11
ATOM	16436	C	THR	41	218.757	115.112	-69.843	1.00 71.23	KS11	ATOM	16489	C	GLY	49	224.079	112.143	-54.415	1.00 74.94	KS11
ATOM	16437	O	THR	41	217.608	115.539	-69.966	1.00 71.23	KS11	ATOM	16490	O	GLY	49	223.646	111.016	-54.666	1.00 74.94	KS11
ATOM	16438	N	TRP	42	219.251	114.667	-68.692	1.00 75.69	KS11	ATOM	16491	N	TYR	50	223.526	112.971	-53.528	1.00 70.98	KS11
ATOM	16439	CA	TRP	42	218.463	114.659	-67.467	1.00 75.69	KS11	ATOM	16492	CA	TYR	50	222.316	112.694	-52.731	1.00 70.98	KS11
ATOM	16440	CB	TRP	42	217.480	113.508	-67.481	1.00 46.20	KS11	ATOM	16493	CB	TYR	50	221.317	113.836	-52.924	1.00 55.92	KS11
ATOM	16441	CG	TRP	42	218.101	112.180	-67.369	1.00 46.20	KS11	ATOM	16494	CG	TYR	50	221.795	115.141	-52.318	1.00 55.92	KS11
ATOM	16442	CD2	TRP	42	218.176	111.363	-66.193	1.00 46.20	KS11	ATOM	16495	CD1	TYR	50	221.411	116.362	-52.852	1.00 55.92	KS11
ATOM	16443	CE2	TRP	42	218.798	110.146	-66.567	1.00 46.20	KS11	ATOM	16496	CE1	TYR	50	221.868	117.549	-52.316	1.00 55.92	KS11
ATOM	16444	CE3	TRP	42	217.773	111.535	-64.862	1.00 46.20	KS11	ATOM	16497	CD2	TYR	50	222.649	115.143	-51.219	1.00 55.92	KS11
ATOM	16445	CD1	TRP	42	218.669	111.462	-68.369	1.00 46.20	KS11	ATOM	16498	CE2	TYR	50	223.111	116.326	-50.675	1.00 55.92	KS11
ATOM	16446	NE1	TRP	42	219.089	110.232	-67.901	1.00 46.20	KS11	ATOM	16499	CZ	TYR	50	222.720	117.525	-51.228	1.00 55.92	KS11
ATOM	16447	CZ2	TRP	42	219.026	109.104	-65.658	1.00 46.20	KS11	ATOM	16500	OH	TYR	50	223.200	118.700	-50.696	1.00 55.92	KS11
ATOM	16448	CZ3	TRP	42	218.000	110.493	-63.955	1.00 46.20	KS11	ATOM	16501	C	TYR	50	221.601	111.356	-52.912	1.00 70.98	KS11

ATOM	16502	O	TYR	50	221.144	111.023	-54.005	1.00	70.98	KS11	ATOM	16555	CA	PRO	58	215.412	121.969	-52.706	1.00	78.44	KS11
ATOM	16503	N	LYS	51	221.495	110.609	-51.813	1.00	74.85	KS11	ATOM	16556	CB	PRO	58	214.868	123.305	-52.183	1.00	54.95	KS11
ATOM	16504	CA	LYS	51	220.866	109.295	-51.816	1.00	74.85	KS11	ATOM	16557	CG	PRO	58	214.675	123.078	-50.687	1.00	54.95	KS11
ATOM	16505	CB	LYS	51	221.779	108.275	-51.133	1.00	97.97	KS11	ATOM	16558	C	PRO	58	216.940	121.924	-52.778	1.00	78.44	KS11
ATOM	16506	CG	LYS	51	222.792	107.630	-52.056	1.00	97.97	KS11	ATOM	16559	O	PRO	58	217.549	121.109	-52.093	1.00	78.44	KS11
ATOM	16507	CD	LYS	51	222.818	106.114	-51.866	1.00	97.97	KS11	ATOM	16560	N	TYR	59	217.576	122.780	-53.565	1.00	92.26	KS11
ATOM	16508	CE	LYS	51	221.453	105.492	-52.167	1.00	97.97	KS11	ATOM	16561	CA	TYR	59	219.038	122.720	-53.673	1.00	92.26	KS11
ATOM	16509	NZ	LYS	51	221.415	104.017	-51.942	1.00	97.97	KS11	ATOM	16562	CB	TYR	59	219.723	122.779	-52.300	1.00	69.63	KS11
ATOM	16510	C	LYS	51	219.484	109.203	-51.184	1.00	74.85	KS11	ATOM	16563	CG	TYR	59	221.229	122.804	-52.421	1.00	69.63	KS11
ATOM	16511	O	LYS	51	218.473	109.097	-51.879	1.00	74.85	KS11	ATOM	16564	CD1	TYR	59	221.870	123.883	-53.028	1.00	69.63	KS11
ATOM	16512	N	GLY	52	219.435	109.228	-49.861	1.00	73.89	KS11	ATOM	16565	CE1	TYR	59	223.246	123.888	-53.226	1.00	69.63	KS11
ATOM	16513	CA	GLY	52	218.152	109.098	-49.197	1.00	73.89	KS11	ATOM	16566	CD2	TYR	59	222.013	121.722	-52.001	1.00	69.63	KS11
ATOM	16514	C	GLY	52	217.291	110.338	-49.198	1.00	73.89	KS11	ATOM	16567	CE2	TYR	59	223.399	121.721	-52.197	1.00	69.63	KS11
ATOM	16515	O	GLY	52	217.176	111.051	-50.201	1.00	73.89	KS11	ATOM	16568	CZ	TYR	59	223.999	122.810	-52.815	1.00	69.63	KS11
ATOM	16516	N	SER	53	216.669	110.574	-48.050	1.00	48.98	KS11	ATOM	16569	OH	TYR	59	225.349	122.829	-53.055	1.00	69.63	KS11
ATOM	16517	CA	SER	53	215.805	111.718	-47.852	1.00	48.98	KS11	ATOM	16570	C	TYR	59	219.374	121.385	-54.332	1.00	92.26	KS11
ATOM	16518	CB	SER	53	215.734	112.051	-46.370	1.00	68.44	KS11	ATOM	16571	O	TYR	59	219.990	121.343	-55.397	1.00	92.26	KS11
ATOM	16519	OG	SER	53	215.076	113.284	-46.182	1.00	68.44	KS11	ATOM	16572	N	ALA	60	218.983	120.293	-53.680	1.00	43.29	KS11
ATOM	16520	C	SER	53	216.213	112.966	-48.619	1.00	48.98	KS11	ATOM	16573	CA	ALA	60	219.177	118.969	-54.241	1.00	43.29	KS11
ATOM	16521	O	SER	53	215.396	113.559	-49.307	1.00	48.98	KS11	ATOM	16574	CB	ALA	60	218.541	117.919	-53.364	1.00	49.65	KS11
ATOM	16522	N	ARG	54	217.480	113.349	-48.513	1.00	52.29	KS11	ATOM	16575	C	ALA	60	218.428	119.040	-55.550	1.00	43.29	KS11
ATOM	16523	CA	ARG	54	217.986	114.551	-49.162	1.00	52.29	KS11	ATOM	16576	O	ALA	60	218.562	118.167	-56.399	1.00	43.29	KS11
ATOM	16524	CB	ARG	54	219.483	114.667	-48.952	1.00	118.36	KS11	ATOM	16577	N	ALA	61	217.617	120.088	-55.675	1.00	53.89	KS11
ATOM	16525	CG	ARG	54	219.918	114.588	-47.521	1.00	118.36	KS11	ATOM	16578	CA	ALA	61	216.822	120.355	-56.862	1.00	53.89	KS11
ATOM	16526	CD	ARG	54	221.270	115.231	-47.398	1.00	118.36	KS11	ATOM	16579	CB	ALA	61	215.464	120.905	-56.461	1.00	54.26	KS11
ATOM	16527	NE	ARG	54	221.976	114.829	-46.189	1.00	118.36	KS11	ATOM	16580	C	ALA	61	217.575	121.381	-57.695	1.00	53.89	KS11
ATOM	16528	CZ	ARG	54	223.099	115.404	-45.771	1.00	118.36	KS11	ATOM	16581	O	ALA	61	217.585	121.322	-58.919	1.00	53.89	KS11
ATOM	16529	NH1	ARG	54	223.630	116.407	-46.466	1.00	118.36	KS11	ATOM	16582	N	GLN	62	218.200	122.336	-57.021	1.00	60.23	KS11
ATOM	16530	NH2	ARG	54	223.702	114.970	-44.668	1.00	118.36	KS11	ATOM	16583	CA	GLN	62	218.964	123.368	-57.710	1.00	60.23	KS11
ATOM	16531	C	ARG	54	217.704	114.751	-50.640	1.00	52.29	KS11	ATOM	16584	CB	GLN	62	219.518	124.373	-56.694	1.00	76.31	KS11
ATOM	16532	O	ARG	54	217.916	115.831	-51.167	1.00	52.29	KS11	ATOM	16585	CG	GLN	62	220.233	125.559	-57.309	1.00	76.31	KS11
ATOM	16533	N	LYS	55	217.244	113.736	-51.340	1.00	43.95	KS11	ATOM	16586	CD	GLN	62	220.686	126.578	-56.270	1.00	76.31	KS11
ATOM	16534	CA	LYS	55	216.980	113.960	-52.749	1.00	43.95	KS11	ATOM	16587	OE1	GLN	62	221.440	126.253	-55.353	1.00	76.31	KS11
ATOM	16535	CB	LYS	55	216.633	112.653	-53.446	1.00	25.69	KS11	ATOM	16588	NE2	GLN	62	220.229	127.821	-56.416	1.00	76.31	KS11
ATOM	16536	CG	LYS	55	217.661	111.597	-53.389	1.00	25.69	KS11	ATOM	16589	C	GLN	62	220.112	122.685	-58.447	1.00	60.23	KS11
ATOM	16537	CD	LYS	55	217.469	110.645	-54.570	1.00	25.69	KS11	ATOM	16590	O	GLN	62	220.370	122.943	-59.623	1.00	60.23	KS11
ATOM	16538	CE	LYS	55	216.355	109.623	-54.357	1.00	25.69	KS11	ATOM	16591	N	LEU	63	220.789	121.789	-57.743	1.00	60.53	KS11
ATOM	16539	NZ	LYS	55	216.884	108.278	-53.917	1.00	25.69	KS11	ATOM	16592	CA	LEU	63	221.907	121.083	-58.318	1.00	60.53	KS11
ATOM	16540	C	LYS	55	215.811	114.934	-52.943	1.00	43.95	KS11	ATOM	16593	CB	LEU	63	222.615	120.264	-57.234	1.00	43.23	KS11
ATOM	16541	O	LYS	55	215.793	115.747	-53.876	1.00	43.95	KS11	ATOM	16594	CG	LEU	63	223.176	121.136	-56.093	1.00	43.23	KS11
ATOM	16542	N	GLY	56	214.825	114.834	-52.063	1.00	51.40	KS11	ATOM	16595	CD1	LEU	63	224.042	120.299	-55.161	1.00	43.23	KS11
ATOM	16543	CA	GLY	56	213.653	115.669	-52.192	1.00	51.40	KS11	ATOM	16596	CD2	LEU	63	223.999	122.283	-56.660	1.00	43.23	KS11
ATOM	16544	C	GLY	56	213.838	117.123	-51.847	1.00	51.40	KS11	ATOM	16597	C	LEU	63	221.437	120.210	-59.469	1.00	60.53	KS11
ATOM	16545	O	GLY	56	213.075	117.981	-52.293	1.00	51.40	KS11	ATOM	16598	O	LEU	63	222.017	120.236	-60.562	1.00	60.53	KS11
ATOM	16546	N	THR	57	214.854	117.417	-51.056	1.00	64.24	KS11	ATOM	16599	N	ALA	64	220.378	119.448	-59.246	1.00	58.09	KS11
ATOM	16547	CA	THR	57	215.078	118.793	-50.657	1.00	64.24	KS11	ATOM	16600	CA	ALA	64	219.869	118.599	-60.316	1.00	58.09	KS11
ATOM	16548	CB	THR	57	216.224	118.887	-49.655	1.00	56.09	KS11	ATOM	16601	CB	ALA	64	218.652	117.790	-59.829	1.00	38.44	KS11
ATOM	16549	OG1	THR	57	216.977	120.078	-49.905	1.00	56.09	KS11	ATOM	16602	C	ALA	64	219.483	119.481	-61.505	1.00	58.09	KS11
ATOM	16550	CG2	THR	57	217.124	117.726	-49.787	1.00	56.09	KS11	ATOM	16603	O	ALA	64	219.689	119.112	-62.661	1.00	58.09	KS11
ATOM	16551	C	THR	57	215.406	119.735	-51.797	1.00	64.24	KS11	ATOM	16604	N	ALA	65	218.943	120.657	-61.207	1.00	57.57	KS11
ATOM	16552	O	THR	57	215.911	119.315	-52.839	1.00	64.24	KS11	ATOM	16605	CA	ALA	65	218.512	121.592	-62.240	1.00	57.57	KS11
ATOM	16553	N	PRO	58	215.081	121.026	-51.634	1.00	78.44	KS11	ATOM	16606	CB	ALA	65	217.757	122.768	-61.608	1.00	59.73	KS11
ATOM	16554	CD	PRO	58	214.216	121.653	-50.624	1.00	54.95	KS11	ATOM	16607	C	ALA	65	219.687	122.103	-63.053	1.00	57.57	KS11

ATOM	16608	O	ALA	65	219.737	121.909	-64.266	1.00 57.57	KS11	ATOM	16661	CG	MET	73	224.282	125.007	-70.527	1.00105.55	KS11
ATOM	16609	N	LEU	66	220.630	122.757	-62.382	1.00 71.26	KS11	ATOM	16662	SD	MET	73	223.606	126.667	-70.763	1.00105.55	KS11
ATOM	16610	CA	LEU	66	221.804	123.294	-63.056	1.00 71.26	KS11	ATOM	16663	CE	MET	73	224.344	127.527	-69.362	1.00105.55	KS11
ATOM	16611	CB	LEU	66	222.746	123.941	-62.047	1.00 45.46	KS11	ATOM	16664	C	MET	73	225.231	123.069	-73.761	1.00 84.38	KS11
ATOM	16612	CG	LEU	66	222.154	125.111	-61.260	1.00 45.46	KS11	ATOM	16665	O	MET	73	225.480	123.626	-74.826	1.00 84.38	KS11
ATOM	16613	CD1	LEU	66	223.137	125.575	-60.237	1.00 45.46	KS11	ATOM	16666	N	ALA	74	225.752	121.896	-73.430	1.00 99.15	KS11
ATOM	16614	CD2	LEU	66	221.806	126.252	-62.195	1.00 45.46	KS11	ATOM	16667	CA	ALA	74	226.662	121.207	-74.330	1.00 99.15	KS11
ATOM	16615	C	LEU	66	222.527	122.184	-63.801	1.00 71.26	KS11	ATOM	16668	CB	ALA	74	227.080	119.896	-73.726	1.00 58.41	KS11
ATOM	16616	O	LEU	66	222.988	122.387	-64.921	1.00 71.26	KS11	ATOM	16669	C	ALA	74	226.038	120.977	-75.706	1.00 99.15	KS11
ATOM	16617	N	ASP	67	222.625	121.010	-63.177	1.00 42.93	KS11	ATOM	16670	O	ALA	74	226.677	121.225	-76.724	1.00 99.15	KS11
ATOM	16618	CA	ASP	67	223.281	119.874	-63.811	1.00 42.93	KS11	ATOM	16671	N	TYR	75	224.800	120.492	-75.743	1.00 77.27	KS11
ATOM	16619	CB	ASP	67	223.142	118.619	-62.959	1.00 69.71	KS11	ATOM	16672	CA	TYR	75	224.120	120.261	-77.017	1.00 77.27	KS11
ATOM	16620	CG	ASP	67	223.940	117.455	-63.518	1.00 69.71	KS11	ATOM	16673	CB	TYR	75	222.822	119.478	-76.816	1.00 77.41	KS11
ATOM	16621	OD1	ASP	67	225.185	117.527	-63.473	1.00 69.71	KS11	ATOM	16674	CG	TYR	75	222.958	117.995	-76.575	1.00 77.41	KS11
ATOM	16622	OD2	ASP	67	223.338	116.477	-64.012	1.00 69.71	KS11	ATOM	16675	CD1	TYR	75	223.485	117.503	-75.383	1.00 77.41	KS11
ATOM	16623	C	ASP	67	222.597	119.640	-65.150	1.00 42.93	KS11	ATOM	16676	CE1	TYR	75	223.550	116.126	-75.135	1.00 77.41	KS11
ATOM	16624	O	ASP	67	223.180	119.841	-66.212	1.00 42.93	KS11	ATOM	16677	CD2	TYR	75	222.499	117.074	-77.522	1.00 77.41	KS11
ATOM	16625	N	ALA	68	221.342	119.221	-65.089	1.00 57.91	KS11	ATOM	16678	CE2	TYR	75	222.556	115.701	-77.284	1.00 77.41	KS11
ATOM	16626	CA	ALA	68	220.583	118.975	-66.296	1.00 57.91	KS11	ATOM	16679	CZ	TYR	75	223.084	115.235	-76.089	1.00 77.41	KS11
ATOM	16627	CB	ALA	68	219.107	118.868	-65.957	1.00 67.74	KS11	ATOM	16680	OH	TYR	75	223.157	113.880	-75.856	1.00 77.41	KS11
ATOM	16628	C	ALA	68	220.825	120.114	-67.289	1.00 57.91	KS11	ATOM	16681	C	TYR	75	223.755	121.597	-77.662	1.00 77.27	KS11
ATOM	16629	O	ALA	68	220.932	119.888	-68.497	1.00 57.91	KS11	ATOM	16682	O	TYR	75	222.882	121.654	-78.528	1.00 77.27	KS11
ATOM	16630	N	ALA	69	220.919	121.337	-66.778	1.00 57.09	KS11	ATOM	16683	N	GLY	76	224.413	122.669	-77.240	1.00101.42	KS11
ATOM	16631	CA	ALA	69	221.160	122.484	-67.644	1.00 57.09	KS11	ATOM	16684	CA	GLY	76	224.094	123.974	-77.786	1.00101.42	KS11
ATOM	16632	CB	ALA	69	221.036	123.784	-66.859	1.00 61.24	KS11	ATOM	16685	C	GLY	76	223.098	124.629	-76.850	1.00101.42	KS11
ATOM	16633	C	ALA	69	222.549	122.371	-68.268	1.00 57.09	KS11	ATOM	16686	O	GLY	76	223.471	125.468	-76.032	1.00101.42	KS11
ATOM	16634	O	ALA	69	222.688	122.450	-69.486	1.00 57.09	KS11	ATOM	16687	N	MET	77	221.832	124.242	-76.968	1.00 89.46	KS11
ATOM	16635	N	LYS	70	223.573	122.187	-67.439	1.00 56.04	KS11	ATOM	16688	CA	MET	77	220.769	124.755	-76.103	1.00 89.46	KS11
ATOM	16636	CA	LYS	70	224.933	122.053	-67.945	1.00 56.04	KS11	ATOM	16689	CB	MET	77	220.543	123.787	-74.939	1.00 85.03	KS11
ATOM	16637	CB	LYS	70	225.873	121.492	-66.868	1.00123.54	KS11	ATOM	16690	CG	MET	77	219.629	122.611	-75.243	1.00 85.03	KS11
ATOM	16638	CG	LYS	70	226.614	122.538	-66.039	1.00123.54	KS11	ATOM	16691	SD	MET	77	217.888	123.066	-75.169	1.00 85.03	KS11
ATOM	16639	CD	LYS	70	225.667	123.367	-65.174	1.00123.54	KS11	ATOM	16692	CE	MET	77	217.720	123.328	-73.417	1.00 85.03	KS11
ATOM	16640	CE	LYS	70	226.433	124.353	-64.290	1.00123.54	KS11	ATOM	16693	C	MET	77	220.987	126.146	-75.528	1.00 89.46	KS11
ATOM	16641	NZ	LYS	70	225.552	125.109	-63.350	1.00123.54	KS11	ATOM	16694	O	MET	77	221.832	126.342	-74.654	1.00 89.46	KS11
ATOM	16642	C	LYS	70	224.936	121.114	-69.143	1.00 56.04	KS11	ATOM	16695	N	GLN	78	220.206	127.105	-76.008	1.00 70.88	KS11
ATOM	16643	O	LYS	70	225.166	121.532	-70.276	1.00 56.04	KS11	ATOM	16696	CA	GLN	78	220.287	128.474	-75.523	1.00 70.88	KS11
ATOM	16644	N	LYS	71	224.664	119.843	-68.891	1.00 54.57	KS11	ATOM	16697	CB	GLN	78	220.523	129.442	-76.681	1.00164.47	KS11
ATOM	16645	CA	LYS	71	224.650	118.855	-69.953	1.00 54.57	KS11	ATOM	16698	CG	GLN	78	221.826	129.234	-77.419	1.00164.47	KS11
ATOM	16646	CB	LYS	71	224.037	117.550	-69.444	1.00 52.91	KS11	ATOM	16699	CD	GLN	78	222.040	130.280	-78.489	1.00164.47	KS11
ATOM	16647	CG	LYS	71	224.637	117.019	-68.144	1.00 52.91	KS11	ATOM	16700	OE1	GLN	78	221.236	130.410	-79.412	1.00164.47	KS11
ATOM	16648	CD	LYS	71	224.030	115.661	-67.841	1.00 52.91	KS11	ATOM	16701	NE2	GLN	78	223.123	131.041	-78.368	1.00164.47	KS11
ATOM	16649	CE	LYS	71	224.304	115.172	-66.433	1.00 52.91	KS11	ATOM	16702	C	GLN	78	218.980	128.831	-74.832	1.00 70.88	KS11
ATOM	16650	NZ	LYS	71	223.564	113.884	-66.245	1.00 52.91	KS11	ATOM	16703	O	GLN	78	218.981	129.414	-73.749	1.00 70.88	KS11
ATOM	16651	C	LYS	71	223.870	119.343	-71.172	1.00 54.57	KS11	ATOM	16704	N	SER	79	217.870	128.468	-75.473	1.00 73.32	KS11
ATOM	16652	O	LYS	71	224.167	118.966	-72.301	1.00 54.57	KS11	ATOM	16705	CA	SER	79	216.528	128.739	-74.966	1.00 73.32	KS11
ATOM	16653	N	ALA	72	222.870	120.182	-70.945	1.00 58.33	KS11	ATOM	16706	CB	SER	79	215.753	129.583	-75.983	1.00118.75	KS11
ATOM	16654	CA	ALA	72	222.062	120.697	-72.039	1.00 58.33	KS11	ATOM	16707	OG	SER	79	214.391	129.720	-75.613	1.00118.75	KS11
ATOM	16655	CB	ALA	72	220.769	121.248	-71.494	1.00 78.01	KS11	ATOM	16708	C	SER	79	215.760	127.450	-74.691	1.00 73.32	KS11
ATOM	16656	C	ALA	72	222.798	121.776	-72.825	1.00 58.33	KS11	ATOM	16709	O	SER	79	215.906	126.462	-75.411	1.00 73.32	KS11
ATOM	16657	O	ALA	72	222.689	121.845	-74.049	1.00 58.33	KS11	ATOM	16710	N	VAL	80	214.932	127.466	-73.651	1.00 65.56	KS11
ATOM	16658	N	MET	73	223.532	122.626	-72.115	1.00 84.38	KS11	ATOM	16711	CA	VAL	80	214.135	126.297	-73.290	1.00 65.56	KS11
ATOM	16659	CA	MET	73	224.288	123.699	-72.745	1.00 84.38	KS11	ATOM	16712	CB	VAL	80	214.894	125.411	-72.276	1.00 57.94	KS11
ATOM	16660	CB	MET	73	225.100	124.466	-71.698	1.00105.55	KS11	ATOM	16713	CG1	VAL	80	215.096	126.162	-70.974	1.00 57.94	KS11

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ATOM  16714  CG2 VAL   80     214.134 124.132 -72.036  1.00 57.94      KS11
ATOM  16715  C   VAL   80     212.795 126.715 -72.680  1.00 65.56      KS11
ATOM  16716  O   VAL   80     212.680 127.803 -72.105  1.00 65.56      KS11
ATOM  16717  N   ASP   81     211.786 125.856 -72.829  1.00 70.64      KS11
ATOM  16718  CA  ASP   81     210.446 126.091 -72.274  1.00 70.64      KS11
ATOM  16719  CB  ASP   81     209.355 125.779 -73.304  1.00 93.50      KS11
ATOM  16720  CG  ASP   81     209.295 126.798 -74.427  1.00 93.50      KS11
ATOM  16721  OD1 ASP   81     209.149 128.002 -74.129  1.00 93.50      KS11
ATOM  16722  OD2 ASP   81     209.384 126.394 -75.607  1.00 93.50      KS11
ATOM  16723  C   ASP   81     210.257 125.175 -71.063  1.00 70.64      KS11
ATOM  16724  O   ASP   81     210.390 123.951 -71.169  1.00 70.64      KS11
ATOM  16725  N   VAL   82     209.938 125.764 -69.915  1.00 63.28      KS11
ATOM  16726  CA  VAL   82     209.764 124.976 -68.709  1.00 63.28      KS11
ATOM  16727  CB  VAL   82     210.227 125.743 -67.472  1.00 40.10      KS11
ATOM  16728  CG1 VAL   82     210.246 124.801 -66.260  1.00 40.10      KS11
ATOM  16729  CG2 VAL   82     211.598 126.324 -67.722  1.00 40.10      KS11
ATOM  16730  C   VAL   82     208.343 124.502 -68.468  1.00 63.28      KS11
ATOM  16731  O   VAL   82     207.386 125.282 -68.513  1.00 63.28      KS11
ATOM  16732  N   ILE   83     208.229 123.209 -68.196  1.00 52.80      KS11
ATOM  16733  CA  ILE   83     206.953 122.565 -67.936  1.00 52.80      KS11
ATOM  16734  CB  ILE   83     206.702 121.489 -68.966  1.00 53.70      KS11
ATOM  16735  CG2 ILE   83     205.328 120.900 -68.784  1.00 53.70      KS11
ATOM  16736  CG1 ILE   83     206.878 122.090 -70.353  1.00 53.70      KS11
ATOM  16737  CD1 ILE   83     207.345 121.082 -71.364  1.00 53.70      KS11
ATOM  16738  C   ILE   83     207.038 121.922 -66.559  1.00 52.80      KS11
ATOM  16739  O   ILE   83     207.773 120.957 -66.358  1.00 52.80      KS11
ATOM  16740  N   VAL   84     206.285 122.455 -65.607  1.00 52.31      KS11
ATOM  16741  CA  VAL   84     206.333 121.922 -64.264  1.00 52.31      KS11
ATOM  16742  CB  VAL   84     206.230 123.044 -63.232  1.00 55.77      KS11
ATOM  16743  CG1 VAL   84     207.014 122.667 -62.010  1.00 55.77      KS11
ATOM  16744  CG2 VAL   84     206.754 124.337 -63.803  1.00 55.77      KS11
ATOM  16745  C   VAL   84     205.227 120.912 -64.010  1.00 52.31      KS11
ATOM  16746  O   VAL   84     204.101 121.074 -64.476  1.00 52.31      KS11
ATOM  16747  N   ARG   85     205.563 119.861 -63.274  1.00 71.42      KS11
ATOM  16748  CA  ARG   85     204.603 118.825 -62.944  1.00 71.42      KS11
ATOM  16749  CB  ARG   85     204.721 117.639 -63.890  1.00 57.21      KS11
ATOM  16750  CG  ARG   85     204.078 117.869 -65.222  1.00 57.21      KS11
ATOM  16751  CD  ARG   85     204.209 116.643 -66.098  1.00 57.21      KS11
ATOM  16752  NE  ARG   85     203.639 116.883 -67.414  1.00 57.21      KS11
ATOM  16753  CZ  ARG   85     204.239 116.565 -68.552  1.00 57.21      KS11
ATOM  16754  NH1 ARG   85     205.433 115.989 -68.542  1.00 57.21      KS11
ATOM  16755  NH2 ARG   85     203.648 116.833 -69.705  1.00 57.21      KS11
ATOM  16756  C   ARG   85     204.840 118.342 -61.540  1.00 71.42      KS11
ATOM  16757  O   ARG   85     205.971 118.031 -61.165  1.00 71.42      KS11
ATOM  16758  N   GLY   86     203.761 118.271 -60.771  1.00 50.94      KS11
ATOM  16759  CA  GLY   86     203.863 117.821 -59.401  1.00 50.94      KS11
ATOM  16760  C   GLY   86     204.059 118.976 -58.451  1.00 50.94      KS11
ATOM  16761  O   GLY   86     204.299 120.110 -58.850  1.00 50.94      KS11
ATOM  16762  N   THR   87     203.914 118.682 -57.174  1.00 91.63      KS11
ATOM  16763  CA  THR   87     204.101 119.681 -56.152  1.00 91.63      KS11
ATOM  16764  CB  THR   87     202.827 120.003 -55.440  1.00 70.38      KS11
ATOM  16765  OG1 THR   87     201.911 120.567 -56.377  1.00 70.38      KS11
ATOM  16766  CG2 THR   87     203.098 120.988 -54.312  1.00 70.38      KS11
ATOM  16767  C   THR   87     205.002 118.999 -55.184  1.00 91.63      KS11
ATOM  16768  O   THR   87     204.679 117.922 -54.684  1.00 91.63      KS11
ATOM  16769  N   GLY   88     206.143 119.612 -54.933  1.00 48.38      KS11
ATOM  16770  CA  GLY   88     207.074 119.005 -54.022  1.00 48.38      KS11
ATOM  16771  C   GLY   88     208.092 120.039 -53.641  1.00 48.38      KS11
ATOM  16772  O   GLY   88     208.154 121.119 -54.243  1.00 48.38      KS11
ATOM  16773  N   ALA   89     208.879 119.721 -52.626  1.00 74.29      KS11
ATOM  16774  CA  ALA   89     209.910 120.629 -52.193  1.00 74.29      KS11
ATOM  16775  CB  ALA   89     210.821 119.925 -51.195  1.00 56.32      KS11
ATOM  16776  C   ALA   89     210.690 121.020 -53.446  1.00 74.29      KS11
ATOM  16777  O   ALA   89     210.818 120.231 -54.392  1.00 74.29      KS11
ATOM  16778  N   GLY   90     211.176 122.250 -53.473  1.00 63.18      KS11
ATOM  16779  CA  GLY   90     211.968 122.687 -54.608  1.00 63.18      KS11
ATOM  16780  C   GLY   90     211.429 122.548 -56.024  1.00 63.18      KS11
ATOM  16781  O   GLY   90     212.137 122.124 -56.935  1.00 63.18      KS11
ATOM  16782  N   ARG   91     210.168 122.890 -56.214  1.00 65.54      KS11
ATOM  16783  CA  ARG   91     209.601 122.862 -57.542  1.00 65.54      KS11
ATOM  16784  CB  ARG   91     208.076 122.853 -57.481  1.00 94.84      KS11
ATOM  16785  CG  ARG   91     207.425 122.716 -58.836  1.00 94.84      KS11
ATOM  16786  CD  ARG   91     206.138 123.509 -58.944  1.00 94.84      KS11
ATOM  16787  NE  ARG   91     205.235 123.264 -57.827  1.00 94.84      KS11
ATOM  16788  CZ  ARG   91     203.963 123.650 -57.797  1.00 94.84      KS11
ATOM  16789  NH1 ARG   91     203.436 124.297 -58.828  1.00 94.84      KS11
ATOM  16790  NH2 ARG   91     203.221 123.398 -56.730  1.00 94.84      KS11
ATOM  16791  C   ARG   91     210.075 124.210 -58.072  1.00 65.54      KS11
ATOM  16792  O   ARG   91     210.823 124.297 -59.038  1.00 65.54      KS11
ATOM  16793  N   GLU   92     209.654 125.263 -57.387  1.00 61.24      KS11
ATOM  16794  CA  GLU   92     210.010 126.612 -57.766  1.00 61.24      KS11
ATOM  16795  CB  GLU   92     209.263 127.614 -56.880  1.00 99.53      KS11
ATOM  16796  CG  GLU   92     208.584 128.772 -57.636  1.00 99.53      KS11
ATOM  16797  CD  GLU   92     207.534 128.306 -58.651  1.00 99.53      KS11
ATOM  16798  OE1 GLU   92     206.709 127.433 -58.299  1.00 99.53      KS11
ATOM  16799  OE2 GLU   92     207.525 128.821 -59.796  1.00 99.53      KS11
ATOM  16800  C   GLU   92     211.518 126.811 -57.657  1.00 61.24      KS11
ATOM  16801  O   GLU   92     212.080 127.681 -58.312  1.00 61.24      KS11
ATOM  16802  N   GLN   93     212.186 126.016 -56.831  1.00 60.07      KS11
ATOM  16803  CA  GLN   93     213.632 126.159 -56.722  1.00 60.07      KS11
ATOM  16804  CB  GLN   93     214.199 125.232 -55.655  1.00105.02      KS11
ATOM  16805  CG  GLN   93     214.828 125.978 -54.501  1.00105.02      KS11
ATOM  16806  CD  GLN   93     215.872 126.977 -54.962  1.00105.02      KS11
ATOM  16807  OE1 GLN   93     216.981 126.605 -55.352  1.00105.02      KS11
ATOM  16808  NE2 GLN   93     215.516 128.257 -54.931  1.00105.02      KS11
ATOM  16809  C   GLN   93     214.200 125.776 -58.077  1.00 60.07      KS11
ATOM  16810  O   GLN   93     214.867 126.573 -58.738  1.00 60.07      KS11
ATOM  16811  N   ALA   94     213.914 124.545 -58.489  1.00 71.49      KS11
ATOM  16812  CA  ALA   94     214.369 124.043 -59.775  1.00 71.49      KS11
ATOM  16813  CB  ALA   94     213.597 122.782 -60.153  1.00 41.97      KS11
ATOM  16814  C   ALA   94     214.141 125.110 -60.826  1.00 71.49      KS11
ATOM  16815  O   ALA   94     215.015 125.377 -61.649  1.00 71.49      KS11
ATOM  16816  N   ILE   95     212.965 125.726 -60.790  1.00 54.04      KS11
ATOM  16817  CA  ILE   95     212.637 126.748 -61.770  1.00 54.04      KS11
ATOM  16818  CB  ILE   95     211.175 127.241 -61.611  1.00 58.51      KS11
ATOM  16819  CG2 ILE   95     210.873 128.314 -62.645  1.00 58.51      KS11
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ATOM  16820  CG1 ILE   95     210.202 126.078 -61.818  1.00 58.51      KS11
ATOM  16821  CD1 ILE   95     208.743 126.483 -61.770  1.00 58.51      KS11
ATOM  16822  C   ILE   95     213.591 127.944 -61.706  1.00 54.04      KS11
ATOM  16823  O   ILE   95     213.928 128.528 -62.735  1.00 54.04      KS11
ATOM  16824  N   ARG   96     214.038 128.306 -60.510  1.00 57.75      KS11
ATOM  16825  CA  ARG   96     214.959 129.431 -60.365  1.00 57.75      KS11
ATOM  16826  CB  ARG   96     214.968 129.903 -58.912  1.00121.32      KS11
ATOM  16827  CG  ARG   96     213.597 130.393 -58.484  1.00121.32      KS11
ATOM  16828  CD  ARG   96     213.370 130.293 -56.993  1.00121.32      KS11
ATOM  16829  NE  ARG   96     213.983 131.390 -56.261  1.00121.32      KS11
ATOM  16830  CZ  ARG   96     213.814 131.585 -54.959  1.00121.32      KS11
ATOM  16831  NH1 ARG   96     213.050 130.749 -54.264  1.00121.32      KS11
ATOM  16832  NH2 ARG   96     214.400 132.611 -54.352  1.00121.32      KS11
ATOM  16833  C   ARG   96     216.350 129.005 -60.811  1.00 57.75      KS11
ATOM  16834  O   ARG   96     217.092 129.779 -61.415  1.00 57.75      KS11
ATOM  16835  N   ALA   97     216.702 127.762 -60.521  1.00 84.18      KS11
ATOM  16836  CA  ALA   97     217.999 127.262 -60.935  1.00 84.18      KS11
ATOM  16837  CB  ALA   97     218.168 125.808 -60.514  1.00 84.62      KS11
ATOM  16838  C   ALA   97     218.071 127.393 -62.455  1.00 84.18      KS11
ATOM  16839  O   ALA   97     219.090 127.822 -63.002  1.00 84.18      KS11
ATOM  16840  N   LEU   98     216.986 127.037 -63.138  1.00 69.19      KS11
ATOM  16841  CA  LEU   98     216.977 127.139 -64.591  1.00 69.19      KS11
ATOM  16842  CB  LEU   98     215.729 126.511 -65.203  1.00 43.82      KS11
ATOM  16843  CG  LEU   98     215.690 124.994 -65.239  1.00 43.82      KS11
ATOM  16844  CD1 LEU   98     214.583 124.553 -66.179  1.00 43.82      KS11
ATOM  16845  CD2 LEU   98     217.039 124.464 -65.704  1.00 43.82      KS11
ATOM  16846  C   LEU   98     217.027 128.583 -65.007  1.00 69.19      KS11
ATOM  16847  O   LEU   98     217.899 128.976 -65.771  1.00 69.19      KS11
ATOM  16848  N   GLN   99     216.083 129.370 -64.505  1.00126.50      KS11
ATOM  16849  CA  GLN   99     216.026 130.779 -64.849  1.00126.50      KS11
ATOM  16850  CB  GLN   99     215.130 131.530 -63.867  1.00 92.13      KS11
ATOM  16851  CG  GLN   99     213.658 131.188 -64.040  1.00 92.13      KS11
ATOM  16852  CD  GLN   99     212.742 132.341 -63.685  1.00 92.13      KS11
ATOM  16853  OE1 GLN   99     212.647 132.737 -62.526  1.00 92.13      KS11
ATOM  16854  NE2 GLN   99     212.066 132.891 -64.690  1.00 92.13      KS11
ATOM  16855  C   GLN   99     217.421 131.384 -64.897  1.00126.50      KS11
ATOM  16856  O   GLN   99     217.677 132.304 -65.673  1.00126.50      KS11
ATOM  16857  N   ALA  100     218.324 130.864 -64.073  1.00 81.71      KS11
ATOM  16858  CA  ALA  100     219.703 131.333 -64.083  1.00 81.71      KS11
ATOM  16859  CB  ALA  100     220.401 130.928 -62.800  1.00 57.84      KS11
ATOM  16860  C   ALA  100     220.344 130.636 -65.289  1.00 81.71      KS11
ATOM  16861  O   ALA  100     219.787 130.662 -66.389  1.00 81.71      KS11
ATOM  16862  N   SER  101     221.508 130.024 -65.093  1.00 72.23      KS11
ATOM  16863  CA  SER  101     222.178 129.288 -66.166  1.00 72.23      KS11
ATOM  16864  CB  SER  101     221.669 127.846 -66.169  1.00 69.05      KS11
ATOM  16865  OG  SER  101     220.260 127.815 -66.302  1.00 69.05      KS11
ATOM  16866  C   SER  101     222.022 129.871 -67.577  1.00 72.23      KS11
ATOM  16867  O   SER  101     222.106 129.143 -68.576  1.00 72.23      KS11
ATOM  16868  N   GLY  102     221.789 131.178 -67.650  1.00177.10      KS11
ATOM  16869  CA  GLY  102     221.627 131.853 -68.927  1.00177.10      KS11
ATOM  16870  C   GLY  102     220.892 131.090 -70.015  1.00177.10      KS11
ATOM  16871  O   GLY  102     221.034 131.412 -71.195  1.00177.10      KS11
ATOM  16872  N   LEU  103     220.107 130.085 -69.637  1.00 90.06      KS11
ATOM  16873  CA  LEU  103     219.367 129.311 -70.621  1.00 90.06      KS11
ATOM  16874  CB  LEU  103     219.076 127.913 -70.090  1.00 64.11      KS11
ATOM  16875  CG  LEU  103     220.145 126.908 -70.504  1.00 64.11      KS11
ATOM  16876  CD1 LEU  103     219.602 125.483 -70.376  1.00 64.11      KS11
ATOM  16877  CD2 LEU  103     220.540 127.177 -71.944  1.00 64.11      KS11
ATOM  16878  C   LEU  103     218.069 129.966 -71.070  1.00 90.06      KS11
ATOM  16879  O   LEU  103     217.140 129.286 -71.518  1.00 90.06      KS11
ATOM  16880  N   GLN  104     218.016 131.288 -70.950  1.00 91.85      KS11
ATOM  16881  CA  GLN  104     216.851 132.063 -71.352  1.00 91.85      KS11
ATOM  16882  CB  GLN  104     217.105 132.654 -72.743  1.00137.52      KS11
ATOM  16883  CG  GLN  104     216.364 133.946 -73.047  1.00137.52      KS11
ATOM  16884  CD  GLN  104     214.960 133.711 -73.564  1.00137.52      KS11
ATOM  16885  OE1 GLN  104     214.116 133.151 -72.866  1.00137.52      KS11
ATOM  16886  NE2 GLN  104     214.701 134.139 -74.798  1.00137.52      KS11
ATOM  16887  C   GLN  104     215.580 131.208 -71.346  1.00 91.85      KS11
ATOM  16888  O   GLN  104     215.241 130.571 -72.343  1.00 91.85      KS11
ATOM  16889  N   VAL  105     214.905 131.181 -70.199  1.00 61.71      KS11
ATOM  16890  CA  VAL  105     213.663 130.430 -70.028  1.00 61.71      KS11
ATOM  16891  CB  VAL  105     213.357 130.188 -68.546  1.00 46.62      KS11
ATOM  16892  CG1 VAL  105     212.124 129.336 -68.426  1.00 46.62      KS11
ATOM  16893  CG2 VAL  105     214.540 129.539 -67.853  1.00 46.62      KS11
ATOM  16894  C   VAL  105     212.528 131.277 -70.585  1.00 61.71      KS11
ATOM  16895  O   VAL  105     212.080 132.219 -69.929  1.00 61.71      KS11
ATOM  16896  N   LYS  106     212.044 130.947 -71.778  1.00 70.76      KS11
ATOM  16897  CA  LYS  106     210.989 131.756 -72.373  1.00 70.76      KS11
ATOM  16898  CB  LYS  106     210.926 131.530 -73.885  1.00150.76      KS11
ATOM  16899  CG  LYS  106     211.398 132.746 -74.675  1.00150.76      KS11
ATOM  16900  CD  LYS  106     210.827 132.772 -76.087  1.00150.76      KS11
ATOM  16901  CE  LYS  106     211.109 134.105 -76.773  1.00150.76      KS11
ATOM  16902  NZ  LYS  106     210.440 134.208 -78.102  1.00150.76      KS11
ATOM  16903  C   LYS  106     209.594 131.615 -71.778  1.00 70.76      KS11
ATOM  16904  O   LYS  106     208.800 132.552 -71.848  1.00 70.76      KS11
ATOM  16905  N   SER  107     209.283 130.464 -71.189  1.00 80.47      KS11
ATOM  16906  CA  SER  107     207.959 130.281 -70.607  1.00 80.47      KS11
ATOM  16907  CB  SER  107     206.961 129.841 -71.670  1.00 65.83      KS11
ATOM  16908  OG  SER  107     207.023 128.436 -71.840  1.00 65.83      KS11
ATOM  16909  C   SER  107     207.931 129.256 -69.495  1.00 80.47      KS11
ATOM  16910  O   SER  107     208.748 128.342 -69.442  1.00 80.47      KS11
ATOM  16911  N   ILE  108     206.953 129.409 -68.618  1.00 59.51      KS11
ATOM  16912  CA  ILE  108     206.782 128.508 -67.496  1.00 59.51      KS11
ATOM  16913  CB  ILE  108     207.133 129.213 -66.183  1.00 44.44      KS11
ATOM  16914  CG2 ILE  108     206.997 128.250 -65.027  1.00 44.44      KS11
ATOM  16915  CG1 ILE  108     208.566 129.749 -66.258  1.00 44.44      KS11
ATOM  16916  CD1 ILE  108     209.037 130.449 -64.980  1.00 44.44      KS11
ATOM  16917  C   ILE  108     205.324 128.087 -67.480  1.00 59.51      KS11
ATOM  16918  O   ILE  108     204.434 128.930 -67.507  1.00 59.51      KS11
ATOM  16919  N   VAL  109     205.082 126.784 -67.443  1.00 49.86      KS11
ATOM  16920  CA  VAL  109     203.721 126.283 -67.445  1.00 49.86      KS11
ATOM  16921  CB  VAL  109     203.331 125.799 -68.833  1.00 49.11      KS11
ATOM  16922  CG1 VAL  109     201.952 125.184 -68.793  1.00 49.11      KS11
ATOM  16923  CG2 VAL  109     203.384 126.946 -69.807  1.00 49.11      KS11
ATOM  16924  C   VAL  109     203.513 125.124 -66.495  1.00 49.86      KS11
ATOM  16925  O   VAL  109     204.378 124.248 -66.397  1.00 49.86      KS11
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ATOM	16926	N	ASP	110	202.372	125.112	-65.796	1.00	52.69	KS11	ATOM	16979	O	HIS	116	186.977	112.212	-62.880	1.00	46.09	KS11
ATOM	16927	CA	ASP	110	202.076	124.007	-64.891	1.00	52.69	KS11	ATOM	16980	N	ASN	117	188.714	112.209	-61.430	1.00	63.47	KS11
ATOM	16928	CB	ASP	110	201.391	124.474	-63.608	1.00	101.68	KS11	ATOM	16981	CA	ASN	117	188.241	111.135	-60.574	1.00	63.47	KS11
ATOM	16929	CG	ASP	110	201.119	123.313	-62.643	1.00	101.68	KS11	ATOM	16982	CB	ASN	117	186.899	111.498	-59.978	1.00	88.80	KS11
ATOM	16930	OD1	ASP	110	200.304	122.422	-62.984	1.00	101.68	KS11	ATOM	16983	CG	ASN	117	187.043	112.148	-58.635	1.00	88.80	KS11
ATOM	16931	OD2	ASP	110	201.730	123.282	-61.550	1.00	101.68	KS11	ATOM	16984	OD1	ASN	117	187.809	113.102	-58.470	1.00	88.80	KS11
ATOM	16932	C	ASP	110	201.180	123.014	-65.613	1.00	52.69	KS11	ATOM	16985	ND2	ASN	117	186.315	111.631	-57.652	1.00	88.80	KS11
ATOM	16933	O	ASP	110	200.067	123.347	-66.003	1.00	52.69	KS11	ATOM	16986	C	ASN	117	188.155	109.843	-61.379	1.00	63.47	KS11
ATOM	16934	N	ASP	111	201.685	121.794	-65.770	1.00	62.51	KS11	ATOM	16987	O	ASN	117	187.208	109.651	-62.141	1.00	63.47	KS11
ATOM	16935	CA	ASP	111	200.988	120.713	-66.462	1.00	62.51	KS11	ATOM	16988	N	GLY	118	189.149	108.968	-61.230	1.00	41.48	KS11
ATOM	16936	CB	ASP	111	201.728	120.434	-67.790	1.00	106.00	KS11	ATOM	16989	CA	GLY	118	189.141	107.722	-61.981	1.00	41.48	KS11
ATOM	16937	CG	ASP	111	201.074	119.340	-68.640	1.00	106.00	KS11	ATOM	16990	C	GLY	118	189.655	106.499	-61.229	1.00	41.48	KS11
ATOM	16938	OD1	ASP	111	201.463	118.155	-68.518	1.00	106.00	KS11	ATOM	16991	O	GLY	118	188.942	105.489	-61.118	1.00	41.48	KS11
ATOM	16939	OD2	ASP	111	200.174	119.668	-69.443	1.00	106.00	KS11	ATOM	16992	N	CYS	119	190.885	106.560	-60.717	1.00	40.82	KS11
ATOM	16940	C	ASP	111	200.923	119.443	-65.584	1.00	62.51	KS11	ATOM	16993	CA	CYS	119	191.451	105.418	-59.990	1.00	40.82	KS11
ATOM	16941	O	ASP	111	201.188	118.334	-66.051	1.00	62.51	KS11	ATOM	16994	CB	CYS	119	192.852	105.084	-60.520	1.00	56.07	KS11
ATOM	16942	N	THR	112	200.576	119.596	-64.308	1.00	55.72	KS11	ATOM	16995	SG	CYS	119	192.914	103.966	-61.931	1.00	56.07	KS11
ATOM	16943	CA	THR	112	200.493	118.423	-63.443	1.00	55.72	KS11	ATOM	16996	C	CYS	119	191.536	105.644	-58.488	1.00	40.82	KS11
ATOM	16944	CB	THR	112	200.382	118.783	-61.968	1.00	53.28	KS11	ATOM	16997	O	CYS	119	192.051	106.674	-58.045	1.00	40.82	KS11
ATOM	16945	OG1	THR	112	201.444	119.673	-61.603	1.00	53.28	KS11	ATOM	16998	N	ARG	120	191.056	104.678	-57.707	1.00	33.56	KS11
ATOM	16946	CG2	THR	112	200.485	117.523	-61.141	1.00	53.28	KS11	ATOM	16999	CA	ARG	120	191.088	104.793	-56.250	1.00	33.56	KS11
ATOM	16947	C	THR	112	199.273	117.603	-63.805	1.00	55.72	KS11	ATOM	17000	CB	ARG	120	190.434	103.574	-55.596	1.00	40.61	KS11
ATOM	16948	O	THR	112	198.198	118.143	-64.043	1.00	55.72	KS11	ATOM	17001	CG	ARG	120	190.712	103.495	-54.112	1.00	40.61	KS11
ATOM	16949	N	PRO	113	199.421	116.278	-63.852	1.00	53.59	KS11	ATOM	17002	CD	ARG	120	189.931	102.425	-53.379	1.00	40.61	KS11
ATOM	16950	CD	PRO	113	200.646	115.483	-63.668	1.00	46.60	KS11	ATOM	17003	NE	ARG	120	188.978	103.042	-52.455	1.00	40.61	KS11
ATOM	16951	CA	PRO	113	198.290	115.420	-64.199	1.00	53.59	KS11	ATOM	17004	CZ	ARG	120	188.615	102.539	-51.276	1.00	40.61	KS11
ATOM	16952	CB	PRO	113	198.961	114.098	-64.534	1.00	46.60	KS11	ATOM	17005	NH1	ARG	120	189.120	101.388	-50.841	1.00	40.61	KS11
ATOM	16953	CG	PRO	113	200.107	114.063	-63.572	1.00	46.60	KS11	ATOM	17006	NH2	ARG	120	187.747	103.195	-50.522	1.00	40.61	KS11
ATOM	16954	C	PRO	113	197.274	115.280	-63.081	1.00	53.59	KS11	ATOM	17007	C	ARG	120	192.510	104.928	-55.728	1.00	33.56	KS11
ATOM	16955	O	PRO	113	197.605	114.834	-61.977	1.00	53.59	KS11	ATOM	17008	O	ARG	120	193.338	104.025	-55.894	1.00	33.56	KS11
ATOM	16956	N	VAL	114	196.037	115.662	-63.381	1.00	58.65	KS11	ATOM	17009	N	PRO	121	192.825	106.059	-55.094	1.00	38.35	KS11
ATOM	16957	CA	VAL	114	194.943	115.575	-62.425	1.00	58.65	KS11	ATOM	17010	CD	PRO	121	192.110	107.338	-55.043	1.00	26.46	KS11
ATOM	16958	CB	VAL	114	194.360	116.956	-62.098	1.00	61.58	KS11	ATOM	17011	CA	PRO	121	194.186	106.204	-54.581	1.00	38.35	KS11
ATOM	16959	CG1	VAL	114	194.110	117.737	-63.380	1.00	61.58	KS11	ATOM	17012	CB	PRO	121	194.238	107.657	-54.122	1.00	26.46	KS11
ATOM	16960	CG2	VAL	114	193.053	116.790	-61.343	1.00	61.58	KS11	ATOM	17013	CG	PRO	121	192.816	108.033	-53.922	1.00	26.46	KS11
ATOM	16961	C	VAL	114	193.836	114.729	-63.020	1.00	58.65	KS11	ATOM	17014	C	PRO	121	194.490	105.247	-53.449	1.00	38.35	KS11
ATOM	16962	O	VAL	114	193.277	115.071	-64.055	1.00	58.65	KS11	ATOM	17015	O	PRO	121	193.593	104.823	-52.728	1.00	38.35	KS11
ATOM	16963	N	PRO	115	193.508	113.603	-62.376	1.00	54.02	KS11	ATOM	17016	N	LYS	122	195.759	104.891	-53.300	1.00	46.47	KS11
ATOM	16964	CD	PRO	115	194.059	113.033	-61.135	1.00	47.93	KS11	ATOM	17017	CA	LYS	122	196.151	104.006	-52.213	1.00	46.47	KS11
ATOM	16965	CA	PRO	115	192.442	112.755	-62.907	1.00	54.02	KS11	ATOM	17018	CB	LYS	122	197.641	103.698	-52.307	1.00	71.34	KS11
ATOM	16966	CB	PRO	115	192.604	111.469	-62.119	1.00	47.93	KS11	ATOM	17019	CG	LYS	122	198.443	104.833	-52.900	1.00	71.34	KS11
ATOM	16967	CG	PRO	115	193.029	111.973	-60.794	1.00	47.93	KS11	ATOM	17020	CD	LYS	122	199.920	104.575	-52.767	1.00	71.34	KS11
ATOM	16968	C	PRO	115	191.117	113.406	-62.623	1.00	54.02	KS11	ATOM	17021	CE	LYS	122	200.325	103.275	-53.418	1.00	71.34	KS11
ATOM	16969	O	PRO	115	190.977	114.110	-61.627	1.00	54.02	KS11	ATOM	17022	NZ	LYS	122	201.778	103.049	-53.191	1.00	71.34	KS11
ATOM	16970	N	HIS	116	190.151	113.186	-63.503	1.00	46.09	KS11	ATOM	17023	C	LYS	122	195.826	104.744	-50.914	1.00	46.47	KS11
ATOM	16971	CA	HIS	116	188.823	113.733	-63.298	1.00	46.09	KS11	ATOM	17024	O	LYS	122	195.724	105.974	-50.899	1.00	46.47	KS11
ATOM	16972	CB	HIS	116	188.205	114.025	-64.659	1.00	46.95	KS11	ATOM	17025	N	LYS	123	195.670	103.998	-49.829	1.00	38.85	KS11
ATOM	16973	CG	HIS	116	188.997	115.009	-65.468	1.00	46.95	KS11	ATOM	17026	CA	LYS	123	195.310	104.594	-48.549	1.00	38.85	KS11
ATOM	16974	CD2	HIS	116	188.912	115.383	-66.767	1.00	46.95	KS11	ATOM	17027	CB	LYS	123	195.478	103.593	-47.412	1.00	37.92	KS11
ATOM	16975	ND1	HIS	116	190.019	115.763	-64.924	1.00	46.95	KS11	ATOM	17028	CG	LYS	123	194.861	104.130	-46.159	1.00	37.92	KS11
ATOM	16976	CE1	HIS	116	190.527	116.553	-65.851	1.00	46.95	KS11	ATOM	17029	CD	LYS	123	195.441	103.537	-44.909	1.00	37.92	KS11
ATOM	16977	NE2	HIS	116	189.874	116.342	-66.980	1.00	46.95	KS11	ATOM	17030	CE	LYS	123	194.795	102.229	-44.589	1.00	37.92	KS11
ATOM	16978	C	HIS	116	188.072	112.641	-62.517	1.00	46.09	KS11	ATOM	17031	NZ	LYS	123	195.282	101.723	-43.274	1.00	37.92	KS11

ATOM	17032	C	LYS	123	196.043	105.879	-48.193	1.00	38.85	KS11	ATOM	17085	OXT	SER	129	185.575	112.618	-45.504	1.00	92.79	KS11
ATOM	17033	O	LYS	123	195.438	106.806	-47.671	1.00	38.85	KS11	ATOM	17086	C	GLY	2	206.188	129.466	7.323	1.00	78.01	CS3
ATOM	17034	N	LYS	124	197.344	105.920	-48.461	1.00	45.41	KS11	ATOM	17087	O	GLY	2	206.347	129.669	6.122	1.00	78.01	CS3
ATOM	17035	CA	LYS	124	198.173	107.102	-48.190	1.00	45.41	KS11	ATOM	17088	N	GLY	2	205.773	127.147	7.926	1.00	78.01	CS3
ATOM	17036	CB	LYS	124	199.446	107.067	-49.054	1.00	115.73	KS11	ATOM	17089	CA	GLY	2	206.775	128.241	7.974	1.00	78.01	CS3
ATOM	17037	CG	LYS	124	200.760	106.817	-48.330	1.00	115.73	KS11	ATOM	17090	N	ASN	3	205.510	130.288	8.108	1.00	63.32	CS3
ATOM	17038	CD	LYS	124	201.199	108.018	-47.500	1.00	115.73	KS11	ATOM	17091	CA	ASN	3	204.886	131.491	7.569	1.00	63.32	CS3
ATOM	17039	CE	LYS	124	202.555	107.768	-46.820	1.00	115.73	KS11	ATOM	17092	CB	ASN	3	203.480	131.161	7.023	1.00	63.39	CS3
ATOM	17040	NZ	LYS	124	203.002	108.870	-45.913	1.00	115.73	KS11	ATOM	17093	CG	ASN	3	203.497	130.447	5.687	1.00	63.39	CS3
ATOM	17041	C	LYS	124	197.408	108.364	-48.539	1.00	45.41	KS11	ATOM	17094	OD1	ASN	3	203.534	131.077	4.634	1.00	63.39	CS3
ATOM	17042	O	LYS	124	197.353	109.301	-47.761	1.00	45.41	KS11	ATOM	17095	ND2	ASN	3	203.452	129.123	5.726	1.00	63.39	CS3
ATOM	17043	N	PHE	125	196.820	108.384	-49.725	1.00	64.93	KS11	ATOM	17096	C	ASN	3	204.708	132.625	8.590	1.00	63.32	CS3
ATOM	17044	CA	PHE	125	196.094	109.552	-50.185	1.00	64.93	KS11	ATOM	17097	O	ASN	3	204.327	132.402	9.746	1.00	63.32	CS3
ATOM	17045	CB	PHE	125	196.523	109.889	-51.614	1.00	42.98	KS11	ATOM	17098	N	LYS	4	204.967	133.846	8.147	1.00	52.29	CS3
ATOM	17046	CG	PHE	125	198.007	109.740	-51.854	1.00	42.98	KS11	ATOM	17099	CA	LYS	4	204.739	135.032	8.968	1.00	52.29	CS3
ATOM	17047	CD1	PHE	125	198.547	108.513	-52.196	1.00	42.98	KS11	ATOM	17100	CB	LYS	4	203.293	135.017	9.451	1.00	67.18	CS3
ATOM	17048	CD2	PHE	125	198.863	110.831	-51.718	1.00	42.98	KS11	ATOM	17101	CG	LYS	4	202.279	135.108	8.341	1.00	67.18	CS3
ATOM	17049	CE1	PHE	125	199.907	108.372	-52.400	1.00	42.98	KS11	ATOM	17102	CD	LYS	4	201.531	133.820	8.204	1.00	67.18	CS3
ATOM	17050	CE2	PHE	125	200.223	110.702	-51.920	1.00	42.98	KS11	ATOM	17103	CE	LYS	4	200.447	133.955	7.163	1.00	67.18	CS3
ATOM	17051	CZ	PHE	125	200.746	109.467	-52.263	1.00	42.98	KS11	ATOM	17104	NZ	LYS	4	199.658	132.687	7.064	1.00	67.18	CS3
ATOM	17052	C	PHE	125	194.597	109.302	-50.142	1.00	64.93	KS11	ATOM	17105	C	LYS	4	205.640	135.366	10.149	1.00	52.29	CS3
ATOM	17053	O	PHE	125	193.792	110.211	-50.371	1.00	64.93	KS11	ATOM	17106	O	LYS	4	205.758	134.582	11.095	1.00	52.29	CS3
ATOM	17054	N	ARG	126	194.230	108.056	-49.864	1.00	136.74	KS11	ATOM	17107	N	ILE	5	206.259	136.548	10.097	1.00	63.08	CS3
ATOM	17055	CA	ARG	126	192.828	107.681	-49.779	1.00	136.74	KS11	ATOM	17108	CA	ILE	5	207.118	136.981	11.193	1.00	63.08	CS3
ATOM	17056	CB	ARG	126	192.706	106.165	-49.608	1.00	86.73	KS11	ATOM	17109	CB	ILE	5	208.112	138.146	10.836	1.00	49.67	CS3
ATOM	17057	CG	ARG	126	191.505	105.541	-50.284	1.00	86.73	KS11	ATOM	17110	CG2	ILE	5	209.466	137.575	10.481	1.00	49.67	CS3
ATOM	17058	CD	ARG	126	190.229	105.855	-49.557	1.00	86.73	KS11	ATOM	17111	CG1	ILE	5	207.548	139.042	9.735	1.00	49.67	CS3
ATOM	17059	NE	ARG	126	189.145	106.048	-50.508	1.00	86.73	KS11	ATOM	17112	CD1	ILE	5	206.331	139.800	10.127	1.00	49.67	CS3
ATOM	17060	CZ	ARG	126	187.879	106.248	-50.165	1.00	86.73	KS11	ATOM	17113	C	ILE	5	206.202	137.503	12.250	1.00	63.08	CS3
ATOM	17061	NH1	ARG	126	187.534	106.274	-48.885	1.00	86.73	KS11	ATOM	17114	O	ILE	5	205.146	138.048	11.939	1.00	63.08	CS3
ATOM	17062	NH2	ARG	126	186.960	106.439	-51.103	1.00	86.73	KS11	ATOM	17115	N	HIS	6	206.605	137.318	13.499	1.00	57.74	CS3
ATOM	17063	C	ARG	126	192.301	108.410	-48.551	1.00	136.74	KS11	ATOM	17116	CA	HIS	6	205.833	137.805	14.620	1.00	57.74	CS3
ATOM	17064	O	ARG	126	191.829	107.800	-47.593	1.00	136.74	KS11	ATOM	17117	CB	HIS	6	206.709	137.811	15.858	1.00	63.64	CS3
ATOM	17065	N	LYS	127	192.417	109.730	-48.587	1.00	118.94	KS11	ATOM	17118	CG	HIS	6	205.968	138.148	17.100	1.00	63.64	CS3
ATOM	17066	CA	LYS	127	191.973	110.582	-47.501	1.00	118.94	KS11	ATOM	17119	CD2	HIS	6	205.388	139.302	17.500	1.00	63.64	CS3
ATOM	17067	CB	LYS	127	193.179	111.094	-46.707	1.00	151.52	KS11	ATOM	17120	ND1	HIS	6	205.727	137.226	18.094	1.00	63.64	CS3
ATOM	17068	CG	LYS	127	193.952	110.006	-45.980	1.00	151.52	KS11	ATOM	17121	CE1	HIS	6	205.030	137.800	19.059	1.00	63.64	CS3
ATOM	17069	CD	LYS	127	193.040	109.174	-45.078	1.00	151.52	KS11	ATOM	17122	NE2	HIS	6	204.811	139.060	18.722	1.00	63.64	CS3
ATOM	17070	CE	LYS	127	192.289	110.024	-44.037	1.00	151.52	KS11	ATOM	17123	C	HIS	6	205.420	139.226	14.238	1.00	57.74	CS3
ATOM	17071	NZ	LYS	127	191.148	110.824	-44.587	1.00	151.52	KS11	ATOM	17124	O	HIS	6	206.243	140.006	13.750	1.00	57.74	CS3
ATOM	17072	C	LYS	127	191.196	111.753	-48.082	1.00	118.94	KS11	ATOM	17125	N	PRO	7	204.138	139.575	14.424	1.00	59.94	CS3
ATOM	17073	O	LYS	127	191.405	112.907	-47.702	1.00	118.94	KS11	ATOM	17126	CD	PRO	7	203.008	138.784	14.938	1.00	46.07	CS3
ATOM	17074	N	ALA	128	190.299	111.447	-49.012	1.00	177.64	KS11	ATOM	17127	CA	PRO	7	203.711	140.927	14.056	1.00	59.94	CS3
ATOM	17075	CA	ALA	128	189.487	112.472	-49.652	1.00	177.64	KS11	ATOM	17128	CB	PRO	7	202.197	140.865	14.204	1.00	46.07	CS3
ATOM	17076	CB	ALA	128	189.228	112.091	-51.105	1.00	87.88	KS11	ATOM	17129	CG	PRO	7	202.006	139.851	15.268	1.00	46.07	CS3
ATOM	17077	C	ALA	128	188.166	112.665	-48.904	1.00	177.64	KS11	ATOM	17130	C	PRO	7	204.356	142.006	14.899	1.00	59.94	CS3
ATOM	17078	O	ALA	128	187.135	112.108	-49.289	1.00	177.64	KS11	ATOM	17131	O	PRO	7	204.528	143.133	14.439	1.00	59.94	CS3
ATOM	17079	N	SER	129	188.215	113.460	-47.835	1.00	180.11	KS11	ATOM	17132	N	ILE	8	204.726	141.659	16.126	1.00	74.77	CS3
ATOM	17080	CA	SER	129	187.047	113.753	-47.003	1.00	180.11	KS11	ATOM	17133	CA	ILE	8	205.382	142.615	17.010	1.00	74.77	CS3
ATOM	17081	CB	SER	129	185.828	114.081	-47.877	1.00	163.72	KS11	ATOM	17134	CB	ILE	8	205.279	142.178	18.488	1.00	60.61	CS3
ATOM	17082	OG	SER	129	186.037	115.273	-48.618	1.00	163.72	KS11	ATOM	17135	CG2	ILE	8	206.306	142.926	19.334	1.00	60.61	CS3
ATOM	17083	C	SER	129	186.708	112.616	-46.038	1.00	180.11	KS11	ATOM	17136	CG1	ILE	8	203.858	142.417	18.998	1.00	60.61	CS3
ATOM	17084	O	SER	129	187.586	111.752	-45.812	1.00	180.11	KS11	ATOM	17137	CD1	ILE	8	203.635	141.908	20.414	1.00	60.61	CS3

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ATOM  17138  C   ILE    8     206.858 142.747  16.627  1.00 74.77      CS3
ATOM  17139  O   ILE    8     207.309 143.827  16.243  1.00 74.77      CS3
ATOM  17140  N   GLY    9     207.607 141.650  16.739  1.00 65.76      CS3
ATOM  17141  CA  GLY    9     209.012 141.689  16.384  1.00 65.76      CS3
ATOM  17142  C   GLY    9     209.213 142.416  15.065  1.00 65.76      CS3
ATOM  17143  O   GLY    9     210.219 143.104  14.845  1.00 65.76      CS3
ATOM  17144  N   PHE   10     208.229 142.279  14.185  1.00 58.04      CS3
ATOM  17145  CA  PHE   10     208.294 142.901  12.880  1.00 58.04      CS3
ATOM  17146  CB  PHE   10     207.197 142.337  11.977  1.00 39.06      CS3
ATOM  17147  CG  PHE   10     207.238 142.872  10.561  1.00 39.06      CS3
ATOM  17148  CD1 PHE   10     208.432 142.885   9.838  1.00 39.06      CS3
ATOM  17149  CD2 PHE   10     206.092 143.353   9.952  1.00 39.06      CS3
ATOM  17150  CE1 PHE   10     208.483 143.367   8.540  1.00 39.06      CS3
ATOM  17151  CE2 PHE   10     206.134 143.838   8.649  1.00 39.06      CS3
ATOM  17152  CZ  PHE   10     207.339 143.846   7.938  1.00 39.06      CS3
ATOM  17153  C   PHE   10     208.175 144.410  12.929  1.00 58.04      CS3
ATOM  17154  O   PHE   10     208.639 145.106  12.028  1.00 58.04      CS3
ATOM  17155  N   ARG   11     207.571 144.928  13.985  1.00 73.28      CS3
ATOM  17156  CA  ARG   11     207.389 146.365  14.071  1.00 73.28      CS3
ATOM  17157  CB  ARG   11     205.905 146.656  14.204  1.00118.68      CS3
ATOM  17158  CG  ARG   11     205.088 145.945  13.155  1.00118.68      CS3
ATOM  17159  CD  ARG   11     203.747 145.611  13.716  1.00118.68      CS3
ATOM  17160  NE  ARG   11     202.657 146.158  12.925  1.00118.68      CS3
ATOM  17161  CZ  ARG   11     201.459 146.427  13.434  1.00118.68      CS3
ATOM  17162  NH1 ARG   11     201.236 146.191  14.721  1.00118.68      CS3
ATOM  17163  NH2 ARG   11     200.497 146.944  12.677  1.00118.68      CS3
ATOM  17164  C   ARG   11     208.157 147.047  15.188  1.00 73.28      CS3
ATOM  17165  O   ARG   11     208.073 148.263  15.336  1.00 73.28      CS3
ATOM  17166  N   LEU   12     208.914 146.277  15.961  1.00 60.96      CS3
ATOM  17167  CA  LEU   12     209.678 146.844  17.061  1.00 60.96      CS3
ATOM  17168  CB  LEU   12     210.718 145.842  17.540  1.00 49.93      CS3
ATOM  17169  CG  LEU   12     210.062 144.957  18.597  1.00 49.93      CS3
ATOM  17170  CD1 LEU   12     210.813 143.653  18.810  1.00 49.93      CS3
ATOM  17171  CD2 LEU   12     210.005 145.760  19.875  1.00 49.93      CS3
ATOM  17172  C   LEU   12     210.330 148.181  16.736  1.00 60.96      CS3
ATOM  17173  O   LEU   12     210.306 149.108  17.545  1.00 60.96      CS3
ATOM  17174  N   GLY   13     210.910 148.291  15.552  1.00 77.33      CS3
ATOM  17175  CA  GLY   13     211.517 149.554  15.181  1.00 77.33      CS3
ATOM  17176  C   GLY   13     210.520 150.666  15.467  1.00 77.33      CS3
ATOM  17177  O   GLY   13     210.667 151.392  16.442  1.00 77.33      CS3
ATOM  17178  N   ILE   14     209.505 150.804  14.619  1.00 91.89      CS3
ATOM  17179  CA  ILE   14     208.502 151.824  14.851  1.00 91.89      CS3
ATOM  17180  CB  ILE   14     207.880 152.336  13.526  1.00145.68      CS3
ATOM  17181  CG2 ILE   14     206.786 153.377  13.807  1.00145.68      CS3
ATOM  17182  CG1 ILE   14     208.972 152.999  12.680  1.00145.68      CS3
ATOM  17183  CD1 ILE   14     208.449 153.867  11.533  1.00145.68      CS3
ATOM  17184  C   ILE   14     207.433 151.218  15.749  1.00 91.89      CS3
ATOM  17185  O   ILE   14     207.753 150.450  16.649  1.00 91.89      CS3
ATOM  17186  N   THR   15     206.182 151.576  15.495  1.00 60.11      CS3
ATOM  17187  CA  THR   15     205.005 151.146  16.231  1.00 60.11      CS3
ATOM  17188  CB  THR   15     204.033 150.529  15.280  1.00 64.81      CS3
ATOM  17189  OG1 THR   15     203.697 151.497  14.279  1.00 64.81      CS3
ATOM  17190  CG2 THR   15     202.789 150.070  16.015  1.00 64.81      CS3
ATOM  17191  C   THR   15     205.039 150.254  17.469  1.00 60.11      CS3
ATOM  17192  O   THR   15     204.072 150.216  18.229  1.00 60.11      CS3
ATOM  17193  N   ARG   16     206.118 149.536  17.709  1.00 67.27      CS3
ATOM  17194  CA  ARG   16     206.117 148.678  18.871  1.00 67.27      CS3
ATOM  17195  CB  ARG   16     205.909 147.237  18.419  1.00 93.84      CS3
ATOM  17196  CG  ARG   16     205.217 146.379  19.429  1.00 93.84      CS3
ATOM  17197  CD  ARG   16     203.801 146.831  19.585  1.00 93.84      CS3
ATOM  17198  NE  ARG   16     203.091 145.980  20.522  1.00 93.84      CS3
ATOM  17199  CZ  ARG   16     201.798 146.105  20.792  1.00 93.84      CS3
ATOM  17200  NH1 ARG   16     201.084 147.050  20.190  1.00 93.84      CS3
ATOM  17201  NH2 ARG   16     201.218 145.285  21.659  1.00 93.84      CS3
ATOM  17202  C   ARG   16     207.369 148.776  19.723  1.00 67.27      CS3
ATOM  17203  O   ARG   16     208.348 148.078  19.480  1.00 67.27      CS3
ATOM  17204  N   ASP   17     207.351 149.645  20.724  1.00 59.29      CS3
ATOM  17205  CA  ASP   17     208.510 149.748  21.600  1.00 59.29      CS3
ATOM  17206  CB  ASP   17     208.366 150.925  22.568  1.00121.81      CS3
ATOM  17207  CG  ASP   17     206.947 151.117  23.043  1.00121.81      CS3
ATOM  17208  OD1 ASP   17     206.690 152.129  23.729  1.00121.81      CS3
ATOM  17209  OD2 ASP   17     206.089 150.263  22.732  1.00121.81      CS3
ATOM  17210  C   ASP   17     208.638 148.430  22.356  1.00 59.29      CS3
ATOM  17211  O   ASP   17     207.658 147.685  22.494  1.00 59.29      CS3
ATOM  17212  N   TRP   18     209.851 148.136  22.818  1.00 80.88      CS3
ATOM  17213  CA  TRP   18     210.135 146.896  23.538  1.00 80.88      CS3
ATOM  17214  CB  TRP   18     211.637 146.767  23.811  1.00 59.89      CS3
ATOM  17215  CG  TRP   18     212.486 146.529  22.602  1.00 59.89      CS3
ATOM  17216  CD2 TRP   18     212.677 147.418  21.505  1.00 59.89      CS3
ATOM  17217  CE2 TRP   18     213.598 146.809  20.627  1.00 59.89      CS3
ATOM  17218  CE3 TRP   18     212.165 148.673  21.177  1.00 59.89      CS3
ATOM  17219  CD1 TRP   18     213.271 145.437  22.353  1.00 59.89      CS3
ATOM  17220  NE1 TRP   18     213.943 145.597  21.168  1.00 59.89      CS3
ATOM  17221  CZ2 TRP   18     214.012 147.411  19.446  1.00 59.89      CS3
ATOM  17222  CZ3 TRP   18     212.576 149.272  20.005  1.00 59.89      CS3
ATOM  17223  CH2 TRP   18     213.491 148.644  19.153  1.00 59.89      CS3
ATOM  17224  C   TRP   18     209.390 146.789  24.861  1.00 80.88      CS3
ATOM  17225  O   TRP   18     208.793 147.754  25.327  1.00 80.88      CS3
ATOM  17226  N   ALA   19     209.438 145.605  25.462  1.00 62.87      CS3
ATOM  17227  CA  ALA   19     208.780 145.359  26.740  1.00 62.87      CS3
ATOM  17228  CB  ALA   19     207.992 144.041  26.692  1.00 70.76      CS3
ATOM  17229  C   ALA   19     209.829 145.304  27.838  1.00 62.87      CS3
ATOM  17230  O   ALA   19     209.639 144.644  28.852  1.00 62.87      CS3
ATOM  17231  N   ALA   20     210.946 145.989  27.609  1.00 70.00      CS3
ATOM  17232  CA  ALA   20     212.051 146.051  28.571  1.00 70.00      CS3
ATOM  17233  CB  ALA   20     212.762 144.685  28.690  1.00 28.50      CS3
ATOM  17234  C   ALA   20     213.042 147.122  28.124  1.00 70.00      CS3
ATOM  17235  O   ALA   20     213.059 147.513  26.957  1.00 70.00      CS3
ATOM  17236  N   ALA   21     213.860 147.606  29.052  1.00108.78      CS3
ATOM  17237  CA  ALA   21     214.833 148.629  28.699  1.00108.78      CS3
ATOM  17238  CB  ALA   21     214.178 150.012  28.748  1.00 21.07      CS3
ATOM  17239  C   ALA   21     216.112 148.619  29.536  1.00108.78      CS3
ATOM  17240  O   ALA   21     216.352 149.530  30.320  1.00108.78      CS3
ATOM  17241  N   ALA   22     216.927 147.582  29.363  1.00103.88      CS3
ATOM  17242  CA  ALA   22     218.202 147.480  30.062  1.00103.88      CS3
ATOM  17243  CB  ALA   22     218.806 146.087  29.871  1.00 51.18      CS3
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ATOM	17244	C	ALA	22	219.104	148.539	29.423	1.00103.88	CS3	ATOM	17297	C	ARG	30	222.482	137.748	31.734	1.00 81.23	CS3
ATOM	17245	O	ALA	22	218.612	149.477	28.791	1.00103.88	CS3	ATOM	17298	O	ARG	30	221.921	136.701	32.064	1.00 81.23	CS3
ATOM	17246	N	ALA	23	220.418	148.389	29.571	1.00 63.55	CS3	ATOM	17299	N	HIS	31	222.584	138.797	32.543	1.00 63.69	CS3
ATOM	17247	CA	ALA	23	221.357	149.356	29.006	1.00 63.55	CS3	ATOM	17300	CA	HIS	31	222.054	138.788	33.901	1.00 63.69	CS3
ATOM	17248	CB	ALA	23	221.531	150.525	29.943	1.00 70.55	CS3	ATOM	17301	CB	HIS	31	223.136	139.246	34.870	1.00 69.85	CS3
ATOM	17249	C	ALA	23	222.704	148.716	28.738	1.00 63.55	CS3	ATOM	17302	CG	HIS	31	224.401	138.454	34.763	1.00 69.85	CS3
ATOM	17250	O	ALA	23	223.082	147.746	29.407	1.00 63.55	CS3	ATOM	17303	CD2	HIS	31	225.666	138.827	34.450	1.00 69.85	CS3
ATOM	17251	N	ALA	24	223.401	149.280	27.748	1.00130.93	CS3	ATOM	17304	ND1	HIS	31	224.442	137.090	34.973	1.00 69.85	CS3
ATOM	17252	CA	ALA	24	224.719	148.835	27.297	1.00130.93	CS3	ATOM	17305	CE1	HIS	31	225.680	136.658	34.795	1.00 69.85	CS3
ATOM	17253	CB	ALA	24	225.565	150.053	26.930	1.00 49.93	CS3	ATOM	17306	NE2	HIS	31	226.441	137.691	34.476	1.00 69.85	CS3
ATOM	17254	C	ALA	24	225.447	147.977	28.328	1.00130.93	CS3	ATOM	17307	C	HIS	31	220.838	139.696	33.980	1.00 63.69	CS3
ATOM	17255	O	ALA	24	226.397	148.433	28.964	1.00130.93	CS3	ATOM	17308	O	HIS	31	219.908	139.443	34.741	1.00 63.69	CS3
ATOM	17256	N	ALA	25	225.017	146.725	28.464	1.00 79.39	CS3	ATOM	17309	N	LEU	32	220.855	140.760	33.187	1.00 79.74	CS3
ATOM	17257	CA	ALA	25	225.593	145.815	29.452	1.00 79.39	CS3	ATOM	17310	CA	LEU	32	219.723	141.661	33.148	1.00 79.74	CS3
ATOM	17258	CB	ALA	25	224.461	145.251	30.341	1.00 68.59	CS3	ATOM	17311	CB	LEU	32	219.924	142.746	32.089	1.00132.82	CS3
ATOM	17259	C	ALA	25	226.421	144.665	28.884	1.00 79.39	CS3	ATOM	17312	CG	LEU	32	221.026	143.771	32.372	1.00132.82	CS3
ATOM	17260	O	ALA	25	226.151	143.506	29.187	1.00 79.39	CS3	ATOM	17313	CD1	LEU	32	221.221	144.659	31.148	1.00132.82	CS3
ATOM	17261	N	ALA	26	227.443	144.975	28.095	1.00 60.92	CS3	ATOM	17314	CD2	LEU	32	220.663	144.599	33.601	1.00132.82	CS3
ATOM	17262	CA	ALA	26	228.268	143.926	27.494	1.00 60.92	CS3	ATOM	17315	C	LEU	32	218.560	140.770	32.753	1.00 79.74	CS3
ATOM	17263	CB	ALA	26	229.540	144.539	26.896	1.00 45.27	CS3	ATOM	17316	O	LEU	32	217.671	140.510	33.565	1.00 79.74	CS3
ATOM	17264	C	ALA	26	228.630	142.754	28.429	1.00 60.92	CS3	ATOM	17317	N	LEU	33	218.596	140.275	31.514	1.00 92.10	CS3
ATOM	17265	O	ALA	26	228.873	141.642	27.967	1.00 60.92	CS3	ATOM	17318	CA	LEU	33	217.543	139.403	30.992	1.00 92.10	CS3
ATOM	17266	N	ALA	27	228.664	142.985	29.736	1.00 75.73	CS3	ATOM	17319	CB	LEU	33	218.023	138.600	29.787	1.00 76.19	CS3
ATOM	17267	CA	ALA	27	229.005	141.907	30.662	1.00 75.73	CS3	ATOM	17320	CG	LEU	33	218.172	139.290	28.440	1.00 76.19	CS3
ATOM	17268	CB	ALA	27	230.332	142.216	31.350	1.00 64.70	CS3	ATOM	17321	CD1	LEU	33	218.042	138.222	27.369	1.00 76.19	CS3
ATOM	17269	C	ALA	27	227.915	141.695	31.706	1.00 75.73	CS3	ATOM	17322	CD2	LEU	33	217.108	140.364	28.257	1.00 76.19	CS3
ATOM	17270	O	ALA	27	227.916	140.699	32.433	1.00 75.73	CS3	ATOM	17323	C	LEU	33	217.018	138.411	32.004	1.00 92.10	CS3
ATOM	17271	N	ALA	28	226.983	142.636	31.778	1.00 87.30	CS3	ATOM	17324	O	LEU	33	215.860	138.490	32.424	1.00 92.10	CS3
ATOM	17272	CA	ALA	28	225.906	142.548	32.747	1.00 87.30	CS3	ATOM	17325	N	LEU	34	217.870	137.466	32.383	1.00 81.46	CS3
ATOM	17273	CB	ALA	28	225.776	143.895	33.484	1.00 54.36	CS3	ATOM	17326	CA	LEU	34	217.454	136.455	33.328	1.00 81.46	CS3
ATOM	17274	C	ALA	28	224.576	142.147	32.092	1.00 87.30	CS3	ATOM	17327	CB	LEU	34	218.657	135.786	33.991	1.00 35.79	CS3
ATOM	17275	O	ALA	28	223.589	141.894	32.783	1.00 87.30	CS3	ATOM	17328	CG	LEU	34	218.417	134.265	34.027	1.00 35.79	CS3
ATOM	17276	N	TYR	29	224.573	142.057	30.762	1.00 64.87	CS3	ATOM	17329	CD1	LEU	34	219.440	133.564	34.911	1.00 35.79	CS3
ATOM	17277	CA	TYR	29	223.381	141.710	29.968	1.00 64.87	CS3	ATOM	17330	CD2	LEU	34	217.005	133.977	34.524	1.00 35.79	CS3
ATOM	17278	CB	TYR	29	223.702	141.865	28.482	1.00 46.40	CS3	ATOM	17331	C	LEU	34	216.536	137.060	34.381	1.00 81.46	CS3
ATOM	17279	CG	TYR	29	222.516	142.216	27.613	1.00 46.40	CS3	ATOM	17332	O	LEU	34	215.423	136.579	34.577	1.00 81.46	CS3
ATOM	17280	CD1	TYR	29	222.421	143.469	27.003	1.00 46.40	CS3	ATOM	17333	N	GLU	35	216.986	138.126	35.037	1.00 70.32	CS3
ATOM	17281	CE1	TYR	29	221.340	143.792	26.181	1.00 46.40	CS3	ATOM	17334	CA	GLU	35	216.171	138.777	36.056	1.00 70.32	CS3
ATOM	17282	CD2	TYR	29	221.496	141.292	27.381	1.00 46.40	CS3	ATOM	17335	CB	GLU	35	216.883	140.021	36.593	1.00184.28	CS3
ATOM	17283	CE2	TYR	29	220.413	141.606	26.566	1.00 46.40	CS3	ATOM	17336	CG	GLU	35	218.287	139.727	37.106	1.00184.28	CS3
ATOM	17284	CZ	TYR	29	220.342	142.855	25.970	1.00 46.40	CS3	ATOM	17337	CD	GLU	35	218.969	140.939	37.712	1.00184.28	CS3
ATOM	17285	OH	TYR	29	219.271	143.156	25.162	1.00 46.40	CS3	ATOM	17338	OE1	GLU	35	218.905	142.027	37.100	1.00184.28	CS3
ATOM	17286	C	TYR	29	222.778	140.314	30.199	1.00 64.87	CS3	ATOM	17339	OE2	GLU	35	219.575	140.800	38.796	1.00184.28	CS3
ATOM	17287	O	TYR	29	221.569	140.182	30.426	1.00 64.87	CS3	ATOM	17340	C	GLU	35	214.827	139.157	35.451	1.00 70.32	CS3
ATOM	17288	N	ARG	30	223.604	139.272	30.134	1.00 81.23	CS3	ATOM	17341	O	GLU	35	213.779	138.722	35.928	1.00 70.32	CS3
ATOM	17289	CA	ARG	30	223.100	137.912	30.340	1.00 81.23	CS3	ATOM	17342	N	ASP	36	214.867	139.955	34.388	1.00 71.66	CS3
ATOM	17290	CB	ARG	30	224.222	136.881	30.140	1.00 84.21	CS3	ATOM	17343	CA	ASP	36	213.657	140.390	33.698	1.00 71.66	CS3
ATOM	17291	CG	ARG	30	225.108	136.662	31.348	1.00 84.21	CS3	ATOM	17344	CB	ASP	36	214.014	140.973	32.328	1.00118.10	CS3
ATOM	17292	CD	ARG	30	226.406	135.974	30.963	1.00 84.21	CS3	ATOM	17345	CG	ASP	36	214.727	142.302	32.428	1.00118.10	CS3
ATOM	17293	NE	ARG	30	227.511	136.921	30.787	1.00 84.21	CS3	ATOM	17346	OD1	ASP	36	215.663	142.401	33.246	1.00118.10	CS3
ATOM	17294	CZ	ARG	30	227.462	138.025	30.038	1.00 84.21	CS3	ATOM	17347	OD2	ASP	36	214.358	143.242	31.685	1.00118.10	CS3
ATOM	17295	NH1	ARG	30	226.355	138.350	29.378	1.00 84.21	CS3	ATOM	17348	C	ASP	36	212.680	139.233	33.498	1.00 71.66	CS3
ATOM	17296	NH2	ARG	30	228.532	138.809	29.938	1.00 84.21	CS3	ATOM	17349	O	ASP	36	211.455	139.413	33.520	1.00 71.66	CS3

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ATOM  17350  N   GLN  37     213.221 138.041  33.302  1.00 92.31      CS3
ATOM  17351  CA  GLN  37     212.370 136.897  33.082  1.00 92.31      CS3
ATOM  17352  CB  GLN  37     213.010 135.980  32.053  1.00129.47      CS3
ATOM  17353  CG  GLN  37     212.793 136.507  30.655  1.00129.47      CS3
ATOM  17354  CD  GLN  37     213.754 135.925  29.667  1.00129.47      CS3
ATOM  17355  OE1 GLN  37     214.924 136.310  29.618  1.00129.47      CS3
ATOM  17356  NE2 GLN  37     213.275 134.977  28.873  1.00129.47      CS3
ATOM  17357  C   GLN  37     211.991 136.142  34.334  1.00 92.31      CS3
ATOM  17358  O   GLN  37     210.892 135.595  34.410  1.00 92.31      CS3
ATOM  17359  N   ARG  38     212.879 136.098  35.321  1.00 81.31      CS3
ATOM  17360  CA  ARG  38     212.525 135.411  36.551  1.00 81.31      CS3
ATOM  17361  CB  ARG  38     213.683 135.432  37.549  1.00 99.45      CS3
ATOM  17362  CG  ARG  38     215.036 135.224  36.900  1.00 99.45      CS3
ATOM  17363  CD  ARG  38     216.049 134.549  37.814  1.00 99.45      CS3
ATOM  17364  NE  ARG  38     215.993 133.096  37.685  1.00 99.45      CS3
ATOM  17365  CZ  ARG  38     216.930 132.263  38.131  1.00 99.45      CS3
ATOM  17366  NH1 ARG  38     218.006 132.741  38.745  1.00 99.45      CS3
ATOM  17367  NH2 ARG  38     216.798 130.952  37.949  1.00 99.45      CS3
ATOM  17368  C   ARG  38     211.357 136.249  37.055  1.00 81.31      CS3
ATOM  17369  O   ARG  38     210.406 135.738  37.650  1.00 81.31      CS3
ATOM  17370  N   ILE  39     211.434 137.545  36.769  1.00 66.19      CS3
ATOM  17371  CA  ILE  39     210.397 138.491  37.153  1.00 66.19      CS3
ATOM  17372  CB  ILE  39     210.757 139.918  36.690  1.00 56.79      CS3
ATOM  17373  CG2 ILE  39     209.553 140.841  36.822  1.00 56.79      CS3
ATOM  17374  CG1 ILE  39     211.943 140.438  37.503  1.00 56.79      CS3
ATOM  17375  CD1 ILE  39     212.453 141.796  37.048  1.00 56.79      CS3
ATOM  17376  C   ILE  39     209.073 138.089  36.517  1.00 66.19      CS3
ATOM  17377  O   ILE  39     208.161 137.614  37.202  1.00 66.19      CS3
ATOM  17378  N   ARG  40     208.979 138.283  35.202  1.00 66.89      CS3
ATOM  17379  CA  ARG  40     207.777 137.943  34.450  1.00 66.89      CS3
ATOM  17380  CB  ARG  40     208.064 137.998  32.954  1.00 63.83      CS3
ATOM  17381  CG  ARG  40     208.616 139.320  32.460  1.00 63.83      CS3
ATOM  17382  CD  ARG  40     209.198 139.160  31.070  1.00 63.83      CS3
ATOM  17383  NE  ARG  40     210.039 140.287  30.689  1.00 63.83      CS3
ATOM  17384  CZ  ARG  40     209.568 141.437  30.228  1.00 63.83      CS3
ATOM  17385  NH1 ARG  40     208.258 141.603  30.091  1.00 63.83      CS3
ATOM  17386  NH2 ARG  40     210.405 142.415  29.904  1.00 63.83      CS3
ATOM  17387  C   ARG  40     207.323 136.539  34.819  1.00 66.89      CS3
ATOM  17388  O   ARG  40     206.149 136.209  34.726  1.00 66.89      CS3
ATOM  17389  N   GLY  41     208.267 135.711  35.241  1.00 87.99      CS3
ATOM  17390  CA  GLY  41     207.929 134.356  35.618  1.00 87.99      CS3
ATOM  17391  C   GLY  41     206.769 134.309  36.585  1.00 87.99      CS3
ATOM  17392  O   GLY  41     205.677 133.881  36.232  1.00 87.99      CS3
ATOM  17393  N   LEU  42     207.005 134.759  37.810  1.00118.81      CS3
ATOM  17394  CA  LEU  42     205.968 134.756  38.826  1.00118.81      CS3
ATOM  17395  CB  LEU  42     206.549 135.224  40.164  1.00123.08      CS3
ATOM  17396  CG  LEU  42     207.683 134.369  40.745  1.00123.08      CS3
ATOM  17397  CD1 LEU  42     208.242 135.040  41.991  1.00123.08      CS3
ATOM  17398  CD2 LEU  42     207.171 132.968  41.071  1.00123.08      CS3
ATOM  17399  C   LEU  42     204.795 135.642  38.426  1.00118.81      CS3
ATOM  17400  O   LEU  42     203.638 135.235  38.519  1.00118.81      CS3
ATOM  17401  N   LEU  43     205.100 136.846  37.962  1.00 65.64      CS3
ATOM  17402  CA  LEU  43     204.068 137.795  37.574  1.00 65.64      CS3
ATOM  17403  CB  LEU  43     204.706 139.060  37.023  1.00 77.48      CS3
ATOM  17404  CG  LEU  43     205.940 139.574  37.756  1.00 77.48      CS3
ATOM  17405  CD1 LEU  43     206.266 140.970  37.241  1.00 77.48      CS3
ATOM  17406  CD2 LEU  43     205.691 139.606  39.254  1.00 77.48      CS3
ATOM  17407  C   LEU  43     203.077 137.253  36.549  1.00 65.64      CS3
ATOM  17408  O   LEU  43     201.916 137.668  36.517  1.00 65.64      CS3
ATOM  17409  N   GLU  44     203.533 136.343  35.697  1.00 97.35      CS3
ATOM  17410  CA  GLU  44     202.652 135.766  34.692  1.00 97.35      CS3
ATOM  17411  CB  GLU  44     203.438 135.303  33.463  1.00147.38      CS3
ATOM  17412  CG  GLU  44     203.733 136.395  32.451  1.00147.38      CS3
ATOM  17413  CD  GLU  44     204.249 135.832  31.136  1.00147.38      CS3
ATOM  17414  OE1 GLU  44     203.551 134.982  30.538  1.00147.38      CS3
ATOM  17415  OE2 GLU  44     205.347 136.239  30.701  1.00147.38      CS3
ATOM  17416  C   GLU  44     201.906 134.584  35.274  1.00 97.35      CS3
ATOM  17417  O   GLU  44     200.963 134.081  34.671  1.00 97.35      CS3
ATOM  17418  N   LYS  45     202.330 134.140  36.449  1.00114.04      CS3
ATOM  17419  CA  LYS  45     201.690 133.005  37.088  1.00114.04      CS3
ATOM  17420  CB  LYS  45     202.715 132.208  37.900  1.00124.62      CS3
ATOM  17421  CG  LYS  45     202.188 130.898  38.484  1.00124.62      CS3
ATOM  17422  CD  LYS  45     201.869 129.872  37.394  1.00124.62      CS3
ATOM  17423  CE  LYS  45     201.536 128.513  37.995  1.00124.62      CS3
ATOM  17424  NZ  LYS  45     201.336 127.459  36.954  1.00124.62      CS3
ATOM  17425  C   LYS  45     200.566 133.468  37.997  1.00114.04      CS3
ATOM  17426  O   LYS  45     199.399 133.483  37.610  1.00114.04      CS3
ATOM  17427  N   GLU  46     200.930 133.862  39.209  1.00158.39      CS3
ATOM  17428  CA  GLU  46     199.951 134.299  40.188  1.00158.39      CS3
ATOM  17429  CB  GLU  46     200.635 134.540  41.535  1.00188.68      CS3
ATOM  17430  CG  GLU  46     201.110 133.257  42.207  1.00188.68      CS3
ATOM  17431  CD  GLU  46     199.965 132.302  42.513  1.00188.68      CS3
ATOM  17432  OE1 GLU  46     199.092 132.665  43.329  1.00188.68      CS3
ATOM  17433  OE2 GLU  46     199.936 131.193  41.936  1.00188.68      CS3
ATOM  17434  C   GLU  46     199.149 135.526  39.786  1.00158.39      CS3
ATOM  17435  O   GLU  46     197.974 135.637  40.133  1.00158.39      CS3
ATOM  17436  N   LEU  47     199.766 136.444  39.051  1.00 57.49      CS3
ATOM  17437  CA  LEU  47     199.046 137.648  38.645  1.00 57.49      CS3
ATOM  17438  CB  LEU  47     200.035 138.742  38.252  1.00 59.53      CS3
ATOM  17439  CG  LEU  47     199.545 140.151  38.579  1.00 59.53      CS3
ATOM  17440  CD1 LEU  47     199.333 140.276  40.090  1.00 59.53      CS3
ATOM  17441  CD2 LEU  47     200.553 141.173  38.099  1.00 59.53      CS3
ATOM  17442  C   LEU  47     198.045 137.407  37.498  1.00 57.49      CS3
ATOM  17443  O   LEU  47     197.443 138.347  36.966  1.00 57.49      CS3
ATOM  17444  N   TYR  48     197.862 136.135  37.146  1.00 71.15      CS3
ATOM  17445  CA  TYR  48     196.958 135.718  36.075  1.00 71.15      CS3
ATOM  17446  CB  TYR  48     196.922 134.184  36.026  1.00 90.19      CS3
ATOM  17447  CG  TYR  48     196.035 133.587  34.951  1.00 90.19      CS3
ATOM  17448  CD1 TYR  48     195.884 134.207  33.701  1.00 90.19      CS3
ATOM  17449  CE1 TYR  48     195.071 133.648  32.710  1.00 90.19      CS3
ATOM  17450  CD2 TYR  48     195.355 132.390  35.179  1.00 90.19      CS3
ATOM  17451  CE2 TYR  48     194.543 131.824  34.199  1.00 90.19      CS3
ATOM  17452  CZ  TYR  48     194.403 132.457  32.973  1.00 90.19      CS3
ATOM  17453  OH  TYR  48     193.575 131.900  32.029  1.00 90.19      CS3
ATOM  17454  C   TYR  48     195.547 136.275  36.225  1.00 71.15      CS3
ATOM  17455  O   TYR  48     195.050 137.009  35.360  1.00 71.15      CS3
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ATOM	17456	N	SER	49	194.920	135.902	37.336	1.00105.52	CS3
ATOM	17457	CA	SER	49	193.564	136.298	37.700	1.00105.52	CS3
ATOM	17458	CB	SER	49	193.445	136.316	39.212	1.00104.42	CS3
ATOM	17459	OG	SER	49	194.373	137.245	39.736	1.00104.42	CS3
ATOM	17460	C	SER	49	193.091	137.642	37.172	1.00105.52	CS3
ATOM	17461	O	SER	49	191.912	137.815	36.880	1.00105.52	CS3
ATOM	17462	N	ALA	50	193.993	138.606	37.071	1.00 93.08	CS3
ATOM	17463	CA	ALA	50	193.600	139.914	36.579	1.00 93.08	CS3
ATOM	17464	CB	ALA	50	193.676	140.926	37.695	1.00 77.01	CS3
ATOM	17465	C	ALA	50	194.457	140.364	35.412	1.00 93.08	CS3
ATOM	17466	O	ALA	50	195.569	140.839	35.603	1.00 93.08	CS3
ATOM	17467	N	GLY	51	193.931	140.193	34.204	1.00 64.73	CS3
ATOM	17468	CA	GLY	51	194.621	140.598	32.987	1.00 64.73	CS3
ATOM	17469	C	GLY	51	196.138	140.565	32.865	1.00 64.73	CS3
ATOM	17470	O	GLY	51	196.799	141.602	32.956	1.00 64.73	CS3
ATOM	17471	N	LEU	52	196.697	139.381	32.634	1.00112.86	CS3
ATOM	17472	CA	LEU	52	198.139	139.240	32.456	1.00112.86	CS3
ATOM	17473	CB	LEU	52	198.529	137.768	32.377	1.00152.00	CS3
ATOM	17474	CG	LEU	52	198.633	136.936	33.646	1.00152.00	CS3
ATOM	17475	CD1	LEU	52	198.972	135.504	33.259	1.00152.00	CS3
ATOM	17476	CD2	LEU	52	199.707	137.517	34.563	1.00152.00	CS3
ATOM	17477	C	LEU	52	198.559	139.897	31.147	1.00112.86	CS3
ATOM	17478	O	LEU	52	199.002	139.210	30.226	1.00112.86	CS3
ATOM	17479	N	ALA	53	198.421	141.212	31.045	1.00121.60	CS3
ATOM	17480	CA	ALA	53	198.801	141.883	29.811	1.00121.60	CS3
ATOM	17481	CB	ALA	53	197.601	142.546	29.188	1.00 30.53	CS3
ATOM	17482	C	ALA	53	199.889	142.908	30.035	1.00121.60	CS3
ATOM	17483	O	ALA	53	199.718	143.841	30.821	1.00121.60	CS3
ATOM	17484	N	ARG	54	201.011	142.725	29.344	1.00107.59	CS3
ATOM	17485	CA	ARG	54	202.145	143.641	29.436	1.00107.59	CS3
ATOM	17486	CB	ARG	54	201.727	145.023	28.923	1.00132.73	CS3
ATOM	17487	CG	ARG	54	201.853	145.211	27.423	1.00132.73	CS3
ATOM	17488	CD	ARG	54	203.254	145.668	27.065	1.00132.73	CS3
ATOM	17489	NE	ARG	54	203.369	146.032	25.658	1.00132.73	CS3
ATOM	17490	CZ	ARG	54	204.384	146.725	25.151	1.00132.73	CS3
ATOM	17491	NH1	ARG	54	205.370	147.128	25.942	1.00132.73	CS3
ATOM	17492	NH2	ARG	54	204.415	147.015	23.856	1.00132.73	CS3
ATOM	17493	C	ARG	54	202.804	143.800	30.809	1.00107.59	CS3
ATOM	17494	O	ARG	54	202.179	144.245	31.771	1.00107.59	CS3
ATOM	17495	N	VAL	55	204.077	143.429	30.881	1.00 69.88	CS3
ATOM	17496	CA	VAL	55	204.883	143.569	32.089	1.00 69.88	CS3
ATOM	17497	CB	VAL	55	205.312	142.203	32.674	1.00 52.76	CS3
ATOM	17498	CG1	VAL	55	206.363	142.407	33.769	1.00 52.76	CS3
ATOM	17499	CG2	VAL	55	204.104	141.471	33.230	1.00 52.76	CS3
ATOM	17500	C	VAL	55	206.129	144.288	31.597	1.00 69.88	CS3
ATOM	17501	O	VAL	55	207.119	143.648	31.275	1.00 69.88	CS3
ATOM	17502	N	ASP	56	206.075	145.612	31.523	1.00123.61	CS3
ATOM	17503	CA	ASP	56	207.201	146.395	31.034	1.00123.61	CS3
ATOM	17504	CB	ASP	56	206.904	147.874	31.210	1.00139.97	CS3
ATOM	17505	CG	ASP	56	205.681	148.299	30.441	1.00139.97	CS3
ATOM	17506	OD1	ASP	56	205.673	148.121	29.203	1.00139.97	CS3
ATOM	17507	OD2	ASP	56	204.726	148.800	31.072	1.00139.97	CS3
ATOM	17508	C	ASP	56	208.563	146.061	31.627	1.00123.61	CS3
ATOM	17509	O	ASP	56	209.127	145.019	31.311	1.00123.61	CS3
ATOM	17510	N	ILE	57	209.090	146.956	32.462	1.00 79.38	CS3
ATOM	17511	CA	ILE	57	210.402	146.801	33.113	1.00 79.38	CS3
ATOM	17512	CB	ILE	57	210.993	145.368	33.009	1.00 38.16	CS3
ATOM	17513	CG2	ILE	57	212.447	145.386	33.420	1.00 38.16	CS3
ATOM	17514	CG1	ILE	57	210.213	144.391	33.895	1.00 38.16	CS3
ATOM	17515	CD1	ILE	57	210.767	142.936	33.887	1.00 38.16	CS3
ATOM	17516	C	ILE	57	211.491	147.719	32.571	1.00 79.38	CS3
ATOM	17517	O	ILE	57	211.849	147.651	31.394	1.00 79.38	CS3
ATOM	17518	N	GLU	58	212.020	148.556	33.459	1.00 82.24	CS3
ATOM	17519	CA	GLU	58	213.106	149.479	33.156	1.00 82.24	CS3
ATOM	17520	CB	GLU	58	212.596	150.911	33.205	1.00125.71	CS3
ATOM	17521	CG	GLU	58	211.184	151.032	32.662	1.00125.71	CS3
ATOM	17522	CD	GLU	58	210.841	152.434	32.202	1.00125.71	CS3
ATOM	17523	OE1	GLU	58	209.646	152.700	31.939	1.00125.71	CS3
ATOM	17524	OE2	GLU	58	211.767	153.266	32.093	1.00125.71	CS3
ATOM	17525	C	GLU	58	214.090	149.196	34.291	1.00 82.24	CS3
ATOM	17526	O	GLU	58	213.688	148.665	35.325	1.00 82.24	CS3
ATOM	17527	N	ALA	59	215.368	149.512	34.128	1.00 67.37	CS3
ATOM	17528	CA	ALA	59	216.298	149.200	35.206	1.00 67.37	CS3
ATOM	17529	CB	ALA	59	216.944	147.827	34.954	1.00 24.04	CS3
ATOM	17530	C	ALA	59	217.372	150.246	35.466	1.00 67.37	CS3
ATOM	17531	O	ALA	59	217.451	151.256	34.764	1.00 67.37	CS3
ATOM	17532	N	ALA	60	218.170	149.988	36.506	1.00141.44	CS3
ATOM	17533	CA	ALA	60	219.280	150.845	36.934	1.00141.44	CS3
ATOM	17534	CB	ALA	60	218.821	152.303	37.067	1.00 23.16	CS3
ATOM	17535	C	ALA	60	219.859	150.339	38.266	1.00141.44	CS3
ATOM	17536	O	ALA	60	220.222	151.127	39.141	1.00141.44	CS3
ATOM	17537	N	ALA	61	219.929	149.012	38.393	1.00144.24	CS3
ATOM	17538	CA	ALA	61	220.458	148.308	39.569	1.00144.24	CS3
ATOM	17539	CB	ALA	61	221.932	147.967	39.348	1.00 89.96	CS3
ATOM	17540	C	ALA	61	220.293	149.005	40.915	1.00144.24	CS3
ATOM	17541	O	ALA	61	221.273	149.231	41.629	1.00144.24	CS3
ATOM	17542	N	ALA	62	219.053	149.325	41.268	1.00140.34	CS3
ATOM	17543	CA	ALA	62	218.767	149.993	42.533	1.00140.34	CS3
ATOM	17544	CB	ALA	62	219.381	151.387	42.539	1.00119.88	CS3
ATOM	17545	C	ALA	62	217.262	150.086	42.730	1.00140.34	CS3
ATOM	17546	O	ALA	62	216.764	150.073	43.859	1.00140.34	CS3
ATOM	17547	N	ALA	63	216.544	150.182	41.619	1.00186.37	CS3
ATOM	17548	CA	ALA	63	215.095	150.273	41.661	1.00186.37	CS3
ATOM	17549	CB	ALA	63	214.669	151.675	42.074	1.00 93.28	CS3
ATOM	17550	C	ALA	63	214.494	149.920	40.311	1.00186.37	CS3
ATOM	17551	O	ALA	63	213.956	150.782	39.618	1.00186.37	CS3
ATOM	17552	N	VAL	64	214.611	148.652	39.932	1.00 84.66	CS3
ATOM	17553	CA	VAL	64	214.045	148.188	38.680	1.00 84.66	CS3
ATOM	17554	CB	VAL	64	214.066	146.656	38.600	1.00 76.59	CS3
ATOM	17555	CG1	VAL	64	214.891	146.211	37.395	1.00 76.59	CS3
ATOM	17556	CG2	VAL	64	214.625	146.078	39.891	1.00 76.59	CS3
ATOM	17557	C	VAL	64	212.594	148.648	38.687	1.00 84.66	CS3
ATOM	17558	O	VAL	64	211.859	148.346	39.622	1.00 84.66	CS3
ATOM	17559	N	ALA	65	212.184	149.384	37.660	1.00 88.72	CS3
ATOM	17560	CA	ALA	65	210.814	149.879	37.587	1.00 88.72	CS3
ATOM	17561	CB	ALA	65	210.609	150.672	36.305	1.00 76.19	CS3

ATOM	17562	C	ALA	65	209.797	148.748	37.670	1.00	88.72	CS3	ATOM	17615	C	ALA	73	193.561	145.738	40.541	1.00	84.33	CS3
ATOM	17563	O	ALA	65	209.328	148.408	38.755	1.00	88.72	CS3	ATOM	17616	O	ALA	73	194.343	145.400	41.435	1.00	84.33	CS3
ATOM	17564	N	VAL	66	209.464	148.164	36.523	1.00	66.19	CS3	ATOM	17617	N	ALA	74	192.242	145.653	40.660	1.00	140.56	CS3
ATOM	17565	CA	VAL	66	208.488	147.074	36.449	1.00	66.19	CS3	ATOM	17618	CA	ALA	74	191.610	145.137	41.864	1.00	140.56	CS3
ATOM	17566	CB	VAL	66	208.659	146.020	37.572	1.00	52.67	CS3	ATOM	17619	CB	ALA	74	190.142	144.810	41.578	1.00	104.58	CS3
ATOM	17567	CG1	VAL	66	207.527	145.012	37.497	1.00	52.67	CS3	ATOM	17620	C	ALA	74	192.337	143.890	42.362	1.00	140.56	CS3
ATOM	17568	CG2	VAL	66	209.986	145.308	37.430	1.00	52.67	CS3	ATOM	17621	O	ALA	74	193.132	143.954	43.300	1.00	140.56	CS3
ATOM	17569	C	VAL	66	207.062	147.575	36.542	1.00	66.19	CS3	ATOM	17622	N	ALA	75	192.062	142.761	41.715	1.00	111.77	CS3
ATOM	17570	O	VAL	66	206.577	147.904	37.618	1.00	66.19	CS3	ATOM	17623	CA	ALA	75	192.662	141.482	42.079	1.00	111.77	CS3
ATOM	17571	N	THR	67	206.396	147.617	35.402	1.00	111.63	CS3	ATOM	17624	CB	ALA	75	192.444	140.472	40.951	1.00	26.26	CS3
ATOM	17572	CA	THR	67	205.015	148.051	35.342	1.00	111.63	CS3	ATOM	17625	C	ALA	75	194.149	141.594	42.400	1.00	111.77	CS3
ATOM	17573	CB	THR	67	204.834	149.107	34.275	1.00	60.42	CS3	ATOM	17626	O	ALA	75	194.686	140.815	43.189	1.00	111.77	CS3
ATOM	17574	OG1	THR	67	205.689	150.213	34.570	1.00	60.42	CS3	ATOM	17627	N	ALA	76	194.809	142.570	41.791	1.00	125.93	CS3
ATOM	17575	CG2	THR	67	203.398	149.567	34.220	1.00	60.42	CS3	ATOM	17628	CA	ALA	76	196.236	142.764	42.004	1.00	125.93	CS3
ATOM	17576	C	THR	67	204.158	146.851	34.990	1.00	111.63	CS3	ATOM	17629	CB	ALA	76	196.804	143.655	40.914	1.00	68.56	CS3
ATOM	17577	O	THR	67	204.573	145.986	34.221	1.00	111.63	CS3	ATOM	17630	C	ALA	76	196.554	143.355	43.368	1.00	125.93	CS3
ATOM	17578	N	VAL	68	202.961	146.791	35.552	1.00	87.53	CS3	ATOM	17631	O	ALA	76	197.356	142.798	44.116	1.00	125.93	CS3
ATOM	17579	CA	VAL	68	202.084	145.675	35.268	1.00	87.53	CS3	ATOM	17632	N	ALA	77	195.915	144.478	43.686	1.00	163.20	CS3
ATOM	17580	CB	VAL	68	202.015	144.710	36.455	1.00	72.39	CS3	ATOM	17633	CA	ALA	77	196.136	145.172	44.951	1.00	163.20	CS3
ATOM	17581	CG1	VAL	68	201.011	143.632	36.165	1.00	72.39	CS3	ATOM	17634	CB	ALA	77	195.560	146.579	44.869	1.00	37.28	CS3
ATOM	17582	CG2	VAL	68	203.379	144.090	36.705	1.00	72.39	CS3	ATOM	17635	C	ALA	77	195.597	144.460	46.194	1.00	163.20	CS3
ATOM	17583	C	VAL	68	200.682	146.132	34.922	1.00	87.53	CS3	ATOM	17636	O	ALA	77	196.302	144.353	47.196	1.00	163.20	CS3
ATOM	17584	O	VAL	68	199.931	146.598	35.780	1.00	87.53	CS3	ATOM	17637	N	ALA	78	194.352	143.986	46.125	1.00	149.88	CS3
ATOM	17585	N	HIS	69	200.338	145.997	33.650	1.00	82.41	CS3	ATOM	17638	CA	ALA	78	193.689	143.281	47.236	1.00	149.88	CS3
ATOM	17586	CA	HIS	69	199.024	146.379	33.174	1.00	82.41	CS3	ATOM	17639	CB	ALA	78	194.625	142.245	47.863	1.00	84.18	CS3
ATOM	17587	CB	HIS	69	199.117	146.665	31.689	1.00	62.83	CS3	ATOM	17640	C	ALA	78	193.172	144.224	48.317	1.00	149.88	CS3
ATOM	17588	CG	HIS	69	200.231	147.606	31.357	1.00	62.83	CS3	ATOM	17641	O	ALA	78	192.801	145.360	48.025	1.00	149.88	CS3
ATOM	17589	CD2	HIS	69	201.549	147.565	31.669	1.00	62.83	CS3	ATOM	17642	N	ALA	79	193.143	143.740	49.561	1.00	112.70	CS3
ATOM	17590	ND1	HIS	69	200.034	148.800	30.693	1.00	62.83	CS3	ATOM	17643	CA	ALA	79	192.670	144.530	50.698	1.00	112.70	CS3
ATOM	17591	CE1	HIS	69	201.180	149.453	30.615	1.00	62.83	CS3	ATOM	17644	CB	ALA	79	192.842	143.742	51.999	1.00	91.51	CS3
ATOM	17592	NE2	HIS	69	202.115	148.727	31.201	1.00	62.83	CS3	ATOM	17645	C	ALA	79	193.430	145.847	50.774	1.00	112.70	CS3
ATOM	17593	C	HIS	69	198.121	145.208	33.506	1.00	82.41	CS3	ATOM	17646	O	ALA	79	194.249	146.061	51.667	1.00	112.70	CS3
ATOM	17594	O	HIS	69	198.493	144.050	33.304	1.00	82.41	CS3	ATOM	17647	N	ALA	80	193.144	146.717	49.812	1.00	155.87	CS3
ATOM	17595	N	VAL	70	196.937	145.510	34.026	1.00	93.74	CS3	ATOM	17648	CA	ALA	80	193.762	148.029	49.696	1.00	155.87	CS3
ATOM	17596	CA	VAL	70	196.045	144.456	34.471	1.00	93.74	CS3	ATOM	17649	CB	ALA	80	193.075	149.005	50.645	1.00	77.57	CS3
ATOM	17597	CB	VAL	70	196.095	144.408	36.005	1.00	105.47	CS3	ATOM	17650	C	ALA	80	195.282	148.055	49.911	1.00	155.87	CS3
ATOM	17598	CG1	VAL	70	195.259	143.280	36.522	1.00	105.47	CS3	ATOM	17651	O	ALA	80	195.866	149.135	50.036	1.00	155.87	CS3
ATOM	17599	CG2	VAL	70	197.532	144.265	36.467	1.00	105.47	CS3	ATOM	17652	N	ALA	81	195.916	146.879	49.943	1.00	100.69	CS3
ATOM	17600	C	VAL	70	194.580	144.478	34.020	1.00	93.74	CS3	ATOM	17653	CA	ALA	81	197.371	146.776	50.128	1.00	100.69	CS3
ATOM	17601	O	VAL	70	193.911	143.437	34.022	1.00	93.74	CS3	ATOM	17654	CB	ALA	81	197.823	147.733	51.221	1.00	87.40	CS3
ATOM	17602	N	ALA	71	194.067	145.642	33.641	1.00	78.46	CS3	ATOM	17655	C	ALA	81	197.837	145.361	50.474	1.00	100.69	CS3
ATOM	17603	CA	ALA	71	192.670	145.718	33.224	1.00	78.46	CS3	ATOM	17656	O	ALA	81	198.989	144.993	50.235	1.00	100.69	CS3
ATOM	17604	CB	ALA	71	192.439	144.836	32.007	1.00	62.65	CS3	ATOM	17657	N	ALA	82	196.931	144.575	51.043	1.00	133.80	CS3
ATOM	17605	C	ALA	71	191.762	145.271	34.377	1.00	78.46	CS3	ATOM	17658	CA	ALA	82	197.231	143.211	51.456	1.00	133.80	CS3
ATOM	17606	O	ALA	71	190.548	145.135	34.212	1.00	78.46	CS3	ATOM	17659	CB	ALA	82	196.027	142.637	52.209	1.00	82.29	CS3
ATOM	17607	N	ALA	72	192.372	145.034	35.538	1.00	80.36	CS3	ATOM	17660	C	ALA	82	197.648	142.258	50.332	1.00	133.80	CS3
ATOM	17608	CA	ALA	72	191.669	144.621	36.757	1.00	80.36	CS3	ATOM	17661	O	ALA	82	197.457	141.043	50.454	1.00	133.80	CS3
ATOM	17609	CB	ALA	72	191.175	143.172	36.637	1.00	36.65	CS3	ATOM	17662	N	ARG	83	198.215	142.793	49.248	1.00	121.04	CS3
ATOM	17610	C	ALA	72	192.616	144.762	37.954	1.00	80.36	CS3	ATOM	17663	CA	ARG	83	198.652	141.956	48.125	1.00	121.04	CS3
ATOM	17611	O	ALA	72	192.859	143.799	38.695	1.00	80.36	CS3	ATOM	17664	CB	ARG	83	197.451	141.237	47.498	1.00	126.59	CS3
ATOM	17612	N	ALA	73	193.144	145.974	38.126	1.00	84.33	CS3	ATOM	17665	CG	ARG	83	197.734	139.834	46.967	1.00	126.59	CS3
ATOM	17613	CA	ALA	73	194.069	146.285	39.210	1.00	84.33	CS3	ATOM	17666	CD	ARG	83	198.747	139.833	45.836	1.00	126.59	CS3
ATOM	17614	CB	ALA	73	194.265	147.788	39.303	1.00	39.47	CS3	ATOM	17667	NE	ARG	83	198.928	138.502	45.262	1.00	126.59	CS3

ATOM	17668	CZ	ARG	83	197.998	137.855	44.566	1.00126.59	CS3
ATOM	17669	NH1	ARG	83	196.814	138.416	44.352	1.00126.59	CS3
ATOM	17670	NH2	ARG	83	198.251	136.645	44.084	1.00126.59	CS3
ATOM	17671	C	ARG	83	199.409	142.716	47.034	1.00121.04	CS3
ATOM	17672	O	ARG	83	199.114	142.571	45.852	1.00121.04	CS3
ATOM	17673	N	ILE	84	200.365	143.542	47.442	1.00102.99	CS3
ATOM	17674	CA	ILE	84	201.212	144.292	46.517	1.00102.99	CS3
ATOM	17675	CB	ILE	84	200.719	145.720	46.264	1.00 80.98	CS3
ATOM	17676	CG2	ILE	84	201.579	146.377	45.197	1.00 80.98	CS3
ATOM	17677	CG1	ILE	84	199.276	145.695	45.769	1.00 80.98	CS3
ATOM	17678	CD1	ILE	84	198.719	147.074	45.437	1.00 80.98	CS3
ATOM	17679	C	ILE	84	202.523	144.349	47.268	1.00102.99	CS3
ATOM	17680	O	ILE	84	203.607	144.316	46.679	1.00102.99	CS3
ATOM	17681	N	ARG	85	202.395	144.445	48.588	1.00107.39	CS3
ATOM	17682	CA	ARG	85	203.539	144.436	49.483	1.00107.39	CS3
ATOM	17683	CB	ARG	85	203.117	144.818	50.903	1.00160.37	CS3
ATOM	17684	CG	ARG	85	204.109	144.389	51.976	1.00160.37	CS3
ATOM	17685	CD	ARG	85	203.397	144.116	53.286	1.00160.37	CS3
ATOM	17686	NE	ARG	85	202.866	145.334	53.887	1.00160.37	CS3
ATOM	17687	CZ	ARG	85	201.980	145.351	54.880	1.00160.37	CS3
ATOM	17688	NH1	ARG	85	201.520	144.211	55.380	1.00160.37	CS3
ATOM	17689	NH2	ARG	85	201.560	146.507	55.382	1.00160.37	CS3
ATOM	17690	C	ARG	85	203.926	142.966	49.449	1.00107.39	CS3
ATOM	17691	O	ARG	85	205.099	142.609	49.487	1.00107.39	CS3
ATOM	17692	N	VAL	86	202.909	142.117	49.373	1.00 98.26	CS3
ATOM	17693	CA	VAL	86	203.128	140.687	49.310	1.00 98.26	CS3
ATOM	17694	CB	VAL	86	201.783	139.914	49.285	1.00108.87	CS3
ATOM	17695	CG1	VAL	86	202.036	138.414	49.403	1.00108.87	CS3
ATOM	17696	CG2	VAL	86	200.887	140.388	50.424	1.00108.87	CS3
ATOM	17697	C	VAL	86	203.902	140.440	48.018	1.00 98.26	CS3
ATOM	17698	O	VAL	86	204.841	139.643	47.988	1.00 98.26	CS3
ATOM	17699	N	LEU	87	203.513	141.137	46.952	1.00108.99	CS3
ATOM	17700	CA	LEU	87	204.196	140.994	45.669	1.00108.99	CS3
ATOM	17701	CB	LEU	87	203.516	141.837	44.582	1.00 88.78	CS3
ATOM	17702	CG	LEU	87	202.150	141.371	44.064	1.00 88.78	CS3
ATOM	17703	CD1	LEU	87	201.679	142.300	42.953	1.00 88.78	CS3
ATOM	17704	CD2	LEU	87	202.255	139.938	43.556	1.00 88.78	CS3
ATOM	17705	C	LEU	87	205.636	141.453	45.832	1.00108.99	CS3
ATOM	17706	O	LEU	87	206.558	140.636	45.863	1.00108.99	CS3
ATOM	17707	N	ARG	88	205.816	142.765	45.942	1.00 80.30	CS3
ATOM	17708	CA	ARG	88	207.138	143.351	46.117	1.00 80.30	CS3
ATOM	17709	CB	ARG	88	206.991	144.793	46.597	1.00119.14	CS3
ATOM	17710	CG	ARG	88	206.349	145.698	45.566	1.00119.14	CS3
ATOM	17711	CD	ARG	88	206.091	147.085	46.116	1.00119.14	CS3
ATOM	17712	NE	ARG	88	206.132	148.098	45.063	1.00119.14	CS3
ATOM	17713	CZ	ARG	88	205.818	149.380	45.239	1.00119.14	CS3
ATOM	17714	NH1	ARG	88	205.430	149.814	46.433	1.00119.14	CS3
ATOM	17715	NH2	ARG	88	205.908	150.234	44.224	1.00119.14	CS3
ATOM	17716	C	ARG	88	208.007	142.550	47.094	1.00 80.30	CS3
ATOM	17717	O	ARG	88	209.236	142.602	47.028	1.00 80.30	CS3
ATOM	17718	N	GLU	89	207.359	141.805	47.988	1.00115.00	CS3
ATOM	17719	CA	GLU	89	208.054	140.983	48.979	1.00115.00	CS3
ATOM	17720	CB	GLU	89	207.068	140.484	50.038	1.00149.21	CS3
ATOM	17721	CG	GLU	89	207.045	141.328	51.296	1.00149.21	CS3
ATOM	17722	CD	GLU	89	208.293	141.142	52.136	1.00149.21	CS3
ATOM	17723	OE1	GLU	89	208.404	140.103	52.819	1.00149.21	CS3
ATOM	17724	OE2	GLU	89	209.169	142.031	52.103	1.00149.21	CS3
ATOM	17725	C	GLU	89	208.773	139.793	48.358	1.00115.00	CS3
ATOM	17726	O	GLU	89	209.994	139.684	48.463	1.00115.00	CS3
ATOM	17727	N	GLU	90	208.015	138.895	47.728	1.00151.82	CS3
ATOM	17728	CA	GLU	90	208.593	137.715	47.079	1.00151.82	CS3
ATOM	17729	CB	GLU	90	207.500	136.811	46.508	1.00171.91	CS3
ATOM	17730	CG	GLU	90	206.934	135.800	47.477	1.00171.91	CS3
ATOM	17731	CD	GLU	90	206.130	134.723	46.770	1.00171.91	CS3
ATOM	17732	OE1	GLU	90	205.111	135.063	46.129	1.00171.91	CS3
ATOM	17733	OE2	GLU	90	206.524	133.539	46.851	1.00171.91	CS3
ATOM	17734	C	GLU	90	209.496	138.146	45.938	1.00151.82	CS3
ATOM	17735	O	GLU	90	210.392	137.412	45.517	1.00151.82	CS3
ATOM	17736	N	LEU	91	209.234	139.347	45.442	1.00 81.92	CS3
ATOM	17737	CA	LEU	91	209.980	139.922	44.340	1.00 81.92	CS3
ATOM	17738	CB	LEU	91	209.216	141.136	43.811	1.00 78.37	CS3
ATOM	17739	CG	LEU	91	209.968	142.172	42.992	1.00 78.37	CS3
ATOM	17740	CD1	LEU	91	208.977	142.922	42.109	1.00 78.37	CS3
ATOM	17741	CD2	LEU	91	210.723	143.105	43.940	1.00 78.37	CS3
ATOM	17742	C	LEU	91	211.406	140.296	44.724	1.00 81.92	CS3
ATOM	17743	O	LEU	91	212.308	140.287	43.886	1.00 81.92	CS3
ATOM	17744	N	ALA	92	211.608	140.633	45.992	1.00 96.29	CS3
ATOM	17745	CA	ALA	92	212.936	140.990	46.466	1.00 96.29	CS3
ATOM	17746	CB	ALA	92	212.834	141.914	47.663	1.00 75.59	CS3
ATOM	17747	C	ALA	92	213.676	139.706	46.834	1.00 96.29	CS3
ATOM	17748	O	ALA	92	214.893	139.712	47.013	1.00 96.29	CS3
ATOM	17749	N	LYS	93	212.926	138.610	46.952	1.00114.44	CS3
ATOM	17750	CA	LYS	93	213.497	137.294	47.256	1.00114.44	CS3
ATOM	17751	CB	LYS	93	212.418	136.341	47.785	1.00121.54	CS3
ATOM	17752	CG	LYS	93	211.842	136.697	49.147	1.00121.54	CS3
ATOM	17753	CD	LYS	93	212.769	136.298	50.287	1.00121.54	CS3
ATOM	17754	CE	LYS	93	212.069	136.468	51.636	1.00121.54	CS3
ATOM	17755	NZ	LYS	93	212.882	135.972	52.786	1.00121.54	CS3
ATOM	17756	C	LYS	93	214.051	136.750	45.933	1.00114.44	CS3
ATOM	17757	O	LYS	93	214.755	135.737	45.890	1.00114.44	CS3
ATOM	17758	N	LEU	94	213.698	137.439	44.852	1.00110.59	CS3
ATOM	17759	CA	LEU	94	214.145	137.091	43.511	1.00110.59	CS3
ATOM	17760	CB	LEU	94	213.041	137.372	42.486	1.00 71.44	CS3
ATOM	17761	CG	LEU	94	212.074	136.281	42.024	1.00 71.44	CS3
ATOM	17762	CD1	LEU	94	211.005	136.916	41.140	1.00 71.44	CS3
ATOM	17763	CD2	LEU	94	212.826	135.199	41.260	1.00 71.44	CS3
ATOM	17764	C	LEU	94	215.338	137.973	43.189	1.00110.59	CS3
ATOM	17765	O	LEU	94	216.437	137.490	42.913	1.00110.59	CS3
ATOM	17766	N	THR	95	215.099	139.278	43.244	1.00124.35	CS3
ATOM	17767	CA	THR	95	216.114	140.270	42.944	1.00124.35	CS3
ATOM	17768	CB	THR	95	215.631	141.219	41.859	1.00 79.55	CS3
ATOM	17769	OG1	THR	95	214.581	142.048	42.381	1.00 79.55	CS3
ATOM	17770	CG2	THR	95	215.111	140.426	40.668	1.00 79.55	CS3
ATOM	17771	C	THR	95	216.471	141.117	44.149	1.00124.35	CS3
ATOM	17772	O	THR	95	215.620	141.819	44.703	1.00124.35	CS3
ATOM	17773	N	GLY	96	217.733	141.056	44.551	1.00105.67	CS3

ATOM	17774	CA	GLY	96	218.160	141.858	45.676	1.00105.67	CS3	ATOM	17827	C	VAL	103	198.674	149.854	37.642	1.00 71.74	CS3
ATOM	17775	C	GLY	96	218.468	143.256	45.176	1.00105.67	CS3	ATOM	17828	O	VAL	103	197.807	150.436	38.295	1.00 71.74	CS3
ATOM	17776	O	GLY	96	219.540	143.792	45.455	1.00105.67	CS3	ATOM	17829	N	GLN	104	198.877	150.064	36.346	1.00 80.45	CS3
ATOM	17777	N	LYS	97	217.539	143.852	44.435	1.00 83.52	CS3	ATOM	17830	CA	GLN	104	197.996	150.935	35.595	1.00 80.45	CS3
ATOM	17778	CA	LYS	97	217.764	145.191	43.904	1.00 83.52	CS3	ATOM	17831	CB	GLN	104	198.770	151.941	34.747	1.00 87.74	CS3
ATOM	17779	CB	LYS	97	217.755	145.177	42.375	1.00146.82	CS3	ATOM	17832	CG	GLN	104	199.656	151.351	33.689	1.00 87.74	CS3
ATOM	17780	CG	LYS	97	218.192	143.882	41.730	1.00146.82	CS3	ATOM	17833	CD	GLN	104	199.931	152.349	32.585	1.00 87.74	CS3
ATOM	17781	CD	LYS	97	217.874	143.931	40.245	1.00146.82	CS3	ATOM	17834	OE1	GLN	104	200.279	153.499	32.848	1.00 87.74	CS3
ATOM	17782	CE	LYS	97	217.517	142.557	39.711	1.00146.82	CS3	ATOM	17835	NE2	GLN	104	199.773	151.915	31.340	1.00 87.74	CS3
ATOM	17783	NZ	LYS	97	216.803	142.606	38.395	1.00146.82	CS3	ATOM	17836	C	GLN	104	197.222	149.965	34.720	1.00 80.45	CS3
ATOM	17784	C	LYS	97	216.724	146.202	44.367	1.00 83.52	CS3	ATOM	17837	O	GLN	104	197.777	149.348	33.814	1.00 80.45	CS3
ATOM	17785	O	LYS	97	216.858	147.393	44.089	1.00 83.52	CS3	ATOM	17838	N	GLU	105	195.940	149.812	35.033	1.00102.23	CS3
ATOM	17786	N	ASN	98	215.692	145.738	45.064	1.00 68.17	CS3	ATOM	17839	CA	GLU	105	195.058	148.897	34.324	1.00102.23	CS3
ATOM	17787	CA	ASN	98	214.634	146.640	45.522	1.00 68.17	CS3	ATOM	17840	CB	GLU	105	193.652	148.960	34.918	1.00151.30	CS3
ATOM	17788	CB	ASN	98	215.230	147.809	46.323	1.00121.01	CS3	ATOM	17841	CG	GLU	105	193.442	148.051	36.111	1.00151.30	CS3
ATOM	17789	CG	ASN	98	214.217	148.911	46.601	1.00121.01	CS3	ATOM	17842	CD	GLU	105	192.022	148.113	36.638	1.00151.30	CS3
ATOM	17790	OD1	ASN	98	213.114	148.654	47.091	1.00121.01	CS3	ATOM	17843	OE1	GLU	105	191.079	148.019	35.822	1.00151.30	CS3
ATOM	17791	ND2	ASN	98	214.593	150.149	46.296	1.00121.01	CS3	ATOM	17844	OE2	GLU	105	191.849	148.247	37.866	1.00151.30	CS3
ATOM	17792	C	ASN	98	213.891	147.160	44.293	1.00 68.17	CS3	ATOM	17845	C	GLU	105	194.958	149.080	32.822	1.00102.23	CS3
ATOM	17793	O	ASN	98	214.250	148.195	43.711	1.00 68.17	CS3	ATOM	17846	O	GLU	105	195.505	150.022	32.247	1.00102.23	CS3
ATOM	17794	N	VAL	99	212.848	146.433	43.903	1.00 91.51	CS3	ATOM	17847	N	VAL	106	194.233	148.155	32.205	1.00107.30	CS3
ATOM	17795	CA	VAL	99	212.074	146.803	42.728	1.00 91.51	CS3	ATOM	17848	CA	VAL	106	194.015	148.154	30.773	1.00107.30	CS3
ATOM	17796	CB	VAL	99	211.467	145.547	42.079	1.00133.66	CS3	ATOM	17849	CB	VAL	106	194.318	146.771	30.193	1.00128.23	CS3
ATOM	17797	CG1	VAL	99	210.851	145.887	40.730	1.00133.66	CS3	ATOM	17850	CG1	VAL	106	194.231	146.811	28.680	1.00128.23	CS3
ATOM	17798	CG2	VAL	99	212.559	144.491	41.909	1.00133.66	CS3	ATOM	17851	CG2	VAL	106	195.694	146.315	30.657	1.00128.23	CS3
ATOM	17799	C	VAL	99	210.990	147.831	43.034	1.00 91.51	CS3	ATOM	17852	C	VAL	106	192.566	148.526	30.473	1.00107.30	CS3
ATOM	17800	O	VAL	99	210.861	148.287	44.163	1.00 91.51	CS3	ATOM	17853	O	VAL	106	191.645	147.733	30.674	1.00107.30	CS3
ATOM	17801	N	ALA	100	210.218	148.203	42.022	1.00 71.47	CS3	ATOM	17854	N	GLN	107	192.383	149.750	30.001	1.00 92.89	CS3
ATOM	17802	CA	ALA	100	209.176	149.196	42.203	1.00 71.47	CS3	ATOM	17855	CA	GLN	107	191.074	150.285	29.664	1.00 92.89	CS3
ATOM	17803	CB	ALA	100	209.724	150.556	41.854	1.00 22.33	CS3	ATOM	17856	CB	GLN	107	191.178	151.793	29.472	1.00145.31	CS3
ATOM	17804	C	ALA	100	207.927	148.916	41.374	1.00 71.47	CS3	ATOM	17857	CG	GLN	107	192.529	152.350	29.879	1.00145.31	CS3
ATOM	17805	O	ALA	100	207.684	149.573	40.360	1.00 71.47	CS3	ATOM	17858	CD	GLN	107	193.683	151.683	29.136	1.00145.31	CS3
ATOM	17806	N	LEU	101	207.125	147.953	41.815	1.00 75.38	CS3	ATOM	17859	OE1	GLN	107	193.761	151.737	27.907	1.00145.31	CS3
ATOM	17807	CA	LEU	101	205.905	147.604	41.102	1.00 75.38	CS3	ATOM	17860	NE2	GLN	107	194.578	151.043	29.883	1.00145.31	CS3
ATOM	17808	CB	LEU	101	205.042	146.664	41.938	1.00 77.91	CS3	ATOM	17861	C	GLN	107	190.538	149.638	28.391	1.00 92.89	CS3
ATOM	17809	CG	LEU	101	205.327	145.186	41.721	1.00 77.91	CS3	ATOM	17862	O	GLN	107	190.972	149.954	27.276	1.00 92.89	CS3
ATOM	17810	CD1	LEU	101	204.260	144.353	42.428	1.00 77.91	CS3	ATOM	17863	N	ASN	108	189.585	148.732	28.585	1.00 92.62	CS3
ATOM	17811	CD2	LEU	101	205.334	144.891	40.225	1.00 77.91	CS3	ATOM	17864	CA	ASN	108	188.931	147.984	27.516	1.00 92.62	CS3
ATOM	17812	C	LEU	101	205.061	148.798	40.688	1.00 75.38	CS3	ATOM	17865	CB	ASN	108	188.671	148.864	26.290	1.00125.59	CS3
ATOM	17813	O	LEU	101	205.302	149.933	41.091	1.00 75.38	CS3	ATOM	17866	CG	ASN	108	187.546	148.328	25.424	1.00125.59	CS3
ATOM	17814	N	ASN	102	204.060	148.510	39.871	1.00106.84	CS3	ATOM	17867	OD1	ASN	108	187.536	147.152	25.059	1.00125.59	CS3
ATOM	17815	CA	ASN	102	203.139	149.512	39.372	1.00106.84	CS3	ATOM	17868	ND2	ASN	108	186.589	149.189	25.094	1.00125.59	CS3
ATOM	17816	CB	ASN	102	203.782	150.331	38.269	1.00 77.82	CS3	ATOM	17869	C	ASN	108	189.761	146.777	27.113	1.00 92.62	CS3
ATOM	17817	CG	ASN	102	204.763	151.323	38.802	1.00 77.82	CS3	ATOM	17870	O	ASN	108	190.450	146.797	26.098	1.00 92.62	CS3
ATOM	17818	OD1	ASN	102	204.380	152.289	39.464	1.00 77.82	CS3	ATOM	17871	N	PRO	109	189.715	145.708	27.922	1.00 54.14	CS3
ATOM	17819	ND2	ASN	102	206.043	151.092	38.537	1.00 77.82	CS3	ATOM	17872	CD	PRO	109	189.037	145.609	29.226	1.00 90.48	CS3
ATOM	17820	C	ASN	102	201.936	148.797	38.821	1.00106.84	CS3	ATOM	17873	CA	PRO	109	190.465	144.483	27.642	1.00 54.14	CS3
ATOM	17821	O	ASN	102	202.030	147.643	38.409	1.00106.84	CS3	ATOM	17874	CB	PRO	109	190.008	143.540	28.754	1.00 90.48	CS3
ATOM	17822	N	VAL	103	200.801	149.479	38.812	1.00 71.74	CS3	ATOM	17875	CG	PRO	109	189.780	144.466	29.891	1.00 90.48	CS3
ATOM	17823	CA	VAL	103	199.603	148.865	38.298	1.00 71.74	CS3	ATOM	17876	C	PRO	109	190.127	143.937	26.260	1.00 54.14	CS3
ATOM	17824	CB	VAL	103	198.837	148.106	39.403	1.00 62.72	CS3	ATOM	17877	O	PRO	109	190.840	143.095	25.721	1.00 54.14	CS3
ATOM	17825	CG1	VAL	103	197.480	147.655	38.881	1.00 62.72	CS3	ATOM	17878	N	ASN	110	189.027	144.415	25.696	1.00 94.41	CS3
ATOM	17826	CG2	VAL	103	199.635	146.884	39.846	1.00 62.72	CS3	ATOM	17879	CA	ASN	110	188.612	143.962	24.386	1.00 94.41	CS3

ATOM	17880	CB	ASN	110	187.159	144.347	24.141	1.00128.87	CS3	ATOM	17933	CA	GLN	118	193.361	134.293	27.140	1.00 78.18	CS3
ATOM	17881	CG	ASN	110	186.204	143.295	24.645	1.00128.87	CS3	ATOM	17934	CB	GLN	118	193.892	135.111	28.321	1.00 95.91	CS3
ATOM	17882	OD1	ASN	110	186.299	142.851	25.790	1.00128.87	CS3	ATOM	17935	CG	GLN	118	195.265	135.721	28.042	1.00 95.91	CS3
ATOM	17883	ND2	ASN	110	185.281	142.880	23.789	1.00128.87	CS3	ATOM	17936	CD	GLN	118	195.962	136.231	29.284	1.00 95.91	CS3
ATOM	17884	C	ASN	110	189.501	144.490	23.279	1.00 94.41	CS3	ATOM	17937	OE1	GLN	118	195.510	137.177	29.929	1.00 95.91	CS3
ATOM	17885	O	ASN	110	189.483	143.969	22.168	1.00 94.41	CS3	ATOM	17938	NE2	GLN	118	197.078	135.602	29.625	1.00 95.91	CS3
ATOM	17886	N	LEU	111	190.284	145.519	23.578	1.00 61.00	CS3	ATOM	17939	C	GLN	118	191.860	134.036	27.279	1.00 78.18	CS3
ATOM	17887	CA	LEU	111	191.188	146.073	22.578	1.00 61.00	CS3	ATOM	17940	O	GLN	118	191.434	132.976	27.755	1.00 78.18	CS3
ATOM	17888	CB	LEU	111	191.024	147.589	22.487	1.00 47.70	CS3	ATOM	17941	N	ARG	119	191.067	135.014	26.851	1.00 84.60	CS3
ATOM	17889	CG	LEU	111	189.788	148.030	21.699	1.00 47.70	CS3	ATOM	17942	CA	ARG	119	189.615	134.910	26.897	1.00 84.60	CS3
ATOM	17890	CD1	LEU	111	189.916	149.516	21.328	1.00 47.70	CS3	ATOM	17943	CB	ARG	119	188.992	136.104	26.172	1.00115.69	CS3
ATOM	17891	CD2	LEU	111	189.662	147.189	20.426	1.00 47.70	CS3	ATOM	17944	CG	ARG	119	188.048	136.933	27.011	1.00115.69	CS3
ATOM	17892	C	LEU	111	192.648	145.700	22.841	1.00 61.00	CS3	ATOM	17945	CD	ARG	119	186.643	136.361	27.028	1.00115.69	CS3
ATOM	17893	O	LEU	111	193.578	146.295	22.277	1.00 61.00	CS3	ATOM	17946	NE	ARG	119	185.731	137.195	27.812	1.00115.69	CS3
ATOM	17894	N	SER	112	192.830	144.696	23.694	1.00 48.58	CS3	ATOM	17947	CZ	ARG	119	185.542	138.500	27.615	1.00115.69	CS3
ATOM	17895	CA	SER	112	194.148	144.207	24.031	1.00 48.58	CS3	ATOM	17948	NH1	ARG	119	186.202	139.143	26.657	1.00115.69	CS3
ATOM	17896	CB	SER	112	194.401	144.294	25.534	1.00120.50	CS3	ATOM	17949	NH2	ARG	119	184.686	139.167	28.379	1.00115.69	CS3
ATOM	17897	OG	SER	112	195.659	143.723	25.861	1.00120.50	CS3	ATOM	17950	C	ARG	119	189.219	133.628	26.182	1.00 84.60	CS3
ATOM	17898	C	SER	112	194.250	142.764	23.592	1.00 48.58	CS3	ATOM	17951	O	ARG	119	188.510	132.778	26.728	1.00 84.60	CS3
ATOM	17899	O	SER	112	193.730	141.856	24.245	1.00 48.58	CS3	ATOM	17952	N	VAL	120	189.707	133.503	24.952	1.00 55.40	CS3
ATOM	17900	N	ALA	113	194.939	142.561	22.479	1.00 56.43	CS3	ATOM	17953	CA	VAL	120	189.422	132.359	24.112	1.00 55.40	CS3
ATOM	17901	CA	ALA	113	195.134	141.240	21.916	1.00 56.43	CS3	ATOM	17954	CB	VAL	120	189.907	132.594	22.694	1.00 40.64	CS3
ATOM	17902	CB	ALA	113	196.200	141.309	20.840	1.00 48.47	CS3	ATOM	17955	CG1	VAL	120	189.677	131.338	21.872	1.00 40.64	CS3
ATOM	17903	C	ALA	113	195.502	140.172	22.952	1.00 56.43	CS3	ATOM	17956	CG2	VAL	120	189.184	133.799	22.089	1.00 40.64	CS3
ATOM	17904	O	ALA	113	194.846	139.128	23.038	1.00 56.43	CS3	ATOM	17957	C	VAL	120	190.047	131.071	24.598	1.00 55.40	CS3
ATOM	17905	N	PRO	114	196.543	140.428	23.766	1.00 55.33	CS3	ATOM	17958	O	VAL	120	189.432	130.009	24.518	1.00 55.40	CS3
ATOM	17906	CD	PRO	114	197.250	141.712	23.928	1.00 34.39	CS3	ATOM	17959	N	ALA	121	191.276	131.148	25.085	1.00 53.41	CS3
ATOM	17907	CA	PRO	114	196.979	139.462	24.783	1.00 55.33	CS3	ATOM	17960	CA	ALA	121	191.927	129.938	25.555	1.00 53.41	CS3
ATOM	17908	CB	PRO	114	197.969	140.258	25.626	1.00 34.39	CS3	ATOM	17961	CB	ALA	121	193.380	130.200	25.865	1.00 62.70	CS3
ATOM	17909	CG	PRO	114	198.487	141.296	24.668	1.00 34.39	CS3	ATOM	17962	C	ALA	121	191.210	129.426	26.788	1.00 53.41	CS3
ATOM	17910	C	PRO	114	195.836	138.935	25.618	1.00 55.33	CS3	ATOM	17963	O	ALA	121	191.169	128.216	27.029	1.00 53.41	CS3
ATOM	17911	O	PRO	114	195.726	137.730	25.849	1.00 55.33	CS3	ATOM	17964	N	GLU	122	190.648	130.354	27.564	1.00 82.04	CS3
ATOM	17912	N	LEU	115	194.989	139.850	26.077	1.00 67.60	CS3	ATOM	17965	CA	GLU	122	189.913	130.005	28.779	1.00 82.04	CS3
ATOM	17913	CA	LEU	115	193.846	139.489	26.903	1.00 67.60	CS3	ATOM	17966	CB	GLU	122	189.548	131.264	29.564	1.00180.00	CS3
ATOM	17914	CB	LEU	115	193.155	140.756	27.400	1.00 83.91	CS3	ATOM	17967	CG	GLU	122	190.677	131.823	30.399	1.00180.00	CS3
ATOM	17915	CG	LEU	115	194.083	141.617	28.258	1.00 83.91	CS3	ATOM	17968	CD	GLU	122	190.235	133.008	31.232	1.00180.00	CS3
ATOM	17916	CD1	LEU	115	193.393	142.913	28.643	1.00 83.91	CS3	ATOM	17969	OE1	GLU	122	189.231	132.877	31.967	1.00180.00	CS3
ATOM	17917	CD2	LEU	115	194.488	140.825	29.498	1.00 83.91	CS3	ATOM	17970	OE2	GLU	122	190.894	134.066	31.155	1.00180.00	CS3
ATOM	17918	C	LEU	115	192.875	138.633	26.112	1.00 67.60	CS3	ATOM	17971	C	GLU	122	188.637	129.243	28.434	1.00 82.04	CS3
ATOM	17919	O	LEU	115	192.533	137.524	26.525	1.00 67.60	CS3	ATOM	17972	O	GLU	122	188.423	128.120	28.890	1.00 82.04	CS3
ATOM	17920	N	VAL	116	192.449	139.158	24.967	1.00 54.16	CS3	ATOM	17973	N	GLN	123	187.784	129.863	27.631	1.00 64.47	CS3
ATOM	17921	CA	VAL	116	191.531	138.456	24.080	1.00 54.16	CS3	ATOM	17974	CA	GLN	123	186.549	129.220	27.232	1.00 64.47	CS3
ATOM	17922	CB	VAL	116	191.469	139.148	22.712	1.00 36.37	CS3	ATOM	17975	CB	GLN	123	185.831	130.068	26.176	1.00 98.33	CS3
ATOM	17923	CG1	VAL	116	190.497	138.407	21.799	1.00 36.37	CS3	ATOM	17976	CG	GLN	123	185.599	131.511	26.602	1.00 98.33	CS3
ATOM	17924	CG2	VAL	116	191.044	140.598	22.882	1.00 36.37	CS3	ATOM	17977	CD	GLN	123	184.618	132.237	25.701	1.00 98.33	CS3
ATOM	17925	C	VAL	116	191.946	136.995	23.862	1.00 54.16	CS3	ATOM	17978	OE1	GLN	123	183.515	131.748	25.448	1.00 98.33	CS3
ATOM	17926	O	VAL	116	191.101	136.098	23.793	1.00 54.16	CS3	ATOM	17979	NE2	GLN	123	185.008	133.413	25.218	1.00 98.33	CS3
ATOM	17927	N	ALA	117	193.247	136.755	23.749	1.00 64.51	CS3	ATOM	17980	C	GLN	123	186.885	127.839	26.678	1.00 64.47	CS3
ATOM	17928	CA	ALA	117	193.728	135.399	23.542	1.00 64.51	CS3	ATOM	17981	O	GLN	123	186.311	126.842	27.099	1.00 64.47	CS3
ATOM	17929	CB	ALA	117	195.237	135.385	23.390	1.00 32.43	CS3	ATOM	17982	N	ILE	124	187.830	127.781	25.745	1.00 54.52	CS3
ATOM	17930	C	ALA	117	193.328	134.527	24.706	1.00 64.51	CS3	ATOM	17983	CA	ILE	124	188.224	126.508	25.158	1.00 54.52	CS3
ATOM	17931	O	ALA	117	192.741	133.455	24.525	1.00 64.51	CS3	ATOM	17984	CB	ILE	124	189.459	126.662	24.227	1.00 55.00	CS3
ATOM	17932	N	GLN	118	193.652	135.006	25.903	1.00 78.18	CS3	ATOM	17985	CG2	ILE	124	190.036	125.277	23.857	1.00 55.00	CS3

ATOM	17986	CG1	ILE	124	189.059	127.432	22.967	1.00	55.00	CS3	ATOM	18039	CB	VAL	130	186.745	126.110	18.882	1.00	44.53	CS3
ATOM	17987	CD1	ILE	124	190.220	127.680	22.010	1.00	55.00	CS3	ATOM	18040	CG1	VAL	130	187.773	126.990	18.195	1.00	44.53	CS3
ATOM	17988	C	ILE	124	188.579	125.541	26.273	1.00	54.52	CS3	ATOM	18041	CG2	VAL	130	187.422	125.186	19.895	1.00	44.53	CS3
ATOM	17989	O	ILE	124	188.160	124.372	26.271	1.00	54.52	CS3	ATOM	18042	C	VAL	130	185.135	128.009	18.609	1.00	46.95	CS3
ATOM	17990	N	GLU	125	189.362	126.049	27.218	1.00	77.08	CS3	ATOM	18043	O	VAL	130	185.287	129.215	18.807	1.00	46.95	CS3
ATOM	17991	CA	GLU	125	189.825	125.285	28.364	1.00	77.08	CS3	ATOM	18044	N	ARG	131	184.471	127.526	17.566	1.00	54.92	CS3
ATOM	17992	CB	GLU	125	190.697	126.187	29.231	1.00	147.14	CS3	ATOM	18045	CA	ARG	131	183.926	128.417	16.558	1.00	54.92	CS3
ATOM	17993	CG	GLU	125	191.642	125.471	30.156	1.00	147.14	CS3	ATOM	18046	CB	ARG	131	182.982	127.657	15.630	1.00	170.67	CS3
ATOM	17994	CD	GLU	125	192.524	126.448	30.905	1.00	147.14	CS3	ATOM	18047	CG	ARG	131	183.691	126.626	14.782	1.00	170.67	CS3
ATOM	17995	OE1	GLU	125	191.978	127.262	31.686	1.00	147.14	CS3	ATOM	18048	CD	ARG	131	182.722	125.885	13.893	1.00	170.67	CS3
ATOM	17996	OE2	GLU	125	193.757	126.410	30.706	1.00	147.14	CS3	ATOM	18049	NE	ARG	131	183.354	124.741	13.248	1.00	170.67	CS3
ATOM	17997	C	GLU	125	188.640	124.745	29.169	1.00	77.08	CS3	ATOM	18050	CZ	ARG	131	182.686	123.786	12.610	1.00	170.67	CS3
ATOM	17998	O	GLU	125	188.700	123.636	29.704	1.00	77.08	CS3	ATOM	18051	NH1	ARG	131	181.363	123.842	12.532	1.00	170.67	CS3
ATOM	17999	N	ARG	126	187.564	125.527	29.245	1.00	69.32	CS3	ATOM	18052	NH2	ARG	131	183.338	122.771	12.057	1.00	170.67	CS3
ATOM	18000	CA	ARG	126	186.372	125.116	29.979	1.00	69.32	CS3	ATOM	18053	C	ARG	131	183.210	129.612	17.161	1.00	54.92	CS3
ATOM	18001	CB	ARG	126	185.448	126.305	30.231	1.00	111.81	CS3	ATOM	18054	O	ARG	131	183.460	130.752	16.767	1.00	54.92	CS3
ATOM	18002	CG	ARG	126	186.019	127.339	31.189	1.00	111.81	CS3	ATOM	18055	N	ARG	132	182.319	129.362	18.118	1.00	77.68	CS3
ATOM	18003	CD	ARG	126	185.024	128.454	31.432	1.00	111.81	CS3	ATOM	18056	CA	ARG	132	181.584	130.457	18.747	1.00	77.68	CS3
ATOM	18004	NE	ARG	126	185.676	129.656	31.930	1.00	111.81	CS3	ATOM	18057	CB	ARG	132	180.642	129.925	19.828	1.00	173.69	CS3
ATOM	18005	CZ	ARG	126	185.092	130.847	31.980	1.00	111.81	CS3	ATOM	18058	CG	ARG	132	179.615	128.946	19.302	1.00	173.69	CS3
ATOM	18006	NH1	ARG	126	183.837	130.990	31.562	1.00	111.81	CS3	ATOM	18059	CD	ARG	132	178.480	128.734	20.287	1.00	173.69	CS3
ATOM	18007	NH2	ARG	126	185.767	131.898	32.431	1.00	111.81	CS3	ATOM	18060	NE	ARG	132	177.484	127.807	19.755	1.00	173.69	CS3
ATOM	18008	C	ARG	126	185.629	124.050	29.203	1.00	69.32	CS3	ATOM	18061	CZ	ARG	132	176.314	127.552	20.331	1.00	173.69	CS3
ATOM	18009	O	ARG	126	185.209	123.050	29.781	1.00	69.32	CS3	ATOM	18062	NH1	ARG	132	175.984	128.156	21.465	1.00	173.69	CS3
ATOM	18010	N	ARG	127	185.469	124.292	27.902	1.00	73.89	CS3	ATOM	18063	NH2	ARG	132	175.472	126.691	19.774	1.00	173.69	CS3
ATOM	18011	CA	ARG	127	184.821	123.390	26.945	1.00	73.89	CS3	ATOM	18064	C	ARG	132	182.588	131.402	19.368	1.00	77.68	CS3
ATOM	18012	CB	ARG	127	184.238	122.155	27.623	1.00	63.14	CS3	ATOM	18065	O	ARG	132	182.742	132.551	18.942	1.00	77.68	CS3
ATOM	18013	CG	ARG	127	185.297	121.180	28.065	1.00	63.14	CS3	ATOM	18066	N	ALA	133	183.280	130.885	20.374	1.00	67.43	CS3
ATOM	18014	CD	ARG	127	184.753	120.216	29.077	1.00	63.14	CS3	ATOM	18067	CA	ALA	133	184.289	131.639	21.089	1.00	67.43	CS3
ATOM	18015	NE	ARG	127	185.813	119.708	29.935	1.00	63.14	CS3	ATOM	18068	CB	ALA	133	185.291	130.695	21.687	1.00	31.55	CS3
ATOM	18016	CZ	ARG	127	185.873	118.458	30.389	1.00	63.14	CS3	ATOM	18069	C	ALA	133	184.990	132.600	20.151	1.00	67.43	CS3
ATOM	18017	NH1	ARG	127	184.923	117.585	30.058	1.00	63.14	CS3	ATOM	18070	O	ALA	133	185.035	133.807	20.391	1.00	67.43	CS3
ATOM	18018	NH2	ARG	127	186.882	118.080	31.178	1.00	63.14	CS3	ATOM	18071	N	ILE	134	185.526	132.059	19.070	1.00	40.08	CS3
ATOM	18019	C	ARG	127	183.753	124.024	26.081	1.00	73.89	CS3	ATOM	18072	CA	ILE	134	186.242	132.873	18.115	1.00	40.08	CS3
ATOM	18020	O	ARG	127	182.776	123.372	25.725	1.00	73.89	CS3	ATOM	18073	CB	ILE	134	186.794	132.008	16.976	1.00	50.10	CS3
ATOM	18021	N	PHE	128	183.942	125.290	25.728	1.00	67.28	CS3	ATOM	18074	CG2	ILE	134	187.793	132.792	16.182	1.00	50.10	CS3
ATOM	18022	CA	PHE	128	182.984	125.972	24.873	1.00	67.28	CS3	ATOM	18075	CG1	ILE	134	187.509	130.787	17.554	1.00	50.10	CS3
ATOM	18023	CB	PHE	128	183.051	127.476	25.119	1.00	113.04	CS3	ATOM	18076	CD1	ILE	134	188.084	129.863	16.508	1.00	50.10	CS3
ATOM	18024	CG	PHE	128	182.536	127.873	26.466	1.00	113.04	CS3	ATOM	18077	C	ILE	134	185.369	133.979	17.533	1.00	40.08	CS3
ATOM	18025	CD1	PHE	128	183.111	127.353	27.622	1.00	113.04	CS3	ATOM	18078	O	ILE	134	185.702	135.164	17.653	1.00	40.08	CS3
ATOM	18026	CD2	PHE	128	181.438	128.718	26.582	1.00	113.04	CS3	ATOM	18079	N	LYS	135	184.259	133.595	16.903	1.00	60.65	CS3
ATOM	18027	CE1	PHE	128	182.596	127.665	28.872	1.00	113.04	CS3	ATOM	18080	CA	LYS	135	183.350	134.562	16.291	1.00	60.65	CS3
ATOM	18028	CE2	PHE	128	180.915	129.036	27.828	1.00	113.04	CS3	ATOM	18081	CB	LYS	135	182.055	133.889	15.843	1.00	94.86	CS3
ATOM	18029	CZ	PHE	128	181.493	128.509	28.977	1.00	113.04	CS3	ATOM	18082	CG	LYS	135	182.224	132.818	14.794	1.00	94.86	CS3
ATOM	18030	C	PHE	128	183.254	125.642	23.406	1.00	67.28	CS3	ATOM	18083	CD	LYS	135	180.878	132.216	14.438	1.00	94.86	CS3
ATOM	18031	O	PHE	128	184.290	125.055	23.068	1.00	67.28	CS3	ATOM	18084	CE	LYS	135	181.016	131.041	13.481	1.00	94.86	CS3
ATOM	18032	N	ALA	129	182.311	125.992	22.537	1.00	68.35	CS3	ATOM	18085	NZ	LYS	135	179.688	130.474	13.100	1.00	94.86	CS3
ATOM	18033	CA	ALA	129	182.466	125.718	21.116	1.00	68.35	CS3	ATOM	18086	C	LYS	135	183.014	135.641	17.303	1.00	60.65	CS3
ATOM	18034	CB	ALA	129	181.138	125.840	20.413	1.00	68.69	CS3	ATOM	18087	O	LYS	135	183.055	136.836	16.984	1.00	60.65	CS3
ATOM	18035	C	ALA	129	183.465	126.695	20.523	1.00	68.35	CS3	ATOM	18088	N	GLN	136	182.684	135.200	18.523	1.00	55.29	CS3
ATOM	18036	O	ALA	129	183.186	127.897	20.399	1.00	68.35	CS3	ATOM	18089	CA	GLN	136	182.336	136.094	19.628	1.00	55.29	CS3
ATOM	18037	N	VAL	130	184.631	126.168	20.161	1.00	46.95	CS3	ATOM	18090	CB	GLN	136	182.081	135.279	20.892	1.00	68.89	CS3
ATOM	18038	CA	VAL	130	185.688	126.986	19.592	1.00	46.95	CS3	ATOM	18091	CG	GLN	136	180.625	134.937	21.147	1.00	68.89	CS3

ATOM	18092	CD	GLN	136	180.464	133.937	22.282	1.00	68.89	CS3
ATOM	18093	OE1	GLN	136	181.230	133.945	23.255	1.00	68.89	CS3
ATOM	18094	NE2	GLN	136	179.459	133.074	22.169	1.00	68.89	CS3
ATOM	18095	C	GLN	136	183.418	137.138	19.902	1.00	55.29	CS3
ATOM	18096	O	GLN	136	183.163	138.341	19.786	1.00	55.29	CS3
ATOM	18097	N	ALA	137	184.619	136.673	20.262	1.00	53.68	CS3
ATOM	18098	CA	ALA	137	185.756	137.556	20.551	1.00	53.68	CS3
ATOM	18099	CB	ALA	137	187.000	136.732	20.839	1.00	57.77	CS3
ATOM	18100	C	ALA	137	186.019	138.496	19.381	1.00	53.68	CS3
ATOM	18101	O	ALA	137	186.252	139.692	19.567	1.00	53.68	CS3
ATOM	18102	N	VAL	138	185.995	137.953	18.169	1.00	56.17	CS3
ATOM	18103	CA	VAL	138	186.207	138.791	17.004	1.00	56.17	CS3
ATOM	18104	CB	VAL	138	186.210	137.961	15.704	1.00	41.24	CS3
ATOM	18105	CG1	VAL	138	186.494	138.866	14.499	1.00	41.24	CS3
ATOM	18106	CG2	VAL	138	187.264	136.870	15.805	1.00	41.24	CS3
ATOM	18107	C	VAL	138	185.055	139.784	16.990	1.00	56.17	CS3
ATOM	18108	O	VAL	138	185.269	140.992	16.943	1.00	56.17	CS3
ATOM	18109	N	GLN	139	183.835	139.259	17.050	1.00	125.73	CS3
ATOM	18110	CA	GLN	139	182.643	140.093	17.067	1.00	125.73	CS3
ATOM	18111	CB	GLN	139	181.388	139.256	16.804	1.00	114.29	CS3
ATOM	18112	CG	GLN	139	180.498	139.802	15.694	1.00	114.29	CS3
ATOM	18113	CD	GLN	139	180.100	141.256	15.905	1.00	114.29	CS3
ATOM	18114	OE1	GLN	139	179.557	141.897	15.006	1.00	114.29	CS3
ATOM	18115	NE2	GLN	139	180.364	141.779	17.095	1.00	114.29	CS3
ATOM	18116	C	GLN	139	182.548	140.712	18.450	1.00	125.73	CS3
ATOM	18117	O	GLN	139	181.505	140.652	19.102	1.00	125.73	CS3
ATOM	18118	N	ARG	140	183.653	141.295	18.897	1.00	62.87	CS3
ATOM	18119	CA	ARG	140	183.720	141.923	20.208	1.00	62.87	CS3
ATOM	18120	CB	ARG	140	184.009	140.868	21.276	1.00	80.83	CS3
ATOM	18121	CG	ARG	140	183.389	141.136	22.626	1.00	80.83	CS3
ATOM	18122	CD	ARG	140	183.937	140.147	23.637	1.00	80.83	CS3
ATOM	18123	NE	ARG	140	183.425	138.792	23.447	1.00	80.83	CS3
ATOM	18124	CZ	ARG	140	184.069	137.686	23.826	1.00	80.83	CS3
ATOM	18125	NH1	ARG	140	185.261	137.772	24.407	1.00	80.83	CS3
ATOM	18126	NH2	ARG	140	183.517	136.489	23.646	1.00	80.83	CS3
ATOM	18127	C	ARG	140	184.857	142.933	20.128	1.00	62.87	CS3
ATOM	18128	O	ARG	140	184.639	144.129	20.276	1.00	62.87	CS3
ATOM	18129	N	VAL	141	186.072	142.441	19.884	1.00	77.53	CS3
ATOM	18130	CA	VAL	141	187.232	143.316	19.739	1.00	77.53	CS3
ATOM	18131	CB	VAL	141	188.459	142.558	19.184	1.00	57.77	CS3
ATOM	18132	CG1	VAL	141	189.563	143.558	18.798	1.00	57.77	CS3
ATOM	18133	CG2	VAL	141	188.967	141.554	20.219	1.00	57.77	CS3
ATOM	18134	C	VAL	141	186.804	144.324	18.692	1.00	77.53	CS3
ATOM	18135	O	VAL	141	187.212	145.486	18.690	1.00	77.53	CS3
ATOM	18136	N	MET	142	185.963	143.840	17.793	1.00	72.79	CS3
ATOM	18137	CA	MET	142	185.444	144.655	16.726	1.00	72.79	CS3
ATOM	18138	CB	MET	142	184.805	143.758	15.669	1.00	70.92	CS3
ATOM	18139	CG	MET	142	184.864	144.319	14.269	1.00	70.92	CS3
ATOM	18140	SD	MET	142	186.548	144.781	13.828	1.00	70.92	CS3
ATOM	18141	CE	MET	142	186.216	146.195	12.776	1.00	70.92	CS3
ATOM	18142	C	MET	142	184.398	145.531	17.373	1.00	72.79	CS3
ATOM	18143	O	MET	142	184.398	146.749	17.205	1.00	72.79	CS3
ATOM	18144	N	GLU	143	183.529	144.882	18.144	1.00	99.27	CS3
ATOM	18145	CA	GLU	143	182.424	145.533	18.846	1.00	99.27	CS3
ATOM	18146	CB	GLU	143	181.671	144.486	19.677	1.00	166.14	CS3
ATOM	18147	CG	GLU	143	180.262	144.886	20.109	1.00	166.14	CS3
ATOM	18148	CD	GLU	143	179.433	143.690	20.575	1.00	166.14	CS3
ATOM	18149	OE1	GLU	143	179.839	143.019	21.551	1.00	166.14	CS3
ATOM	18150	OE2	GLU	143	178.377	143.420	19.961	1.00	166.14	CS3
ATOM	18151	C	GLU	143	182.828	146.713	19.731	1.00	99.27	CS3
ATOM	18152	O	GLU	143	181.984	147.520	20.111	1.00	99.27	CS3
ATOM	18153	N	SER	144	184.114	146.824	20.046	1.00	66.31	CS3
ATOM	18154	CA	SER	144	184.595	147.917	20.887	1.00	66.31	CS3
ATOM	18155	CB	SER	144	185.139	147.357	22.214	1.00	66.83	CS3
ATOM	18156	OG	SER	144	186.172	146.403	22.016	1.00	66.83	CS3
ATOM	18157	C	SER	144	185.661	148.782	20.204	1.00	66.31	CS3
ATOM	18158	O	SER	144	186.740	149.004	20.758	1.00	66.31	CS3
ATOM	18159	N	GLY	145	185.341	149.284	19.011	1.00	96.86	CS3
ATOM	18160	CA	GLY	145	186.278	150.107	18.263	1.00	96.86	CS3
ATOM	18161	C	GLY	145	186.978	149.261	17.220	1.00	96.86	CS3
ATOM	18162	O	GLY	145	186.322	148.653	16.381	1.00	96.86	CS3
ATOM	18163	N	ALA	146	188.307	149.220	17.279	1.00	75.59	CS3
ATOM	18164	CA	ALA	146	189.138	148.423	16.362	1.00	75.59	CS3
ATOM	18165	CB	ALA	146	189.039	146.919	16.712	1.00	36.44	CS3
ATOM	18166	C	ALA	146	188.844	148.613	14.884	1.00	75.59	CS3
ATOM	18167	O	ALA	146	187.694	148.587	14.453	1.00	75.59	CS3
ATOM	18168	N	LYS	147	189.895	148.797	14.100	1.00	53.50	CS3
ATOM	18169	CA	LYS	147	189.711	148.961	12.669	1.00	53.50	CS3
ATOM	18170	CB	LYS	147	190.860	149.769	12.063	1.00	77.42	CS3
ATOM	18171	CG	LYS	147	190.767	151.278	12.212	1.00	77.42	CS3
ATOM	18172	CD	LYS	147	191.879	151.901	11.373	1.00	77.42	CS3
ATOM	18173	CE	LYS	147	192.020	153.411	11.548	1.00	77.42	CS3
ATOM	18174	NZ	LYS	147	193.258	153.926	10.869	1.00	77.42	CS3
ATOM	18175	C	LYS	147	189.662	147.572	12.028	1.00	53.50	CS3
ATOM	18176	O	LYS	147	189.352	147.435	10.835	1.00	53.50	CS3
ATOM	18177	N	GLY	148	189.970	146.556	12.836	1.00	47.80	CS3
ATOM	18178	CA	GLY	148	189.971	145.185	12.368	1.00	47.80	CS3
ATOM	18179	C	GLY	148	190.466	144.252	13.461	1.00	47.80	CS3
ATOM	18180	O	GLY	148	191.136	144.699	14.391	1.00	47.80	CS3
ATOM	18181	N	ALA	149	190.146	142.962	13.353	1.00	43.01	CS3
ATOM	18182	CA	ALA	149	190.556	141.980	14.342	1.00	43.01	CS3
ATOM	18183	CB	ALA	149	189.595	142.007	15.489	1.00	66.05	CS3
ATOM	18184	C	ALA	149	190.582	140.586	13.712	1.00	43.01	CS3
ATOM	18185	O	ALA	149	189.925	140.364	12.690	1.00	43.01	CS3
ATOM	18186	N	LYS	150	191.334	139.662	14.325	1.00	52.10	CS3
ATOM	18187	CA	LYS	150	191.466	138.287	13.839	1.00	52.10	CS3
ATOM	18188	CB	LYS	150	192.491	138.230	12.709	1.00	92.73	CS3
ATOM	18189	CG	LYS	150	193.001	136.822	12.426	1.00	92.73	CS3
ATOM	18190	CD	LYS	150	194.016	136.806	11.302	1.00	92.73	CS3
ATOM	18191	CE	LYS	150	193.371	137.230	10.002	1.00	92.73	CS3
ATOM	18192	NZ	LYS	150	192.165	136.396	9.768	1.00	92.73	CS3
ATOM	18193	C	LYS	150	191.878	137.297	14.943	1.00	52.10	CS3
ATOM	18194	O	LYS	150	192.773	137.581	15.748	1.00	52.10	CS3
ATOM	18195	N	VAL	151	191.244	136.123	14.964	1.00	50.43	CS3
ATOM	18196	CA	VAL	151	191.530	135.109	15.979	1.00	50.43	CS3
ATOM	18197	CB	VAL	151	190.385	135.038	16.993	1.00	42.57	CS3

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ATOM  18198  CG1 VAL   151     190.640 133.918  18.023  1.00 42.57      CS3
ATOM  18199  CG2 VAL   151     190.234 136.390  17.665  1.00 42.57      CS3
ATOM  18200  C   VAL   151     191.722 133.732  15.361  1.00 50.43      CS3
ATOM  18201  O   VAL   151     190.979 133.347  14.466  1.00 50.43      CS3
ATOM  18202  N   ILE   152     192.695 132.981  15.867  1.00 46.00      CS3
ATOM  18203  CA  ILE   152     193.022 131.663  15.337  1.00 46.00      CS3
ATOM  18204  CB  ILE   152     194.320 131.743  14.518  1.00 31.08      CS3
ATOM  18205  CG2 ILE   152     194.659 130.380  13.926  1.00 31.08      CS3
ATOM  18206  CG1 ILE   152     194.186 132.806  13.430  1.00 31.08      CS3
ATOM  18207  CD1 ILE   152     195.512 133.254  12.857  1.00 31.08      CS3
ATOM  18208  C   ILE   152     193.259 130.639  16.444  1.00 46.00      CS3
ATOM  18209  O   ILE   152     194.197 130.786  17.240  1.00 46.00      CS3
ATOM  18210  N   VAL   153     192.437 129.598  16.509  1.00 45.37      CS3
ATOM  18211  CA  VAL   153     192.645 128.586  17.539  1.00 45.37      CS3
ATOM  18212  CB  VAL   153     191.311 128.112  18.161  1.00 47.11      CS3
ATOM  18213  CG1 VAL   153     191.558 126.930  19.102  1.00 47.11      CS3
ATOM  18214  CG2 VAL   153     190.657 129.260  18.915  1.00 47.11      CS3
ATOM  18215  C   VAL   153     193.337 127.421  16.848  1.00 45.37      CS3
ATOM  18216  O   VAL   153     192.995 127.087  15.719  1.00 45.37      CS3
ATOM  18217  N   SER   154     194.313 126.822  17.527  1.00 75.67      CS3
ATOM  18218  CA  SER   154     195.086 125.712  16.986  1.00 75.67      CS3
ATOM  18219  CB  SER   154     196.061 125.178  18.014  1.00 74.66      CS3
ATOM  18220  OG  SER   154     195.433 124.172  18.794  1.00 74.66      CS3
ATOM  18221  C   SER   154     194.213 124.564  16.560  1.00 75.67      CS3
ATOM  18222  O   SER   154     193.131 124.764  16.016  1.00 75.67      CS3
ATOM  18223  N   GLY   155     194.674 123.348  16.843  1.00 43.49      CS3
ATOM  18224  CA  GLY   155     193.926 122.179  16.425  1.00 43.49      CS3
ATOM  18225  C   GLY   155     193.631 121.226  17.542  1.00 43.49      CS3
ATOM  18226  O   GLY   155     194.257 121.292  18.596  1.00 43.49      CS3
ATOM  18227  N   ARG   156     192.697 120.318  17.256  1.00 57.73      CS3
ATOM  18228  CA  ARG   156     192.154 119.284  18.154  1.00 57.73      CS3
ATOM  18229  CB  ARG   156     193.066 118.935  19.327  1.00 56.32      CS3
ATOM  18230  CG  ARG   156     194.139 117.943  18.950  1.00 56.32      CS3
ATOM  18231  CD  ARG   156     194.156 116.714  19.851  1.00 56.32      CS3
ATOM  18232  NE  ARG   156     192.964 115.893  19.706  1.00 56.32      CS3
ATOM  18233  CZ  ARG   156     192.824 114.685  20.248  1.00 56.32      CS3
ATOM  18234  NH1 ARG   156     193.804 114.158  20.975  1.00 56.32      CS3
ATOM  18235  NH2 ARG   156     191.705 113.996  20.054  1.00 56.32      CS3
ATOM  18236  C   ARG   156     190.877 119.891  18.665  1.00 57.73      CS3
ATOM  18237  O   ARG   156     190.340 119.477  19.682  1.00 57.73      CS3
ATOM  18238  N   ILE   157     190.411 120.896  17.929  1.00 51.81      CS3
ATOM  18239  CA  ILE   157     189.179 121.586  18.248  1.00 51.81      CS3
ATOM  18240  CB  ILE   157     188.643 122.358  17.032  1.00 45.69      CS3
ATOM  18241  CG2 ILE   157     187.244 122.797  17.296  1.00 45.69      CS3
ATOM  18242  CG1 ILE   157     189.546 123.564  16.728  1.00 45.69      CS3
ATOM  18243  CD1 ILE   157     189.052 124.469  15.591  1.00 45.69      CS3
ATOM  18244  C   ILE   157     188.145 120.559  18.661  1.00 51.81      CS3
ATOM  18245  O   ILE   157     188.095 119.466  18.098  1.00 51.81      CS3
ATOM  18246  N   GLY   158     187.337 120.908  19.657  1.00 71.65      CS3
ATOM  18247  CA  GLY   158     186.310 119.998  20.130  1.00 71.65      CS3
ATOM  18248  C   GLY   158     186.860 118.655  20.573  1.00 71.65      CS3
ATOM  18249  O   GLY   158     186.149 117.653  20.554  1.00 71.65      CS3
ATOM  18250  N   GLY   159     188.131 118.633  20.963  1.00 58.72      CS3
ATOM  18251  CA  GLY   159     188.753 117.403  21.422  1.00 58.72      CS3
ATOM  18252  C   GLY   159     188.779 116.318  20.374  1.00 58.72      CS3
ATOM  18253  O   GLY   159     188.954 115.137  20.676  1.00 58.72      CS3
ATOM  18254  N   ALA   160     188.609 116.730  19.128  1.00 71.73      CS3
ATOM  18255  CA  ALA   160     188.609 115.803  18.018  1.00 71.73      CS3
ATOM  18256  CB  ALA   160     187.970 116.467  16.815  1.00 44.51      CS3
ATOM  18257  C   ALA   160     190.019 115.353  17.664  1.00 71.73      CS3
ATOM  18258  O   ALA   160     190.989 116.074  17.895  1.00 71.73      CS3
ATOM  18259  N   GLU   161     190.135 114.147  17.122  1.00 78.35      CS3
ATOM  18260  CA  GLU   161     191.429 113.654  16.673  1.00 78.35      CS3
ATOM  18261  CB  GLU   161     191.337 112.177  16.314  1.00115.84      CS3
ATOM  18262  CG  GLU   161     190.401 111.412  17.215  1.00115.84      CS3
ATOM  18263  CD  GLU   161     190.052 110.039  16.684  1.00115.84      CS3
ATOM  18264  OE1 GLU   161     190.969 109.203  16.543  1.00115.84      CS3
ATOM  18265  OE2 GLU   161     188.857 109.801  16.409  1.00115.84      CS3
ATOM  18266  C   GLU   161     191.560 114.475  15.396  1.00 78.35      CS3
ATOM  18267  O   GLU   161     190.544 114.867  14.819  1.00 78.35      CS3
ATOM  18268  N   GLN   162     192.777 114.751  14.951  1.00 56.56      CS3
ATOM  18269  CA  GLN   162     192.956 115.542  13.731  1.00 56.56      CS3
ATOM  18270  CB  GLN   162     191.920 115.162  12.669  1.00100.89      CS3
ATOM  18271  CG  GLN   162     192.183 113.859  11.954  1.00100.89      CS3
ATOM  18272  CD  GLN   162     193.184 114.023  10.840  1.00100.89      CS3
ATOM  18273  OE1 GLN   162     193.078 114.952  10.042  1.00100.89      CS3
ATOM  18274  NE2 GLN   162     194.159 113.120  10.771  1.00100.89      CS3
ATOM  18275  C   GLN   162     192.824 117.027  14.002  1.00 56.56      CS3
ATOM  18276  O   GLN   162     191.742 117.584  13.823  1.00 56.56      CS3
ATOM  18277  N   ALA   163     193.919 117.661  14.420  1.00 35.82      CS3
ATOM  18278  CA  ALA   163     193.914 119.092  14.707  1.00 35.82      CS3
ATOM  18279  CB  ALA   163     195.325 119.559  15.057  1.00 95.52      CS3
ATOM  18280  C   ALA   163     193.397 119.816  13.464  1.00 35.82      CS3
ATOM  18281  O   ALA   163     193.511 119.294  12.349  1.00 35.82      CS3
ATOM  18282  N   ARG   164     192.847 121.015  13.634  1.00 71.68      CS3
ATOM  18283  CA  ARG   164     192.307 121.703  12.478  1.00 71.68      CS3
ATOM  18284  CB  ARG   164     190.774 121.615  12.483  1.00 75.45      CS3
ATOM  18285  CG  ARG   164     190.240 120.198  12.631  1.00 75.45      CS3
ATOM  18286  CD  ARG   164     188.765 120.050  12.235  1.00 75.45      CS3
ATOM  18287  NE  ARG   164     187.824 120.682  13.159  1.00 75.45      CS3
ATOM  18288  CZ  ARG   164     187.499 121.968  13.136  1.00 75.45      CS3
ATOM  18289  NH1 ARG   164     188.041 122.781  12.232  1.00 75.45      CS3
ATOM  18290  NH2 ARG   164     186.618 122.436  14.011  1.00 75.45      CS3
ATOM  18291  C   ARG   164     192.709 123.146  12.264  1.00 71.68      CS3
ATOM  18292  O   ARG   164     193.212 123.488  11.196  1.00 71.68      CS3
ATOM  18293  N   THR   165     192.476 123.996  13.254  1.00 53.32      CS3
ATOM  18294  CA  THR   165     192.784 125.425  13.129  1.00 53.32      CS3
ATOM  18295  CB  THR   165     193.968 125.681  12.165  1.00 69.17      CS3
ATOM  18296  OG1 THR   165     195.089 124.887  12.569  1.00 69.17      CS3
ATOM  18297  CG2 THR   165     194.353 127.154  12.162  1.00 69.17      CS3
ATOM  18298  C   THR   165     191.558 126.166  12.578  1.00 53.32      CS3
ATOM  18299  O   THR   165     191.268 126.080  11.385  1.00 53.32      CS3
ATOM  18300  N   GLU   166     190.855 126.896  13.447  1.00 47.82      CS3
ATOM  18301  CA  GLU   166     189.656 127.632  13.057  1.00 47.82      CS3
ATOM  18302  CB  GLU   166     188.565 127.444  14.117  1.00108.63      CS3
ATOM  18303  CG  GLU   166     187.143 127.393  13.571  1.00108.63      CS3
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ATOM	18304	CD	GLU	166	186.855	126.120	12.784	1.00	108.63	CS3	ATOM	18357	N	VAL	173	193.292	143.828	8.638	1.00	67.02	CS3
ATOM	18305	OE1	GLU	166	187.507	125.893	11.743	1.00	108.63	CS3	ATOM	18358	CA	VAL	173	194.307	143.205	9.487	1.00	67.02	CS3
ATOM	18306	OE2	GLU	166	185.974	125.344	13.207	1.00	108.63	CS3	ATOM	18359	CB	VAL	173	193.862	141.825	9.994	1.00	52.21	CS3
ATOM	18307	C	GLU	166	189.963	129.118	12.865	1.00	47.82	CS3	ATOM	18360	CG1	VAL	173	194.798	141.352	11.106	1.00	52.21	CS3
ATOM	18308	O	GLU	166	190.720	129.722	13.628	1.00	47.82	CS3	ATOM	18361	CG2	VAL	173	192.439	141.890	10.485	1.00	52.21	CS3
ATOM	18309	N	TRP	167	189.359	129.696	11.838	1.00	84.97	CS3	ATOM	18362	C	VAL	173	195.527	143.045	8.573	1.00	67.02	CS3
ATOM	18310	CA	TRP	167	189.557	131.092	11.474	1.00	84.97	CS3	ATOM	18363	O	VAL	173	195.959	141.930	8.275	1.00	67.02	CS3
ATOM	18311	CB	TRP	167	189.280	131.239	9.994	1.00	90.22	CS3	ATOM	18364	N	PRO	174	196.086	144.175	8.105	1.00	68.22	CS3
ATOM	18312	CG	TRP	167	190.429	131.674	9.220	1.00	90.22	CS3	ATOM	18365	CD	PRO	174	195.588	145.529	8.416	1.00	62.02	CS3
ATOM	18313	CD2	TRP	167	190.574	132.929	8.570	1.00	90.22	CS3	ATOM	18366	CA	PRO	174	197.246	144.256	7.212	1.00	68.22	CS3
ATOM	18314	CE2	TRP	167	191.815	132.918	7.919	1.00	90.22	CS3	ATOM	18367	CB	PRO	174	197.218	145.718	6.768	1.00	62.02	CS3
ATOM	18315	CE3	TRP	167	189.769	134.072	8.476	1.00	90.22	CS3	ATOM	18368	CG	PRO	174	196.740	146.410	7.991	1.00	62.02	CS3
ATOM	18316	CD1	TRP	167	191.550	130.963	8.956	1.00	90.22	CS3	ATOM	18369	C	PRO	174	198.613	143.859	7.771	1.00	68.22	CS3
ATOM	18317	NE1	TRP	167	192.394	131.699	8.171	1.00	90.22	CS3	ATOM	18370	O	PRO	174	199.480	144.721	7.957	1.00	68.22	CS3
ATOM	18318	CZ2	TRP	167	192.280	134.004	7.176	1.00	90.22	CS3	ATOM	18371	N	LEU	175	198.822	142.565	8.001	1.00	47.31	CS3
ATOM	18319	CZ3	TRP	167	190.223	135.148	7.743	1.00	90.22	CS3	ATOM	18372	CA	LEU	175	200.098	142.088	8.532	1.00	47.31	CS3
ATOM	18320	CH2	TRP	167	191.469	135.109	7.101	1.00	90.22	CS3	ATOM	18373	CB	LEU	175	200.081	140.563	8.650	1.00	40.12	CS3
ATOM	18321	C	TRP	167	188.644	132.046	12.215	1.00	84.97	CS3	ATOM	18374	CG	LEU	175	199.041	139.969	9.606	1.00	40.12	CS3
ATOM	18322	O	TRP	167	188.117	131.703	13.261	1.00	84.97	CS3	ATOM	18375	CD1	LEU	175	199.265	138.467	9.753	1.00	40.12	CS3
ATOM	18323	N	ALA	168	188.475	133.242	11.640	1.00	44.29	CS3	ATOM	18376	CD2	LEU	175	199.162	140.633	10.982	1.00	40.12	CS3
ATOM	18324	CA	ALA	168	187.599	134.319	12.143	1.00	44.29	CS3	ATOM	18377	C	LEU	175	201.320	142.523	7.711	1.00	47.31	CS3
ATOM	18325	CB	ALA	168	187.161	134.059	13.560	1.00	55.21	CS3	ATOM	18378	O	LEU	175	202.448	142.406	8.170	1.00	47.31	CS3
ATOM	18326	C	ALA	168	188.230	135.686	12.084	1.00	44.29	CS3	ATOM	18379	N	HIS	176	201.099	143.022	6.502	1.00	60.25	CS3
ATOM	18327	O	ALA	168	189.214	135.938	12.779	1.00	44.29	CS3	ATOM	18380	CA	HIS	176	202.209	143.459	5.662	1.00	60.25	CS3
ATOM	18328	N	ALA	169	187.645	136.585	11.298	1.00	52.92	CS3	ATOM	18381	CB	HIS	176	201.929	143.162	4.183	1.00	58.04	CS3
ATOM	18329	CA	ALA	169	188.203	137.919	11.178	1.00	52.92	CS3	ATOM	18382	CG	HIS	176	202.421	141.827	3.714	1.00	58.04	CS3
ATOM	18330	CB	ALA	169	189.375	137.874	10.261	1.00	65.94	CS3	ATOM	18383	CD2	HIS	176	203.320	141.500	2.758	1.00	58.04	CS3
ATOM	18331	C	ALA	169	187.218	138.963	10.684	1.00	52.92	CS3	ATOM	18384	ND1	HIS	176	201.924	140.634	4.194	1.00	58.04	CS3
ATOM	18332	O	ALA	169	186.254	138.631	9.995	1.00	52.92	CS3	ATOM	18385	CE1	HIS	176	202.488	139.630	3.549	1.00	58.04	CS3
ATOM	18333	N	GLN	170	187.477	140.226	11.036	1.00	34.96	CS3	ATOM	18386	NE2	HIS	176	203.339	140.128	2.670	1.00	58.04	CS3
ATOM	18334	CA	GLN	170	186.645	141.365	10.633	1.00	34.96	CS3	ATOM	18387	C	HIS	176	202.458	144.954	5.809	1.00	60.25	CS3
ATOM	18335	CB	GLN	170	185.638	141.721	11.725	1.00	96.33	CS3	ATOM	18388	O	HIS	176	203.585	145.381	6.056	1.00	60.25	CS3
ATOM	18336	CG	GLN	170	184.479	140.750	11.835	1.00	96.33	CS3	ATOM	18389	N	THR	177	201.400	145.741	5.629	1.00	75.92	CS3
ATOM	18337	CD	GLN	170	183.444	141.197	12.849	1.00	96.33	CS3	ATOM	18390	CA	THR	177	201.486	147.195	5.728	1.00	75.92	CS3
ATOM	18338	OE1	GLN	170	182.867	142.283	12.730	1.00	96.33	CS3	ATOM	18391	CB	THR	177	200.107	147.861	5.853	1.00	69.26	CS3
ATOM	18339	NE2	GLN	170	183.202	140.361	13.853	1.00	96.33	CS3	ATOM	18392	OG1	THR	177	199.466	147.884	4.573	1.00	69.26	CS3
ATOM	18340	C	GLN	170	187.523	142.575	10.335	1.00	34.96	CS3	ATOM	18393	CG2	THR	177	200.254	149.292	6.371	1.00	69.26	CS3
ATOM	18341	O	GLN	170	188.630	142.689	10.858	1.00	34.96	CS3	ATOM	18394	C	THR	177	202.254	147.586	6.954	1.00	75.92	CS3
ATOM	18342	N	GLY	171	187.029	143.464	9.478	1.00	57.60	CS3	ATOM	18395	O	THR	177	203.134	148.436	6.913	1.00	75.92	CS3
ATOM	18343	CA	GLY	171	187.785	144.647	9.113	1.00	57.60	CS3	ATOM	18396	N	LEU	178	201.909	146.948	8.056	1.00	65.23	CS3
ATOM	18344	C	GLY	171	189.171	144.337	8.576	1.00	57.60	CS3	ATOM	18397	CA	LEU	178	202.551	147.264	9.305	1.00	65.23	CS3
ATOM	18345	O	GLY	171	189.459	143.204	8.194	1.00	57.60	CS3	ATOM	18398	CB	LEU	178	203.369	146.065	9.821	1.00	105.41	CS3
ATOM	18346	N	ARG	172	190.030	145.352	8.544	1.00	59.82	CS3	ATOM	18399	CG	LEU	178	202.593	144.759	10.079	1.00	105.41	CS3
ATOM	18347	CA	ARG	172	191.400	145.214	8.063	1.00	59.82	CS3	ATOM	18400	CD1	LEU	178	203.219	143.955	11.219	1.00	105.41	CS3
ATOM	18348	CB	ARG	172	191.972	146.570	7.699	1.00	98.15	CS3	ATOM	18401	CD2	LEU	178	201.170	145.088	10.436	1.00	105.41	CS3
ATOM	18349	CG	ARG	172	191.383	147.226	6.498	1.00	98.15	CS3	ATOM	18402	C	LEU	178	203.400	148.550	9.286	1.00	65.23	CS3
ATOM	18350	CD	ARG	172	192.137	148.515	6.284	1.00	98.15	CS3	ATOM	18403	O	LEU	178	204.639	148.521	9.278	1.00	65.23	CS3
ATOM	18351	NE	ARG	172	192.040	149.007	4.917	1.00	98.15	CS3	ATOM	18404	N	ARG	179	202.693	149.680	9.202	1.00	104.39	CS3
ATOM	18352	CZ	ARG	172	192.817	149.967	4.420	1.00	98.15	CS3	ATOM	18405	CA	ARG	179	203.327	150.979	9.339	1.00	104.39	CS3
ATOM	18353	NH1	ARG	172	193.744	150.532	5.189	1.00	98.15	CS3	ATOM	18406	CB	ARG	179	202.317	152.111	9.176	1.00	93.34	CS3
ATOM	18354	NH2	ARG	172	192.676	150.355	3.155	1.00	98.15	CS3	ATOM	18407	CG	ARG	179	201.660	152.112	7.825	1.00	93.34	CS3
ATOM	18355	C	ARG	172	192.322	144.607	9.106	1.00	59.82	CS3	ATOM	18408	CD	ARG	179	200.918	153.390	7.538	1.00	93.34	CS3
ATOM	18356	O	ARG	172	192.163	144.844	10.302	1.00	59.82	CS3	ATOM	18409	NE	ARG	179	200.637	153.501	6.111	1.00	93.34	CS3

ATOM	18410	CZ	ARG	179	199.942	154.487	5.556	1.00	93.34	CS3	ATOM	18463	CG	PHE	186	200.352	132.159	21.860	1.00	44.80	CS3
ATOM	18411	NH1	ARG	179	199.443	155.461	6.308	1.00	93.34	CS3	ATOM	18464	CD1	PHE	186	199.574	131.351	21.037	1.00	44.80	CS3
ATOM	18412	NH2	ARG	179	199.747	154.503	4.243	1.00	93.34	CS3	ATOM	18465	CD2	PHE	186	201.229	131.554	22.748	1.00	44.80	CS3
ATOM	18413	C	ARG	179	203.464	150.621	10.789	1.00	104.39	CS3	ATOM	18466	CE1	PHE	186	199.674	129.951	21.101	1.00	44.80	CS3
ATOM	18414	O	ARG	179	204.366	151.042	11.506	1.00	104.39	CS3	ATOM	18467	CE2	PHE	186	201.337	130.157	22.822	1.00	44.80	CS3
ATOM	18415	N	ALA	180	202.503	149.777	11.157	1.00	97.34	CS3	ATOM	18468	CZ	PHE	186	200.560	129.357	21.998	1.00	44.80	CS3
ATOM	18416	CA	ALA	180	202.356	149.144	12.440	1.00	97.34	CS3	ATOM	18469	C	PHE	186	198.422	133.555	23.478	1.00	58.47	CS3
ATOM	18417	CB	ALA	180	203.734	148.827	13.008	1.00	102.05	CS3	ATOM	18470	O	PHE	186	198.838	133.984	24.553	1.00	58.47	CS3
ATOM	18418	C	ALA	180	201.459	149.765	13.499	1.00	97.34	CS3	ATOM	18471	N	ALA	187	197.594	132.523	23.372	1.00	61.47	CS3
ATOM	18419	O	ALA	180	201.383	150.983	13.677	1.00	97.34	CS3	ATOM	18472	CA	ALA	187	197.098	131.815	24.539	1.00	61.47	CS3
ATOM	18420	N	ASN	181	200.759	148.853	14.165	1.00	90.77	CS3	ATOM	18473	CB	ALA	187	195.622	132.104	24.718	1.00	94.98	CS3
ATOM	18421	CA	ASN	181	199.834	149.066	15.267	1.00	90.77	CS3	ATOM	18474	C	ALA	187	197.340	130.324	24.330	1.00	61.47	CS3
ATOM	18422	CB	ASN	181	199.252	150.472	15.326	1.00	64.63	CS3	ATOM	18475	O	ALA	187	197.153	129.809	23.227	1.00	61.47	CS3
ATOM	18423	CG	ASN	181	199.081	150.935	16.752	1.00	64.63	CS3	ATOM	18476	N	LEU	188	197.710	129.632	25.399	1.00	56.83	CS3
ATOM	18424	OD1	ASN	181	199.290	150.151	17.683	1.00	64.63	CS3	ATOM	18477	CA	LEU	188	198.055	128.219	25.331	1.00	56.83	CS3
ATOM	18425	ND2	ASN	181	198.709	152.200	16.940	1.00	64.63	CS3	ATOM	18478	CB	LEU	188	199.405	128.050	26.018	1.00	40.30	CS3
ATOM	18426	C	ASN	181	198.733	148.048	15.133	1.00	90.77	CS3	ATOM	18479	CG	LEU	188	200.384	126.950	25.647	1.00	40.30	CS3
ATOM	18427	O	ASN	181	197.577	148.354	14.860	1.00	90.77	CS3	ATOM	18480	CD1	LEU	188	200.030	125.620	26.282	1.00	40.30	CS3
ATOM	18428	N	ILE	182	199.158	146.811	15.315	1.00	63.18	CS3	ATOM	18481	CD2	LEU	188	200.417	126.885	24.132	1.00	40.30	CS3
ATOM	18429	CA	ILE	182	198.324	145.636	15.255	1.00	63.18	CS3	ATOM	18482	C	LEU	188	197.070	127.224	25.933	1.00	56.83	CS3
ATOM	18430	CB	ILE	182	198.626	144.812	13.971	1.00	44.98	CS3	ATOM	18483	O	LEU	188	197.482	126.342	26.685	1.00	56.83	CS3
ATOM	18431	CG2	ILE	182	198.016	143.427	14.080	1.00	44.98	CS3	ATOM	18484	N	ALA	189	195.784	127.340	25.606	1.00	49.61	CS3
ATOM	18432	CG1	ILE	182	198.123	145.570	12.738	1.00	44.98	CS3	ATOM	18485	CA	ALA	189	194.750	126.428	26.137	1.00	49.61	CS3
ATOM	18433	CD1	ILE	182	198.088	144.745	11.445	1.00	44.98	CS3	ATOM	18486	CB	ALA	189	193.569	126.399	25.186	1.00	34.60	CS3
ATOM	18434	C	ILE	182	198.746	144.846	16.492	1.00	63.18	CS3	ATOM	18487	C	ALA	189	195.200	124.994	26.400	1.00	49.61	CS3
ATOM	18435	O	ILE	182	199.734	144.119	16.462	1.00	63.18	CS3	ATOM	18488	O	ALA	189	195.416	124.256	25.455	1.00	49.61	CS3
ATOM	18436	N	ASP	183	198.022	145.005	17.591	1.00	50.02	CS3	ATOM	18489	N	ARG	190	195.350	124.602	27.666	1.00	67.24	CS3
ATOM	18437	CA	ASP	183	198.387	144.287	18.797	1.00	50.02	CS3	ATOM	18490	CA	ARG	190	195.736	123.219	28.004	1.00	67.24	CS3
ATOM	18438	CB	ASP	183	197.497	144.711	19.966	1.00	82.48	CS3	ATOM	18491	CB	ARG	190	196.569	123.161	29.283	1.00	109.87	CS3
ATOM	18439	CG	ASP	183	198.026	144.228	21.306	1.00	82.48	CS3	ATOM	18492	CG	ARG	190	197.894	123.873	29.188	1.00	109.87	CS3
ATOM	18440	OD1	ASP	183	197.326	144.422	22.321	1.00	82.48	CS3	ATOM	18493	CD	ARG	190	198.808	123.464	30.325	1.00	109.87	CS3
ATOM	18441	OD2	ASP	183	199.138	143.660	21.342	1.00	82.48	CS3	ATOM	18494	NE	ARG	190	200.110	124.115	30.226	1.00	109.87	CS3
ATOM	18442	C	ASP	183	198.282	142.781	18.567	1.00	50.02	CS3	ATOM	18495	CZ	ARG	190	201.188	123.735	30.905	1.00	109.87	CS3
ATOM	18443	O	ASP	183	197.347	142.295	17.931	1.00	50.02	CS3	ATOM	18496	NH1	ARG	190	201.116	122.702	31.735	1.00	109.87	CS3
ATOM	18444	N	TYR	184	199.257	142.050	19.089	1.00	55.34	CS3	ATOM	18497	NH2	ARG	190	202.339	124.382	30.752	1.00	109.87	CS3
ATOM	18445	CA	TYR	184	199.300	140.607	18.947	1.00	55.34	CS3	ATOM	18498	C	ARG	190	194.417	122.498	28.228	1.00	67.24	CS3
ATOM	18446	CB	TYR	184	200.604	140.206	18.263	1.00	53.04	CS3	ATOM	18499	O	ARG	190	193.589	122.972	29.006	1.00	67.24	CS3
ATOM	18447	CG	TYR	184	200.766	138.713	18.105	1.00	53.04	CS3	ATOM	18500	N	THR	191	194.208	121.349	27.589	1.00	59.48	CS3
ATOM	18448	CD1	TYR	184	199.987	138.003	17.188	1.00	53.04	CS3	ATOM	18501	CA	THR	191	192.906	120.723	27.724	1.00	59.48	CS3
ATOM	18449	CE1	TYR	184	200.114	136.634	17.054	1.00	53.04	CS3	ATOM	18502	CB	THR	191	191.934	121.348	26.723	1.00	66.58	CS3
ATOM	18450	CD2	TYR	184	201.678	138.007	18.885	1.00	53.04	CS3	ATOM	18503	OG1	THR	191	192.355	120.983	25.407	1.00	66.58	CS3
ATOM	18451	CE2	TYR	184	201.817	136.636	18.761	1.00	53.04	CS3	ATOM	18504	CG2	THR	191	191.924	122.877	26.815	1.00	66.58	CS3
ATOM	18452	CZ	TYR	184	201.033	135.952	17.843	1.00	53.04	CS3	ATOM	18505	C	THR	191	192.714	119.225	27.551	1.00	59.48	CS3
ATOM	18453	OH	TYR	184	201.171	134.584	17.698	1.00	53.04	CS3	ATOM	18506	O	THR	191	192.412	118.787	26.446	1.00	59.48	CS3
ATOM	18454	C	TYR	184	199.206	139.913	20.307	1.00	55.34	CS3	ATOM	18507	N	THR	192	192.841	118.456	28.629	1.00	57.13	CS3
ATOM	18455	O	TYR	184	199.542	140.495	21.334	1.00	55.34	CS3	ATOM	18508	CA	THR	192	192.598	116.999	28.627	1.00	57.13	CS3
ATOM	18456	N	GLY	185	198.760	138.663	20.311	1.00	48.29	CS3	ATOM	18509	CB	THR	192	191.100	116.681	28.764	1.00	74.93	CS3
ATOM	18457	CA	GLY	185	198.652	137.926	21.555	1.00	48.29	CS3	ATOM	18510	OG1	THR	192	190.438	117.738	29.459	1.00	74.93	CS3
ATOM	18458	C	GLY	185	198.597	136.430	21.309	1.00	48.29	CS3	ATOM	18511	CG2	THR	192	190.908	115.373	29.515	1.00	74.93	CS3
ATOM	18459	O	GLY	185	198.290	135.994	20.204	1.00	48.29	CS3	ATOM	18512	C	THR	192	193.044	116.172	27.429	1.00	57.13	CS3
ATOM	18460	N	PHE	186	198.890	135.637	22.331	1.00	58.47	CS3	ATOM	18513	O	THR	192	193.491	115.042	27.584	1.00	57.13	CS3
ATOM	18461	CA	PHE	186	198.858	134.194	22.181	1.00	58.47	CS3	ATOM	18514	N	TYR	193	192.866	116.714	26.234	1.00	83.66	CS3
ATOM	18462	CB	PHE	186	200.242	133.660	21.794	1.00	44.80	CS3	ATOM	18515	CA	TYR	193	193.223	116.032	25.006	1.00	83.66	CS3

ATOM	18516	CB	TYR	193	191.968	115.899	24.155	1.00	84.86	CS3	ATOM	18569	CG1	ILE	200	193.135	136.699	20.306	1.00	171.44	CS3
ATOM	18517	CG	TYR	193	191.249	117.215	23.953	1.00	84.86	CS3	ATOM	18570	CD1	ILE	200	193.561	135.251	20.438	1.00	171.44	CS3
ATOM	18518	CD1	TYR	193	191.734	118.170	23.058	1.00	84.86	CS3	ATOM	18571	C	ILE	200	195.408	138.336	17.765	1.00	54.44	CS3
ATOM	18519	CE1	TYR	193	191.077	119.384	22.870	1.00	84.86	CS3	ATOM	18572	O	ILE	200	196.508	138.716	18.131	1.00	54.44	CS3
ATOM	18520	CD2	TYR	193	190.086	117.509	24.662	1.00	84.86	CS3	ATOM	18573	N	PHE	201	194.733	138.921	16.791	1.00	48.25	CS3
ATOM	18521	CE2	TYR	193	189.420	118.721	24.483	1.00	84.86	CS3	ATOM	18574	CA	PHE	201	195.282	140.057	16.076	1.00	48.25	CS3
ATOM	18522	CZ	TYR	193	189.921	119.652	23.582	1.00	84.86	CS3	ATOM	18575	CB	PHE	201	195.445	139.737	14.578	1.00	51.74	CS3
ATOM	18523	OH	TYR	193	189.259	120.840	23.373	1.00	84.86	CS3	ATOM	18576	CG	PHE	201	196.473	138.675	14.272	1.00	51.74	CS3
ATOM	18524	C	TYR	193	194.309	116.784	24.232	1.00	83.66	CS3	ATOM	18577	CD1	PHE	201	196.326	137.375	14.749	1.00	51.74	CS3
ATOM	18525	O	TYR	193	194.262	116.860	23.004	1.00	83.66	CS3	ATOM	18578	CD2	PHE	201	197.586	138.978	13.494	1.00	51.74	CS3
ATOM	18526	N	GLY	194	195.281	117.344	24.946	1.00	72.27	CS3	ATOM	18579	CE1	PHE	201	197.271	136.395	14.457	1.00	51.74	CS3
ATOM	18527	CA	GLY	194	196.343	118.072	24.278	1.00	72.27	CS3	ATOM	18580	CE2	PHE	201	198.539	138.005	13.197	1.00	51.74	CS3
ATOM	18528	C	GLY	194	196.151	119.577	24.231	1.00	72.27	CS3	ATOM	18581	CZ	PHE	201	198.383	136.708	13.678	1.00	51.74	CS3
ATOM	18529	O	GLY	194	195.072	120.088	24.532	1.00	72.27	CS3	ATOM	18582	C	PHE	201	194.301	141.209	16.218	1.00	48.25	CS3
ATOM	18530	N	VAL	195	197.206	120.286	23.837	1.00	57.48	CS3	ATOM	18583	O	PHE	201	193.133	141.093	15.820	1.00	48.25	CS3
ATOM	18531	CA	VAL	195	197.168	121.737	23.769	1.00	57.48	CS3	ATOM	18584	N	ILE	202	194.750	142.323	16.779	1.00	56.66	CS3
ATOM	18532	CB	VAL	195	198.578	122.318	23.717	1.00	54.98	CS3	ATOM	18585	CA	ILE	202	193.856	143.457	16.915	1.00	56.66	CS3
ATOM	18533	CG1	VAL	195	198.548	123.781	24.152	1.00	54.98	CS3	ATOM	18586	CB	ILE	202	193.605	143.795	18.388	1.00	70.03	CS3
ATOM	18534	CG2	VAL	195	199.510	121.490	24.573	1.00	54.98	CS3	ATOM	18587	CG2	ILE	202	192.820	145.094	18.500	1.00	70.03	CS3
ATOM	18535	C	VAL	195	196.411	122.274	22.561	1.00	57.48	CS3	ATOM	18588	CG1	ILE	202	192.822	142.649	19.031	1.00	70.03	CS3
ATOM	18536	O	VAL	195	196.074	121.536	21.644	1.00	57.48	CS3	ATOM	18589	CD1	ILE	202	192.537	142.828	20.492	1.00	70.03	CS3
ATOM	18537	N	LEU	196	196.170	123.579	22.588	1.00	39.32	CS3	ATOM	18590	C	ILE	202	194.441	144.641	16.188	1.00	56.66	CS3
ATOM	18538	CA	LEU	196	195.467	124.334	21.561	1.00	39.32	CS3	ATOM	18591	O	ILE	202	195.556	145.061	16.461	1.00	56.66	CS3
ATOM	18539	CB	LEU	196	193.981	124.437	21.882	1.00	42.37	CS3	ATOM	18592	N	PHE	203	193.682	145.185	15.253	1.00	64.30	CS3
ATOM	18540	CG	LEU	196	192.869	123.412	21.659	1.00	42.37	CS3	ATOM	18593	CA	PHE	203	194.175	146.297	14.476	1.00	64.30	CS3
ATOM	18541	CD1	LEU	196	192.362	123.545	20.225	1.00	42.37	CS3	ATOM	18594	CB	PHE	203	193.845	146.071	13.004	1.00	40.19	CS3
ATOM	18542	CD2	LEU	196	193.325	122.012	22.017	1.00	42.37	CS3	ATOM	18595	CG	PHE	203	194.276	147.188	12.113	1.00	40.19	CS3
ATOM	18543	C	LEU	196	196.046	125.747	21.660	1.00	39.32	CS3	ATOM	18596	CD1	PHE	203	195.481	147.855	12.344	1.00	40.19	CS3
ATOM	18544	O	LEU	196	195.960	126.379	22.720	1.00	39.32	CS3	ATOM	18597	CD2	PHE	203	193.486	147.576	11.036	1.00	40.19	CS3
ATOM	18545	N	GLY	197	196.637	126.241	20.579	1.00	55.85	CS3	ATOM	18598	CE1	PHE	203	195.892	148.899	11.512	1.00	40.19	CS3
ATOM	18546	CA	GLY	197	197.199	127.576	20.602	1.00	55.85	CS3	ATOM	18599	CE2	PHE	203	193.886	148.617	10.198	1.00	40.19	CS3
ATOM	18547	C	GLY	197	196.129	128.572	20.222	1.00	55.85	CS3	ATOM	18600	CZ	PHE	203	195.092	149.283	10.434	1.00	40.19	CS3
ATOM	18548	O	GLY	197	195.227	128.245	19.459	1.00	55.85	CS3	ATOM	18601	C	PHE	203	193.657	147.647	14.930	1.00	64.30	CS3
ATOM	18549	N	VAL	198	196.198	129.783	20.754	1.00	63.84	CS3	ATOM	18602	O	PHE	203	192.574	148.082	14.520	1.00	64.30	CS3
ATOM	18550	CA	VAL	198	195.198	130.769	20.406	1.00	63.84	CS3	ATOM	18603	N	LEU	204	194.457	148.303	15.773	1.00	71.79	CS3
ATOM	18551	CB	VAL	198	194.244	131.016	21.573	1.00	54.07	CS3	ATOM	18604	CA	LEU	204	194.164	149.633	16.323	1.00	71.79	CS3
ATOM	18552	CG1	VAL	198	193.189	132.022	21.175	1.00	54.07	CS3	ATOM	18605	CB	LEU	204	194.983	149.860	17.591	1.00	62.66	CS3
ATOM	18553	CG2	VAL	198	193.571	129.724	21.962	1.00	54.07	CS3	ATOM	18606	CG	LEU	204	195.138	148.618	18.469	1.00	62.66	CS3
ATOM	18554	C	VAL	198	195.897	132.058	20.024	1.00	63.84	CS3	ATOM	18607	CD1	LEU	204	196.164	148.862	19.554	1.00	62.66	CS3
ATOM	18555	O	VAL	198	196.625	132.635	20.835	1.00	63.84	CS3	ATOM	18608	CD2	LEU	204	193.783	148.252	19.071	1.00	62.66	CS3
ATOM	18556	N	LYS	199	195.685	132.503	18.787	1.00	56.36	CS3	ATOM	18609	C	LEU	204	194.611	150.644	15.283	1.00	71.79	CS3
ATOM	18557	CA	LYS	199	196.324	133.715	18.307	1.00	56.36	CS3	ATOM	18610	O	LEU	204	195.794	150.722	14.994	1.00	71.79	CS3
ATOM	18558	CB	LYS	199	197.091	133.433	17.015	1.00	82.35	CS3	ATOM	18611	N	GLY	205	193.679	151.400	14.716	1.00	79.01	CS3
ATOM	18559	CG	LYS	199	198.315	132.558	17.203	1.00	82.35	CS3	ATOM	18612	CA	GLY	205	194.034	152.392	13.712	1.00	79.01	CS3
ATOM	18560	CD	LYS	199	199.015	132.338	15.883	1.00	82.35	CS3	ATOM	18613	C	GLY	205	195.370	152.254	12.984	1.00	79.01	CS3
ATOM	18561	CE	LYS	199	200.122	131.317	16.024	1.00	82.35	CS3	ATOM	18614	O	GLY	205	195.413	151.896	11.809	1.00	79.01	CS3
ATOM	18562	NZ	LYS	199	200.793	131.053	14.723	1.00	82.35	CS3	ATOM	18615	N	GLU	206	196.453	152.562	13.693	1.00	141.89	CS3
ATOM	18563	C	LYS	199	195.316	134.817	18.072	1.00	56.36	CS3	ATOM	18616	CA	GLU	206	197.830	152.511	13.198	1.00	141.89	CS3
ATOM	18564	O	LYS	199	194.276	134.583	17.457	1.00	56.36	CS3	ATOM	18617	CB	GLU	206	197.985	151.598	11.973	1.00	73.82	CS3
ATOM	18565	N	ILE	200	195.629	136.020	18.559	1.00	54.44	CS3	ATOM	18618	CG	GLU	206	198.713	150.276	12.264	1.00	73.82	CS3
ATOM	18566	CA	ILE	200	194.735	137.166	18.430	1.00	54.44	CS3	ATOM	18619	CD	GLU	206	199.610	149.788	11.111	1.00	73.82	CS3
ATOM	18567	CB	ILE	200	194.231	137.636	19.804	1.00	171.44	CS3	ATOM	18620	OE1	GLU	206	199.683	148.564	10.911	1.00	73.82	CS3
ATOM	18568	CG2	ILE	200	193.693	139.057	19.705	1.00	171.44	CS3	ATOM	18621	OE2	GLU	206	200.251	150.624	10.435	1.00	73.82	CS3

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ATOM  18622  C   GLU   206     198.368 153.895  12.858  1.00141.89      CS3
ATOM  18623  O   GLU   206     198.403 154.783  13.711  1.00141.89      CS3
ATOM  18624  N   VAL   207     198.780 154.075  11.607  1.00 90.60      CS3
ATOM  18625  CA  VAL   207     199.355 155.340  11.146  1.00 90.60      CS3
ATOM  18626  CB  VAL   207     198.444 156.545  11.470  1.00 95.78      CS3
ATOM  18627  CG1 VAL   207     198.984 157.799  10.770  1.00 95.78      CS3
ATOM  18628  CG2 VAL   207     197.002 156.247  11.053  1.00 95.78      CS3
ATOM  18629  C   VAL   207     200.722 155.607  11.785  1.00 90.60      CS3
ATOM  18630  O   VAL   207     201.030 154.988  12.832  1.00 90.60      CS3
ATOM  18631  OXT VAL   207     201.462 156.453  11.234  1.00124.85      CS3
ATOM  18632  O5' URI     5     133.811 110.964   1.588  1.00 67.30      A16S
ATOM  18633  C5' URI     5     133.840 110.069   2.709  1.00 67.30      A16S
ATOM  18634  C4' URI     5     135.051 110.270   3.603  1.00 67.30      A16S
ATOM  18635  O4' URI     5     135.080 111.639   4.064  1.00 67.30      A16S
ATOM  18636  C1' URI     5     135.711 111.691   5.326  1.00 67.30      A16S
ATOM  18637  N1  URI     5     135.022 112.670   6.184  1.00 81.68      A16S
ATOM  18638  C6  URI     5     134.272 113.685   5.621  1.00 81.68      A16S
ATOM  18639  C2  URI     5     135.180 112.585   7.556  1.00 81.68      A16S
ATOM  18640  O2  URI     5     135.764 111.668   8.103  1.00 81.68      A16S
ATOM  18641  N3  URI     5     134.607 113.614   8.265  1.00 81.68      A16S
ATOM  18642  C4  URI     5     133.881 114.679   7.757  1.00 81.68      A16S
ATOM  18643  O4  URI     5     133.480 115.561   8.518  1.00 81.68      A16S
ATOM  18644  C5  URI     5     133.712 114.662   6.341  1.00 81.68      A16S
ATOM  18645  C2' URI     5     135.971 110.271   5.827  1.00 67.30      A16S
ATOM  18646  O2' URI     5     137.357 110.072   5.693  1.00 67.30      A16S
ATOM  18647  C3' URI     5     135.124 109.423   4.875  1.00 67.30      A16S
ATOM  18648  O3' URI     5     135.648 108.122   4.525  1.00 67.30      A16S
ATOM  18649  P   GUA     6     136.886 107.453   5.336  1.00 54.45      A16S
ATOM  18650  O1P GUA     6     136.772 106.017   4.982  1.00 57.28      A16S
ATOM  18651  O2P GUA     6     136.965 107.838   6.769  1.00 57.28      A16S
ATOM  18652  O5' GUA     6     138.189 108.037   4.621  1.00 54.45      A16S
ATOM  18653  C5' GUA     6     138.700 107.430   3.430  1.00 54.45      A16S
ATOM  18654  C4' GUA     6     139.687 108.341   2.717  1.00 54.45      A16S
ATOM  18655  O4' GUA     6     139.008 109.430   2.050  1.00 54.45      A16S
ATOM  18656  C1' GUA     6     139.916 110.500   1.886  1.00 54.45      A16S
ATOM  18657  N9  GUA     6     139.261 111.740   2.290  1.00 57.28      A16S
ATOM  18658  C4  GUA     6     139.235 112.308   3.538  1.00 57.28      A16S
ATOM  18659  N3  GUA     6     139.824 111.819   4.640  1.00 57.28      A16S
ATOM  18660  C2  GUA     6     139.591 112.574   5.691  1.00 57.28      A16S
ATOM  18661  N2  GUA     6     140.073 112.219   6.875  1.00 57.28      A16S
ATOM  18662  N1  GUA     6     138.860 113.729   5.659  1.00 57.28      A16S
ATOM  18663  C6  GUA     6     138.254 114.257   4.527  1.00 57.28      A16S
ATOM  18664  O6  GUA     6     137.622 115.320   4.597  1.00 57.28      A16S
ATOM  18665  C5  GUA     6     138.476 113.450   3.403  1.00 57.28      A16S
ATOM  18666  N7  GUA     6     138.044 113.604   2.099  1.00 57.28      A16S
ATOM  18667  C8  GUA     6     138.535 112.570   1.475  1.00 57.28      A16S
ATOM  18668  C2' GUA     6     141.229 110.130   2.585  1.00 54.45      A16S
ATOM  18669  O2' GUA     6     142.121 109.650   1.600  1.00 54.45      A16S
ATOM  18670  C3' GUA     6     140.793 109.007   3.520  1.00 54.45      A16S
ATOM  18671  O3' GUA     6     141.837 108.054   3.703  1.00 54.45      A16S
ATOM  18672  P   GUA     7     143.313 108.524   4.157  1.00 49.87      A16S
ATOM  18673  O1P GUA     7     143.263 109.825   4.869  1.00 55.30      A16S
ATOM  18674  O2P GUA     7     143.926 107.354   4.831  1.00 55.30      A16S
ATOM  18675  O5' GUA     7     144.083 108.750   2.784  1.00 49.87      A16S
ATOM  18676  C5' GUA     7     145.232 107.984   2.471  1.00 49.87      A16S
ATOM  18677  C4' GUA     7     146.125 108.755   1.544  1.00 49.87      A16S
ATOM  18678  O4' GUA     7     145.412 108.993   0.324  1.00 49.87      A16S
ATOM  18679  C1' GUA     7     145.990 110.095  -0.307  1.00 49.87      A16S
ATOM  18680  N9  GUA     7     145.027 110.698  -1.212  1.00 55.30      A16S
ATOM  18681  C4  GUA     7     145.245 110.900  -2.547  1.00 55.30      A16S
ATOM  18682  N3  GUA     7     146.379 110.588  -3.216  1.00 55.30      A16S
ATOM  18683  C2  GUA     7     146.292 110.892  -4.493  1.00 55.30      A16S
ATOM  18684  N2  GUA     7     147.327 110.650  -5.307  1.00 55.30      A16S
ATOM  18685  N1  GUA     7     145.185 111.458  -5.070  1.00 55.30      A16S
ATOM  18686  C6  GUA     7     144.011 111.792  -4.400  1.00 55.30      A16S
ATOM  18687  O6  GUA     7     143.073 112.311  -5.020  1.00 55.30      A16S
ATOM  18688  C5  GUA     7     144.088 111.468  -3.025  1.00 55.30      A16S
ATOM  18689  N7  GUA     7     143.162 111.630  -2.005  1.00 55.30      A16S
ATOM  18690  C8  GUA     7     143.764 111.157  -0.946  1.00 55.30      A16S
ATOM  18691  C2' GUA     7     146.650 110.979   0.750  1.00 49.87      A16S
ATOM  18692  O2' GUA     7     147.983 111.258   0.410  1.00 49.87      A16S
ATOM  18693  C3' GUA     7     146.502 110.146   2.018  1.00 49.87      A16S
ATOM  18694  O3' GUA     7     147.671 110.133   2.851  1.00 49.87      A16S
ATOM  18695  P   ADE     8     149.024 109.381   2.380  1.00 41.85      A16S
ATOM  18696  O1P ADE     8     149.040 109.239   0.913  1.00 50.79      A16S
ATOM  18697  O2P ADE     8     149.146 108.166   3.218  1.00 50.79      A16S
ATOM  18698  O5' ADE     8     150.192 110.358   2.851  1.00 41.85      A16S
ATOM  18699  C5' ADE     8     150.729 111.377   2.006  1.00 41.85      A16S
ATOM  18700  C4' ADE     8     152.096 111.766   2.520  1.00 41.85      A16S
ATOM  18701  O4' ADE     8     151.924 112.284   3.857  1.00 41.85      A16S
ATOM  18702  C1' ADE     8     153.025 111.893   4.636  1.00 41.85      A16S
ATOM  18703  N9  ADE     8     152.620 111.623   6.009  1.00 50.79      A16S
ATOM  18704  C4  ADE     8     153.491 111.607   7.066  1.00 50.79      A16S
ATOM  18705  N3  ADE     8     154.814 111.797   7.022  1.00 50.79      A16S
ATOM  18706  C2  ADE     8     155.336 111.730   8.244  1.00 50.79      A16S
ATOM  18707  N1  ADE     8     154.731 111.516   9.413  1.00 50.79      A16S
ATOM  18708  C6  ADE     8     153.397 111.336   9.417  1.00 50.79      A16S
ATOM  18709  N6  ADE     8     152.789 111.139  10.584  1.00 50.79      A16S
ATOM  18710  C5  ADE     8     152.728 111.374   8.183  1.00 50.79      A16S
ATOM  18711  N7  ADE     8     151.396 111.222   7.839  1.00 50.79      A16S
ATOM  18712  C8  ADE     8     151.388 111.371   6.535  1.00 50.79      A16S
ATOM  18713  C2' ADE     8     153.781 110.760   3.948  1.00 41.85      A16S
ATOM  18714  O2' ADE     8     155.099 111.178   3.704  1.00 41.85      A16S
ATOM  18715  C3' ADE     8     153.016 110.549   2.648  1.00 41.85      A16S
ATOM  18716  O3' ADE     8     154.075 110.425   1.668  1.00 41.85      A16S
ATOM  18717  P   GUA     9     154.168 111.393   0.367  1.00 31.48      A16S
ATOM  18718  O1P GUA     9     153.687 112.775   0.590  1.00 39.27      A16S
ATOM  18719  O2P GUA     9     153.621 110.616  -0.767  1.00 39.27      A16S
ATOM  18720  O5' GUA     9     155.735 111.530   0.120  1.00 31.48      A16S
ATOM  18721  C5' GUA     9     156.513 112.403   0.904  1.00 31.48      A16S
ATOM  18722  C4' GUA     9     157.238 111.629   1.973  1.00 31.48      A16S
ATOM  18723  O4' GUA     9     156.586 110.351   2.165  1.00 31.48      A16S
ATOM  18724  C1' GUA     9     157.501 109.437   2.753  1.00 31.48      A16S
ATOM  18725  N9  GUA     9     157.552 108.227   1.944  1.00 39.27      A16S
ATOM  18726  C4  GUA     9     158.325 107.135   2.200  1.00 39.27      A16S
ATOM  18727  N3  GUA     9     159.124 106.977   3.264  1.00 39.27      A16S
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ATOM	18728	C2	GUA	9	159.769	105.824	3.222	1.00	39.27	A16S	ATOM	18781	C2'	GUA	11	169.486	106.113	2.413	1.00	43.41	A16S
ATOM	18729	N2	GUA	9	160.594	105.485	4.220	1.00	39.27	A16S	ATOM	18782	O2'	GUA	11	170.379	105.567	3.356	1.00	43.41	A16S
ATOM	18730	N1	GUA	9	159.648	104.916	2.206	1.00	39.27	A16S	ATOM	18783	C3'	GUA	11	169.392	107.608	2.619	1.00	43.41	A16S
ATOM	18731	C6	GUA	9	158.830	105.072	1.101	1.00	39.27	A16S	ATOM	18784	O3'	GUA	11	170.675	108.153	2.866	1.00	43.41	A16S
ATOM	18732	O6	GUA	9	158.804	104.205	0.238	1.00	39.27	A16S	ATOM	18785	P	URI	12	171.484	108.804	1.651	1.00	41.44	A16S
ATOM	18733	C5	GUA	9	158.119	106.283	1.146	1.00	39.27	A16S	ATOM	18786	O1P	URI	12	172.776	109.305	2.181	1.00	44.93	A16S
ATOM	18734	N7	GUA	9	157.196	106.810	0.261	1.00	39.27	A16S	ATOM	18787	O2P	URI	12	170.572	109.734	0.931	1.00	44.93	A16S
ATOM	18735	C8	GUA	9	156.880	107.964	0.778	1.00	39.27	A16S	ATOM	18788	O5'	URI	12	171.754	107.552	0.708	1.00	41.44	A16S
ATOM	18736	C2'	GUA	9	158.855	110.134	2.767	1.00	31.48	A16S	ATOM	18789	C5'	URI	12	172.675	106.541	1.086	1.00	41.44	A16S
ATOM	18737	O2'	GUA	9	159.053	110.727	4.024	1.00	31.48	A16S	ATOM	18790	C4'	URI	12	172.737	105.471	0.027	1.00	41.44	A16S
ATOM	18738	C3'	GUA	9	158.653	111.182	1.686	1.00	31.48	A16S	ATOM	18791	O4'	URI	12	171.452	104.797	-0.051	1.00	41.44	A16S
ATOM	18739	O3'	GUA	9	159.582	112.234	1.848	1.00	31.48	A16S	ATOM	18792	C1'	URI	12	171.207	104.392	-1.381	1.00	41.44	A16S
ATOM	18740	P	ADE	10	160.994	112.128	1.119	1.00	38.24	A16S	ATOM	18793	N1	URI	12	170.020	105.107	-1.857	1.00	44.93	A16S
ATOM	18741	O1P	ADE	10	161.638	113.467	1.157	1.00	37.91	A16S	ATOM	18794	C6	URI	12	169.715	106.354	-1.393	1.00	44.93	A16S
ATOM	18742	O2P	ADE	10	160.790	111.451	-0.185	1.00	37.91	A16S	ATOM	18795	C2	URI	12	169.247	104.499	-2.806	1.00	44.93	A16S
ATOM	18743	O5'	ADE	10	161.781	111.128	2.065	1.00	38.24	A16S	ATOM	18796	O2	URI	12	169.462	103.380	-3.210	1.00	44.93	A16S
ATOM	18744	C5'	ADE	10	162.055	111.472	3.407	1.00	38.24	A16S	ATOM	18797	N3	URI	12	168.205	105.248	-3.267	1.00	44.93	A16S
ATOM	18745	C4'	ADE	10	162.924	110.412	4.033	1.00	38.24	A16S	ATOM	18798	C4	URI	12	167.859	106.517	-2.874	1.00	44.93	A16S
ATOM	18746	O4'	ADE	10	162.166	109.175	4.127	1.00	38.24	A16S	ATOM	18799	O4	URI	12	166.915	107.090	-3.430	1.00	44.93	A16S
ATOM	18747	C1'	ADE	10	163.006	108.078	3.823	1.00	38.24	A16S	ATOM	18800	C5	URI	12	168.690	107.064	-1.858	1.00	44.93	A16S
ATOM	18748	N9	ADE	10	162.561	107.518	2.554	1.00	37.91	A16S	ATOM	18801	C2'	URI	12	172.448	104.780	-2.190	1.00	41.44	A16S
ATOM	18749	C4	ADE	10	162.868	106.274	2.074	1.00	37.91	A16S	ATOM	18802	O2'	URI	12	173.359	103.705	-2.176	1.00	41.44	A16S
ATOM	18750	N3	ADE	10	163.626	105.342	2.670	1.00	37.91	A16S	ATOM	18803	C3'	URI	12	172.971	105.960	-1.387	1.00	41.44	A16S
ATOM	18751	C2	ADE	10	163.706	104.253	1.915	1.00	37.91	A16S	ATOM	18804	O3'	URI	12	174.355	106.157	-1.608	1.00	41.44	A16S
ATOM	18752	N1	ADE	10	163.150	104.005	0.721	1.00	37.91	A16S	ATOM	18805	P	URI	13	174.853	107.409	-2.467	1.00	49.73	A16S
ATOM	18753	C6	ADE	10	162.388	104.962	0.154	1.00	37.91	A16S	ATOM	18806	O1P	URI	13	176.280	107.607	-2.167	1.00	47.52	A16S
ATOM	18754	N6	ADE	10	161.826	104.704	-1.025	1.00	37.91	A16S	ATOM	18807	O2P	URI	13	173.901	108.502	-2.200	1.00	47.52	A16S
ATOM	18755	C5	ADE	10	162.233	106.174	0.856	1.00	37.91	A16S	ATOM	18808	O5'	URI	13	174.695	106.958	-3.992	1.00	49.73	A16S
ATOM	18756	N7	ADE	10	161.541	107.341	0.569	1.00	37.91	A16S	ATOM	18809	C5'	URI	13	175.047	105.641	-4.416	1.00	49.73	A16S
ATOM	18757	C8	ADE	10	161.768	108.103	1.606	1.00	37.91	A16S	ATOM	18810	C4'	URI	13	175.275	105.590	-5.919	1.00	49.73	A16S
ATOM	18758	C2'	ADE	10	164.428	108.623	3.729	1.00	38.24	A16S	ATOM	18811	O4'	URI	13	174.074	105.558	-6.696	1.00	49.73	A16S
ATOM	18759	O2'	ADE	10	165.027	108.582	5.007	1.00	38.24	A16S	ATOM	18812	C1'	URI	13	174.462	105.751	-8.022	1.00	49.73	A16S
ATOM	18760	C3'	ADE	10	164.159	110.035	3.235	1.00	38.24	A16S	ATOM	18813	N1	URI	13	173.291	105.960	-8.870	1.00	47.52	A16S
ATOM	18761	O3'	ADE	10	165.244	110.907	3.498	1.00	38.24	A16S	ATOM	18814	C6	URI	13	172.462	107.026	-8.731	1.00	47.52	A16S
ATOM	18762	P	GUA	11	166.561	110.825	2.587	1.00	43.41	A16S	ATOM	18815	C2	URI	13	173.056	104.999	-9.819	1.00	47.52	A16S
ATOM	18763	O1P	GUA	11	167.568	111.733	3.185	1.00	49.54	A16S	ATOM	18816	O2	URI	13	173.789	104.054	-9.979	1.00	47.52	A16S
ATOM	18764	O2P	GUA	11	166.168	110.998	1.171	1.00	49.54	A16S	ATOM	18817	N3	URI	13	171.929	105.178	-10.569	1.00	47.52	A16S
ATOM	18765	O5'	GUA	11	167.087	109.341	2.818	1.00	43.41	A16S	ATOM	18818	C4	URI	13	171.035	106.212	-10.468	1.00	47.52	A16S
ATOM	18766	C5'	GUA	11	167.772	109.003	4.013	1.00	43.41	A16S	ATOM	18819	O4	URI	13	170.046	106.232	-11.198	1.00	47.52	A16S
ATOM	18767	C4'	GUA	11	168.499	107.698	3.842	1.00	43.41	A16S	ATOM	18820	C5	URI	13	171.364	107.184	-9.478	1.00	47.52	A16S
ATOM	18768	O4'	GUA	11	167.537	106.630	3.651	1.00	43.41	A16S	ATOM	18821	C2'	URI	13	175.611	106.764	-8.014	1.00	49.73	A16S
ATOM	18769	C1'	GUA	11	168.050	105.690	2.721	1.00	43.41	A16S	ATOM	18822	O2'	URI	13	176.592	106.396	-8.970	1.00	49.73	A16S
ATOM	18770	N9	GUA	11	167.194	105.742	1.546	1.00	49.54	A16S	ATOM	18823	C3'	URI	13	176.148	106.647	-6.578	1.00	49.73	A16S
ATOM	18771	C4	GUA	11	167.039	104.772	0.581	1.00	49.54	A16S	ATOM	18824	O3'	URI	13	177.409	106.011	-6.735	1.00	49.73	A16S
ATOM	18772	N3	GUA	11	167.650	103.571	0.552	1.00	49.54	A16S	ATOM	18825	P	URI	14	178.742	106.727	-6.270	1.00	41.80	A16S
ATOM	18773	C2	GUA	11	167.297	102.862	-0.514	1.00	49.54	A16S	ATOM	18826	O1P	URI	14	179.828	106.060	-7.014	1.00	42.25	A16S
ATOM	18774	N2	GUA	11	167.776	101.621	-0.693	1.00	49.54	A16S	ATOM	18827	O2P	URI	14	178.741	106.722	-4.775	1.00	42.25	A16S
ATOM	18775	N1	GUA	11	166.437	103.305	-1.480	1.00	49.54	A16S	ATOM	18828	O5'	URI	14	178.591	108.215	-6.804	1.00	41.80	A16S
ATOM	18776	C6	GUA	11	165.793	104.534	-1.475	1.00	49.54	A16S	ATOM	18829	C5'	URI	14	179.091	108.584	-8.064	1.00	41.80	A16S
ATOM	18777	O6	GUA	11	165.026	104.831	-2.405	1.00	49.54	A16S	ATOM	18830	C4'	URI	14	179.310	110.068	-8.105	1.00	41.80	A16S
ATOM	18778	C5	GUA	11	166.144	105.302	-0.325	1.00	49.54	A16S	ATOM	18831	O4'	URI	14	178.037	110.730	-7.950	1.00	41.80	A16S
ATOM	18779	N7	GUA	11	165.734	106.567	0.071	1.00	49.54	A16S	ATOM	18832	C1'	URI	14	178.208	111.939	-7.233	1.00	41.80	A16S
ATOM	18780	C8	GUA	11	166.382	106.785	1.182	1.00	49.54	A16S	ATOM	18833	N1	URI	14	177.390	111.873	-6.014	1.00	42.25	A16S

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ATOM  18834  C6  URI   14     177.090 110.677  -5.436  1.00 42.25      A16S
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ATOM  18841  C2' URI   14     179.704 112.084  -6.949  1.00 41.80      A16S
ATOM  18842  O2' URI   14     180.275 112.848  -7.982  1.00 41.80      A16S
ATOM  18843  C3' URI   14     180.168 110.635  -6.994  1.00 41.80      A16S
ATOM  18844  O3' URI   14     181.522 110.572  -7.403  1.00 41.80      A16S
ATOM  18845  P   GUA   15     182.691 110.485  -6.312  1.00 45.33      A16S
ATOM  18846  O1P GUA   15     183.943 110.426  -7.100  1.00 42.15      A16S
ATOM  18847  O2P GUA   15     182.402 109.429  -5.310  1.00 42.15      A16S
ATOM  18848  O5' GUA   15     182.683 111.901  -5.593  1.00 45.33      A16S
ATOM  18849  C5' GUA   15     183.430 112.097  -4.405  1.00 45.33      A16S
ATOM  18850  C4' GUA   15     183.440 113.549  -4.033  1.00 45.33      A16S
ATOM  18851  O4' GUA   15     184.253 114.292  -4.970  1.00 45.33      A16S
ATOM  18852  C1' GUA   15     183.656 115.552  -5.234  1.00 45.33      A16S
ATOM  18853  N9  GUA   15     183.314 115.581  -6.654  1.00 42.15      A16S
ATOM  18854  C4  GUA   15     182.827 116.638  -7.383  1.00 42.15      A16S
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ATOM  18859  C6  GUA   15     182.214 117.016  -9.676  1.00 42.15      A16S
ATOM  18860  O6  GUA   15     182.007 116.759 -10.870  1.00 42.15      A16S
ATOM  18861  C5  GUA   15     182.700 116.163  -8.674  1.00 42.15      A16S
ATOM  18862  N7  GUA   15     183.087 114.837  -8.752  1.00 42.15      A16S
ATOM  18863  C8  GUA   15     183.440 114.533  -7.533  1.00 42.15      A16S
ATOM  18864  C2' GUA   15     182.483 115.678  -4.262  1.00 45.33      A16S
ATOM  18865  O2' GUA   15     182.993 116.193  -3.052  1.00 45.33      A16S
ATOM  18866  C3' GUA   15     182.087 114.221  -4.081  1.00 45.33      A16S
ATOM  18867  O3' GUA   15     181.421 113.992  -2.851  1.00 45.33      A16S
ATOM  18868  P   ADE   16     179.916 113.431  -2.858  1.00 41.06      A16S
ATOM  18869  O1P ADE   16     179.505 113.157  -1.451  1.00 39.99      A16S
ATOM  18870  O2P ADE   16     179.809 112.349  -3.876  1.00 39.99      A16S
ATOM  18871  O5' ADE   16     179.073 114.691  -3.338  1.00 41.06      A16S
ATOM  18872  C5' ADE   16     178.856 115.768  -2.446  1.00 41.06      A16S
ATOM  18873  C4' ADE   16     178.574 117.032  -3.206  1.00 41.06      A16S
ATOM  18874  O4' ADE   16     179.577 117.191  -4.243  1.00 41.06      A16S
ATOM  18875  C1' ADE   16     179.015 117.932  -5.318  1.00 41.06      A16S
ATOM  18876  N9  ADE   16     179.140 117.154  -6.546  1.00 39.99      A16S
ATOM  18877  C4  ADE   16     178.790 117.607  -7.790  1.00 39.99      A16S
ATOM  18878  N3  ADE   16     178.287 118.814  -8.101  1.00 39.99      A16S
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ATOM  18880  N1  ADE   16     178.254 117.971 -10.361  1.00 39.99      A16S
ATOM  18881  C6  ADE   16     178.755 116.776 -10.002  1.00 39.99      A16S
ATOM  18882  N6  ADE   16     178.937 115.871 -10.937  1.00 39.99      A16S
ATOM  18883  C5  ADE   16     179.046 116.566  -8.657  1.00 39.99      A16S
ATOM  18884  N7  ADE   16     179.548 115.474  -7.973  1.00 39.99      A16S
ATOM  18885  C8  ADE   16     179.589 115.875  -6.725  1.00 39.99      A16S
ATOM  18886  C2' ADE   16     177.544 118.194  -4.974  1.00 41.06      A16S
ATOM  18887  O2' ADE   16     177.398 119.491  -4.426  1.00 41.06      A16S
ATOM  18888  C3' ADE   16     177.273 117.070  -3.983  1.00 41.06      A16S
ATOM  18889  O3' ADE   16     176.193 117.377  -3.128  1.00 41.06      A16S
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ATOM  18892  O2P URI   17     174.886 115.306  -3.585  1.00 42.83      A16S
ATOM  18893  O5' URI   17     174.361 117.410  -4.845  1.00 34.91      A16S
ATOM  18894  C5' URI   17     174.222 118.805  -4.970  1.00 34.91      A16S
ATOM  18895  C4' URI   17     173.686 119.167  -6.328  1.00 34.91      A16S
ATOM  18896  O4' URI   17     174.695 119.002  -7.351  1.00 34.91      A16S
ATOM  18897  C1' URI   17     174.058 118.786  -8.594  1.00 34.91      A16S
ATOM  18898  N1  URI   17     174.537 117.516  -9.143  1.00 42.83      A16S
ATOM  18899  C6  URI   17     175.112 116.570  -8.346  1.00 42.83      A16S
ATOM  18900  C2  URI   17     174.391 117.317 -10.488  1.00 42.83      A16S
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ATOM  18906  C2' URI   17     172.552 118.799  -8.330  1.00 34.91      A16S
ATOM  18907  O2' URI   17     172.096 120.131  -8.517  1.00 34.91      A16S
ATOM  18908  C3' URI   17     172.503 118.383  -6.865  1.00 34.91      A16S
ATOM  18909  O3' URI   17     171.305 118.839  -6.245  1.00 34.91      A16S
ATOM  18910  P   CYT   18     170.092 117.821  -5.984  1.00 34.59      A16S
ATOM  18911  O1P CYT   18     169.156 118.532  -5.089  1.00 44.64      A16S
ATOM  18912  O2P CYT   18     170.576 116.472  -5.617  1.00 44.64      A16S
ATOM  18913  O5' CYT   18     169.355 117.758  -7.377  1.00 34.59      A16S
ATOM  18914  C5' CYT   18     168.698 118.900  -7.863  1.00 34.59      A16S
ATOM  18915  C4' CYT   18     168.495 118.768  -9.333  1.00 34.59      A16S
ATOM  18916  O4' CYT   18     169.795 118.653  -9.959  1.00 34.59      A16S
ATOM  18917  C1' CYT   18     169.689 117.822 -11.103  1.00 34.59      A16S
ATOM  18918  N1  CYT   18     170.541 116.653 -10.903  1.00 44.64      A16S
ATOM  18919  C6  CYT   18     170.939 116.274  -9.654  1.00 44.64      A16S
ATOM  18920  C2  CYT   18     170.919 115.916 -12.020  1.00 44.64      A16S
ATOM  18921  O2  CYT   18     170.543 116.305 -13.141  1.00 44.64      A16S
ATOM  18922  N3  CYT   18     171.674 114.801 -11.854  1.00 44.64      A16S
ATOM  18923  C4  CYT   18     172.043 114.430 -10.626  1.00 44.64      A16S
ATOM  18924  N4  CYT   18     172.771 113.326 -10.496  1.00 44.64      A16S
ATOM  18925  C5  CYT   18     171.679 115.178  -9.471  1.00 44.64      A16S
ATOM  18926  C2' CYT   18     168.220 117.413 -11.211  1.00 34.59      A16S
ATOM  18927  O2' CYT   18     167.519 118.357 -11.995  1.00 34.59      A16S
ATOM  18928  C3' CYT   18     167.804 117.489  -9.757  1.00 34.59      A16S
ATOM  18929  O3' CYT   18     166.399 117.571  -9.591  1.00 34.59      A16S
ATOM  18930  P   CYT   19     165.565 116.253  -9.191  1.00 33.59      A16S
ATOM  18931  O1P CYT   19     164.170 116.737  -8.963  1.00 38.55      A16S
ATOM  18932  O2P CYT   19     166.272 115.513  -8.113  1.00 38.55      A16S
ATOM  18933  O5' CYT   19     165.587 115.379 -10.520  1.00 33.59      A16S
ATOM  18934  C5' CYT   19     164.931 115.860 -11.674  1.00 33.59      A16S
ATOM  18935  C4' CYT   19     165.243 115.004 -12.869  1.00 33.59      A16S
ATOM  18936  O4' CYT   19     166.676 114.994 -13.128  1.00 33.59      A16S
ATOM  18937  C1' CYT   19     167.036 113.757 -13.725  1.00 33.59      A16S
ATOM  18938  N1  CYT   19     167.902 113.046 -12.780  1.00 38.55      A16S
ATOM  18939  C6  CYT   19     167.926 113.398 -11.464  1.00 38.55      A16S
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ATOM	18940	C2	CYT	19	168.701	112.021	-13.243	1.00	38.55	A16S	ATOM	18993	P	GUA	22	162.056	101.422	-11.806	1.00	43.16	A16S
ATOM	18941	O2	CYT	19	168.646	111.729	-14.444	1.00	38.55	A16S	ATOM	18994	O1P	GUA	22	161.058	100.568	-12.510	1.00	39.70	A16S
ATOM	18942	N3	CYT	19	169.512	111.370	-12.376	1.00	38.55	A16S	ATOM	18995	O2P	GUA	22	161.598	102.564	-10.975	1.00	39.70	A16S
ATOM	18943	C4	CYT	19	169.518	111.717	-11.087	1.00	38.55	A16S	ATOM	18996	O5'	GUA	22	162.905	100.460	-10.877	1.00	43.16	A16S
ATOM	18944	N4	CYT	19	170.291	111.037	-10.248	1.00	38.55	A16S	ATOM	18997	C5'	GUA	22	163.334	99.219	-11.387	1.00	43.16	A16S
ATOM	18945	C5	CYT	19	168.718	112.768	-10.594	1.00	38.55	A16S	ATOM	18998	C4'	GUA	22	164.614	98.808	-10.733	1.00	43.16	A16S
ATOM	18946	C2'	CYT	19	165.721	113.022	-13.982	1.00	33.59	A16S	ATOM	18999	O4'	GUA	22	165.496	99.955	-10.667	1.00	43.16	A16S
ATOM	18947	O2'	CYT	19	165.179	113.505	-15.207	1.00	33.59	A16S	ATOM	19000	C1'	GUA	22	166.387	99.787	-9.580	1.00	43.16	A16S
ATOM	18948	C3'	CYT	19	164.885	113.532	-12.816	1.00	33.59	A16S	ATOM	19001	N9	GUA	22	166.300	100.942	-8.698	1.00	39.70	A16S
ATOM	18949	O3'	CYT	19	163.503	113.364	-13.080	1.00	33.59	A16S	ATOM	19002	C4	GUA	22	167.206	101.257	-7.727	1.00	39.70	A16S
ATOM	18950	P	URI	20	162.785	111.979	-12.714	1.00	37.27	A16S	ATOM	19003	N3	GUA	22	168.318	100.556	-7.434	1.00	39.70	A16S
ATOM	18951	O1P	URI	20	161.453	112.047	-13.361	1.00	37.17	A16S	ATOM	19004	C2	GUA	22	168.981	101.083	-6.432	1.00	39.70	A16S
ATOM	18952	O2P	URI	20	162.882	111.704	-11.263	1.00	37.17	A16S	ATOM	19005	N2	GUA	22	170.105	100.508	-6.002	1.00	39.70	A16S
ATOM	18953	O5'	URI	20	163.609	110.883	-13.518	1.00	37.27	A16S	ATOM	19006	N1	GUA	22	168.594	102.217	-5.771	1.00	39.70	A16S
ATOM	18954	C5'	URI	20	163.371	110.694	-14.914	1.00	37.27	A16S	ATOM	19007	C6	GUA	22	167.466	102.967	-6.068	1.00	39.70	A16S
ATOM	18955	C4'	URI	20	164.215	109.566	-15.454	1.00	37.27	A16S	ATOM	19008	O6	GUA	22	167.226	103.989	-5.424	1.00	39.70	A16S
ATOM	18956	O4'	URI	20	165.616	109.851	-15.221	1.00	37.27	A16S	ATOM	19009	C5	GUA	22	166.731	102.398	-7.139	1.00	39.70	A16S
ATOM	18957	C1'	URI	20	166.295	108.657	-14.886	1.00	37.27	A16S	ATOM	19010	N7	GUA	22	165.545	102.797	-7.733	1.00	39.70	A16S
ATOM	18958	N1	URI	20	166.743	108.771	-13.499	1.00	37.17	A16S	ATOM	19011	C8	GUA	22	165.330	101.902	-8.654	1.00	39.70	A16S
ATOM	18959	C6	URI	20	166.245	109.736	-12.667	1.00	37.17	A16S	ATOM	19012	C2'	GUA	22	165.966	98.515	-8.855	1.00	43.16	A16S
ATOM	18960	C2	URI	20	167.681	107.883	-13.069	1.00	37.17	A16S	ATOM	19013	O2'	GUA	22	166.772	97.476	-9.354	1.00	43.16	A16S
ATOM	18961	O2	URI	20	168.132	107.015	-13.779	1.00	37.17	A16S	ATOM	19014	C3'	GUA	22	164.508	98.420	-9.277	1.00	43.16	A16S
ATOM	18962	N3	URI	20	168.076	108.043	-11.774	1.00	37.17	A16S	ATOM	19015	O3'	GUA	22	163.983	97.110	-9.151	1.00	43.16	A16S
ATOM	18963	C4	URI	20	167.629	108.981	-10.890	1.00	37.17	A16S	ATOM	19016	P	CYT	23	163.163	96.718	-7.841	1.00	34.64	A16S
ATOM	18964	O4	URI	20	168.086	108.997	-9.754	1.00	37.17	A16S	ATOM	19017	O1P	CYT	23	162.686	95.316	-7.961	1.00	38.60	A16S
ATOM	18965	C5	URI	20	166.646	109.869	-11.412	1.00	37.17	A16S	ATOM	19018	O2P	CYT	23	162.200	97.811	-7.612	1.00	38.60	A16S
ATOM	18966	C2'	URI	20	165.309	107.513	-15.074	1.00	37.27	A16S	ATOM	19019	O5'	CYT	23	164.260	96.753	-6.691	1.00	34.64	A16S
ATOM	18967	O2'	URI	20	165.414	107.042	-16.404	1.00	37.27	A16S	ATOM	19020	C5'	CYT	23	165.341	95.841	-6.729	1.00	34.64	A16S
ATOM	18968	C3'	URI	20	163.993	108.224	-14.795	1.00	37.27	A16S	ATOM	19021	C4'	CYT	23	166.328	96.161	-5.654	1.00	34.64	A16S
ATOM	18969	O3'	URI	20	162.907	107.571	-15.421	1.00	37.27	A16S	ATOM	19022	O4'	CYT	23	166.848	97.479	-5.907	1.00	34.64	A16S
ATOM	18970	P	GUA	21	161.906	106.701	-14.535	1.00	31.91	A16S	ATOM	19023	C1'	CYT	23	167.178	98.099	-4.676	1.00	34.64	A16S
ATOM	18971	O1P	GUA	21	160.852	106.124	-15.447	1.00	46.33	A16S	ATOM	19024	N1	CYT	23	166.409	99.336	-4.568	1.00	38.60	A16S
ATOM	18972	O2P	GUA	21	161.501	107.576	-13.412	1.00	46.33	A16S	ATOM	19025	C6	CYT	23	165.315	99.560	-5.351	1.00	38.60	A16S
ATOM	18973	O5'	GUA	21	162.848	105.574	-13.932	1.00	31.91	A16S	ATOM	19026	C2	CYT	23	166.821	100.283	-3.649	1.00	38.60	A16S
ATOM	18974	C5'	GUA	21	163.427	104.598	-14.765	1.00	31.91	A16S	ATOM	19027	O2	CYT	23	167.792	100.029	-2.932	1.00	38.60	A16S
ATOM	18975	C4'	GUA	21	164.385	103.724	-13.978	1.00	31.91	A16S	ATOM	19028	N3	CYT	23	166.146	101.446	-3.547	1.00	38.60	A16S
ATOM	18976	O4'	GUA	21	165.543	104.500	-13.565	1.00	31.91	A16S	ATOM	19029	C4	CYT	23	165.075	101.658	-4.308	1.00	38.60	A16S
ATOM	18977	C1'	GUA	21	166.048	103.970	-12.353	1.00	31.91	A16S	ATOM	19030	N4	CYT	23	164.428	102.812	-4.157	1.00	38.60	A16S
ATOM	18978	N9	GUA	21	165.943	105.005	-11.343	1.00	46.33	A16S	ATOM	19031	C5	CYT	23	164.621	100.696	-5.252	1.00	38.60	A16S
ATOM	18979	C4	GUA	21	166.736	105.155	-10.240	1.00	46.33	A16S	ATOM	19032	C2'	CYT	23	166.827	97.111	-3.566	1.00	34.64	A16S
ATOM	18980	N3	GUA	21	167.763	104.358	-9.892	1.00	46.33	A16S	ATOM	19033	O2'	CYT	23	167.965	96.346	-3.217	1.00	34.64	A16S
ATOM	18981	C2	GUA	21	168.368	104.787	-8.807	1.00	46.33	A16S	ATOM	19034	C3'	CYT	23	165.761	96.286	-4.258	1.00	34.64	A16S
ATOM	18982	N2	GUA	21	169.440	104.143	-8.346	1.00	46.33	A16S	ATOM	19035	O3'	CYT	23	165.587	95.040	-3.619	1.00	34.64	A16S
ATOM	18983	N1	GUA	21	167.975	105.889	-8.104	1.00	46.33	A16S	ATOM	19036	P	URI	24	164.406	94.884	-2.551	1.00	42.00	A16S
ATOM	18984	C6	GUA	21	166.911	106.717	-8.444	1.00	46.33	A16S	ATOM	19037	O1P	URI	24	164.433	93.503	-2.009	1.00	46.28	A16S
ATOM	18985	O6	GUA	21	166.638	107.699	-7.741	1.00	46.33	A16S	ATOM	19038	O2P	URI	24	163.164	95.415	-3.168	1.00	46.28	A16S
ATOM	18986	C5	GUA	21	166.275	106.282	-9.612	1.00	46.33	A16S	ATOM	19039	O5'	URI	24	164.853	95.865	-1.395	1.00	42.00	A16S
ATOM	18987	N7	GUA	21	165.206	106.822	-10.299	1.00	46.33	A16S	ATOM	19040	C5'	URI	24	166.018	95.584	-0.653	1.00	42.00	A16S
ATOM	18988	C8	GUA	21	165.042	106.027	-11.316	1.00	46.33	A16S	ATOM	19041	C4'	URI	24	166.198	96.608	0.423	1.00	42.00	A16S
ATOM	18989	C2'	GUA	21	165.200	102.746	-12.004	1.00	31.91	A16S	ATOM	19042	O4'	URI	24	166.499	97.896	-0.176	1.00	42.00	A16S
ATOM	18990	O2'	GUA	21	165.806	101.607	-12.573	1.00	31.91	A16S	ATOM	19043	C1'	URI	24	165.983	98.922	0.654	1.00	42.00	A16S
ATOM	18991	C3'	GUA	21	163.886	103.093	-12.684	1.00	31.91	A16S	ATOM	19044	N1	URI	24	165.001	99.702	-0.111	1.00	46.28	A16S
ATOM	18992	O3'	GUA	21	163.109	101.924	-12.921	1.00	31.91	A16S	ATOM	19045	C6	URI	24	164.480	99.252	-1.287	1.00	46.28	A16S

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ATOM  19046  C2  URI   24     164.613 100.906   0.422  1.00 46.28      A16S
ATOM  19047  O2  URI   24     165.064 101.333   1.464  1.00 46.28      A16S
ATOM  19048  N3  URI   24     163.677 101.591  -0.302  1.00 46.28      A16S
ATOM  19049  C4  URI   24     163.098 101.196  -1.479  1.00 46.28      A16S
ATOM  19050  O4  URI   24     162.207 101.889  -1.977  1.00 46.28      A16S
ATOM  19051  C5  URI   24     163.563  99.937  -1.973  1.00 46.28      A16S
ATOM  19052  C2' URI   24     165.327  98.225   1.849  1.00 42.00      A16S
ATOM  19053  O2' URI   24     166.288  98.016   2.859  1.00 42.00      A16S
ATOM  19054  C3' URI   24     164.952  96.901   1.229  1.00 42.00      A16S
ATOM  19055  O3' URI   24     164.699  95.916   2.206  1.00 42.00      A16S
ATOM  19056  P   CYT   25     163.193  95.671   2.691  1.00 42.95      A16S
ATOM  19057  O1P CYT   25     163.155  94.388   3.448  1.00 42.76      A16S
ATOM  19058  O2P CYT   25     162.275  95.861   1.540  1.00 42.76      A16S
ATOM  19059  O5' CYT   25     162.972  96.866   3.709  1.00 42.95      A16S
ATOM  19060  C5' CYT   25     163.822  97.009   4.830  1.00 42.95      A16S
ATOM  19061  C4' CYT   25     163.577  98.331   5.502  1.00 42.95      A16S
ATOM  19062  O4' CYT   25     163.848  99.397   4.557  1.00 42.95      A16S
ATOM  19063  C1' CYT   25     162.985 100.490   4.827  1.00 42.95      A16S
ATOM  19064  N1  CYT   25     162.192 100.780   3.621  1.00 42.76      A16S
ATOM  19065  C6  CYT   25     161.982  99.832   2.662  1.00 42.76      A16S
ATOM  19066  C2  CYT   25     161.664 102.051   3.479  1.00 42.76      A16S
ATOM  19067  O2  CYT   25     161.872 102.881   4.377  1.00 42.76      A16S
ATOM  19068  N3  CYT   25     160.948 102.351   2.372  1.00 42.76      A16S
ATOM  19069  C4  CYT   25     160.763 101.424   1.429  1.00 42.76      A16S
ATOM  19070  N4  CYT   25     160.085 101.770   0.335  1.00 42.76      A16S
ATOM  19071  C5  CYT   25     161.277 100.108   1.561  1.00 42.76      A16S
ATOM  19072  C2' CYT   25     162.143 100.110   6.046  1.00 42.95      A16S
ATOM  19073  O2' CYT   25     162.828 100.554   7.201  1.00 42.95      A16S
ATOM  19074  C3' CYT   25     162.148  98.595   5.937  1.00 42.95      A16S
ATOM  19075  O3' CYT   25     161.903  97.982   7.185  1.00 42.95      A16S
ATOM  19076  P   ADE   26     160.439  97.430   7.525  1.00 53.28      A16S
ATOM  19077  O1P ADE   26     160.592  96.506   8.669  1.00 42.42      A16S
ATOM  19078  O2P ADE   26     159.775  96.951   6.293  1.00 42.42      A16S
ATOM  19079  O5' ADE   26     159.687  98.732   8.039  1.00 53.28      A16S
ATOM  19080  C5' ADE   26     160.167  99.424   9.187  1.00 53.28      A16S
ATOM  19081  C4' ADE   26     159.521 100.776   9.295  1.00 53.28      A16S
ATOM  19082  O4' ADE   26     159.832 101.537   8.106  1.00 53.28      A16S
ATOM  19083  C1' ADE   26     158.811 102.484   7.881  1.00 53.28      A16S
ATOM  19084  N9  ADE   26     158.335 102.345   6.514  1.00 42.42      A16S
ATOM  19085  C4  ADE   26     157.880 103.371   5.728  1.00 42.42      A16S
ATOM  19086  N3  ADE   26     157.829 104.673   6.045  1.00 42.42      A16S
ATOM  19087  C2  ADE   26     157.286 105.373   5.058  1.00 42.42      A16S
ATOM  19088  N1  ADE   26     156.826 104.955   3.878  1.00 42.42      A16S
ATOM  19089  C6  ADE   26     156.902 103.636   3.588  1.00 42.42      A16S
ATOM  19090  N6  ADE   26     156.439 103.208   2.403  1.00 42.42      A16S
ATOM  19091  C5  ADE   26     157.460 102.787   4.554  1.00 42.42      A16S
ATOM  19092  N7  ADE   26     157.682 101.419   4.582  1.00 42.42      A16S
ATOM  19093  C8  ADE   26     158.209 101.210   5.763  1.00 42.42      A16S
ATOM  19094  C2' ADE   26     157.712 102.231   8.914  1.00 53.28      A16S
ATOM  19095  O2' ADE   26     157.912 103.129   9.981  1.00 53.28      A16S
ATOM  19096  C3' ADE   26     158.005 100.799   9.341  1.00 53.28      A16S
ATOM  19097  O3' ADE   26     157.558 100.600  10.678  1.00 53.28      A16S
ATOM  19098  P   GUA   27     156.606  99.348  11.032  1.00 48.29      A16S
ATOM  19099  O1P GUA   27     156.396  99.396  12.504  1.00 43.12      A16S
ATOM  19100  O2P GUA   27     157.157  98.117  10.410  1.00 43.12      A16S
ATOM  19101  O5' GUA   27     155.226  99.679  10.313  1.00 48.29      A16S
ATOM  19102  C5' GUA   27     154.514 100.869  10.613  1.00 48.29      A16S
ATOM  19103  C4' GUA   27     153.185 100.856   9.904  1.00 48.29      A16S
ATOM  19104  O4' GUA   27     153.407 100.872   8.472  1.00 48.29      A16S
ATOM  19105  C1' GUA   27     152.399 100.112   7.825  1.00 48.29      A16S
ATOM  19106  N9  GUA   27     153.038  98.995   7.145  1.00 43.12      A16S
ATOM  19107  C4  GUA   27     152.505  98.251   6.127  1.00 43.12      A16S
ATOM  19108  N3  GUA   27     151.303  98.444   5.554  1.00 43.12      A16S
ATOM  19109  C2  GUA   27     151.049  97.537   4.626  1.00 43.12      A16S
ATOM  19110  N2  GUA   27     149.891  97.575   3.940  1.00 43.12      A16S
ATOM  19111  N1  GUA   27     151.904  96.529   4.299  1.00 43.12      A16S
ATOM  19112  C6  GUA   27     153.143  96.317   4.872  1.00 43.12      A16S
ATOM  19113  O6  GUA   27     153.828  95.368   4.499  1.00 43.12      A16S
ATOM  19114  C5  GUA   27     153.432  97.281   5.860  1.00 43.12      A16S
ATOM  19115  N7  GUA   27     154.543  97.428   6.674  1.00 43.12      A16S
ATOM  19116  C8  GUA   27     154.267  98.461   7.413  1.00 43.12      A16S
ATOM  19117  C2' GUA   27     151.449  99.623   8.916  1.00 48.29      A16S
ATOM  19118  O2' GUA   27     150.408 100.551   9.107  1.00 48.29      A16S
ATOM  19119  C3' GUA   27     152.373  99.598  10.112  1.00 48.29      A16S
ATOM  19120  O3' GUA   27     151.641  99.660  11.309  1.00 48.29      A16S
ATOM  19121  P   GUA   28     151.237  98.302  12.050  1.00 46.99      A16S
ATOM  19122  O1P GUA   28     150.502  98.711  13.275  1.00 47.43      A16S
ATOM  19123  O2P GUA   28     152.424  97.416  12.171  1.00 47.43      A16S
ATOM  19124  O5' GUA   28     150.175  97.636  11.070  1.00 46.99      A16S
ATOM  19125  C5' GUA   28     148.901  98.233  10.895  1.00 46.99      A16S
ATOM  19126  C4' GUA   28     148.145  97.568   9.772  1.00 46.99      A16S
ATOM  19127  O4' GUA   28     148.862  97.717   8.516  1.00 46.99      A16S
ATOM  19128  C1' GUA   28     148.591  96.600   7.677  1.00 46.99      A16S
ATOM  19129  N9  GUA   28     149.827  95.853   7.494  1.00 47.43      A16S
ATOM  19130  C4  GUA   28     150.010  94.778   6.662  1.00 47.43      A16S
ATOM  19131  N3  GUA   28     149.087  94.248   5.831  1.00 47.43      A16S
ATOM  19132  C2  GUA   28     149.560  93.206   5.171  1.00 47.43      A16S
ATOM  19133  N2  GUA   28     148.794  92.572   4.285  1.00 47.43      A16S
ATOM  19134  N1  GUA   28     150.825  92.711   5.324  1.00 47.43      A16S
ATOM  19135  C6  GUA   28     151.793  93.236   6.172  1.00 47.43      A16S
ATOM  19136  O6  GUA   28     152.907  92.703   6.241  1.00 47.43      A16S
ATOM  19137  C5  GUA   28     151.309  94.370   6.875  1.00 47.43      A16S
ATOM  19138  N7  GUA   28     151.940  95.193   7.802  1.00 47.43      A16S
ATOM  19139  C8  GUA   28     151.023  96.058   8.137  1.00 47.43      A16S
ATOM  19140  C2' GUA   28     147.575  95.752   8.431  1.00 46.99      A16S
ATOM  19141  O2' GUA   28     146.281  96.224   8.116  1.00 46.99      A16S
ATOM  19142  C3' GUA   28     147.966  96.071   9.860  1.00 46.99      A16S
ATOM  19143  O3' GUA   28     146.954  95.717  10.772  1.00 46.99      A16S
ATOM  19144  P   GUA   29     147.164  94.432  11.692  1.00 45.06      A16S
ATOM  19145  O1P GUA   29     146.007  94.348  12.616  1.00 43.08      A16S
ATOM  19146  O2P GUA   29     148.546  94.505  12.235  1.00 43.08      A16S
ATOM  19147  O5' GUA   29     147.048  93.219  10.673  1.00 45.06      A16S
ATOM  19148  C5' GUA   29     145.869  93.063   9.907  1.00 45.06      A16S
ATOM  19149  C4' GUA   29     146.056  92.001   8.859  1.00 45.06      A16S
ATOM  19150  O4' GUA   29     147.189  92.333   8.025  1.00 45.06      A16S
ATOM  19151  C1' GUA   29     147.704  91.150   7.449  1.00 45.06      A16S
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ATOM  19152  N9  GUA  29     149.134  91.070   7.714  1.00 43.08      A16S
ATOM  19153  C4  GUA  29     150.023  90.218   7.108  1.00 43.08      A16S
ATOM  19154  N3  GUA  29     149.730  89.324   6.148  1.00 43.08      A16S
ATOM  19155  C2  GUA  29     150.791  88.637   5.771  1.00 43.08      A16S
ATOM  19156  N2  GUA  29     150.687  87.721   4.806  1.00 43.08      A16S
ATOM  19157  N1  GUA  29     152.032  88.798   6.304  1.00 43.08      A16S
ATOM  19158  C6  GUA  29     152.360  89.709   7.295  1.00 43.08      A16S
ATOM  19159  O6  GUA  29     153.520  89.765   7.715  1.00 43.08      A16S
ATOM  19160  C5  GUA  29     151.234  90.471   7.697  1.00 43.08      A16S
ATOM  19161  N7  GUA  29     151.122  91.485   8.636  1.00 43.08      A16S
ATOM  19162  C8  GUA  29     149.856  91.807   8.612  1.00 43.08      A16S
ATOM  19163  C2' GUA  29     146.908  89.996   8.050  1.00 45.06      A16S
ATOM  19164  O2' GUA  29     145.821  89.754   7.188  1.00 45.06      A16S
ATOM  19165  C3' GUA  29     146.415  90.617   9.342  1.00 45.06      A16S
ATOM  19166  O3' GUA  29     145.257  89.946   9.791  1.00 45.06      A16S
ATOM  19167  P   URI  30     145.397  88.728  10.814  1.00 71.04      A16S
ATOM  19168  O1P URI  30     144.020  88.308  11.140  1.00 44.45      A16S
ATOM  19169  O2P URI  30     146.307  89.149  11.898  1.00 44.45      A16S
ATOM  19170  O5' URI  30     146.118  87.579   9.975  1.00 71.04      A16S
ATOM  19171  C5' URI  30     145.395  86.710   9.088  1.00 71.04      A16S
ATOM  19172  C4' URI  30     146.251  85.506   8.741  1.00 71.04      A16S
ATOM  19173  O4' URI  30     147.504  86.000   8.226  1.00 71.04      A16S
ATOM  19174  C1' URI  30     148.552  85.155   8.637  1.00 71.04      A16S
ATOM  19175  N1  URI  30     149.705  85.975   9.015  1.00 44.45      A16S
ATOM  19176  C6  URI  30     149.567  87.155   9.698  1.00 44.45      A16S
ATOM  19177  C2  URI  30     150.943  85.502   8.648  1.00 44.45      A16S
ATOM  19178  O2  URI  30     151.089  84.463   8.022  1.00 44.45      A16S
ATOM  19179  N3  URI  30     152.000  86.288   9.029  1.00 44.45      A16S
ATOM  19180  C4  URI  30     151.938  87.474   9.722  1.00 44.45      A16S
ATOM  19181  O4  URI  30     152.981  88.041  10.038  1.00 44.45      A16S
ATOM  19182  C5  URI  30     150.613  87.905  10.053  1.00 44.45      A16S
ATOM  19183  C2' URI  30     148.051  84.190   9.714  1.00 71.04      A16S
ATOM  19184  O2' URI  30     148.169  82.851   9.275  1.00 71.04      A16S
ATOM  19185  C3' URI  30     146.610  84.650   9.953  1.00 71.04      A16S
ATOM  19186  O3' URI  30     145.801  83.470  10.045  1.00 71.04      A16S
ATOM  19187  P   GUA  31     144.817  83.038   8.830  1.00 63.12      A16S
ATOM  19188  O1P GUA  31     145.601  82.786   7.592  1.00 56.24      A16S
ATOM  19189  O2P GUA  31     143.663  83.968   8.788  1.00 56.24      A16S
ATOM  19190  O5' GUA  31     144.262  81.635   9.334  1.00 63.12      A16S
ATOM  19191  C5' GUA  31     143.998  81.414  10.721  1.00 63.12      A16S
ATOM  19192  C4' GUA  31     144.643  80.135  11.155  1.00 63.12      A16S
ATOM  19193  O4' GUA  31     144.130  79.094  10.312  1.00 63.12      A16S
ATOM  19194  C1' GUA  31     145.149  78.176  10.012  1.00 63.12      A16S
ATOM  19195  N9  GUA  31     145.049  77.827   8.601  1.00 56.24      A16S
ATOM  19196  C4  GUA  31     144.899  76.564   8.101  1.00 56.24      A16S
ATOM  19197  N3  GUA  31     144.824  75.434   8.827  1.00 56.24      A16S
ATOM  19198  C2  GUA  31     144.698  74.372   8.065  1.00 56.24      A16S
ATOM  19199  N2  GUA  31     144.633  73.169   8.616  1.00 56.24      A16S
ATOM  19200  N1  GUA  31     144.638  74.410   6.704  1.00 56.24      A16S
ATOM  19201  C6  GUA  31     144.715  75.559   5.933  1.00 56.24      A16S
ATOM  19202  O6  GUA  31     144.667  75.478   4.698  1.00 56.24      A16S
ATOM  19203  C5  GUA  31     144.854  76.713   6.738  1.00 56.24      A16S
ATOM  19204  N7  GUA  31     144.964  78.048   6.386  1.00 56.24      A16S
ATOM  19205  C8  GUA  31     145.077  78.671   7.524  1.00 56.24      A16S
ATOM  19206  C2' GUA  31     146.492  78.718  10.509  1.00 63.12      A16S
ATOM  19207  O2' GUA  31     147.045  77.890  11.510  1.00 63.12      A16S
ATOM  19208  C3' GUA  31     146.139  80.139  10.940  1.00 63.12      A16S
ATOM  19209  O3' GUA  31     146.785  80.624  12.125  1.00 63.12      A16S
ATOM  19210  P   ADE  32     146.724  79.780  13.506  1.00 47.90      A16S
ATOM  19211  O1P ADE  32     145.860  78.605  13.290  1.00 50.42      A16S
ATOM  19212  O2P ADE  32     146.398  80.732  14.595  1.00 50.42      A16S
ATOM  19213  O5' ADE  32     148.221  79.305  13.740  1.00 47.90      A16S
ATOM  19214  C5' ADE  32     149.290  80.165  13.396  1.00 47.90      A16S
ATOM  19215  C4' ADE  32     150.167  79.514  12.359  1.00 47.90      A16S
ATOM  19216  O4' ADE  32     150.428  80.470  11.304  1.00 47.90      A16S
ATOM  19217  C1' ADE  32     151.787  80.395  10.920  1.00 47.90      A16S
ATOM  19218  N9  ADE  32     152.423  81.675  11.253  1.00 50.42      A16S
ATOM  19219  C4  ADE  32     153.682  82.108  10.902  1.00 50.42      A16S
ATOM  19220  N3  ADE  32     154.615  81.438  10.205  1.00 50.42      A16S
ATOM  19221  C2  ADE  32     155.702  82.178  10.042  1.00 50.42      A16S
ATOM  19222  N1  ADE  32     155.950  83.422  10.459  1.00 50.42      A16S
ATOM  19223  C6  ADE  32     154.994  84.073  11.155  1.00 50.42      A16S
ATOM  19224  N6  ADE  32     155.239  85.323  11.563  1.00 50.42      A16S
ATOM  19225  C5  ADE  32     153.792  83.391  11.404  1.00 50.42      A16S
ATOM  19226  N7  ADE  32     152.635  83.756  12.075  1.00 50.42      A16S
ATOM  19227  C8  ADE  32     151.861  82.706  11.964  1.00 50.42      A16S
ATOM  19228  C2' ADE  32     152.373  79.157  11.602  1.00 47.90      A16S
ATOM  19229  O2' ADE  32     152.146  78.040  10.772  1.00 47.90      A16S
ATOM  19230  C3' ADE  32     151.532  79.085  12.865  1.00 47.90      A16S
ATOM  19231  O3' ADE  32     151.479  77.766  13.400  1.00 47.90      A16S
ATOM  19232  P   ADE  33     152.164  77.454  14.826  1.00 44.73      A16S
ATOM  19233  O1P ADE  33     151.643  76.136  15.285  1.00 46.04      A16S
ATOM  19234  O2P ADE  33     151.984  78.652  15.681  1.00 46.04      A16S
ATOM  19235  O5' ADE  33     153.721  77.287  14.491  1.00 44.73      A16S
ATOM  19236  C5' ADE  33     154.191  76.188  13.706  1.00 44.73      A16S
ATOM  19237  C4' ADE  33     155.560  76.489  13.138  1.00 44.73      A16S
ATOM  19238  O4' ADE  33     155.478  77.656  12.281  1.00 44.73      A16S
ATOM  19239  C1' ADE  33     156.648  78.445  12.429  1.00 44.73      A16S
ATOM  19240  N9  ADE  33     156.247  79.743  12.965  1.00 46.04      A16S
ATOM  19241  C4  ADE  33     156.998  80.891  12.991  1.00 46.04      A16S
ATOM  19242  N3  ADE  33     158.238  81.064  12.515  1.00 46.04      A16S
ATOM  19243  C2  ADE  33     158.660  82.310  12.735  1.00 46.04      A16S
ATOM  19244  N1  ADE  33     158.032  83.321  13.329  1.00 46.04      A16S
ATOM  19245  C6  ADE  33     156.780  83.115  13.794  1.00 46.04      A16S
ATOM  19246  N6  ADE  33     156.146  84.127  14.388  1.00 46.04      A16S
ATOM  19247  C5  ADE  33     156.219  81.838  13.622  1.00 46.04      A16S
ATOM  19248  N7  ADE  33     154.987  81.305  13.973  1.00 46.04      A16S
ATOM  19249  C8  ADE  33     155.052  80.063  13.559  1.00 46.04      A16S
ATOM  19250  C2' ADE  33     157.600  77.695  13.362  1.00 44.73      A16S
ATOM  19251  O2' ADE  33     158.515  76.940  12.610  1.00 44.73      A16S
ATOM  19252  C3' ADE  33     156.632  76.829  14.161  1.00 44.73      A16S
ATOM  19253  O3' ADE  33     157.260  75.638  14.629  1.00 44.73      A16S
ATOM  19254  P   CYT  34     157.828  75.563  16.139  1.00 44.47      A16S
ATOM  19255  O1P CYT  34     158.256  74.162  16.355  1.00 45.73      A16S
ATOM  19256  O2P CYT  34     156.858  76.185  17.077  1.00 45.73      A16S
ATOM  19257  O5' CYT  34     159.139  76.456  16.117  1.00 44.47      A16S
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ATOM  19258  C5' CYT  34     160.297  76.006  15.458  1.00 44.47      A16S
ATOM  19259  C4' CYT  34     161.342  77.080  15.487  1.00 44.47      A16S
ATOM  19260  O4' CYT  34     160.893  78.210  14.700  1.00 44.47      A16S
ATOM  19261  C1' CYT  34     161.366  79.411  15.286  1.00 44.47      A16S
ATOM  19262  N1  CYT  34     160.204  80.204  15.703  1.00 45.73      A16S
ATOM  19263  C6  CYT  34     158.982  79.617  15.895  1.00 45.73      A16S
ATOM  19264  C2  CYT  34     160.367  81.578  15.896  1.00 45.73      A16S
ATOM  19265  O2  CYT  34     161.489  82.072  15.729  1.00 45.73      A16S
ATOM  19266  N3  CYT  34     159.301  82.326  16.262  1.00 45.73      A16S
ATOM  19267  C4  CYT  34     158.112  81.743  16.449  1.00 45.73      A16S
ATOM  19268  N4  CYT  34     157.093  82.510  16.828  1.00 45.73      A16S
ATOM  19269  C5  CYT  34     157.920  80.341  16.262  1.00 45.73      A16S
ATOM  19270  C2' CYT  34     162.252  78.999  16.456  1.00 44.47      A16S
ATOM  19271  O2' CYT  34     163.553  78.790  15.953  1.00 44.47      A16S
ATOM  19272  C3' CYT  34     161.608  77.684  16.848  1.00 44.47      A16S
ATOM  19273  O3' CYT  34     162.494  76.863  17.579  1.00 44.47      A16S
ATOM  19274  P   GUA  35     162.577  77.007  19.174  1.00 51.03      A16S
ATOM  19275  O1P GUA  35     163.611  76.041  19.605  1.00 48.09      A16S
ATOM  19276  O2P GUA  35     161.224  76.946  19.765  1.00 48.09      A16S
ATOM  19277  O5' GUA  35     163.178  78.462  19.407  1.00 51.03      A16S
ATOM  19278  C5' GUA  35     164.552  78.718  19.142  1.00 51.03      A16S
ATOM  19279  C4' GUA  35     164.930  80.077  19.649  1.00 51.03      A16S
ATOM  19280  O4' GUA  35     164.234  81.088  18.883  1.00 51.03      A16S
ATOM  19281  C1' GUA  35     163.912  82.183  19.720  1.00 51.03      A16S
ATOM  19282  N9  GUA  35     162.463  82.317  19.735  1.00 48.09      A16S
ATOM  19283  C4  GUA  35     161.739  83.447  20.043  1.00 48.09      A16S
ATOM  19284  N3  GUA  35     162.244  84.641  20.412  1.00 48.09      A16S
ATOM  19285  C2  GUA  35     161.294  85.533  20.631  1.00 48.09      A16S
ATOM  19286  N2  GUA  35     161.618  86.773  21.013  1.00 48.09      A16S
ATOM  19287  N1  GUA  35     159.958  85.274  20.495  1.00 48.09      A16S
ATOM  19288  C6  GUA  35     159.414  84.053  20.123  1.00 48.09      A16S
ATOM  19289  O6  GUA  35     158.188  83.923  20.040  1.00 48.09      A16S
ATOM  19290  C5  GUA  35     160.420  83.086  19.888  1.00 48.09      A16S
ATOM  19291  N7  GUA  35     160.314  81.754  19.512  1.00 48.09      A16S
ATOM  19292  C8  GUA  35     161.549  81.340  19.433  1.00 48.09      A16S
ATOM  19293  C2' GUA  35     164.493  81.873  21.096  1.00 51.03      A16S
ATOM  19294  O2' GUA  35     165.810  82.364  21.153  1.00 51.03      A16S
ATOM  19295  C3' GUA  35     164.508  80.356  21.075  1.00 51.03      A16S
ATOM  19296  O3' GUA  35     165.476  79.852  21.978  1.00 51.03      A16S
ATOM  19297  P   CYT  36     165.022  79.391  23.445  1.00 55.96      A16S
ATOM  19298  O1P CYT  36     166.163  78.655  24.029  1.00 42.00      A16S
ATOM  19299  O2P CYT  36     163.691  78.729  23.349  1.00 42.00      A16S
ATOM  19300  O5' CYT  36     164.860  80.763  24.231  1.00 55.96      A16S
ATOM  19301  C5' CYT  36     165.983  81.572  24.534  1.00 55.96      A16S
ATOM  19302  C4' CYT  36     165.519  82.910  25.052  1.00 55.96      A16S
ATOM  19303  O4' CYT  36     164.826  83.620  23.992  1.00 55.96      A16S
ATOM  19304  C1' CYT  36     163.777  84.395  24.545  1.00 55.96      A16S
ATOM  19305  N1  CYT  36     162.508  83.886  24.030  1.00 42.00      A16S
ATOM  19306  C6  CYT  36     162.396  82.609  23.568  1.00 42.00      A16S
ATOM  19307  C2  CYT  36     161.403  84.731  24.038  1.00 42.00      A16S
ATOM  19308  O2  CYT  36     161.550  85.899  24.439  1.00 42.00      A16S
ATOM  19309  N3  CYT  36     160.208  84.265  23.610  1.00 42.00      A16S
ATOM  19310  C4  CYT  36     160.106  83.014  23.177  1.00 42.00      A16S
ATOM  19311  N4  CYT  36     158.920  82.593  22.779  1.00 42.00      A16S
ATOM  19312  C5  CYT  36     161.225  82.136  23.137  1.00 42.00      A16S
ATOM  19313  C2' CYT  36     163.835  84.217  26.058  1.00 55.96      A16S
ATOM  19314  O2' CYT  36     164.632  85.231  26.626  1.00 55.96      A16S
ATOM  19315  C3' CYT  36     164.483  82.848  26.162  1.00 55.96      A16S
ATOM  19316  O3' CYT  36     165.084  82.669  27.429  1.00 55.96      A16S
ATOM  19317  P   URI  37     164.330  81.797  28.538  1.00 52.72      A16S
ATOM  19318  O1P URI  37     165.231  81.782  29.723  1.00 52.87      A16S
ATOM  19319  O2P URI  37     163.882  80.517  27.909  1.00 52.87      A16S
ATOM  19320  O5' URI  37     163.024  82.633  28.900  1.00 52.72      A16S
ATOM  19321  C5' URI  37     163.126  83.974  29.360  1.00 52.72      A16S
ATOM  19322  C4' URI  37     161.761  84.615  29.429  1.00 52.72      A16S
ATOM  19323  O4' URI  37     161.250  84.895  28.097  1.00 52.72      A16S
ATOM  19324  C1' URI  37     159.828  84.907  28.138  1.00 52.72      A16S
ATOM  19325  N1  URI  37     159.312  83.856  27.255  1.00 52.87      A16S
ATOM  19326  C6  URI  37     160.092  82.810  26.868  1.00 52.87      A16S
ATOM  19327  C2  URI  37     157.984  83.940  26.864  1.00 52.87      A16S
ATOM  19328  O2  URI  37     157.263  84.895  27.148  1.00 52.87      A16S
ATOM  19329  N3  URI  37     157.533  82.869  26.130  1.00 52.87      A16S
ATOM  19330  C4  URI  37     158.262  81.767  25.752  1.00 52.87      A16S
ATOM  19331  O4  URI  37     157.700  80.833  25.188  1.00 52.87      A16S
ATOM  19332  C5  URI  37     159.624  81.790  26.153  1.00 52.87      A16S
ATOM  19333  C2' URI  37     159.431  84.569  29.573  1.00 52.72      A16S
ATOM  19334  O2' URI  37     159.260  85.757  30.307  1.00 52.72      A16S
ATOM  19335  C3' URI  37     160.647  83.785  30.030  1.00 52.72      A16S
ATOM  19336  O3' URI  37     160.710  83.729  31.438  1.00 52.72      A16S
ATOM  19337  P   GUA  38     159.855  82.615  32.221  1.00 54.08      A16S
ATOM  19338  O1P GUA  38     160.032  82.890  33.667  1.00 61.01      A16S
ATOM  19339  O2P GUA  38     160.182  81.278  31.687  1.00 61.01      A16S
ATOM  19340  O5' GUA  38     158.338  82.932  31.849  1.00 54.08      A16S
ATOM  19341  C5' GUA  38     157.697  84.082  32.381  1.00 54.08      A16S
ATOM  19342  C4' GUA  38     156.255  84.124  31.956  1.00 54.08      A16S
ATOM  19343  O4' GUA  38     156.182  84.120  30.507  1.00 54.08      A16S
ATOM  19344  C1' GUA  38     154.994  83.465  30.096  1.00 54.08      A16S
ATOM  19345  N9  GUA  38     155.373  82.300  29.307  1.00 61.01      A16S
ATOM  19346  C4  GUA  38     154.539  81.525  28.534  1.00 61.01      A16S
ATOM  19347  N3  GUA  38     153.218  81.723  28.343  1.00 61.01      A16S
ATOM  19348  C2  GUA  38     152.692  80.796  27.561  1.00 61.01      A16S
ATOM  19349  N2  GUA  38     151.393  80.834  27.246  1.00 61.01      A16S
ATOM  19350  N1  GUA  38     153.398  79.762  27.023  1.00 61.01      A16S
ATOM  19351  C6  GUA  38     154.754  79.540  27.203  1.00 61.01      A16S
ATOM  19352  O6  GUA  38     155.295  78.567  26.663  1.00 61.01      A16S
ATOM  19353  C5  GUA  38     155.338  80.524  28.029  1.00 61.01      A16S
ATOM  19354  N7  GUA  38     156.651  80.677  28.455  1.00 61.01      A16S
ATOM  19355  C8  GUA  38     156.625  81.743  29.207  1.00 61.01      A16S
ATOM  19356  C2' GUA  38     154.250  83.065  31.371  1.00 54.08      A16S
ATOM  19357  O2' GUA  38     153.357  84.093  31.751  1.00 54.08      A16S
ATOM  19358  C3' GUA  38     155.404  82.933  32.349  1.00 54.08      A16S
ATOM  19359  O3' GUA  38     154.948  83.075  33.682  1.00 54.08      A16S
ATOM  19360  P   GUA  39     154.702  81.769  34.586  1.00 54.50      A16S
ATOM  19361  O1P GUA  39     155.782  81.700  35.610  1.00 65.25      A16S
ATOM  19362  O2P GUA  39     154.464  80.611  33.687  1.00 65.25      A16S
ATOM  19363  O5' GUA  39     153.343  82.104  35.337  1.00 54.50      A16S
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ATOM	19364	C5'	GUA	39	152.110	82.015	34.654	1.00	54.50	A16S	ATOM	19417	C6	GUA	41	142.129	85.875	28.189	1.00	65.76	A16S
ATOM	19365	C4'	GUA	39	151.017	82.643	35.470	1.00	54.50	A16S	ATOM	19418	O6	GUA	41	143.175	85.867	27.527	1.00	65.76	A16S
ATOM	19366	O4'	GUA	39	151.253	84.073	35.554	1.00	54.50	A16S	ATOM	19419	C5	GUA	41	141.846	85.195	29.399	1.00	65.76	A16S
ATOM	19367	C1'	GUA	39	150.011	84.767	35.494	1.00	54.50	A16S	ATOM	19420	N7	GUA	41	142.641	84.355	30.165	1.00	65.76	A16S
ATOM	19368	N9	GUA	39	149.976	85.575	34.278	1.00	65.25	A16S	ATOM	19421	C8	GUA	41	141.880	84.021	31.169	1.00	65.76	A16S
ATOM	19369	C4	GUA	39	149.008	86.494	33.950	1.00	65.25	A16S	ATOM	19422	C2'	GUA	41	138.386	83.580	31.496	1.00	60.14	A16S
ATOM	19370	N3	GUA	39	147.946	86.826	34.709	1.00	65.25	A16S	ATOM	19423	O2'	GUA	41	137.156	84.057	31.998	1.00	60.14	A16S
ATOM	19371	C2	GUA	39	147.180	87.722	34.120	1.00	65.25	A16S	ATOM	19424	C3'	GUA	41	138.718	82.199	32.042	1.00	60.14	A16S
ATOM	19372	N2	GUA	39	146.077	88.157	34.734	1.00	65.25	A16S	ATOM	19425	O3'	GUA	41	137.533	81.436	32.183	1.00	60.14	A16S
ATOM	19373	N1	GUA	39	147.435	88.255	32.886	1.00	65.25	A16S	ATOM	19426	P	GUA	42	137.011	80.549	30.959	1.00	51.86	A16S
ATOM	19374	C6	GUA	39	148.520	87.931	32.087	1.00	65.25	A16S	ATOM	19427	O1P	GUA	42	135.914	79.684	31.457	1.00	61.50	A16S
ATOM	19375	O6	GUA	39	148.648	88.469	30.989	1.00	65.25	A16S	ATOM	19428	O2P	GUA	42	138.180	79.934	30.296	1.00	61.50	A16S
ATOM	19376	C5	GUA	39	149.356	86.968	32.707	1.00	65.25	A16S	ATOM	19429	O5'	GUA	42	136.393	81.611	29.955	1.00	51.86	A16S
ATOM	19377	N7	GUA	39	150.533	86.376	32.267	1.00	65.25	A16S	ATOM	19430	C5'	GUA	42	135.160	82.242	30.239	1.00	51.86	A16S
ATOM	19378	C8	GUA	39	150.866	85.561	33.233	1.00	65.25	A16S	ATOM	19431	C4'	GUA	42	134.812	83.211	29.138	1.00	51.86	A16S
ATOM	19379	C2'	GUA	39	148.912	83.706	35.456	1.00	54.50	A16S	ATOM	19432	O4'	GUA	42	135.820	84.253	29.067	1.00	51.86	A16S
ATOM	19380	O2'	GUA	39	148.438	83.415	36.753	1.00	54.50	A16S	ATOM	19433	C1'	GUA	42	135.942	84.693	27.730	1.00	51.86	A16S
ATOM	19381	C3'	GUA	39	149.657	82.555	34.812	1.00	54.50	A16S	ATOM	19434	N9	GUA	42	137.300	84.433	27.282	1.00	61.50	A16S
ATOM	19382	O3'	GUA	39	149.034	81.312	35.035	1.00	54.50	A16S	ATOM	19435	C4	GUA	42	137.895	85.001	26.190	1.00	61.50	A16S
ATOM	19383	P	CYT	40	148.017	80.759	33.942	1.00	72.53	A16S	ATOM	19436	N3	GUA	42	137.330	85.913	25.370	1.00	61.50	A16S
ATOM	19384	O1P	CYT	40	147.794	79.312	34.191	1.00	67.18	A16S	ATOM	19437	C2	GUA	42	138.143	86.265	24.390	1.00	61.50	A16S
ATOM	19385	O2P	CYT	40	148.532	81.211	32.627	1.00	67.18	A16S	ATOM	19438	N2	GUA	42	137.731	87.156	23.474	1.00	61.50	A16S
ATOM	19386	O5'	CYT	40	146.678	81.557	34.250	1.00	72.53	A16S	ATOM	19439	N1	GUA	42	139.414	85.766	24.234	1.00	61.50	A16S
ATOM	19387	C5'	CYT	40	146.191	81.632	35.578	1.00	72.53	A16S	ATOM	19440	C6	GUA	42	140.014	84.831	25.072	1.00	61.50	A16S
ATOM	19388	C4'	CYT	40	144.969	82.504	35.643	1.00	72.53	A16S	ATOM	19441	O6	GUA	42	141.165	84.448	24.844	1.00	61.50	A16S
ATOM	19389	O4'	CYT	40	145.335	83.892	35.431	1.00	72.53	A16S	ATOM	19442	C5	GUA	42	139.148	84.440	26.124	1.00	61.50	A16S
ATOM	19390	C1'	CYT	40	144.233	84.579	34.864	1.00	72.53	A16S	ATOM	19443	N7	GUA	42	139.341	83.544	27.167	1.00	61.50	A16S
ATOM	19391	N1	CYT	40	144.648	85.159	33.580	1.00	67.18	A16S	ATOM	19444	C8	GUA	42	138.220	83.578	27.831	1.00	61.50	A16S
ATOM	19392	C6	CYT	40	145.816	84.788	32.982	1.00	67.18	A16S	ATOM	19445	C2'	GUA	42	134.937	83.901	26.899	1.00	51.86	A16S
ATOM	19393	C2	CYT	40	143.816	86.093	32.976	1.00	67.18	A16S	ATOM	19446	O2'	GUA	42	133.730	84.619	26.834	1.00	51.86	A16S
ATOM	19394	O2	CYT	40	142.761	86.415	33.549	1.00	67.18	A16S	ATOM	19447	C3'	GUA	42	134.792	82.643	27.733	1.00	51.86	A16S
ATOM	19395	N3	CYT	40	144.170	86.621	31.787	1.00	67.18	A16S	ATOM	19448	O3'	GUA	42	133.548	82.027	27.474	1.00	51.86	A16S
ATOM	19396	C4	CYT	40	145.303	86.243	31.202	1.00	67.18	A16S	ATOM	19449	P	CYT	43	133.469	80.789	26.460	1.00	48.10	A16S
ATOM	19397	N4	CYT	40	145.600	86.774	30.021	1.00	67.18	A16S	ATOM	19450	O1P	CYT	43	132.096	80.237	26.629	1.00	48.48	A16S
ATOM	19398	C5	CYT	40	146.178	85.300	31.800	1.00	67.18	A16S	ATOM	19451	O2P	CYT	43	134.652	79.904	26.652	1.00	48.48	A16S
ATOM	19399	C2'	CYT	40	143.112	83.552	34.689	1.00	72.53	A16S	ATOM	19452	O5'	CYT	43	133.587	81.439	25.007	1.00	48.10	A16S
ATOM	19400	O2'	CYT	40	142.292	83.556	35.838	1.00	72.53	A16S	ATOM	19453	C5'	CYT	43	132.621	82.366	24.525	1.00	48.10	A16S
ATOM	19401	C3'	CYT	40	143.913	82.266	34.583	1.00	72.53	A16S	ATOM	19454	C4'	CYT	43	133.180	83.137	23.345	1.00	48.10	A16S
ATOM	19402	O3'	CYT	40	143.118	81.119	34.857	1.00	72.53	A16S	ATOM	19455	O4'	CYT	43	134.355	83.888	23.761	1.00	48.10	A16S
ATOM	19403	P	GUA	41	142.482	80.287	33.636	1.00	60.14	A16S	ATOM	19456	C1'	CYT	43	135.288	83.949	22.690	1.00	48.10	A16S
ATOM	19404	O1P	GUA	41	141.906	79.037	34.196	1.00	65.76	A16S	ATOM	19457	N1	CYT	43	136.515	83.262	23.101	1.00	48.48	A16S
ATOM	19405	O2P	GUA	41	143.497	80.211	32.554	1.00	65.76	A16S	ATOM	19458	C6	CYT	43	136.540	82.479	24.218	1.00	48.48	A16S
ATOM	19406	O5'	GUA	41	141.273	81.196	33.142	1.00	60.14	A16S	ATOM	19459	C2	CYT	43	137.656	83.407	22.319	1.00	48.48	A16S
ATOM	19407	C5'	GUA	41	140.194	81.485	34.017	1.00	60.14	A16S	ATOM	19460	O2	CYT	43	137.606	84.142	21.334	1.00	48.48	A16S
ATOM	19408	C4'	GUA	41	139.291	82.529	33.410	1.00	60.14	A16S	ATOM	19461	N3	CYT	43	138.780	82.736	22.655	1.00	48.48	A16S
ATOM	19409	O4'	GUA	41	140.041	83.752	33.200	1.00	60.14	A16S	ATOM	19462	C4	CYT	43	138.780	81.940	23.726	1.00	48.48	A16S
ATOM	19410	C1'	GUA	41	139.538	84.420	32.056	1.00	60.14	A16S	ATOM	19463	N4	CYT	43	139.880	81.250	23.994	1.00	48.48	A16S
ATOM	19411	N9	GUA	41	140.631	84.587	31.108	1.00	65.76	A16S	ATOM	19464	C5	CYT	43	137.640	81.804	24.561	1.00	48.48	A16S
ATOM	19412	C4	GUA	41	140.603	85.346	29.970	1.00	65.76	A16S	ATOM	19465	C2'	CYT	43	134.643	83.256	21.495	1.00	48.10	A16S
ATOM	19413	N3	GUA	41	139.558	86.075	29.534	1.00	65.76	A16S	ATOM	19466	O2'	CYT	43	133.941	84.200	20.724	1.00	48.10	A16S
ATOM	19414	C2	GUA	41	139.830	86.701	28.404	1.00	65.76	A16S	ATOM	19467	C3'	CYT	43	133.694	82.296	22.191	1.00	48.10	A16S
ATOM	19415	N2	GUA	41	138.893	87.464	27.823	1.00	65.76	A16S	ATOM	19468	O3'	CYT	43	132.654	81.890	21.318	1.00	48.10	A16S
ATOM	19416	N1	GUA	41	141.039	86.623	27.756	1.00	65.76	A16S	ATOM	19469	P	GUA	44	132.759	80.464	20.585	1.00	54.33	A16S

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ATOM  19470  O1P GUA  44     131.494  80.322  19.807  1.00 48.48      A16S
ATOM  19471  O2P GUA  44     133.139  79.435  21.585  1.00 48.48      A16S
ATOM  19472  O5' GUA  44     134.002  80.590  19.593  1.00 54.33      A16S
ATOM  19473  C5' GUA  44     133.853  81.243  18.349  1.00 54.33      A16S
ATOM  19474  C4' GUA  44     135.193  81.630  17.777  1.00 54.33      A16S
ATOM  19475  O4' GUA  44     136.081  82.063  18.835  1.00 54.33      A16S
ATOM  19476  C1' GUA  44     137.416  81.974  18.369  1.00 54.33      A16S
ATOM  19477  N9  GUA  44     138.220  81.241  19.338  1.00 48.48      A16S
ATOM  19478  C4  GUA  44     139.577  81.081  19.287  1.00 48.48      A16S
ATOM  19479  N3  GUA  44     140.392  81.585  18.342  1.00 48.48      A16S
ATOM  19480  C2  GUA  44     141.650  81.261  18.558  1.00 48.48      A16S
ATOM  19481  N2  GUA  44     142.600  81.706  17.731  1.00 48.48      A16S
ATOM  19482  N1  GUA  44     142.073  80.489  19.607  1.00 48.48      A16S
ATOM  19483  C6  GUA  44     141.250  79.959  20.590  1.00 48.48      A16S
ATOM  19484  O6  GUA  44     141.739  79.279  21.500  1.00 48.48      A16S
ATOM  19485  C5  GUA  44     139.897  80.309  20.375  1.00 48.48      A16S
ATOM  19486  N7  GUA  44     138.762  79.992  21.100  1.00 48.48      A16S
ATOM  19487  C8  GUA  44     137.791  80.567  20.449  1.00 48.48      A16S
ATOM  19488  C2' GUA  44     137.373  81.255  17.020  1.00 54.33      A16S
ATOM  19489  O2' GUA  44     137.414  82.222  15.999  1.00 54.33      A16S
ATOM  19490  C3' GUA  44     136.017  80.568  17.077  1.00 54.33      A16S
ATOM  19491  O3' GUA  44     135.535  80.354  15.752  1.00 54.33      A16S
ATOM  19492  P   URI  45     135.705  78.908  15.054  1.00 43.94      A16S
ATOM  19493  O1P URI  45     135.146  79.039  13.683  1.00 65.38      A16S
ATOM  19494  O2P URI  45     135.165  77.865  15.971  1.00 65.38      A16S
ATOM  19495  O5' URI  45     137.283  78.720  14.940  1.00 43.94      A16S
ATOM  19496  C5' URI  45     138.057  79.496  14.033  1.00 43.94      A16S
ATOM  19497  C4' URI  45     139.536  79.358  14.352  1.00 43.94      A16S
ATOM  19498  O4' URI  45     139.769  79.729  15.739  1.00 43.94      A16S
ATOM  19499  C1' URI  45     140.854  78.972  16.253  1.00 43.94      A16S
ATOM  19500  N1  URI  45     140.371  78.161  17.377  1.00 65.38      A16S
ATOM  19501  C6  URI  45     139.033  78.002  17.630  1.00 65.38      A16S
ATOM  19502  C2  URI  45     141.320  77.557  18.161  1.00 65.38      A16S
ATOM  19503  O2  URI  45     142.509  77.678  17.953  1.00 65.38      A16S
ATOM  19504  N3  URI  45     140.828  76.803  19.191  1.00 65.38      A16S
ATOM  19505  C4  URI  45     139.501  76.598  19.505  1.00 65.38      A16S
ATOM  19506  O4  URI  45     139.207  75.894  20.478  1.00 65.38      A16S
ATOM  19507  C5  URI  45     138.575  77.260  18.639  1.00 65.38      A16S
ATOM  19508  C2' URI  45     141.378  78.088  15.120  1.00 43.94      A16S
ATOM  19509  O2' URI  45     142.467  78.722  14.485  1.00 43.94      A16S
ATOM  19510  C3' URI  45     140.141  77.962  14.248  1.00 43.94      A16S
ATOM  19511  O3' URI  45     140.491  77.644  12.915  1.00 43.94      A16S
ATOM  19512  P   GUA  46     140.413  76.125  12.418  1.00 49.77      A16S
ATOM  19513  O1P GUA  46     140.574  76.147  10.948  1.00 46.17      A16S
ATOM  19514  O2P GUA  46     139.219  75.473  13.001  1.00 46.17      A16S
ATOM  19515  O5' GUA  46     141.746  75.487  13.012  1.00 49.77      A16S
ATOM  19516  C5' GUA  46     143.020  75.802  12.431  1.00 49.77      A16S
ATOM  19517  C4' GUA  46     144.132  75.069  13.145  1.00 49.77      A16S
ATOM  19518  O4' GUA  46     144.249  75.574  14.502  1.00 49.77      A16S
ATOM  19519  C1' GUA  46     144.520  74.502  15.394  1.00 49.77      A16S
ATOM  19520  N9  GUA  46     143.343  74.290  16.230  1.00 46.17      A16S
ATOM  19521  C4  GUA  46     143.328  73.776  17.503  1.00 46.17      A16S
ATOM  19522  N3  GUA  46     144.404  73.390  18.211  1.00 46.17      A16S
ATOM  19523  C2  GUA  46     144.070  72.914  19.389  1.00 46.17      A16S
ATOM  19524  N2  GUA  46     145.014  72.460  20.207  1.00 46.17      A16S
ATOM  19525  N1  GUA  46     142.789  72.841  19.851  1.00 46.17      A16S
ATOM  19526  C6  GUA  46     141.663  73.239  19.149  1.00 46.17      A16S
ATOM  19527  O6  GUA  46     140.537  73.134  19.670  1.00 46.17      A16S
ATOM  19528  C5  GUA  46     142.002  73.734  17.866  1.00 46.17      A16S
ATOM  19529  N7  GUA  46     141.196  74.215  16.843  1.00 46.17      A16S
ATOM  19530  C8  GUA  46     142.034  74.540  15.898  1.00 46.17      A16S
ATOM  19531  C2' GUA  46     144.807  73.287  14.520  1.00 49.77      A16S
ATOM  19532  O2' GUA  46     146.170  73.299  14.182  1.00 49.77      A16S
ATOM  19533  C3' GUA  46     143.909  73.580  13.331  1.00 49.77      A16S
ATOM  19534  O3' GUA  46     144.267  72.840  12.176  1.00 49.77      A16S
ATOM  19535  P   CYT  47     143.398  71.565  11.758  1.00 59.88      A16S
ATOM  19536  O1P CYT  47     142.148  71.999  11.098  1.00 58.96      A16S
ATOM  19537  O2P CYT  47     143.323  70.684  12.939  1.00 58.96      A16S
ATOM  19538  O5' CYT  47     144.302  70.866  10.661  1.00 59.88      A16S
ATOM  19539  C5' CYT  47     145.524  70.261  11.023  1.00 59.88      A16S
ATOM  19540  C4' CYT  47     146.459  70.225   9.843  1.00 59.88      A16S
ATOM  19541  O4' CYT  47     147.752  69.802  10.292  1.00 59.88      A16S
ATOM  19542  C1' CYT  47     148.346  68.999   9.314  1.00 59.88      A16S
ATOM  19543  N1  CYT  47     149.100  67.948  10.007  1.00 58.96      A16S
ATOM  19544  C6  CYT  47     148.782  67.604  11.292  1.00 58.96      A16S
ATOM  19545  C2  CYT  47     150.199  67.369   9.374  1.00 58.96      A16S
ATOM  19546  O2  CYT  47     150.396  67.605   8.174  1.00 58.96      A16S
ATOM  19547  N3  CYT  47     151.012  66.560  10.086  1.00 58.96      A16S
ATOM  19548  C4  CYT  47     150.735  66.291  11.365  1.00 58.96      A16S
ATOM  19549  N4  CYT  47     151.600  65.544  12.046  1.00 58.96      A16S
ATOM  19550  C5  CYT  47     149.567  66.791  12.003  1.00 58.96      A16S
ATOM  19551  C2' CYT  47     147.370  68.743   8.156  1.00 59.88      A16S
ATOM  19552  O2' CYT  47     147.884  69.419   7.024  1.00 59.88      A16S
ATOM  19553  C3' CYT  47     146.049  69.318   8.693  1.00 59.88      A16S
ATOM  19554  O3' CYT  47     145.261  70.192   7.852  1.00 59.88      A16S
ATOM  19555  P   CYT  48     145.472  70.274   6.257  1.00 48.03      A16S
ATOM  19556  O1P CYT  48     144.284  71.016   5.781  1.00 86.41      A16S
ATOM  19557  O2P CYT  48     145.789  68.950   5.664  1.00 86.41      A16S
ATOM  19558  O5' CYT  48     146.721  71.227   6.048  1.00 48.03      A16S
ATOM  19559  C5' CYT  48     146.550  72.561   5.574  1.00 48.03      A16S
ATOM  19560  C4' CYT  48     147.634  72.918   4.569  1.00 48.03      A16S
ATOM  19561  O4' CYT  48     147.859  74.340   4.597  1.00 48.03      A16S
ATOM  19562  C1' CYT  48     149.232  74.621   4.715  1.00 48.03      A16S
ATOM  19563  N1  CYT  48     149.382  75.498   5.875  1.00 86.41      A16S
ATOM  19564  C6  CYT  48     148.970  75.109   7.114  1.00 86.41      A16S
ATOM  19565  C2  CYT  48     149.908  76.762   5.675  1.00 86.41      A16S
ATOM  19566  O2  CYT  48     150.331  77.054   4.549  1.00 86.41      A16S
ATOM  19567  N3  CYT  48     149.944  77.635   6.701  1.00 86.41      A16S
ATOM  19568  C4  CYT  48     149.491  77.269   7.897  1.00 86.41      A16S
ATOM  19569  N4  CYT  48     149.494  78.180   8.874  1.00 86.41      A16S
ATOM  19570  C5  CYT  48     149.002  75.958   8.143  1.00 86.41      A16S
ATOM  19571  C2' CYT  48     150.039  73.322   4.663  1.00 48.03      A16S
ATOM  19572  O2' CYT  48     150.786  73.266   3.476  1.00 48.03      A16S
ATOM  19573  C3' CYT  48     148.963  72.246   4.841  1.00 48.03      A16S
ATOM  19574  O3' CYT  48     148.996  71.068   4.009  1.00 48.03      A16S
ATOM  19575  P   URI  49     149.479  71.139   2.463  1.00 81.55      A16S
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ATOM	19576	O1P	URI	49	148.823	69.991	1.795	1.00	46.65	A16S	ATOM	19629	N1	ADE	51	139.574	63.044	-3.826	1.00	56.64	A16S
ATOM	19577	O2P	URI	49	149.338	72.482	1.879	1.00	46.65	A16S	ATOM	19630	C6	ADE	51	139.713	63.923	-2.820	1.00	56.64	A16S
ATOM	19578	O5'	URI	49	151.031	70.837	2.576	1.00	81.55	A16S	ATOM	19631	N6	ADE	51	138.689	64.721	-2.528	1.00	56.64	A16S
ATOM	19579	C5'	URI	49	151.832	70.600	1.438	1.00	81.55	A16S	ATOM	19632	C5	ADE	51	140.928	63.936	-2.133	1.00	56.64	A16S
ATOM	19580	C4'	URI	49	152.878	69.582	1.789	1.00	81.55	A16S	ATOM	19633	N7	ADE	51	141.387	64.698	-1.073	1.00	56.64	A16S
ATOM	19581	O4'	URI	49	153.354	69.885	3.108	1.00	81.55	A16S	ATOM	19634	C8	ADE	51	142.591	64.232	-0.845	1.00	56.64	A16S
ATOM	19582	C1'	URI	49	153.667	68.700	3.785	1.00	81.55	A16S	ATOM	19635	C2'	ADE	51	145.244	62.783	-2.670	1.00	54.43	A16S
ATOM	19583	N1	URI	49	153.257	68.873	5.182	1.00	46.65	A16S	ATOM	19636	O2'	ADE	51	145.459	61.743	-3.589	1.00	54.43	A16S
ATOM	19584	C6	URI	49	152.058	69.433	5.503	1.00	46.65	A16S	ATOM	19637	C3'	ADE	51	146.448	63.159	-1.811	1.00	54.43	A16S
ATOM	19585	C2	URI	49	154.159	68.506	6.170	1.00	46.65	A16S	ATOM	19638	O3'	ADE	51	147.726	62.666	-2.245	1.00	54.43	A16S
ATOM	19586	O2	URI	49	155.220	67.962	5.936	1.00	46.65	A16S	ATOM	19639	P	GUA	52	148.061	61.080	-2.171	1.00	53.30	A16S
ATOM	19587	N3	URI	49	153.778	68.806	7.447	1.00	46.65	A16S	ATOM	19640	O1P	GUA	52	146.814	60.287	-2.128	1.00	73.94	A16S
ATOM	19588	C4	URI	49	152.611	69.405	7.835	1.00	46.65	A16S	ATOM	19641	O2P	GUA	52	149.079	60.785	-3.202	1.00	73.94	A16S
ATOM	19589	O4	URI	49	152.426	69.632	9.023	1.00	46.65	A16S	ATOM	19642	O5'	GUA	52	148.727	60.872	-0.741	1.00	53.30	A16S
ATOM	19590	C5	URI	49	151.710	69.713	6.764	1.00	46.65	A16S	ATOM	19643	C5'	GUA	52	148.120	59.996	0.207	1.00	53.30	A16S
ATOM	19591	C2'	URI	49	153.201	67.496	2.954	1.00	81.55	A16S	ATOM	19644	C4'	GUA	52	149.076	58.897	0.598	1.00	53.30	A16S
ATOM	19592	O2'	URI	49	154.358	66.835	2.479	1.00	81.55	A16S	ATOM	19645	O4'	GUA	52	150.052	59.403	1.550	1.00	53.30	A16S
ATOM	19593	C3'	URI	49	152.371	68.154	1.842	1.00	81.55	A16S	ATOM	19646	C1'	GUA	52	150.399	58.371	2.467	1.00	53.30	A16S
ATOM	19594	O3'	URI	49	152.647	67.705	0.507	1.00	81.55	A16S	ATOM	19647	N9	GUA	52	150.016	58.805	3.805	1.00	73.94	A16S
ATOM	19595	P	ADE	50	152.718	66.143	0.146	1.00	71.51	A16S	ATOM	19648	C4	GUA	52	150.589	58.418	4.989	1.00	73.94	A16S
ATOM	19596	O1P	ADE	50	152.379	66.094	-1.296	1.00	59.21	A16S	ATOM	19649	N3	GUA	52	151.567	57.502	5.135	1.00	73.94	A16S
ATOM	19597	O2P	ADE	50	154.015	65.588	0.599	1.00	59.21	A16S	ATOM	19650	C2	GUA	52	151.917	57.349	6.406	1.00	73.94	A16S
ATOM	19598	O5'	ADE	50	151.520	65.498	0.976	1.00	71.51	A16S	ATOM	19651	N2	GUA	52	152.854	56.457	6.744	1.00	73.94	A16S
ATOM	19599	C5'	ADE	50	150.566	64.644	0.349	1.00	71.51	A16S	ATOM	19652	N1	GUA	52	151.369	58.055	7.439	1.00	73.94	A16S
ATOM	19600	C4'	ADE	50	150.598	63.314	1.020	1.00	71.51	A16S	ATOM	19653	C6	GUA	52	150.368	59.008	7.312	1.00	73.94	A16S
ATOM	19601	O4'	ADE	50	151.952	62.857	0.945	1.00	71.51	A16S	ATOM	19654	O6	GUA	52	149.958	59.604	8.314	1.00	73.94	A16S
ATOM	19602	C1'	ADE	50	152.200	62.061	2.056	1.00	71.51	A16S	ATOM	19655	C5	GUA	52	149.959	59.160	5.961	1.00	73.94	A16S
ATOM	19603	N9	ADE	50	153.629	61.955	2.281	1.00	59.21	A16S	ATOM	19656	N7	GUA	52	148.974	59.962	5.406	1.00	73.94	A16S
ATOM	19604	C4	ADE	50	154.220	61.008	3.072	1.00	59.21	A16S	ATOM	19657	C8	GUA	52	149.034	59.709	4.129	1.00	73.94	A16S
ATOM	19605	N3	ADE	50	153.605	60.076	3.816	1.00	59.21	A16S	ATOM	19658	C2'	GUA	52	149.660	57.113	2.010	1.00	53.30	A16S
ATOM	19606	C2	ADE	50	154.495	59.305	4.418	1.00	59.21	A16S	ATOM	19659	O2'	GUA	52	150.453	56.410	1.073	1.00	53.30	A16S
ATOM	19607	N1	ADE	50	155.827	59.354	4.360	1.00	59.21	A16S	ATOM	19660	C3'	GUA	52	148.450	57.721	1.324	1.00	53.30	A16S
ATOM	19608	C6	ADE	50	156.408	60.306	3.601	1.00	59.21	A16S	ATOM	19661	O3'	GUA	52	147.906	56.807	0.384	1.00	53.30	A16S
ATOM	19609	N6	ADE	50	157.735	60.356	3.540	1.00	59.21	A16S	ATOM	19662	P	ADE	53	146.869	55.685	0.877	1.00	54.14	A16S
ATOM	19610	C5	ADE	50	155.576	61.186	2.920	1.00	59.21	A16S	ATOM	19663	O1P	ADE	53	146.737	54.710	-0.236	1.00	70.34	A16S
ATOM	19611	N7	ADE	50	155.839	62.255	2.078	1.00	59.21	A16S	ATOM	19664	O2P	ADE	53	145.642	56.342	1.432	1.00	70.34	A16S
ATOM	19612	C8	ADE	50	154.650	62.684	1.738	1.00	59.21	A16S	ATOM	19665	O5'	ADE	53	147.652	54.974	2.065	1.00	54.14	A16S
ATOM	19613	C2'	ADE	50	151.290	62.490	3.202	1.00	71.51	A16S	ATOM	19666	C5'	ADE	53	148.783	54.155	1.796	1.00	54.14	A16S
ATOM	19614	O2'	ADE	50	150.783	61.315	3.778	1.00	71.51	A16S	ATOM	19667	C4'	ADE	53	149.264	53.508	3.062	1.00	54.14	A16S
ATOM	19615	C3'	ADE	50	150.246	63.376	2.504	1.00	71.51	A16S	ATOM	19668	O4'	ADE	53	149.828	54.509	3.947	1.00	54.14	A16S
ATOM	19616	O3'	ADE	50	148.971	62.737	2.646	1.00	71.51	A16S	ATOM	19669	C1'	ADE	53	149.568	54.152	5.294	1.00	54.14	A16S
ATOM	19617	P	ADE	51	147.648	63.579	3.004	1.00	54.43	A16S	ATOM	19670	N9	ADE	53	148.789	55.224	5.904	1.00	70.34	A16S
ATOM	19618	O1P	ADE	51	147.151	63.092	4.320	1.00	56.64	A16S	ATOM	19671	C4	ADE	53	148.705	55.497	7.244	1.00	70.34	A16S
ATOM	19619	O2P	ADE	51	147.934	65.021	2.820	1.00	56.64	A16S	ATOM	19672	N3	ADE	53	149.325	54.855	8.245	1.00	70.34	A16S
ATOM	19620	O5'	ADE	51	146.584	63.112	1.909	1.00	54.43	A16S	ATOM	19673	C2	ADE	53	149.000	55.388	9.417	1.00	70.34	A16S
ATOM	19621	C5'	ADE	51	146.652	63.634	0.602	1.00	54.43	A16S	ATOM	19674	N1	ADE	53	148.189	56.409	9.680	1.00	70.34	A16S
ATOM	19622	C4'	ADE	51	146.160	62.638	-0.416	1.00	54.43	A16S	ATOM	19675	C6	ADE	53	147.582	57.033	8.649	1.00	70.34	A16S
ATOM	19623	O4'	ADE	51	144.729	62.503	-0.334	1.00	54.43	A16S	ATOM	19676	N6	ADE	53	146.768	58.056	8.911	1.00	70.34	A16S
ATOM	19624	C1'	ADE	51	144.181	62.418	-1.634	1.00	54.43	A16S	ATOM	19677	C5	ADE	53	147.845	56.565	7.357	1.00	70.34	A16S
ATOM	19625	N9	ADE	51	142.950	63.203	-1.674	1.00	56.64	A16S	ATOM	19678	N7	ADE	53	147.399	56.969	6.110	1.00	70.34	A16S
ATOM	19626	C4	ADE	51	141.887	63.026	-2.529	1.00	56.64	A16S	ATOM	19679	C8	ADE	53	147.989	56.144	5.284	1.00	70.34	A16S
ATOM	19627	N3	ADE	51	141.779	62.133	-3.523	1.00	56.64	A16S	ATOM	19680	C2'	ADE	53	148.793	52.834	5.260	1.00	54.14	A16S
ATOM	19628	C2	ADE	51	140.590	62.228	-4.105	1.00	56.64	A16S	ATOM	19681	O2'	ADE	53	149.687	51.756	5.361	1.00	54.14	A16S

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ATOM  19682  C3' ADE  53     148.157  52.902   3.885  1.00 54.14      A16S
ATOM  19683  O3' ADE  53     147.786  51.636   3.388  1.00 54.14      A16S
ATOM  19684  P   CYT  54     146.388  51.001   3.843  1.00 47.90      A16S
ATOM  19685  O1P CYT  54     146.332  49.642   3.249  1.00 57.30      A16S
ATOM  19686  O2P CYT  54     145.285  51.956   3.572  1.00 57.30      A16S
ATOM  19687  O5' CYT  54     146.571  50.901   5.421  1.00 47.90      A16S
ATOM  19688  C5' CYT  54     145.466  50.908   6.302  1.00 47.90      A16S
ATOM  19689  C4' CYT  54     145.961  51.067   7.713  1.00 47.90      A16S
ATOM  19690  O4' CYT  54     146.605  52.359   7.849  1.00 47.90      A16S
ATOM  19691  C1' CYT  54     146.426  52.842   9.171  1.00 47.90      A16S
ATOM  19692  N1  CYT  54     145.715  54.123   9.111  1.00 57.30      A16S
ATOM  19693  C6  CYT  54     145.074  54.514   7.976  1.00 57.30      A16S
ATOM  19694  C2  CYT  54     145.687  54.926  10.249  1.00 57.30      A16S
ATOM  19695  O2  CYT  54     146.306  54.560  11.261  1.00 57.30      A16S
ATOM  19696  N3  CYT  54     144.995  56.078  10.223  1.00 57.30      A16S
ATOM  19697  C4  CYT  54     144.350  56.437   9.120  1.00 57.30      A16S
ATOM  19698  N4  CYT  54     143.657  57.564   9.150  1.00 57.30      A16S
ATOM  19699  C5  CYT  54     144.382  55.651   7.939  1.00 57.30      A16S
ATOM  19700  C2' CYT  54     145.614  51.797   9.938  1.00 47.90      A16S
ATOM  19701  O2' CYT  54     146.496  51.015  10.717  1.00 47.90      A16S
ATOM  19702  C3' CYT  54     144.905  51.066   8.799  1.00 47.90      A16S
ATOM  19703  O3' CYT  54     144.566  49.725   9.121  1.00 47.90      A16S
ATOM  19704  P   ADE  55     143.480  49.425  10.262  1.00 49.60      A16S
ATOM  19705  O1P ADE  55     142.848  48.126   9.918  1.00 72.69      A16S
ATOM  19706  O2P ADE  55     142.631  50.631  10.451  1.00 72.69      A16S
ATOM  19707  O5' ADE  55     144.351  49.224  11.582  1.00 49.60      A16S
ATOM  19708  C5' ADE  55     145.287  48.159  11.682  1.00 49.60      A16S
ATOM  19709  C4' ADE  55     145.505  47.801  13.125  1.00 49.60      A16S
ATOM  19710  O4' ADE  55     146.304  48.812  13.781  1.00 49.60      A16S
ATOM  19711  C1' ADE  55     145.928  48.890  15.147  1.00 49.60      A16S
ATOM  19712  N9  ADE  55     145.597  50.278  15.463  1.00 72.69      A16S
ATOM  19713  C4  ADE  55     145.185  50.739  16.686  1.00 72.69      A16S
ATOM  19714  N3  ADE  55     145.001  50.021  17.803  1.00 72.69      A16S
ATOM  19715  C2  ADE  55     144.597  50.801  18.801  1.00 72.69      A16S
ATOM  19716  N1  ADE  55     144.377  52.117  18.810  1.00 72.69      A16S
ATOM  19717  C6  ADE  55     144.572  52.811  17.669  1.00 72.69      A16S
ATOM  19718  N6  ADE  55     144.356  54.129  17.680  1.00 72.69      A16S
ATOM  19719  C5  ADE  55     144.995  52.095  16.534  1.00 72.69      A16S
ATOM  19720  N7  ADE  55     145.273  52.485  15.233  1.00 72.69      A16S
ATOM  19721  C8  ADE  55     145.626  51.372  14.641  1.00 72.69      A16S
ATOM  19722  C2' ADE  55     144.750  47.932  15.374  1.00 49.60      A16S
ATOM  19723  O2' ADE  55     145.179  46.744  16.016  1.00 49.60      A16S
ATOM  19724  C3' ADE  55     144.239  47.703  13.955  1.00 49.60      A16S
ATOM  19725  O3' ADE  55     143.684  46.406  13.832  1.00 49.60      A16S
ATOM  19726  P   URI  56     142.099  46.206  13.942  1.00 54.08      A16S
ATOM  19727  O1P URI  56     141.818  44.753  14.028  1.00 74.03      A16S
ATOM  19728  O2P URI  56     141.448  47.017  12.876  1.00 74.03      A16S
ATOM  19729  O5' URI  56     141.747  46.851  15.351  1.00 54.08      A16S
ATOM  19730  C5' URI  56     142.221  46.281  16.557  1.00 54.08      A16S
ATOM  19731  C4' URI  56     141.765  47.122  17.714  1.00 54.08      A16S
ATOM  19732  O4' URI  56     142.553  48.338  17.777  1.00 54.08      A16S
ATOM  19733  C1' URI  56     141.726  49.417  18.187  1.00 54.08      A16S
ATOM  19734  N1  URI  56     141.724  50.424  17.113  1.00 74.03      A16S
ATOM  19735  C6  URI  56     141.932  50.073  15.798  1.00 74.03      A16S
ATOM  19736  C2  URI  56     141.498  51.735  17.466  1.00 74.03      A16S
ATOM  19737  O2  URI  56     141.323  52.085  18.617  1.00 74.03      A16S
ATOM  19738  N3  URI  56     141.487  52.623  16.422  1.00 74.03      A16S
ATOM  19739  C4  URI  56     141.674  52.341  15.090  1.00 74.03      A16S
ATOM  19740  O4  URI  56     141.563  53.245  14.261  1.00 74.03      A16S
ATOM  19741  C5  URI  56     141.915  50.962  14.803  1.00 74.03      A16S
ATOM  19742  C2' URI  56     140.327  48.847  18.455  1.00 54.08      A16S
ATOM  19743  O2' URI  56     140.128  48.514  19.816  1.00 54.08      A16S
ATOM  19744  C3' URI  56     140.337  47.616  17.572  1.00 54.08      A16S
ATOM  19745  O3' URI  56     139.400  46.672  18.034  1.00 54.08      A16S
ATOM  19746  P   GUA  57     137.871  46.830  17.609  1.00 56.53      A16S
ATOM  19747  O1P GUA  57     137.116  45.632  18.062  1.00 76.80      A16S
ATOM  19748  O2P GUA  57     137.854  47.209  16.172  1.00 76.80      A16S
ATOM  19749  O5' GUA  57     137.381  48.076  18.464  1.00 56.53      A16S
ATOM  19750  C5' GUA  57     137.029  47.923  19.824  1.00 56.53      A16S
ATOM  19751  C4' GUA  57     136.319  49.156  20.311  1.00 56.53      A16S
ATOM  19752  O4' GUA  57     137.239  50.277  20.231  1.00 56.53      A16S
ATOM  19753  C1' GUA  57     136.534  51.444  19.842  1.00 56.53      A16S
ATOM  19754  N9  GUA  57     137.017  51.847  18.525  1.00 76.80      A16S
ATOM  19755  C4  GUA  57     137.061  53.126  18.034  1.00 76.80      A16S
ATOM  19756  N3  GUA  57     136.682  54.240  18.694  1.00 76.80      A16S
ATOM  19757  C2  GUA  57     136.854  55.324  17.966  1.00 76.80      A16S
ATOM  19758  N2  GUA  57     136.537  56.525  18.473  1.00 76.80      A16S
ATOM  19759  N1  GUA  57     137.351  55.314  16.690  1.00 76.80      A16S
ATOM  19760  C6  GUA  57     137.739  54.183  15.991  1.00 76.80      A16S
ATOM  19761  O6  GUA  57     138.167  54.290  14.843  1.00 76.80      A16S
ATOM  19762  C5  GUA  57     137.568  53.012  16.760  1.00 76.80      A16S
ATOM  19763  N7  GUA  57     137.841  51.685  16.455  1.00 76.80      A16S
ATOM  19764  C8  GUA  57     137.502  51.032  17.531  1.00 76.80      A16S
ATOM  19765  C2' GUA  57     135.049  51.073  19.817  1.00 56.53      A16S
ATOM  19766  O2' GUA  57     134.473  51.300  21.087  1.00 56.53      A16S
ATOM  19767  C3' GUA  57     135.129  49.594  19.477  1.00 56.53      A16S
ATOM  19768  O3' GUA  57     133.940  48.920  19.847  1.00 56.53      A16S
ATOM  19769  P   CYT  58     132.760  48.751  18.771  1.00 72.58      A16S
ATOM  19770  O1P CYT  58     131.650  48.018  19.431  1.00 60.74      A16S
ATOM  19771  O2P CYT  58     133.342  48.228  17.505  1.00 60.74      A16S
ATOM  19772  O5' CYT  58     132.233  50.236  18.535  1.00 72.58      A16S
ATOM  19773  C5' CYT  58     131.509  50.904  19.562  1.00 72.58      A16S
ATOM  19774  C4' CYT  58     131.340  52.366  19.236  1.00 72.58      A16S
ATOM  19775  O4' CYT  58     132.641  53.010  19.128  1.00 72.58      A16S
ATOM  19776  C1' CYT  58     132.582  54.034  18.148  1.00 72.58      A16S
ATOM  19777  N1  CYT  58     133.409  53.619  17.009  1.00 60.74      A16S
ATOM  19778  C6  CYT  58     133.663  52.296  16.777  1.00 60.74      A16S
ATOM  19779  C2  CYT  58     133.909  54.595  16.146  1.00 60.74      A16S
ATOM  19780  O2  CYT  58     133.702  55.789  16.409  1.00 60.74      A16S
ATOM  19781  N3  CYT  58     134.609  54.212  15.052  1.00 60.74      A16S
ATOM  19782  C4  CYT  58     134.824  52.917  14.821  1.00 60.74      A16S
ATOM  19783  N4  CYT  58     135.496  52.581  13.723  1.00 60.74      A16S
ATOM  19784  C5  CYT  58     134.356  51.906  15.706  1.00 60.74      A16S
ATOM  19785  C2' CYT  58     131.115  54.132  17.726  1.00 72.58      A16S
ATOM  19786  O2' CYT  58     130.426  54.985  18.613  1.00 72.58      A16S
ATOM  19787  C3' CYT  58     130.663  52.696  17.920  1.00 72.58      A16S
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ATOM  19788  O3' CYT  58      129.253  52.627  18.054  1.00 72.58      A16S
ATOM  19789  P   ADE  59      128.340  52.362  16.760  1.00 63.63      A16S
ATOM  19790  O1P ADE  59      126.932  52.256  17.253  1.00 71.33      A16S
ATOM  19791  O2P ADE  59      128.943  51.238  15.998  1.00 71.33      A16S
ATOM  19792  O5' ADE  59      128.501  53.686  15.884  1.00 63.63      A16S
ATOM  19793  C5' ADE  59      128.024  54.935  16.369  1.00 63.63      A16S
ATOM  19794  C4' ADE  59      128.459  56.061  15.465  1.00 63.63      A16S
ATOM  19795  O4' ADE  59      129.898  55.986  15.317  1.00 63.63      A16S
ATOM  19796  C1' ADE  59      130.269  56.450  14.032  1.00 63.63      A16S
ATOM  19797  N9  ADE  59      130.969  55.374  13.332  1.00 71.33      A16S
ATOM  19798  C4  ADE  59      131.388  55.408  12.025  1.00 71.33      A16S
ATOM  19799  N3  ADE  59      131.223  56.407  11.145  1.00 71.33      A16S
ATOM  19800  C2  ADE  59      131.763  56.091   9.973  1.00 71.33      A16S
ATOM  19801  N1  ADE  59      132.405  54.978   9.609  1.00 71.33      A16S
ATOM  19802  C6  ADE  59      132.558  53.996  10.518  1.00 71.33      A16S
ATOM  19803  N6  ADE  59      133.209  52.891  10.157  1.00 71.33      A16S
ATOM  19804  C5  ADE  59      132.021  54.203  11.801  1.00 71.33      A16S
ATOM  19805  N7  ADE  59      131.992  53.414  12.943  1.00 71.33      A16S
ATOM  19806  C8  ADE  59      131.354  54.151  13.818  1.00 71.33      A16S
ATOM  19807  C2' ADE  59      128.990  56.891  13.323  1.00 63.63      A16S
ATOM  19808  O2' ADE  59      128.780  58.265  13.547  1.00 63.63      A16S
ATOM  19809  C3' ADE  59      127.946  56.047  14.034  1.00 63.63      A16S
ATOM  19810  O3' ADE  59      126.670  56.661  13.904  1.00 63.63      A16S
ATOM  19811  P   ADE  60      125.960  56.706  12.458  1.00 49.21      A16S
ATOM  19812  O1P ADE  60      126.986  57.129  11.485  1.00 63.40      A16S
ATOM  19813  O2P ADE  60      124.677  57.448  12.534  1.00 63.40      A16S
ATOM  19814  O5' ADE  60      125.639  55.184  12.122  1.00 49.21      A16S
ATOM  19815  C5' ADE  60      124.956  54.341  13.048  1.00 49.21      A16S
ATOM  19816  C4' ADE  60      123.830  53.641  12.345  1.00 49.21      A16S
ATOM  19817  O4' ADE  60      122.878  54.638  11.949  1.00 49.21      A16S
ATOM  19818  C1' ADE  60      122.321  54.296  10.706  1.00 49.21      A16S
ATOM  19819  N9  ADE  60      122.150  55.516   9.934  1.00 63.40      A16S
ATOM  19820  C4  ADE  60      120.989  55.897   9.309  1.00 63.40      A16S
ATOM  19821  N3  ADE  60      119.843  55.202   9.226  1.00 63.40      A16S
ATOM  19822  C2  ADE  60      118.915  55.905   8.586  1.00 63.40      A16S
ATOM  19823  N1  ADE  60      118.995  57.129   8.062  1.00 63.40      A16S
ATOM  19824  C6  ADE  60      120.164  57.797   8.162  1.00 63.40      A16S
ATOM  19825  N6  ADE  60      120.246  59.026   7.649  1.00 63.40      A16S
ATOM  19826  C5  ADE  60      121.228  57.157   8.811  1.00 63.40      A16S
ATOM  19827  N7  ADE  60      122.531  57.547   9.074  1.00 63.40      A16S
ATOM  19828  C8  ADE  60      123.037  56.532   9.730  1.00 63.40      A16S
ATOM  19829  C2' ADE  60      123.090  53.132  10.085  1.00 49.21      A16S
ATOM  19830  O2' ADE  60      122.210  52.043   9.914  1.00 49.21      A16S
ATOM  19831  C3' ADE  60      124.248  52.931  11.069  1.00 49.21      A16S
ATOM  19832  O3' ADE  60      124.677  51.575  11.341  1.00 49.21      A16S
ATOM  19833  P   GUA  61      123.656  50.474  11.981  1.00 54.41      A16S
ATOM  19834  O1P GUA  61      124.500  49.526  12.736  1.00 41.51      A16S
ATOM  19835  O2P GUA  61      122.672  49.945  11.002  1.00 41.51      A16S
ATOM  19836  O5' GUA  61      122.850  51.245  13.109  1.00 54.41      A16S
ATOM  19837  C5' GUA  61      121.624  50.729  13.598  1.00 54.41      A16S
ATOM  19838  C4' GUA  61      120.568  51.793  13.516  1.00 54.41      A16S
ATOM  19839  O4' GUA  61      120.418  52.199  12.137  1.00 54.41      A16S
ATOM  19840  C1' GUA  61      119.065  52.499  11.877  1.00 54.41      A16S
ATOM  19841  N9  GUA  61      118.604  51.537  10.890  1.00 41.51      A16S
ATOM  19842  C4  GUA  61      117.468  51.622  10.131  1.00 41.51      A16S
ATOM  19843  N3  GUA  61      116.572  52.620  10.167  1.00 41.51      A16S
ATOM  19844  C2  GUA  61      115.594  52.430   9.297  1.00 41.51      A16S
ATOM  19845  N2  GUA  61      114.621  53.354   9.169  1.00 41.51      A16S
ATOM  19846  N1  GUA  61      115.495  51.335   8.481  1.00 41.51      A16S
ATOM  19847  C6  GUA  61      116.400  50.287   8.442  1.00 41.51      A16S
ATOM  19848  O6  GUA  61      116.205  49.326   7.677  1.00 41.51      A16S
ATOM  19849  C5  GUA  61      117.466  50.490   9.348  1.00 41.51      A16S
ATOM  19850  N7  GUA  61      118.580  49.707   9.614  1.00 41.51      A16S
ATOM  19851  C8  GUA  61      119.225  50.367  10.535  1.00 41.51      A16S
ATOM  19852  C2' GUA  61      118.329  52.411  13.213  1.00 54.41      A16S
ATOM  19853  O2' GUA  61      118.401  53.656  13.881  1.00 54.41      A16S
ATOM  19854  C3' GUA  61      119.175  51.382  13.935  1.00 54.41      A16S
ATOM  19855  O3' GUA  61      119.059  51.543  15.331  1.00 54.41      A16S
ATOM  19856  P   URI  62      118.165  50.518  16.169  1.00 47.24      A16S
ATOM  19857  O1P URI  62      118.376  49.139  15.635  1.00 46.03      A16S
ATOM  19858  O2P URI  62      118.435  50.814  17.598  1.00 46.03      A16S
ATOM  19859  O5' URI  62      116.672  50.903  15.791  1.00 47.24      A16S
ATOM  19860  C5' URI  62      116.191  52.204  16.009  1.00 47.24      A16S
ATOM  19861  C4' URI  62      114.924  52.386  15.245  1.00 47.24      A16S
ATOM  19862  O4' URI  62      115.205  52.203  13.845  1.00 47.24      A16S
ATOM  19863  C1' URI  62      114.099  51.598  13.216  1.00 47.24      A16S
ATOM  19864  N1  URI  62      114.599  50.441  12.474  1.00 46.03      A16S
ATOM  19865  C6  URI  62      115.796  49.852  12.799  1.00 46.03      A16S
ATOM  19866  C2  URI  62      113.835  49.985  11.429  1.00 46.03      A16S
ATOM  19867  O2  URI  62      112.767  50.494  11.122  1.00 46.03      A16S
ATOM  19868  N3  URI  62      114.367  48.923  10.749  1.00 46.03      A16S
ATOM  19869  C4  URI  62      115.570  48.300  10.996  1.00 46.03      A16S
ATOM  19870  O4  URI  62      115.978  47.450  10.203  1.00 46.03      A16S
ATOM  19871  C5  URI  62      116.298  48.827  12.110  1.00 46.03      A16S
ATOM  19872  C2' URI  62      113.051  51.286  14.286  1.00 47.24      A16S
ATOM  19873  O2' URI  62      112.041  52.266  14.246  1.00 47.24      A16S
ATOM  19874  C3' URI  62      113.897  51.322  15.555  1.00 47.24      A16S
ATOM  19875  O3' URI  62      113.197  51.739  16.714  1.00 47.24      A16S
ATOM  19876  P   CYT  63      112.184  50.739  17.443  1.00 44.16      A16S
ATOM  19877  O1P CYT  63      112.683  49.351  17.321  1.00 39.31      A16S
ATOM  19878  O2P CYT  63      111.930  51.319  18.789  1.00 39.31      A16S
ATOM  19879  O5' CYT  63      110.867  50.872  16.574  1.00 44.16      A16S
ATOM  19880  C5' CYT  63      109.954  49.820  16.554  1.00 44.16      A16S
ATOM  19881  C4' CYT  63      109.016  49.959  15.400  1.00 44.16      A16S
ATOM  19882  O4' CYT  63      109.756  50.138  14.175  1.00 44.16      A16S
ATOM  19883  C1' CYT  63      109.152  49.381  13.140  1.00 44.16      A16S
ATOM  19884  N1  CYT  63      110.168  48.462  12.621  1.00 39.31      A16S
ATOM  19885  C6  CYT  63      111.299  48.209  13.342  1.00 39.31      A16S
ATOM  19886  C2  CYT  63      109.978  47.867  11.371  1.00 39.31      A16S
ATOM  19887  O2  CYT  63      108.940  48.124  10.744  1.00 39.31      A16S
ATOM  19888  N3  CYT  63      110.931  47.044  10.878  1.00 39.31      A16S
ATOM  19889  C4  CYT  63      112.046  46.826  11.581  1.00 39.31      A16S
ATOM  19890  N4  CYT  63      112.980  46.036  11.061  1.00 39.31      A16S
ATOM  19891  C5  CYT  63      112.260  47.415  12.859  1.00 39.31      A16S
ATOM  19892  C2' CYT  63      107.912  48.700  13.720  1.00 44.16      A16S
ATOM  19893  O2' CYT  63      106.764  49.461  13.428  1.00 44.16      A16S
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ATOM  19894  C3' CYT  63     108.251  48.674  15.204  1.00 44.16      A16S
ATOM  19895  O3' CYT  63     107.148  48.674  16.098  1.00 44.16      A16S
ATOM  19896  P   GUA  64     107.215  47.771  17.423  1.00 70.81      A16S
ATOM  19897  O1P GUA  64     106.362  48.413  18.444  1.00 44.79      A16S
ATOM  19898  O2P GUA  64     108.617  47.463  17.755  1.00 44.79      A16S
ATOM  19899  O5' GUA  64     106.501  46.433  16.958  1.00 70.81      A16S
ATOM  19900  C5' GUA  64     105.117  46.429  16.635  1.00 70.81      A16S
ATOM  19901  C4' GUA  64     104.545  45.063  16.877  1.00 70.81      A16S
ATOM  19902  O4' GUA  64     105.348  44.138  16.118  1.00 70.81      A16S
ATOM  19903  C1' GUA  64     105.256  42.871  16.715  1.00 70.81      A16S
ATOM  19904  N9  GUA  64     106.558  42.219  16.692  1.00 44.79      A16S
ATOM  19905  C4  GUA  64     106.818  41.036  16.053  1.00 44.79      A16S
ATOM  19906  N3  GUA  64     105.923  40.310  15.351  1.00 44.79      A16S
ATOM  19907  C2  GUA  64     106.461  39.230  14.832  1.00 44.79      A16S
ATOM  19908  N2  GUA  64     105.710  38.413  14.085  1.00 44.79      A16S
ATOM  19909  N1  GUA  64     107.772  38.874  15.000  1.00 44.79      A16S
ATOM  19910  C6  GUA  64     108.714  39.599  15.723  1.00 44.79      A16S
ATOM  19911  O6  GUA  64     109.876  39.179  15.812  1.00 44.79      A16S
ATOM  19912  C5  GUA  64     108.148  40.781  16.278  1.00 44.79      A16S
ATOM  19913  N7  GUA  64     108.718  41.789  17.047  1.00 44.79      A16S
ATOM  19914  C8  GUA  64     107.732  42.619  17.272  1.00 44.79      A16S
ATOM  19915  C2' GUA  64     104.614  43.025  18.092  1.00 70.81      A16S
ATOM  19916  O2' GUA  64     103.284  42.530  18.051  1.00 70.81      A16S
ATOM  19917  C3' GUA  64     104.643  44.533  18.303  1.00 70.81      A16S
ATOM  19918  O3' GUA  64     103.513  44.783  19.152  1.00 70.81      A16S
ATOM  19919  P   URI  65     102.237  45.615  18.631  1.00 62.99      A16S
ATOM  19920  O1P URI  65     101.039  44.973  19.211  1.00 92.38      A16S
ATOM  19921  O2P URI  65     102.478  47.060  18.863  1.00 92.38      A16S
ATOM  19922  O5' URI  65     102.175  45.369  17.073  1.00 62.99      A16S
ATOM  19923  C5' URI  65     100.960  45.037  16.452  1.00 62.99      A16S
ATOM  19924  C4' URI  65     100.426  46.221  15.701  1.00 62.99      A16S
ATOM  19925  O4' URI  65      99.813  47.162  16.582  1.00 62.99      A16S
ATOM  19926  C1' URI  65      99.610  48.337  15.844  1.00 62.99      A16S
ATOM  19927  N1  URI  65      99.346  49.463  16.743  1.00 92.38      A16S
ATOM  19928  C6  URI  65      99.762  49.467  18.051  1.00 92.38      A16S
ATOM  19929  C2  URI  65      98.603  50.498  16.227  1.00 92.38      A16S
ATOM  19930  O2  URI  65      98.273  50.546  15.054  1.00 92.38      A16S
ATOM  19931  N3  URI  65      98.259  51.471  17.131  1.00 92.38      A16S
ATOM  19932  C4  URI  65      98.595  51.516  18.471  1.00 92.38      A16S
ATOM  19933  O4  URI  65      98.118  52.399  19.187  1.00 92.38      A16S
ATOM  19934  C5  URI  65      99.418  50.430  18.914  1.00 92.38      A16S
ATOM  19935  C2' URI  65     100.672  48.408  14.744  1.00 62.99      A16S
ATOM  19936  O2' URI  65      99.984  48.474  13.507  1.00 62.99      A16S
ATOM  19937  C3' URI  65     101.415  47.073  14.924  1.00 62.99      A16S
ATOM  19938  O3' URI  65     101.582  46.422  13.673  1.00 62.99      A16S
ATOM  19939  P   GUA  66     102.729  46.890  12.673  1.00 64.53      A16S
ATOM  19940  O1P GUA  66     104.011  46.405  13.223  1.00 42.58      A16S
ATOM  19941  O2P GUA  66     102.520  48.337  12.445  1.00 42.58      A16S
ATOM  19942  O5' GUA  66     102.412  46.091  11.338  1.00 64.53      A16S
ATOM  19943  C5' GUA  66     101.113  46.122  10.762  1.00 64.53      A16S
ATOM  19944  C4' GUA  66     101.088  45.254   9.537  1.00 64.53      A16S
ATOM  19945  O4' GUA  66     102.185  45.670   8.680  1.00 64.53      A16S
ATOM  19946  C1' GUA  66     102.836  44.532   8.142  1.00 64.53      A16S
ATOM  19947  N9  GUA  66     104.135  44.399   8.797  1.00 42.58      A16S
ATOM  19948  C4  GUA  66     105.059  43.408   8.574  1.00 42.58      A16S
ATOM  19949  N3  GUA  66     104.914  42.369   7.726  1.00 42.58      A16S
ATOM  19950  C2  GUA  66     105.975  41.582   7.722  1.00 42.58      A16S
ATOM  19951  N2  GUA  66     105.992  40.505   6.929  1.00 42.58      A16S
ATOM  19952  N1  GUA  66     107.092  41.795   8.493  1.00 42.58      A16S
ATOM  19953  C6  GUA  66     107.261  42.856   9.375  1.00 42.58      A16S
ATOM  19954  O6  GUA  66     108.308  42.955  10.029  1.00 42.58      A16S
ATOM  19955  C5  GUA  66     106.127  43.712   9.386  1.00 42.58      A16S
ATOM  19956  N7  GUA  66     105.877  44.865  10.115  1.00 42.58      A16S
ATOM  19957  C8  GUA  66     104.682  45.233   9.737  1.00 42.58      A16S
ATOM  19958  C2' GUA  66     101.922  43.356   8.447  1.00 64.53      A16S
ATOM  19959  O2' GUA  66     100.890  43.306   7.484  1.00 64.53      A16S
ATOM  19960  C3' GUA  66     101.388  43.790   9.794  1.00 64.53      A16S
ATOM  19961  O3' GUA  66     100.218  43.079  10.135  1.00 64.53      A16S
ATOM  19962  P   CYT  67     100.324  41.787  11.078  1.00 58.36      A16S
ATOM  19963  O1P CYT  67      98.985  41.186  10.974  1.00 34.28      A16S
ATOM  19964  O2P CYT  67     100.856  42.185  12.398  1.00 34.28      A16S
ATOM  19965  O5' CYT  67     101.353  40.808  10.353  1.00 58.36      A16S
ATOM  19966  C5' CYT  67     100.939  40.070   9.211  1.00 58.36      A16S
ATOM  19967  C4' CYT  67     101.943  38.998   8.859  1.00 58.36      A16S
ATOM  19968  O4' CYT  67     103.239  39.594   8.617  1.00 58.36      A16S
ATOM  19969  C1' CYT  67     104.248  38.636   8.870  1.00 58.36      A16S
ATOM  19970  N1  CYT  67     105.197  39.192   9.835  1.00 34.28      A16S
ATOM  19971  C6  CYT  67     104.852  40.222  10.662  1.00 34.28      A16S
ATOM  19972  C2  CYT  67     106.473  38.645   9.888  1.00 34.28      A16S
ATOM  19973  O2  CYT  67     106.748  37.709   9.123  1.00 34.28      A16S
ATOM  19974  N3  CYT  67     107.376  39.144  10.766  1.00 34.28      A16S
ATOM  19975  C4  CYT  67     107.027  40.145  11.581  1.00 34.28      A16S
ATOM  19976  N4  CYT  67     107.937  40.591  12.456  1.00 34.28      A16S
ATOM  19977  C5  CYT  67     105.728  40.726  11.542  1.00 34.28      A16S
ATOM  19978  C2' CYT  67     103.555  37.372   9.364  1.00 58.36      A16S
ATOM  19979  O2' CYT  67     103.351  36.543   8.240  1.00 58.36      A16S
ATOM  19980  C3' CYT  67     102.246  37.941   9.902  1.00 58.36      A16S
ATOM  19981  O3' CYT  67     101.217  36.956   9.922  1.00 58.36      A16S
ATOM  19982  P   GUA  68     100.862  36.200  11.294  1.00 57.42      A16S
ATOM  19983  O1P GUA  68      99.452  35.754  11.200  1.00 41.46      A16S
ATOM  19984  O2P GUA  68     101.279  37.024  12.434  1.00 41.46      A16S
ATOM  19985  O5' GUA  68     101.805  34.923  11.272  1.00 57.42      A16S
ATOM  19986  C5' GUA  68     101.737  33.995  10.207  1.00 57.42      A16S
ATOM  19987  C4' GUA  68     103.047  33.276  10.075  1.00 57.42      A16S
ATOM  19988  O4' GUA  68     104.088  34.246   9.795  1.00 57.42      A16S
ATOM  19989  C1' GUA  68     105.331  33.745  10.257  1.00 57.42      A16S
ATOM  19990  N9  GUA  68     105.935  34.709  11.170  1.00 41.46      A16S
ATOM  19991  C4  GUA  68     107.267  34.762  11.502  1.00 41.46      A16S
ATOM  19992  N3  GUA  68     108.235  33.967  11.003  1.00 41.46      A16S
ATOM  19993  C2  GUA  68     109.419  34.246  11.521  1.00 41.46      A16S
ATOM  19994  N2  GUA  68     110.503  33.565  11.118  1.00 41.46      A16S
ATOM  19995  N1  GUA  68     109.634  35.213  12.468  1.00 41.46      A16S
ATOM  19996  C6  GUA  68     108.658  36.039  13.007  1.00 41.46      A16S
ATOM  19997  O6  GUA  68     108.970  36.867  13.881  1.00 41.46      A16S
ATOM  19998  C5  GUA  68     107.375  35.769  12.437  1.00 41.46      A16S
ATOM  19999  N7  GUA  68     106.138  36.362  12.665  1.00 41.46      A16S
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ATOM  20000  C8  GUA  68      105.316  35.706  11.887  1.00 41.46      A16S
ATOM  20001  C2' GUA  68      105.039  32.410  10.939  1.00 57.42      A16S
ATOM  20002  O2' GUA  68      105.204  31.389   9.976  1.00 57.42      A16S
ATOM  20003  C3' GUA  68      103.579  32.598  11.324  1.00 57.42      A16S
ATOM  20004  O3' GUA  68      102.914  31.364  11.580  1.00 57.42      A16S
ATOM  20005  P   GUA  69      103.294  30.502  12.892  1.00 66.52      A16S
ATOM  20006  O1P GUA  69      102.384  29.330  12.889  1.00 52.52      A16S
ATOM  20007  O2P GUA  69      103.348  31.367  14.091  1.00 52.52      A16S
ATOM  20008  O5' GUA  69      104.772  29.996  12.578  1.00 66.52      A16S
ATOM  20009  C5' GUA  69      105.665  29.653  13.623  1.00 66.52      A16S
ATOM  20010  C4' GUA  69      107.091  29.701  13.130  1.00 66.52      A16S
ATOM  20011  O4' GUA  69      107.439  31.065  12.765  1.00 66.52      A16S
ATOM  20012  C1' GUA  69      108.791  31.327  13.117  1.00 66.52      A16S
ATOM  20013  N9  GUA  69      108.805  32.394  14.109  1.00 52.52      A16S
ATOM  20014  C4  GUA  69      109.905  32.908  14.754  1.00 52.52      A16S
ATOM  20015  N3  GUA  69      111.185  32.525  14.571  1.00 52.52      A16S
ATOM  20016  C2  GUA  69      112.017  33.192  15.357  1.00 52.52      A16S
ATOM  20017  N2  GUA  69      113.333  32.930  15.325  1.00 52.52      A16S
ATOM  20018  N1  GUA  69      111.624  34.161  16.239  1.00 52.52      A16S
ATOM  20019  C6  GUA  69      110.312  34.573  16.440  1.00 52.52      A16S
ATOM  20020  O6  GUA  69      110.062  35.462  17.271  1.00 52.52      A16S
ATOM  20021  C5  GUA  69      109.412  33.864  15.609  1.00 52.52      A16S
ATOM  20022  N7  GUA  69      108.033  33.961  15.494  1.00 52.52      A16S
ATOM  20023  C8  GUA  69      107.719  33.075  14.592  1.00 52.52      A16S
ATOM  20024  C2' GUA  69      109.369  30.023  13.653  1.00 66.52      A16S
ATOM  20025  O2' GUA  69      109.944  29.316  12.579  1.00 66.52      A16S
ATOM  20026  C3' GUA  69      108.116  29.348  14.187  1.00 66.52      A16S
ATOM  20027  O3' GUA  69      108.246  27.940  14.272  1.00 66.52      A16S
ATOM  20028  P   GUA  70      108.424  27.244  15.709  1.00 69.80      A16S
ATOM  20029  O1P GUA  70      108.156  25.800  15.502  1.00 51.03      A16S
ATOM  20030  O2P GUA  70      107.637  28.001  16.725  1.00 51.03      A16S
ATOM  20031  O5' GUA  70      109.978  27.411  16.004  1.00 69.80      A16S
ATOM  20032  C5' GUA  70      110.940  26.872  15.109  1.00 69.80      A16S
ATOM  20033  C4' GUA  70      112.323  27.284  15.532  1.00 69.80      A16S
ATOM  20034  O4' GUA  70      112.482  28.715  15.352  1.00 69.80      A16S
ATOM  20035  C1' GUA  70      113.326  29.229  16.369  1.00 69.80      A16S
ATOM  20036  N9  GUA  70      112.575  30.238  17.106  1.00 51.03      A16S
ATOM  20037  C4  GUA  70      113.081  31.145  18.003  1.00 51.03      A16S
ATOM  20038  N3  GUA  70      114.364  31.229  18.402  1.00 51.03      A16S
ATOM  20039  C2  GUA  70      114.563  32.241  19.234  1.00 51.03      A16S
ATOM  20040  N2  GUA  70      115.799  32.478  19.715  1.00 51.03      A16S
ATOM  20041  N1  GUA  70      113.573  33.100  19.650  1.00 51.03      A16S
ATOM  20042  C6  GUA  70      112.239  33.038  19.253  1.00 51.03      A16S
ATOM  20043  O6  GUA  70      111.416  33.891  19.676  1.00 51.03      A16S
ATOM  20044  C5  GUA  70      112.015  31.944  18.356  1.00 51.03      A16S
ATOM  20045  N7  GUA  70      110.851  31.518  17.726  1.00 51.03      A16S
ATOM  20046  C8  GUA  70      111.231  30.498  17.005  1.00 51.03      A16S
ATOM  20047  C2' GUA  70      113.776  28.043  17.217  1.00 69.80      A16S
ATOM  20048  O2' GUA  70      114.970  27.508  16.684  1.00 69.80      A16S
ATOM  20049  C3' GUA  70      112.615  27.091  17.005  1.00 69.80      A16S
ATOM  20050  O3' GUA  70      112.970  25.755  17.301  1.00 69.80      A16S
ATOM  20051  P   CYT  71      112.551  25.132  18.719  1.00 60.81      A16S
ATOM  20052  O1P CYT  71      112.956  23.703  18.656  1.00 56.79      A16S
ATOM  20053  O2P CYT  71      111.127  25.478  18.998  1.00 56.79      A16S
ATOM  20054  O5' CYT  71      113.481  25.914  19.757  1.00 60.81      A16S
ATOM  20055  C5' CYT  71      114.900  25.821  19.677  1.00 60.81      A16S
ATOM  20056  C4' CYT  71      115.555  26.838  20.587  1.00 60.81      A16S
ATOM  20057  O4' CYT  71      115.212  28.179  20.160  1.00 60.81      A16S
ATOM  20058  C1' CYT  71      115.203  29.046  21.277  1.00 60.81      A16S
ATOM  20059  N1  CYT  71      113.882  29.671  21.383  1.00 56.79      A16S
ATOM  20060  C6  CYT  71      112.786  29.151  20.752  1.00 56.79      A16S
ATOM  20061  C2  CYT  71      113.769  30.816  22.155  1.00 56.79      A16S
ATOM  20062  O2  CYT  71      114.782  31.256  22.703  1.00 56.79      A16S
ATOM  20063  N3  CYT  71      112.568  31.415  22.287  1.00 56.79      A16S
ATOM  20064  C4  CYT  71      111.503  30.903  21.677  1.00 56.79      A16S
ATOM  20065  N4  CYT  71      110.342  31.525  21.844  1.00 56.79      A16S
ATOM  20066  C5  CYT  71      111.586  29.730  20.872  1.00 56.79      A16S
ATOM  20067  C2' CYT  71      115.522  28.208  22.506  1.00 60.81      A16S
ATOM  20068  O2' CYT  71      116.897  28.328  22.781  1.00 60.81      A16S
ATOM  20069  C3' CYT  71      115.117  26.818  22.034  1.00 60.81      A16S
ATOM  20070  O3' CYT  71      115.801  25.799  22.744  1.00 60.81      A16S
ATOM  20071  P   CYT  72      115.043  25.012  23.921  1.00 77.89      A16S
ATOM  20072  O1P CYT  72      115.931  23.878  24.295  1.00 56.75      A16S
ATOM  20073  O2P CYT  72      113.638  24.744  23.515  1.00 56.75      A16S
ATOM  20074  O5' CYT  72      115.033  26.051  25.124  1.00 77.89      A16S
ATOM  20075  C5' CYT  72      116.242  26.381  25.787  1.00 77.89      A16S
ATOM  20076  C4' CYT  72      115.989  27.440  26.817  1.00 77.89      A16S
ATOM  20077  O4' CYT  72      115.697  28.706  26.167  1.00 77.89      A16S
ATOM  20078  C1' CYT  72      114.731  29.416  26.926  1.00 77.89      A16S
ATOM  20079  N1  CYT  72      113.502  29.519  26.131  1.00 56.75      A16S
ATOM  20080  C6  CYT  72      113.292  28.721  25.041  1.00 56.75      A16S
ATOM  20081  C2  CYT  72      112.539  30.431  26.526  1.00 56.75      A16S
ATOM  20082  O2  CYT  72      112.768  31.136  27.506  1.00 56.75      A16S
ATOM  20083  N3  CYT  72      111.379  30.518  25.842  1.00 56.75      A16S
ATOM  20084  C4  CYT  72      111.160  29.712  24.804  1.00 56.75      A16S
ATOM  20085  N4  CYT  72      109.975  29.788  24.195  1.00 56.75      A16S
ATOM  20086  C5  CYT  72      112.143  28.780  24.356  1.00 56.75      A16S
ATOM  20087  C2' CYT  72      114.485  28.596  28.193  1.00 77.89      A16S
ATOM  20088  O2' CYT  72      115.383  29.013  29.203  1.00 77.89      A16S
ATOM  20089  C3' CYT  72      114.771  27.194  27.680  1.00 77.89      A16S
ATOM  20090  O3' CYT  72      115.051  26.257  28.704  1.00 77.89      A16S
ATOM  20091  P   GUA  73      113.881  25.294  29.234  1.00 93.75      A16S
ATOM  20092  O1P GUA  73      114.515  24.491  30.304  1.00 62.87      A16S
ATOM  20093  O2P GUA  73      113.230  24.603  28.095  1.00 62.87      A16S
ATOM  20094  O5' GUA  73      112.831  26.304  29.885  1.00 93.75      A16S
ATOM  20095  C5' GUA  73      113.255  27.164  30.928  1.00 93.75      A16S
ATOM  20096  C4' GUA  73      112.161  28.118  31.354  1.00 93.75      A16S
ATOM  20097  O4' GUA  73      111.852  29.077  30.317  1.00 93.75      A16S
ATOM  20098  C1' GUA  73      110.628  29.712  30.651  1.00 93.75      A16S
ATOM  20099  N9  GUA  73      109.732  29.715  29.503  1.00 62.87      A16S
ATOM  20100  C4  GUA  73      108.642  30.527  29.363  1.00 62.87      A16S
ATOM  20101  N3  GUA  73      108.263  31.484  30.229  1.00 62.87      A16S
ATOM  20102  C2  GUA  73      107.159  32.082  29.846  1.00 62.87      A16S
ATOM  20103  N2  GUA  73      106.657  33.077  30.590  1.00 62.87      A16S
ATOM  20104  N1  GUA  73      106.469  31.757  28.703  1.00 62.87      A16S
ATOM  20105  C6  GUA  73      106.845  30.775  27.794  1.00 62.87      A16S
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ATOM  20106  O6  GUA  73     106.152  30.561  26.788  1.00 62.87      A16S
ATOM  20107  C5  GUA  73     108.039  30.135  28.192  1.00 62.87      A16S
ATOM  20108  N7  GUA  73     108.759  29.118  27.586  1.00 62.87      A16S
ATOM  20109  C8  GUA  73     109.762  28.908  28.395  1.00 62.87      A16S
ATOM  20110  C2' GUA  73     110.019  28.918  31.809  1.00 93.75      A16S
ATOM  20111  O2' GUA  73     110.305  29.601  33.008  1.00 93.75      A16S
ATOM  20112  C3' GUA  73     110.783  27.603  31.714  1.00 93.75      A16S
ATOM  20113  O3' GUA  73     110.780  26.952  32.974  1.00 93.75      A16S
ATOM  20114  P   CYT  74     109.449  26.208  33.487  1.00 73.61      A16S
ATOM  20115  O1P CYT  74     109.789  25.675  34.827  1.00 64.73      A16S
ATOM  20116  O2P CYT  74     108.923  25.287  32.445  1.00 64.73      A16S
ATOM  20117  O5' CYT  74     108.412  27.395  33.716  1.00 73.61      A16S
ATOM  20118  C5' CYT  74     108.518  28.227  34.868  1.00 73.61      A16S
ATOM  20119  C4' CYT  74     107.305  29.118  34.992  1.00 73.61      A16S
ATOM  20120  O4' CYT  74     107.272  30.063  33.888  1.00 73.61      A16S
ATOM  20121  C1' CYT  74     105.926  30.342  33.544  1.00 73.61      A16S
ATOM  20122  N1  CYT  74     105.677  29.832  32.194  1.00 64.73      A16S
ATOM  20123  C6  CYT  74     106.503  28.907  31.622  1.00 64.73      A16S
ATOM  20124  C2  CYT  74     104.549  30.282  31.520  1.00 64.73      A16S
ATOM  20125  O2  CYT  74     103.861  31.167  32.046  1.00 64.73      A16S
ATOM  20126  N3  CYT  74     104.236  29.749  30.320  1.00 64.73      A16S
ATOM  20127  C4  CYT  74     105.014  28.807  29.790  1.00 64.73      A16S
ATOM  20128  N4  CYT  74     104.636  28.263  28.636  1.00 64.73      A16S
ATOM  20129  C5  CYT  74     106.209  28.369  30.432  1.00 64.73      A16S
ATOM  20130  C2' CYT  74     105.049  29.581  34.537  1.00 73.61      A16S
ATOM  20131  O2' CYT  74     104.751  30.381  35.656  1.00 73.61      A16S
ATOM  20132  C3' CYT  74     105.959  28.425  34.898  1.00 73.61      A16S
ATOM  20133  O3' CYT  74     105.562  27.833  36.119  1.00 73.61      A16S
ATOM  20134  P   GUA  75     104.382  26.748  36.106  1.00 56.98      A16S
ATOM  20135  O1P GUA  75     104.151  26.241  37.484  1.00 56.30      A16S
ATOM  20136  O2P GUA  75     104.681  25.786  35.019  1.00 56.30      A16S
ATOM  20137  O5' GUA  75     103.119  27.607  35.663  1.00 56.98      A16S
ATOM  20138  C5' GUA  75     102.647  28.674  36.471  1.00 56.98      A16S
ATOM  20139  C4' GUA  75     101.358  29.212  35.909  1.00 56.98      A16S
ATOM  20140  O4' GUA  75     101.612  29.884  34.644  1.00 56.98      A16S
ATOM  20141  C1' GUA  75     100.505  29.684  33.769  1.00 56.98      A16S
ATOM  20142  N9  GUA  75     100.948  28.863  32.646  1.00 56.30      A16S
ATOM  20143  C4  GUA  75     100.279  28.651  31.465  1.00 56.30      A16S
ATOM  20144  N3  GUA  75      99.096  29.188  31.118  1.00 56.30      A16S
ATOM  20145  C2  GUA  75      98.708  28.791  29.916  1.00 56.30      A16S
ATOM  20146  N2  GUA  75      97.557  29.238  29.408  1.00 56.30      A16S
ATOM  20147  N1  GUA  75      99.422  27.930  29.127  1.00 56.30      A16S
ATOM  20148  C6  GUA  75     100.640  27.360  29.473  1.00 56.30      A16S
ATOM  20149  O6  GUA  75     101.195  26.578  28.697  1.00 56.30      A16S
ATOM  20150  C5  GUA  75     101.071  27.787  30.747  1.00 56.30      A16S
ATOM  20151  N7  GUA  75     102.220  27.473  31.453  1.00 56.30      A16S
ATOM  20152  C8  GUA  75     102.105  28.134  32.570  1.00 56.30      A16S
ATOM  20153  C2' GUA  75      99.450  28.941  34.585  1.00 56.98      A16S
ATOM  20154  O2' GUA  75      98.630  29.844  35.303  1.00 56.98      A16S
ATOM  20155  C3' GUA  75     100.338  28.161  35.527  1.00 56.98      A16S
ATOM  20156  O3' GUA  75      99.585  27.690  36.612  1.00 56.98      A16S
ATOM  20157  P   GUA  76      98.726  26.350  36.428  1.00 54.22      A16S
ATOM  20158  O1P GUA  76      97.982  26.181  37.705  1.00 48.89      A16S
ATOM  20159  O2P GUA  76      99.603  25.251  35.930  1.00 48.89      A16S
ATOM  20160  O5' GUA  76      97.684  26.687  35.272  1.00 54.22      A16S
ATOM  20161  C5' GUA  76      96.608  27.576  35.523  1.00 54.22      A16S
ATOM  20162  C4' GUA  76      95.627  27.539  34.388  1.00 54.22      A16S
ATOM  20163  O4' GUA  76      96.300  27.937  33.170  1.00 54.22      A16S
ATOM  20164  C1' GUA  76      95.711  27.276  32.067  1.00 54.22      A16S
ATOM  20165  N9  GUA  76      96.754  26.518  31.385  1.00 48.89      A16S
ATOM  20166  C4  GUA  76      96.704  26.032  30.101  1.00 48.89      A16S
ATOM  20167  N3  GUA  76      95.697  26.210  29.224  1.00 48.89      A16S
ATOM  20168  C2  GUA  76      95.920  25.586  28.081  1.00 48.89      A16S
ATOM  20169  N2  GUA  76      95.019  25.654  27.094  1.00 48.89      A16S
ATOM  20170  N1  GUA  76      97.040  24.847  27.821  1.00 48.89      A16S
ATOM  20171  C6  GUA  76      98.087  24.649  28.708  1.00 48.89      A16S
ATOM  20172  O6  GUA  76      99.043  23.948  28.377  1.00 48.89      A16S
ATOM  20173  C5  GUA  76      97.868  25.318  29.935  1.00 48.89      A16S
ATOM  20174  N7  GUA  76      98.656  25.383  31.077  1.00 48.89      A16S
ATOM  20175  C8  GUA  76      97.960  26.114  31.906  1.00 48.89      A16S
ATOM  20176  C2' GUA  76      94.598  26.382  32.627  1.00 54.22      A16S
ATOM  20177  O2' GUA  76      93.355  27.046  32.615  1.00 54.22      A16S
ATOM  20178  C3' GUA  76      95.071  26.174  34.052  1.00 54.22      A16S
ATOM  20179  O3' GUA  76      93.990  25.836  34.902  1.00 54.22      A16S
ATOM  20180  P   GUA  77      93.355  24.364  34.823  1.00 50.83      A16S
ATOM  20181  O1P GUA  77      94.457  23.373  34.836  1.00 50.62      A16S
ATOM  20182  O2P GUA  77      92.262  24.256  35.820  1.00 50.62      A16S
ATOM  20183  O5' GUA  77      92.699  24.338  33.376  1.00 50.83      A16S
ATOM  20184  C5' GUA  77      92.444  23.111  32.709  1.00 50.83      A16S
ATOM  20185  C4' GUA  77      92.038  23.374  31.281  1.00 50.83      A16S
ATOM  20186  O4' GUA  77      93.131  23.985  30.543  1.00 50.83      A16S
ATOM  20187  C1' GUA  77      93.168  23.468  29.223  1.00 50.83      A16S
ATOM  20188  N9  GUA  77      94.433  22.759  29.051  1.00 50.62      A16S
ATOM  20189  C4  GUA  77      94.835  22.037  27.950  1.00 50.62      A16S
ATOM  20190  N3  GUA  77      94.115  21.826  26.831  1.00 50.62      A16S
ATOM  20191  C2  GUA  77      94.779  21.103  25.949  1.00 50.62      A16S
ATOM  20192  N2  GUA  77      94.216  20.803  24.779  1.00 50.62      A16S
ATOM  20193  N1  GUA  77      96.041  20.626  26.149  1.00 50.62      A16S
ATOM  20194  C6  GUA  77      96.800  20.833  27.291  1.00 50.62      A16S
ATOM  20195  O6  GUA  77      97.935  20.365  27.366  1.00 50.62      A16S
ATOM  20196  C5  GUA  77      96.106  21.600  28.244  1.00 50.62      A16S
ATOM  20197  N7  GUA  77      96.493  22.022  29.506  1.00 50.62      A16S
ATOM  20198  C8  GUA  77      95.469  22.700  29.949  1.00 50.62      A16S
ATOM  20199  C2' GUA  77      91.939  22.579  29.061  1.00 50.83      A16S
ATOM  20200  O2' GUA  77      90.871  23.353  28.546  1.00 50.83      A16S
ATOM  20201  C3' GUA  77      91.724  22.124  30.497  1.00 50.83      A16S
ATOM  20202  O3' GUA  77      90.390  21.750  30.757  1.00 50.83      A16S
ATOM  20203  P   GUA  78      90.015  20.207  30.818  1.00 75.36      A16S
ATOM  20204  O1P GUA  78      88.560  20.129  31.068  1.00 55.57      A16S
ATOM  20205  O2P GUA  78      90.962  19.551  31.741  1.00 55.57      A16S
ATOM  20206  O5' GUA  78      90.340  19.682  29.355  1.00 75.36      A16S
ATOM  20207  C5' GUA  78      89.448  19.918  28.283  1.00 75.36      A16S
ATOM  20208  C4' GUA  78      89.819  19.046  27.118  1.00 75.36      A16S
ATOM  20209  O4' GUA  78      91.103  19.473  26.593  1.00 75.36      A16S
ATOM  20210  C1' GUA  78      91.787  18.355  26.054  1.00 75.36      A16S
ATOM  20211  N9  GUA  78      93.070  18.214  26.733  1.00 55.57      A16S
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ATOM	20212	C4	GUA	78	94.168	17.542	26.253	1.00	55.57	A16S	ATOM	20265	O3'	URI	80	93.741	11.412	34.993	1.00	75.35	A16S
ATOM	20213	N3	GUA	78	94.249	16.901	25.068	1.00	55.57	A16S	ATOM	20266	P	URI	81	94.981	12.101	34.246	1.00	90.72	A16S
ATOM	20214	C2	GUA	78	95.438	16.355	24.884	1.00	55.57	A16S	ATOM	20267	O1P	URI	81	95.509	13.162	35.138	1.00	78.80	A16S
ATOM	20215	N2	GUA	78	95.697	15.692	23.752	1.00	55.57	A16S	ATOM	20268	O2P	URI	81	94.543	12.448	32.869	1.00	78.80	A16S
ATOM	20216	N1	GUA	78	96.459	16.421	25.794	1.00	55.57	A16S	ATOM	20269	O5'	URI	81	96.072	10.945	34.173	1.00	90.72	A16S
ATOM	20217	C6	GUA	78	96.393	17.066	27.022	1.00	55.57	A16S	ATOM	20270	C5'	URI	81	96.789	10.565	35.338	1.00	90.72	A16S
ATOM	20218	O6	GUA	78	97.371	17.052	27.774	1.00	55.57	A16S	ATOM	20271	C4'	URI	81	97.672	9.379	35.049	1.00	90.72	A16S
ATOM	20219	C5	GUA	78	95.129	17.671	27.227	1.00	55.57	A16S	ATOM	20272	O4'	URI	81	96.845	8.239	34.702	1.00	90.72	A16S
ATOM	20220	N7	GUA	78	94.651	18.415	28.295	1.00	55.57	A16S	ATOM	20273	C1'	URI	81	97.504	7.455	33.720	1.00	90.72	A16S
ATOM	20221	C8	GUA	78	93.426	18.712	27.959	1.00	55.57	A16S	ATOM	20274	N1	URI	81	96.716	7.514	32.482	1.00	78.80	A16S
ATOM	20222	C2'	GUA	78	90.881	17.139	26.242	1.00	75.36	A16S	ATOM	20275	C6	URI	81	95.653	8.375	32.339	1.00	78.80	A16S
ATOM	20223	O2'	GUA	78	90.118	16.989	25.065	1.00	75.36	A16S	ATOM	20276	C2	URI	81	97.084	6.664	31.464	1.00	78.80	A16S
ATOM	20224	C3'	GUA	78	90.043	17.575	27.439	1.00	75.36	A16S	ATOM	20277	O2	URI	81	98.031	5.893	31.558	1.00	78.80	A16S
ATOM	20225	O3'	GUA	78	88.802	16.870	27.573	1.00	75.36	A16S	ATOM	20278	N3	URI	81	96.311	6.747	30.332	1.00	78.80	A16S
ATOM	20226	P	URI	79	88.786	15.285	27.879	1.00	148.52	A16S	ATOM	20279	C4	URI	81	95.233	7.575	30.124	1.00	78.80	A16S
ATOM	20227	O1P	URI	79	89.403	14.596	26.720	1.00	174.35	A16S	ATOM	20280	O4	URI	81	94.618	7.506	29.059	1.00	78.80	A16S
ATOM	20228	O2P	URI	79	87.401	14.944	28.280	1.00	174.35	A16S	ATOM	20281	C5	URI	81	94.918	8.434	31.225	1.00	78.80	A16S
ATOM	20229	O5'	URI	79	89.723	15.048	29.150	1.00	148.52	A16S	ATOM	20282	C2'	URI	81	98.889	8.065	33.533	1.00	90.72	A16S
ATOM	20230	C5'	URI	79	91.123	15.319	29.100	1.00	148.52	A16S	ATOM	20283	O2'	URI	81	99.791	7.484	34.452	1.00	90.72	A16S
ATOM	20231	C4'	URI	79	91.917	14.087	28.688	1.00	148.52	A16S	ATOM	20284	C3'	URI	81	98.590	9.517	33.851	1.00	90.72	A16S
ATOM	20232	O4'	URI	79	93.262	14.531	28.365	1.00	148.52	A16S	ATOM	20285	O3'	URI	81	99.761	10.245	34.159	1.00	90.72	A16S
ATOM	20233	C1'	URI	79	94.210	13.594	28.836	1.00	148.52	A16S	ATOM	20286	P	URI	82	100.276	11.357	33.131	1.00	84.18	A16S
ATOM	20234	N1	URI	79	95.086	14.273	29.803	1.00	174.35	A16S	ATOM	20287	O1P	URI	82	101.368	12.094	33.796	1.00	52.12	A16S
ATOM	20235	C6	URI	79	94.623	15.309	30.584	1.00	174.35	A16S	ATOM	20288	O2P	URI	82	99.073	12.086	32.660	1.00	52.12	A16S
ATOM	20236	C2	URI	79	96.397	13.840	29.901	1.00	174.35	A16S	ATOM	20289	O5'	URI	82	100.893	10.520	31.924	1.00	84.18	A16S
ATOM	20237	O2	URI	79	96.844	12.927	29.230	1.00	174.35	A16S	ATOM	20290	C5'	URI	82	102.021	9.677	32.132	1.00	84.18	A16S
ATOM	20238	N3	URI	79	97.165	14.518	30.816	1.00	174.35	A16S	ATOM	20291	C4'	URI	82	102.184	8.721	30.975	1.00	84.18	A16S
ATOM	20239	C4	URI	79	96.766	15.563	31.625	1.00	174.35	A16S	ATOM	20292	O4'	URI	82	100.953	7.971	30.812	1.00	84.18	A16S
ATOM	20240	O4	URI	79	97.579	16.073	32.400	1.00	174.35	A16S	ATOM	20293	C1'	URI	82	100.716	7.732	29.437	1.00	84.18	A16S
ATOM	20241	C5	URI	79	95.397	15.952	31.466	1.00	174.35	A16S	ATOM	20294	N1	URI	82	99.468	8.410	29.070	1.00	52.12	A16S
ATOM	20242	C2'	URI	79	93.451	12.379	29.381	1.00	148.52	A16S	ATOM	20295	C6	URI	82	98.853	9.285	29.932	1.00	52.12	A16S
ATOM	20243	O2'	URI	79	93.396	11.369	28.391	1.00	148.52	A16S	ATOM	20296	C2	URI	82	98.923	8.125	27.837	1.00	52.12	A16S
ATOM	20244	C3'	URI	79	92.081	12.973	29.727	1.00	148.52	A16S	ATOM	20297	O2	URI	82	99.462	7.400	27.033	1.00	52.12	A16S
ATOM	20245	O3'	URI	79	91.072	11.962	29.572	1.00	148.52	A16S	ATOM	20298	N3	URI	82	97.726	8.737	27.573	1.00	52.12	A16S
ATOM	20246	P	URI	80	90.202	11.466	30.842	1.00	75.35	A16S	ATOM	20299	C4	URI	82	97.044	9.608	28.392	1.00	52.12	A16S
ATOM	20247	O1P	URI	80	89.617	10.151	30.473	1.00	87.76	A16S	ATOM	20300	O4	URI	82	95.970	10.080	28.010	1.00	52.12	A16S
ATOM	20248	O2P	URI	80	89.296	12.586	31.230	1.00	87.76	A16S	ATOM	20301	C5	URI	82	97.690	9.882	29.643	1.00	52.12	A16S
ATOM	20249	O5'	URI	80	91.252	11.221	32.021	1.00	75.35	A16S	ATOM	20302	C2'	URI	82	101.932	8.251	28.678	1.00	84.18	A16S
ATOM	20250	C5'	URI	80	90.965	11.665	33.349	1.00	75.35	A16S	ATOM	20303	O2'	URI	82	102.872	7.202	28.557	1.00	84.18	A16S
ATOM	20251	C4'	URI	80	91.505	10.692	34.380	1.00	75.35	A16S	ATOM	20304	C3'	URI	82	102.400	9.356	29.612	1.00	84.18	A16S
ATOM	20252	O4'	URI	80	90.889	9.386	34.214	1.00	75.35	A16S	ATOM	20305	O3'	URI	82	103.767	9.691	29.403	1.00	84.18	A16S
ATOM	20253	C1'	URI	80	91.828	8.370	34.547	1.00	75.35	A16S	ATOM	20306	P	ADE	83	104.138	11.088	28.702	1.00	81.19	A16S
ATOM	20254	N1	URI	80	92.038	7.519	33.363	1.00	87.76	A16S	ATOM	20307	O1P	ADE	83	105.600	11.314	28.877	1.00	55.96	A16S
ATOM	20255	C6	URI	80	91.255	7.655	32.241	1.00	87.76	A16S	ATOM	20308	O2P	ADE	83	103.167	12.117	29.181	1.00	55.96	A16S
ATOM	20256	C2	URI	80	93.045	6.573	33.411	1.00	87.76	A16S	ATOM	20309	O5'	ADE	83	103.850	10.831	27.158	1.00	81.19	A16S
ATOM	20257	O2	URI	80	93.760	6.419	34.384	1.00	87.76	A16S	ATOM	20310	C5'	ADE	83	104.573	9.850	26.437	1.00	81.19	A16S
ATOM	20258	N3	URI	80	93.183	5.814	32.275	1.00	87.76	A16S	ATOM	20311	C4'	ADE	83	103.809	9.458	25.202	1.00	81.19	A16S
ATOM	20259	C4	URI	80	92.433	5.900	31.122	1.00	87.76	A16S	ATOM	20312	O4'	ADE	83	102.507	8.964	25.608	1.00	81.19	A16S
ATOM	20260	O4	URI	80	92.671	5.140	30.185	1.00	87.76	A16S	ATOM	20313	C1'	ADE	83	101.541	9.303	24.629	1.00	81.19	A16S
ATOM	20261	C5	URI	80	91.415	6.899	31.149	1.00	87.76	A16S	ATOM	20314	N9	ADE	83	100.539	10.161	25.256	1.00	55.96	A16S
ATOM	20262	C2'	URI	80	93.097	9.072	35.037	1.00	75.35	A16S	ATOM	20315	C4	ADE	83	99.303	10.462	24.742	1.00	55.96	A16S
ATOM	20263	O2'	URI	80	93.061	9.213	36.439	1.00	75.35	A16S	ATOM	20316	N3	ADE	83	98.781	10.036	23.579	1.00	55.96	A16S
ATOM	20264	C3'	URI	80	92.995	10.410	34.321	1.00	75.35	A16S	ATOM	20317	C2	ADE	83	97.549	10.511	23.418	1.00	55.96	A16S

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ATOM  20318  N1  ADE  83      96.836  11.315  24.223  1.00 55.96      A16S
ATOM  20319  C6  ADE  83      97.401  11.741  25.374  1.00 55.96      A16S
ATOM  20320  N6  ADE  83      96.706  12.568  26.155  1.00 55.96      A16S
ATOM  20321  C5  ADE  83      98.699  11.291  25.670  1.00 55.96      A16S
ATOM  20322  N7  ADE  83      99.542  11.514  26.749  1.00 55.96      A16S
ATOM  20323  C8  ADE  83     100.618  10.824  26.454  1.00 55.96      A16S
ATOM  20324  C2' ADE  83     102.286  10.008  23.498  1.00 81.19      A16S
ATOM  20325  O2' ADE  83     102.676   9.055  22.529  1.00 81.19      A16S
ATOM  20326  C3' ADE  83     103.465  10.593  24.258  1.00 81.19      A16S
ATOM  20327  O3' ADE  83     104.549  10.922  23.403  1.00 81.19      A16S
ATOM  20328  P   CYT  84     104.887  12.467  23.121  1.00 74.25      A16S
ATOM  20329  O1P CYT  84     106.051  12.521  22.201  1.00 69.79      A16S
ATOM  20330  O2P CYT  84     104.949  13.178  24.426  1.00 69.79      A16S
ATOM  20331  O5' CYT  84     103.617  13.000  22.319  1.00 74.25      A16S
ATOM  20332  C5' CYT  84     103.315  12.498  21.021  1.00 74.25      A16S
ATOM  20333  C4' CYT  84     101.885  12.815  20.650  1.00 74.25      A16S
ATOM  20334  O4' CYT  84     100.990  12.231  21.639  1.00 74.25      A16S
ATOM  20335  C1' CYT  84      99.851  13.062  21.804  1.00 74.25      A16S
ATOM  20336  N1  CYT  84      99.863  13.604  23.168  1.00 69.79      A16S
ATOM  20337  C6  CYT  84     100.958  13.468  23.970  1.00 69.79      A16S
ATOM  20338  C2  CYT  84      98.722  14.277  23.632  1.00 69.79      A16S
ATOM  20339  O2  CYT  84      97.736  14.390  22.869  1.00 69.79      A16S
ATOM  20340  N3  CYT  84      98.721  14.789  24.885  1.00 69.79      A16S
ATOM  20341  C4  CYT  84      99.801  14.656  25.657  1.00 69.79      A16S
ATOM  20342  N4  CYT  84      99.763  15.184  26.880  1.00 69.79      A16S
ATOM  20343  C5  CYT  84     100.972  13.976  25.207  1.00 69.79      A16S
ATOM  20344  C2' CYT  84      99.985  14.185  20.782  1.00 74.25      A16S
ATOM  20345  O2' CYT  84      99.348  13.795  19.583  1.00 74.25      A16S
ATOM  20346  C3' CYT  84     101.499  14.280  20.677  1.00 74.25      A16S
ATOM  20347  O3' CYT  84     101.934  14.978  19.526  1.00 74.25      A16S
ATOM  20348  P   URI  85     102.556  16.448  19.691  1.00 73.21      A16S
ATOM  20349  O1P URI  85     103.235  16.814  18.421  1.00 63.51      A16S
ATOM  20350  O2P URI  85     103.325  16.455  20.961  1.00 63.51      A16S
ATOM  20351  O5' URI  85     101.277  17.383  19.867  1.00 73.21      A16S
ATOM  20352  C5' URI  85     100.193  17.317  18.941  1.00 73.21      A16S
ATOM  20353  C4' URI  85      98.946  17.939  19.534  1.00 73.21      A16S
ATOM  20354  O4' URI  85      98.542  17.196  20.714  1.00 73.21      A16S
ATOM  20355  C1' URI  85      97.961  18.081  21.651  1.00 73.21      A16S
ATOM  20356  N1  URI  85      98.765  18.040  22.878  1.00 63.51      A16S
ATOM  20357  C6  URI  85     100.015  17.474  22.896  1.00 63.51      A16S
ATOM  20358  C2  URI  85      98.225  18.605  24.011  1.00 63.51      A16S
ATOM  20359  O2  URI  85      97.112  19.096  24.036  1.00 63.51      A16S
ATOM  20360  N3  URI  85      99.034  18.574  25.115  1.00 63.51      A16S
ATOM  20361  C4  URI  85     100.301  18.041  25.200  1.00 63.51      A16S
ATOM  20362  O4  URI  85     100.916  18.114  26.263  1.00 63.51      A16S
ATOM  20363  C5  URI  85     100.783  17.458  23.988  1.00 63.51      A16S
ATOM  20364  C2' URI  85      97.921  19.471  21.007  1.00 73.21      A16S
ATOM  20365  O2' URI  85      96.673  19.649  20.374  1.00 73.21      A16S
ATOM  20366  C3' URI  85      99.062  19.380  20.005  1.00 73.21      A16S
ATOM  20367  O3' URI  85      98.846  20.241  18.893  1.00 73.21      A16S
ATOM  20368  P   CYT  86      99.107  21.825  19.025  1.00 58.92      A16S
ATOM  20369  O1P CYT  86      98.995  22.378  17.643  1.00 43.89      A16S
ATOM  20370  O2P CYT  86     100.333  22.089  19.830  1.00 43.89      A16S
ATOM  20371  O5' CYT  86      97.847  22.361  19.840  1.00 58.92      A16S
ATOM  20372  C5' CYT  86      96.575  22.473  19.209  1.00 58.92      A16S
ATOM  20373  C4' CYT  86      95.620  23.236  20.089  1.00 58.92      A16S
ATOM  20374  O4' CYT  86      95.361  22.478  21.298  1.00 58.92      A16S
ATOM  20375  C1' CYT  86      95.235  23.363  22.396  1.00 58.92      A16S
ATOM  20376  N1  CYT  86      96.363  23.132  23.288  1.00 43.89      A16S
ATOM  20377  C6  CYT  86      97.455  22.436  22.863  1.00 43.89      A16S
ATOM  20378  C2  CYT  86      96.312  23.646  24.570  1.00 43.89      A16S
ATOM  20379  O2  CYT  86      95.292  24.243  24.929  1.00 43.89      A16S
ATOM  20380  N3  CYT  86      97.370  23.482  25.392  1.00 43.89      A16S
ATOM  20381  C4  CYT  86      98.443  22.817  24.965  1.00 43.89      A16S
ATOM  20382  N4  CYT  86      99.479  22.693  25.794  1.00 43.89      A16S
ATOM  20383  C5  CYT  86      98.507  22.253  23.662  1.00 43.89      A16S
ATOM  20384  C2' CYT  86      95.277  24.778  21.830  1.00 58.92      A16S
ATOM  20385  O2' CYT  86      93.965  25.179  21.511  1.00 58.92      A16S
ATOM  20386  C3' CYT  86      96.134  24.567  20.594  1.00 58.92      A16S
ATOM  20387  O3' CYT  86      95.902  25.578  19.636  1.00 58.92      A16S
ATOM  20388  P   CYT  87      96.711  26.956  19.736  1.00 58.66      A16S
ATOM  20389  O1P CYT  87      96.264  27.811  18.607  1.00 48.07      A16S
ATOM  20390  O2P CYT  87      98.146  26.617  19.892  1.00 48.07      A16S
ATOM  20391  O5' CYT  87      96.220  27.616  21.096  1.00 58.66      A16S
ATOM  20392  C5' CYT  87      94.915  28.149  21.195  1.00 58.66      A16S
ATOM  20393  C4' CYT  87      94.757  28.884  22.492  1.00 58.66      A16S
ATOM  20394  O4' CYT  87      94.853  27.954  23.598  1.00 58.66      A16S
ATOM  20395  C1' CYT  87      95.441  28.611  24.706  1.00 58.66      A16S
ATOM  20396  N1  CYT  87      96.706  27.944  25.011  1.00 48.07      A16S
ATOM  20397  C6  CYT  87      97.256  27.032  24.157  1.00 48.07      A16S
ATOM  20398  C2  CYT  87      97.336  28.262  26.192  1.00 48.07      A16S
ATOM  20399  O2  CYT  87      96.812  29.111  26.921  1.00 48.07      A16S
ATOM  20400  N3  CYT  87      98.502  27.651  26.517  1.00 48.07      A16S
ATOM  20401  C4  CYT  87      99.031  26.755  25.687  1.00 48.07      A16S
ATOM  20402  N4  CYT  87     100.172  26.172  26.043  1.00 48.07      A16S
ATOM  20403  C5  CYT  87      98.410  26.418  24.455  1.00 48.07      A16S
ATOM  20404  C2' CYT  87      95.672  30.063  24.293  1.00 58.66      A16S
ATOM  20405  O2' CYT  87      94.530  30.839  24.596  1.00 58.66      A16S
ATOM  20406  C3' CYT  87      95.833  29.904  22.797  1.00 58.66      A16S
ATOM  20407  O3' CYT  87      95.559  31.121  22.146  1.00 58.66      A16S
ATOM  20408  P   GUA  88      96.684  32.255  22.099  1.00 60.72      A16S
ATOM  20409  O1P GUA  88      96.071  33.413  21.408  1.00 52.30      A16S
ATOM  20410  O2P GUA  88      97.967  31.696  21.605  1.00 52.30      A16S
ATOM  20411  O5' GUA  88      96.904  32.640  23.624  1.00 60.72      A16S
ATOM  20412  C5' GUA  88      95.956  33.435  24.310  1.00 60.72      A16S
ATOM  20413  C4' GUA  88      96.439  33.707  25.701  1.00 60.72      A16S
ATOM  20414  O4' GUA  88      96.716  32.438  26.340  1.00 60.72      A16S
ATOM  20415  C1' GUA  88      97.781  32.596  27.255  1.00 60.72      A16S
ATOM  20416  N9  GUA  88      98.835  31.671  26.888  1.00 52.30      A16S
ATOM  20417  C4  GUA  88      99.918  31.357  27.658  1.00 52.30      A16S
ATOM  20418  N3  GUA  88     100.191  31.865  28.876  1.00 52.30      A16S
ATOM  20419  C2  GUA  88     101.302  31.367  29.379  1.00 52.30      A16S
ATOM  20420  N2  GUA  88     101.713  31.763  30.578  1.00 52.30      A16S
ATOM  20421  N1  GUA  88     102.090  30.446  28.742  1.00 52.30      A16S
ATOM  20422  C6  GUA  88     101.835  29.913  27.483  1.00 52.30      A16S
ATOM  20423  O6  GUA  88     102.621  29.093  26.988  1.00 52.30      A16S
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ATOM	20424	C5	GUA	88	100.633	30.437	26.929	1.00	52.30	A16S	ATOM	20477	O5'	GUA	91	110.538	39.767	27.744	1.00	77.96	A16S
ATOM	20425	N7	GUA	88	100.008	30.182	25.713	1.00	52.30	A16S	ATOM	20478	C5'	GUA	91	111.514	39.851	28.765	1.00	77.96	A16S
ATOM	20426	C8	GUA	88	98.947	30.942	25.732	1.00	52.30	A16S	ATOM	20479	C4'	GUA	91	112.578	38.815	28.545	1.00	77.96	A16S
ATOM	20427	C2'	GUA	88	98.261	34.040	27.165	1.00	60.72	A16S	ATOM	20480	O4'	GUA	91	111.973	37.494	28.561	1.00	77.96	A16S
ATOM	20428	O2'	GUA	88	97.683	34.800	28.206	1.00	60.72	A16S	ATOM	20481	C1'	GUA	91	112.699	36.633	27.696	1.00	77.96	A16S
ATOM	20429	C3'	GUA	88	97.768	34.426	25.781	1.00	60.72	A16S	ATOM	20482	N9	GUA	91	111.807	36.181	26.636	1.00	70.78	A16S
ATOM	20430	O3'	GUA	88	97.588	35.819	25.681	1.00	60.72	A16S	ATOM	20483	C4	GUA	91	112.063	35.158	25.764	1.00	70.78	A16S
ATOM	20431	P	URI	89	98.792	36.725	25.150	1.00	61.97	A16S	ATOM	20484	N3	GUA	91	113.158	34.380	25.773	1.00	70.78	A16S
ATOM	20432	O1P	URI	89	98.301	38.122	25.173	1.00	63.20	A16S	ATOM	20485	C2	GUA	91	113.141	33.497	24.798	1.00	70.78	A16S
ATOM	20433	O2P	URI	89	99.310	36.144	23.883	1.00	63.20	A16S	ATOM	20486	N2	GUA	91	114.164	32.643	24.666	1.00	70.78	A16S
ATOM	20434	O5'	URI	89	99.910	36.590	26.276	1.00	61.97	A16S	ATOM	20487	N1	GUA	91	112.124	33.386	23.882	1.00	70.78	A16S
ATOM	20435	C5'	URI	89	99.711	37.140	27.574	1.00	61.97	A16S	ATOM	20488	C6	GUA	91	110.986	34.182	23.854	1.00	70.78	A16S
ATOM	20436	C4'	URI	89	100.845	36.742	28.491	1.00	61.97	A16S	ATOM	20489	O6	GUA	91	110.135	34.010	22.976	1.00	70.78	A16S
ATOM	20437	O4'	URI	89	100.871	35.295	28.648	1.00	61.97	A16S	ATOM	20490	C5	GUA	91	110.991	35.131	24.902	1.00	70.78	A16S
ATOM	20438	C1'	URI	89	102.213	34.858	28.820	1.00	61.97	A16S	ATOM	20491	N7	GUA	91	110.059	36.102	25.243	1.00	70.78	A16S
ATOM	20439	N1	URI	89	102.559	33.960	27.715	1.00	63.20	A16S	ATOM	20492	C8	GUA	91	110.582	36.697	26.283	1.00	70.78	A16S
ATOM	20440	C6	URI	89	101.829	33.924	26.550	1.00	63.20	A16S	ATOM	20493	C2'	GUA	91	113.845	37.460	27.106	1.00	77.96	A16S
ATOM	20441	C2	URI	89	103.658	33.152	27.893	1.00	63.20	A16S	ATOM	20494	O2'	GUA	91	115.017	37.319	27.883	1.00	77.96	A16S
ATOM	20442	O2	URI	89	104.327	33.176	28.910	1.00	63.20	A16S	ATOM	20495	C3'	GUA	91	113.261	38.858	27.193	1.00	77.96	A16S
ATOM	20443	N3	URI	89	103.947	32.320	26.839	1.00	63.20	A16S	ATOM	20496	O3'	GUA	91	114.270	39.848	27.146	1.00	77.96	A16S
ATOM	20444	C4	URI	89	103.255	32.221	25.650	1.00	63.20	A16S	ATOM	20497	P	URI	92	114.599	40.566	25.750	1.00	80.11	A16S
ATOM	20445	O4	URI	89	103.569	31.345	24.844	1.00	63.20	A16S	ATOM	20498	O1P	URI	92	115.606	41.630	26.021	1.00	59.09	A16S
ATOM	20446	C5	URI	89	102.133	33.106	25.537	1.00	63.20	A16S	ATOM	20499	O2P	URI	92	113.316	40.913	25.070	1.00	59.09	A16S
ATOM	20447	C2'	URI	89	103.096	36.100	28.791	1.00	61.97	A16S	ATOM	20500	O5'	URI	92	115.305	39.419	24.909	1.00	80.11	A16S
ATOM	20448	O2'	URI	89	103.341	36.578	30.096	1.00	61.97	A16S	ATOM	20501	C5'	URI	92	116.477	38.794	25.394	1.00	80.11	A16S
ATOM	20449	C3'	URI	89	102.235	37.042	27.969	1.00	61.97	A16S	ATOM	20502	C4'	URI	92	116.820	37.621	24.524	1.00	80.11	A16S
ATOM	20450	O3'	URI	89	102.618	38.379	28.181	1.00	61.97	A16S	ATOM	20503	O4'	URI	92	115.750	36.645	24.600	1.00	80.11	A16S
ATOM	20451	P	GUA	90	103.899	38.947	27.412	1.00	67.50	A16S	ATOM	20504	C1'	URI	92	115.655	35.955	23.368	1.00	80.11	A16S
ATOM	20452	O1P	GUA	90	103.897	40.418	27.595	1.00	75.12	A16S	ATOM	20505	N1	URI	92	114.316	36.184	22.818	1.00	59.09	A16S
ATOM	20453	O2P	GUA	90	103.893	38.377	26.040	1.00	75.12	A16S	ATOM	20506	C6	URI	92	113.535	37.222	23.251	1.00	59.09	A16S
ATOM	20454	O5'	GUA	90	105.132	38.333	28.212	1.00	67.50	A16S	ATOM	20507	C2	URI	92	113.872	35.314	21.840	1.00	59.09	A16S
ATOM	20455	C5'	GUA	90	105.435	38.788	29.516	1.00	67.50	A16S	ATOM	20508	O2	URI	92	114.538	34.377	21.436	1.00	59.09	A16S
ATOM	20456	C4'	GUA	90	106.805	38.322	29.928	1.00	67.50	A16S	ATOM	20509	N3	URI	92	112.616	35.580	21.353	1.00	59.09	A16S
ATOM	20457	O4'	GUA	90	106.813	36.877	30.038	1.00	67.50	A16S	ATOM	20510	C4	URI	92	111.779	36.605	21.740	1.00	59.09	A16S
ATOM	20458	C1'	GUA	90	108.112	36.390	29.740	1.00	67.50	A16S	ATOM	20511	O4	URI	92	110.653	36.689	21.239	1.00	59.09	A16S
ATOM	20459	N9	GUA	90	108.032	35.469	28.613	1.00	75.12	A16S	ATOM	20512	C5	URI	92	112.314	37.460	22.758	1.00	59.09	A16S
ATOM	20460	C4	GUA	90	108.944	34.493	28.324	1.00	75.12	A16S	ATOM	20513	C2'	URI	92	116.747	36.523	22.466	1.00	80.11	A16S
ATOM	20461	N3	GUA	90	110.049	34.216	29.042	1.00	75.12	A16S	ATOM	20514	O2'	URI	92	117.936	35.789	22.657	1.00	80.11	A16S
ATOM	20462	C2	GUA	90	110.740	33.221	28.521	1.00	75.12	A16S	ATOM	20515	C3'	URI	92	116.891	37.916	23.041	1.00	80.11	A16S
ATOM	20463	N2	GUA	90	111.871	32.820	29.119	1.00	75.12	A16S	ATOM	20516	O3'	URI	92	118.137	38.477	22.691	1.00	80.11	A16S
ATOM	20464	N1	GUA	90	110.374	32.547	27.379	1.00	75.12	A16S	ATOM	20517	P	CYT	93	118.226	39.474	21.439	1.00	72.41	A16S
ATOM	20465	C6	GUA	90	109.237	32.813	26.622	1.00	75.12	A16S	ATOM	20518	O1P	CYT	93	119.536	40.164	21.567	1.00	57.58	A16S
ATOM	20466	O6	GUA	90	108.996	32.138	25.612	1.00	75.12	A16S	ATOM	20519	O2P	CYT	93	116.975	40.268	21.376	1.00	57.58	A16S
ATOM	20467	C5	GUA	90	108.484	33.887	27.175	1.00	75.12	A16S	ATOM	20520	O5'	CYT	93	118.279	38.512	20.171	1.00	72.41	A16S
ATOM	20468	N7	GUA	90	107.298	34.471	26.751	1.00	75.12	A16S	ATOM	20521	C5'	CYT	93	119.374	37.622	19.992	1.00	72.41	A16S
ATOM	20469	C8	GUA	90	107.067	35.403	27.636	1.00	75.12	A16S	ATOM	20522	C4'	CYT	93	119.084	36.638	18.886	1.00	72.41	A16S
ATOM	20470	C2'	GUA	90	108.979	37.603	29.415	1.00	67.50	A16S	ATOM	20523	O4'	CYT	93	117.974	35.779	19.252	1.00	72.41	A16S
ATOM	20471	O2'	GUA	90	109.615	38.032	30.597	1.00	67.50	A16S	ATOM	20524	C1'	CYT	93	117.271	35.395	18.083	1.00	72.41	A16S
ATOM	20472	C3'	GUA	90	107.929	38.599	28.951	1.00	67.50	A16S	ATOM	20525	N1	CYT	93	115.880	35.851	18.199	1.00	57.58	A16S
ATOM	20473	O3'	GUA	90	108.411	39.924	29.081	1.00	67.50	A16S	ATOM	20526	C6	CYT	93	115.530	36.825	19.092	1.00	57.58	A16S
ATOM	20474	P	GUA	91	109.192	40.604	27.855	1.00	77.96	A16S	ATOM	20527	C2	CYT	93	114.915	35.281	17.356	1.00	57.58	A16S
ATOM	20475	O1P	GUA	91	109.553	41.982	28.280	1.00	70.78	A16S	ATOM	20528	O2	CYT	93	115.257	34.372	16.579	1.00	57.58	A16S
ATOM	20476	O2P	GUA	91	108.387	40.392	26.618	1.00	70.78	A16S	ATOM	20529	N3	CYT	93	113.643	35.731	17.410	1.00	57.58	A16S

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ATOM  20530  C4  CYT  93     113.319  36.705  18.263  1.00 57.58      A16S
ATOM  20531  N4  CYT  93     112.060  37.143  18.256  1.00 57.58      A16S
ATOM  20532  C5  CYT  93     114.273  37.278  19.155  1.00 57.58      A16S
ATOM  20533  C2' CYT  93     117.978  36.050  16.896  1.00 72.41      A16S
ATOM  20534  O2' CYT  93     118.898  35.135  16.342  1.00 72.41      A16S
ATOM  20535  C3' CYT  93     118.648  37.240  17.569  1.00 72.41      A16S
ATOM  20536  O3' CYT  93     119.775  37.707  16.845  1.00 72.41      A16S
ATOM  20537  P   ADE  94     119.808  39.226  16.325  1.00 71.20      A16S
ATOM  20538  O1P ADE  94     121.154  39.467  15.760  1.00 50.91      A16S
ATOM  20539  O2P ADE  94     119.290  40.133  17.382  1.00 50.91      A16S
ATOM  20540  O5' ADE  94     118.777  39.230  15.117  1.00 71.20      A16S
ATOM  20541  C5' ADE  94     119.242  39.206  13.777  1.00 71.20      A16S
ATOM  20542  C4' ADE  94     118.943  37.872  13.158  1.00 71.20      A16S
ATOM  20543  O4' ADE  94     118.178  37.079  14.097  1.00 71.20      A16S
ATOM  20544  C1' ADE  94     117.212  36.318  13.401  1.00 71.20      A16S
ATOM  20545  N9  ADE  94     115.898  36.717  13.897  1.00 50.91      A16S
ATOM  20546  C4  ADE  94     114.675  36.222  13.507  1.00 50.91      A16S
ATOM  20547  N3  ADE  94     114.436  35.262  12.600  1.00 50.91      A16S
ATOM  20548  C2  ADE  94     113.131  35.055  12.472  1.00 50.91      A16S
ATOM  20549  N1  ADE  94     112.113  35.653  13.099  1.00 50.91      A16S
ATOM  20550  C6  ADE  94     112.384  36.610  14.007  1.00 50.91      A16S
ATOM  20551  N6  ADE  94     111.361  37.204  14.633  1.00 50.91      A16S
ATOM  20552  C5  ADE  94     113.734  36.922  14.238  1.00 50.91      A16S
ATOM  20553  N7  ADE  94     114.351  37.832  15.085  1.00 50.91      A16S
ATOM  20554  C8  ADE  94     115.631  37.669  14.844  1.00 50.91      A16S
ATOM  20555  C2' ADE  94     117.426  36.569  11.905  1.00 71.20      A16S
ATOM  20556  O2' ADE  94     118.301  35.604  11.361  1.00 71.20      A16S
ATOM  20557  C3' ADE  94     118.079  37.940  11.916  1.00 71.20      A16S
ATOM  20558  O3' ADE  94     118.886  38.126  10.766  1.00 71.20      A16S
ATOM  20559  P   GUA  95     118.335  39.017   9.554  1.00 55.33      A16S
ATOM  20560  O1P GUA  95     119.443  39.202   8.586  1.00 44.53      A16S
ATOM  20561  O2P GUA  95     117.660  40.198  10.142  1.00 44.53      A16S
ATOM  20562  O5' GUA  95     117.214  38.116   8.871  1.00 55.33      A16S
ATOM  20563  C5' GUA  95     117.514  36.809   8.408  1.00 55.33      A16S
ATOM  20564  C4' GUA  95     116.244  36.086   8.058  1.00 55.33      A16S
ATOM  20565  O4' GUA  95     115.471  35.823   9.260  1.00 55.33      A16S
ATOM  20566  C1' GUA  95     114.086  35.859   8.948  1.00 55.33      A16S
ATOM  20567  N9  GUA  95     113.463  36.876   9.785  1.00 44.53      A16S
ATOM  20568  C4  GUA  95     112.118  37.124   9.915  1.00 44.53      A16S
ATOM  20569  N3  GUA  95     111.132  36.477   9.275  1.00 44.53      A16S
ATOM  20570  C2  GUA  95     109.946  36.927   9.622  1.00 44.53      A16S
ATOM  20571  N2  GUA  95     108.853  36.399   9.079  1.00 44.53      A16S
ATOM  20572  N1  GUA  95     109.740  37.928  10.525  1.00 44.53      A16S
ATOM  20573  C6  GUA  95     110.741  38.613  11.194  1.00 44.53      A16S
ATOM  20574  O6  GUA  95     110.443  39.513  11.995  1.00 44.53      A16S
ATOM  20575  C5  GUA  95     112.021  38.143  10.830  1.00 44.53      A16S
ATOM  20576  N7  GUA  95     113.277  38.541  11.257  1.00 44.53      A16S
ATOM  20577  C8  GUA  95     114.102  37.764  10.609  1.00 44.53      A16S
ATOM  20578  C2' GUA  95     113.971  36.175   7.459  1.00 55.33      A16S
ATOM  20579  O2' GUA  95     113.876  34.976   6.725  1.00 55.33      A16S
ATOM  20580  C3' GUA  95     115.286  36.901   7.222  1.00 55.33      A16S
ATOM  20581  O3' GUA  95     115.675  36.969   5.863  1.00 55.33      A16S
ATOM  20582  P   CYT  96     115.525  38.364   5.091  1.00 52.72      A16S
ATOM  20583  O1P CYT  96     116.383  38.362   3.873  1.00 39.18      A16S
ATOM  20584  O2P CYT  96     115.732  39.396   6.152  1.00 39.18      A16S
ATOM  20585  O5' CYT  96     114.002  38.366   4.633  1.00 52.72      A16S
ATOM  20586  C5' CYT  96     113.444  37.225   4.012  1.00 52.72      A16S
ATOM  20587  C4' CYT  96     111.944  37.295   4.058  1.00 52.72      A16S
ATOM  20588  O4' CYT  96     111.475  37.150   5.421  1.00 52.72      A16S
ATOM  20589  C1' CYT  96     110.246  37.847   5.567  1.00 52.72      A16S
ATOM  20590  N1  CYT  96     110.391  38.838   6.632  1.00 39.18      A16S
ATOM  20591  C6  CYT  96     111.606  39.111   7.195  1.00 39.18      A16S
ATOM  20592  C2  CYT  96     109.254  39.508   7.049  1.00 39.18      A16S
ATOM  20593  O2  CYT  96     108.175  39.232   6.506  1.00 39.18      A16S
ATOM  20594  N3  CYT  96     109.351  40.440   8.022  1.00 39.18      A16S
ATOM  20595  C4  CYT  96     110.538  40.707   8.563  1.00 39.18      A16S
ATOM  20596  N4  CYT  96     110.592  41.632   9.516  1.00 39.18      A16S
ATOM  20597  C5  CYT  96     111.725  40.033   8.151  1.00 39.18      A16S
ATOM  20598  C2' CYT  96     109.961  38.546   4.239  1.00 52.72      A16S
ATOM  20599  O2' CYT  96     109.093  37.778   3.433  1.00 52.72      A16S
ATOM  20600  C3' CYT  96     111.357  38.627   3.654  1.00 52.72      A16S
ATOM  20601  O3' CYT  96     111.295  38.756   2.259  1.00 52.72      A16S
ATOM  20602  P   GUA  97     111.497  40.198   1.616  1.00 54.20      A16S
ATOM  20603  O1P GUA  97     111.140  40.089   0.179  1.00 34.44      A16S
ATOM  20604  O2P GUA  97     112.873  40.587   1.997  1.00 34.44      A16S
ATOM  20605  O5' GUA  97     110.395  41.088   2.361  1.00 54.20      A16S
ATOM  20606  C5' GUA  97     109.021  41.014   1.959  1.00 54.20      A16S
ATOM  20607  C4' GUA  97     108.156  42.002   2.729  1.00 54.20      A16S
ATOM  20608  O4' GUA  97     108.221  41.721   4.149  1.00 54.20      A16S
ATOM  20609  C1' GUA  97     108.055  42.924   4.885  1.00 54.20      A16S
ATOM  20610  N9  GUA  97     109.283  43.162   5.626  1.00 34.44      A16S
ATOM  20611  C4  GUA  97     109.479  44.071   6.639  1.00 34.44      A16S
ATOM  20612  N3  GUA  97     108.567  44.948   7.118  1.00 34.44      A16S
ATOM  20613  C2  GUA  97     109.068  45.682   8.114  1.00 34.44      A16S
ATOM  20614  N2  GUA  97     108.318  46.621   8.710  1.00 34.44      A16S
ATOM  20615  N1  GUA  97     110.341  45.551   8.592  1.00 34.44      A16S
ATOM  20616  C6  GUA  97     111.287  44.656   8.101  1.00 34.44      A16S
ATOM  20617  O6  GUA  97     112.414  44.615   8.595  1.00 34.44      A16S
ATOM  20618  C5  GUA  97     110.779  43.881   7.045  1.00 34.44      A16S
ATOM  20619  N7  GUA  97     111.394  42.896   6.291  1.00 34.44      A16S
ATOM  20620  C8  GUA  97     110.472  42.503   5.459  1.00 34.44      A16S
ATOM  20621  C2' GUA  97     107.793  44.026   3.872  1.00 54.20      A16S
ATOM  20622  O2' GUA  97     106.402  44.144   3.685  1.00 54.20      A16S
ATOM  20623  C3' GUA  97     108.517  43.473   2.657  1.00 54.20      A16S
ATOM  20624  O3' GUA  97     108.053  44.083   1.467  1.00 54.20      A16S
ATOM  20625  P   GUA  98     108.951  45.214   0.774  1.00 56.52      A16S
ATOM  20626  O1P GUA  98     108.291  45.544  -0.512  1.00 41.80      A16S
ATOM  20627  O2P GUA  98     110.357  44.727   0.780  1.00 41.80      A16S
ATOM  20628  O5' GUA  98     108.831  46.454   1.766  1.00 56.52      A16S
ATOM  20629  C5' GUA  98     107.561  47.041   1.993  1.00 56.52      A16S
ATOM  20630  C4' GUA  98     107.607  48.055   3.116  1.00 56.52      A16S
ATOM  20631  O4' GUA  98     108.049  47.444   4.352  1.00 56.52      A16S
ATOM  20632  C1' GUA  98     108.400  48.474   5.251  1.00 56.52      A16S
ATOM  20633  N9  GUA  98     109.674  48.170   5.883  1.00 41.80      A16S
ATOM  20634  C4  GUA  98     110.186  48.845   6.953  1.00 41.80      A16S
ATOM  20635  N3  GUA  98     109.594  49.876   7.584  1.00 41.80      A16S
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ATOM	20636	C2	GUA	98	110.325	50.326	8.586	1.00	41.80	A16S	ATOM	20689	C3'	GUA	100	116.062	56.680	4.534	1.00	44.20	A16S
ATOM	20637	N2	GUA	98	109.881	51.350	9.332	1.00	41.80	A16S	ATOM	20690	O3'	GUA	100	116.732	57.809	4.010	1.00	44.20	A16S
ATOM	20638	N1	GUA	98	111.544	49.805	8.936	1.00	41.80	A16S	ATOM	20691	P	GUA	101	117.500	57.676	2.611	1.00	45.46	A16S
ATOM	20639	C6	GUA	98	112.171	48.742	8.302	1.00	41.80	A16S	ATOM	20692	O1P	GUA	101	117.886	59.044	2.191	1.00	56.69	A16S
ATOM	20640	O6	GUA	98	113.268	48.348	8.707	1.00	41.80	A16S	ATOM	20693	O2P	GUA	101	116.634	56.848	1.725	1.00	56.69	A16S
ATOM	20641	C5	GUA	98	111.395	48.248	7.222	1.00	41.80	A16S	ATOM	20694	O5'	GUA	101	118.808	56.843	2.983	1.00	45.46	A16S
ATOM	20642	N7	GUA	98	111.642	47.208	6.329	1.00	41.80	A16S	ATOM	20695	C5'	GUA	101	119.409	56.985	4.262	1.00	45.46	A16S
ATOM	20643	C8	GUA	98	110.590	47.199	5.554	1.00	41.80	A16S	ATOM	20696	C4'	GUA	101	120.339	55.833	4.560	1.00	45.46	A16S
ATOM	20644	C2'	GUA	98	108.444	49.772	4.449	1.00	56.52	A16S	ATOM	20697	O4'	GUA	101	119.659	54.549	4.398	1.00	45.46	A16S
ATOM	20645	O2'	GUA	98	107.219	50.427	4.667	1.00	56.52	A16S	ATOM	20698	C1'	GUA	101	120.639	53.518	4.328	1.00	45.46	A16S
ATOM	20646	C3'	GUA	98	108.543	49.245	3.026	1.00	56.52	A16S	ATOM	20699	N9	GUA	101	120.422	52.660	3.164	1.00	56.69	A16S
ATOM	20647	O3'	GUA	98	108.048	50.220	2.121	1.00	56.52	A16S	ATOM	20700	C4	GUA	101	119.389	52.696	2.279	1.00	56.69	A16S
ATOM	20648	P	CYT	99	109.074	51.026	1.181	1.00	52.06	A16S	ATOM	20701	N3	GUA	101	118.333	53.522	2.339	1.00	56.69	A16S
ATOM	20649	O1P	CYT	99	108.244	51.687	0.136	1.00	45.08	A16S	ATOM	20702	C2	GUA	101	117.513	53.351	1.309	1.00	56.69	A16S
ATOM	20650	O2P	CYT	99	110.183	50.127	0.769	1.00	45.08	A16S	ATOM	20703	N2	GUA	101	116.391	54.107	1.205	1.00	56.69	A16S
ATOM	20651	O5'	CYT	99	109.688	52.128	2.151	1.00	52.06	A16S	ATOM	20704	N1	GUA	101	117.732	52.433	0.298	1.00	56.69	A16S
ATOM	20652	C5'	CYT	99	108.894	53.215	2.585	1.00	52.06	A16S	ATOM	20705	C6	GUA	101	118.828	51.578	0.220	1.00	56.69	A16S
ATOM	20653	C4'	CYT	99	109.505	53.865	3.795	1.00	52.06	A16S	ATOM	20706	O6	GUA	101	118.951	50.819	-0.744	1.00	56.69	A16S
ATOM	20654	O4'	CYT	99	109.572	52.925	4.900	1.00	52.06	A16S	ATOM	20707	C5	GUA	101	119.692	51.741	1.321	1.00	56.69	A16S
ATOM	20655	C1'	CYT	99	110.662	53.269	5.747	1.00	52.06	A16S	ATOM	20708	N7	GUA	101	120.871	51.084	1.632	1.00	56.69	A16S
ATOM	20656	N1	CYT	99	111.643	52.188	5.697	1.00	45.08	A16S	ATOM	20709	C8	GUA	101	121.267	51.655	2.733	1.00	56.69	A16S
ATOM	20657	C6	CYT	99	111.590	51.224	4.729	1.00	45.08	A16S	ATOM	20710	C2'	GUA	101	121.976	54.240	4.171	1.00	45.46	A16S
ATOM	20658	C2	CYT	99	112.657	52.184	6.637	1.00	45.08	A16S	ATOM	20711	O2'	GUA	101	122.599	54.316	5.438	1.00	45.46	A16S
ATOM	20659	O2	CYT	99	112.644	53.048	7.514	1.00	45.08	A16S	ATOM	20712	C3'	GUA	101	121.512	55.591	3.640	1.00	45.46	A16S
ATOM	20660	N3	CYT	99	113.629	51.245	6.562	1.00	45.08	A16S	ATOM	20713	O3'	GUA	101	122.541	56.569	3.695	1.00	45.46	A16S
ATOM	20661	C4	CYT	99	113.601	50.337	5.584	1.00	45.08	A16S	ATOM	20714	P	ADE	102	123.501	56.766	2.421	1.00	53.51	A16S
ATOM	20662	N4	CYT	99	114.604	49.479	5.506	1.00	45.08	A16S	ATOM	20715	O1P	ADE	102	124.802	57.272	2.922	1.00	71.83	A16S
ATOM	20663	C5	CYT	99	112.545	50.288	4.634	1.00	45.08	A16S	ATOM	20716	O2P	ADE	102	123.467	55.505	1.643	1.00	71.83	A16S
ATOM	20664	C2'	CYT	99	111.288	54.519	5.136	1.00	52.06	A16S	ATOM	20717	O5'	ADE	102	122.776	57.904	1.566	1.00	53.51	A16S
ATOM	20665	O2'	CYT	99	110.669	55.680	5.656	1.00	52.06	A16S	ATOM	20718	C5'	ADE	102	123.549	58.848	0.808	1.00	53.51	A16S
ATOM	20666	C3'	CYT	99	110.946	54.299	3.675	1.00	52.06	A16S	ATOM	20719	C4'	ADE	102	122.758	59.379	-0.378	1.00	53.51	A16S
ATOM	20667	O3'	CYT	99	111.078	55.470	2.906	1.00	52.06	A16S	ATOM	20720	O4'	ADE	102	122.146	58.263	-1.028	1.00	53.51	A16S
ATOM	20668	P	GUA	100	112.380	55.660	1.997	1.00	44.20	A16S	ATOM	20721	C1'	ADE	102	120.937	58.661	-1.604	1.00	53.51	A16S
ATOM	20669	O1P	GUA	100	112.123	56.911	1.235	1.00	41.23	A16S	ATOM	20722	N9	ADE	102	119.996	57.570	-1.436	1.00	71.83	A16S
ATOM	20670	O2P	GUA	100	112.636	54.401	1.262	1.00	41.23	A16S	ATOM	20723	C4	ADE	102	119.365	56.953	-2.469	1.00	71.83	A16S
ATOM	20671	O5'	GUA	100	113.543	55.870	3.071	1.00	44.20	A16S	ATOM	20724	N3	ADE	102	119.458	57.277	-3.765	1.00	71.83	A16S
ATOM	20672	C5'	GUA	100	113.588	57.060	3.846	1.00	44.20	A16S	ATOM	20725	C2	ADE	102	118.734	56.438	-4.495	1.00	71.83	A16S
ATOM	20673	C4'	GUA	100	114.623	56.958	4.937	1.00	44.20	A16S	ATOM	20726	N1	ADE	102	117.986	55.383	-4.096	1.00	71.83	A16S
ATOM	20674	O4'	GUA	100	114.311	55.817	5.771	1.00	44.20	A16S	ATOM	20727	C6	ADE	102	117.925	55.095	-2.776	1.00	71.83	A16S
ATOM	20675	C1'	GUA	100	115.520	55.266	6.293	1.00	44.20	A16S	ATOM	20728	N6	ADE	102	117.195	54.050	-2.375	1.00	71.83	A16S
ATOM	20676	N9	GUA	100	115.741	53.976	5.664	1.00	41.23	A16S	ATOM	20729	C5	ADE	102	118.642	55.917	-1.904	1.00	71.83	A16S
ATOM	20677	C4	GUA	100	116.764	53.120	5.958	1.00	41.23	A16S	ATOM	20730	N7	ADE	102	118.789	55.909	-0.527	1.00	71.83	A16S
ATOM	20678	N3	GUA	100	117.721	53.328	6.882	1.00	41.23	A16S	ATOM	20731	C8	ADE	102	119.594	56.914	-0.297	1.00	71.83	A16S
ATOM	20679	C2	GUA	100	118.572	52.326	6.943	1.00	41.23	A16S	ATOM	20732	C2'	ADE	102	120.529	60.026	-1.053	1.00	53.51	A16S
ATOM	20680	N2	GUA	100	119.586	52.377	7.815	1.00	41.23	A16S	ATOM	20733	O2'	ADE	102	120.473	60.943	-2.123	1.00	53.51	A16S
ATOM	20681	N1	GUA	100	118.492	51.202	6.155	1.00	41.23	A16S	ATOM	20734	C3'	ADE	102	121.646	60.370	-0.065	1.00	53.51	A16S
ATOM	20682	C6	GUA	100	117.511	50.972	5.194	1.00	41.23	A16S	ATOM	20735	O3'	ADE	102	122.036	61.668	-0.520	1.00	53.51	A16S
ATOM	20683	O6	GUA	100	117.517	49.925	4.541	1.00	41.23	A16S	ATOM	20736	P	CYT	103	123.298	62.448	0.110	1.00	47.68	A16S
ATOM	20684	C5	GUA	100	116.595	52.046	5.117	1.00	41.23	A16S	ATOM	20737	O1P	CYT	103	123.641	63.434	-0.946	1.00	42.28	A16S
ATOM	20685	N7	GUA	100	115.486	52.229	4.301	1.00	41.23	A16S	ATOM	20738	O2P	CYT	103	124.375	61.586	0.668	1.00	42.28	A16S
ATOM	20686	C8	GUA	100	115.008	53.387	4.665	1.00	41.23	A16S	ATOM	20739	O5'	CYT	103	122.618	63.243	1.305	1.00	47.68	A16S
ATOM	20687	C2'	GUA	100	116.646	56.186	5.849	1.00	44.20	A16S	ATOM	20740	C5'	CYT	103	121.459	64.025	1.064	1.00	47.68	A16S
ATOM	20688	O2'	GUA	100	116.869	57.171	6.839	1.00	44.20	A16S	ATOM	20741	C4'	CYT	103	120.793	64.367	2.359	1.00	47.68	A16S

ATOM	20742	O4'	CYT	103	120.243	63.163	2.946	1.00	47.68	A16S	ATOM	20795	C5	GUA	105	129.463	63.335	5.078	1.00	42.62	A16S
ATOM	20743	C1'	CYT	103	120.347	63.237	4.357	1.00	47.68	A16S	ATOM	20796	N7	GUA	105	128.302	64.065	5.245	1.00	42.62	A16S
ATOM	20744	N1	CYT	103	121.223	62.145	4.809	1.00	42.28	A16S	ATOM	20797	C8	GUA	105	128.235	64.270	6.532	1.00	42.62	A16S
ATOM	20745	C6	CYT	103	121.929	61.384	3.916	1.00	42.28	A16S	ATOM	20798	C2'	GUA	105	130.875	64.589	8.812	1.00	54.03	A16S
ATOM	20746	C2	CYT	103	121.322	61.898	6.172	1.00	42.28	A16S	ATOM	20799	O2'	GUA	105	131.400	64.355	10.097	1.00	54.03	A16S
ATOM	20747	O2	CYT	103	120.670	62.606	6.956	1.00	42.28	A16S	ATOM	20800	C3'	GUA	105	130.387	66.013	8.712	1.00	54.03	A16S
ATOM	20748	N3	CYT	103	122.120	60.899	6.606	1.00	42.28	A16S	ATOM	20801	O3'	GUA	105	131.355	66.880	9.251	1.00	54.03	A16S
ATOM	20749	C4	CYT	103	122.801	60.162	5.731	1.00	42.28	A16S	ATOM	20802	P	GUA	106	132.081	67.932	8.289	1.00	40.06	A16S
ATOM	20750	N4	CYT	103	123.566	59.193	6.207	1.00	42.28	A16S	ATOM	20803	O1P	GUA	106	132.631	68.999	9.191	1.00	33.04	A16S
ATOM	20751	C5	CYT	103	122.724	60.391	4.333	1.00	42.28	A16S	ATOM	20804	O2P	GUA	106	131.116	68.285	7.232	1.00	33.04	A16S
ATOM	20752	C2'	CYT	103	120.907	64.620	4.682	1.00	47.68	A16S	ATOM	20805	O5'	GUA	106	133.244	67.089	7.605	1.00	40.06	A16S
ATOM	20753	O2'	CYT	103	119.830	65.525	4.820	1.00	47.68	A16S	ATOM	20806	C5'	GUA	106	134.062	66.208	8.371	1.00	40.06	A16S
ATOM	20754	C3'	CYT	103	121.720	64.896	3.430	1.00	47.68	A16S	ATOM	20807	C4'	GUA	106	134.865	65.317	7.458	1.00	40.06	A16S
ATOM	20755	O3'	CYT	103	121.953	66.274	3.234	1.00	47.68	A16S	ATOM	20808	O4'	GUA	106	133.967	64.464	6.709	1.00	40.06	A16S
ATOM	20756	P	GUA	104	123.405	66.878	3.532	1.00	42.73	A16S	ATOM	20809	C1'	GUA	106	134.556	64.149	5.463	1.00	40.06	A16S
ATOM	20757	O1P	GUA	104	123.268	68.355	3.420	1.00	62.99	A16S	ATOM	20810	N9	GUA	106	133.647	64.528	4.395	1.00	33.04	A16S
ATOM	20758	O2P	GUA	104	124.433	66.163	2.728	1.00	62.99	A16S	ATOM	20811	C4	GUA	106	133.845	64.302	3.064	1.00	33.04	A16S
ATOM	20759	O5'	GUA	104	123.668	66.500	5.052	1.00	42.73	A16S	ATOM	20812	N3	GUA	106	134.938	63.738	2.518	1.00	33.04	A16S
ATOM	20760	C5'	GUA	104	122.980	67.161	6.090	1.00	42.73	A16S	ATOM	20813	C2	GUA	106	134.836	63.645	1.203	1.00	33.04	A16S
ATOM	20761	C4'	GUA	104	123.265	66.482	7.389	1.00	42.73	A16S	ATOM	20814	N2	GUA	106	135.839	63.117	0.493	1.00	33.04	A16S
ATOM	20762	O4'	GUA	104	122.829	65.108	7.276	1.00	42.73	A16S	ATOM	20815	N1	GUA	106	133.742	64.063	0.486	1.00	33.04	A16S
ATOM	20763	C1'	GUA	104	123.693	64.273	8.028	1.00	42.73	A16S	ATOM	20816	C6	GUA	106	132.602	64.639	1.034	1.00	33.04	A16S
ATOM	20764	N9	GUA	104	124.339	63.367	7.091	1.00	62.99	A16S	ATOM	20817	O6	GUA	106	131.666	64.970	0.300	1.00	33.04	A16S
ATOM	20765	C4	GUA	104	124.967	62.191	7.394	1.00	62.99	A16S	ATOM	20818	C5	GUA	106	132.707	64.753	2.442	1.00	33.04	A16S
ATOM	20766	N3	GUA	104	125.046	61.633	8.614	1.00	62.99	A16S	ATOM	20819	N7	GUA	106	131.819	65.276	3.367	1.00	33.04	A16S
ATOM	20767	C2	GUA	104	125.751	60.523	8.596	1.00	62.99	A16S	ATOM	20820	C8	GUA	106	132.427	65.133	4.512	1.00	33.04	A16S
ATOM	20768	N2	GUA	104	125.943	59.836	9.730	1.00	62.99	A16S	ATOM	20821	C2'	GUA	106	135.880	64.886	5.387	1.00	40.06	A16S
ATOM	20769	N1	GUA	104	126.325	60.004	7.469	1.00	62.99	A16S	ATOM	20822	O2'	GUA	106	136.862	64.005	5.865	1.00	40.06	A16S
ATOM	20770	C6	GUA	104	126.248	60.562	6.203	1.00	62.99	A16S	ATOM	20823	C3'	GUA	106	135.623	66.024	6.352	1.00	40.06	A16S
ATOM	20771	O6	GUA	104	126.807	60.010	5.248	1.00	62.99	A16S	ATOM	20824	O3'	GUA	106	136.827	66.611	6.813	1.00	40.06	A16S
ATOM	20772	C5	GUA	104	125.499	61.747	6.208	1.00	62.99	A16S	ATOM	20825	P	URI	107	137.175	68.124	6.386	1.00	42.78	A16S
ATOM	20773	N7	GUA	104	125.177	62.607	5.171	1.00	62.99	A16S	ATOM	20826	O1P	URI	107	137.908	68.774	7.511	1.00	38.76	A16S
ATOM	20774	C8	GUA	104	124.478	63.548	5.739	1.00	62.99	A16S	ATOM	20827	O2P	URI	107	135.904	68.740	5.880	1.00	38.76	A16S
ATOM	20775	C2'	GUA	104	124.723	65.191	8.696	1.00	42.73	A16S	ATOM	20828	O5'	URI	107	138.151	67.940	5.145	1.00	42.78	A16S
ATOM	20776	O2'	GUA	104	124.321	65.623	9.986	1.00	42.73	A16S	ATOM	20829	C5'	URI	107	139.083	66.881	5.110	1.00	42.78	A16S
ATOM	20777	C3'	GUA	104	124.735	66.347	7.721	1.00	42.73	A16S	ATOM	20830	C4'	URI	107	139.274	66.436	3.696	1.00	42.78	A16S
ATOM	20778	O3'	GUA	104	125.216	67.508	8.348	1.00	42.73	A16S	ATOM	20831	O4'	URI	107	138.018	65.905	3.227	1.00	42.78	A16S
ATOM	20779	P	GUA	105	126.526	68.218	7.767	1.00	54.03	A16S	ATOM	20832	C1'	URI	107	137.941	66.060	1.822	1.00	42.78	A16S
ATOM	20780	O1P	GUA	105	126.683	69.469	8.568	1.00	42.62	A16S	ATOM	20833	N1	URI	107	136.643	66.661	1.486	1.00	38.76	A16S
ATOM	20781	O2P	GUA	105	126.361	68.288	6.285	1.00	42.62	A16S	ATOM	20834	C6	URI	107	135.859	67.235	2.439	1.00	38.76	A16S
ATOM	20782	O5'	GUA	105	127.715	67.212	8.120	1.00	54.03	A16S	ATOM	20835	C2	URI	107	136.231	66.599	0.175	1.00	38.76	A16S
ATOM	20783	C5'	GUA	105	128.141	67.052	9.469	1.00	54.03	A16S	ATOM	20836	O2	URI	107	136.920	66.142	-0.718	1.00	38.76	A16S
ATOM	20784	C4'	GUA	105	129.155	65.938	9.587	1.00	54.03	A16S	ATOM	20837	N3	URI	107	134.986	67.096	-0.061	1.00	38.76	A16S
ATOM	20785	O4'	GUA	105	128.560	64.681	9.183	1.00	54.03	A16S	ATOM	20838	C4	URI	107	134.143	67.654	0.847	1.00	38.76	A16S
ATOM	20786	C1'	GUA	105	129.559	63.844	8.634	1.00	54.03	A16S	ATOM	20839	O4	URI	107	133.020	68.002	0.486	1.00	38.76	A16S
ATOM	20787	N9	GUA	105	129.289	63.731	7.214	1.00	42.62	A16S	ATOM	20840	C5	URI	107	134.658	67.724	2.173	1.00	38.76	A16S
ATOM	20788	C4	GUA	105	130.070	63.100	6.288	1.00	42.62	A16S	ATOM	20841	C2'	URI	107	139.167	66.860	1.387	1.00	42.78	A16S
ATOM	20789	N3	GUA	105	131.203	62.421	6.545	1.00	42.62	A16S	ATOM	20842	O2'	URI	107	140.180	65.959	0.998	1.00	42.78	A16S
ATOM	20790	C2	GUA	105	131.747	61.947	5.444	1.00	42.62	A16S	ATOM	20843	C3'	URI	107	139.551	67.537	2.688	1.00	42.78	A16S
ATOM	20791	N2	GUA	105	132.883	61.246	5.516	1.00	42.62	A16S	ATOM	20844	O3'	URI	107	140.918	67.901	2.656	1.00	42.78	A16S
ATOM	20792	N1	GUA	105	131.216	62.135	4.191	1.00	42.62	A16S	ATOM	20845	P	GUA	108	141.323	69.381	2.202	1.00	42.23	A16S
ATOM	20793	C6	GUA	105	130.057	62.849	3.915	1.00	42.62	A16S	ATOM	20846	O1P	GUA	108	142.688	69.652	2.708	1.00	33.72	A16S
ATOM	20794	O6	GUA	105	129.689	63.006	2.752	1.00	42.62	A16S	ATOM	20847	O2P	GUA	108	140.211	70.259	2.615	1.00	33.72	A16S

ATOM	20848	O5'	GUA	108	141.292	69.332	0.610	1.00	42.23	A16S	ATOM	20901	C2	GUA	110	137.029	68.434	-9.746	1.00	46.83	A16S
ATOM	20849	C5'	GUA	108	142.070	68.406	-0.136	1.00	42.23	A16S	ATOM	20902	N2	GUA	110	135.863	68.419	-10.421	1.00	46.83	A16S
ATOM	20850	C4'	GUA	108	141.674	68.490	-1.588	1.00	42.23	A16S	ATOM	20903	N1	GUA	110	137.152	69.378	-8.758	1.00	46.83	A16S
ATOM	20851	O4'	GUA	108	140.265	68.234	-1.636	1.00	42.23	A16S	ATOM	20904	C6	GUA	110	138.271	69.560	-7.964	1.00	46.83	A16S
ATOM	20852	C1'	GUA	108	139.634	69.118	-2.527	1.00	42.23	A16S	ATOM	20905	O6	GUA	110	138.263	70.411	-7.077	1.00	46.83	A16S
ATOM	20853	N9	GUA	108	138.358	69.493	-1.931	1.00	33.72	A16S	ATOM	20906	C5	GUA	110	139.303	68.665	-8.312	1.00	46.83	A16S
ATOM	20854	C4	GUA	108	137.191	69.736	-2.601	1.00	33.72	A16S	ATOM	20907	N7	GUA	110	140.583	68.532	-7.796	1.00	46.83	A16S
ATOM	20855	N3	GUA	108	137.045	69.774	-3.936	1.00	33.72	A16S	ATOM	20908	C8	GUA	110	141.094	67.531	-8.459	1.00	46.83	A16S
ATOM	20856	C2	GUA	108	135.794	70.000	-4.284	1.00	33.72	A16S	ATOM	20909	C2'	GUA	110	140.590	66.176	-11.713	1.00	46.31	A16S
ATOM	20857	N2	GUA	108	135.478	70.099	-5.586	1.00	33.72	A16S	ATOM	20910	O2'	GUA	110	140.178	65.069	-12.471	1.00	46.31	A16S
ATOM	20858	N1	GUA	108	134.763	70.155	-3.386	1.00	33.72	A16S	ATOM	20911	C3'	GUA	110	142.080	66.446	-11.845	1.00	46.31	A16S
ATOM	20859	C6	GUA	108	134.900	70.117	-2.008	1.00	33.72	A16S	ATOM	20912	O3'	GUA	110	142.506	66.212	-13.179	1.00	46.31	A16S
ATOM	20860	O6	GUA	108	133.918	70.271	-1.293	1.00	33.72	A16S	ATOM	20913	P	URI	111	142.794	67.454	-14.155	1.00	43.68	A16S
ATOM	20861	C5	GUA	108	136.233	69.894	-1.625	1.00	33.72	A16S	ATOM	20914	O1P	URI	111	143.032	66.896	-15.509	1.00	47.76	A16S
ATOM	20862	N7	GUA	108	136.796	69.798	-0.364	1.00	33.72	A16S	ATOM	20915	O2P	URI	111	143.815	68.328	-13.519	1.00	47.76	A16S
ATOM	20863	C8	GUA	108	138.062	69.577	-0.594	1.00	33.72	A16S	ATOM	20916	O5'	URI	111	141.405	68.223	-14.238	1.00	43.68	A16S
ATOM	20864	C2'	GUA	108	140.627	70.168	-3.038	1.00	42.23	A16S	ATOM	20917	C5'	URI	111	140.301	67.630	-14.912	1.00	43.68	A16S
ATOM	20865	O2'	GUA	108	140.738	70.097	-4.448	1.00	42.23	A16S	ATOM	20918	C4'	URI	111	139.062	68.469	-14.726	1.00	43.68	A16S
ATOM	20866	C3'	GUA	108	141.879	69.867	-2.201	1.00	42.23	A16S	ATOM	20919	O4'	URI	111	138.741	68.553	-13.312	1.00	43.68	A16S
ATOM	20867	O3'	GUA	108	143.226	70.011	-2.718	1.00	42.23	A16S	ATOM	20920	C1'	URI	111	138.170	69.813	-13.026	1.00	43.68	A16S
ATOM	20868	P	ADE	109	143.675	69.436	-4.170	1.00	38.37	A16S	ATOM	20921	N1	URI	111	139.017	70.505	-12.048	1.00	47.76	A16S
ATOM	20869	O1P	ADE	109	145.113	69.740	-4.180	1.00	45.82	A16S	ATOM	20922	C6	URI	111	140.317	70.141	-11.821	1.00	47.76	A16S
ATOM	20870	O2P	ADE	109	142.840	69.920	-5.300	1.00	45.82	A16S	ATOM	20923	C2	URI	111	138.448	71.552	-11.369	1.00	47.76	A16S
ATOM	20871	O5'	ADE	109	143.601	67.849	-4.106	1.00	38.37	A16S	ATOM	20924	O2	URI	111	137.285	71.880	-11.537	1.00	47.76	A16S
ATOM	20872	C5'	ADE	109	144.790	67.063	-4.310	1.00	38.37	A16S	ATOM	20925	N3	URI	111	139.279	72.202	-10.487	1.00	47.76	A16S
ATOM	20873	C4'	ADE	109	144.532	65.908	-5.261	1.00	38.37	A16S	ATOM	20926	C4	URI	111	140.590	71.908	-10.229	1.00	47.76	A16S
ATOM	20874	O4'	ADE	109	143.485	65.045	-4.724	1.00	38.37	A16S	ATOM	20927	O4	URI	111	141.230	72.634	-9.479	1.00	47.76	A16S
ATOM	20875	C1'	ADE	109	142.569	64.707	-5.754	1.00	38.37	A16S	ATOM	20928	C5	URI	111	141.104	70.790	-10.957	1.00	47.76	A16S
ATOM	20876	N9	ADE	109	141.384	65.545	-5.583	1.00	45.82	A16S	ATOM	20929	C2'	URI	111	138.058	70.554	-14.354	1.00	43.68	A16S
ATOM	20877	C4	ADE	109	140.165	65.342	-6.163	1.00	45.82	A16S	ATOM	20930	O2'	URI	111	136.799	70.226	-14.904	1.00	43.68	A16S
ATOM	20878	N3	ADE	109	139.821	64.341	-6.974	1.00	45.82	A16S	ATOM	20931	C3'	URI	111	139.189	69.916	-15.147	1.00	43.68	A16S
ATOM	20879	C2	ADE	109	138.563	64.469	-7.348	1.00	45.82	A16S	ATOM	20932	O3'	URI	111	138.969	70.010	-16.542	1.00	43.68	A16S
ATOM	20880	N1	ADE	109	137.676	65.413	-7.028	1.00	45.82	A16S	ATOM	20933	P	ADE	112	139.784	71.089	-17.399	1.00	56.01	A16S
ATOM	20881	C6	ADE	109	138.056	66.404	-6.208	1.00	45.82	A16S	ATOM	20934	O1P	ADE	112	139.345	70.967	-18.810	1.00	41.20	A16S
ATOM	20882	N6	ADE	109	137.165	67.341	-5.888	1.00	45.82	A16S	ATOM	20935	O2P	ADE	112	141.220	70.950	-17.062	1.00	41.20	A16S
ATOM	20883	C5	ADE	109	139.366	66.386	-5.742	1.00	45.82	A16S	ATOM	20936	O5'	ADE	112	139.263	72.488	-16.852	1.00	56.01	A16S
ATOM	20884	N7	ADE	109	140.068	67.237	-4.903	1.00	45.82	A16S	ATOM	20937	C5'	ADE	112	138.045	73.043	-17.327	1.00	56.01	A16S
ATOM	20885	C8	ADE	109	141.256	66.694	-4.836	1.00	45.82	A16S	ATOM	20938	C4'	ADE	112	138.294	74.422	-17.864	1.00	56.01	A16S
ATOM	20886	C2'	ADE	109	143.276	65.043	-7.064	1.00	38.37	A16S	ATOM	20939	O4'	ADE	112	138.765	75.247	-16.785	1.00	56.01	A16S
ATOM	20887	O2'	ADE	109	144.130	63.982	-7.426	1.00	38.37	A16S	ATOM	20940	C1'	ADE	112	139.666	76.202	-17.286	1.00	56.01	A16S
ATOM	20888	C3'	ADE	109	144.056	66.284	-6.658	1.00	38.37	A16S	ATOM	20941	N9	ADE	112	140.741	76.373	-16.323	1.00	41.20	A16S
ATOM	20889	O3'	ADE	109	145.162	66.496	-7.528	1.00	38.37	A16S	ATOM	20942	C4	ADE	112	140.877	77.462	-15.506	1.00	41.20	A16S
ATOM	20890	P	GUA	110	145.078	67.622	-8.673	1.00	46.31	A16S	ATOM	20943	N3	ADE	112	140.065	78.528	-15.436	1.00	41.20	A16S
ATOM	20891	O1P	GUA	110	144.652	68.908	-7.983	1.00	46.83	A16S	ATOM	20944	C2	ADE	112	140.514	79.400	-14.534	1.00	41.20	A16S
ATOM	20892	O2P	GUA	110	146.367	67.584	-9.418	1.00	46.83	A16S	ATOM	20945	N1	ADE	112	141.603	79.332	-13.760	1.00	41.20	A16S
ATOM	20893	O5'	GUA	110	143.923	67.093	-9.648	1.00	46.31	A16S	ATOM	20946	C6	ADE	112	142.397	78.244	-13.863	1.00	41.20	A16S
ATOM	20894	C5'	GUA	110	144.016	65.816	-10.277	1.00	46.31	A16S	ATOM	20947	N6	ADE	112	143.490	78.179	-13.110	1.00	41.20	A16S
ATOM	20895	C4'	GUA	110	142.688	65.428	-10.893	1.00	46.31	A16S	ATOM	20948	C5	ADE	112	142.023	77.243	-14.773	1.00	41.20	A16S
ATOM	20896	O4'	GUA	110	141.713	65.276	-9.837	1.00	46.31	A16S	ATOM	20949	N7	ADE	112	142.595	76.026	-15.112	1.00	41.20	A16S
ATOM	20897	C1'	GUA	110	140.477	65.840	-10.230	1.00	46.31	A16S	ATOM	20950	C8	ADE	112	141.794	75.551	-16.034	1.00	41.20	A16S
ATOM	20898	N9	GUA	110	140.228	66.995	-9.376	1.00	46.83	A16S	ATOM	20951	C2'	ADE	112	140.095	75.805	-18.699	1.00	56.01	A16S
ATOM	20899	C4	GUA	110	139.079	67.742	-9.306	1.00	46.83	A16S	ATOM	20952	O2'	ADE	112	139.787	76.806	-19.639	1.00	56.01	A16S
ATOM	20900	N3	GUA	110	137.977	67.569	-10.056	1.00	46.83	A16S	ATOM	20953	C3'	ADE	112	139.403	74.458	-18.892	1.00	56.01	A16S

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ATOM  20954  O3' ADE  112      138.929  74.154 -20.213  1.00 56.01      A16S
ATOM  20955  P   ADE  113      137.629  74.900 -20.832  1.00 58.47      A16S
ATOM  20956  O1P ADE  113      137.552  74.425 -22.238  1.00 45.85      A16S
ATOM  20957  O2P ADE  113      137.580  76.355 -20.560  1.00 45.85      A16S
ATOM  20958  O5' ADE  113      136.404  74.239 -20.071  1.00 58.47      A16S
ATOM  20959  C5' ADE  113      135.921  72.959 -20.444  1.00 58.47      A16S
ATOM  20960  C4' ADE  113      134.757  72.586 -19.566  1.00 58.47      A16S
ATOM  20961  O4' ADE  113      135.202  72.634 -18.183  1.00 58.47      A16S
ATOM  20962  C1' ADE  113      134.213  73.238 -17.380  1.00 58.47      A16S
ATOM  20963  N9  ADE  113      134.777  74.475 -16.840  1.00 45.85      A16S
ATOM  20964  C4  ADE  113      135.379  74.592 -15.611  1.00 45.85      A16S
ATOM  20965  N3  ADE  113      135.528  73.630 -14.686  1.00 45.85      A16S
ATOM  20966  C2  ADE  113      136.169  74.108 -13.610  1.00 45.85      A16S
ATOM  20967  N1  ADE  113      136.647  75.342 -13.380  1.00 45.85      A16S
ATOM  20968  C6  ADE  113      136.490  76.278 -14.339  1.00 45.85      A16S
ATOM  20969  N6  ADE  113      136.990  77.495 -14.119  1.00 45.85      A16S
ATOM  20970  C5  ADE  113      135.813  75.903 -15.521  1.00 45.85      A16S
ATOM  20971  N7  ADE  113      135.472  76.606 -16.665  1.00 45.85      A16S
ATOM  20972  C8  ADE  113      134.855  75.717 -17.412  1.00 45.85      A16S
ATOM  20973  C2' ADE  113      132.960  73.367 -18.249  1.00 58.47      A16S
ATOM  20974  O2' ADE  113      132.254  72.145 -18.171  1.00 58.47      A16S
ATOM  20975  C3' ADE  113      133.560  73.522 -19.638  1.00 58.47      A16S
ATOM  20976  O3' ADE  113      132.658  73.038 -20.637  1.00 58.47      A16S
ATOM  20977  P   CYT  114      131.527  74.009 -21.250  1.00 65.55      A16S
ATOM  20978  O1P CYT  114      130.675  73.196 -22.153  1.00 41.06      A16S
ATOM  20979  O2P CYT  114      132.223  75.191 -21.800  1.00 41.06      A16S
ATOM  20980  O5' CYT  114      130.637  74.433 -19.989  1.00 65.55      A16S
ATOM  20981  C5' CYT  114      129.641  73.552 -19.448  1.00 65.55      A16S
ATOM  20982  C4' CYT  114      128.832  74.259 -18.379  1.00 65.55      A16S
ATOM  20983  O4' CYT  114      128.444  75.533 -18.901  1.00 65.55      A16S
ATOM  20984  C1' CYT  114      127.336  75.989 -18.178  1.00 65.55      A16S
ATOM  20985  N1  CYT  114      126.579  76.949 -18.992  1.00 41.06      A16S
ATOM  20986  C6  CYT  114      126.425  76.764 -20.335  1.00 41.06      A16S
ATOM  20987  C2  CYT  114      126.033  78.082 -18.367  1.00 41.06      A16S
ATOM  20988  O2  CYT  114      126.150  78.216 -17.143  1.00 41.06      A16S
ATOM  20989  N3  CYT  114      125.387  78.998 -19.116  1.00 41.06      A16S
ATOM  20990  C4  CYT  114      125.260  78.815 -20.431  1.00 41.06      A16S
ATOM  20991  N4  CYT  114      124.619  79.750 -21.130  1.00 41.06      A16S
ATOM  20992  C5  CYT  114      125.782  77.665 -21.085  1.00 41.06      A16S
ATOM  20993  C2' CYT  114      126.598  74.774 -17.613  1.00 65.55      A16S
ATOM  20994  O2' CYT  114      126.464  74.932 -16.213  1.00 65.55      A16S
ATOM  20995  C3' CYT  114      127.517  73.597 -17.968  1.00 65.55      A16S
ATOM  20996  O3' CYT  114      127.569  72.877 -16.721  1.00 65.55      A16S
ATOM  20997  P   GUA  115      128.820  71.929 -16.329  1.00 41.19      A16S
ATOM  20998  O1P GUA  115      128.340  70.523 -16.445  1.00 45.43      A16S
ATOM  20999  O2P GUA  115      130.062  72.318 -17.014  1.00 45.43      A16S
ATOM  21000  O5' GUA  115      129.064  72.283 -14.795  1.00 41.19      A16S
ATOM  21001  C5' GUA  115      129.547  71.305 -13.892  1.00 41.19      A16S
ATOM  21002  C4' GUA  115      130.456  71.936 -12.874  1.00 41.19      A16S
ATOM  21003  O4' GUA  115      131.685  72.352 -13.523  1.00 41.19      A16S
ATOM  21004  C1' GUA  115      132.165  73.543 -12.923  1.00 41.19      A16S
ATOM  21005  N9  GUA  115      132.171  74.578 -13.947  1.00 45.43      A16S
ATOM  21006  C4  GUA  115      132.746  75.814 -13.850  1.00 45.43      A16S
ATOM  21007  N3  GUA  115      133.448  76.277 -12.802  1.00 45.43      A16S
ATOM  21008  C2  GUA  115      133.842  77.518 -12.989  1.00 45.43      A16S
ATOM  21009  N2  GUA  115      134.554  78.147 -12.045  1.00 45.43      A16S
ATOM  21010  N1  GUA  115      133.569  78.238 -14.112  1.00 45.43      A16S
ATOM  21011  C6  GUA  115      132.853  77.780 -15.201  1.00 45.43      A16S
ATOM  21012  O6  GUA  115      132.663  78.521 -16.162  1.00 45.43      A16S
ATOM  21013  C5  GUA  115      132.426  76.458 -15.021  1.00 45.43      A16S
ATOM  21014  N7  GUA  115      131.691  75.629 -15.856  1.00 45.43      A16S
ATOM  21015  C8  GUA  115      131.571  74.522 -15.181  1.00 45.43      A16S
ATOM  21016  C2' GUA  115      131.209  73.883 -11.774  1.00 41.19      A16S
ATOM  21017  O2' GUA  115      131.671  73.359 -10.548  1.00 41.19      A16S
ATOM  21018  C3' GUA  115      129.930  73.203 -12.235  1.00 41.19      A16S
ATOM  21019  O3' GUA  115      129.067  72.916 -11.148  1.00 41.19      A16S
ATOM  21020  P   CYT  116      127.865  73.929 -10.804  1.00 39.16      A16S
ATOM  21021  O1P CYT  116      127.134  73.364  -9.642  1.00 33.85      A16S
ATOM  21022  O2P CYT  116      127.128  74.209 -12.067  1.00 33.85      A16S
ATOM  21023  O5' CYT  116      128.617  75.260 -10.358  1.00 39.16      A16S
ATOM  21024  C5' CYT  116      129.516  75.251  -9.256  1.00 39.16      A16S
ATOM  21025  C4' CYT  116      130.267  76.557  -9.181  1.00 39.16      A16S
ATOM  21026  O4' CYT  116      131.111  76.694 -10.352  1.00 39.16      A16S
ATOM  21027  C1' CYT  116      131.182  78.057 -10.739  1.00 39.16      A16S
ATOM  21028  N1  CYT  116      130.599  78.181 -12.082  1.00 33.85      A16S
ATOM  21029  C6  CYT  116      129.815  77.191 -12.594  1.00 33.85      A16S
ATOM  21030  C2  CYT  116      130.844  79.338 -12.821  1.00 33.85      A16S
ATOM  21031  O2  CYT  116      131.584  80.206 -12.350  1.00 33.85      A16S
ATOM  21032  N3  CYT  116      130.268  79.484 -14.030  1.00 33.85      A16S
ATOM  21033  C4  CYT  116      129.473  78.528 -14.506  1.00 33.85      A16S
ATOM  21034  N4  CYT  116      128.888  78.734 -15.683  1.00 33.85      A16S
ATOM  21035  C5  CYT  116      129.235  77.322 -13.791  1.00 33.85      A16S
ATOM  21036  C2' CYT  116      130.400  78.849  -9.694  1.00 39.16      A16S
ATOM  21037  O2' CYT  116      131.261  79.275  -8.660  1.00 39.16      A16S
ATOM  21038  C3' CYT  116      129.410  77.803  -9.218  1.00 39.16      A16S
ATOM  21039  O3' CYT  116      128.903  78.117  -7.940  1.00 39.16      A16S
ATOM  21040  P   GUA  117      127.439  78.759  -7.819  1.00 41.89      A16S
ATOM  21041  O1P GUA  117      127.108  78.799  -6.369  1.00 36.17      A16S
ATOM  21042  O2P GUA  117      126.540  78.045  -8.771  1.00 36.17      A16S
ATOM  21043  O5' GUA  117      127.616  80.255  -8.331  1.00 41.89      A16S
ATOM  21044  C5' GUA  117      128.360  81.208  -7.574  1.00 41.89      A16S
ATOM  21045  C4' GUA  117      128.493  82.503  -8.348  1.00 41.89      A16S
ATOM  21046  O4' GUA  117      129.207  82.246  -9.584  1.00 41.89      A16S
ATOM  21047  C1' GUA  117      128.773  83.148 -10.577  1.00 41.89      A16S
ATOM  21048  N9  GUA  117      128.287  82.385 -11.718  1.00 36.17      A16S
ATOM  21049  C4  GUA  117      128.062  82.883 -12.974  1.00 36.17      A16S
ATOM  21050  N3  GUA  117      128.238  84.159 -13.354  1.00 36.17      A16S
ATOM  21051  C2  GUA  117      127.928  84.343 -14.617  1.00 36.17      A16S
ATOM  21052  N2  GUA  117      128.030  85.564 -15.155  1.00 36.17      A16S
ATOM  21053  N1  GUA  117      127.492  83.349 -15.448  1.00 36.17      A16S
ATOM  21054  C6  GUA  117      127.303  82.025 -15.082  1.00 36.17      A16S
ATOM  21055  O6  GUA  117      126.887  81.209 -15.915  1.00 36.17      A16S
ATOM  21056  C5  GUA  117      127.624  81.815 -13.722  1.00 36.17      A16S
ATOM  21057  N7  GUA  117      127.564  80.664 -12.948  1.00 36.17      A16S
ATOM  21058  C8  GUA  117      127.970  81.052 -11.766  1.00 36.17      A16S
ATOM  21059  C2' GUA  117      127.694  84.030  -9.953  1.00 41.89      A16S
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ATOM	21060	O2'	GUA	117	128.284	85.236	-9.509	1.00	41.89	A16S	ATOM	21113	C1'	GUA	120	116.929	83.789	-17.749	1.00	45.56	A16S
ATOM	21061	C3'	GUA	117	127.196	83.140	-8.822	1.00	41.89	A16S	ATOM	21114	N9	GUA	120	117.443	82.660	-16.995	1.00	40.93	A16S
ATOM	21062	O3'	GUA	117	126.592	83.907	-7.788	1.00	41.89	A16S	ATOM	21115	C4	GUA	120	117.737	81.422	-17.505	1.00	40.93	A16S
ATOM	21063	P	URI	118	124.995	83.863	-7.577	1.00	41.07	A16S	ATOM	21116	N3	GUA	120	117.623	81.052	-18.796	1.00	40.93	A16S
ATOM	21064	O1P	URI	118	124.773	84.391	-6.194	1.00	35.98	A16S	ATOM	21117	C2	GUA	120	117.968	79.785	-18.981	1.00	40.93	A16S
ATOM	21065	O2P	URI	118	124.402	82.568	-7.986	1.00	35.98	A16S	ATOM	21118	N2	GUA	120	117.900	79.244	-20.209	1.00	40.93	A16S
ATOM	21066	O5'	URI	118	124.433	84.915	-8.623	1.00	41.07	A16S	ATOM	21119	N1	GUA	120	118.400	78.957	-17.982	1.00	40.93	A16S
ATOM	21067	C5'	URI	118	125.023	86.204	-8.757	1.00	41.07	A16S	ATOM	21120	C6	GUA	120	118.526	79.318	-16.645	1.00	40.93	A16S
ATOM	21068	C4'	URI	118	124.750	86.739	-10.134	1.00	41.07	A16S	ATOM	21121	O6	GUA	120	118.926	78.489	-15.821	1.00	40.93	A16S
ATOM	21069	O4'	URI	118	125.534	86.011	-11.110	1.00	41.07	A16S	ATOM	21122	C5	GUA	120	118.151	80.673	-16.428	1.00	40.93	A16S
ATOM	21070	C1'	URI	118	124.850	86.009	-12.345	1.00	41.07	A16S	ATOM	21123	N7	GUA	120	118.124	81.431	-15.259	1.00	40.93	A16S
ATOM	21071	N1	URI	118	124.749	84.630	-12.840	1.00	35.98	A16S	ATOM	21124	C8	GUA	120	117.705	82.604	-15.647	1.00	40.93	A16S
ATOM	21072	C6	URI	118	124.813	83.536	-12.006	1.00	35.98	A16S	ATOM	21125	C2'	GUA	120	115.546	83.445	-18.295	1.00	45.56	A16S
ATOM	21073	C2	URI	118	124.564	84.471	-14.207	1.00	35.98	A16S	ATOM	21126	O2'	GUA	120	115.340	84.045	-19.558	1.00	45.56	A16S
ATOM	21074	O2	URI	118	124.518	85.409	-14.981	1.00	35.98	A16S	ATOM	21127	C3'	GUA	120	114.654	83.967	-17.174	1.00	45.56	A16S
ATOM	21075	N3	URI	118	124.436	83.177	-14.635	1.00	35.98	A16S	ATOM	21128	O3'	GUA	120	113.329	84.236	-17.614	1.00	45.56	A16S
ATOM	21076	C4	URI	118	124.484	82.044	-13.865	1.00	35.98	A16S	ATOM	21129	P	GUA	121	112.191	83.115	-17.426	1.00	55.00	A16S
ATOM	21077	O4	URI	118	124.509	80.946	-14.435	1.00	35.98	A16S	ATOM	21130	O1P	GUA	121	110.896	83.650	-17.893	1.00	36.23	A16S
ATOM	21078	C5	URI	118	124.684	82.281	-12.458	1.00	35.98	A16S	ATOM	21131	O2P	GUA	121	112.315	82.624	-16.030	1.00	36.23	A16S
ATOM	21079	C2'	URI	118	123.490	86.672	-12.114	1.00	41.07	A16S	ATOM	21132	O5'	GUA	121	112.602	81.988	-18.475	1.00	55.00	A16S
ATOM	21080	O2'	URI	118	123.549	88.032	-12.510	1.00	41.07	A16S	ATOM	21133	C5'	GUA	121	112.592	82.280	-19.862	1.00	55.00	A16S
ATOM	21081	C3'	URI	118	123.334	86.513	-10.611	1.00	41.07	A16S	ATOM	21134	C4'	GUA	121	112.945	81.057	-20.660	1.00	55.00	A16S
ATOM	21082	O3'	URI	118	122.449	87.458	-10.039	1.00	41.07	A16S	ATOM	21135	O4'	GUA	121	114.293	80.653	-20.331	1.00	55.00	A16S
ATOM	21083	P	GUA	119	120.938	87.023	-9.702	1.00	37.23	A16S	ATOM	21136	C1'	GUA	121	114.410	79.247	-20.453	1.00	55.00	A16S
ATOM	21084	O1P	GUA	119	120.338	88.114	-8.884	1.00	52.42	A16S	ATOM	21137	N9	GUA	121	114.825	78.727	-19.159	1.00	36.23	A16S
ATOM	21085	O2P	GUA	119	120.951	85.644	-9.174	1.00	52.42	A16S	ATOM	21138	C4	GUA	121	115.237	77.452	-18.891	1.00	36.23	A16S
ATOM	21086	O5'	GUA	119	120.216	87.019	-11.124	1.00	37.23	A16S	ATOM	21139	N3	GUA	121	115.340	76.454	-19.783	1.00	36.23	A16S
ATOM	21087	C5'	GUA	119	120.089	88.232	-11.846	1.00	37.23	A16S	ATOM	21140	C2	GUA	121	115.771	75.341	-19.228	1.00	36.23	A16S
ATOM	21088	C4'	GUA	119	119.852	87.966	-13.308	1.00	37.23	A16S	ATOM	21141	N2	GUA	121	115.946	74.250	-19.978	1.00	36.23	A16S
ATOM	21089	O4'	GUA	119	120.908	87.144	-13.868	1.00	37.23	A16S	ATOM	21142	N1	GUA	121	116.066	75.217	-17.902	1.00	36.23	A16S
ATOM	21090	C1'	GUA	119	120.415	86.469	-15.015	1.00	37.23	A16S	ATOM	21143	C6	GUA	121	115.966	76.232	-16.965	1.00	36.23	A16S
ATOM	21091	N9	GUA	119	120.761	85.059	-14.905	1.00	52.42	A16S	ATOM	21144	O6	GUA	121	116.260	76.011	-15.794	1.00	36.23	A16S
ATOM	21092	C4	GUA	119	120.788	84.125	-15.921	1.00	52.42	A16S	ATOM	21145	C5	GUA	121	115.514	77.430	-17.544	1.00	36.23	A16S
ATOM	21093	N3	GUA	119	120.485	84.344	-17.219	1.00	52.42	A16S	ATOM	21146	N7	GUA	121	115.284	78.672	-16.974	1.00	36.23	A16S
ATOM	21094	C2	GUA	119	120.644	83.247	-17.956	1.00	52.42	A16S	ATOM	21147	C8	GUA	121	114.876	79.410	-17.971	1.00	36.23	A16S
ATOM	21095	N2	GUA	119	120.435	83.277	-19.272	1.00	52.42	A16S	ATOM	21148	C2'	GUA	121	113.045	78.716	-20.894	1.00	55.00	A16S
ATOM	21096	N1	GUA	119	121.035	82.040	-17.460	1.00	52.42	A16S	ATOM	21149	O2'	GUA	121	112.995	78.590	-22.302	1.00	55.00	A16S
ATOM	21097	C6	GUA	119	121.345	81.785	-16.135	1.00	52.42	A16S	ATOM	21150	C3'	GUA	121	112.125	79.813	-20.383	1.00	55.00	A16S
ATOM	21098	O6	GUA	119	121.690	80.642	-15.797	1.00	52.42	A16S	ATOM	21151	O3'	GUA	121	110.899	79.831	-21.098	1.00	55.00	A16S
ATOM	21099	C5	GUA	119	121.207	82.954	-15.329	1.00	52.42	A16S	ATOM	21152	P	URI	122	109.615	79.103	-20.474	1.00	46.94	A16S
ATOM	21100	N7	GUA	119	121.435	83.145	-13.972	1.00	52.42	A16S	ATOM	21153	O1P	URI	122	108.498	79.297	-21.416	1.00	47.46	A16S
ATOM	21101	C8	GUA	119	121.150	84.403	-13.767	1.00	52.42	A16S	ATOM	21154	O2P	URI	122	109.463	79.525	-19.071	1.00	47.46	A16S
ATOM	21102	C2'	GUA	119	118.918	86.767	-15.089	1.00	37.23	A16S	ATOM	21155	O5'	URI	122	110.024	77.568	-20.462	1.00	46.94	A16S
ATOM	21103	O2'	GUA	119	118.745	87.860	-15.962	1.00	37.23	A16S	ATOM	21156	C5'	URI	122	110.105	76.813	-21.663	1.00	46.94	A16S
ATOM	21104	C3'	GUA	119	118.618	87.181	-13.656	1.00	37.23	A16S	ATOM	21157	C4'	URI	122	110.386	75.368	-21.333	1.00	46.94	A16S
ATOM	21105	O3'	GUA	119	117.505	88.039	-13.598	1.00	37.23	A16S	ATOM	21158	O4'	URI	122	111.678	75.257	-20.689	1.00	46.94	A16S
ATOM	21106	P	GUA	120	116.029	87.418	-13.587	1.00	45.56	A16S	ATOM	21159	C1'	URI	122	111.669	74.164	-19.795	1.00	46.94	A16S
ATOM	21107	O1P	GUA	120	115.132	88.578	-13.372	1.00	40.93	A16S	ATOM	21160	N1	URI	122	112.131	74.640	-18.489	1.00	47.46	A16S
ATOM	21108	O2P	GUA	120	115.979	86.268	-12.655	1.00	40.93	A16S	ATOM	21161	C6	URI	122	111.961	75.938	-18.113	1.00	47.46	A16S
ATOM	21109	O5'	GUA	120	115.844	86.885	-15.078	1.00	45.56	A16S	ATOM	21162	C2	URI	122	112.741	73.731	-17.657	1.00	47.46	A16S
ATOM	21110	C5'	GUA	120	115.084	85.720	-15.356	1.00	45.56	A16S	ATOM	21163	O2	URI	122	112.923	72.573	-17.977	1.00	47.46	A16S
ATOM	21111	C4'	GUA	120	115.374	85.237	-16.755	1.00	45.56	A16S	ATOM	21164	N3	URI	122	113.134	74.228	-16.443	1.00	47.46	A16S
ATOM	21112	O4'	GUA	120	116.777	84.880	-16.853	1.00	45.56	A16S	ATOM	21165	C4	URI	122	112.988	75.525	-15.998	1.00	47.46	A16S

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ATOM  21166  O4  URI  122     113.403  75.840 -14.882  1.00 47.46      A16S
ATOM  21167  C5  URI  122     112.359  76.403 -16.928  1.00 47.46      A16S
ATOM  21168  C2' URI  122     110.253  73.585 -19.784  1.00 46.94      A16S
ATOM  21169  O2' URI  122     110.176  72.472 -20.654  1.00 46.94      A16S
ATOM  21170  C3' URI  122     109.433  74.741 -20.332  1.00 46.94      A16S
ATOM  21171  O3' URI  122     108.349  74.206 -21.061  1.00 46.94      A16S
ATOM  21172  P   GUA  123     106.849  74.364 -20.529  1.00 53.58      A16S
ATOM  21173  O1P GUA  123     106.438  75.766 -20.748  1.00 47.40      A16S
ATOM  21174  O2P GUA  123     106.740  73.780 -19.173  1.00 47.40      A16S
ATOM  21175  O5' GUA  123     106.073  73.461 -21.587  1.00 53.58      A16S
ATOM  21176  C5' GUA  123     106.749  72.402 -22.267  1.00 53.58      A16S
ATOM  21177  C4' GUA  123     106.654  72.580 -23.766  1.00 53.58      A16S
ATOM  21178  O4' GUA  123     105.256  72.709 -24.104  1.00 53.58      A16S
ATOM  21179  C1' GUA  123     105.103  73.580 -25.205  1.00 53.58      A16S
ATOM  21180  N9  GUA  123     103.985  74.483 -24.948  1.00 47.40      A16S
ATOM  21181  C4  GUA  123     102.915  74.667 -25.778  1.00 47.40      A16S
ATOM  21182  N3  GUA  123     102.728  74.055 -26.959  1.00 47.40      A16S
ATOM  21183  C2  GUA  123     101.592  74.405 -27.523  1.00 47.40      A16S
ATOM  21184  N2  GUA  123     101.245  73.872 -28.708  1.00 47.40      A16S
ATOM  21185  N1  GUA  123     100.713  75.302 -26.977  1.00 47.40      A16S
ATOM  21186  C6  GUA  123     100.891  75.959 -25.764  1.00 47.40      A16S
ATOM  21187  O6  GUA  123     100.039  76.775 -25.370  1.00 47.40      A16S
ATOM  21188  C5  GUA  123     102.100  75.573 -25.138  1.00 47.40      A16S
ATOM  21189  N7  GUA  123     102.648  75.957 -23.923  1.00 47.40      A16S
ATOM  21190  C8  GUA  123     103.769  75.289 -23.853  1.00 47.40      A16S
ATOM  21191  C2' GUA  123     106.458  74.203 -25.549  1.00 53.58      A16S
ATOM  21192  O2' GUA  123     106.898  73.683 -26.782  1.00 53.58      A16S
ATOM  21193  C3' GUA  123     107.307  73.831 -24.332  1.00 53.58      A16S
ATOM  21194  O3' GUA  123     108.740  73.707 -24.497  1.00 53.58      A16S
ATOM  21195  P   ADE  124     109.400  72.757 -25.640  1.00 56.61      A16S
ATOM  21196  O1P ADE  124     110.725  73.348 -25.848  1.00 61.98      A16S
ATOM  21197  O2P ADE  124     108.568  72.434 -26.817  1.00 61.98      A16S
ATOM  21198  O5' ADE  124     109.699  71.403 -24.868  1.00 56.61      A16S
ATOM  21199  C5' ADE  124     109.315  70.142 -25.400  1.00 56.61      A16S
ATOM  21200  C4' ADE  124     109.741  69.060 -24.453  1.00 56.61      A16S
ATOM  21201  O4' ADE  124     111.176  69.010 -24.466  1.00 56.61      A16S
ATOM  21202  C1' ADE  124     111.667  68.894 -23.150  1.00 56.61      A16S
ATOM  21203  N9  ADE  124     112.671  69.936 -22.959  1.00 61.98      A16S
ATOM  21204  C4  ADE  124     113.919  69.767 -22.417  1.00 61.98      A16S
ATOM  21205  N3  ADE  124     114.432  68.646 -21.891  1.00 61.98      A16S
ATOM  21206  C2  ADE  124     115.694  68.844 -21.505  1.00 61.98      A16S
ATOM  21207  N1  ADE  124     116.444  69.951 -21.586  1.00 61.98      A16S
ATOM  21208  C6  ADE  124     115.897  71.059 -22.125  1.00 61.98      A16S
ATOM  21209  N6  ADE  124     116.648  72.161 -22.228  1.00 61.98      A16S
ATOM  21210  C5  ADE  124     114.559  70.982 -22.560  1.00 61.98      A16S
ATOM  21211  N7  ADE  124     113.711  71.916 -23.138  1.00 61.98      A16S
ATOM  21212  C8  ADE  124     112.602  71.249 -23.342  1.00 61.98      A16S
ATOM  21213  C2' ADE  124     110.487  68.788 -22.182  1.00 56.61      A16S
ATOM  21214  O2' ADE  124     110.360  67.426 -21.847  1.00 56.61      A16S
ATOM  21215  C3' ADE  124     109.337  69.344 -23.017  1.00 56.61      A16S
ATOM  21216  O3' ADE  124     107.990  68.853 -22.835  1.00 56.61      A16S
ATOM  21217  P   CYT  125     107.664  67.558 -21.910  1.00 55.16      A16S
ATOM  21218  O1P CYT  125     108.089  66.329 -22.657  1.00 38.01      A16S
ATOM  21219  O2P CYT  125     106.234  67.710 -21.509  1.00 38.01      A16S
ATOM  21220  O5' CYT  125     108.558  67.754 -20.598  1.00 55.16      A16S
ATOM  21221  C5' CYT  125     108.106  67.324 -19.322  1.00 55.16      A16S
ATOM  21222  C4' CYT  125     109.191  66.545 -18.627  1.00 55.16      A16S
ATOM  21223  O4' CYT  125     110.413  67.318 -18.624  1.00 55.16      A16S
ATOM  21224  C1' CYT  125     111.078  67.158 -17.382  1.00 55.16      A16S
ATOM  21225  N1  CYT  125     111.074  68.456 -16.689  1.00 38.01      A16S
ATOM  21226  C6  CYT  125     110.320  69.494 -17.153  1.00 38.01      A16S
ATOM  21227  C2  CYT  125     111.854  68.612 -15.526  1.00 38.01      A16S
ATOM  21228  O2  CYT  125     112.569  67.673 -15.148  1.00 38.01      A16S
ATOM  21229  N3  CYT  125     111.815  69.786 -14.853  1.00 38.01      A16S
ATOM  21230  C4  CYT  125     111.055  70.784 -15.306  1.00 38.01      A16S
ATOM  21231  N4  CYT  125     111.028  71.916 -14.595  1.00 38.01      A16S
ATOM  21232  C5  CYT  125     110.283  70.664 -16.505  1.00 38.01      A16S
ATOM  21233  C2' CYT  125     110.324  66.078 -16.609  1.00 55.16      A16S
ATOM  21234  O2' CYT  125     110.844  64.801 -16.917  1.00 55.16      A16S
ATOM  21235  C3' CYT  125     108.923  66.254 -17.162  1.00 55.16      A16S
ATOM  21236  O3' CYT  125     108.192  65.052 -17.024  1.00 55.16      A16S
ATOM  21237  P   CYT  126     107.175  64.890 -15.806  1.00 53.78      A16S
ATOM  21238  O1P CYT  126     106.224  63.829 -16.196  1.00 50.85      A16S
ATOM  21239  O2P CYT  126     106.678  66.235 -15.450  1.00 50.85      A16S
ATOM  21240  O5' CYT  126     108.065  64.351 -14.605  1.00 53.78      A16S
ATOM  21241  C5' CYT  126     108.764  63.126 -14.716  1.00 53.78      A16S
ATOM  21242  C4' CYT  126     109.743  63.002 -13.588  1.00 53.78      A16S
ATOM  21243  O4' CYT  126     110.687  64.098 -13.686  1.00 53.78      A16S
ATOM  21244  C1' CYT  126     111.137  64.448 -12.386  1.00 53.78      A16S
ATOM  21245  N1  CYT  126     110.869  65.864 -12.160  1.00 50.85      A16S
ATOM  21246  C6  CYT  126     110.074  66.579 -13.004  1.00 50.85      A16S
ATOM  21247  C2  CYT  126     111.425  66.459 -11.046  1.00 50.85      A16S
ATOM  21248  O2  CYT  126     112.165  65.788 -10.330  1.00 50.85      A16S
ATOM  21249  N3  CYT  126     111.150  67.744 -10.773  1.00 50.85      A16S
ATOM  21250  C4  CYT  126     110.359  68.435 -11.584  1.00 50.85      A16S
ATOM  21251  N4  CYT  126     110.103  69.697 -11.268  1.00 50.85      A16S
ATOM  21252  C5  CYT  126     109.793  67.859 -12.755  1.00 50.85      A16S
ATOM  21253  C2' CYT  126     110.364  63.592 -11.382  1.00 53.78      A16S
ATOM  21254  O2' CYT  126     111.157  62.505 -10.965  1.00 53.78      A16S
ATOM  21255  C3' CYT  126     109.148  63.183 -12.202  1.00 53.78      A16S
ATOM  21256  O3' CYT  126     108.573  61.978 -11.712  1.00 53.78      A16S
ATOM  21257  P   URI  127     107.372  62.042 -10.646  1.00 49.11      A16S
ATOM  21258  O1P URI  127     106.970  60.647 -10.382  1.00 48.15      A16S
ATOM  21259  O2P URI  127     106.363  63.007 -11.130  1.00 48.15      A16S
ATOM  21260  O5' URI  127     108.050  62.614  -9.327  1.00 49.11      A16S
ATOM  21261  C5' URI  127     109.047  61.867  -8.653  1.00 49.11      A16S
ATOM  21262  C4' URI  127     109.586  62.662  -7.503  1.00 49.11      A16S
ATOM  21263  O4' URI  127     110.176  63.882  -8.019  1.00 49.11      A16S
ATOM  21264  C1' URI  127     109.962  64.946  -7.104  1.00 49.11      A16S
ATOM  21265  N1  URI  127     109.243  66.019  -7.805  1.00 48.15      A16S
ATOM  21266  C6  URI  127     108.588  65.785  -8.994  1.00 48.15      A16S
ATOM  21267  C2  URI  127     109.252  67.272  -7.240  1.00 48.15      A16S
ATOM  21268  O2  URI  127     109.807  67.514  -6.199  1.00 48.15      A16S
ATOM  21269  N3  URI  127     108.582  68.233  -7.948  1.00 48.15      A16S
ATOM  21270  C4  URI  127     107.915  68.073  -9.142  1.00 48.15      A16S
ATOM  21271  O4  URI  127     107.343  69.036  -9.647  1.00 48.15      A16S
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ATOM	21272	C5	URI	127	107.945	66.747	-9.667	1.00	48.15	A16S	ATOM	21325	O4'	CYT	130	104.779	65.574	4.399	1.00	58.52	A16S
ATOM	21273	C2'	URI	127	109.210	64.362	-5.905	1.00	49.11	A16S	ATOM	21326	C1'	CYT	130	104.274	66.679	3.671	1.00	58.52	A16S
ATOM	21274	O2'	URI	127	110.131	63.971	-4.909	1.00	49.11	A16S	ATOM	21327	N1	CYT	130	104.172	66.293	2.268	1.00	49.26	A16S
ATOM	21275	C3'	URI	127	108.534	63.152	-6.531	1.00	49.11	A16S	ATOM	21328	C6	CYT	130	104.287	64.991	1.890	1.00	49.26	A16S
ATOM	21276	O3'	URI	127	108.295	62.164	-5.548	1.00	49.11	A16S	ATOM	21329	C2	CYT	130	103.957	67.291	1.316	1.00	49.26	A16S
ATOM	21277	P	ADE	128	106.802	61.934	-5.008	1.00	59.89	A16S	ATOM	21330	O2	CYT	130	103.852	68.472	1.697	1.00	49.26	A16S
ATOM	21278	O1P	ADE	128	106.049	61.239	-6.097	1.00	45.54	A16S	ATOM	21331	N3	CYT	130	103.866	66.954	0.014	1.00	49.26	A16S
ATOM	21279	O2P	ADE	128	106.288	63.208	-4.435	1.00	45.54	A16S	ATOM	21332	C4	CYT	130	103.981	65.682	-0.347	1.00	49.26	A16S
ATOM	21280	O5'	ADE	128	106.991	60.929	-3.792	1.00	59.89	A16S	ATOM	21333	N4	CYT	130	103.884	65.397	-1.636	1.00	49.26	A16S
ATOM	21281	C5'	ADE	128	107.127	59.526	-3.991	1.00	59.89	A16S	ATOM	21334	C5	CYT	130	104.199	64.643	0.605	1.00	49.26	A16S
ATOM	21282	C4'	ADE	128	107.794	58.919	-2.787	1.00	59.89	A16S	ATOM	21335	C2'	CYT	130	102.912	67.052	4.251	1.00	58.52	A16S
ATOM	21283	O4'	ADE	128	109.180	59.333	-2.758	1.00	59.89	A16S	ATOM	21336	O2'	CYT	130	103.053	68.109	5.168	1.00	58.52	A16S
ATOM	21284	C1'	ADE	128	109.565	59.620	-1.429	1.00	59.89	A16S	ATOM	21337	C3'	CYT	130	102.484	65.738	4.889	1.00	58.52	A16S
ATOM	21285	N9	ADE	128	109.987	61.019	-1.377	1.00	45.54	A16S	ATOM	21338	O3'	CYT	130	101.575	65.923	5.961	1.00	58.52	A16S
ATOM	21286	C4	ADE	128	110.520	61.680	-0.299	1.00	45.54	A16S	ATOM	21339	P	CYT	131	100.015	65.646	5.720	1.00	59.48	A16S
ATOM	21287	N3	ADE	128	110.751	61.184	0.926	1.00	45.54	A16S	ATOM	21340	O1P	CYT	131	99.350	65.550	7.036	1.00	45.35	A16S
ATOM	21288	C2	ADE	128	111.270	62.118	1.719	1.00	45.54	A16S	ATOM	21341	O2P	CYT	131	99.913	64.519	4.757	1.00	45.35	A16S
ATOM	21289	N1	ADE	128	111.555	63.395	1.444	1.00	45.54	A16S	ATOM	21342	O5'	CYT	131	99.498	66.973	5.018	1.00	59.48	A16S
ATOM	21290	C6	ADE	128	111.299	63.861	0.203	1.00	45.54	A16S	ATOM	21343	C5'	CYT	131	99.541	68.209	5.698	1.00	59.48	A16S
ATOM	21291	N6	ADE	128	111.562	65.142	-0.065	1.00	45.54	A16S	ATOM	21344	C4'	CYT	131	99.166	69.315	4.756	1.00	59.48	A16S
ATOM	21292	C5	ADE	128	110.762	62.967	-0.730	1.00	45.54	A16S	ATOM	21345	O4'	CYT	131	100.152	69.390	3.700	1.00	59.48	A16S
ATOM	21293	N7	ADE	128	110.392	63.117	-2.054	1.00	45.54	A16S	ATOM	21346	C1'	CYT	131	99.528	69.800	2.497	1.00	59.48	A16S
ATOM	21294	C8	ADE	128	109.937	61.938	-2.390	1.00	45.54	A16S	ATOM	21347	N1	CYT	131	99.786	68.788	1.465	1.00	45.35	A16S
ATOM	21295	C2'	ADE	128	108.379	59.280	-0.525	1.00	59.89	A16S	ATOM	21348	C6	CYT	131	100.507	67.666	1.740	1.00	45.35	A16S
ATOM	21296	O2'	ADE	128	108.506	57.953	-0.085	1.00	59.89	A16S	ATOM	21349	C2	CYT	131	99.303	69.012	0.193	1.00	45.35	A16S
ATOM	21297	C3'	ADE	128	107.215	59.427	-1.485	1.00	59.89	A16S	ATOM	21350	O2	CYT	131	98.625	70.022	-0.010	1.00	45.35	A16S
ATOM	21298	O3'	ADE	128	106.114	58.622	-1.116	1.00	59.89	A16S	ATOM	21351	N3	CYT	131	99.574	68.136	-0.786	1.00	45.35	A16S
ATOM	21299	P	CYT	129	104.736	59.314	-0.670	1.00	42.59	A16S	ATOM	21352	C4	CYT	131	100.298	67.059	-0.520	1.00	45.35	A16S
ATOM	21300	O1P	CYT	129	103.762	58.208	-0.466	1.00	66.53	A16S	ATOM	21353	N4	CYT	131	100.562	66.225	-1.526	1.00	45.35	A16S
ATOM	21301	O2P	CYT	129	104.397	60.416	-1.599	1.00	66.53	A16S	ATOM	21354	C5	CYT	131	100.787	66.786	0.785	1.00	45.35	A16S
ATOM	21302	O5'	CYT	129	105.080	59.951	0.744	1.00	42.59	A16S	ATOM	21355	C2'	CYT	131	98.051	70.018	2.803	1.00	59.48	A16S
ATOM	21303	C5'	CYT	129	105.415	59.121	1.835	1.00	42.59	A16S	ATOM	21356	O2'	CYT	131	97.871	71.379	3.135	1.00	59.48	A16S
ATOM	21304	C4'	CYT	129	106.146	59.913	2.884	1.00	42.59	A16S	ATOM	21357	C3'	CYT	131	97.868	69.102	4.003	1.00	59.48	A16S
ATOM	21305	O4'	CYT	129	107.388	60.417	2.325	1.00	42.59	A16S	ATOM	21358	O3'	CYT	131	96.770	69.509	4.795	1.00	59.48	A16S
ATOM	21306	C1'	CYT	129	107.752	61.609	3.011	1.00	42.59	A16S	ATOM	21359	P	GUA	132	95.394	68.706	4.699	1.00	60.52	A16S
ATOM	21307	N1	CYT	129	107.865	62.718	2.053	1.00	66.53	A16S	ATOM	21360	O1P	GUA	132	94.699	68.984	5.975	1.00	43.30	A16S
ATOM	21308	C6	CYT	129	107.367	62.627	0.786	1.00	66.53	A16S	ATOM	21361	O2P	GUA	132	95.708	67.312	4.307	1.00	43.30	A16S
ATOM	21309	C2	CYT	129	108.496	63.885	2.480	1.00	66.53	A16S	ATOM	21362	O5'	GUA	132	94.619	69.369	3.480	1.00	60.52	A16S
ATOM	21310	O2	CYT	129	108.942	63.930	3.634	1.00	66.53	A16S	ATOM	21363	C5'	GUA	132	94.283	70.742	3.491	1.00	60.52	A16S
ATOM	21311	N3	CYT	129	108.605	64.929	1.636	1.00	66.53	A16S	ATOM	21364	C4'	GUA	132	93.846	71.168	2.116	1.00	60.52	A16S
ATOM	21312	C4	CYT	129	108.115	64.837	0.402	1.00	66.53	A16S	ATOM	21365	O4'	GUA	132	94.977	71.142	1.201	1.00	60.52	A16S
ATOM	21313	N4	CYT	129	108.247	65.899	-0.401	1.00	66.53	A16S	ATOM	21366	C1'	GUA	132	94.515	70.825	-0.107	1.00	60.52	A16S
ATOM	21314	C5	CYT	129	107.467	63.653	-0.065	1.00	66.53	A16S	ATOM	21367	N9	GUA	132	95.197	69.620	-0.560	1.00	43.30	A16S
ATOM	21315	C2'	CYT	129	106.657	61.869	4.038	1.00	42.59	A16S	ATOM	21368	C4	GUA	132	95.207	69.110	-1.837	1.00	43.30	A16S
ATOM	21316	O2'	CYT	129	107.010	61.164	5.200	1.00	42.59	A16S	ATOM	21369	N3	GUA	132	94.612	69.653	-2.914	1.00	43.30	A16S
ATOM	21317	C3'	CYT	129	105.479	61.184	3.379	1.00	42.59	A16S	ATOM	21370	C2	GUA	132	94.802	68.923	-3.998	1.00	43.30	A16S
ATOM	21318	O3'	CYT	129	104.456	60.932	4.326	1.00	42.59	A16S	ATOM	21371	N2	GUA	132	94.293	69.311	-5.161	1.00	43.30	A16S
ATOM	21319	P	CYT	130	102.987	61.531	4.074	1.00	58.52	A16S	ATOM	21372	N1	GUA	132	95.504	67.757	-4.019	1.00	43.30	A16S
ATOM	21320	O1P	CYT	130	102.098	61.053	5.157	1.00	49.26	A16S	ATOM	21373	C6	GUA	132	96.112	67.174	-2.917	1.00	43.30	A16S
ATOM	21321	O2P	CYT	130	102.624	61.265	2.657	1.00	49.26	A16S	ATOM	21374	O6	GUA	132	96.699	66.095	-3.037	1.00	43.30	A16S
ATOM	21322	O5'	CYT	130	103.160	63.101	4.277	1.00	58.52	A16S	ATOM	21375	C5	GUA	132	95.939	67.949	-1.759	1.00	43.30	A16S
ATOM	21323	C5'	CYT	130	103.764	63.638	5.459	1.00	58.52	A16S	ATOM	21376	N7	GUA	132	96.399	67.742	-0.472	1.00	43.30	A16S
ATOM	21324	C4'	CYT	130	103.795	65.147	5.379	1.00	58.52	A16S	ATOM	21377	C8	GUA	132	95.936	68.759	0.205	1.00	43.30	A16S

ATOM	21378	C2'	GUA	132	93.004	70.606	-0.006	1.00	60.52	A16S	ATOM	21431	C5'	ADE	135	84.068	61.094	-5.747	1.00	72.79	A16S
ATOM	21379	O2'	GUA	132	92.333	71.814	-0.285	1.00	60.52	A16S	ATOM	21432	C4'	ADE	135	84.920	59.930	-6.198	1.00	72.79	A16S
ATOM	21380	C3'	GUA	132	92.862	70.224	1.457	1.00	60.52	A16S	ATOM	21433	O4'	ADE	135	86.326	60.299	-6.158	1.00	72.79	A16S
ATOM	21381	O3'	GUA	132	91.544	70.411	1.940	1.00	60.52	A16S	ATOM	21434	C1'	ADE	135	87.112	59.125	-6.012	1.00	72.79	A16S
ATOM	21382	P	GUA	133	90.553	69.153	2.021	1.00	70.26	A16S	ATOM	21435	N9	ADE	135	87.950	59.254	-4.821	1.00	52.87	A16S
ATOM	21383	O1P	GUA	133	89.387	69.576	2.828	1.00	64.41	A16S	ATOM	21436	C4	ADE	135	89.045	58.470	-4.544	1.00	52.87	A16S
ATOM	21384	O2P	GUA	133	91.320	67.954	2.428	1.00	64.41	A16S	ATOM	21437	N3	ADE	135	89.540	57.471	-5.297	1.00	52.87	A16S
ATOM	21385	O5'	GUA	133	90.105	68.956	0.510	1.00	70.26	A16S	ATOM	21438	C2	ADE	135	90.624	56.952	-4.728	1.00	52.87	A16S
ATOM	21386	C5'	GUA	133	89.594	70.047	-0.231	1.00	70.26	A16S	ATOM	21439	N1	ADE	135	91.221	57.287	-3.573	1.00	52.87	A16S
ATOM	21387	C4'	GUA	133	89.541	69.701	-1.694	1.00	70.26	A16S	ATOM	21440	C6	ADE	135	90.689	58.284	-2.833	1.00	52.87	A16S
ATOM	21388	O4'	GUA	133	90.888	69.510	-2.199	1.00	70.26	A16S	ATOM	21441	N6	ADE	135	91.271	58.594	-1.673	1.00	52.87	A16S
ATOM	21389	C1'	GUA	133	90.853	68.610	-3.300	1.00	70.26	A16S	ATOM	21442	C5	ADE	135	89.542	58.927	-3.334	1.00	52.87	A16S
ATOM	21390	N9	GUA	133	91.763	67.502	-3.030	1.00	64.41	A16S	ATOM	21443	N7	ADE	135	88.772	59.976	-2.853	1.00	52.87	A16S
ATOM	21391	C4	GUA	133	92.164	66.532	-3.925	1.00	64.41	A16S	ATOM	21444	C8	ADE	135	87.842	60.132	-3.771	1.00	52.87	A16S
ATOM	21392	N3	GUA	133	91.784	66.433	-5.216	1.00	64.41	A16S	ATOM	21445	C2'	ADE	135	86.137	57.957	-5.900	1.00	72.79	A16S
ATOM	21393	C2	GUA	133	92.330	65.389	-5.815	1.00	64.41	A16S	ATOM	21446	O2'	ADE	135	85.901	57.431	-7.190	1.00	72.79	A16S
ATOM	21394	N2	GUA	133	92.054	65.135	-7.098	1.00	64.41	A16S	ATOM	21447	C3'	ADE	135	84.907	58.667	-5.359	1.00	72.79	A16S
ATOM	21395	N1	GUA	133	93.184	64.515	-5.200	1.00	64.41	A16S	ATOM	21448	O3'	ADE	135	83.754	57.882	-5.592	1.00	72.79	A16S
ATOM	21396	C6	GUA	133	93.591	64.597	-3.873	1.00	64.41	A16S	ATOM	21449	P	GUA	136	83.252	56.852	-4.462	1.00	83.19	A16S
ATOM	21397	O6	GUA	133	94.368	63.749	-3.412	1.00	64.41	A16S	ATOM	21450	O1P	GUA	136	82.022	56.249	-5.042	1.00	40.99	A16S
ATOM	21398	C5	GUA	133	93.011	65.712	-3.217	1.00	64.41	A16S	ATOM	21451	O2P	GUA	136	83.187	57.545	-3.150	1.00	40.99	A16S
ATOM	21399	N7	GUA	133	93.145	66.155	-1.907	1.00	64.41	A16S	ATOM	21452	O5'	GUA	136	84.395	55.740	-4.386	1.00	83.19	A16S
ATOM	21400	C8	GUA	133	92.389	67.218	-1.843	1.00	64.41	A16S	ATOM	21453	C5'	GUA	136	84.598	54.856	-5.477	1.00	83.19	A16S
ATOM	21401	C2'	GUA	133	89.403	68.151	-3.454	1.00	70.26	A16S	ATOM	21454	C4'	GUA	136	85.881	54.069	-5.322	1.00	83.19	A16S
ATOM	21402	O2'	GUA	133	88.781	68.957	-4.435	1.00	70.26	A16S	ATOM	21455	O4'	GUA	136	87.001	54.955	-5.061	1.00	83.19	A16S
ATOM	21403	C3'	GUA	133	88.870	68.387	-2.046	1.00	70.26	A16S	ATOM	21456	C1'	GUA	136	88.054	54.204	-4.473	1.00	83.19	A16S
ATOM	21404	O3'	GUA	133	87.454	68.497	-2.009	1.00	70.26	A16S	ATOM	21457	N9	GUA	136	88.465	54.833	-3.223	1.00	40.99	A16S
ATOM	21405	P	ADE	134	86.561	67.214	-1.608	1.00	75.54	A16S	ATOM	21458	C4	GUA	136	89.556	54.474	-2.466	1.00	40.99	A16S
ATOM	21406	O1P	ADE	134	85.171	67.727	-1.503	1.00	60.55	A16S	ATOM	21459	N3	GUA	136	90.424	53.478	-2.749	1.00	40.99	A16S
ATOM	21407	O2P	ADE	134	87.156	66.502	-0.445	1.00	60.55	A16S	ATOM	21460	C2	GUA	136	91.366	53.360	-1.827	1.00	40.99	A16S
ATOM	21408	O5'	ADE	134	86.636	66.283	-2.903	1.00	75.54	A16S	ATOM	21461	N2	GUA	136	92.279	52.396	-1.936	1.00	40.99	A16S
ATOM	21409	C5'	ADE	134	86.068	66.729	-4.127	1.00	75.54	A16S	ATOM	21462	N1	GUA	136	91.472	54.174	-0.729	1.00	40.99	A16S
ATOM	21410	C4'	ADE	134	86.319	65.734	-5.227	1.00	75.54	A16S	ATOM	21463	C6	GUA	136	90.606	55.226	-0.428	1.00	40.99	A16S
ATOM	21411	O4'	ADE	134	87.736	65.651	-5.522	1.00	75.54	A16S	ATOM	21464	O6	GUA	136	90.815	55.933	0.569	1.00	40.99	A16S
ATOM	21412	C1'	ADE	134	88.030	64.363	-6.046	1.00	75.54	A16S	ATOM	21465	C5	GUA	136	89.559	55.339	-1.395	1.00	40.99	A16S
ATOM	21413	N9	ADE	134	89.075	63.749	-5.227	1.00	60.55	A16S	ATOM	21466	N7	GUA	136	88.488	56.220	-1.470	1.00	40.99	A16S
ATOM	21414	C4	ADE	134	89.789	62.621	-5.555	1.00	60.55	A16S	ATOM	21467	C8	GUA	136	87.868	55.883	-2.570	1.00	40.99	A16S
ATOM	21415	N3	ADE	134	89.654	61.862	-6.655	1.00	60.55	A16S	ATOM	21468	C2'	GUA	136	87.504	52.802	-4.242	1.00	83.19	A16S
ATOM	21416	C2	ADE	134	90.544	60.867	-6.654	1.00	60.55	A16S	ATOM	21469	O2'	GUA	136	87.836	52.025	-5.373	1.00	83.19	A16S
ATOM	21417	N1	ADE	134	91.481	60.570	-5.748	1.00	60.55	A16S	ATOM	21470	C3'	GUA	136	86.012	53.091	-4.176	1.00	83.19	A16S
ATOM	21418	C6	ADE	134	91.588	61.352	-4.653	1.00	60.55	A16S	ATOM	21471	O3'	GUA	136	85.269	51.905	-4.400	1.00	83.19	A16S
ATOM	21419	N6	ADE	134	92.530	61.064	-3.758	1.00	60.55	A16S	ATOM	21472	P	ADE	137	84.789	51.025	-3.146	1.00	78.88	A16S
ATOM	21420	C5	ADE	134	90.696	62.435	-4.529	1.00	60.55	A16S	ATOM	21473	O1P	ADE	137	83.680	50.178	-3.638	1.00	64.36	A16S
ATOM	21421	N7	ADE	134	90.536	63.409	-3.553	1.00	60.55	A16S	ATOM	21474	O2P	ADE	137	84.582	51.925	-1.985	1.00	64.36	A16S
ATOM	21422	C8	ADE	134	89.563	64.160	-4.012	1.00	60.55	A16S	ATOM	21475	O5'	ADE	137	86.023	50.082	-2.820	1.00	78.88	A16S
ATOM	21423	C2'	ADE	134	86.724	63.574	-6.026	1.00	75.54	A16S	ATOM	21476	C5'	ADE	137	86.486	49.138	-3.772	1.00	78.88	A16S
ATOM	21424	O2'	ADE	134	86.067	63.718	-7.268	1.00	75.54	A16S	ATOM	21477	C4'	ADE	137	87.756	48.506	-3.279	1.00	78.88	A16S
ATOM	21425	C3'	ADE	134	85.980	64.296	-4.920	1.00	75.54	A16S	ATOM	21478	O4'	ADE	137	88.745	49.548	-3.078	1.00	78.88	A16S
ATOM	21426	O3'	ADE	134	84.599	64.043	-4.981	1.00	75.54	A16S	ATOM	21479	C1'	ADE	137	89.524	49.258	-1.930	1.00	78.88	A16S
ATOM	21427	P	ADE	135	83.965	62.993	-3.957	1.00	72.79	A16S	ATOM	21480	N9	ADE	137	89.316	50.329	-0.963	1.00	64.36	A16S
ATOM	21428	O1P	ADE	135	82.502	63.051	-4.149	1.00	52.87	A16S	ATOM	21481	C4	ADE	137	90.167	50.680	0.054	1.00	64.36	A16S
ATOM	21429	O2P	ADE	135	84.538	63.270	-2.619	1.00	52.87	A16S	ATOM	21482	N3	ADE	137	91.340	50.104	0.374	1.00	64.36	A16S
ATOM	21430	O5'	ADE	135	84.491	61.581	-4.480	1.00	72.79	A16S	ATOM	21483	C2	ADE	137	91.902	50.726	1.412	1.00	64.36	A16S

ATOM	21484	N1	ADE	137	91.456	51.781	2.110	1.00	64.36	A16S	ATOM	21537	O2'	GUA	139	86.075	35.892	-5.913	1.00	109.32	A16S
ATOM	21485	C6	ADE	137	90.272	52.335	1.756	1.00	64.36	A16S	ATOM	21538	C3'	GUA	139	86.251	37.076	-3.800	1.00	109.32	A16S
ATOM	21486	N6	ADE	137	89.828	53.392	2.436	1.00	64.36	A16S	ATOM	21539	O3'	GUA	139	85.868	35.846	-3.219	1.00	109.32	A16S
ATOM	21487	C5	ADE	137	89.577	51.763	0.679	1.00	64.36	A16S	ATOM	21540	P	GUA	140	86.972	34.951	-2.473	1.00	90.94	A16S
ATOM	21488	N7	ADE	137	88.368	52.078	0.078	1.00	64.36	A16S	ATOM	21541	O1P	GUA	140	86.275	33.707	-2.063	1.00	87.94	A16S
ATOM	21489	C8	ADE	137	88.259	51.197	-0.886	1.00	64.36	A16S	ATOM	21542	O2P	GUA	140	87.649	35.780	-1.445	1.00	87.94	A16S
ATOM	21490	C2'	ADE	137	89.071	47.895	-1.416	1.00	78.88	A16S	ATOM	21543	O5'	GUA	140	88.030	34.600	-3.617	1.00	90.94	A16S
ATOM	21491	O2'	ADE	137	89.868	46.888	-2.004	1.00	78.88	A16S	ATOM	21544	C5'	GUA	140	87.673	33.731	-4.687	1.00	90.94	A16S
ATOM	21492	C3'	ADE	137	87.634	47.866	-1.911	1.00	78.88	A16S	ATOM	21545	C4'	GUA	140	88.816	33.569	-5.667	1.00	90.94	A16S
ATOM	21493	O3'	ADE	137	87.124	46.548	-2.010	1.00	78.88	A16S	ATOM	21546	O4'	GUA	140	89.195	34.863	-6.202	1.00	90.94	A16S
ATOM	21494	P	GUA	138	86.511	45.849	-0.712	1.00	89.93	A16S	ATOM	21547	C1'	GUA	140	90.555	34.815	-6.618	1.00	90.94	A16S
ATOM	21495	O1P	GUA	138	85.534	46.784	-0.114	1.00	77.72	A16S	ATOM	21548	N9	GUA	140	91.311	35.821	-5.887	1.00	87.94	A16S
ATOM	21496	O2P	GUA	138	87.642	45.353	0.104	1.00	77.72	A16S	ATOM	21549	C4	GUA	140	92.573	36.253	-6.196	1.00	87.94	A16S
ATOM	21497	O5'	GUA	138	85.700	44.621	-1.300	1.00	89.93	A16S	ATOM	21550	N3	GUA	140	93.318	35.836	-7.241	1.00	87.94	A16S
ATOM	21498	C5'	GUA	138	84.310	44.730	-1.543	1.00	89.93	A16S	ATOM	21551	C2	GUA	140	94.493	36.434	-7.278	1.00	87.94	A16S
ATOM	21499	C4'	GUA	138	83.951	43.917	-2.747	1.00	89.93	A16S	ATOM	21552	N2	GUA	140	95.354	36.140	-8.257	1.00	87.94	A16S
ATOM	21500	O4'	GUA	138	84.395	44.606	-3.945	1.00	89.93	A16S	ATOM	21553	N1	GUA	140	94.910	37.367	-6.358	1.00	87.94	A16S
ATOM	21501	C1'	GUA	138	84.881	43.660	-4.886	1.00	89.93	A16S	ATOM	21554	C6	GUA	140	94.158	37.813	-5.272	1.00	87.94	A16S
ATOM	21502	N9	GUA	138	86.306	43.908	-5.080	1.00	77.72	A16S	ATOM	21555	O6	GUA	140	94.623	38.662	-4.496	1.00	87.94	A16S
ATOM	21503	C4	GUA	138	87.127	43.252	-5.960	1.00	77.72	A16S	ATOM	21556	C5	GUA	140	92.890	37.178	-5.226	1.00	87.94	A16S
ATOM	21504	N3	GUA	138	86.747	42.286	-6.815	1.00	77.72	A16S	ATOM	21557	N7	GUA	140	91.842	37.328	-4.327	1.00	87.94	A16S
ATOM	21505	C2	GUA	138	87.760	41.821	-7.513	1.00	77.72	A16S	ATOM	21558	C8	GUA	140	90.927	36.504	-4.760	1.00	87.94	A16S
ATOM	21506	N2	GUA	138	87.545	40.848	-8.403	1.00	77.72	A16S	ATOM	21559	C2'	GUA	140	91.088	33.431	-6.264	1.00	90.94	A16S
ATOM	21507	N1	GUA	138	89.053	42.273	-7.387	1.00	77.72	A16S	ATOM	21560	O2'	GUA	140	91.014	32.586	-7.393	1.00	90.94	A16S
ATOM	21508	C6	GUA	138	89.470	43.270	-6.507	1.00	77.72	A16S	ATOM	21561	C3'	GUA	140	90.138	33.032	-5.146	1.00	90.94	A16S
ATOM	21509	O6	GUA	138	90.671	43.595	-6.453	1.00	77.72	A16S	ATOM	21562	O3'	GUA	140	90.139	31.628	-5.018	1.00	90.94	A16S
ATOM	21510	C5	GUA	138	88.384	43.780	-5.754	1.00	77.72	A16S	ATOM	21563	P	GUA	141	91.305	30.915	-4.178	1.00	74.87	A16S
ATOM	21511	N7	GUA	138	88.350	44.769	-4.780	1.00	77.72	A16S	ATOM	21564	O1P	GUA	141	90.980	29.470	-4.210	1.00	69.34	A16S
ATOM	21512	C8	GUA	138	87.097	44.815	-4.412	1.00	77.72	A16S	ATOM	21565	O2P	GUA	141	91.466	31.609	-2.872	1.00	69.34	A16S
ATOM	21513	C2'	GUA	138	84.632	42.271	-4.290	1.00	89.93	A16S	ATOM	21566	O5'	GUA	141	92.630	31.139	-5.034	1.00	74.87	A16S
ATOM	21514	O2'	GUA	138	83.383	41.759	-4.710	1.00	89.93	A16S	ATOM	21567	C5'	GUA	141	92.841	30.425	-6.242	1.00	74.87	A16S
ATOM	21515	C3'	GUA	138	84.675	42.587	-2.804	1.00	89.93	A16S	ATOM	21568	C4'	GUA	141	94.146	30.841	-6.884	1.00	74.87	A16S
ATOM	21516	O3'	GUA	138	84.049	41.608	-1.989	1.00	89.93	A16S	ATOM	21569	O4'	GUA	141	94.161	32.287	-7.059	1.00	74.87	A16S
ATOM	21517	P	GUA	139	84.959	40.556	-1.186	1.00	109.32	A16S	ATOM	21570	C1'	GUA	141	95.505	32.752	-7.014	1.00	74.87	A16S
ATOM	21518	O1P	GUA	139	84.056	39.820	-0.257	1.00	69.22	A16S	ATOM	21571	N9	GUA	141	95.646	33.672	-5.893	1.00	69.34	A16S
ATOM	21519	O2P	GUA	139	86.143	41.289	-0.639	1.00	69.22	A16S	ATOM	21572	C4	GUA	141	96.756	34.424	-5.603	1.00	69.34	A16S
ATOM	21520	O5'	GUA	139	85.419	39.535	-2.322	1.00	109.32	A16S	ATOM	21573	N3	GUA	141	97.903	34.445	-6.311	1.00	69.34	A16S
ATOM	21521	C5'	GUA	139	84.444	38.749	-3.000	1.00	109.32	A16S	ATOM	21574	C2	GUA	141	98.792	35.264	-5.786	1.00	69.34	A16S
ATOM	21522	C4'	GUA	139	85.066	37.962	-4.128	1.00	109.32	A16S	ATOM	21575	N2	GUA	141	99.991	35.405	-6.370	1.00	69.34	A16S
ATOM	21523	O4'	GUA	139	85.608	38.867	-5.125	1.00	109.32	A16S	ATOM	21576	N1	GUA	141	98.572	36.004	-4.649	1.00	69.34	A16S
ATOM	21524	C1'	GUA	139	86.690	38.233	-5.796	1.00	109.32	A16S	ATOM	21577	C6	GUA	141	97.399	35.992	-3.902	1.00	69.34	A16S
ATOM	21525	N9	GUA	139	87.907	38.994	-5.542	1.00	69.22	A16S	ATOM	21578	O6	GUA	141	97.305	36.689	-2.885	1.00	69.34	A16S
ATOM	21526	C4	GUA	139	89.074	38.917	-6.256	1.00	69.22	A16S	ATOM	21579	C5	GUA	141	96.437	35.119	-4.461	1.00	69.34	A16S
ATOM	21527	N3	GUA	139	89.276	38.170	-7.362	1.00	69.22	A16S	ATOM	21580	N7	GUA	141	95.152	34.810	-4.040	1.00	69.34	A16S
ATOM	21528	C2	GUA	139	90.512	38.282	-7.811	1.00	69.22	A16S	ATOM	21581	C8	GUA	141	94.722	33.949	-4.920	1.00	69.34	A16S
ATOM	21529	N2	GUA	139	90.881	37.615	-8.916	1.00	69.22	A16S	ATOM	21582	C2'	GUA	141	96.391	31.528	-6.805	1.00	74.87	A16S
ATOM	21530	N1	GUA	139	91.477	39.056	-7.209	1.00	69.22	A16S	ATOM	21583	O2'	GUA	141	96.824	31.037	-8.057	1.00	74.87	A16S
ATOM	21531	C6	GUA	139	91.288	39.824	-6.060	1.00	69.22	A16S	ATOM	21584	C3'	GUA	141	95.423	30.592	-6.101	1.00	74.87	A16S
ATOM	21532	O6	GUA	139	92.235	40.465	-5.572	1.00	69.22	A16S	ATOM	21585	O3'	GUA	141	95.875	29.258	-6.209	1.00	74.87	A16S
ATOM	21533	C5	GUA	139	89.965	39.729	-5.589	1.00	69.22	A16S	ATOM	21586	P	GUA	142	96.911	28.690	-5.122	1.00	82.78	A16S
ATOM	21534	N7	GUA	139	89.357	40.340	-4.503	1.00	69.22	A16S	ATOM	21587	O1P	GUA	142	97.118	27.260	-5.456	1.00	64.49	A16S
ATOM	21535	C8	GUA	139	88.135	39.883	-4.520	1.00	69.22	A16S	ATOM	21588	O2P	GUA	142	96.451	29.072	-3.759	1.00	64.49	A16S
ATOM	21536	C2'	GUA	139	86.828	36.839	-5.183	1.00	109.32	A16S	ATOM	21589	O5'	GUA	142	98.273	29.463	-5.422	1.00	82.78	A16S

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ATOM  21590  C5' GUA 142      98.955  29.281  -6.657  1.00 82.78      A16S
ATOM  21591  C4' GUA 142     100.235  30.084  -6.684  1.00 82.78      A16S
ATOM  21592  O4' GUA 142      99.927  31.487  -6.488  1.00 82.78      A16S
ATOM  21593  C1' GUA 142     101.031  32.132  -5.876  1.00 82.78      A16S
ATOM  21594  N9  GUA 142     100.585  32.729  -4.626  1.00 64.49      A16S
ATOM  21595  C4  GUA 142     101.281  33.642  -3.880  1.00 64.49      A16S
ATOM  21596  N3  GUA 142     102.483  34.162  -4.190  1.00 64.49      A16S
ATOM  21597  C2  GUA 142     102.896  35.022  -3.278  1.00 64.49      A16S
ATOM  21598  N2  GUA 142     104.067  35.652  -3.434  1.00 64.49      A16S
ATOM  21599  N1  GUA 142     102.191  35.331  -2.151  1.00 64.49      A16S
ATOM  21600  C6  GUA 142     100.954  34.802  -1.813  1.00 64.49      A16S
ATOM  21601  O6  GUA 142     100.406  35.144  -0.765  1.00 64.49      A16S
ATOM  21602  C5  GUA 142     100.493  33.895  -2.784  1.00 64.49      A16S
ATOM  21603  N7  GUA 142      99.315  33.164  -2.843  1.00 64.49      A16S
ATOM  21604  C8  GUA 142      99.413  32.488  -3.954  1.00 64.49      A16S
ATOM  21605  C2' GUA 142     102.096  31.067  -5.631  1.00 82.78      A16S
ATOM  21606  O2' GUA 142     103.023  31.075  -6.696  1.00 82.78      A16S
ATOM  21607  C3' GUA 142     101.249  29.804  -5.593  1.00 82.78      A16S
ATOM  21608  O3' GUA 142     102.037  28.661  -5.886  1.00 82.78      A16S
ATOM  21609  P   ADE 143     102.772  27.878  -4.689  1.00 76.65      A16S
ATOM  21610  O1P ADE 143     102.786  26.434  -5.054  1.00 55.86      A16S
ATOM  21611  O2P ADE 143     102.173  28.307  -3.394  1.00 55.86      A16S
ATOM  21612  O5' ADE 143     104.263  28.436  -4.699  1.00 76.65      A16S
ATOM  21613  C5' ADE 143     104.865  28.920  -5.892  1.00 76.65      A16S
ATOM  21614  C4' ADE 143     105.817  30.045  -5.564  1.00 76.65      A16S
ATOM  21615  O4' ADE 143     105.070  31.198  -5.105  1.00 76.65      A16S
ATOM  21616  C1' ADE 143     105.849  31.917  -4.168  1.00 76.65      A16S
ATOM  21617  N9  ADE 143     105.040  32.144  -2.978  1.00 55.86      A16S
ATOM  21618  C4  ADE 143     105.325  33.048  -1.990  1.00 55.86      A16S
ATOM  21619  N3  ADE 143     106.415  33.823  -1.894  1.00 55.86      A16S
ATOM  21620  C2  ADE 143     106.324  34.620  -0.831  1.00 55.86      A16S
ATOM  21621  N1  ADE 143     105.336  34.729   0.069  1.00 55.86      A16S
ATOM  21622  C6  ADE 143     104.256  33.936  -0.058  1.00 55.86      A16S
ATOM  21623  N6  ADE 143     103.268  34.065   0.828  1.00 55.86      A16S
ATOM  21624  C5  ADE 143     104.238  33.027  -1.133  1.00 55.86      A16S
ATOM  21625  N7  ADE 143     103.314  32.077  -1.542  1.00 55.86      A16S
ATOM  21626  C8  ADE 143     103.842  31.575  -2.634  1.00 55.86      A16S
ATOM  21627  C2' ADE 143     107.149  31.150  -3.929  1.00 76.65      A16S
ATOM  21628  O2' ADE 143     108.199  31.734  -4.672  1.00 76.65      A16S
ATOM  21629  C3' ADE 143     106.773  29.760  -4.421  1.00 76.65      A16S
ATOM  21630  O3' ADE 143     107.912  29.069  -4.883  1.00 76.65      A16S
ATOM  21631  P   CYT 144     108.828  28.289  -3.833  1.00 52.03      A16S
ATOM  21632  O1P CYT 144     109.799  27.448  -4.586  1.00 58.46      A16S
ATOM  21633  O2P CYT 144     107.934  27.661  -2.822  1.00 58.46      A16S
ATOM  21634  O5' CYT 144     109.631  29.457  -3.116  1.00 52.03      A16S
ATOM  21635  C5' CYT 144     110.564  30.254  -3.830  1.00 52.03      A16S
ATOM  21636  C4' CYT 144     111.134  31.285  -2.904  1.00 52.03      A16S
ATOM  21637  O4' CYT 144     110.048  32.119  -2.441  1.00 52.03      A16S
ATOM  21638  C1' CYT 144     110.255  32.480  -1.094  1.00 52.03      A16S
ATOM  21639  N1  CYT 144     109.041  32.129  -0.354  1.00 58.46      A16S
ATOM  21640  C6  CYT 144     108.263  31.080  -0.746  1.00 58.46      A16S
ATOM  21641  C2  CYT 144     108.681  32.900   0.746  1.00 58.46      A16S
ATOM  21642  O2  CYT 144     109.422  33.831   1.087  1.00 58.46      A16S
ATOM  21643  N3  CYT 144     107.537  32.616   1.409  1.00 58.46      A16S
ATOM  21644  C4  CYT 144     106.772  31.603   1.006  1.00 58.46      A16S
ATOM  21645  N4  CYT 144     105.640  31.371   1.669  1.00 58.46      A16S
ATOM  21646  C5  CYT 144     107.130  30.785  -0.101  1.00 58.46      A16S
ATOM  21647  C2' CYT 144     111.547  31.814  -0.624  1.00 52.03      A16S
ATOM  21648  O2' CYT 144     112.603  32.741  -0.696  1.00 52.03      A16S
ATOM  21649  C3' CYT 144     111.704  30.689  -1.638  1.00 52.03      A16S
ATOM  21650  O3' CYT 144     113.058  30.336  -1.861  1.00 52.03      A16S
ATOM  21651  P   ADE 145     113.859  29.532  -0.731  1.00 47.90      A16S
ATOM  21652  O1P ADE 145     115.169  29.114  -1.294  1.00 57.17      A16S
ATOM  21653  O2P ADE 145     112.960  28.520  -0.117  1.00 57.17      A16S
ATOM  21654  O5' ADE 145     114.130  30.639   0.371  1.00 47.90      A16S
ATOM  21655  C5' ADE 145     114.389  30.278   1.711  1.00 47.90      A16S
ATOM  21656  C4' ADE 145     114.527  31.519   2.541  1.00 47.90      A16S
ATOM  21657  O4' ADE 145     113.300  32.279   2.463  1.00 47.90      A16S
ATOM  21658  C1' ADE 145     113.093  32.959   3.681  1.00 47.90      A16S
ATOM  21659  N9  ADE 145     111.762  32.619   4.165  1.00 57.17      A16S
ATOM  21660  C4  ADE 145     111.146  33.107   5.288  1.00 57.17      A16S
ATOM  21661  N3  ADE 145     111.649  33.971   6.181  1.00 57.17      A16S
ATOM  21662  C2  ADE 145     110.746  34.254   7.116  1.00 57.17      A16S
ATOM  21663  N1  ADE 145     109.498  33.796   7.254  1.00 57.17      A16S
ATOM  21664  C6  ADE 145     109.032  32.913   6.347  1.00 57.17      A16S
ATOM  21665  N6  ADE 145     107.798  32.431   6.498  1.00 57.17      A16S
ATOM  21666  C5  ADE 145     109.883  32.547   5.299  1.00 57.17      A16S
ATOM  21667  N7  ADE 145     109.713  31.704   4.213  1.00 57.17      A16S
ATOM  21668  C8  ADE 145     110.858  31.775   3.579  1.00 57.17      A16S
ATOM  21669  C2' ADE 145     114.245  32.598   4.617  1.00 47.90      A16S
ATOM  21670  O2' ADE 145     115.230  33.602   4.513  1.00 47.90      A16S
ATOM  21671  C3' ADE 145     114.735  31.289   4.019  1.00 47.90      A16S
ATOM  21672  O3' ADE 145     116.121  31.108   4.254  1.00 47.90      A16S
ATOM  21673  P   ADE 146     116.600  30.046   5.348  1.00 55.00      A16S
ATOM  21674  O1P ADE 146     118.034  30.301   5.668  1.00 59.88      A16S
ATOM  21675  O2P ADE 146     116.182  28.704   4.871  1.00 59.88      A16S
ATOM  21676  O5' ADE 146     115.731  30.419   6.628  1.00 55.00      A16S
ATOM  21677  C5' ADE 146     116.049  31.568   7.393  1.00 55.00      A16S
ATOM  21678  C4' ADE 146     114.972  31.845   8.408  1.00 55.00      A16S
ATOM  21679  O4' ADE 146     113.704  32.051   7.739  1.00 55.00      A16S
ATOM  21680  C1' ADE 146     112.656  31.761   8.643  1.00 55.00      A16S
ATOM  21681  N9  ADE 146     111.747  30.810   8.015  1.00 59.88      A16S
ATOM  21682  C4  ADE 146     110.469  30.553   8.440  1.00 59.88      A16S
ATOM  21683  N3  ADE 146     109.834  31.115   9.482  1.00 59.88      A16S
ATOM  21684  C2  ADE 146     108.599  30.635   9.590  1.00 59.88      A16S
ATOM  21685  N1  ADE 146     107.977  29.724   8.835  1.00 59.88      A16S
ATOM  21686  C6  ADE 146     108.646  29.178   7.799  1.00 59.88      A16S
ATOM  21687  N6  ADE 146     108.023  28.268   7.052  1.00 59.88      A16S
ATOM  21688  C5  ADE 146     109.965  29.606   7.573  1.00 59.88      A16S
ATOM  21689  N7  ADE 146     110.912  29.265   6.616  1.00 59.88      A16S
ATOM  21690  C8  ADE 146     111.949  30.007   6.922  1.00 59.88      A16S
ATOM  21691  C2' ADE 146     113.297  31.224   9.924  1.00 55.00      A16S
ATOM  21692  O2' ADE 146     113.446  32.288  10.848  1.00 55.00      A16S
ATOM  21693  C3' ADE 146     114.645  30.747   9.403  1.00 55.00      A16S
ATOM  21694  O3' ADE 146     115.600  30.723  10.457  1.00 55.00      A16S
ATOM  21695  P   CYT 147     116.379  29.362  10.788  1.00 63.37      A16S
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ATOM  21696  O1P CYT   147     117.022  29.568  12.101  1.00 54.46      A16S
ATOM  21697  O2P CYT   147     117.199  28.968   9.621  1.00 54.46      A16S
ATOM  21698  O5' CYT   147     115.216  28.288  10.951  1.00 63.37      A16S
ATOM  21699  C5' CYT   147     114.343  28.314  12.081  1.00 63.37      A16S
ATOM  21700  C4' CYT   147     113.283  27.246  11.941  1.00 63.37      A16S
ATOM  21701  O4' CYT   147     112.356  27.600  10.882  1.00 63.37      A16S
ATOM  21702  C1' CYT   147     112.011  26.441  10.143  1.00 63.37      A16S
ATOM  21703  N1  CYT   147     112.589  26.568   8.807  1.00 54.46      A16S
ATOM  21704  C6  CYT   147     113.717  27.305   8.594  1.00 54.46      A16S
ATOM  21705  C2  CYT   147     111.964  25.923   7.758  1.00 54.46      A16S
ATOM  21706  O2  CYT   147     110.949  25.253   7.996  1.00 54.46      A16S
ATOM  21707  N3  CYT   147     112.469  26.040   6.511  1.00 54.46      A16S
ATOM  21708  C4  CYT   147     113.567  26.765   6.305  1.00 54.46      A16S
ATOM  21709  N4  CYT   147     114.030  26.856   5.061  1.00 54.46      A16S
ATOM  21710  C5  CYT   147     114.237  27.428   7.369  1.00 54.46      A16S
ATOM  21711  C2' CYT   147     112.619  25.246  10.864  1.00 63.37      A16S
ATOM  21712  O2' CYT   147     111.682  24.696  11.765  1.00 63.37      A16S
ATOM  21713  C3' CYT   147     113.828  25.897  11.516  1.00 63.37      A16S
ATOM  21714  O3' CYT   147     114.315  25.165  12.617  1.00 63.37      A16S
ATOM  21715  P   CYT   148     115.380  24.009  12.366  1.00 81.37      A16S
ATOM  21716  O1P CYT   148     115.676  23.416  13.689  1.00 88.23      A16S
ATOM  21717  O2P CYT   148     116.479  24.565  11.544  1.00 88.23      A16S
ATOM  21718  O5' CYT   148     114.581  22.947  11.490  1.00 81.37      A16S
ATOM  21719  C5' CYT   148     113.520  22.177  12.050  1.00 81.37      A16S
ATOM  21720  C4' CYT   148     113.063  21.127  11.062  1.00 81.37      A16S
ATOM  21721  O4' CYT   148     112.435  21.776   9.929  1.00 81.37      A16S
ATOM  21722  C1' CYT   148     112.768  21.087   8.735  1.00 81.37      A16S
ATOM  21723  N1  CYT   148     113.541  21.999   7.878  1.00 88.23      A16S
ATOM  21724  C6  CYT   148     114.152  23.099   8.406  1.00 88.23      A16S
ATOM  21725  C2  CYT   148     113.646  21.724   6.511  1.00 88.23      A16S
ATOM  21726  O2  CYT   148     113.072  20.725   6.053  1.00 88.23      A16S
ATOM  21727  N3  CYT   148     114.368  22.556   5.723  1.00 88.23      A16S
ATOM  21728  C4  CYT   148     114.966  23.624   6.255  1.00 88.23      A16S
ATOM  21729  N4  CYT   148     115.674  24.412   5.449  1.00 88.23      A16S
ATOM  21730  C5  CYT   148     114.866  23.929   7.639  1.00 88.23      A16S
ATOM  21731  C2' CYT   148     113.553  19.842   9.141  1.00 81.37      A16S
ATOM  21732  O2' CYT   148     112.667  18.763   9.340  1.00 81.37      A16S
ATOM  21733  C3' CYT   148     114.177  20.300  10.446  1.00 81.37      A16S
ATOM  21734  O3' CYT   148     114.506  19.187  11.260  1.00 81.37      A16S
ATOM  21735  P   CYT   149     115.964  18.525  11.140  1.00 90.51      A16S
ATOM  21736  O1P CYT   149     115.960  17.352  12.053  1.00103.44      A16S
ATOM  21737  O2P CYT   149     116.983  19.593  11.324  1.00103.44      A16S
ATOM  21738  O5' CYT   149     116.038  18.010   9.630  1.00 90.51      A16S
ATOM  21739  C5' CYT   149     115.443  16.773   9.252  1.00 90.51      A16S
ATOM  21740  C4' CYT   149     115.876  16.377   7.858  1.00 90.51      A16S
ATOM  21741  O4' CYT   149     115.323  17.306   6.889  1.00 90.51      A16S
ATOM  21742  C1' CYT   149     116.224  17.456   5.802  1.00 90.51      A16S
ATOM  21743  N1  CYT   149     116.661  18.859   5.758  1.00103.44      A16S
ATOM  21744  C6  CYT   149     116.513  19.673   6.845  1.00103.44      A16S
ATOM  21745  C2  CYT   149     117.256  19.342   4.590  1.00103.44      A16S
ATOM  21746  O2  CYT   149     117.336  18.596   3.608  1.00103.44      A16S
ATOM  21747  N3  CYT   149     117.723  20.610   4.561  1.00103.44      A16S
ATOM  21748  C4  CYT   149     117.597  21.390   5.637  1.00103.44      A16S
ATOM  21749  N4  CYT   149     118.094  22.627   5.576  1.00103.44      A16S
ATOM  21750  C5  CYT   149     116.961  20.934   6.829  1.00103.44      A16S
ATOM  21751  C2' CYT   149     117.401  16.510   6.058  1.00 90.51      A16S
ATOM  21752  O2' CYT   149     117.203  15.274   5.408  1.00 90.51      A16S
ATOM  21753  C3' CYT   149     117.369  16.390   7.575  1.00 90.51      A16S
ATOM  21754  O3' CYT   149     118.002  15.190   7.998  1.00 90.51      A16S
ATOM  21755  P   GUA   150     119.595  15.164   8.211  1.00 88.11      A16S
ATOM  21756  O1P GUA   150     119.937  13.834   8.769  1.00 90.86      A16S
ATOM  21757  O2P GUA   150     120.016  16.387   8.933  1.00 90.86      A16S
ATOM  21758  O5' GUA   150     120.185  15.220   6.737  1.00 88.11      A16S
ATOM  21759  C5' GUA   150     120.369  14.020   6.012  1.00 88.11      A16S
ATOM  21760  C4' GUA   150     120.900  14.306   4.635  1.00 88.11      A16S
ATOM  21761  O4' GUA   150     120.030  15.277   3.992  1.00 88.11      A16S
ATOM  21762  C1' GUA   150     120.790  16.061   3.082  1.00 88.11      A16S
ATOM  21763  N9  GUA   150     120.806  17.438   3.564  1.00 90.86      A16S
ATOM  21764  C4  GUA   150     121.217  18.539   2.856  1.00 90.86      A16S
ATOM  21765  N3  GUA   150     121.631  18.544   1.572  1.00 90.86      A16S
ATOM  21766  C2  GUA   150     121.990  19.748   1.176  1.00 90.86      A16S
ATOM  21767  N2  GUA   150     122.422  19.932  -0.075  1.00 90.86      A16S
ATOM  21768  N1  GUA   150     121.952  20.859   1.978  1.00 90.86      A16S
ATOM  21769  C6  GUA   150     121.534  20.874   3.306  1.00 90.86      A16S
ATOM  21770  O6  GUA   150     121.555  21.929   3.950  1.00 90.86      A16S
ATOM  21771  C5  GUA   150     121.134  19.592   3.737  1.00 90.86      A16S
ATOM  21772  N7  GUA   150     120.648  19.169   4.966  1.00 90.86      A16S
ATOM  21773  C8  GUA   150     120.461  17.888   4.814  1.00 90.86      A16S
ATOM  21774  C2' GUA   150     122.209  15.492   3.110  1.00 88.11      A16S
ATOM  21775  O2' GUA   150     122.361  14.458   2.151  1.00 88.11      A16S
ATOM  21776  C3' GUA   150     122.263  14.964   4.532  1.00 88.11      A16S
ATOM  21777  O3' GUA   150     123.344  14.058   4.685  1.00 88.11      A16S
ATOM  21778  P   GUA   151     124.830  14.637   4.903  1.00 93.13      A16S
ATOM  21779  O1P GUA   151     125.755  13.477   4.978  1.00135.89      A16S
ATOM  21780  O2P GUA   151     124.785  15.613   6.024  1.00135.89      A16S
ATOM  21781  O5' GUA   151     125.148  15.420   3.551  1.00 93.13      A16S
ATOM  21782  C5' GUA   151     125.214  14.711   2.325  1.00 93.13      A16S
ATOM  21783  C4' GUA   151     125.714  15.597   1.213  1.00 93.13      A16S
ATOM  21784  O4' GUA   151     124.761  16.659   0.946  1.00 93.13      A16S
ATOM  21785  C1' GUA   151     125.451  17.770   0.385  1.00 93.13      A16S
ATOM  21786  N9  GUA   151     125.287  18.922   1.268  1.00135.89      A16S
ATOM  21787  C4  GUA   151     125.659  20.216   0.987  1.00135.89      A16S
ATOM  21788  N3  GUA   151     126.221  20.647  -0.164  1.00135.89      A16S
ATOM  21789  C2  GUA   151     126.477  21.943  -0.133  1.00135.89      A16S
ATOM  21790  N2  GUA   151     127.035  22.536  -1.198  1.00135.89      A16S
ATOM  21791  N1  GUA   151     126.205  22.754   0.942  1.00135.89      A16S
ATOM  21792  C6  GUA   151     125.627  22.334   2.137  1.00135.89      A16S
ATOM  21793  O6  GUA   151     125.426  23.151   3.045  1.00135.89      A16S
ATOM  21794  C5  GUA   151     125.345  20.941   2.117  1.00135.89      A16S
ATOM  21795  N7  GUA   151     124.777  20.123   3.085  1.00135.89      A16S
ATOM  21796  C8  GUA   151     124.761  18.937   2.537  1.00135.89      A16S
ATOM  21797  C2' GUA   151     126.922  17.364   0.298  1.00 93.13      A16S
ATOM  21798  O2' GUA   151     127.167  16.738  -0.945  1.00 93.13      A16S
ATOM  21799  C3' GUA   151     127.001  16.367   1.440  1.00 93.13      A16S
ATOM  21800  O3' GUA   151     128.162  15.559   1.335  1.00 93.13      A16S
ATOM  21801  P   GUA   152     129.482  15.963   2.160  1.00111.96      A16S
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ATOM  21802  O1P GUA  152     130.437  14.831   2.053  1.00103.27      A16S
ATOM  21803  O2P GUA  152     129.069  16.452   3.503  1.00103.27      A16S
ATOM  21804  O5' GUA  152     130.090  17.181   1.333  1.00111.96      A16S
ATOM  21805  C5' GUA  152     130.615  16.978   0.023  1.00111.96      A16S
ATOM  21806  C4' GUA  152     131.049  18.292  -0.586  1.00111.96      A16S
ATOM  21807  O4' GUA  152     129.902  19.181  -0.689  1.00111.96      A16S
ATOM  21808  C1' GUA  152     130.323  20.527  -0.510  1.00111.96      A16S
ATOM  21809  N9  GUA  152     129.708  21.051   0.706  1.00103.27      A16S
ATOM  21810  C4  GUA  152     129.764  22.351   1.148  1.00103.27      A16S
ATOM  21811  N3  GUA  152     130.382  23.376   0.521  1.00103.27      A16S
ATOM  21812  C2  GUA  152     130.275  24.506   1.201  1.00103.27      A16S
ATOM  21813  N2  GUA  152     130.836  25.626   0.722  1.00103.27      A16S
ATOM  21814  N1  GUA  152     129.613  24.619   2.401  1.00103.27      A16S
ATOM  21815  C6  GUA  152     128.973  23.575   3.063  1.00103.27      A16S
ATOM  21816  O6  GUA  152     128.415  23.781   4.144  1.00103.27      A16S
ATOM  21817  C5  GUA  152     129.077  22.360   2.344  1.00103.27      A16S
ATOM  21818  N7  GUA  152     128.589  21.097   2.641  1.00103.27      A16S
ATOM  21819  C8  GUA  152     128.982  20.355   1.642  1.00103.27      A16S
ATOM  21820  C2' GUA  152     131.845  20.496  -0.386  1.00111.96      A16S
ATOM  21821  O2' GUA  152     132.422  20.640  -1.669  1.00111.96      A16S
ATOM  21822  C3' GUA  152     132.058  19.108   0.203  1.00111.96      A16S
ATOM  21823  O3' GUA  152     133.394  18.660   0.011  1.00111.96      A16S
ATOM  21824  P   GUA  153     134.542  19.134   1.032  1.00125.43      A16S
ATOM  21825  O1P GUA  153     135.843  18.680   0.484  1.00103.00      A16S
ATOM  21826  O2P GUA  153     134.148  18.744   2.408  1.00103.00      A16S
ATOM  21827  O5' GUA  153     134.505  20.725   0.954  1.00125.43      A16S
ATOM  21828  C5' GUA  153     135.320  21.438   0.025  1.00125.43      A16S
ATOM  21829  C4' GUA  153     135.727  22.770   0.610  1.00125.43      A16S
ATOM  21830  O4' GUA  153     134.562  23.629   0.735  1.00125.43      A16S
ATOM  21831  C1' GUA  153     134.638  24.364   1.946  1.00125.43      A16S
ATOM  21832  N9  GUA  153     133.532  23.935   2.793  1.00103.00      A16S
ATOM  21833  C4  GUA  153     132.997  24.609   3.869  1.00103.00      A16S
ATOM  21834  N3  GUA  153     133.416  25.799   4.351  1.00103.00      A16S
ATOM  21835  C2  GUA  153     132.695  26.190   5.394  1.00103.00      A16S
ATOM  21836  N2  GUA  153     132.976  27.353   6.012  1.00103.00      A16S
ATOM  21837  N1  GUA  153     131.646  25.472   5.909  1.00103.00      A16S
ATOM  21838  C6  GUA  153     131.195  24.251   5.421  1.00103.00      A16S
ATOM  21839  O6  GUA  153     130.225  23.697   5.949  1.00103.00      A16S
ATOM  21840  C5  GUA  153     131.965  23.816   4.318  1.00103.00      A16S
ATOM  21841  N7  GUA  153     131.861  22.662   3.554  1.00103.00      A16S
ATOM  21842  C8  GUA  153     132.809  22.775   2.666  1.00103.00      A16S
ATOM  21843  C2' GUA  153     136.009  24.083   2.561  1.00125.43      A16S
ATOM  21844  O2' GUA  153     136.936  25.047   2.106  1.00125.43      A16S
ATOM  21845  C3' GUA  153     136.303  22.693   2.015  1.00125.43      A16S
ATOM  21846  O3' GUA  153     137.701  22.424   1.972  1.00125.43      A16S
ATOM  21847  P   ADE  154     138.395  21.625   3.181  1.00 92.30      A16S
ATOM  21848  O1P ADE  154     139.865  21.824   3.057  1.00123.65      A16S
ATOM  21849  O2P ADE  154     137.838  20.248   3.204  1.00123.65      A16S
ATOM  21850  O5' ADE  154     137.887  22.393   4.481  1.00 92.30      A16S
ATOM  21851  C5' ADE  154     138.380  22.051   5.768  1.00 92.30      A16S
ATOM  21852  C4' ADE  154     138.931  23.277   6.459  1.00 92.30      A16S
ATOM  21853  O4' ADE  154     140.050  23.799   5.695  1.00 92.30      A16S
ATOM  21854  C1' ADE  154     140.139  25.200   5.887  1.00 92.30      A16S
ATOM  21855  N9  ADE  154     140.187  25.841   4.573  1.00123.65      A16S
ATOM  21856  C4  ADE  154     140.684  27.091   4.286  1.00123.65      A16S
ATOM  21857  N3  ADE  154     141.215  27.978   5.145  1.00123.65      A16S
ATOM  21858  C2  ADE  154     141.596  29.082   4.504  1.00123.65      A16S
ATOM  21859  N1  ADE  154     141.512  29.379   3.203  1.00123.65      A16S
ATOM  21860  C6  ADE  154     140.973  28.467   2.367  1.00123.65      A16S
ATOM  21861  N6  ADE  154     140.887  28.760   1.068  1.00123.65      A16S
ATOM  21862  C5  ADE  154     140.531  27.253   2.921  1.00123.65      A16S
ATOM  21863  N7  ADE  154     139.945  26.129   2.357  1.00123.65      A16S
ATOM  21864  C8  ADE  154     139.761  25.325   3.375  1.00123.65      A16S
ATOM  21865  C2' ADE  154     138.969  25.619   6.783  1.00 92.30      A16S
ATOM  21866  O2' ADE  154     139.402  25.713   8.128  1.00 92.30      A16S
ATOM  21867  C3' ADE  154     137.992  24.465   6.582  1.00 92.30      A16S
ATOM  21868  O3' ADE  154     137.145  24.317   7.718  1.00 92.30      A16S
ATOM  21869  P   ADE  155     135.603  24.762   7.629  1.00114.10      A16S
ATOM  21870  O1P ADE  155     134.947  24.363   8.902  1.00 82.55      A16S
ATOM  21871  O2P ADE  155     135.067  24.262   6.335  1.00 82.55      A16S
ATOM  21872  O5' ADE  155     135.657  26.356   7.594  1.00114.10      A16S
ATOM  21873  C5' ADE  155     136.201  27.093   8.688  1.00114.10      A16S
ATOM  21874  C4' ADE  155     136.720  28.434   8.214  1.00114.10      A16S
ATOM  21875  O4' ADE  155     137.702  28.212   7.168  1.00114.10      A16S
ATOM  21876  C1' ADE  155     137.603  29.234   6.192  1.00114.10      A16S
ATOM  21877  N9  ADE  155     137.215  28.613   4.928  1.00 82.55      A16S
ATOM  21878  C4  ADE  155     137.421  29.124   3.668  1.00 82.55      A16S
ATOM  21879  N3  ADE  155     138.012  30.287   3.346  1.00 82.55      A16S
ATOM  21880  C2  ADE  155     138.041  30.451   2.027  1.00 82.55      A16S
ATOM  21881  N1  ADE  155     137.581  29.647   1.062  1.00 82.55      A16S
ATOM  21882  C6  ADE  155     136.989  28.487   1.416  1.00 82.55      A16S
ATOM  21883  N6  ADE  155     136.523  27.689   0.449  1.00 82.55      A16S
ATOM  21884  C5  ADE  155     136.897  28.192   2.792  1.00 82.55      A16S
ATOM  21885  N7  ADE  155     136.365  27.113   3.488  1.00 82.55      A16S
ATOM  21886  C8  ADE  155     136.579  27.412   4.746  1.00 82.55      A16S
ATOM  21887  C2' ADE  155     136.582  30.248   6.705  1.00114.10      A16S
ATOM  21888  O2' ADE  155     137.248  31.235   7.463  1.00114.10      A16S
ATOM  21889  C3' ADE  155     135.702  29.365   7.574  1.00114.10      A16S
ATOM  21890  O3' ADE  155     135.041  30.146   8.559  1.00114.10      A16S
ATOM  21891  P   ADE  156     133.561  30.694   8.272  1.00104.86      A16S
ATOM  21892  O1P ADE  156     133.154  31.484   9.462  1.00 97.82      A16S
ATOM  21893  O2P ADE  156     132.719  29.558   7.819  1.00 97.82      A16S
ATOM  21894  O5' ADE  156     133.739  31.674   7.028  1.00104.86      A16S
ATOM  21895  C5' ADE  156     134.276  32.982   7.193  1.00104.86      A16S
ATOM  21896  C4' ADE  156     134.309  33.709   5.867  1.00104.86      A16S
ATOM  21897  O4' ADE  156     135.206  33.014   4.954  1.00104.86      A16S
ATOM  21898  C1' ADE  156     134.694  33.085   3.631  1.00104.86      A16S
ATOM  21899  N9  ADE  156     134.334  31.730   3.202  1.00 97.82      A16S
ATOM  21900  C4  ADE  156     134.449  31.211   1.932  1.00 97.82      A16S
ATOM  21901  N3  ADE  156     134.934  31.824   0.838  1.00 97.82      A16S
ATOM  21902  C2  ADE  156     134.872  31.018  -0.221  1.00 97.82      A16S
ATOM  21903  N1  ADE  156     134.416  29.766  -0.306  1.00 97.82      A16S
ATOM  21904  C6  ADE  156     133.935  29.177   0.809  1.00 97.82      A16S
ATOM  21905  N6  ADE  156     133.478  27.926   0.721  1.00 97.82      A16S
ATOM  21906  C5  ADE  156     133.946  29.925   2.002  1.00 97.82      A16S
ATOM  21907  N7  ADE  156     133.536  29.628   3.295  1.00 97.82      A16S
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ATOM  21908  C8  ADE  156     133.792  30.724   3.966  1.00 97.82      A16S
ATOM  21909  C2' ADE  156     133.479  34.012   3.690  1.00104.86      A16S
ATOM  21910  O2' ADE  156     133.902  35.342   3.499  1.00104.86      A16S
ATOM  21911  C3' ADE  156     132.993  33.762   5.111  1.00104.86      A16S
ATOM  21912  O3' ADE  156     132.136  34.796   5.590  1.00104.86      A16S
ATOM  21913  P   CYT  157     130.631  34.438   6.044  1.00105.63      A16S
ATOM  21914  O1P CYT  157     129.910  35.720   6.242  1.00109.02      A16S
ATOM  21915  O2P CYT  157     130.702  33.460   7.160  1.00109.02      A16S
ATOM  21916  O5' CYT  157     129.999  33.709   4.772  1.00105.63      A16S
ATOM  21917  C5' CYT  157     130.179  34.251   3.465  1.00105.63      A16S
ATOM  21918  C4' CYT  157     130.260  33.148   2.433  1.00105.63      A16S
ATOM  21919  O4' CYT  157     131.127  32.096   2.936  1.00105.63      A16S
ATOM  21920  C1' CYT  157     130.734  30.852   2.380  1.00105.63      A16S
ATOM  21921  N1  CYT  157     130.439  29.912   3.469  1.00109.02      A16S
ATOM  21922  C6  CYT  157     130.318  30.339   4.761  1.00109.02      A16S
ATOM  21923  C2  CYT  157     130.264  28.564   3.151  1.00109.02      A16S
ATOM  21924  O2  CYT  157     130.415  28.203   1.976  1.00109.02      A16S
ATOM  21925  N3  CYT  157     129.942  27.690   4.127  1.00109.02      A16S
ATOM  21926  C4  CYT  157     129.807  28.115   5.382  1.00109.02      A16S
ATOM  21927  N4  CYT  157     129.473  27.218   6.309  1.00109.02      A16S
ATOM  21928  C5  CYT  157     130.007  29.482   5.741  1.00109.02      A16S
ATOM  21929  C2' CYT  157     129.511  31.114   1.500  1.00105.63      A16S
ATOM  21930  O2' CYT  157     129.931  31.258   0.158  1.00105.63      A16S
ATOM  21931  C3' CYT  157     128.974  32.408   2.102  1.00105.63      A16S
ATOM  21932  O3' CYT  157     128.198  33.128   1.147  1.00105.63      A16S
ATOM  21933  P   URI  158     126.644  32.764   0.944  1.00100.71      A16S
ATOM  21934  O1P URI  158     126.040  33.787   0.055  1.00 99.55      A16S
ATOM  21935  O2P URI  158     126.043  32.499   2.274  1.00 99.55      A16S
ATOM  21936  O5' URI  158     126.677  31.402   0.130  1.00100.71      A16S
ATOM  21937  C5' URI  158     127.365  31.327  -1.108  1.00100.71      A16S
ATOM  21938  C4' URI  158     127.424  29.898  -1.577  1.00100.71      A16S
ATOM  21939  O4' URI  158     128.124  29.102  -0.589  1.00100.71      A16S
ATOM  21940  C1' URI  158     127.567  27.798  -0.551  1.00100.71      A16S
ATOM  21941  N1  URI  158     127.141  27.512   0.824  1.00 99.55      A16S
ATOM  21942  C6  URI  158     127.109  28.494   1.782  1.00 99.55      A16S
ATOM  21943  C2  URI  158     126.785  26.215   1.122  1.00 99.55      A16S
ATOM  21944  O2  URI  158     126.797  25.323   0.293  1.00 99.55      A16S
ATOM  21945  N3  URI  158     126.415  26.000   2.424  1.00 99.55      A16S
ATOM  21946  C4  URI  158     126.371  26.935   3.438  1.00 99.55      A16S
ATOM  21947  O4  URI  158     126.032  26.587   4.571  1.00 99.55      A16S
ATOM  21948  C5  URI  158     126.749  28.257   3.045  1.00 99.55      A16S
ATOM  21949  C2' URI  158     126.443  27.743  -1.588  1.00100.71      A16S
ATOM  21950  O2' URI  158     126.955  27.210  -2.792  1.00100.71      A16S
ATOM  21951  C3' URI  158     126.075  29.216  -1.712  1.00100.71      A16S
ATOM  21952  O3' URI  158     125.511  29.513  -2.981  1.00100.71      A16S
ATOM  21953  P   CYT  159     123.971  29.171  -3.261  1.00110.20      A16S
ATOM  21954  O1P CYT  159     123.611  29.822  -4.543  1.00 90.93      A16S
ATOM  21955  O2P CYT  159     123.180  29.463  -2.039  1.00 90.93      A16S
ATOM  21956  O5' CYT  159     123.978  27.597  -3.492  1.00110.20      A16S
ATOM  21957  C5' CYT  159     124.757  27.024  -4.535  1.00110.20      A16S
ATOM  21958  C4' CYT  159     124.559  25.532  -4.566  1.00110.20      A16S
ATOM  21959  O4' CYT  159     125.168  24.918  -3.399  1.00110.20      A16S
ATOM  21960  C1' CYT  159     124.410  23.781  -3.018  1.00110.20      A16S
ATOM  21961  N1  CYT  159     123.941  23.971  -1.645  1.00 90.93      A16S
ATOM  21962  C6  CYT  159     124.138  25.149  -0.986  1.00 90.93      A16S
ATOM  21963  C2  CYT  159     123.286  22.915  -1.019  1.00 90.93      A16S
ATOM  21964  O2  CYT  159     123.113  21.861  -1.653  1.00 90.93      A16S
ATOM  21965  N3  CYT  159     122.852  23.063   0.252  1.00 90.93      A16S
ATOM  21966  C4  CYT  159     123.054  24.214   0.892  1.00 90.93      A16S
ATOM  21967  N4  CYT  159     122.618  24.315   2.149  1.00 90.93      A16S
ATOM  21968  C5  CYT  159     123.714  25.313   0.274  1.00 90.93      A16S
ATOM  21969  C2' CYT  159     123.241  23.660  -3.994  1.00110.20      A16S
ATOM  21970  O2' CYT  159     123.573  22.750  -5.020  1.00110.20      A16S
ATOM  21971  C3' CYT  159     123.111  25.098  -4.472  1.00110.20      A16S
ATOM  21972  O3' CYT  159     122.461  25.199  -5.723  1.00110.20      A16S
ATOM  21973  P   GUA  160     120.866  25.331  -5.764  1.00 79.38      A16S
ATOM  21974  O1P GUA  160     120.478  25.528  -7.186  1.00 84.14      A16S
ATOM  21975  O2P GUA  160     120.448  26.323  -4.742  1.00 84.14      A16S
ATOM  21976  O5' GUA  160     120.364  23.896  -5.287  1.00 79.38      A16S
ATOM  21977  C5' GUA  160     120.606  22.739  -6.084  1.00 79.38      A16S
ATOM  21978  C4' GUA  160     120.087  21.502  -5.390  1.00 79.38      A16S
ATOM  21979  O4' GUA  160     120.828  21.274  -4.157  1.00 79.38      A16S
ATOM  21980  C1' GUA  160     119.974  20.655  -3.205  1.00 79.38      A16S
ATOM  21981  N9  GUA  160     119.893  21.517  -2.033  1.00 84.14      A16S
ATOM  21982  C4  GUA  160     119.475  21.150  -0.777  1.00 84.14      A16S
ATOM  21983  N3  GUA  160     119.078  19.916  -0.403  1.00 84.14      A16S
ATOM  21984  C2  GUA  160     118.718  19.876   0.870  1.00 84.14      A16S
ATOM  21985  N2  GUA  160     118.298  18.725   1.408  1.00 84.14      A16S
ATOM  21986  N1  GUA  160     118.743  20.961   1.707  1.00 84.14      A16S
ATOM  21987  C6  GUA  160     119.146  22.241   1.341  1.00 84.14      A16S
ATOM  21988  O6  GUA  160     119.121  23.151   2.170  1.00 84.14      A16S
ATOM  21989  C5  GUA  160     119.541  22.296  -0.020  1.00 84.14      A16S
ATOM  21990  N7  GUA  160     120.001  23.362  -0.780  1.00 84.14      A16S
ATOM  21991  C8  GUA  160     120.199  22.852  -1.965  1.00 84.14      A16S
ATOM  21992  C2' GUA  160     118.606  20.475  -3.870  1.00 79.38      A16S
ATOM  21993  O2' GUA  160     118.480  19.188  -4.446  1.00 79.38      A16S
ATOM  21994  C3' GUA  160     118.644  21.570  -4.923  1.00 79.38      A16S
ATOM  21995  O3' GUA  160     117.724  21.306  -5.967  1.00 79.38      A16S
ATOM  21996  P   GUA  161     116.192  21.753  -5.788  1.00 66.40      A16S
ATOM  21997  O1P GUA  161     115.448  21.436  -7.039  1.00 85.56      A16S
ATOM  21998  O2P GUA  161     116.197  23.147  -5.268  1.00 85.56      A16S
ATOM  21999  O5' GUA  161     115.651  20.796  -4.636  1.00 66.40      A16S
ATOM  22000  C5' GUA  161     115.492  19.404  -4.871  1.00 66.40      A16S
ATOM  22001  C4' GUA  161     114.873  18.744  -3.674  1.00 66.40      A16S
ATOM  22002  O4' GUA  161     115.812  18.776  -2.575  1.00 66.40      A16S
ATOM  22003  C1' GUA  161     115.101  18.851  -1.351  1.00 66.40      A16S
ATOM  22004  N9  GUA  161     115.533  20.047  -0.641  1.00 85.56      A16S
ATOM  22005  C4  GUA  161     115.224  20.380   0.654  1.00 85.56      A16S
ATOM  22006  N3  GUA  161     114.457  19.658   1.498  1.00 85.56      A16S
ATOM  22007  C2  GUA  161     114.346  20.237   2.684  1.00 85.56      A16S
ATOM  22008  N2  GUA  161     113.617  19.663   3.646  1.00 85.56      A16S
ATOM  22009  N1  GUA  161     114.943  21.425   3.014  1.00 85.56      A16S
ATOM  22010  C6  GUA  161     115.740  22.182   2.164  1.00 85.56      A16S
ATOM  22011  O6  GUA  161     116.239  23.235   2.568  1.00 85.56      A16S
ATOM  22012  C5  GUA  161     115.862  21.576   0.884  1.00 85.56      A16S
ATOM  22013  N7  GUA  161     116.551  21.992  -0.246  1.00 85.56      A16S
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ATOM  22014  C8  GUA  161     116.324  21.056  -1.124  1.00 85.56      A16S
ATOM  22015  C2' GUA  161     113.613  18.883  -1.695  1.00 66.40      A16S
ATOM  22016  O2' GUA  161     113.089  17.574  -1.644  1.00 66.40      A16S
ATOM  22017  C3' GUA  161     113.650  19.434  -3.108  1.00 66.40      A16S
ATOM  22018  O3' GUA  161     112.478  19.075  -3.807  1.00 66.40      A16S
ATOM  22019  P   GUA  162     111.157  19.969  -3.632  1.00 61.74      A16S
ATOM  22020  O1P GUA  162     110.062  19.334  -4.415  1.00 70.87      A16S
ATOM  22021  O2P GUA  162     111.539  21.379  -3.915  1.00 70.87      A16S
ATOM  22022  O5' GUA  162     110.808  19.849  -2.080  1.00 61.74      A16S
ATOM  22023  C5' GUA  162     110.231  18.664  -1.554  1.00 61.74      A16S
ATOM  22024  C4' GUA  162     109.686  18.908  -0.170  1.00 61.74      A16S
ATOM  22025  O4' GUA  162     110.769  19.172   0.756  1.00 61.74      A16S
ATOM  22026  C1' GUA  162     110.295  19.985   1.818  1.00 61.74      A16S
ATOM  22027  N9  GUA  162     111.140  21.176   1.911  1.00 70.87      A16S
ATOM  22028  C4  GUA  162     111.249  22.025   2.994  1.00 70.87      A16S
ATOM  22029  N3  GUA  162     110.638  21.877   4.187  1.00 70.87      A16S
ATOM  22030  C2  GUA  162     110.908  22.878   5.004  1.00 70.87      A16S
ATOM  22031  N2  GUA  162     110.392  22.896   6.231  1.00 70.87      A16S
ATOM  22032  N1  GUA  162     111.705  23.938   4.679  1.00 70.87      A16S
ATOM  22033  C6  GUA  162     112.342  24.114   3.463  1.00 70.87      A16S
ATOM  22034  O6  GUA  162     113.020  25.120   3.273  1.00 70.87      A16S
ATOM  22035  C5  GUA  162     112.076  23.044   2.576  1.00 70.87      A16S
ATOM  22036  N7  GUA  162     112.516  22.821   1.279  1.00 70.87      A16S
ATOM  22037  C8  GUA  162     111.945  21.699   0.929  1.00 70.87      A16S
ATOM  22038  C2' GUA  162     108.834  20.330   1.500  1.00 61.74      A16S
ATOM  22039  O2' GUA  162     107.961  19.466   2.194  1.00 61.74      A16S
ATOM  22040  C3' GUA  162     108.782  20.109  -0.007  1.00 61.74      A16S
ATOM  22041  O3' GUA  162     107.464  19.819  -0.439  1.00 61.74      A16S
ATOM  22042  P   CYT  163     106.439  21.026  -0.718  1.00 68.93      A16S
ATOM  22043  O1P CYT  163     105.115  20.434  -1.071  1.00 75.33      A16S
ATOM  22044  O2P CYT  163     107.101  21.966  -1.657  1.00 75.33      A16S
ATOM  22045  O5' CYT  163     106.280  21.738   0.700  1.00 68.93      A16S
ATOM  22046  C5' CYT  163     105.625  21.054   1.752  1.00 68.93      A16S
ATOM  22047  C4' CYT  163     105.553  21.901   2.999  1.00 68.93      A16S
ATOM  22048  O4' CYT  163     106.870  22.179   3.537  1.00 68.93      A16S
ATOM  22049  C1' CYT  163     106.748  23.238   4.468  1.00 68.93      A16S
ATOM  22050  N1  CYT  163     107.832  24.206   4.281  1.00 75.33      A16S
ATOM  22051  C6  CYT  163     108.435  24.392   3.070  1.00 75.33      A16S
ATOM  22052  C2  CYT  163     108.216  24.963   5.381  1.00 75.33      A16S
ATOM  22053  O2  CYT  163     107.675  24.737   6.476  1.00 75.33      A16S
ATOM  22054  N3  CYT  163     109.164  25.915   5.237  1.00 75.33      A16S
ATOM  22055  C4  CYT  163     109.733  26.110   4.051  1.00 75.33      A16S
ATOM  22056  N4  CYT  163     110.651  27.070   3.956  1.00 75.33      A16S
ATOM  22057  C5  CYT  163     109.381  25.328   2.910  1.00 75.33      A16S
ATOM  22058  C2' CYT  163     105.371  23.876   4.250  1.00 68.93      A16S
ATOM  22059  O2' CYT  163     104.494  23.476   5.278  1.00 68.93      A16S
ATOM  22060  C3' CYT  163     104.958  23.288   2.906  1.00 68.93      A16S
ATOM  22061  O3' CYT  163     103.544  23.248   2.822  1.00 68.93      A16S
ATOM  22062  P   URI  164     102.760  24.494   2.178  1.00 64.28      A16S
ATOM  22063  O1P URI  164     101.295  24.237   2.162  1.00 53.70      A16S
ATOM  22064  O2P URI  164     103.464  24.803   0.907  1.00 53.70      A16S
ATOM  22065  O5' URI  164     103.019  25.681   3.206  1.00 64.28      A16S
ATOM  22066  C5' URI  164     102.390  25.693   4.483  1.00 64.28      A16S
ATOM  22067  C4' URI  164     102.716  26.975   5.217  1.00 64.28      A16S
ATOM  22068  O4' URI  164     104.132  27.039   5.540  1.00 64.28      A16S
ATOM  22069  C1' URI  164     104.569  28.384   5.481  1.00 64.28      A16S
ATOM  22070  N1  URI  164     105.619  28.477   4.461  1.00 53.70      A16S
ATOM  22071  C6  URI  164     105.589  27.707   3.325  1.00 53.70      A16S
ATOM  22072  C2  URI  164     106.644  29.362   4.689  1.00 53.70      A16S
ATOM  22073  O2  URI  164     106.680  30.083   5.670  1.00 53.70      A16S
ATOM  22074  N3  URI  164     107.623  29.379   3.725  1.00 53.70      A16S
ATOM  22075  C4  URI  164     107.667  28.626   2.576  1.00 53.70      A16S
ATOM  22076  O4  URI  164     108.640  28.715   1.831  1.00 53.70      A16S
ATOM  22077  C5  URI  164     106.550  27.752   2.397  1.00 53.70      A16S
ATOM  22078  C2' URI  164     103.344  29.240   5.166  1.00 64.28      A16S
ATOM  22079  O2' URI  164     102.750  29.625   6.384  1.00 64.28      A16S
ATOM  22080  C3' URI  164     102.465  28.244   4.432  1.00 64.28      A16S
ATOM  22081  O3' URI  164     101.097  28.584   4.537  1.00 64.28      A16S
ATOM  22082  P   ADE  165     100.531  29.830   3.712  1.00 53.87      A16S
ATOM  22083  O1P ADE  165      99.043  29.786   3.730  1.00 58.04      A16S
ATOM  22084  O2P ADE  165     101.254  29.836   2.412  1.00 58.04      A16S
ATOM  22085  O5' ADE  165     100.980  31.074   4.598  1.00 53.87      A16S
ATOM  22086  C5' ADE  165     100.478  31.220   5.916  1.00 53.87      A16S
ATOM  22087  C4' ADE  165     100.824  32.575   6.461  1.00 53.87      A16S
ATOM  22088  O4' ADE  165     102.234  32.655   6.801  1.00 53.87      A16S
ATOM  22089  C1' ADE  165     102.673  33.994   6.649  1.00 53.87      A16S
ATOM  22090  N9  ADE  165     103.765  34.003   5.681  1.00 58.04      A16S
ATOM  22091  C4  ADE  165     104.886  34.790   5.729  1.00 58.04      A16S
ATOM  22092  N3  ADE  165     105.186  35.721   6.647  1.00 58.04      A16S
ATOM  22093  C2  ADE  165     106.370  36.260   6.391  1.00 58.04      A16S
ATOM  22094  N1  ADE  165     107.226  35.988   5.403  1.00 58.04      A16S
ATOM  22095  C6  ADE  165     106.894  35.044   4.503  1.00 58.04      A16S
ATOM  22096  N6  ADE  165     107.760  34.757   3.533  1.00 58.04      A16S
ATOM  22097  C5  ADE  165     105.657  34.412   4.650  1.00 58.04      A16S
ATOM  22098  N7  ADE  165     105.020  33.429   3.912  1.00 58.04      A16S
ATOM  22099  C8  ADE  165     103.903  33.225   4.562  1.00 58.04      A16S
ATOM  22100  C2' ADE  165     101.454  34.812   6.210  1.00 53.87      A16S
ATOM  22101  O2' ADE  165     100.825  35.316   7.376  1.00 53.87      A16S
ATOM  22102  C3' ADE  165     100.618  33.741   5.520  1.00 53.87      A16S
ATOM  22103  O3' ADE  165      99.241  34.074   5.442  1.00 53.87      A16S
ATOM  22104  P   ADE  166      98.695  34.904   4.180  1.00 58.30      A16S
ATOM  22105  O1P ADE  166      97.227  35.051   4.317  1.00 44.45      A16S
ATOM  22106  O2P ADE  166      99.257  34.368   2.908  1.00 44.45      A16S
ATOM  22107  O5' ADE  166      99.316  36.338   4.433  1.00 58.30      A16S
ATOM  22108  C5' ADE  166      98.848  37.146   5.501  1.00 58.30      A16S
ATOM  22109  C4' ADE  166      99.660  38.402   5.566  1.00 58.30      A16S
ATOM  22110  O4' ADE  166     101.039  38.052   5.851  1.00 58.30      A16S
ATOM  22111  C1' ADE  166     101.901  38.922   5.150  1.00 58.30      A16S
ATOM  22112  N9  ADE  166     102.705  38.128   4.218  1.00 44.45      A16S
ATOM  22113  C4  ADE  166     104.047  38.307   3.974  1.00 44.45      A16S
ATOM  22114  N3  ADE  166     104.862  39.214   4.537  1.00 44.45      A16S
ATOM  22115  C2  ADE  166     106.093  39.097   4.056  1.00 44.45      A16S
ATOM  22116  N1  ADE  166     106.565  38.249   3.143  1.00 44.45      A16S
ATOM  22117  C6  ADE  166     105.719  37.360   2.589  1.00 44.45      A16S
ATOM  22118  N6  ADE  166     106.193  36.536   1.661  1.00 44.45      A16S
ATOM  22119  C5  ADE  166     104.389  37.367   3.022  1.00 44.45      A16S
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ATOM  22120  N7  ADE  166     103.289  36.599   2.672  1.00 44.45      A16S
ATOM  22121  C8  ADE  166     102.316  37.088   3.411  1.00 44.45      A16S
ATOM  22122  C2' ADE  166     101.009  39.959   4.465  1.00 58.30      A16S
ATOM  22123  O2' ADE  166     100.757  41.024   5.360  1.00 58.30      A16S
ATOM  22124  C3' ADE  166      99.746  39.156   4.255  1.00 58.30      A16S
ATOM  22125  O3' ADE  166      98.625  40.007   4.138  1.00 58.30      A16S
ATOM  22126  P   URI  167      98.383  40.836   2.785  1.00 65.93      A16S
ATOM  22127  O1P URI  167      99.148  40.172   1.699  1.00 59.93      A16S
ATOM  22128  O2P URI  167      96.910  40.975   2.661  1.00 59.93      A16S
ATOM  22129  O5' URI  167      99.018  42.275   3.095  1.00 65.93      A16S
ATOM  22130  C5' URI  167      99.113  43.283   2.070  1.00 65.93      A16S
ATOM  22131  C4' URI  167     100.158  44.336   2.426  1.00 65.93      A16S
ATOM  22132  O4' URI  167      99.670  45.227   3.441  1.00 65.93      A16S
ATOM  22133  C1' URI  167     100.784  45.864   4.003  1.00 65.93      A16S
ATOM  22134  N1  URI  167     100.453  46.436   5.311  1.00 59.93      A16S
ATOM  22135  C6  URI  167      99.343  46.055   6.016  1.00 59.93      A16S
ATOM  22136  C2  URI  167     101.301  47.413   5.790  1.00 59.93      A16S
ATOM  22137  O2  URI  167     102.308  47.750   5.203  1.00 59.93      A16S
ATOM  22138  N3  URI  167     100.923  47.983   6.974  1.00 59.93      A16S
ATOM  22139  C4  URI  167      99.806  47.678   7.711  1.00 59.93      A16S
ATOM  22140  O4  URI  167      99.540  48.351   8.701  1.00 59.93      A16S
ATOM  22141  C5  URI  167      98.995  46.630   7.170  1.00 59.93      A16S
ATOM  22142  C2' URI  167     101.985  44.923   3.905  1.00 65.93      A16S
ATOM  22143  O2' URI  167     103.086  45.602   3.348  1.00 65.93      A16S
ATOM  22144  C3' URI  167     101.481  43.813   2.979  1.00 65.93      A16S
ATOM  22145  O3' URI  167     102.523  43.666   1.998  1.00 65.93      A16S
ATOM  22146  P   CYT  168     102.254  43.957   0.429  1.00 54.99      A16S
ATOM  22147  O1P CYT  168     102.469  45.394   0.171  1.00 57.22      A16S
ATOM  22148  O2P CYT  168     101.008  43.310  -0.059  1.00 57.22      A16S
ATOM  22149  O5' CYT  168     103.467  43.193  -0.256  1.00 54.99      A16S
ATOM  22150  C5' CYT  168     104.795  43.318   0.249  1.00 54.99      A16S
ATOM  22151  C4' CYT  168     105.651  42.220  -0.320  1.00 54.99      A16S
ATOM  22152  O4' CYT  168     105.557  41.036   0.509  1.00 54.99      A16S
ATOM  22153  C1' CYT  168     105.506  39.882  -0.315  1.00 54.99      A16S
ATOM  22154  N1  CYT  168     104.204  39.238  -0.110  1.00 57.22      A16S
ATOM  22155  C6  CYT  168     103.295  39.759   0.765  1.00 57.22      A16S
ATOM  22156  C2  CYT  168     103.906  38.089  -0.836  1.00 57.22      A16S
ATOM  22157  O2  CYT  168     104.750  37.646  -1.619  1.00 57.22      A16S
ATOM  22158  N3  CYT  168     102.708  37.495  -0.673  1.00 57.22      A16S
ATOM  22159  C4  CYT  168     101.821  38.015   0.170  1.00 57.22      A16S
ATOM  22160  N4  CYT  168     100.646  37.408   0.286  1.00 57.22      A16S
ATOM  22161  C5  CYT  168     102.101  39.187   0.931  1.00 57.22      A16S
ATOM  22162  C2' CYT  168     105.707  40.339  -1.764  1.00 54.99      A16S
ATOM  22163  O2' CYT  168     107.065  40.217  -2.142  1.00 54.99      A16S
ATOM  22164  C3' CYT  168     105.197  41.772  -1.700  1.00 54.99      A16S
ATOM  22165  O3' CYT  168     105.749  42.606  -2.709  1.00 54.99      A16S
ATOM  22166  P   CYT  169     104.774  43.471  -3.653  1.00 65.43      A16S
ATOM  22167  O1P CYT  169     105.558  44.659  -4.069  1.00 68.21      A16S
ATOM  22168  O2P CYT  169     103.446  43.670  -3.002  1.00 68.21      A16S
ATOM  22169  O5' CYT  169     104.604  42.527  -4.922  1.00 65.43      A16S
ATOM  22170  C5' CYT  169     105.753  42.016  -5.582  1.00 65.43      A16S
ATOM  22171  C4' CYT  169     105.428  40.730  -6.291  1.00 65.43      A16S
ATOM  22172  O4' CYT  169     105.184  39.674  -5.329  1.00 65.43      A16S
ATOM  22173  C1' CYT  169     104.223  38.769  -5.856  1.00 65.43      A16S
ATOM  22174  N1  CYT  169     103.054  38.747  -4.962  1.00 68.21      A16S
ATOM  22175  C6  CYT  169     102.915  39.665  -3.963  1.00 68.21      A16S
ATOM  22176  C2  CYT  169     102.078  37.764  -5.159  1.00 68.21      A16S
ATOM  22177  O2  CYT  169     102.229  36.942  -6.077  1.00 68.21      A16S
ATOM  22178  N3  CYT  169     100.997  37.735  -4.351  1.00 68.21      A16S
ATOM  22179  C4  CYT  169     100.868  38.639  -3.381  1.00 68.21      A16S
ATOM  22180  N4  CYT  169      99.782  38.576  -2.614  1.00 68.21      A16S
ATOM  22181  C5  CYT  169     101.847  39.649  -3.157  1.00 68.21      A16S
ATOM  22182  C2' CYT  169     103.862  39.274  -7.252  1.00 65.43      A16S
ATOM  22183  O2' CYT  169     104.699  38.679  -8.221  1.00 65.43      A16S
ATOM  22184  C3' CYT  169     104.154  40.753  -7.105  1.00 65.43      A16S
ATOM  22185  O3' CYT  169     104.333  41.367  -8.363  1.00 65.43      A16S
ATOM  22186  P   CYT  170     103.071  42.038  -9.079  1.00 58.73      A16S
ATOM  22187  O1P CYT  170     103.590  42.785 -10.254  1.00 56.34      A16S
ATOM  22188  O2P CYT  170     102.279  42.748  -8.051  1.00 56.34      A16S
ATOM  22189  O5' CYT  170     102.219  40.791  -9.588  1.00 58.73      A16S
ATOM  22190  C5' CYT  170     102.762  39.886 -10.544  1.00 58.73      A16S
ATOM  22191  C4' CYT  170     101.768  38.804 -10.865  1.00 58.73      A16S
ATOM  22192  O4' CYT  170     101.522  38.007  -9.681  1.00 58.73      A16S
ATOM  22193  C1' CYT  170     100.181  37.561  -9.679  1.00 58.73      A16S
ATOM  22194  N1  CYT  170      99.537  38.088  -8.473  1.00 56.34      A16S
ATOM  22195  C6  CYT  170     100.187  38.978  -7.669  1.00 56.34      A16S
ATOM  22196  C2  CYT  170      98.248  37.671  -8.161  1.00 56.34      A16S
ATOM  22197  O2  CYT  170      97.689  36.854  -8.904  1.00 56.34      A16S
ATOM  22198  N3  CYT  170      97.641  38.166  -7.058  1.00 56.34      A16S
ATOM  22199  C4  CYT  170      98.282  39.038  -6.283  1.00 56.34      A16S
ATOM  22200  N4  CYT  170      97.650  39.500  -5.213  1.00 56.34      A16S
ATOM  22201  C5  CYT  170      99.602  39.473  -6.574  1.00 56.34      A16S
ATOM  22202  C2' CYT  170      99.541  38.052 -10.979  1.00 58.73      A16S
ATOM  22203  O2' CYT  170      99.670  37.037 -11.954  1.00 58.73      A16S
ATOM  22204  C3' CYT  170     100.394  39.274 -11.293  1.00 58.73      A16S
ATOM  22205  O3' CYT  170     100.420  39.556 -12.684  1.00 58.73      A16S
ATOM  22206  P   CYT  171      99.202  40.351 -13.371  1.00 64.94      A16S
ATOM  22207  O1P CYT  171      99.562  40.440 -14.810  1.00 59.27      A16S
ATOM  22208  O2P CYT  171      98.908  41.589 -12.607  1.00 59.27      A16S
ATOM  22209  O5' CYT  171      97.960  39.362 -13.228  1.00 64.94      A16S
ATOM  22210  C5' CYT  171      97.892  38.175 -14.012  1.00 64.94      A16S
ATOM  22211  C4' CYT  171      96.578  37.468 -13.787  1.00 64.94      A16S
ATOM  22212  O4' CYT  171      96.486  37.059 -12.400  1.00 64.94      A16S
ATOM  22213  C1' CYT  171      95.123  37.060 -11.999  1.00 64.94      A16S
ATOM  22214  N1  CYT  171      94.974  37.968 -10.861  1.00 59.27      A16S
ATOM  22215  C6  CYT  171      96.038  38.674 -10.382  1.00 59.27      A16S
ATOM  22216  C2  CYT  171      93.716  38.097 -10.273  1.00 59.27      A16S
ATOM  22217  O2  CYT  171      92.768  37.448 -10.740  1.00 59.27      A16S
ATOM  22218  N3  CYT  171      93.562  38.923  -9.218  1.00 59.27      A16S
ATOM  22219  C4  CYT  171      94.608  39.607  -8.752  1.00 59.27      A16S
ATOM  22220  N4  CYT  171      94.414  40.407  -7.703  1.00 59.27      A16S
ATOM  22221  C5  CYT  171      95.901  39.498  -9.340  1.00 59.27      A16S
ATOM  22222  C2' CYT  171      94.289  37.523 -13.192  1.00 64.94      A16S
ATOM  22223  O2' CYT  171      93.785  36.412 -13.898  1.00 64.94      A16S
ATOM  22224  C3' CYT  171      95.323  38.302 -13.988  1.00 64.94      A16S
ATOM  22225  O3' CYT  171      94.929  38.388 -15.344  1.00 64.94      A16S
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ATOM  22226  P   CYT  172      94.017  39.618 -15.806  1.00 85.46      A16S
ATOM  22227  O1P CYT  172      93.788  39.493 -17.269  1.00 64.62      A16S
ATOM  22228  O2P CYT  172      94.632  40.849 -15.254  1.00 64.62      A16S
ATOM  22229  O5' CYT  172      92.631  39.390 -15.052  1.00 85.46      A16S
ATOM  22230  C5' CYT  172      91.716  38.387 -15.485  1.00 85.46      A16S
ATOM  22231  C4' CYT  172      90.425  38.484 -14.707  1.00 85.46      A16S
ATOM  22232  O4' CYT  172      90.693  38.270 -13.294  1.00 85.46      A16S
ATOM  22233  C1' CYT  172      89.719  38.959 -12.524  1.00 85.46      A16S
ATOM  22234  N1  CYT  172      90.388  39.826 -11.537  1.00 64.62      A16S
ATOM  22235  C6  CYT  172      91.651  40.309 -11.743  1.00 64.62      A16S
ATOM  22236  C2  CYT  172      89.688  40.158 -10.368  1.00 64.62      A16S
ATOM  22237  O2  CYT  172      88.545  39.696 -10.206  1.00 64.62      A16S
ATOM  22238  N3  CYT  172      90.271  40.970  -9.447  1.00 64.62      A16S
ATOM  22239  C4  CYT  172      91.498  41.443  -9.661  1.00 64.62      A16S
ATOM  22240  N4  CYT  172      92.023  42.247  -8.738  1.00 64.62      A16S
ATOM  22241  C5  CYT  172      92.239  41.114 -10.838  1.00 64.62      A16S
ATOM  22242  C2' CYT  172      88.837  39.746 -13.495  1.00 85.46      A16S
ATOM  22243  O2' CYT  172      87.652  39.022 -13.748  1.00 85.46      A16S
ATOM  22244  C3' CYT  172      89.739  39.839 -14.718  1.00 85.46      A16S
ATOM  22245  O3' CYT  172      88.974  40.034 -15.897  1.00 85.46      A16S
ATOM  22246  P   ADE  173      88.613  41.529 -16.372  1.00 61.91      A16S
ATOM  22247  O1P ADE  173      87.782  41.413 -17.601  1.00 79.87      A16S
ATOM  22248  O2P ADE  173      89.874  42.309 -16.413  1.00 79.87      A16S
ATOM  22249  O5' ADE  173      87.696  42.113 -15.200  1.00 61.91      A16S
ATOM  22250  C5' ADE  173      86.391  41.590 -14.972  1.00 61.91      A16S
ATOM  22251  C4' ADE  173      85.768  42.204 -13.740  1.00 61.91      A16S
ATOM  22252  O4' ADE  173      86.632  42.009 -12.595  1.00 61.91      A16S
ATOM  22253  C1' ADE  173      86.349  43.003 -11.625  1.00 61.91      A16S
ATOM  22254  N9  ADE  173      87.599  43.589 -11.145  1.00 79.87      A16S
ATOM  22255  C4  ADE  173      87.700  44.450 -10.081  1.00 79.87      A16S
ATOM  22256  N3  ADE  173      86.700  44.901  -9.304  1.00 79.87      A16S
ATOM  22257  C2  ADE  173      87.168  45.718  -8.368  1.00 79.87      A16S
ATOM  22258  N1  ADE  173      88.425  46.110  -8.137  1.00 79.87      A16S
ATOM  22259  C6  ADE  173      89.405  45.640  -8.938  1.00 79.87      A16S
ATOM  22260  N6  ADE  173      90.659  46.037  -8.709  1.00 79.87      A16S
ATOM  22261  C5  ADE  173      89.040  44.759  -9.968  1.00 79.87      A16S
ATOM  22262  N7  ADE  173      89.778  44.102 -10.942  1.00 79.87      A16S
ATOM  22263  C8  ADE  173      88.878  43.424 -11.614  1.00 79.87      A16S
ATOM  22264  C2' ADE  173      85.413  44.027 -12.267  1.00 61.91      A16S
ATOM  22265  O2' ADE  173      84.106  43.842 -11.769  1.00 61.91      A16S
ATOM  22266  C3' ADE  173      85.563  43.704 -13.752  1.00 61.91      A16S
ATOM  22267  O3' ADE  173      84.384  44.048 -14.463  1.00 61.91      A16S
ATOM  22268  P   URI  174      84.227  45.530 -15.057  1.00 58.56      A16S
ATOM  22269  O1P URI  174      82.918  45.630 -15.750  1.00 68.19      A16S
ATOM  22270  O2P URI  174      85.475  45.827 -15.802  1.00 68.19      A16S
ATOM  22271  O5' URI  174      84.170  46.454 -13.762  1.00 58.56      A16S
ATOM  22272  C5' URI  174      82.965  46.582 -13.033  1.00 58.56      A16S
ATOM  22273  C4' URI  174      83.149  47.538 -11.893  1.00 58.56      A16S
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ATOM  22329  C3' URI  176      85.339  59.120 -12.268  1.00 78.36      A16S
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ATOM	22332	O1P	GUA	177	84.612	62.397	-13.899	1.00	52.94	A16S	ATOM	22385	N9	ADE	179	96.417	56.502	-20.567	1.00	58.74	A16S
ATOM	22333	O2P	GUA	177	85.372	60.398	-15.338	1.00	52.94	A16S	ATOM	22386	C4	ADE	179	95.760	55.656	-21.414	1.00	58.74	A16S
ATOM	22334	O5'	GUA	177	86.742	61.298	-13.405	1.00	63.45	A16S	ATOM	22387	N3	ADE	179	96.280	54.620	-22.084	1.00	58.74	A16S
ATOM	22335	C5'	GUA	177	87.853	61.517	-14.265	1.00	63.45	A16S	ATOM	22388	C2	ADE	179	95.345	54.015	-22.802	1.00	58.74	A16S
ATOM	22336	C4'	GUA	177	89.138	61.205	-13.543	1.00	63.45	A16S	ATOM	22389	N1	ADE	179	94.045	54.302	-22.908	1.00	58.74	A16S
ATOM	22337	O4'	GUA	177	89.007	59.934	-12.849	1.00	63.45	A16S	ATOM	22390	C6	ADE	179	93.559	55.348	-22.210	1.00	58.74	A16S
ATOM	22338	C1'	GUA	177	90.184	59.166	-13.023	1.00	63.45	A16S	ATOM	22391	N6	ADE	179	92.257	55.619	-22.290	1.00	58.74	A16S
ATOM	22339	N9	GUA	177	89.848	58.069	-13.921	1.00	52.94	A16S	ATOM	22392	C5	ADE	179	94.452	56.081	-21.430	1.00	58.74	A16S
ATOM	22340	C4	GUA	177	90.613	56.964	-14.224	1.00	52.94	A16S	ATOM	22393	N7	ADE	179	94.289	57.198	-20.626	1.00	58.74	A16S
ATOM	22341	N3	GUA	177	91.840	56.682	-13.734	1.00	52.94	A16S	ATOM	22394	C8	ADE	179	95.484	57.409	-20.141	1.00	58.74	A16S
ATOM	22342	C2	GUA	177	92.330	55.558	-14.241	1.00	52.94	A16S	ATOM	22395	C2'	ADE	179	98.752	56.848	-21.330	1.00	59.34	A16S
ATOM	22343	N2	GUA	177	93.555	55.141	-13.877	1.00	52.94	A16S	ATOM	22396	O2'	ADE	179	99.938	56.088	-21.299	1.00	59.34	A16S
ATOM	22344	N1	GUA	177	91.655	54.770	-15.143	1.00	52.94	A16S	ATOM	22397	C3'	ADE	179	98.965	58.317	-20.991	1.00	59.34	A16S
ATOM	22345	C6	GUA	177	90.388	55.044	-15.653	1.00	52.94	A16S	ATOM	22398	O3'	ADE	179	100.183	58.809	-21.520	1.00	59.34	A16S
ATOM	22346	O6	GUA	177	89.865	54.273	-16.461	1.00	52.94	A16S	ATOM	22399	P	CYT	180	100.157	59.702	-22.847	1.00	48.63	A16S
ATOM	22347	C5	GUA	177	89.866	56.245	-15.131	1.00	52.94	A16S	ATOM	22400	O1P	CYT	180	101.528	60.254	-22.961	1.00	50.03	A16S
ATOM	22348	N7	GUA	177	88.665	56.881	-15.391	1.00	52.94	A16S	ATOM	22401	O2P	CYT	180	98.990	60.619	-22.743	1.00	50.03	A16S
ATOM	22349	C8	GUA	177	88.695	57.951	-14.646	1.00	52.94	A16S	ATOM	22402	O5'	CYT	180	99.915	58.650	-24.020	1.00	48.63	A16S
ATOM	22350	C2'	GUA	177	91.225	60.115	-13.619	1.00	63.45	A16S	ATOM	22403	C5'	CYT	180	100.914	57.689	-24.314	1.00	48.63	A16S
ATOM	22351	O2'	GUA	177	91.862	60.809	-12.568	1.00	63.45	A16S	ATOM	22404	C4'	CYT	180	100.391	56.650	-25.271	1.00	48.63	A16S
ATOM	22352	C3'	GUA	177	90.338	61.028	-14.454	1.00	63.45	A16S	ATOM	22405	O4'	CYT	180	99.326	55.893	-24.644	1.00	48.63	A16S
ATOM	22353	O3'	GUA	177	90.943	62.279	-14.751	1.00	63.45	A16S	ATOM	22406	C1'	CYT	180	98.423	55.445	-25.637	1.00	48.63	A16S
ATOM	22354	P	GUA	178	91.482	62.568	-16.240	1.00	65.56	A16S	ATOM	22407	N1	CYT	180	97.118	56.015	-25.327	1.00	50.03	A16S
ATOM	22355	O1P	GUA	178	91.841	64.013	-16.295	1.00	54.82	A16S	ATOM	22408	C6	CYT	180	97.012	57.058	-24.460	1.00	50.03	A16S
ATOM	22356	O2P	GUA	178	90.531	62.006	-17.242	1.00	54.82	A16S	ATOM	22409	C2	CYT	180	95.991	55.480	-25.929	1.00	50.03	A16S
ATOM	22357	O5'	GUA	178	92.815	61.705	-16.360	1.00	65.56	A16S	ATOM	22410	O2	CYT	180	96.128	54.526	-26.706	1.00	50.03	A16S
ATOM	22358	C5'	GUA	178	93.931	61.942	-15.515	1.00	65.56	A16S	ATOM	22411	N3	CYT	180	94.782	56.009	-25.652	1.00	50.03	A16S
ATOM	22359	C4'	GUA	178	94.860	60.762	-15.575	1.00	65.56	A16S	ATOM	22412	C4	CYT	180	94.687	57.030	-24.804	1.00	50.03	A16S
ATOM	22360	O4'	GUA	178	94.103	59.585	-15.189	1.00	65.56	A16S	ATOM	22413	N4	CYT	180	93.491	57.524	-24.557	1.00	50.03	A16S
ATOM	22361	C1'	GUA	178	94.565	58.456	-15.909	1.00	65.56	A16S	ATOM	22414	C5	CYT	180	95.824	57.590	-24.171	1.00	50.03	A16S
ATOM	22362	N9	GUA	178	93.456	57.920	-16.687	1.00	54.82	A16S	ATOM	22415	C2'	CYT	180	98.959	55.930	-26.986	1.00	48.63	A16S
ATOM	22363	C4	GUA	178	93.450	56.728	-17.363	1.00	54.82	A16S	ATOM	22416	O2'	CYT	180	99.798	54.941	-27.545	1.00	48.63	A16S
ATOM	22364	N3	GUA	178	94.454	55.833	-17.393	1.00	54.82	A16S	ATOM	22417	C3'	CYT	180	99.759	57.150	-26.556	1.00	48.63	A16S
ATOM	22365	C2	GUA	178	94.161	54.792	-18.145	1.00	54.82	A16S	ATOM	22418	O3'	CYT	180	100.752	57.468	-27.517	1.00	48.63	A16S
ATOM	22366	N2	GUA	178	95.040	53.802	-18.283	1.00	54.82	A16S	ATOM	22419	P	CYT	181	100.460	58.598	-28.619	1.00	58.16	A16S
ATOM	22367	N1	GUA	178	92.985	54.645	-18.817	1.00	54.82	A16S	ATOM	22420	O1P	CYT	181	101.773	58.841	-29.263	1.00	48.53	A16S
ATOM	22368	C6	GUA	178	91.941	55.555	-18.803	1.00	54.82	A16S	ATOM	22421	O2P	CYT	181	99.722	59.726	-28.002	1.00	48.53	A16S
ATOM	22369	O6	GUA	178	90.929	55.329	-19.457	1.00	54.82	A16S	ATOM	22422	O5'	CYT	181	99.531	57.859	-29.676	1.00	58.16	A16S
ATOM	22370	C5	GUA	178	92.232	56.670	-17.992	1.00	54.82	A16S	ATOM	22423	C5'	CYT	181	100.067	56.817	-30.475	1.00	58.16	A16S
ATOM	22371	N7	GUA	178	91.469	57.791	-17.694	1.00	54.82	A16S	ATOM	22424	C4'	CYT	181	98.979	56.163	-31.278	1.00	58.16	A16S
ATOM	22372	C8	GUA	178	92.235	58.503	-16.913	1.00	54.82	A16S	ATOM	22425	O4'	CYT	181	98.030	55.552	-30.376	1.00	58.16	A16S
ATOM	22373	C2'	GUA	178	95.705	58.933	-16.802	1.00	65.56	A16S	ATOM	22426	C1'	CYT	181	96.752	55.534	-30.981	1.00	58.16	A16S
ATOM	22374	O2'	GUA	178	96.929	58.733	-16.130	1.00	65.56	A16S	ATOM	22427	N1	CYT	181	95.817	56.215	-30.086	1.00	48.53	A16S
ATOM	22375	C3'	GUA	178	95.355	60.403	-16.962	1.00	65.56	A16S	ATOM	22428	C6	CYT	181	96.261	57.010	-29.070	1.00	48.53	A16S
ATOM	22376	O3'	GUA	178	96.489	61.172	-17.323	1.00	65.56	A16S	ATOM	22429	C2	CYT	181	94.466	56.040	-30.299	1.00	48.53	A16S
ATOM	22377	P	ADE	179	96.782	61.462	-18.878	1.00	59.34	A16S	ATOM	22430	O2	CYT	181	94.109	55.277	-31.199	1.00	48.53	A16S
ATOM	22378	O1P	ADE	179	97.770	62.564	-18.958	1.00	58.74	A16S	ATOM	22431	N3	CYT	181	93.578	56.689	-29.520	1.00	48.53	A16S
ATOM	22379	O2P	ADE	179	95.477	61.602	-19.564	1.00	58.74	A16S	ATOM	22432	C4	CYT	181	94.011	57.470	-28.535	1.00	48.53	A16S
ATOM	22380	O5'	ADE	179	97.453	60.117	-19.412	1.00	59.34	A16S	ATOM	22433	N4	CYT	181	93.104	58.086	-27.786	1.00	48.53	A16S
ATOM	22381	C5'	ADE	179	98.647	59.615	-18.835	1.00	59.34	A16S	ATOM	22434	C5	CYT	181	95.398	57.650	-28.274	1.00	48.53	A16S
ATOM	22382	C4'	ADE	179	99.009	58.305	-19.477	1.00	59.34	A16S	ATOM	22435	C2'	CYT	181	96.878	56.242	-32.329	1.00	58.16	A16S
ATOM	22383	O4'	ADE	179	98.034	57.301	-19.109	1.00	59.34	A16S	ATOM	22436	O2'	CYT	181	97.059	55.293	-33.360	1.00	58.16	A16S
ATOM	22384	C1'	ADE	179	97.823	56.418	-20.198	1.00	59.34	A16S	ATOM	22437	C3'	CYT	181	98.114	57.094	-32.099	1.00	58.16	A16S

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ATOM  22438  O3' CYT  181      98.753  57.456 -33.314  1.00 58.16      A16S
ATOM  22439  P   CYT  182      98.690  58.984 -33.804  1.00 69.68      A16S
ATOM  22440  O1P CYT  182      99.659  59.118 -34.912  1.00 47.91      A16S
ATOM  22441  O2P CYT  182      98.815  59.869 -32.615  1.00 47.91      A16S
ATOM  22442  O5' CYT  182      97.211  59.113 -34.378  1.00 69.68      A16S
ATOM  22443  C5' CYT  182      96.788  58.274 -35.443  1.00 69.68      A16S
ATOM  22444  C4' CYT  182      95.290  58.316 -35.596  1.00 69.68      A16S
ATOM  22445  O4' CYT  182      94.654  57.687 -34.456  1.00 69.68      A16S
ATOM  22446  C1' CYT  182      93.387  58.285 -34.238  1.00 69.68      A16S
ATOM  22447  N1  CYT  182      93.396  58.942 -32.926  1.00 47.91      A16S
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ATOM  22449  C2  CYT  182      92.186  59.382 -32.401  1.00 47.91      A16S
ATOM  22450  O2  CYT  182      91.137  59.136 -33.030  1.00 47.91      A16S
ATOM  22451  N3  CYT  182      92.177  60.051 -31.225  1.00 47.91      A16S
ATOM  22452  C4  CYT  182      93.317  60.258 -30.577  1.00 47.91      A16S
ATOM  22453  N4  CYT  182      93.264  60.929 -29.433  1.00 47.91      A16S
ATOM  22454  C5  CYT  182      94.560  59.787 -31.073  1.00 47.91      A16S
ATOM  22455  C2' CYT  182      93.194  59.312 -35.351  1.00 69.68      A16S
ATOM  22456  O2' CYT  182      92.580  58.676 -36.453  1.00 69.68      A16S
ATOM  22457  C3' CYT  182      94.637  59.684 -35.645  1.00 69.68      A16S
ATOM  22458  O3' CYT  182      94.775  60.284 -36.929  1.00 69.68      A16S
ATOM  22459  P   GUA  183      94.909  61.884 -37.055  1.00 76.49      A16S
ATOM  22460  O1P GUA  183      95.280  62.132 -38.468  1.00 54.52      A16S
ATOM  22461  O2P GUA  183      95.772  62.402 -35.963  1.00 54.52      A16S
ATOM  22462  O5' GUA  183      93.431  62.422 -36.813  1.00 76.49      A16S
ATOM  22463  C5' GUA  183      92.379  62.045 -37.680  1.00 76.49      A16S
ATOM  22464  C4' GUA  183      91.066  62.547 -37.149  1.00 76.49      A16S
ATOM  22465  O4' GUA  183      90.752  61.893 -35.895  1.00 76.49      A16S
ATOM  22466  C1' GUA  183      89.945  62.755 -35.111  1.00 76.49      A16S
ATOM  22467  N9  GUA  183      90.581  62.942 -33.815  1.00 54.52      A16S
ATOM  22468  C4  GUA  183      89.960  63.370 -32.668  1.00 54.52      A16S
ATOM  22469  N3  GUA  183      88.653  63.683 -32.545  1.00 54.52      A16S
ATOM  22470  C2  GUA  183      88.349  64.049 -31.316  1.00 54.52      A16S
ATOM  22471  N2  GUA  183      87.089  64.374 -31.009  1.00 54.52      A16S
ATOM  22472  N1  GUA  183      89.255  64.120 -30.293  1.00 54.52      A16S
ATOM  22473  C6  GUA  183      90.605  63.812 -30.397  1.00 54.52      A16S
ATOM  22474  O6  GUA  183      91.338  63.925 -29.408  1.00 54.52      A16S
ATOM  22475  C5  GUA  183      90.945  63.398 -31.707  1.00 54.52      A16S
ATOM  22476  N7  GUA  183      92.162  62.991 -32.237  1.00 54.52      A16S
ATOM  22477  C8  GUA  183      91.898  62.733 -33.489  1.00 54.52      A16S
ATOM  22478  C2' GUA  183      89.805  64.068 -35.878  1.00 76.49      A16S
ATOM  22479  O2' GUA  183      88.604  64.031 -36.616  1.00 76.49      A16S
ATOM  22480  C3' GUA  183      91.028  64.016 -36.779  1.00 76.49      A16S
ATOM  22481  O3' GUA  183      90.845  64.810 -37.934  1.00 76.49      A16S
ATOM  22482  P   CYT  184      91.512  66.265 -38.007  1.00 64.32      A16S
ATOM  22483  O1P CYT  184      91.469  66.655 -39.446  1.00 57.41      A16S
ATOM  22484  O2P CYT  184      92.803  66.264 -37.281  1.00 57.41      A16S
ATOM  22485  O5' CYT  184      90.532  67.184 -37.160  1.00 64.32      A16S
ATOM  22486  C5' CYT  184      89.173  67.309 -37.517  1.00 64.32      A16S
ATOM  22487  C4' CYT  184      88.408  67.890 -36.371  1.00 64.32      A16S
ATOM  22488  O4' CYT  184      88.397  66.940 -35.276  1.00 64.32      A16S
ATOM  22489  C1' CYT  184      88.318  67.641 -34.047  1.00 64.32      A16S
ATOM  22490  N1  CYT  184      89.442  67.230 -33.202  1.00 57.41      A16S
ATOM  22491  C6  CYT  184      90.565  66.674 -33.742  1.00 57.41      A16S
ATOM  22492  C2  CYT  184      89.360  67.457 -31.828  1.00 57.41      A16S
ATOM  22493  O2  CYT  184      88.305  67.907 -31.360  1.00 57.41      A16S
ATOM  22494  N3  CYT  184      90.427  67.182 -31.046  1.00 57.41      A16S
ATOM  22495  C4  CYT  184      91.537  66.688 -31.589  1.00 57.41      A16S
ATOM  22496  N4  CYT  184      92.576  66.480 -30.794  1.00 57.41      A16S
ATOM  22497  C5  CYT  184      91.630  66.395 -32.979  1.00 57.41      A16S
ATOM  22498  C2' CYT  184      88.397  69.140 -34.374  1.00 64.32      A16S
ATOM  22499  O2' CYT  184      87.113  69.737 -34.381  1.00 64.32      A16S
ATOM  22500  C3' CYT  184      89.047  69.114 -35.751  1.00 64.32      A16S
ATOM  22501  O3' CYT  184      88.779  70.293 -36.500  1.00 64.32      A16S
ATOM  22502  P   CYT  185      89.767  71.558 -36.365  1.00 62.70      A16S
ATOM  22503  O1P CYT  185      89.402  72.532 -37.421  1.00 67.21      A16S
ATOM  22504  O2P CYT  185      91.171  71.065 -36.280  1.00 67.21      A16S
ATOM  22505  O5' CYT  185      89.357  72.200 -34.966  1.00 62.70      A16S
ATOM  22506  C5' CYT  185      88.077  72.783 -34.804  1.00 62.70      A16S
ATOM  22507  C4' CYT  185      87.868  73.190 -33.375  1.00 62.70      A16S
ATOM  22508  O4' CYT  185      87.970  72.018 -32.530  1.00 62.70      A16S
ATOM  22509  C1' CYT  185      88.491  72.389 -31.264  1.00 62.70      A16S
ATOM  22510  N1  CYT  185      89.718  71.613 -31.028  1.00 67.21      A16S
ATOM  22511  C6  CYT  185      90.330  70.952 -32.052  1.00 67.21      A16S
ATOM  22512  C2  CYT  185      90.258  71.574 -29.741  1.00 67.21      A16S
ATOM  22513  O2  CYT  185      89.673  72.163 -28.829  1.00 67.21      A16S
ATOM  22514  N3  CYT  185      91.402  70.897 -29.524  1.00 67.21      A16S
ATOM  22515  C4  CYT  185      92.005  70.273 -30.534  1.00 67.21      A16S
ATOM  22516  N4  CYT  185      93.148  69.637 -30.281  1.00 67.21      A16S
ATOM  22517  C5  CYT  185      91.466  70.278 -31.852  1.00 67.21      A16S
ATOM  22518  C2' CYT  185      88.740  73.900 -31.310  1.00 62.70      A16S
ATOM  22519  O2' CYT  185      87.624  74.576 -30.768  1.00 62.70      A16S
ATOM  22520  C3' CYT  185      88.911  74.127 -32.806  1.00 62.70      A16S
ATOM  22521  O3' CYT  185      88.641  75.466 -33.193  1.00 62.70      A16S
ATOM  22522  P   CYT  186      89.858  76.455 -33.544  1.00 73.28      A16S
ATOM  22523  O1P CYT  186      89.291  77.578 -34.333  1.00 69.31      A16S
ATOM  22524  O2P CYT  186      90.997  75.674 -34.098  1.00 69.31      A16S
ATOM  22525  O5' CYT  186      90.303  77.006 -32.125  1.00 73.28      A16S
ATOM  22526  C5' CYT  186      89.346  77.523 -31.225  1.00 73.28      A16S
ATOM  22527  C4' CYT  186      89.924  77.564 -29.841  1.00 73.28      A16S
ATOM  22528  O4' CYT  186      90.133  76.210 -29.364  1.00 73.28      A16S
ATOM  22529  C1' CYT  186      91.250  76.184 -28.490  1.00 73.28      A16S
ATOM  22530  N1  CYT  186      92.239  75.247 -29.028  1.00 69.31      A16S
ATOM  22531  C6  CYT  186      92.219  74.880 -30.343  1.00 69.31      A16S
ATOM  22532  C2  CYT  186      93.213  74.734 -28.165  1.00 69.31      A16S
ATOM  22533  O2  CYT  186      93.199  75.085 -26.980  1.00 69.31      A16S
ATOM  22534  N3  CYT  186      94.139  73.874 -28.643  1.00 69.31      A16S
ATOM  22535  C4  CYT  186      94.114  73.525 -29.929  1.00 69.31      A16S
ATOM  22536  N4  CYT  186      95.046  72.680 -30.362  1.00 69.31      A16S
ATOM  22537  C5  CYT  186      93.129  74.029 -30.833  1.00 69.31      A16S
ATOM  22538  C2' CYT  186      91.796  77.607 -28.425  1.00 73.28      A16S
ATOM  22539  O2' CYT  186      91.231  78.281 -27.322  1.00 73.28      A16S
ATOM  22540  C3' CYT  186      91.311  78.161 -29.753  1.00 73.28      A16S
ATOM  22541  O3' CYT  186      91.293  79.577 -29.766  1.00 73.28      A16S
ATOM  22542  P   CYT  187      92.670  80.372 -30.003  1.00 78.69      A16S
ATOM  22543  O1P CYT  187      92.400  81.835 -29.924  1.00 57.80      A16S
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ATOM	22544	O2P	CYT	187	93.337	79.807	-31.214	1.00	57.80	A16S	ATOM	22597	C5	URI	189	109.931	76.019	-28.071	1.00	51.00	A16S
ATOM	22545	O5'	CYT	187	93.527	79.987	-28.718	1.00	78.69	A16S	ATOM	22598	C2'	URI	189	107.149	72.556	-29.850	1.00	68.57	A16S
ATOM	22546	C5'	CYT	187	94.915	80.232	-28.680	1.00	78.69	A16S	ATOM	22599	O2'	URI	189	107.295	71.839	-31.059	1.00	68.57	A16S
ATOM	22547	C4'	CYT	187	95.563	79.387	-27.619	1.00	78.69	A16S	ATOM	22600	C3'	URI	189	105.675	72.721	-29.447	1.00	68.57	A16S
ATOM	22548	O4'	CYT	187	95.146	78.007	-27.764	1.00	78.69	A16S	ATOM	22601	O3'	URI	189	104.951	71.862	-30.332	1.00	68.57	A16S
ATOM	22549	C1'	CYT	187	96.272	77.155	-27.667	1.00	78.69	A16S	ATOM	22602	P	GUA	190	103.873	70.795	-29.792	1.00	58.15	A16S
ATOM	22550	N1	CYT	187	96.466	76.539	-28.989	1.00	57.80	A16S	ATOM	22603	O1P	GUA	190	104.287	69.465	-30.304	1.00	54.99	A16S
ATOM	22551	C6	CYT	187	95.711	76.938	-30.057	1.00	57.80	A16S	ATOM	22604	O2P	GUA	190	102.534	71.330	-30.142	1.00	54.99	A16S
ATOM	22552	C2	CYT	187	97.410	75.517	-29.134	1.00	57.80	A16S	ATOM	22605	O5'	GUA	190	103.958	70.773	-28.205	1.00	58.15	A16S
ATOM	22553	O2	CYT	187	98.129	75.222	-28.168	1.00	57.80	A16S	ATOM	22606	C5'	GUA	190	102.959	70.071	-27.452	1.00	58.15	A16S
ATOM	22554	N3	CYT	187	97.522	74.888	-30.326	1.00	57.80	A16S	ATOM	22607	C4'	GUA	190	103.608	69.037	-26.573	1.00	58.15	A16S
ATOM	22555	C4	CYT	187	96.754	75.264	-31.351	1.00	57.80	A16S	ATOM	22608	O4'	GUA	190	104.438	68.210	-27.401	1.00	58.15	A16S
ATOM	22556	N4	CYT	187	96.875	74.593	-32.499	1.00	57.80	A16S	ATOM	22609	C1'	GUA	190	105.508	67.748	-26.629	1.00	58.15	A16S
ATOM	22557	C5	CYT	187	95.823	76.334	-31.244	1.00	57.80	A16S	ATOM	22610	N9	GUA	190	106.676	67.530	-27.468	1.00	54.99	A16S
ATOM	22558	C2'	CYT	187	97.444	78.009	-27.180	1.00	78.69	A16S	ATOM	22611	C4	GUA	190	107.734	66.741	-27.130	1.00	54.99	A16S
ATOM	22559	O2'	CYT	187	97.497	78.020	-25.769	1.00	78.69	A16S	ATOM	22612	N3	GUA	190	107.887	66.099	-25.954	1.00	54.99	A16S
ATOM	22560	C3'	CYT	187	97.071	79.364	-27.758	1.00	78.69	A16S	ATOM	22613	C2	GUA	190	108.985	65.374	-25.926	1.00	54.99	A16S
ATOM	22561	O3'	CYT	187	97.619	80.454	-27.048	1.00	78.69	A16S	ATOM	22614	N2	GUA	190	109.282	64.673	-24.827	1.00	54.99	A16S
ATOM	22562	P	URI	188	98.665	81.415	-27.778	1.00	78.58	A16S	ATOM	22615	N1	GUA	190	109.871	65.283	-26.973	1.00	54.99	A16S
ATOM	22563	O1P	URI	188	98.355	82.790	-27.327	1.00	62.53	A16S	ATOM	22616	C6	GUA	190	109.740	65.943	-28.193	1.00	54.99	A16S
ATOM	22564	O2P	URI	188	98.653	81.098	-29.231	1.00	62.53	A16S	ATOM	22617	O6	GUA	190	110.603	65.798	-29.067	1.00	54.99	A16S
ATOM	22565	O5'	URI	188	100.052	80.980	-27.125	1.00	78.58	A16S	ATOM	22618	C5	GUA	190	108.554	66.730	-28.234	1.00	54.99	A16S
ATOM	22566	C5'	URI	188	101.189	80.646	-27.917	1.00	78.58	A16S	ATOM	22619	N7	GUA	190	108.032	67.533	-29.241	1.00	54.99	A16S
ATOM	22567	C4'	URI	188	101.222	79.161	-28.166	1.00	78.58	A16S	ATOM	22620	C8	GUA	190	106.924	67.998	-28.735	1.00	54.99	A16S
ATOM	22568	O4'	URI	188	100.110	78.834	-29.015	1.00	78.58	A16S	ATOM	22621	C2'	GUA	190	105.675	68.631	-25.394	1.00	58.15	A16S
ATOM	22569	C1'	URI	188	100.420	77.674	-29.730	1.00	78.58	A16S	ATOM	22622	O2'	GUA	190	105.553	67.842	-24.235	1.00	58.15	A16S
ATOM	22570	N1	URI	188	99.757	77.705	-31.038	1.00	62.53	A16S	ATOM	22623	C3'	GUA	190	104.537	69.637	-25.528	1.00	58.15	A16S
ATOM	22571	C6	URI	188	98.812	78.658	-31.332	1.00	62.53	A16S	ATOM	22624	O3'	GUA	190	103.937	69.759	-24.222	1.00	58.15	A16S
ATOM	22572	C2	URI	188	100.081	76.718	-31.946	1.00	62.53	A16S	ATOM	22625	P	GUA	191	102.503	69.069	-23.869	1.00	54.55	A16S
ATOM	22573	O2	URI	188	100.930	75.878	-31.731	1.00	62.53	A16S	ATOM	22626	O1P	GUA	191	102.725	68.163	-22.719	1.00	51.95	A16S
ATOM	22574	N3	URI	188	99.365	76.747	-33.115	1.00	62.53	A16S	ATOM	22627	O2P	GUA	191	101.775	68.559	-25.056	1.00	51.95	A16S
ATOM	22575	C4	URI	188	98.376	77.646	-33.458	1.00	62.53	A16S	ATOM	22628	O5'	GUA	191	101.684	70.288	-23.271	1.00	54.55	A16S
ATOM	22576	O4	URI	188	97.730	77.470	-34.497	1.00	62.53	A16S	ATOM	22629	C5'	GUA	191	102.298	71.165	-22.338	1.00	54.55	A16S
ATOM	22577	C5	URI	188	98.126	78.660	-32.476	1.00	62.53	A16S	ATOM	22630	C4'	GUA	191	101.397	72.331	-22.062	1.00	54.55	A16S
ATOM	22578	C2'	URI	188	101.924	77.417	-29.662	1.00	78.58	A16S	ATOM	22631	O4'	GUA	191	101.337	73.179	-23.231	1.00	54.55	A16S
ATOM	22579	O2'	URI	188	102.081	76.240	-28.927	1.00	78.58	A16S	ATOM	22632	C1'	GUA	191	100.004	73.606	-23.440	1.00	54.55	A16S
ATOM	22580	C3'	URI	188	102.454	78.616	-28.879	1.00	78.58	A16S	ATOM	22633	N9	GUA	191	99.529	72.951	-24.649	1.00	51.95	A16S
ATOM	22581	O3'	URI	188	103.363	78.166	-27.855	1.00	78.58	A16S	ATOM	22634	C4	GUA	191	98.350	73.186	-25.303	1.00	51.95	A16S
ATOM	22582	P	URI	189	104.746	77.423	-28.237	1.00	68.57	A16S	ATOM	22635	N3	GUA	191	97.377	74.028	-24.900	1.00	51.95	A16S
ATOM	22583	O1P	URI	189	105.250	76.779	-27.001	1.00	51.00	A16S	ATOM	22636	C2	GUA	191	96.378	74.074	-25.764	1.00	51.95	A16S
ATOM	22584	O2P	URI	189	105.607	78.388	-28.952	1.00	51.00	A16S	ATOM	22637	N2	GUA	191	95.330	74.866	-25.516	1.00	51.95	A16S
ATOM	22585	O5'	URI	189	104.352	76.291	-29.290	1.00	68.57	A16S	ATOM	22638	N1	GUA	191	96.338	73.349	-26.935	1.00	51.95	A16S
ATOM	22586	C5'	URI	189	104.375	74.901	-28.948	1.00	68.57	A16S	ATOM	22639	C6	GUA	191	97.332	72.476	-27.364	1.00	51.95	A16S
ATOM	22587	C4'	URI	189	105.337	74.161	-29.842	1.00	68.57	A16S	ATOM	22640	O6	GUA	191	97.213	71.885	-28.442	1.00	51.95	A16S
ATOM	22588	O4'	URI	189	106.572	74.881	-29.838	1.00	68.57	A16S	ATOM	22641	C5	GUA	191	98.401	72.409	-26.439	1.00	51.95	A16S
ATOM	22589	C1'	URI	189	107.605	73.992	-30.123	1.00	68.57	A16S	ATOM	22642	N7	GUA	191	99.566	71.657	-26.468	1.00	51.95	A16S
ATOM	22590	N1	URI	189	108.845	74.501	-29.535	1.00	51.00	A16S	ATOM	22643	C8	GUA	191	100.198	72.003	-25.382	1.00	51.95	A16S
ATOM	22591	C6	URI	189	108.826	75.436	-28.530	1.00	51.00	A16S	ATOM	22644	C2'	GUA	191	99.222	73.197	-22.199	1.00	54.55	A16S
ATOM	22592	C2	URI	189	110.029	74.053	-30.071	1.00	51.00	A16S	ATOM	22645	O2'	GUA	191	99.365	74.176	-21.192	1.00	54.55	A16S
ATOM	22593	O2	URI	189	110.084	73.164	-30.908	1.00	51.00	A16S	ATOM	22646	C3'	GUA	191	99.959	71.932	-21.826	1.00	54.55	A16S
ATOM	22594	N3	URI	189	111.148	74.680	-29.589	1.00	51.00	A16S	ATOM	22647	O3'	GUA	191	99.747	71.582	-20.477	1.00	54.55	A16S
ATOM	22595	C4	URI	189	111.195	75.666	-28.629	1.00	51.00	A16S	ATOM	22648	P	GUA	192	98.804	70.336	-20.138	1.00	78.30	A16S
ATOM	22596	O4	URI	189	112.263	76.213	-28.387	1.00	51.00	A16S	ATOM	22649	O1P	GUA	192	98.855	70.162	-18.659	1.00	65.71	A16S

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ATOM  22650  O2P GUA  192      99.228  69.225 -21.037  1.00 65.71      A16S
ATOM  22651  O5' GUA  192      97.350  70.825 -20.582  1.00 78.30      A16S
ATOM  22652  C5' GUA  192      96.678  71.861 -19.870  1.00 78.30      A16S
ATOM  22653  C4' GUA  192      95.370  72.226 -20.547  1.00 78.30      A16S
ATOM  22654  O4' GUA  192      95.630  72.765 -21.871  1.00 78.30      A16S
ATOM  22655  C1' GUA  192      94.483  72.575 -22.684  1.00 78.30      A16S
ATOM  22656  N9  GUA  192      94.850  71.814 -23.869  1.00 65.71      A16S
ATOM  22657  C4  GUA  192      94.061  71.654 -24.975  1.00 65.71      A16S
ATOM  22658  N3  GUA  192      92.835  72.191 -25.153  1.00 65.71      A16S
ATOM  22659  C2  GUA  192      92.328  71.877 -26.328  1.00 65.71      A16S
ATOM  22660  N2  GUA  192      91.115  72.334 -26.669  1.00 65.71      A16S
ATOM  22661  N1  GUA  192      92.971  71.093 -27.254  1.00 65.71      A16S
ATOM  22662  C6  GUA  192      94.227  70.525 -27.085  1.00 65.71      A16S
ATOM  22663  O6  GUA  192      94.709  69.825 -27.977  1.00 65.71      A16S
ATOM  22664  C5  GUA  192      94.786  70.861 -25.831  1.00 65.71      A16S
ATOM  22665  N7  GUA  192      96.013  70.530 -25.274  1.00 65.71      A16S
ATOM  22666  C8  GUA  192      96.007  71.118 -24.110  1.00 65.71      A16S
ATOM  22667  C2' GUA  192      93.468  71.796 -21.857  1.00 78.30      A16S
ATOM  22668  O2' GUA  192      92.560  72.702 -21.273  1.00 78.30      A16S
ATOM  22669  C3' GUA  192      94.374  71.117 -20.843  1.00 78.30      A16S
ATOM  22670  O3' GUA  192      93.623  70.710 -19.709  1.00 78.30      A16S
ATOM  22671  P   GUA  193      92.934  69.256 -19.704  1.00 72.26      A16S
ATOM  22672  O1P GUA  193      92.405  69.034 -18.333  1.00 71.57      A16S
ATOM  22673  O2P GUA  193      93.898  68.289 -20.290  1.00 71.57      A16S
ATOM  22674  O5' GUA  193      91.714  69.387 -20.721  1.00 72.26      A16S
ATOM  22675  C5' GUA  193      90.738  70.399 -20.541  1.00 72.26      A16S
ATOM  22676  C4' GUA  193      89.817  70.471 -21.732  1.00 72.26      A16S
ATOM  22677  O4' GUA  193      90.576  70.782 -22.925  1.00 72.26      A16S
ATOM  22678  C1' GUA  193      89.873  70.304 -24.058  1.00 72.26      A16S
ATOM  22679  N9  GUA  193      90.761  69.448 -24.825  1.00 71.57      A16S
ATOM  22680  C4  GUA  193      90.546  69.010 -26.108  1.00 71.57      A16S
ATOM  22681  N3  GUA  193      89.483  69.312 -26.880  1.00 71.57      A16S
ATOM  22682  C2  GUA  193      89.560  68.745 -28.065  1.00 71.57      A16S
ATOM  22683  N2  GUA  193      88.588  68.942 -28.958  1.00 71.57      A16S
ATOM  22684  N1  GUA  193      90.595  67.943 -28.462  1.00 71.57      A16S
ATOM  22685  C6  GUA  193      91.700  67.617 -27.683  1.00 71.57      A16S
ATOM  22686  O6  GUA  193      92.586  66.881 -28.139  1.00 71.57      A16S
ATOM  22687  C5  GUA  193      91.631  68.220 -26.410  1.00 71.57      A16S
ATOM  22688  N7  GUA  193      92.513  68.163 -25.338  1.00 71.57      A16S
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ATOM	22758	O1P	GUA	197	83.008	51.632	-27.913	1.00	57.55	A16S	ATOM	22811	O2	CYT	199	94.877	51.825	-19.907	1.00	53.77	A16S
ATOM	22759	O2P	GUA	197	84.010	53.424	-26.377	1.00	57.55	A16S	ATOM	22812	N3	CYT	199	92.697	52.340	-20.225	1.00	53.77	A16S
ATOM	22760	O5'	GUA	197	85.366	52.344	-28.194	1.00	73.81	A16S	ATOM	22813	C4	CYT	199	91.555	52.041	-20.832	1.00	53.77	A16S
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ATOM	22762	C4'	GUA	197	86.970	51.197	-29.581	1.00	73.81	A16S	ATOM	22815	C5	CYT	199	91.444	50.947	-21.730	1.00	53.77	A16S
ATOM	22763	O4'	GUA	197	87.776	52.369	-29.873	1.00	73.81	A16S	ATOM	22816	C2'	CYT	199	95.389	48.962	-20.426	1.00	61.28	A16S
ATOM	22764	C1'	GUA	197	89.095	52.170	-29.380	1.00	73.81	A16S	ATOM	22817	O2'	CYT	199	96.789	48.861	-20.488	1.00	61.28	A16S
ATOM	22765	N9	GUA	197	89.410	53.243	-28.439	1.00	57.55	A16S	ATOM	22818	C3'	CYT	199	94.738	47.628	-20.744	1.00	61.28	A16S
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ATOM	22767	N3	GUA	197	91.833	53.048	-28.376	1.00	57.55	A16S	ATOM	22820	P	CYT	200	94.906	46.093	-18.638	1.00	67.86	A16S
ATOM	22768	C2	GUA	197	92.869	53.615	-27.781	1.00	57.55	A16S	ATOM	22821	O1P	CYT	200	95.781	44.943	-18.307	1.00	51.05	A16S
ATOM	22769	N2	GUA	197	94.104	53.182	-28.048	1.00	57.55	A16S	ATOM	22822	O2P	CYT	200	93.430	45.951	-18.586	1.00	51.05	A16S
ATOM	22770	N1	GUA	197	92.770	54.646	-26.885	1.00	57.55	A16S	ATOM	22823	O5'	CYT	200	95.314	47.297	-17.688	1.00	67.86	A16S
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ATOM	22772	O6	GUA	197	91.597	56.164	-25.665	1.00	57.55	A16S	ATOM	22825	C4'	CYT	200	96.748	48.509	-16.209	1.00	67.86	A16S
ATOM	22773	C5	GUA	197	90.453	54.643	-27.117	1.00	57.55	A16S	ATOM	22826	O4'	CYT	200	96.320	49.753	-16.811	1.00	67.86	A16S
ATOM	22774	N7	GUA	197	89.096	54.928	-27.001	1.00	57.55	A16S	ATOM	22827	C1'	CYT	200	95.699	50.560	-15.835	1.00	67.86	A16S
ATOM	22775	C8	GUA	197	88.519	54.079	-27.806	1.00	57.55	A16S	ATOM	22828	N1	CYT	200	94.359	50.893	-16.316	1.00	51.05	A16S
ATOM	22776	C2'	GUA	197	89.124	50.784	-28.730	1.00	73.81	A16S	ATOM	22829	C6	CYT	200	93.743	50.120	-17.257	1.00	51.05	A16S
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ATOM	22778	C3'	GUA	197	87.658	50.598	-28.371	1.00	73.81	A16S	ATOM	22831	O2	CYT	200	94.303	52.695	-14.941	1.00	51.05	A16S
ATOM	22779	O3'	GUA	197	87.347	49.227	-28.223	1.00	73.81	A16S	ATOM	22832	N3	CYT	200	92.487	52.337	-16.239	1.00	51.05	A16S
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ATOM	22783	O5'	URI	198	88.927	48.472	-26.404	1.00	59.19	A16S	ATOM	22836	C2'	CYT	200	95.712	49.784	-14.516	1.00	67.86	A16S
ATOM	22784	C5'	URI	198	89.807	47.676	-27.190	1.00	59.19	A16S	ATOM	22837	O2'	CYT	200	96.835	50.197	-13.763	1.00	67.86	A16S
ATOM	22785	C4'	URI	198	91.245	47.957	-26.822	1.00	59.19	A16S	ATOM	22838	C3'	CYT	200	95.836	48.345	-15.008	1.00	67.86	A16S
ATOM	22786	O4'	URI	198	91.570	49.342	-27.117	1.00	59.19	A16S	ATOM	22839	O3'	CYT	200	96.481	47.507	-14.048	1.00	67.86	A16S
ATOM	22787	C1'	URI	198	92.532	49.809	-26.184	1.00	59.19	A16S	ATOM	22840	P	ADE	201	95.642	46.384	-13.260	1.00	59.55	A16S
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ATOM	22790	C2	URI	198	92.861	51.722	-24.748	1.00	54.09	A16S	ATOM	22843	O5'	ADE	201	95.354	47.036	-11.839	1.00	59.55	A16S
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ATOM	22792	N3	URI	198	92.314	52.802	-24.113	1.00	54.09	A16S	ATOM	22845	C4'	ADE	201	95.012	49.025	-10.558	1.00	59.55	A16S
ATOM	22793	C4	URI	198	90.992	53.159	-24.090	1.00	54.09	A16S	ATOM	22846	O4'	ADE	201	94.277	50.265	-10.533	1.00	59.55	A16S
ATOM	22794	O4	URI	198	90.665	54.216	-23.547	1.00	54.09	A16S	ATOM	22847	C1'	ADE	201	93.974	50.614	-9.202	1.00	59.55	A16S
ATOM	22795	C5	URI	198	90.123	52.275	-24.806	1.00	54.09	A16S	ATOM	22848	N9	ADE	201	92.533	50.806	-9.136	1.00	73.48	A16S
ATOM	22796	C2'	URI	198	92.868	48.643	-25.266	1.00	59.19	A16S	ATOM	22849	C4	ADE	201	91.874	51.868	-8.572	1.00	73.48	A16S
ATOM	22797	O2'	URI	198	93.982	47.983	-25.819	1.00	59.19	A16S	ATOM	22850	N3	ADE	201	92.414	52.899	-7.899	1.00	73.48	A16S
ATOM	22798	C3'	URI	198	91.586	47.832	-25.353	1.00	59.19	A16S	ATOM	22851	C2	ADE	201	91.473	53.776	-7.553	1.00	73.48	A16S
ATOM	22799	O3'	URI	198	91.794	46.483	-25.009	1.00	59.19	A16S	ATOM	22852	N1	ADE	201	90.151	53.742	-7.791	1.00	73.48	A16S
ATOM	22800	P	CYT	199	91.607	46.022	-23.485	1.00	61.28	A16S	ATOM	22853	C6	ADE	201	89.645	52.687	-8.471	1.00	73.48	A16S
ATOM	22801	O1P	CYT	199	91.981	44.586	-23.451	1.00	53.77	A16S	ATOM	22854	N6	ADE	201	88.335	52.655	-8.724	1.00	73.48	A16S
ATOM	22802	O2P	CYT	199	90.272	46.454	-22.982	1.00	53.77	A16S	ATOM	22855	C5	ADE	201	90.540	51.687	-8.882	1.00	73.48	A16S
ATOM	22803	O5'	CYT	199	92.732	46.828	-22.704	1.00	61.28	A16S	ATOM	22856	N7	ADE	201	90.357	50.502	-9.577	1.00	73.48	A16S
ATOM	22804	C5'	CYT	199	94.099	46.573	-22.977	1.00	61.28	A16S	ATOM	22857	C8	ADE	201	91.566	50.012	-9.686	1.00	73.48	A16S
ATOM	22805	C4'	CYT	199	94.971	47.545	-22.238	1.00	61.28	A16S	ATOM	22858	C2'	ADE	201	94.593	49.570	-8.270	1.00	59.55	A16S
ATOM	22806	O4'	CYT	199	94.692	48.894	-22.686	1.00	61.28	A16S	ATOM	22859	O2'	ADE	201	95.810	50.084	-7.771	1.00	59.55	A16S
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ATOM	22808	N1	CYT	199	93.723	50.545	-21.355	1.00	53.77	A16S	ATOM	22861	O3'	ADE	201	95.955	47.628	-8.889	1.00	59.55	A16S

ATOM	22862	P	ADE	202	95.840	46.247	-8.074	1.00	60.13	A16S	ATOM	22915	C4	GUA	204	95.225	48.043	6.687	1.00	44.24	A16S
ATOM	22863	O1P	ADE	202	97.136	45.533	-8.231	1.00	56.53	A16S	ATOM	22916	N3	GUA	204	96.318	48.390	7.402	1.00	44.24	A16S
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ATOM	22865	O5'	ADE	202	95.732	46.707	-6.555	1.00	60.13	A16S	ATOM	22918	N2	GUA	204	97.135	50.026	8.791	1.00	44.24	A16S
ATOM	22866	C5'	ADE	202	96.867	47.207	-5.860	1.00	60.13	A16S	ATOM	22919	N1	GUA	204	94.993	50.278	7.990	1.00	44.24	A16S
ATOM	22867	C4'	ADE	202	96.411	47.982	-4.659	1.00	60.13	A16S	ATOM	22920	C6	GUA	204	93.857	49.938	7.260	1.00	44.24	A16S
ATOM	22868	O4'	ADE	202	95.478	48.987	-5.125	1.00	60.13	A16S	ATOM	22921	O6	GUA	204	92.863	50.676	7.281	1.00	44.24	A16S
ATOM	22869	C1'	ADE	202	94.387	49.086	-4.233	1.00	60.13	A16S	ATOM	22922	C5	GUA	204	94.030	48.716	6.565	1.00	44.24	A16S
ATOM	22870	N9	ADE	202	93.185	48.747	-4.984	1.00	56.53	A16S	ATOM	22923	N7	GUA	204	93.158	48.026	5.733	1.00	44.24	A16S
ATOM	22871	C4	ADE	202	92.074	49.536	-5.158	1.00	56.53	A16S	ATOM	22924	C8	GUA	204	93.821	46.962	5.377	1.00	44.24	A16S
ATOM	22872	N3	ADE	202	91.866	50.770	-4.675	1.00	56.53	A16S	ATOM	22925	C2'	GUA	204	96.079	44.850	6.914	1.00	60.73	A16S
ATOM	22873	C2	ADE	202	90.682	51.231	-5.067	1.00	56.53	A16S	ATOM	22926	O2'	GUA	204	97.300	44.144	6.924	1.00	60.73	A16S
ATOM	22874	N1	ADE	202	89.750	50.640	-5.819	1.00	56.53	A16S	ATOM	22927	C3'	GUA	204	94.949	43.921	6.520	1.00	60.73	A16S
ATOM	22875	C6	ADE	202	89.985	49.391	-6.274	1.00	56.53	A16S	ATOM	22928	O3'	GUA	204	95.090	42.664	7.154	1.00	60.73	A16S
ATOM	22876	N6	ADE	202	89.042	48.784	-6.999	1.00	56.53	A16S	ATOM	22929	P	GUA	205	94.541	42.460	8.651	1.00	56.04	A16S
ATOM	22877	C5	ADE	202	91.209	48.800	-5.945	1.00	56.53	A16S	ATOM	22930	O1P	GUA	205	95.033	41.115	9.069	1.00	55.55	A16S
ATOM	22878	N7	ADE	202	91.764	47.569	-6.262	1.00	56.53	A16S	ATOM	22931	O2P	GUA	205	93.081	42.760	8.658	1.00	55.55	A16S
ATOM	22879	C8	ADE	202	92.934	47.589	-5.668	1.00	56.53	A16S	ATOM	22932	O5'	GUA	205	95.306	43.554	9.521	1.00	56.04	A16S
ATOM	22880	C2'	ADE	202	94.674	48.170	-3.042	1.00	60.13	A16S	ATOM	22933	C5'	GUA	205	96.626	43.309	9.978	1.00	56.04	A16S
ATOM	22881	O2'	ADE	202	95.254	48.921	-1.995	1.00	60.13	A16S	ATOM	22934	C4'	GUA	205	97.134	44.491	10.755	1.00	56.04	A16S
ATOM	22882	C3'	ADE	202	95.626	47.149	-3.661	1.00	60.13	A16S	ATOM	22935	O4'	GUA	205	97.029	45.668	9.912	1.00	56.04	A16S
ATOM	22883	O3'	ADE	202	96.517	46.569	-2.707	1.00	60.13	A16S	ATOM	22936	C1'	GUA	205	96.781	46.805	10.718	1.00	56.04	A16S
ATOM	22884	P	ADE	203	96.685	44.968	-2.641	1.00	72.87	A16S	ATOM	22937	N9	GUA	205	95.465	47.315	10.389	1.00	55.55	A16S
ATOM	22885	O1P	ADE	203	95.358	44.377	-2.911	1.00	59.10	A16S	ATOM	22938	C4	GUA	205	94.920	48.465	10.875	1.00	55.55	A16S
ATOM	22886	O2P	ADE	203	97.853	44.540	-3.450	1.00	59.10	A16S	ATOM	22939	N3	GUA	205	95.530	49.332	11.704	1.00	55.55	A16S
ATOM	22887	O5'	ADE	203	97.050	44.694	-1.118	1.00	72.87	A16S	ATOM	22940	C2	GUA	205	94.757	50.357	11.993	1.00	55.55	A16S
ATOM	22888	C5'	ADE	203	96.375	43.692	-0.366	1.00	72.87	A16S	ATOM	22941	N2	GUA	205	95.216	51.332	12.782	1.00	55.55	A16S
ATOM	22889	C4'	ADE	203	95.823	44.304	0.887	1.00	72.87	A16S	ATOM	22942	N1	GUA	205	93.480	50.502	11.524	1.00	55.55	A16S
ATOM	22890	O4'	ADE	203	96.908	44.898	1.619	1.00	72.87	A16S	ATOM	22943	C6	GUA	205	92.831	49.607	10.680	1.00	55.55	A16S
ATOM	22891	C1'	ADE	203	96.511	46.140	2.138	1.00	72.87	A16S	ATOM	22944	O6	GUA	205	91.663	49.821	10.326	1.00	55.55	A16S
ATOM	22892	N9	ADE	203	97.623	47.060	1.960	1.00	59.10	A16S	ATOM	22945	C5	GUA	205	93.657	48.524	10.344	1.00	55.55	A16S
ATOM	22893	C4	ADE	203	98.019	48.010	2.859	1.00	59.10	A16S	ATOM	22946	N7	GUA	205	93.417	47.436	9.518	1.00	55.55	A16S
ATOM	22894	N3	ADE	203	97.376	48.384	3.973	1.00	59.10	A16S	ATOM	22947	C8	GUA	205	94.521	46.744	9.575	1.00	55.55	A16S
ATOM	22895	C2	ADE	203	98.112	49.234	4.668	1.00	59.10	A16S	ATOM	22948	C2'	GUA	205	96.761	46.333	12.165	1.00	56.04	A16S
ATOM	22896	N1	ADE	203	99.331	49.705	4.402	1.00	59.10	A16S	ATOM	22949	O2'	GUA	205	98.047	46.477	12.726	1.00	56.04	A16S
ATOM	22897	C6	ADE	203	99.949	49.302	3.272	1.00	59.10	A16S	ATOM	22950	C3'	GUA	205	96.330	44.888	11.980	1.00	56.04	A16S
ATOM	22898	N6	ADE	203	101.187	49.738	3.028	1.00	59.10	A16S	ATOM	22951	O3'	GUA	205	96.650	44.106	13.117	1.00	56.04	A16S
ATOM	22899	C5	ADE	203	99.259	48.429	2.436	1.00	59.10	A16S	ATOM	22952	P	GUA	206	95.626	44.054	14.353	1.00	67.83	A16S
ATOM	22900	N7	ADE	203	99.585	47.847	1.224	1.00	59.10	A16S	ATOM	22953	O1P	GUA	206	96.180	43.150	15.391	1.00	48.16	A16S
ATOM	22901	C8	ADE	203	98.566	47.067	0.970	1.00	59.10	A16S	ATOM	22954	O2P	GUA	206	94.268	43.813	13.810	1.00	48.16	A16S
ATOM	22902	C2'	ADE	203	95.097	46.488	1.672	1.00	72.87	A16S	ATOM	22955	O5'	GUA	206	95.657	45.524	14.941	1.00	67.83	A16S
ATOM	22903	O2'	ADE	203	94.202	46.440	2.763	1.00	72.87	A16S	ATOM	22956	C5'	GUA	206	96.835	46.040	15.523	1.00	67.83	A16S
ATOM	22904	C3'	ADE	203	94.828	45.418	0.615	1.00	72.87	A16S	ATOM	22957	C4'	GUA	206	96.511	47.301	16.261	1.00	67.83	A16S
ATOM	22905	O3'	ADE	203	93.500	44.868	0.612	1.00	72.87	A16S	ATOM	22958	O4'	GUA	206	96.070	48.315	15.324	1.00	67.83	A16S
ATOM	22906	P	GUA	204	92.960	43.957	1.857	1.00	60.73	A16S	ATOM	22959	C1'	GUA	206	95.017	49.067	15.896	1.00	67.83	A16S
ATOM	22907	O1P	GUA	204	92.631	42.638	1.270	1.00	44.24	A16S	ATOM	22960	N9	GUA	206	93.839	48.882	15.064	1.00	48.16	A16S
ATOM	22908	O2P	GUA	204	91.931	44.691	2.627	1.00	44.24	A16S	ATOM	22961	C4	GUA	206	92.796	49.756	14.932	1.00	48.16	A16S
ATOM	22909	O5'	GUA	204	94.180	43.711	2.844	1.00	60.73	A16S	ATOM	22962	N3	GUA	206	92.666	50.930	15.577	1.00	48.16	A16S
ATOM	22910	C5'	GUA	204	93.946	43.450	4.223	1.00	60.73	A16S	ATOM	22963	C2	GUA	206	91.565	51.560	15.226	1.00	48.16	A16S
ATOM	22911	C4'	GUA	204	95.174	43.788	5.027	1.00	60.73	A16S	ATOM	22964	N2	GUA	206	91.290	52.745	15.767	1.00	48.16	A16S
ATOM	22912	O4'	GUA	204	95.676	45.086	4.612	1.00	60.73	A16S	ATOM	22965	N1	GUA	206	90.654	51.075	14.318	1.00	48.16	A16S
ATOM	22913	C1'	GUA	204	96.062	45.835	5.746	1.00	60.73	A16S	ATOM	22966	C6	GUA	206	90.770	49.860	13.647	1.00	48.16	A16S
ATOM	22914	N9	GUA	204	95.080	46.903	5.925	1.00	44.24	A16S	ATOM	22967	O6	GUA	206	89.890	49.500	12.853	1.00	48.16	A16S

ATOM	22968	C5	GUA	206	91.951	49.181	14.009	1.00	48.16	A16S	ATOM	23021	O4'	URI	209	86.066	49.159	18.840	1.00	89.46	A16S
ATOM	22969	N7	GUA	206	92.448	47.962	13.579	1.00	48.16	A16S	ATOM	23022	C1'	URI	209	85.988	48.125	17.895	1.00	89.46	A16S
ATOM	22970	C8	GUA	206	93.565	47.821	14.239	1.00	48.16	A16S	ATOM	23023	N1	URI	209	86.927	47.051	18.236	1.00	89.23	A16S
ATOM	22971	C2'	GUA	206	94.837	48.575	17.327	1.00	67.83	A16S	ATOM	23024	C6	URI	209	87.714	47.122	19.360	1.00	89.23	A16S
ATOM	22972	O2'	GUA	206	95.620	49.383	18.180	1.00	67.83	A16S	ATOM	23025	C2	URI	209	87.047	45.999	17.344	1.00	89.23	A16S
ATOM	22973	C3'	GUA	206	95.340	47.144	17.199	1.00	67.83	A16S	ATOM	23026	O2	URI	209	86.300	45.847	16.392	1.00	89.23	A16S
ATOM	22974	O3'	GUA	206	95.779	46.572	18.416	1.00	67.83	A16S	ATOM	23027	N3	URI	209	88.069	45.128	17.616	1.00	89.23	A16S
ATOM	22975	P	CYT	207	94.712	45.860	19.375	1.00	85.22	A16S	ATOM	23028	C4	URI	209	88.944	45.184	18.683	1.00	89.23	A16S
ATOM	22976	O1P	CYT	207	95.370	45.755	20.710	1.00	42.41	A16S	ATOM	23029	O4	URI	209	89.920	44.431	18.700	1.00	89.23	A16S
ATOM	22977	O2P	CYT	207	94.126	44.645	18.730	1.00	42.41	A16S	ATOM	23030	C5	URI	209	88.692	46.250	19.608	1.00	89.23	A16S
ATOM	22978	O5'	CYT	207	93.564	46.946	19.457	1.00	85.22	A16S	ATOM	23031	C2'	URI	209	84.520	47.800	17.628	1.00	89.46	A16S
ATOM	22979	C5'	CYT	207	92.514	46.815	20.381	1.00	85.22	A16S	ATOM	23032	O2'	URI	209	84.257	48.070	16.263	1.00	89.46	A16S
ATOM	22980	C4'	CYT	207	92.176	48.165	20.924	1.00	85.22	A16S	ATOM	23033	C3'	URI	209	83.787	48.761	18.575	1.00	89.46	A16S
ATOM	22981	O4'	CYT	207	92.483	49.148	19.903	1.00	85.22	A16S	ATOM	23034	O3'	URI	209	82.708	49.313	17.828	1.00	89.46	A16S
ATOM	22982	C1'	CYT	207	91.353	49.960	19.687	1.00	85.22	A16S	ATOM	23035	P	URI	210	81.461	49.988	18.572	1.00	112.96	A16S
ATOM	22983	N1	CYT	207	90.674	49.437	18.492	1.00	42.41	A16S	ATOM	23036	O1P	URI	210	81.956	50.698	19.777	1.00	200.66	A16S
ATOM	22984	C6	CYT	207	91.043	48.243	17.931	1.00	42.41	A16S	ATOM	23037	O2P	URI	210	80.396	48.961	18.708	1.00	200.66	A16S
ATOM	22985	C2	CYT	207	89.634	50.181	17.941	1.00	42.41	A16S	ATOM	23038	O5'	URI	210	80.973	51.073	17.511	1.00	112.96	A16S
ATOM	22986	O2	CYT	207	89.330	51.258	18.475	1.00	42.41	A16S	ATOM	23039	C5'	URI	210	79.622	51.106	17.063	1.00	112.96	A16S
ATOM	22987	N3	CYT	207	88.985	49.710	16.845	1.00	42.41	A16S	ATOM	23040	C4'	URI	210	79.570	51.366	15.576	1.00	112.96	A16S
ATOM	22988	C4	CYT	207	89.348	48.539	16.312	1.00	42.41	A16S	ATOM	23041	O4'	URI	210	80.361	50.359	14.904	1.00	112.96	A16S
ATOM	22989	N4	CYT	207	88.680	48.107	15.240	1.00	42.41	A16S	ATOM	23042	C1'	URI	210	79.808	50.104	13.629	1.00	112.96	A16S
ATOM	22990	C5	CYT	207	90.413	47.759	16.856	1.00	42.41	A16S	ATOM	23043	N1	URI	210	79.704	48.653	13.442	1.00	200.66	A16S
ATOM	22991	C2'	CYT	207	90.506	49.833	20.955	1.00	85.22	A16S	ATOM	23044	C6	URI	210	79.672	47.790	14.511	1.00	200.66	A16S
ATOM	22992	O2'	CYT	207	91.042	50.699	21.933	1.00	85.22	A16S	ATOM	23045	C2	URI	210	79.645	48.185	12.145	1.00	200.66	A16S
ATOM	22993	C3'	CYT	207	90.707	48.357	21.263	1.00	85.22	A16S	ATOM	23046	O2	URI	210	79.669	48.923	11.175	1.00	200.66	A16S
ATOM	22994	O3'	CYT	207	90.388	47.850	22.567	1.00	85.22	A16S	ATOM	23047	N3	URI	210	79.559	46.821	12.024	1.00	200.66	A16S
ATOM	22995	P	URI	208	91.007	48.539	23.888	1.00	100.74	A16S	ATOM	23048	C4	URI	210	79.527	45.898	13.048	1.00	200.66	A16S
ATOM	22996	O1P	URI	208	92.344	49.110	23.576	1.00	130.97	A16S	ATOM	23049	O4	URI	210	79.455	44.697	12.777	1.00	200.66	A16S
ATOM	22997	O2P	URI	208	90.878	47.553	24.989	1.00	130.97	A16S	ATOM	23050	C5	URI	210	79.590	46.463	14.363	1.00	200.66	A16S
ATOM	22998	O5'	URI	208	90.024	49.757	24.182	1.00	100.74	A16S	ATOM	23051	C2'	URI	210	78.484	50.865	13.508	1.00	112.96	A16S
ATOM	22999	C5'	URI	208	88.655	49.530	24.499	1.00	100.74	A16S	ATOM	23052	O2'	URI	210	78.665	51.980	12.662	1.00	112.96	A16S
ATOM	23000	C4'	URI	208	87.841	50.772	24.223	1.00	100.74	A16S	ATOM	23053	C3'	URI	210	78.182	51.251	14.958	1.00	112.96	A16S
ATOM	23001	O4'	URI	208	88.292	51.862	25.059	1.00	100.74	A16S	ATOM	23054	O3'	URI	210	77.461	52.494	14.961	1.00	112.96	A16S
ATOM	23002	C1'	URI	208	88.024	53.090	24.409	1.00	100.74	A16S	ATOM	23055	P	GUA	211	78.241	53.894	15.182	1.00	151.93	A16S
ATOM	23003	N1	URI	208	89.170	53.991	24.600	1.00	130.97	A16S	ATOM	23056	O1P	GUA	211	78.656	53.985	16.603	1.00	68.76	A16S
ATOM	23004	C6	URI	208	90.323	53.561	25.215	1.00	130.97	A16S	ATOM	23057	O2P	GUA	211	77.458	55.003	14.587	1.00	68.76	A16S
ATOM	23005	C2	URI	208	89.046	55.297	24.154	1.00	130.97	A16S	ATOM	23058	O5'	GUA	211	79.531	53.736	14.266	1.00	151.93	A16S
ATOM	23006	O2	URI	208	88.043	55.716	23.599	1.00	130.97	A16S	ATOM	23059	C5'	GUA	211	80.150	54.860	13.650	1.00	151.93	A16S
ATOM	23007	N3	URI	208	90.140	56.095	24.384	1.00	130.97	A16S	ATOM	23060	C4'	GUA	211	81.438	55.162	14.360	1.00	151.93	A16S
ATOM	23008	C4	URI	208	91.319	55.732	24.999	1.00	130.97	A16S	ATOM	23061	O4'	GUA	211	81.984	53.923	14.842	1.00	151.93	A16S
ATOM	23009	O4	URI	208	92.220	56.567	25.124	1.00	130.97	A16S	ATOM	23062	C1'	GUA	211	83.382	54.036	14.918	1.00	151.93	A16S
ATOM	23010	C5	URI	208	91.372	54.365	25.428	1.00	130.97	A16S	ATOM	23063	N9	GUA	211	83.967	52.828	14.358	1.00	68.76	A16S
ATOM	23011	C2'	URI	208	87.603	52.800	22.961	1.00	100.74	A16S	ATOM	23064	C4	GUA	211	85.006	52.133	14.904	1.00	68.76	A16S
ATOM	23012	O2'	URI	208	86.239	53.116	22.770	1.00	100.74	A16S	ATOM	23065	N3	GUA	211	85.679	52.484	16.011	1.00	68.76	A16S
ATOM	23013	C3'	URI	208	87.944	51.316	22.811	1.00	100.74	A16S	ATOM	23066	C2	GUA	211	86.598	51.600	16.325	1.00	68.76	A16S
ATOM	23014	O3'	URI	208	87.063	50.584	21.961	1.00	100.74	A16S	ATOM	23067	N2	GUA	211	87.358	51.802	17.397	1.00	68.76	A16S
ATOM	23015	P	URI	209	85.623	50.123	22.515	1.00	89.46	A16S	ATOM	23068	N1	GUA	211	86.836	50.454	15.609	1.00	68.76	A16S
ATOM	23016	O1P	URI	209	84.946	51.275	23.157	1.00	89.23	A16S	ATOM	23069	C6	GUA	211	86.149	50.072	14.462	1.00	68.76	A16S
ATOM	23017	O2P	URI	209	85.855	48.885	23.299	1.00	89.23	A16S	ATOM	23070	O6	GUA	211	86.428	49.006	13.899	1.00	68.76	A16S
ATOM	23018	O5'	URI	209	84.805	49.710	21.213	1.00	89.46	A16S	ATOM	23071	C5	GUA	211	85.166	51.023	14.109	1.00	68.76	A16S
ATOM	23019	C5'	URI	209	84.669	50.606	20.128	1.00	89.46	A16S	ATOM	23072	N7	GUA	211	84.265	51.040	13.053	1.00	68.76	A16S
ATOM	23020	C4'	URI	209	84.809	49.858	18.833	1.00	89.46	A16S	ATOM	23073	C8	GUA	211	83.578	52.136	13.236	1.00	68.76	A16S

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ATOM  23074  C2' GUA  211      83.805  55.378  14.314  1.00151.93      A16S
ATOM  23075  O2' GUA  211      84.100  56.267  15.370  1.00151.93      A16S
ATOM  23076  C3' GUA  211      82.553  55.806  13.555  1.00151.93      A16S
ATOM  23077  O3' GUA  211      82.406  57.214  13.648  1.00151.93      A16S
ATOM  23078  P   CYT  212      83.451  58.187  12.909  1.00119.87      A16S
ATOM  23079  O1P CYT  212      83.032  59.559  13.302  1.00 70.66      A16S
ATOM  23080  O2P CYT  212      83.524  57.816  11.466  1.00 70.66      A16S
ATOM  23081  O5' CYT  212      84.863  57.918  13.605  1.00119.87      A16S
ATOM  23082  C5' CYT  212      85.416  58.883  14.500  1.00119.87      A16S
ATOM  23083  C4' CYT  212      86.764  58.437  15.031  1.00119.87      A16S
ATOM  23084  O4' CYT  212      86.652  57.099  15.580  1.00119.87      A16S
ATOM  23085  C1' CYT  212      87.929  56.477  15.566  1.00119.87      A16S
ATOM  23086  N1  CYT  212      87.882  55.268  14.738  1.00 70.66      A16S
ATOM  23087  C6  CYT  212      87.041  55.166  13.666  1.00 70.66      A16S
ATOM  23088  C2  CYT  212      88.746  54.228  15.056  1.00 70.66      A16S
ATOM  23089  O2  CYT  212      89.464  54.341  16.060  1.00 70.66      A16S
ATOM  23090  N3  CYT  212      88.775  53.127  14.273  1.00 70.66      A16S
ATOM  23091  C4  CYT  212      87.962  53.041  13.219  1.00 70.66      A16S
ATOM  23092  N4  CYT  212      88.025  51.940  12.474  1.00 70.66      A16S
ATOM  23093  C5  CYT  212      87.049  54.080  12.886  1.00 70.66      A16S
ATOM  23094  C2' CYT  212      88.882  57.469  14.918  1.00119.87      A16S
ATOM  23095  O2' CYT  212      89.455  58.276  15.913  1.00119.87      A16S
ATOM  23096  C3' CYT  212      87.924  58.273  14.065  1.00119.87      A16S
ATOM  23097  O3' CYT  212      88.567  59.489  13.740  1.00119.87      A16S
ATOM  23098  P   CYT  213      89.722  59.490  12.623  1.00 79.49      A16S
ATOM  23099  O1P CYT  213      90.215  60.885  12.514  1.00 54.81      A16S
ATOM  23100  O2P CYT  213      89.173  58.801  11.426  1.00 54.81      A16S
ATOM  23101  O5' CYT  213      90.899  58.606  13.240  1.00 79.49      A16S
ATOM  23102  C5' CYT  213      91.700  59.104  14.311  1.00 79.49      A16S
ATOM  23103  C4' CYT  213      92.828  58.143  14.632  1.00 79.49      A16S
ATOM  23104  O4' CYT  213      92.289  56.833  14.949  1.00 79.49      A16S
ATOM  23105  C1' CYT  213      93.204  55.829  14.541  1.00 79.49      A16S
ATOM  23106  N1  CYT  213      92.556  55.001  13.520  1.00 54.81      A16S
ATOM  23107  C6  CYT  213      91.372  55.377  12.954  1.00 54.81      A16S
ATOM  23108  C2  CYT  213      93.174  53.813  13.136  1.00 54.81      A16S
ATOM  23109  O2  CYT  213      94.250  53.507  13.662  1.00 54.81      A16S
ATOM  23110  N3  CYT  213      92.587  53.031  12.203  1.00 54.81      A16S
ATOM  23111  C4  CYT  213      91.426  53.399  11.665  1.00 54.81      A16S
ATOM  23112  N4  CYT  213      90.875  52.594  10.764  1.00 54.81      A16S
ATOM  23113  C5  CYT  213      90.776  54.612  12.031  1.00 54.81      A16S
ATOM  23114  C2' CYT  213      94.429  56.546  13.986  1.00 79.49      A16S
ATOM  23115  O2' CYT  213      95.359  56.769  15.023  1.00 79.49      A16S
ATOM  23116  C3' CYT  213      93.807  57.846  13.512  1.00 79.49      A16S
ATOM  23117  O3' CYT  213      94.797  58.847  13.433  1.00 79.49      A16S
ATOM  23118  P   CYT  214      95.455  59.192  12.016  1.00 79.27      A16S
ATOM  23119  O1P CYT  214      96.239  60.415  12.276  1.00 44.67      A16S
ATOM  23120  O2P CYT  214      94.411  59.196  10.958  1.00 44.67      A16S
ATOM  23121  O5' CYT  214      96.414  57.959  11.718  1.00 79.27      A16S
ATOM  23122  C5' CYT  214      97.557  57.716  12.516  1.00 79.27      A16S
ATOM  23123  C4' CYT  214      98.191  56.410  12.121  1.00 79.27      A16S
ATOM  23124  O4' CYT  214      97.277  55.321  12.421  1.00 79.27      A16S
ATOM  23125  C1' CYT  214      97.476  54.266  11.489  1.00 79.27      A16S
ATOM  23126  N1  CYT  214      96.233  54.061  10.729  1.00 44.67      A16S
ATOM  23127  C6  CYT  214      95.225  54.977  10.757  1.00 44.67      A16S
ATOM  23128  C2  CYT  214      96.107  52.905   9.965  1.00 44.67      A16S
ATOM  23129  O2  CYT  214      97.037  52.092   9.965  1.00 44.67      A16S
ATOM  23130  N3  CYT  214      94.983  52.702   9.245  1.00 44.67      A16S
ATOM  23131  C4  CYT  214      94.012  53.607   9.268  1.00 44.67      A16S
ATOM  23132  N4  CYT  214      92.938  53.383   8.528  1.00 44.67      A16S
ATOM  23133  C5  CYT  214      94.106  54.790  10.048  1.00 44.67      A16S
ATOM  23134  C2' CYT  214      98.607  54.713  10.569  1.00 79.27      A16S
ATOM  23135  O2' CYT  214      99.846  54.305  11.109  1.00 79.27      A16S
ATOM  23136  C3' CYT  214      98.442  56.217  10.638  1.00 79.27      A16S
ATOM  23137  O3' CYT  214      99.606  56.878  10.182  1.00 79.27      A16S
ATOM  23138  P   GUA  215      99.575  57.632   8.764  1.00 66.37      A16S
ATOM  23139  O1P GUA  215     100.938  58.192   8.596  1.00 56.25      A16S
ATOM  23140  O2P GUA  215      98.400  58.537   8.736  1.00 56.25      A16S
ATOM  23141  O5' GUA  215      99.324  56.475   7.689  1.00 66.37      A16S
ATOM  23142  C5' GUA  215     100.339  55.514   7.438  1.00 66.37      A16S
ATOM  23143  C4' GUA  215      99.792  54.257   6.784  1.00 66.37      A16S
ATOM  23144  O4' GUA  215      98.578  53.771   7.428  1.00 66.37      A16S
ATOM  23145  C1' GUA  215      97.943  52.842   6.551  1.00 66.37      A16S
ATOM  23146  N9  GUA  215      96.567  53.245   6.310  1.00 56.25      A16S
ATOM  23147  C4  GUA  215      95.678  52.570   5.521  1.00 56.25      A16S
ATOM  23148  N3  GUA  215      95.926  51.422   4.862  1.00 56.25      A16S
ATOM  23149  C2  GUA  215      94.870  51.004   4.183  1.00 56.25      A16S
ATOM  23150  N2  GUA  215      94.938  49.869   3.473  1.00 56.25      A16S
ATOM  23151  N1  GUA  215      93.671  51.668   4.149  1.00 56.25      A16S
ATOM  23152  C6  GUA  215      93.401  52.857   4.815  1.00 56.25      A16S
ATOM  23153  O6  GUA  215      92.290  53.381   4.709  1.00 56.25      A16S
ATOM  23154  C5  GUA  215      94.520  53.310   5.554  1.00 56.25      A16S
ATOM  23155  N7  GUA  215      94.677  54.431   6.354  1.00 56.25      A16S
ATOM  23156  C8  GUA  215      95.907  54.348   6.785  1.00 56.25      A16S
ATOM  23157  C2' GUA  215      98.711  52.905   5.234  1.00 66.37      A16S
ATOM  23158  O2' GUA  215      99.710  51.902   5.226  1.00 66.37      A16S
ATOM  23159  C3' GUA  215      99.342  54.286   5.339  1.00 66.37      A16S
ATOM  23160  O3' GUA  215     100.425  54.351   4.438  1.00 66.37      A16S
ATOM  23161  P   CYT  216     100.165  54.840   2.934  1.00 51.95      A16S
ATOM  23162  O1P CYT  216     101.520  54.923   2.312  1.00 50.23      A16S
ATOM  23163  O2P CYT  216      99.288  56.039   2.989  1.00 50.23      A16S
ATOM  23164  O5' CYT  216      99.333  53.667   2.236  1.00 51.95      A16S
ATOM  23165  C5' CYT  216      99.967  52.453   1.850  1.00 51.95      A16S
ATOM  23166  C4' CYT  216      99.009  51.592   1.077  1.00 51.95      A16S
ATOM  23167  O4' CYT  216      97.801  51.457   1.858  1.00 51.95      A16S
ATOM  23168  C1' CYT  216      96.674  51.403   1.003  1.00 51.95      A16S
ATOM  23169  N1  CYT  216      95.817  52.553   1.292  1.00 50.23      A16S
ATOM  23170  C6  CYT  216      96.177  53.497   2.215  1.00 50.23      A16S
ATOM  23171  C2  CYT  216      94.622  52.668   0.593  1.00 50.23      A16S
ATOM  23172  O2  CYT  216      94.325  51.777  -0.221  1.00 50.23      A16S
ATOM  23173  N3  CYT  216      93.822  53.734   0.819  1.00 50.23      A16S
ATOM  23174  C4  CYT  216      94.185  54.656   1.714  1.00 50.23      A16S
ATOM  23175  N4  CYT  216      93.378  55.701   1.894  1.00 50.23      A16S
ATOM  23176  C5  CYT  216      95.395  54.550   2.459  1.00 50.23      A16S
ATOM  23177  C2' CYT  216      97.192  51.459  -0.425  1.00 51.95      A16S
ATOM  23178  O2' CYT  216      97.327  50.145  -0.911  1.00 51.95      A16S
ATOM  23179  C3' CYT  216      98.514  52.182  -0.222  1.00 51.95      A16S
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ATOM	23180	O3'	CYT	216	99.414	51.911	-1.276	1.00	51.95	A16S	ATOM	23233	N3	CYT	219	94.373	62.319	-6.776	1.00	49.62	A16S
ATOM	23181	P	URI	217	99.534	52.950	-2.487	1.00	57.57	A16S	ATOM	23234	C4	CYT	219	95.372	61.506	-6.452	1.00	49.62	A16S
ATOM	23182	O1P	URI	217	100.605	52.442	-3.371	1.00	48.24	A16S	ATOM	23235	N4	CYT	219	95.918	61.650	-5.252	1.00	49.62	A16S
ATOM	23183	O2P	URI	217	99.626	54.331	-1.929	1.00	48.24	A16S	ATOM	23236	C5	CYT	219	95.864	60.519	-7.352	1.00	49.62	A16S
ATOM	23184	O5'	URI	217	98.153	52.780	-3.242	1.00	57.57	A16S	ATOM	23237	C2'	CYT	219	94.311	62.479	-11.064	1.00	52.17	A16S
ATOM	23185	C5'	URI	217	97.882	51.588	-3.939	1.00	57.57	A16S	ATOM	23238	O2'	CYT	219	93.310	63.010	-11.902	1.00	52.17	A16S
ATOM	23186	C4'	URI	217	96.719	51.798	-4.855	1.00	57.57	A16S	ATOM	23239	C3'	CYT	219	95.421	61.790	-11.839	1.00	52.17	A16S
ATOM	23187	O4'	URI	217	95.522	51.977	-4.064	1.00	57.57	A16S	ATOM	23240	O3'	CYT	219	95.754	62.497	-13.021	1.00	52.17	A16S
ATOM	23188	C1'	URI	217	94.685	52.929	-4.687	1.00	57.57	A16S	ATOM	23241	P	CYT	220	97.015	63.493	-13.008	1.00	49.54	A16S
ATOM	23189	N1	URI	217	94.551	54.066	-3.775	1.00	48.24	A16S	ATOM	23242	O1P	CYT	220	97.388	63.740	-14.432	1.00	51.84	A16S
ATOM	23190	C6	URI	217	95.392	54.238	-2.707	1.00	48.24	A16S	ATOM	23243	O2P	CYT	220	98.031	62.968	-12.059	1.00	51.84	A16S
ATOM	23191	C2	URI	217	93.528	54.930	-4.014	1.00	48.24	A16S	ATOM	23244	O5'	CYT	220	96.427	64.829	-12.378	1.00	49.54	A16S
ATOM	23192	O2	URI	217	92.805	54.824	-4.979	1.00	48.24	A16S	ATOM	23245	C5'	CYT	220	95.456	65.586	-13.081	1.00	49.54	A16S
ATOM	23193	N3	URI	217	93.376	55.923	-3.087	1.00	48.24	A16S	ATOM	23246	C4'	CYT	220	94.910	66.663	-12.195	1.00	49.54	A16S
ATOM	23194	C4	URI	217	94.142	56.134	-1.970	1.00	48.24	A16S	ATOM	23247	O4'	CYT	220	94.352	66.044	-11.009	1.00	49.54	A16S
ATOM	23195	O4	URI	217	93.789	56.984	-1.150	1.00	48.24	A16S	ATOM	23248	C1'	CYT	220	94.421	66.954	-9.929	1.00	49.54	A16S
ATOM	23196	C5	URI	217	95.228	55.216	-1.816	1.00	48.24	A16S	ATOM	23249	N1	CYT	220	95.096	66.301	-8.803	1.00	51.84	A16S
ATOM	23197	C2'	URI	217	95.326	53.273	-6.025	1.00	57.57	A16S	ATOM	23250	C6	CYT	220	95.825	65.156	-8.967	1.00	51.84	A16S
ATOM	23198	O2'	URI	217	94.868	52.337	-6.978	1.00	57.57	A16S	ATOM	23251	C2	CYT	220	94.991	66.893	-7.552	1.00	51.84	A16S
ATOM	23199	C3'	URI	217	96.790	53.063	-5.686	1.00	57.57	A16S	ATOM	23252	O2	CYT	220	94.284	67.899	-7.437	1.00	51.84	A16S
ATOM	23200	O3'	URI	217	97.597	52.869	-6.832	1.00	57.57	A16S	ATOM	23253	N3	CYT	220	95.651	66.360	-6.501	1.00	51.84	A16S
ATOM	23201	P	URI	218	98.485	54.082	-7.383	1.00	62.88	A16S	ATOM	23254	C4	CYT	220	96.389	65.266	-6.670	1.00	51.84	A16S
ATOM	23202	O1P	URI	218	99.552	53.496	-8.243	1.00	51.22	A16S	ATOM	23255	N4	CYT	220	97.055	64.803	-5.614	1.00	51.84	A16S
ATOM	23203	O2P	URI	218	98.856	54.943	-6.225	1.00	51.22	A16S	ATOM	23256	C5	CYT	220	96.484	64.606	-7.934	1.00	51.84	A16S
ATOM	23204	O5'	URI	218	97.463	54.862	-8.315	1.00	62.88	A16S	ATOM	23257	C2'	CYT	220	95.168	68.190	-10.434	1.00	49.54	A16S
ATOM	23205	C5'	URI	218	96.898	54.215	-9.437	1.00	62.88	A16S	ATOM	23258	O2'	CYT	220	94.231	69.152	-10.857	1.00	49.54	A16S
ATOM	23206	C4'	URI	218	95.748	55.018	-9.962	1.00	62.88	A16S	ATOM	23259	C3'	CYT	220	95.933	67.615	-11.615	1.00	49.54	A16S
ATOM	23207	O4'	URI	218	94.671	55.004	-8.994	1.00	62.88	A16S	ATOM	23260	O3'	CYT	220	96.294	68.613	-12.562	1.00	49.54	A16S
ATOM	23208	C1'	URI	218	93.965	56.232	-9.052	1.00	62.88	A16S	ATOM	23261	P	GUA	221	97.734	69.329	-12.460	1.00	64.80	A16S
ATOM	23209	N1	URI	218	94.126	56.898	-7.756	1.00	51.22	A16S	ATOM	23262	O1P	GUA	221	97.767	70.295	-13.573	1.00	53.16	A16S
ATOM	23210	C6	URI	218	95.110	56.514	-6.890	1.00	51.22	A16S	ATOM	23263	O2P	GUA	221	98.799	68.323	-12.351	1.00	53.16	A16S
ATOM	23211	C2	URI	218	93.259	57.923	-7.443	1.00	51.22	A16S	ATOM	23264	O5'	GUA	221	97.695	70.122	-11.080	1.00	64.80	A16S
ATOM	23212	O2	URI	218	92.359	58.282	-8.191	1.00	51.22	A16S	ATOM	23265	C5'	GUA	221	96.912	71.293	-10.963	1.00	64.80	A16S
ATOM	23213	N3	URI	218	93.483	58.513	-6.222	1.00	51.22	A16S	ATOM	23266	C4'	GUA	221	96.890	71.787	-9.539	1.00	64.80	A16S
ATOM	23214	C4	URI	218	94.462	58.179	-5.311	1.00	51.22	A16S	ATOM	23267	O4'	GUA	221	96.316	70.780	-8.663	1.00	64.80	A16S
ATOM	23215	O4	URI	218	94.573	58.827	-4.272	1.00	51.22	A16S	ATOM	23268	C1'	GUA	221	96.779	71.002	-7.339	1.00	64.80	A16S
ATOM	23216	C5	URI	218	95.302	57.102	-5.711	1.00	51.22	A16S	ATOM	23269	N9	GUA	221	97.472	69.811	-6.871	1.00	53.16	A16S
ATOM	23217	C2'	URI	218	94.592	57.026	-10.196	1.00	62.88	A16S	ATOM	23270	C4	GUA	221	97.845	69.578	-5.580	1.00	53.16	A16S
ATOM	23218	O2'	URI	218	93.955	56.652	-11.404	1.00	62.88	A16S	ATOM	23271	N3	GUA	221	97.576	70.377	-4.535	1.00	53.16	A16S
ATOM	23219	C3'	URI	218	96.013	56.495	-10.153	1.00	62.88	A16S	ATOM	23272	C2	GUA	221	98.101	69.917	-3.417	1.00	53.16	A16S
ATOM	23220	O3'	URI	218	96.698	56.727	-11.370	1.00	62.88	A16S	ATOM	23273	N2	GUA	221	97.918	70.594	-2.277	1.00	53.16	A16S
ATOM	23221	P	CYT	219	97.706	57.973	-11.496	1.00	52.17	A16S	ATOM	23274	N1	GUA	221	98.840	68.762	-3.333	1.00	53.16	A16S
ATOM	23222	O1P	CYT	219	98.344	57.812	-12.823	1.00	49.62	A16S	ATOM	23275	C6	GUA	221	99.127	67.923	-4.400	1.00	53.16	A16S
ATOM	23223	O2P	CYT	219	98.549	58.097	-10.289	1.00	49.62	A16S	ATOM	23276	O6	GUA	221	99.810	66.914	-4.218	1.00	53.16	A16S
ATOM	23224	O5'	CYT	219	96.750	59.242	-11.529	1.00	52.17	A16S	ATOM	23277	C5	GUA	221	98.554	68.402	-5.608	1.00	53.16	A16S
ATOM	23225	C5'	CYT	219	95.747	59.357	-12.518	1.00	52.17	A16S	ATOM	23278	N7	GUA	221	98.585	67.878	-6.892	1.00	53.16	A16S
ATOM	23226	C4'	CYT	219	94.790	60.453	-12.152	1.00	52.17	A16S	ATOM	23279	C8	GUA	221	97.922	68.745	-7.607	1.00	53.16	A16S
ATOM	23227	O4'	CYT	219	94.141	60.122	-10.902	1.00	52.17	A16S	ATOM	23280	C2'	GUA	221	97.776	72.159	-7.411	1.00	64.80	A16S
ATOM	23228	C1'	CYT	219	93.748	61.314	-10.254	1.00	52.17	A16S	ATOM	23281	O2'	GUA	221	97.125	73.383	-7.129	1.00	64.80	A16S
ATOM	23229	N1	CYT	219	94.309	61.317	-8.914	1.00	49.62	A16S	ATOM	23282	C3'	GUA	221	98.217	72.063	-8.862	1.00	64.80	A16S
ATOM	23230	C6	CYT	219	95.304	60.456	-8.561	1.00	49.62	A16S	ATOM	23283	O3'	GUA	221	98.820	73.267	-9.297	1.00	64.80	A16S
ATOM	23231	C2	CYT	219	93.825	62.246	-8.005	1.00	49.62	A16S	ATOM	23284	P	GUA	222	100.408	73.455	-9.130	1.00	65.96	A16S
ATOM	23232	O2	CYT	219	92.897	62.990	-8.355	1.00	49.62	A16S	ATOM	23285	O1P	GUA	222	100.743	74.737	-9.798	1.00	50.29	A16S

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ATOM  23286  O2P GUA  222     101.113  72.202  -9.541  1.00 50.29      A16S
ATOM  23287  O5' GUA  222     100.585  73.679  -7.563  1.00 65.96      A16S
ATOM  23288  C5' GUA  222      99.870  74.711  -6.903  1.00 65.96      A16S
ATOM  23289  C4' GUA  222     100.021  74.578  -5.413  1.00 65.96      A16S
ATOM  23290  O4' GUA  222      99.542  73.275  -4.992  1.00 65.96      A16S
ATOM  23291  C1' GUA  222     100.272  72.855  -3.852  1.00 65.96      A16S
ATOM  23292  N9  GUA  222     100.932  71.591  -4.151  1.00 50.29      A16S
ATOM  23293  C4  GUA  222     101.588  70.803  -3.242  1.00 50.29      A16S
ATOM  23294  N3  GUA  222     101.737  71.071  -1.925  1.00 50.29      A16S
ATOM  23295  C2  GUA  222     102.411  70.116  -1.301  1.00 50.29      A16S
ATOM  23296  N2  GUA  222     102.649  70.213   0.015  1.00 50.29      A16S
ATOM  23297  N1  GUA  222     102.898  68.990  -1.924  1.00 50.29      A16S
ATOM  23298  C6  GUA  222     102.745  68.694  -3.274  1.00 50.29      A16S
ATOM  23299  O6  GUA  222     103.200  67.644  -3.724  1.00 50.29      A16S
ATOM  23300  C5  GUA  222     102.033  69.713  -3.957  1.00 50.29      A16S
ATOM  23301  N7  GUA  222     101.677  69.821  -5.294  1.00 50.29      A16S
ATOM  23302  C8  GUA  222     101.024  70.949  -5.362  1.00 50.29      A16S
ATOM  23303  C2' GUA  222     101.285  73.950  -3.531  1.00 65.96      A16S
ATOM  23304  O2' GUA  222     100.735  74.808  -2.555  1.00 65.96      A16S
ATOM  23305  C3' GUA  222     101.445  74.609  -4.893  1.00 65.96      A16S
ATOM  23306  O3' GUA  222     101.902  75.945  -4.772  1.00 65.96      A16S
ATOM  23307  P   ADE  223     103.441  76.291  -5.069  1.00 53.84      A16S
ATOM  23308  O1P ADE  223     103.577  77.772  -4.984  1.00 51.85      A16S
ATOM  23309  O2P ADE  223     103.856  75.583  -6.304  1.00 51.85      A16S
ATOM  23310  O5' ADE  223     104.223  75.647  -3.845  1.00 53.84      A16S
ATOM  23311  C5' ADE  223     103.980  76.103  -2.528  1.00 53.84      A16S
ATOM  23312  C4' ADE  223     104.596  75.163  -1.533  1.00 53.84      A16S
ATOM  23313  O4' ADE  223     103.942  73.868  -1.595  1.00 53.84      A16S
ATOM  23314  C1' ADE  223     104.885  72.843  -1.336  1.00 53.84      A16S
ATOM  23315  N9  ADE  223     104.991  72.026  -2.538  1.00 51.85      A16S
ATOM  23316  C4  ADE  223     105.543  70.774  -2.629  1.00 51.85      A16S
ATOM  23317  N3  ADE  223     106.063  70.041  -1.634  1.00 51.85      A16S
ATOM  23318  C2  ADE  223     106.534  68.896  -2.099  1.00 51.85      A16S
ATOM  23319  N1  ADE  223     106.550  68.435  -3.349  1.00 51.85      A16S
ATOM  23320  C6  ADE  223     106.022  69.201  -4.327  1.00 51.85      A16S
ATOM  23321  N6  ADE  223     106.054  68.753  -5.587  1.00 51.85      A16S
ATOM  23322  C5  ADE  223     105.479  70.431  -3.963  1.00 51.85      A16S
ATOM  23323  N7  ADE  223     104.869  71.433  -4.701  1.00 51.85      A16S
ATOM  23324  C8  ADE  223     104.594  72.353  -3.808  1.00 51.85      A16S
ATOM  23325  C2' ADE  223     106.209  73.538  -1.014  1.00 53.84      A16S
ATOM  23326  O2' ADE  223     106.323  73.713   0.385  1.00 53.84      A16S
ATOM  23327  C3' ADE  223     106.047  74.842  -1.784  1.00 53.84      A16S
ATOM  23328  O3' ADE  223     106.863  75.895  -1.310  1.00 53.84      A16S
ATOM  23329  P   URI  224     108.186  76.292  -2.127  1.00 50.92      A16S
ATOM  23330  O1P URI  224     108.750  77.537  -1.529  1.00 39.68      A16S
ATOM  23331  O2P URI  224     107.865  76.236  -3.583  1.00 39.68      A16S
ATOM  23332  O5' URI  224     109.192  75.118  -1.777  1.00 50.92      A16S
ATOM  23333  C5' URI  224     109.528  74.871  -0.432  1.00 50.92      A16S
ATOM  23334  C4' URI  224     110.179  73.532  -0.305  1.00 50.92      A16S
ATOM  23335  O4' URI  224     109.250  72.489  -0.688  1.00 50.92      A16S
ATOM  23336  C1' URI  224     109.980  71.376  -1.174  1.00 50.92      A16S
ATOM  23337  N1  URI  224     109.559  71.097  -2.549  1.00 39.68      A16S
ATOM  23338  C6  URI  224     108.872  72.012  -3.292  1.00 39.68      A16S
ATOM  23339  C2  URI  224     109.897  69.872  -3.067  1.00 39.68      A16S
ATOM  23340  O2  URI  224     110.500  69.038  -2.430  1.00 39.68      A16S
ATOM  23341  N3  URI  224     109.510  69.658  -4.360  1.00 39.68      A16S
ATOM  23342  C4  URI  224     108.840  70.529  -5.170  1.00 39.68      A16S
ATOM  23343  O4  URI  224     108.593  70.202  -6.332  1.00 39.68      A16S
ATOM  23344  C5  URI  224     108.512  71.780  -4.555  1.00 39.68      A16S
ATOM  23345  C2' URI  224     111.452  71.767  -1.121  1.00 50.92      A16S
ATOM  23346  O2' URI  224     111.942  71.359   0.136  1.00 50.92      A16S
ATOM  23347  C3' URI  224     111.344  73.280  -1.232  1.00 50.92      A16S
ATOM  23348  O3' URI  224     112.499  73.965  -0.775  1.00 50.92      A16S
ATOM  23349  P   GUA  225     113.655  74.357  -1.820  1.00 43.33      A16S
ATOM  23350  O1P GUA  225     114.711  75.022  -1.018  1.00 38.17      A16S
ATOM  23351  O2P GUA  225     113.075  75.045  -2.994  1.00 38.17      A16S
ATOM  23352  O5' GUA  225     114.189  72.951  -2.338  1.00 43.33      A16S
ATOM  23353  C5' GUA  225     114.907  72.090  -1.468  1.00 43.33      A16S
ATOM  23354  C4' GUA  225     115.134  70.763  -2.130  1.00 43.33      A16S
ATOM  23355  O4' GUA  225     113.846  70.207  -2.500  1.00 43.33      A16S
ATOM  23356  C1' GUA  225     114.001  69.400  -3.662  1.00 43.33      A16S
ATOM  23357  N9  GUA  225     113.141  69.914  -4.721  1.00 38.17      A16S
ATOM  23358  C4  GUA  225     112.901  69.296  -5.909  1.00 38.17      A16S
ATOM  23359  N3  GUA  225     113.394  68.107  -6.282  1.00 38.17      A16S
ATOM  23360  C2  GUA  225     112.972  67.755  -7.482  1.00 38.17      A16S
ATOM  23361  N2  GUA  225     113.325  66.571  -7.999  1.00 38.17      A16S
ATOM  23362  N1  GUA  225     112.161  68.533  -8.266  1.00 38.17      A16S
ATOM  23363  C6  GUA  225     111.659  69.773  -7.909  1.00 38.17      A16S
ATOM  23364  O6  GUA  225     110.956  70.402  -8.711  1.00 38.17      A16S
ATOM  23365  C5  GUA  225     112.070  70.142  -6.605  1.00 38.17      A16S
ATOM  23366  N7  GUA  225     111.773  71.266  -5.852  1.00 38.17      A16S
ATOM  23367  C8  GUA  225     112.436  71.090  -4.741  1.00 38.17      A16S
ATOM  23368  C2' GUA  225     115.470  69.482  -4.069  1.00 43.33      A16S
ATOM  23369  O2' GUA  225     116.195  68.423  -3.488  1.00 43.33      A16S
ATOM  23370  C3' GUA  225     115.853  70.816  -3.463  1.00 43.33      A16S
ATOM  23371  O3' GUA  225     117.257  70.935  -3.336  1.00 43.33      A16S
ATOM  23372  P   GUA  226     118.081  71.706  -4.481  1.00 51.97      A16S
ATOM  23373  O1P GUA  226     119.507  71.555  -4.095  1.00 38.48      A16S
ATOM  23374  O2P GUA  226     117.508  73.079  -4.670  1.00 38.48      A16S
ATOM  23375  O5' GUA  226     117.807  70.839  -5.801  1.00 51.97      A16S
ATOM  23376  C5' GUA  226     118.402  69.556  -5.920  1.00 51.97      A16S
ATOM  23377  C4' GUA  226     117.927  68.805  -7.147  1.00 51.97      A16S
ATOM  23378  O4' GUA  226     116.484  68.812  -7.238  1.00 51.97      A16S
ATOM  23379  C1' GUA  226     116.115  68.394  -8.543  1.00 51.97      A16S
ATOM  23380  N9  GUA  226     115.206  69.365  -9.132  1.00 38.48      A16S
ATOM  23381  C4  GUA  226     114.617  69.236 -10.355  1.00 38.48      A16S
ATOM  23382  N3  GUA  226     114.735  68.179 -11.172  1.00 38.48      A16S
ATOM  23383  C2  GUA  226     114.072  68.346 -12.294  1.00 38.48      A16S
ATOM  23384  N2  GUA  226     114.047  67.370 -13.201  1.00 38.48      A16S
ATOM  23385  N1  GUA  226     113.376  69.476 -12.606  1.00 38.48      A16S
ATOM  23386  C6  GUA  226     113.245  70.584 -11.783  1.00 38.48      A16S
ATOM  23387  O6  GUA  226     112.607  71.563 -12.174  1.00 38.48      A16S
ATOM  23388  C5  GUA  226     113.922  70.403 -10.554  1.00 38.48      A16S
ATOM  23389  N7  GUA  226     114.036  71.239  -9.451  1.00 38.48      A16S
ATOM  23390  C8  GUA  226     114.804  70.579  -8.629  1.00 38.48      A16S
ATOM  23391  C2' GUA  226     117.401  68.350  -9.365  1.00 51.97      A16S
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ATOM	23392	O2'	GUA	226	117.885	67.027	-9.403	1.00	51.97	A16S	ATOM	23445	C1'	CYT	229	119.210	74.353	-21.994	1.00	47.40	A16S
ATOM	23393	C3'	GUA	226	118.311	69.251	-8.544	1.00	51.97	A16S	ATOM	23446	N1	CYT	229	119.375	74.756	-20.603	1.00	38.81	A16S
ATOM	23394	O3'	GUA	226	119.668	68.971	-8.881	1.00	51.97	A16S	ATOM	23447	C6	CYT	229	119.954	73.925	-19.691	1.00	38.81	A16S
ATOM	23395	P	GUA	227	120.316	69.638	-10.206	1.00	44.33	A16S	ATOM	23448	C2	CYT	229	118.935	76.005	-20.233	1.00	38.81	A16S
ATOM	23396	O1P	GUA	227	121.777	69.332	-10.171	1.00	40.76	A16S	ATOM	23449	O2	CYT	229	118.430	76.725	-21.098	1.00	38.81	A16S
ATOM	23397	O2P	GUA	227	119.863	71.057	-10.307	1.00	40.76	A16S	ATOM	23450	N3	CYT	229	119.068	76.408	-18.957	1.00	38.81	A16S
ATOM	23398	O5'	GUA	227	119.694	68.803	-11.416	1.00	44.33	A16S	ATOM	23451	C4	CYT	229	119.626	75.595	-18.066	1.00	38.81	A16S
ATOM	23399	C5'	GUA	227	120.029	67.433	-11.569	1.00	44.33	A16S	ATOM	23452	N4	CYT	229	119.724	76.020	-16.811	1.00	38.81	A16S
ATOM	23400	C4'	GUA	227	119.516	66.904	-12.875	1.00	44.33	A16S	ATOM	23453	C5	CYT	229	120.103	74.302	-18.421	1.00	38.81	A16S
ATOM	23401	O4'	GUA	227	118.074	67.005	-12.899	1.00	44.33	A16S	ATOM	23454	C2'	CYT	229	120.272	74.998	-22.877	1.00	47.40	A16S
ATOM	23402	C1'	GUA	227	117.642	67.322	-14.206	1.00	44.33	A16S	ATOM	23455	O2'	CYT	229	119.771	75.176	-24.183	1.00	47.40	A16S
ATOM	23403	N9	GUA	227	117.002	68.627	-14.149	1.00	40.76	A16S	ATOM	23456	C3'	CYT	229	121.358	73.942	-22.825	1.00	47.40	A16S
ATOM	23404	C4	GUA	227	116.172	69.167	-15.090	1.00	40.76	A16S	ATOM	23457	O3'	CYT	229	122.259	74.048	-23.907	1.00	47.40	A16S
ATOM	23405	N3	GUA	227	115.810	68.587	-16.247	1.00	40.76	A16S	ATOM	23458	P	CYT	230	123.534	74.992	-23.758	1.00	43.52	A16S
ATOM	23406	C2	GUA	227	114.999	69.355	-16.948	1.00	40.76	A16S	ATOM	23459	O1P	CYT	230	124.369	74.760	-24.955	1.00	35.49	A16S
ATOM	23407	N2	GUA	227	114.563	68.954	-18.149	1.00	40.76	A16S	ATOM	23460	O2P	CYT	230	124.111	74.782	-22.408	1.00	35.49	A16S
ATOM	23408	N1	GUA	227	114.564	70.577	-16.533	1.00	40.76	A16S	ATOM	23461	O5'	CYT	230	122.921	76.460	-23.811	1.00	43.52	A16S
ATOM	23409	C6	GUA	227	114.918	71.190	-15.348	1.00	40.76	A16S	ATOM	23462	C5'	CYT	230	122.300	76.950	-24.997	1.00	43.52	A16S
ATOM	23410	O6	GUA	227	114.456	72.305	-15.076	1.00	40.76	A16S	ATOM	23463	C4'	CYT	230	121.652	78.285	-24.725	1.00	43.52	A16S
ATOM	23411	C5	GUA	227	115.802	70.389	-14.594	1.00	40.76	A16S	ATOM	23464	O4'	CYT	230	120.741	78.118	-23.610	1.00	43.52	A16S
ATOM	23412	N7	GUA	227	116.398	70.619	-13.364	1.00	40.76	A16S	ATOM	23465	C1'	CYT	230	120.696	79.308	-22.846	1.00	43.52	A16S
ATOM	23413	C8	GUA	227	117.101	69.546	-13.141	1.00	40.76	A16S	ATOM	23466	N1	CYT	230	121.136	79.012	-21.485	1.00	35.49	A16S
ATOM	23414	C2'	GUA	227	118.877	67.303	-15.101	1.00	44.33	A16S	ATOM	23467	C6	CYT	230	121.650	77.792	-21.144	1.00	35.49	A16S
ATOM	23415	O2'	GUA	227	119.062	66.007	-15.624	1.00	44.33	A16S	ATOM	23468	C2	CYT	230	121.020	80.014	-20.538	1.00	35.49	A16S
ATOM	23416	C3'	GUA	227	119.961	67.667	-14.102	1.00	44.33	A16S	ATOM	23469	O2	CYT	230	120.574	81.109	-20.893	1.00	35.49	A16S
ATOM	23417	O3'	GUA	227	121.240	67.236	-14.532	1.00	44.33	A16S	ATOM	23470	N3	CYT	230	121.404	79.775	-19.267	1.00	35.49	A16S
ATOM	23418	P	CYT	228	122.224	68.290	-15.225	1.00	41.61	A16S	ATOM	23471	C4	CYT	230	121.906	78.589	-18.936	1.00	35.49	A16S
ATOM	23419	O1P	CYT	228	123.477	67.614	-15.641	1.00	41.28	A16S	ATOM	23472	N4	CYT	230	122.285	78.409	-17.676	1.00	35.49	A16S
ATOM	23420	O2P	CYT	228	122.291	69.453	-14.316	1.00	41.28	A16S	ATOM	23473	C5	CYT	230	122.047	77.541	-19.886	1.00	35.49	A16S
ATOM	23421	O5'	CYT	228	121.442	68.696	-16.545	1.00	41.61	A16S	ATOM	23474	C2'	CYT	230	121.634	80.310	-23.505	1.00	43.52	A16S
ATOM	23422	C5'	CYT	228	121.217	67.730	-17.560	1.00	41.61	A16S	ATOM	23475	O2'	CYT	230	120.884	81.188	-24.324	1.00	43.52	A16S
ATOM	23423	C4'	CYT	228	120.277	68.285	-18.590	1.00	41.61	A16S	ATOM	23476	C3'	CYT	230	122.582	79.378	-24.242	1.00	43.52	A16S
ATOM	23424	O4'	CYT	228	119.005	68.582	-17.964	1.00	41.61	A16S	ATOM	23477	O3'	CYT	230	123.213	80.036	-25.315	1.00	43.52	A16S
ATOM	23425	C1'	CYT	228	118.407	69.683	-18.617	1.00	41.61	A16S	ATOM	23478	P	GUA	231	124.638	80.733	-25.074	1.00	43.15	A16S
ATOM	23426	N1	CYT	228	118.233	70.765	-17.645	1.00	41.28	A16S	ATOM	23479	O1P	GUA	231	125.319	80.808	-26.405	1.00	37.98	A16S
ATOM	23427	C6	CYT	228	118.831	70.725	-16.418	1.00	41.28	A16S	ATOM	23480	O2P	GUA	231	125.306	80.032	-23.957	1.00	37.98	A16S
ATOM	23428	C2	CYT	228	117.441	71.850	-18.009	1.00	41.28	A16S	ATOM	23481	O5'	GUA	231	124.256	82.184	-24.531	1.00	43.15	A16S
ATOM	23429	O2	CYT	228	116.921	71.852	-19.128	1.00	41.28	A16S	ATOM	23482	C5'	GUA	231	123.681	83.160	-25.383	1.00	43.15	A16S
ATOM	23430	N3	CYT	228	117.269	72.864	-17.147	1.00	41.28	A16S	ATOM	23483	C4'	GUA	231	123.627	84.482	-24.671	1.00	43.15	A16S
ATOM	23431	C4	CYT	228	117.867	72.832	-15.964	1.00	41.28	A16S	ATOM	23484	O4'	GUA	231	122.749	84.370	-23.521	1.00	43.15	A16S
ATOM	23432	N4	CYT	228	117.695	73.879	-15.161	1.00	41.28	A16S	ATOM	23485	C1'	GUA	231	123.249	85.159	-22.450	1.00	43.15	A16S
ATOM	23433	C5	CYT	228	118.676	71.730	-15.554	1.00	41.28	A16S	ATOM	23486	N9	GUA	231	123.504	84.267	-21.322	1.00	37.98	A16S
ATOM	23434	C2'	CYT	228	119.365	70.103	-19.725	1.00	41.61	A16S	ATOM	23487	C4	GUA	231	123.610	84.592	-19.984	1.00	37.98	A16S
ATOM	23435	O2'	CYT	228	119.063	69.403	-20.909	1.00	41.61	A16S	ATOM	23488	N3	GUA	231	123.512	85.822	-19.451	1.00	37.98	A16S
ATOM	23436	C3'	CYT	228	120.678	69.627	-19.150	1.00	41.61	A16S	ATOM	23489	C2	GUA	231	123.685	85.807	-18.138	1.00	37.98	A16S
ATOM	23437	O3'	CYT	228	121.640	69.483	-20.167	1.00	41.61	A16S	ATOM	23490	N2	GUA	231	123.635	86.939	-17.439	1.00	37.98	A16S
ATOM	23438	P	CYT	229	122.739	70.629	-20.370	1.00	47.40	A16S	ATOM	23491	N1	GUA	231	123.921	84.683	-17.409	1.00	37.98	A16S
ATOM	23439	O1P	CYT	229	123.774	70.056	-21.265	1.00	38.81	A16S	ATOM	23492	C6	GUA	231	124.010	83.403	-17.925	1.00	37.98	A16S
ATOM	23440	O2P	CYT	229	123.122	71.138	-19.033	1.00	38.81	A16S	ATOM	23493	O6	GUA	231	124.205	82.433	-17.153	1.00	37.98	A16S
ATOM	23441	O5'	CYT	229	121.940	71.763	-21.147	1.00	47.40	A16S	ATOM	23494	C5	GUA	231	123.844	83.401	-19.337	1.00	37.98	A16S
ATOM	23442	C5'	CYT	229	121.271	71.451	-22.365	1.00	47.40	A16S	ATOM	23495	N7	GUA	231	123.887	82.352	-20.239	1.00	37.98	A16S
ATOM	23443	C4'	CYT	229	120.552	72.664	-22.890	1.00	47.40	A16S	ATOM	23496	C8	GUA	231	123.681	82.911	-21.399	1.00	37.98	A16S
ATOM	23444	O4'	CYT	229	119.395	72.952	-22.069	1.00	47.40	A16S	ATOM	23497	C2'	GUA	231	124.485	85.879	-22.991	1.00	43.15	A16S

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ATOM  23498  O2' GUA  231     124.081  87.084 -23.595  1.00 43.15      A16S
ATOM  23499  C3' GUA  231     124.946  84.911 -24.063  1.00 43.15      A16S
ATOM  23500  O3' GUA  231     125.780  85.535 -25.034  1.00 43.15      A16S
ATOM  23501  P   CYT  232     127.376  85.355 -24.936  1.00 39.60      A16S
ATOM  23502  O1P CYT  232     128.021  86.006 -26.109  1.00 34.76      A16S
ATOM  23503  O2P CYT  232     127.645  83.929 -24.674  1.00 34.76      A16S
ATOM  23504  O5' CYT  232     127.750  86.178 -23.627  1.00 39.60      A16S
ATOM  23505  C5' CYT  232     127.522  87.578 -23.570  1.00 39.60      A16S
ATOM  23506  C4' CYT  232     127.702  88.080 -22.163  1.00 39.60      A16S
ATOM  23507  O4' CYT  232     126.673  87.527 -21.304  1.00 39.60      A16S
ATOM  23508  C1' CYT  232     127.185  87.388 -19.989  1.00 39.60      A16S
ATOM  23509  N1  CYT  232     127.151  85.971 -19.633  1.00 34.76      A16S
ATOM  23510  C6  CYT  232     127.096  85.003 -20.593  1.00 34.76      A16S
ATOM  23511  C2  CYT  232     127.196  85.629 -18.296  1.00 34.76      A16S
ATOM  23512  O2  CYT  232     127.247  86.538 -17.459  1.00 34.76      A16S
ATOM  23513  N3  CYT  232     127.192  84.321 -17.946  1.00 34.76      A16S
ATOM  23514  C4  CYT  232     127.152  83.382 -18.890  1.00 34.76      A16S
ATOM  23515  N4  CYT  232     127.165  82.116 -18.512  1.00 34.76      A16S
ATOM  23516  C5  CYT  232     127.099  83.706 -20.266  1.00 34.76      A16S
ATOM  23517  C2' CYT  232     128.631  87.881 -20.022  1.00 39.60      A16S
ATOM  23518  O2' CYT  232     128.710  89.249 -19.695  1.00 39.60      A16S
ATOM  23519  C3' CYT  232     128.975  87.641 -21.476  1.00 39.60      A16S
ATOM  23520  O3' CYT  232     130.063  88.434 -21.855  1.00 39.60      A16S
ATOM  23521  P   GUA  233     131.524  87.804 -21.832  1.00 41.45      A16S
ATOM  23522  O1P GUA  233     132.407  88.891 -22.330  1.00 36.07      A16S
ATOM  23523  O2P GUA  233     131.502  86.491 -22.533  1.00 36.07      A16S
ATOM  23524  O5' GUA  233     131.818  87.612 -20.283  1.00 41.45      A16S
ATOM  23525  C5' GUA  233     132.001  88.751 -19.464  1.00 41.45      A16S
ATOM  23526  C4' GUA  233     132.233  88.344 -18.038  1.00 41.45      A16S
ATOM  23527  O4' GUA  233     131.076  87.627 -17.541  1.00 41.45      A16S
ATOM  23528  C1' GUA  233     131.494  86.664 -16.585  1.00 41.45      A16S
ATOM  23529  N9  GUA  233     131.063  85.350 -17.047  1.00 36.07      A16S
ATOM  23530  C4  GUA  233     130.963  84.208 -16.293  1.00 36.07      A16S
ATOM  23531  N3  GUA  233     131.244  84.097 -14.979  1.00 36.07      A16S
ATOM  23532  C2  GUA  233     131.063  82.863 -14.539  1.00 36.07      A16S
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ATOM  23534  N1  GUA  233     130.648  81.824 -15.323  1.00 36.07      A16S
ATOM  23535  C6  GUA  233     130.362  81.910 -16.678  1.00 36.07      A16S
ATOM  23536  O6  GUA  233     130.020  80.895 -17.302  1.00 36.07      A16S
ATOM  23537  C5  GUA  233     130.536  83.230 -17.164  1.00 36.07      A16S
ATOM  23538  N7  GUA  233     130.363  83.747 -18.440  1.00 36.07      A16S
ATOM  23539  C8  GUA  233     130.685  85.007 -18.320  1.00 36.07      A16S
ATOM  23540  C2' GUA  233     133.012  86.810 -16.443  1.00 41.45      A16S
ATOM  23541  O2' GUA  233     133.276  87.739 -15.411  1.00 41.45      A16S
ATOM  23542  C3' GUA  233     133.383  87.389 -17.802  1.00 41.45      A16S
ATOM  23543  O3' GUA  233     134.602  88.112 -17.756  1.00 41.45      A16S
ATOM  23544  P   URI  234     135.965  87.399 -18.206  1.00 51.44      A16S
ATOM  23545  O1P URI  234     137.065  88.380 -18.001  1.00 55.85      A16S
ATOM  23546  O2P URI  234     135.801  86.752 -19.533  1.00 55.85      A16S
ATOM  23547  O5' URI  234     136.148  86.256 -17.124  1.00 51.44      A16S
ATOM  23548  C5' URI  234     136.575  86.576 -15.814  1.00 51.44      A16S
ATOM  23549  C4' URI  234     136.794  85.314 -15.032  1.00 51.44      A16S
ATOM  23550  O4' URI  234     135.523  84.642 -14.855  1.00 51.44      A16S
ATOM  23551  C1' URI  234     135.731  83.246 -14.829  1.00 51.44      A16S
ATOM  23552  N1  URI  234     134.892  82.628 -15.861  1.00 55.85      A16S
ATOM  23553  C6  URI  234     134.652  83.236 -17.060  1.00 55.85      A16S
ATOM  23554  C2  URI  234     134.373  81.400 -15.578  1.00 55.85      A16S
ATOM  23555  O2  URI  234     134.555  80.848 -14.506  1.00 55.85      A16S
ATOM  23556  N3  URI  234     133.633  80.837 -16.583  1.00 55.85      A16S
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ATOM  23558  O4  URI  234     132.681  80.753 -18.609  1.00 55.85      A16S
ATOM  23559  C5  URI  234     133.929  82.665 -18.021  1.00 55.85      A16S
ATOM  23560  C2' URI  234     137.225  82.996 -15.049  1.00 51.44      A16S
ATOM  23561  O2' URI  234     137.872  82.841 -13.806  1.00 51.44      A16S
ATOM  23562  C3' URI  234     137.660  84.284 -15.729  1.00 51.44      A16S
ATOM  23563  O3' URI  234     139.037  84.533 -15.480  1.00 51.44      A16S
ATOM  23564  P   CYT  235     140.039  84.743 -16.716  1.00 49.39      A16S
ATOM  23565  O1P CYT  235     139.945  86.189 -17.045  1.00 41.04      A16S
ATOM  23566  O2P CYT  235     139.751  83.723 -17.763  1.00 41.04      A16S
ATOM  23567  O5' CYT  235     141.489  84.439 -16.130  1.00 49.39      A16S
ATOM  23568  C5' CYT  235     142.045  85.264 -15.127  1.00 49.39      A16S
ATOM  23569  C4' CYT  235     143.372  84.718 -14.679  1.00 49.39      A16S
ATOM  23570  O4' CYT  235     143.196  83.378 -14.165  1.00 49.39      A16S
ATOM  23571  C1' CYT  235     144.357  82.612 -14.435  1.00 49.39      A16S
ATOM  23572  N1  CYT  235     143.989  81.482 -15.303  1.00 41.04      A16S
ATOM  23573  C6  CYT  235     142.845  81.496 -16.047  1.00 41.04      A16S
ATOM  23574  C2  CYT  235     144.837  80.401 -15.353  1.00 41.04      A16S
ATOM  23575  O2  CYT  235     145.882  80.440 -14.681  1.00 41.04      A16S
ATOM  23576  N3  CYT  235     144.524  79.348 -16.129  1.00 41.04      A16S
ATOM  23577  C4  CYT  235     143.419  79.371 -16.859  1.00 41.04      A16S
ATOM  23578  N4  CYT  235     143.161  78.320 -17.630  1.00 41.04      A16S
ATOM  23579  C5  CYT  235     142.529  80.471 -16.836  1.00 41.04      A16S
ATOM  23580  C2' CYT  235     145.351  83.547 -15.116  1.00 49.39      A16S
ATOM  23581  O2' CYT  235     146.145  84.185 -14.144  1.00 49.39      A16S
ATOM  23582  C3' CYT  235     144.405  84.534 -15.767  1.00 49.39      A16S
ATOM  23583  O3' CYT  235     145.071  85.748 -16.031  1.00 49.39      A16S
ATOM  23584  P   CYT  236     145.803  85.947 -17.436  1.00 48.57      A16S
ATOM  23585  O1P CYT  236     146.353  87.320 -17.401  1.00 41.28      A16S
ATOM  23586  O2P CYT  236     144.868  85.549 -18.513  1.00 41.28      A16S
ATOM  23587  O5' CYT  236     147.002  84.903 -17.391  1.00 48.57      A16S
ATOM  23588  C5' CYT  236     148.091  85.108 -16.501  1.00 48.57      A16S
ATOM  23589  C4' CYT  236     149.216  84.166 -16.827  1.00 48.57      A16S
ATOM  23590  O4' CYT  236     148.869  82.815 -16.432  1.00 48.57      A16S
ATOM  23591  C1' CYT  236     149.380  81.899 -17.381  1.00 48.57      A16S
ATOM  23592  N1  CYT  236     148.238  81.242 -18.027  1.00 41.28      A16S
ATOM  23593  C6  CYT  236     147.012  81.839 -18.042  1.00 41.28      A16S
ATOM  23594  C2  CYT  236     148.425  80.003 -18.638  1.00 41.28      A16S
ATOM  23595  O2  CYT  236     149.543  79.473 -18.584  1.00 41.28      A16S
ATOM  23596  N3  CYT  236     147.385  79.408 -19.265  1.00 41.28      A16S
ATOM  23597  C4  CYT  236     146.197  79.999 -19.280  1.00 41.28      A16S
ATOM  23598  N4  CYT  236     145.204  79.382 -19.899  1.00 41.28      A16S
ATOM  23599  C5  CYT  236     145.973  81.258 -18.653  1.00 41.28      A16S
ATOM  23600  C2' CYT  236     150.230  82.708 -18.363  1.00 48.57      A16S
ATOM  23601  O2' CYT  236     151.559  82.759 -17.884  1.00 48.57      A16S
ATOM  23602  C3' CYT  236     149.545  84.064 -18.300  1.00 48.57      A16S
ATOM  23603  O3' CYT  236     150.407  85.133 -18.654  1.00 48.57      A16S
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ATOM  23605  O1P CYT  237     151.681  86.572 -20.241  1.00 48.03      A16S
ATOM  23606  O2P CYT  237     149.398  85.595 -20.929  1.00 48.03      A16S
ATOM  23607  O5' CYT  237     151.392  84.140 -20.734  1.00 44.94      A16S
ATOM  23608  C5' CYT  237     152.769  83.918 -20.523  1.00 44.94      A16S
ATOM  23609  C4' CYT  237     153.221  82.788 -21.388  1.00 44.94      A16S
ATOM  23610  O4' CYT  237     152.573  81.572 -20.944  1.00 44.94      A16S
ATOM  23611  C1' CYT  237     152.337  80.728 -22.056  1.00 44.94      A16S
ATOM  23612  N1  CYT  237     150.902  80.441 -22.118  1.00 48.03      A16S
ATOM  23613  C6  CYT  237     149.987  81.305 -21.587  1.00 48.03      A16S
ATOM  23614  C2  CYT  237     150.487  79.284 -22.760  1.00 48.03      A16S
ATOM  23615  O2  CYT  237     151.346  78.489 -23.156  1.00 48.03      A16S
ATOM  23616  N3  CYT  237     149.165  79.053 -22.923  1.00 48.03      A16S
ATOM  23617  C4  CYT  237     148.277  79.923 -22.444  1.00 48.03      A16S
ATOM  23618  N4  CYT  237     146.986  79.683 -22.661  1.00 48.03      A16S
ATOM  23619  C5  CYT  237     148.676  81.088 -21.727  1.00 48.03      A16S
ATOM  23620  C2' CYT  237     152.829  81.467 -23.305  1.00 44.94      A16S
ATOM  23621  O2' CYT  237     154.134  81.043 -23.651  1.00 44.94      A16S
ATOM  23622  C3' CYT  237     152.797  82.916 -22.836  1.00 44.94      A16S
ATOM  23623  O3' CYT  237     153.736  83.708 -23.535  1.00 44.94      A16S
ATOM  23624  P   ADE  238     153.284  84.518 -24.841  1.00 46.23      A16S
ATOM  23625  O1P ADE  238     154.522  85.066 -25.466  1.00 53.23      A16S
ATOM  23626  O2P ADE  238     152.186  85.436 -24.472  1.00 53.23      A16S
ATOM  23627  O5' ADE  238     152.729  83.389 -25.802  1.00 46.23      A16S
ATOM  23628  C5' ADE  238     153.611  82.431 -26.345  1.00 46.23      A16S
ATOM  23629  C4' ADE  238     153.295  82.222 -27.794  1.00 46.23      A16S
ATOM  23630  O4' ADE  238     151.975  81.678 -27.910  1.00 46.23      A16S
ATOM  23631  C1' ADE  238     151.429  82.060 -29.137  1.00 46.23      A16S
ATOM  23632  N9  ADE  238     149.977  82.022 -29.031  1.00 53.23      A16S
ATOM  23633  C4  ADE  238     149.247  81.001 -29.570  1.00 53.23      A16S
ATOM  23634  N3  ADE  238     149.724  79.947 -30.247  1.00 53.23      A16S
ATOM  23635  C2  ADE  238     148.739  79.157 -30.625  1.00 53.23      A16S
ATOM  23636  N1  ADE  238     147.430  79.292 -30.423  1.00 53.23      A16S
ATOM  23637  C6  ADE  238     146.989  80.364 -29.741  1.00 53.23      A16S
ATOM  23638  N6  ADE  238     145.685  80.495 -29.554  1.00 53.23      A16S
ATOM  23639  C5  ADE  238     147.936  81.274 -29.276  1.00 53.23      A16S
ATOM  23640  N7  ADE  238     147.832  82.451 -28.552  1.00 53.23      A16S
ATOM  23641  C8  ADE  238     149.073  82.856 -28.435  1.00 53.23      A16S
ATOM  23642  C2' ADE  238     152.162  83.295 -29.664  1.00 46.23      A16S
ATOM  23643  O2' ADE  238     152.518  83.040 -30.999  1.00 46.23      A16S
ATOM  23644  C3' ADE  238     153.279  83.487 -28.616  1.00 46.23      A16S
ATOM  23645  O3' ADE  238     154.633  83.912 -28.925  1.00 46.23      A16S
ATOM  23646  P   URI  239     155.586  83.127 -29.987  1.00 55.37      A16S
ATOM  23647  O1P URI  239     156.913  83.693 -29.671  1.00 55.33      A16S
ATOM  23648  O2P URI  239     155.085  83.222 -31.375  1.00 55.33      A16S
ATOM  23649  O5' URI  239     155.658  81.586 -29.564  1.00 55.37      A16S
ATOM  23650  C5' URI  239     155.823  81.204 -28.199  1.00 55.37      A16S
ATOM  23651  C4' URI  239     156.857  80.112 -28.026  1.00 55.37      A16S
ATOM  23652  O4' URI  239     158.113  80.523 -28.588  1.00 55.37      A16S
ATOM  23653  C1' URI  239     159.143  79.927 -27.847  1.00 55.37      A16S
ATOM  23654  N1  URI  239     160.387  80.695 -27.982  1.00 55.33      A16S
ATOM  23655  C6  URI  239     160.395  81.987 -28.436  1.00 55.33      A16S
ATOM  23656  C2  URI  239     161.564  80.055 -27.648  1.00 55.33      A16S
ATOM  23657  O2  URI  239     161.604  78.921 -27.204  1.00 55.33      A16S
ATOM  23658  N3  URI  239     162.697  80.794 -27.837  1.00 55.33      A16S
ATOM  23659  C4  URI  239     162.777  82.086 -28.289  1.00 55.33      A16S
ATOM  23660  O4  URI  239     163.879  82.634 -28.352  1.00 55.33      A16S
ATOM  23661  C5  URI  239     161.520  82.687 -28.597  1.00 55.33      A16S
ATOM  23662  C2' URI  239     158.635  79.646 -26.432  1.00 55.37      A16S
ATOM  23663  O2' URI  239     158.942  78.316 -26.056  1.00 55.37      A16S
ATOM  23664  C3' URI  239     157.128  79.885 -26.543  1.00 55.37      A16S
ATOM  23665  O3' URI  239     156.527  78.672 -26.087  1.00 55.37      A16S
ATOM  23666  P   CYT  240     154.956  78.400 -26.276  1.00 43.84      A16S
ATOM  23667  O1P CYT  240     154.232  79.632 -25.877  1.00 55.81      A16S
ATOM  23668  O2P CYT  240     154.647  77.107 -25.595  1.00 55.81      A16S
ATOM  23669  O5' CYT  240     154.755  78.170 -27.840  1.00 43.84      A16S
ATOM  23670  C5' CYT  240     154.973  76.893 -28.423  1.00 43.84      A16S
ATOM  23671  C4' CYT  240     153.668  76.288 -28.896  1.00 43.84      A16S
ATOM  23672  O4' CYT  240     152.718  76.273 -27.798  1.00 43.84      A16S
ATOM  23673  C1' CYT  240     151.400  76.287 -28.322  1.00 43.84      A16S
ATOM  23674  N1  CYT  240     150.639  77.383 -27.711  1.00 55.81      A16S
ATOM  23675  C6  CYT  240     151.257  78.355 -26.977  1.00 55.81      A16S
ATOM  23676  C2  CYT  240     149.252  77.412 -27.900  1.00 55.81      A16S
ATOM  23677  O2  CYT  240     148.720  76.510 -28.561  1.00 55.81      A16S
ATOM  23678  N3  CYT  240     148.529  78.412 -27.359  1.00 55.81      A16S
ATOM  23679  C4  CYT  240     149.135  79.355 -26.645  1.00 55.81      A16S
ATOM  23680  N4  CYT  240     148.381  80.320 -26.130  1.00 55.81      A16S
ATOM  23681  C5  CYT  240     150.549  79.349 -26.427  1.00 55.81      A16S
ATOM  23682  C2' CYT  240     151.507  76.428 -29.837  1.00 43.84      A16S
ATOM  23683  O2' CYT  240     151.399  75.139 -30.395  1.00 43.84      A16S
ATOM  23684  C3' CYT  240     152.908  77.004 -29.997  1.00 43.84      A16S
ATOM  23685  O3' CYT  240     153.411  76.644 -31.272  1.00 43.84      A16S
ATOM  23686  P   ADE  241     153.156  77.610 -32.526  1.00 46.88      A16S
ATOM  23687  O1P ADE  241     153.980  77.144 -33.673  1.00 39.78      A16S
ATOM  23688  O2P ADE  241     153.264  79.016 -32.061  1.00 39.78      A16S
ATOM  23689  O5' ADE  241     151.629  77.388 -32.875  1.00 46.88      A16S
ATOM  23690  C5' ADE  241     151.173  76.179 -33.439  1.00 46.88      A16S
ATOM  23691  C4' ADE  241     150.126  76.483 -34.469  1.00 46.88      A16S
ATOM  23692  O4' ADE  241     149.127  77.323 -33.895  1.00 46.88      A16S
ATOM  23693  C1' ADE  241     148.540  78.065 -34.916  1.00 46.88      A16S
ATOM  23694  N9  ADE  241     147.844  79.200 -34.321  1.00 39.78      A16S
ATOM  23695  C4  ADE  241     146.477  79.310 -34.309  1.00 39.78      A16S
ATOM  23696  N3  ADE  241     145.594  78.468 -34.870  1.00 39.78      A16S
ATOM  23697  C2  ADE  241     144.353  78.872 -34.643  1.00 39.78      A16S
ATOM  23698  N1  ADE  241     143.922  79.933 -33.955  1.00 39.78      A16S
ATOM  23699  C6  ADE  241     144.835  80.750 -33.386  1.00 39.78      A16S
ATOM  23700  N6  ADE  241     144.399  81.791 -32.665  1.00 39.78      A16S
ATOM  23701  C5  ADE  241     146.195  80.441 -33.578  1.00 39.78      A16S
ATOM  23702  N7  ADE  241     147.367  81.057 -33.163  1.00 39.78      A16S
ATOM  23703  C8  ADE  241     148.315  80.286 -33.641  1.00 39.78      A16S
ATOM  23704  C2' ADE  241     149.531  78.208 -36.079  1.00 46.88      A16S
ATOM  23705  O2' ADE  241     148.857  77.927 -37.286  1.00 46.88      A16S
ATOM  23706  C3' ADE  241     150.645  77.216 -35.693  1.00 46.88      A16S
ATOM  23707  O3' ADE  241     150.835  76.102 -36.576  1.00 46.88      A16S
ATOM  23708  P   GUA  242     151.045  76.304 -38.149  1.00 50.89      A16S
ATOM  23709  O1P GUA  242     151.912  75.162 -38.530  1.00 57.34      A16S
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ATOM  23710  O2P GUA  242     151.477  77.694 -38.418  1.00 57.34      A16S
ATOM  23711  O5' GUA  242     149.622  76.042 -38.817  1.00 50.89      A16S
ATOM  23712  C5' GUA  242     148.965  74.785 -38.683  1.00 50.89      A16S
ATOM  23713  C4' GUA  242     148.008  74.835 -37.518  1.00 50.89      A16S
ATOM  23714  O4' GUA  242     147.174  76.021 -37.632  1.00 50.89      A16S
ATOM  23715  C1' GUA  242     145.922  75.773 -37.023  1.00 50.89      A16S
ATOM  23716  N9  GUA  242     144.877  75.891 -38.037  1.00 57.34      A16S
ATOM  23717  C4  GUA  242     143.528  75.897 -37.797  1.00 57.34      A16S
ATOM  23718  N3  GUA  242     142.945  75.804 -36.584  1.00 57.34      A16S
ATOM  23719  C2  GUA  242     141.632  75.830 -36.662  1.00 57.34      A16S
ATOM  23720  N2  GUA  242     140.908  75.756 -35.544  1.00 57.34      A16S
ATOM  23721  N1  GUA  242     140.936  75.934 -37.842  1.00 57.34      A16S
ATOM  23722  C6  GUA  242     141.510  76.034 -39.106  1.00 57.34      A16S
ATOM  23723  O6  GUA  242     140.784  76.133 -40.108  1.00 57.34      A16S
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ATOM  23727  C2' GUA  242     146.003  74.362 -36.437  1.00 50.89      A16S
ATOM  23728  O2' GUA  242     146.557  74.415 -35.140  1.00 50.89      A16S
ATOM  23729  C3' GUA  242     146.988  73.719 -37.390  1.00 50.89      A16S
ATOM  23730  O3' GUA  242     147.521  72.536 -36.814  1.00 50.89      A16S
ATOM  23731  P   CYT  243     146.796  71.130 -37.092  1.00 54.62      A16S
ATOM  23732  O1P CYT  243     147.601  70.052 -36.466  1.00 56.86      A16S
ATOM  23733  O2P CYT  243     146.474  71.076 -38.540  1.00 56.86      A16S
ATOM  23734  O5' CYT  243     145.448  71.220 -36.264  1.00 54.62      A16S
ATOM  23735  C5' CYT  243     145.508  71.247 -34.854  1.00 54.62      A16S
ATOM  23736  C4' CYT  243     144.133  71.132 -34.264  1.00 54.62      A16S
ATOM  23737  O4' CYT  243     143.355  72.320 -34.556  1.00 54.62      A16S
ATOM  23738  C1' CYT  243     141.986  71.970 -34.626  1.00 54.62      A16S
ATOM  23739  N1  CYT  243     141.516  72.243 -35.987  1.00 56.86      A16S
ATOM  23740  C6  CYT  243     142.396  72.530 -36.986  1.00 56.86      A16S
ATOM  23741  C2  CYT  243     140.146  72.196 -36.247  1.00 56.86      A16S
ATOM  23742  O2  CYT  243     139.366  71.966 -35.305  1.00 56.86      A16S
ATOM  23743  N3  CYT  243     139.704  72.412 -37.505  1.00 56.86      A16S
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ATOM  23747  C2' CYT  243     141.917  70.483 -34.294  1.00 54.62      A16S
ATOM  23748  O2' CYT  243     141.897  70.323 -32.891  1.00 54.62      A16S
ATOM  23749  C3' CYT  243     143.261  70.031 -34.815  1.00 54.62      A16S
ATOM  23750  O3' CYT  243     143.622  68.771 -34.287  1.00 54.62      A16S
ATOM  23751  P   URI  244     143.247  67.441 -35.105  1.00 59.48      A16S
ATOM  23752  O1P URI  244     143.603  66.328 -34.193  1.00 62.26      A16S
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ATOM  23757  O4' URI  244     139.043  68.731 -35.015  1.00 59.48      A16S
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ATOM  23767  C2' URI  244     137.668  66.982 -35.852  1.00 59.48      A16S
ATOM  23768  O2' URI  244     136.602  66.741 -34.956  1.00 59.48      A16S
ATOM  23769  C3' URI  244     138.991  66.425 -35.348  1.00 59.48      A16S
ATOM  23770  O3' URI  244     138.830  65.184 -34.680  1.00 59.48      A16S
ATOM  23771  P   ADE  245     139.153  63.823 -35.456  1.00 69.22      A16S
ATOM  23772  O1P ADE  245     139.350  62.778 -34.418  1.00100.82      A16S
ATOM  23773  O2P ADE  245     140.214  64.071 -36.461  1.00100.82      A16S
ATOM  23774  O5' ADE  245     137.798  63.533 -36.233  1.00 69.22      A16S
ATOM  23775  C5' ADE  245     136.644  63.060 -35.547  1.00 69.22      A16S
ATOM  23776  C4' ADE  245     135.775  62.294 -36.503  1.00 69.22      A16S
ATOM  23777  O4' ADE  245     135.217  63.207 -37.470  1.00 69.22      A16S
ATOM  23778  C1' ADE  245     135.300  62.660 -38.772  1.00 69.22      A16S
ATOM  23779  N9  ADE  245     136.031  63.627 -39.582  1.00100.82      A16S
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ATOM  23782  C2  ADE  245     134.343  64.709 -42.487  1.00100.82      A16S
ATOM  23783  N1  ADE  245     135.160  65.681 -42.918  1.00100.82      A16S
ATOM  23784  C6  ADE  245     136.289  65.936 -42.218  1.00100.82      A16S
ATOM  23785  N6  ADE  245     137.104  66.909 -42.640  1.00100.82      A16S
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ATOM  23787  N7  ADE  245     137.577  65.158 -40.158  1.00100.82      A16S
ATOM  23788  C8  ADE  245     137.238  64.221 -39.303  1.00100.82      A16S
ATOM  23789  C2' ADE  245     135.833  61.230 -38.666  1.00 69.22      A16S
ATOM  23790  O2' ADE  245     134.746  60.332 -38.772  1.00 69.22      A16S
ATOM  23791  C3' ADE  245     136.535  61.258 -37.306  1.00 69.22      A16S
ATOM  23792  O3' ADE  245     136.671  60.041 -36.557  1.00 69.22      A16S
ATOM  23793  P   GUA  246     135.370  59.270 -35.974  1.00 92.85      A16S
ATOM  23794  O1P GUA  246     135.842  58.439 -34.828  1.00 55.89      A16S
ATOM  23795  O2P GUA  246     134.609  58.628 -37.082  1.00 55.89      A16S
ATOM  23796  O5' GUA  246     134.457  60.399 -35.316  1.00 92.85      A16S
ATOM  23797  C5' GUA  246     133.834  60.168 -34.053  1.00 92.85      A16S
ATOM  23798  C4' GUA  246     132.798  61.230 -33.759  1.00 92.85      A16S
ATOM  23799  O4' GUA  246     131.881  61.354 -34.854  1.00 92.85      A16S
ATOM  23800  C1' GUA  246     130.596  61.682 -34.366  1.00 92.85      A16S
ATOM  23801  N9  GUA  246     129.636  61.005 -35.226  1.00 55.89      A16S
ATOM  23802  C4  GUA  246     128.676  61.621 -35.987  1.00 55.89      A16S
ATOM  23803  N3  GUA  246     128.318  62.917 -35.907  1.00 55.89      A16S
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ATOM  23808  O6  GUA  246     126.937  60.376 -38.861  1.00 55.89      A16S
ATOM  23809  C5  GUA  246     128.260  60.669 -36.883  1.00 55.89      A16S
ATOM  23810  N7  GUA  246     128.841  59.440 -36.599  1.00 55.89      A16S
ATOM  23811  C8  GUA  246     129.621  59.682 -35.581  1.00 55.89      A16S
ATOM  23812  C2' GUA  246     130.568  61.539 -32.844  1.00 92.85      A16S
ATOM  23813  O2' GUA  246     130.358  62.793 -32.238  1.00 92.85      A16S
ATOM  23814  C3' GUA  246     131.936  60.925 -32.553  1.00 92.85      A16S
ATOM  23815  O3' GUA  246     132.610  61.392 -31.393  1.00 92.85      A16S
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ATOM	23816	P	URI	247	132.979	62.961	-31.204	1.00	53.63	A16S	ATOM	23869	N1	GUA	249	124.609	64.499	-41.442	1.00	48.57	A16S
ATOM	23817	O1P	URI	247	134.385	62.929	-30.746	1.00	66.84	A16S	ATOM	23870	C6	GUA	249	125.246	64.539	-40.205	1.00	48.57	A16S
ATOM	23818	O2P	URI	247	131.962	63.639	-30.362	1.00	66.84	A16S	ATOM	23871	O6	GUA	249	125.740	63.503	-39.735	1.00	48.57	A16S
ATOM	23819	O5'	URI	247	133.014	63.694	-32.628	1.00	53.63	A16S	ATOM	23872	C5	GUA	249	125.221	65.851	-39.643	1.00	48.57	A16S
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ATOM	23821	C4'	URI	247	133.760	65.546	-34.079	1.00	53.63	A16S	ATOM	23874	C8	GUA	249	125.405	67.594	-38.433	1.00	48.57	A16S
ATOM	23822	O4'	URI	247	134.034	64.745	-35.247	1.00	53.63	A16S	ATOM	23875	C2'	GUA	249	122.637	69.316	-39.620	1.00	49.46	A16S
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ATOM	23826	C2	URI	247	132.841	65.141	-38.623	1.00	66.84	A16S	ATOM	23879	P	GUA	250	120.169	69.078	-37.338	1.00	60.16	A16S
ATOM	23827	O2	URI	247	133.247	66.239	-38.932	1.00	66.84	A16S	ATOM	23880	O1P	GUA	250	118.986	69.839	-36.877	1.00	57.37	A16S
ATOM	23828	N3	URI	247	132.214	64.318	-39.513	1.00	66.84	A16S	ATOM	23881	O2P	GUA	250	120.802	68.081	-36.439	1.00	57.37	A16S
ATOM	23829	C4	URI	247	131.710	63.072	-39.263	1.00	66.84	A16S	ATOM	23882	O5'	GUA	250	119.791	68.332	-38.688	1.00	60.16	A16S
ATOM	23830	O4	URI	247	131.171	62.450	-40.173	1.00	66.84	A16S	ATOM	23883	C5'	GUA	250	119.347	69.074	-39.819	1.00	60.16	A16S
ATOM	23831	C5	URI	247	131.875	62.621	-37.921	1.00	66.84	A16S	ATOM	23884	C4'	GUA	250	119.040	68.143	-40.963	1.00	60.16	A16S
ATOM	23832	C2'	URI	247	132.787	66.669	-35.900	1.00	53.63	A16S	ATOM	23885	O4'	GUA	250	120.259	67.497	-41.413	1.00	60.16	A16S
ATOM	23833	O2'	URI	247	133.557	67.848	-35.980	1.00	53.63	A16S	ATOM	23886	C1'	GUA	250	119.975	66.164	-41.788	1.00	60.16	A16S
ATOM	23834	C3'	URI	247	132.490	66.292	-34.447	1.00	53.63	A16S	ATOM	23887	N9	GUA	250	120.762	65.284	-40.933	1.00	57.37	A16S
ATOM	23835	O3'	URI	247	132.398	67.518	-33.723	1.00	53.63	A16S	ATOM	23888	C4	GUA	250	120.992	63.945	-41.123	1.00	57.37	A16S
ATOM	23836	P	URI	248	130.965	68.069	-33.238	1.00	45.77	A16S	ATOM	23889	N3	GUA	250	120.522	63.194	-42.138	1.00	57.37	A16S
ATOM	23837	O1P	URI	248	131.221	69.145	-32.243	1.00	43.08	A16S	ATOM	23890	C2	GUA	250	120.915	61.934	-42.035	1.00	57.37	A16S
ATOM	23838	O2P	URI	248	130.138	66.897	-32.850	1.00	43.08	A16S	ATOM	23891	N2	GUA	250	120.562	61.032	-42.957	1.00	57.37	A16S
ATOM	23839	O5'	URI	248	130.319	68.729	-34.535	1.00	45.77	A16S	ATOM	23892	N1	GUA	250	121.691	61.459	-41.019	1.00	57.37	A16S
ATOM	23840	C5'	URI	248	130.190	70.133	-34.625	1.00	45.77	A16S	ATOM	23893	C6	GUA	250	122.181	62.216	-39.970	1.00	57.37	A16S
ATOM	23841	C4'	URI	248	129.431	70.517	-35.867	1.00	45.77	A16S	ATOM	23894	O6	GUA	250	122.861	61.682	-39.104	1.00	57.37	A16S
ATOM	23842	O4'	URI	248	130.122	69.990	-37.025	1.00	45.77	A16S	ATOM	23895	C5	GUA	250	121.786	63.559	-40.068	1.00	57.37	A16S
ATOM	23843	C1'	URI	248	129.190	69.754	-38.068	1.00	45.77	A16S	ATOM	23896	N7	GUA	250	122.060	64.634	-39.237	1.00	57.37	A16S
ATOM	23844	N1	URI	248	129.193	68.325	-38.391	1.00	43.08	A16S	ATOM	23897	C8	GUA	250	121.428	65.634	-39.786	1.00	57.37	A16S
ATOM	23845	C6	URI	248	129.761	67.395	-37.556	1.00	43.08	A16S	ATOM	23898	C2'	GUA	250	118.463	65.969	-41.660	1.00	60.16	A16S
ATOM	23846	C2	URI	248	128.575	67.948	-39.567	1.00	43.08	A16S	ATOM	23899	O2'	GUA	250	117.850	66.292	-42.890	1.00	60.16	A16S
ATOM	23847	O2	URI	248	128.091	68.752	-40.342	1.00	43.08	A16S	ATOM	23900	C3'	GUA	250	118.119	66.999	-40.599	1.00	60.16	A16S
ATOM	23848	N3	URI	248	128.548	66.601	-39.805	1.00	43.08	A16S	ATOM	23901	O3'	GUA	250	116.774	67.436	-40.702	1.00	60.16	A16S
ATOM	23849	C4	URI	248	129.081	65.615	-39.013	1.00	43.08	A16S	ATOM	23902	P	URI	251	115.664	66.825	-39.715	1.00	56.60	A16S
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ATOM	23851	C5	URI	248	129.729	66.087	-37.818	1.00	43.08	A16S	ATOM	23904	O2P	URI	251	116.261	66.627	-38.370	1.00	61.44	A16S
ATOM	23852	C2'	URI	248	127.830	70.179	-37.531	1.00	45.77	A16S	ATOM	23905	O5'	URI	251	115.380	65.384	-40.322	1.00	56.60	A16S
ATOM	23853	O2'	URI	248	127.658	71.541	-37.853	1.00	45.77	A16S	ATOM	23906	C5'	URI	251	114.688	65.238	-41.547	1.00	56.60	A16S
ATOM	23854	C3'	URI	248	128.035	69.952	-36.042	1.00	45.77	A16S	ATOM	23907	C4'	URI	251	114.708	63.799	-41.968	1.00	56.60	A16S
ATOM	23855	O3'	URI	248	127.075	70.662	-35.275	1.00	45.77	A16S	ATOM	23908	O4'	URI	251	116.071	63.422	-42.271	1.00	56.60	A16S
ATOM	23856	P	GUA	249	125.707	69.938	-34.855	1.00	49.46	A16S	ATOM	23909	C1'	URI	251	116.260	62.052	-41.963	1.00	56.60	A16S
ATOM	23857	O1P	GUA	249	124.997	70.851	-33.945	1.00	48.57	A16S	ATOM	23910	N1	URI	251	117.278	61.963	-40.913	1.00	61.44	A16S
ATOM	23858	O2P	GUA	249	126.031	68.558	-34.419	1.00	48.57	A16S	ATOM	23911	C6	URI	251	117.638	63.059	-40.183	1.00	61.44	A16S
ATOM	23859	O5'	GUA	249	124.862	69.873	-36.203	1.00	49.46	A16S	ATOM	23912	C2	URI	251	117.851	60.732	-40.683	1.00	61.44	A16S
ATOM	23860	C5'	GUA	249	124.234	71.042	-36.718	1.00	49.46	A16S	ATOM	23913	O2	URI	251	117.556	59.737	-41.327	1.00	61.44	A16S
ATOM	23861	C4'	GUA	249	123.650	70.770	-38.080	1.00	49.46	A16S	ATOM	23914	N3	URI	251	118.781	60.707	-39.674	1.00	61.44	A16S
ATOM	23862	O4'	GUA	249	124.701	70.237	-38.927	1.00	49.46	A16S	ATOM	23915	C4	URI	251	119.179	61.766	-38.895	1.00	61.44	A16S
ATOM	23863	C1'	GUA	249	124.148	69.297	-39.841	1.00	49.46	A16S	ATOM	23916	O4	URI	251	120.005	61.585	-38.004	1.00	61.44	A16S
ATOM	23864	N9	GUA	249	124.703	67.978	-39.549	1.00	48.57	A16S	ATOM	23917	C5	URI	251	118.543	63.004	-39.208	1.00	61.44	A16S
ATOM	23865	C4	GUA	249	124.596	66.860	-40.343	1.00	48.57	A16S	ATOM	23918	C2'	URI	251	114.915	61.526	-41.468	1.00	56.60	A16S
ATOM	23866	N3	GUA	249	123.983	66.795	-41.547	1.00	48.57	A16S	ATOM	23919	O2'	URI	251	114.142	61.065	-42.554	1.00	56.60	A16S
ATOM	23867	C2	GUA	249	124.024	65.573	-42.060	1.00	48.57	A16S	ATOM	23920	C3'	URI	251	114.321	62.795	-40.902	1.00	56.60	A16S
ATOM	23868	N2	GUA	249	123.473	65.333	-43.255	1.00	48.57	A16S	ATOM	23921	O3'	URI	251	112.927	62.663	-40.770	1.00	56.60	A16S

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ATOM  23922  P   GUA  252     112.311  62.302 -39.340  1.00 74.48      A16S
ATOM  23923  O1P GUA  252     110.838  62.504 -39.460  1.00 69.55      A16S
ATOM  23924  O2P GUA  252     113.076  63.046 -38.309  1.00 69.55      A16S
ATOM  23925  O5' GUA  252     112.649  60.754 -39.140  1.00 74.48      A16S
ATOM  23926  C5' GUA  252     111.940  59.746 -39.855  1.00 74.48      A16S
ATOM  23927  C4' GUA  252     112.564  58.393 -39.612  1.00 74.48      A16S
ATOM  23928  O4' GUA  252     113.977  58.473 -39.929  1.00 74.48      A16S
ATOM  23929  C1' GUA  252     114.704  57.597 -39.084  1.00 74.48      A16S
ATOM  23930  N9  GUA  252     115.635  58.386 -38.289  1.00 69.55      A16S
ATOM  23931  C4  GUA  252     116.691  57.896 -37.569  1.00 69.55      A16S
ATOM  23932  N3  GUA  252     117.054  56.602 -37.487  1.00 69.55      A16S
ATOM  23933  C2  GUA  252     118.115  56.437 -36.723  1.00 69.55      A16S
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ATOM  23935  N1  GUA  252     118.766  57.465 -36.082  1.00 69.55      A16S
ATOM  23936  C6  GUA  252     118.404  58.805 -36.150  1.00 69.55      A16S
ATOM  23937  O6  GUA  252     119.050  59.647 -35.528  1.00 69.55      A16S
ATOM  23938  C5  GUA  252     117.272  58.995 -36.975  1.00 69.55      A16S
ATOM  23939  N7  GUA  252     116.596  60.156 -37.320  1.00 69.55      A16S
ATOM  23940  C8  GUA  252     115.633  59.746 -38.101  1.00 69.55      A16S
ATOM  23941  C2' GUA  252     113.691  56.875 -38.200  1.00 74.48      A16S
ATOM  23942  O2' GUA  252     113.320  55.652 -38.801  1.00 74.48      A16S
ATOM  23943  C3' GUA  252     112.550  57.878 -38.181  1.00 74.48      A16S
ATOM  23944  O3' GUA  252     111.336  57.205 -37.880  1.00 74.48      A16S
ATOM  23945  P   GUA  253     110.812  57.146 -36.361  1.00 67.05      A16S
ATOM  23946  O1P GUA  253     109.590  56.309 -36.400  1.00 73.11      A16S
ATOM  23947  O2P GUA  253     110.734  58.530 -35.840  1.00 73.11      A16S
ATOM  23948  O5' GUA  253     111.945  56.357 -35.557  1.00 67.05      A16S
ATOM  23949  C5' GUA  253     112.058  54.951 -35.710  1.00 67.05      A16S
ATOM  23950  C4' GUA  253     113.330  54.423 -35.087  1.00 67.05      A16S
ATOM  23951  O4' GUA  253     114.472  55.192 -35.540  1.00 67.05      A16S
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ATOM  23965  O2' GUA  253     115.273  52.848 -33.641  1.00 67.05      A16S
ATOM  23966  C3' GUA  253     113.488  54.477 -33.580  1.00 67.05      A16S
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ATOM  23968  P   GUA  254     112.340  53.653 -31.379  1.00 59.84      A16S
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ATOM  23972  C5' GUA  254     114.329  52.055 -30.683  1.00 59.84      A16S
ATOM  23973  C4' GUA  254     115.693  52.079 -30.009  1.00 59.84      A16S
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ATOM  23986  C8  GUA  254     116.194  55.671 -30.488  1.00 65.82      A16S
ATOM  23987  C2' GUA  254     117.165  53.006 -28.393  1.00 59.84      A16S
ATOM  23988  O2' GUA  254     118.059  51.953 -28.117  1.00 59.84      A16S
ATOM  23989  C3' GUA  254     115.727  52.529 -28.562  1.00 59.84      A16S
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ATOM  23992  O1P GUA  255     114.443  50.444 -25.592  1.00 78.28      A16S
ATOM  23993  O2P GUA  255     113.408  52.504 -26.746  1.00 78.28      A16S
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ATOM  23997  O4' GUA  255     117.882  54.346 -25.364  1.00 63.28      A16S
ATOM  23998  C1' GUA  255     117.807  55.638 -24.793  1.00 63.28      A16S
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ATOM  24011  O2' GUA  255     118.515  55.384 -22.483  1.00 63.28      A16S
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ATOM  24036  O2P ADE   257     113.813  56.658 -15.501  1.00 61.79      A16S
ATOM  24037  O5' ADE   257     112.760  58.266 -17.073  1.00 56.34      A16S
ATOM  24038  C5' ADE   257     111.361  58.287 -16.844  1.00 56.34      A16S
ATOM  24039  C4' ADE   257     110.856  59.697 -16.971  1.00 56.34      A16S
ATOM  24040  O4' ADE   257     111.360  60.491 -15.870  1.00 56.34      A16S
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ATOM  24042  N9  ADE   257     113.207  61.865 -16.034  1.00 61.79      A16S
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ATOM  24047  C6  ADE   257     116.113  63.611 -15.101  1.00 61.79      A16S
ATOM  24048  N6  ADE   257     117.362  63.371 -14.702  1.00 61.79      A16S
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ATOM  24050  N7  ADE   257     115.284  61.221 -15.471  1.00 61.79      A16S
ATOM  24051  C8  ADE   257     114.088  60.834 -15.843  1.00 61.79      A16S
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ATOM  24053  O2' ADE   257     110.121  62.468 -17.926  1.00 56.34      A16S
ATOM  24054  C3' ADE   257     111.357  60.384 -18.221  1.00 56.34      A16S
ATOM  24055  O3' ADE   257     110.456  60.137 -19.280  1.00 56.34      A16S
ATOM  24056  P   ADE   258     111.006  60.109 -20.776  1.00 47.68      A16S
ATOM  24057  O1P ADE   258     109.869  59.824 -21.695  1.00 57.51      A16S
ATOM  24058  O2P ADE   258     112.190  59.217 -20.778  1.00 57.51      A16S
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ATOM  24060  C5' ADE   258     110.541  62.669 -21.119  1.00 47.68      A16S
ATOM  24061  C4' ADE   258     111.246  63.985 -21.319  1.00 47.68      A16S
ATOM  24062  O4' ADE   258     111.874  64.407 -20.081  1.00 47.68      A16S
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ATOM  24071  C5  ADE   258     116.010  63.601 -18.682  1.00 57.51      A16S
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ATOM  24074  C2' ADE   258     113.272  65.082 -21.893  1.00 47.68      A16S
ATOM  24075  O2' ADE   258     112.862  66.349 -22.355  1.00 47.68      A16S
ATOM  24076  C3' ADE   258     112.363  63.946 -22.346  1.00 47.68      A16S
ATOM  24077  O3' ADE   258     111.818  64.159 -23.637  1.00 47.68      A16S
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ATOM  24081  O5' URI   259     113.495  65.243 -25.141  1.00 50.27      A16S
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ATOM  24091  C4  URI   259     118.121  65.298 -22.656  1.00 54.88      A16S
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ATOM  24100  O2P GUA   260     114.839  64.833 -28.636  1.00 62.68      A16S
ATOM  24101  O5' GUA   260     116.795  66.306 -29.110  1.00 44.58      A16S
ATOM  24102  C5' GUA   260     117.437  67.455 -29.640  1.00 44.58      A16S
ATOM  24103  C4' GUA   260     118.899  67.443 -29.291  1.00 44.58      A16S
ATOM  24104  O4' GUA   260     119.051  67.548 -27.854  1.00 44.58      A16S
ATOM  24105  C1' GUA   260     120.242  66.892 -27.460  1.00 44.58      A16S
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ATOM  24111  N1  GUA   260     121.985  63.813 -23.870  1.00 62.68      A16S
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ATOM  24116  C8  GUA   260     118.733  65.109 -26.476  1.00 62.68      A16S
ATOM  24117  C2' GUA   260     120.869  66.316 -28.728  1.00 44.58      A16S
ATOM  24118  O2' GUA   260     121.805  67.233 -29.242  1.00 44.58      A16S
ATOM  24119  C3' GUA   260     119.644  66.164 -29.611  1.00 44.58      A16S
ATOM  24120  O3' GUA   260     119.989  66.108 -30.982  1.00 44.58      A16S
ATOM  24121  P   GUA   261     119.971  64.701 -31.749  1.00 54.80      A16S
ATOM  24122  O1P GUA   261     119.960  65.029 -33.198  1.00 78.56      A16S
ATOM  24123  O2P GUA   261     118.900  63.854 -31.176  1.00 78.56      A16S
ATOM  24124  O5' GUA   261     121.381  64.078 -31.376  1.00 54.80      A16S
ATOM  24125  C5' GUA   261     122.507  64.922 -31.322  1.00 54.80      A16S
ATOM  24126  C4' GUA   261     123.628  64.286 -30.548  1.00 54.80      A16S
ATOM  24127  O4' GUA   261     123.915  62.980 -31.066  1.00 54.80      A16S
ATOM  24128  C1' GUA   261     125.197  62.971 -31.643  1.00 54.80      A16S
ATOM  24129  N9  GUA   261     124.961  62.948 -33.078  1.00 78.56      A16S
ATOM  24130  C4  GUA   261     125.171  61.877 -33.883  1.00 78.56      A16S
ATOM  24131  N3  GUA   261     125.731  60.722 -33.504  1.00 78.56      A16S
ATOM  24132  C2  GUA   261     125.738  59.843 -34.483  1.00 78.56      A16S
ATOM  24133  N2  GUA   261     126.267  58.617 -34.285  1.00 78.56      A16S
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ATOM	24134	N1	GUA	261	125.228	60.089	-35.734	1.00	78.56	A16S	ATOM	24187	O5'	CYT	264	126.672	54.884	-32.333	1.00	68.29	A16S
ATOM	24135	C6	GUA	261	124.646	61.280	-36.137	1.00	78.56	A16S	ATOM	24188	C5'	CYT	264	126.309	53.529	-32.139	1.00	68.29	A16S
ATOM	24136	O6	GUA	261	124.211	61.393	-37.278	1.00	78.56	A16S	ATOM	24189	C4'	CYT	264	125.111	53.177	-32.988	1.00	68.29	A16S
ATOM	24137	C5	GUA	261	124.640	62.224	-35.106	1.00	78.56	A16S	ATOM	24190	O4'	CYT	264	123.959	53.950	-32.568	1.00	68.29	A16S
ATOM	24138	N7	GUA	261	124.156	63.522	-35.085	1.00	78.56	A16S	ATOM	24191	C1'	CYT	264	123.066	54.076	-33.661	1.00	68.29	A16S
ATOM	24139	C8	GUA	261	124.389	63.922	-33.864	1.00	78.56	A16S	ATOM	24192	N1	CYT	264	122.727	55.491	-33.843	1.00	65.00	A16S
ATOM	24140	C2'	GUA	261	125.995	64.114	-31.004	1.00	54.80	A16S	ATOM	24193	C6	CYT	264	123.481	56.479	-33.284	1.00	65.00	A16S
ATOM	24141	O2'	GUA	261	126.682	63.604	-29.882	1.00	54.80	A16S	ATOM	24194	C2	CYT	264	121.615	55.807	-34.616	1.00	65.00	A16S
ATOM	24142	C3'	GUA	261	124.888	65.116	-30.685	1.00	54.80	A16S	ATOM	24195	O2	CYT	264	120.942	54.886	-35.092	1.00	65.00	A16S
ATOM	24143	O3'	GUA	261	124.929	65.999	-29.554	1.00	54.80	A16S	ATOM	24196	N3	CYT	264	121.300	57.099	-34.827	1.00	65.00	A16S
ATOM	24144	P	CYT	262	125.859	65.705	-28.268	1.00	52.62	A16S	ATOM	24197	C4	CYT	264	122.052	58.056	-34.296	1.00	65.00	A16S
ATOM	24145	O1P	CYT	262	125.408	66.732	-27.299	1.00	67.99	A16S	ATOM	24198	N4	CYT	264	121.720	59.315	-34.549	1.00	65.00	A16S
ATOM	24146	O2P	CYT	262	127.302	65.609	-28.607	1.00	67.99	A16S	ATOM	24199	C5	CYT	264	123.181	57.764	-33.485	1.00	65.00	A16S
ATOM	24147	O5'	CYT	262	125.403	64.319	-27.634	1.00	52.62	A16S	ATOM	24200	C2'	CYT	264	123.749	53.485	-34.895	1.00	68.29	A16S
ATOM	24148	C5'	CYT	262	125.924	63.954	-26.354	1.00	52.62	A16S	ATOM	24201	O2'	CYT	264	123.252	52.190	-35.133	1.00	68.29	A16S
ATOM	24149	C4'	CYT	262	125.441	62.589	-25.920	1.00	52.62	A16S	ATOM	24202	C3'	CYT	264	125.212	53.483	-34.472	1.00	68.29	A16S
ATOM	24150	O4'	CYT	262	124.041	62.611	-25.560	1.00	52.62	A16S	ATOM	24203	O3'	CYT	264	125.928	52.465	-35.159	1.00	68.29	A16S
ATOM	24151	C1'	CYT	262	123.514	61.305	-25.704	1.00	52.62	A16S	ATOM	24204	P	ADE	265	126.571	52.777	-36.598	1.00	85.77	A16S
ATOM	24152	N1	CYT	262	122.348	61.361	-26.574	1.00	67.99	A16S	ATOM	24205	O1P	ADE	265	127.479	51.645	-36.912	1.00	81.69	A16S
ATOM	24153	C6	CYT	262	122.134	62.420	-27.408	1.00	67.99	A16S	ATOM	24206	O2P	ADE	265	127.101	54.167	-36.595	1.00	81.69	A16S
ATOM	24154	C2	CYT	262	121.469	60.302	-26.545	1.00	67.99	A16S	ATOM	24207	O5'	ADE	265	125.330	52.726	-37.599	1.00	85.77	A16S
ATOM	24155	O2	CYT	262	121.687	59.377	-25.755	1.00	67.99	A16S	ATOM	24208	C5'	ADE	265	124.876	51.489	-38.137	1.00	85.77	A16S
ATOM	24156	N3	CYT	262	120.403	60.304	-27.367	1.00	67.99	A16S	ATOM	24209	C4'	ADE	265	123.716	51.721	-39.074	1.00	85.77	A16S
ATOM	24157	C4	CYT	262	120.202	61.328	-28.191	1.00	67.99	A16S	ATOM	24210	O4'	ADE	265	122.655	52.371	-38.331	1.00	85.77	A16S
ATOM	24158	N4	CYT	262	119.148	61.278	-28.997	1.00	67.99	A16S	ATOM	24211	C1'	ADE	265	122.000	53.317	-39.158	1.00	85.77	A16S
ATOM	24159	C5	CYT	262	121.080	62.445	-28.227	1.00	67.99	A16S	ATOM	24212	N9	ADE	265	122.205	54.645	-38.575	1.00	81.69	A16S
ATOM	24160	C2'	CYT	262	124.607	60.416	-26.302	1.00	52.62	A16S	ATOM	24213	C4	ADE	265	121.460	55.774	-38.813	1.00	81.69	A16S
ATOM	24161	O2'	CYT	262	125.220	59.674	-25.269	1.00	52.62	A16S	ATOM	24214	N3	ADE	265	120.399	55.894	-39.625	1.00	81.69	A16S
ATOM	24162	C3'	CYT	262	125.551	61.444	-26.914	1.00	52.62	A16S	ATOM	24215	C2	ADE	265	119.924	57.138	-39.596	1.00	81.69	A16S
ATOM	24163	O3'	CYT	262	126.877	60.944	-26.890	1.00	52.62	A16S	ATOM	24216	N1	ADE	265	120.358	58.194	-38.903	1.00	81.69	A16S
ATOM	24164	P	CYT	263	127.526	60.316	-28.211	1.00	62.06	A16S	ATOM	24217	C6	ADE	265	121.432	58.041	-38.101	1.00	81.69	A16S
ATOM	24165	O1P	CYT	263	128.904	59.969	-27.787	1.00	59.09	A16S	ATOM	24218	N6	ADE	265	121.875	59.098	-37.418	1.00	81.69	A16S
ATOM	24166	O2P	CYT	263	127.319	61.205	-29.386	1.00	59.09	A16S	ATOM	24219	C5	ADE	265	122.025	56.767	-38.039	1.00	81.69	A16S
ATOM	24167	O5'	CYT	263	126.725	58.956	-28.419	1.00	62.06	A16S	ATOM	24220	N7	ADE	265	123.110	56.277	-37.328	1.00	81.69	A16S
ATOM	24168	C5'	CYT	263	127.049	57.792	-27.667	1.00	62.06	A16S	ATOM	24221	C8	ADE	265	123.175	55.019	-37.681	1.00	81.69	A16S
ATOM	24169	C4'	CYT	263	126.195	56.642	-28.122	1.00	62.06	A16S	ATOM	24222	C2'	ADE	265	122.590	53.170	-40.562	1.00	85.77	A16S
ATOM	24170	O4'	CYT	263	124.809	56.987	-27.876	1.00	62.06	A16S	ATOM	24223	O2'	ADE	265	121.839	52.235	-41.309	1.00	85.77	A16S
ATOM	24171	C1'	CYT	263	123.996	56.475	-28.914	1.00	62.06	A16S	ATOM	24224	C3'	ADE	265	123.983	52.653	-40.245	1.00	85.77	A16S
ATOM	24172	N1	CYT	263	123.315	57.597	-29.566	1.00	59.09	A16S	ATOM	24225	O3'	ADE	265	124.513	51.950	-41.358	1.00	85.77	A16S
ATOM	24173	C6	CYT	263	123.814	58.864	-29.487	1.00	59.09	A16S	ATOM	24226	P	CYT	266	125.577	52.676	-42.318	1.00	68.64	A16S
ATOM	24174	C2	CYT	263	122.139	57.350	-30.264	1.00	59.09	A16S	ATOM	24227	O1P	CYT	266	126.193	51.637	-43.185	1.00	78.40	A16S
ATOM	24175	O2	CYT	263	121.717	56.192	-30.328	1.00	59.09	A16S	ATOM	24228	O2P	CYT	266	126.442	53.518	-41.458	1.00	78.40	A16S
ATOM	24176	N3	CYT	263	121.486	58.374	-30.849	1.00	59.09	A16S	ATOM	24229	O5'	CYT	266	124.708	53.640	-43.246	1.00	68.64	A16S
ATOM	24177	C4	CYT	263	121.972	59.606	-30.757	1.00	59.09	A16S	ATOM	24230	C5'	CYT	266	123.870	53.108	-44.262	1.00	68.64	A16S
ATOM	24178	N4	CYT	263	121.295	60.581	-31.345	1.00	59.09	A16S	ATOM	24231	C4'	CYT	266	122.847	54.130	-44.684	1.00	68.64	A16S
ATOM	24179	C5	CYT	263	123.176	59.890	-30.059	1.00	59.09	A16S	ATOM	24232	O4'	CYT	266	122.057	54.537	-43.531	1.00	68.64	A16S
ATOM	24180	C2'	CYT	263	124.902	55.701	-29.867	1.00	62.06	A16S	ATOM	24233	C1'	CYT	266	121.690	55.902	-43.662	1.00	68.64	A16S
ATOM	24181	O2'	CYT	263	124.889	54.328	-29.521	1.00	62.06	A16S	ATOM	24234	N1	CYT	266	122.317	56.659	-42.573	1.00	78.40	A16S
ATOM	24182	C3'	CYT	263	126.242	56.375	-29.613	1.00	62.06	A16S	ATOM	24235	C6	CYT	266	123.316	56.114	-41.820	1.00	78.40	A16S
ATOM	24183	O3'	CYT	263	127.320	55.524	-29.972	1.00	62.06	A16S	ATOM	24236	C2	CYT	266	121.882	57.964	-42.331	1.00	78.40	A16S
ATOM	24184	P	CYT	264	127.856	55.534	-31.489	1.00	68.29	A16S	ATOM	24237	O2	CYT	266	120.964	58.423	-43.022	1.00	78.40	A16S
ATOM	24185	O1P	CYT	264	129.029	54.633	-31.560	1.00	65.00	A16S	ATOM	24238	N3	CYT	266	122.470	58.688	-41.353	1.00	78.40	A16S
ATOM	24186	O2P	CYT	264	127.997	56.954	-31.909	1.00	65.00	A16S	ATOM	24239	C4	CYT	266	123.450	58.149	-40.628	1.00	78.40	A16S

ATOM	24240	N4	CYT	266	124.000	58.896	-39.670	1.00	78.40	A16S	ATOM	24293	C4'	ADE	269	129.153	69.321	-47.682	1.00	74.91	A16S
ATOM	24241	C5	CYT	266	123.907	56.817	-40.849	1.00	78.40	A16S	ATOM	24294	O4'	ADE	269	128.843	68.317	-46.694	1.00	74.91	A16S
ATOM	24242	C2'	CYT	266	122.222	56.370	-45.016	1.00	68.64	A16S	ATOM	24295	C1'	ADE	269	129.918	68.205	-45.805	1.00	74.91	A16S
ATOM	24243	O2'	CYT	266	121.240	56.191	-46.011	1.00	68.64	A16S	ATOM	24296	N9	ADE	269	130.082	66.812	-45.399	1.00	58.11	A16S
ATOM	24244	C3'	CYT	266	123.407	55.439	-45.198	1.00	68.64	A16S	ATOM	24297	C4	ADE	269	130.520	66.421	-44.158	1.00	58.11	A16S
ATOM	24245	O3'	CYT	266	123.774	55.343	-46.557	1.00	68.64	A16S	ATOM	24298	N3	ADE	269	130.832	67.215	-43.123	1.00	58.11	A16S
ATOM	24246	P	CYT	267	124.996	56.227	-47.100	1.00	77.95	A16S	ATOM	24299	C2	ADE	269	131.243	66.493	-42.091	1.00	58.11	A16S
ATOM	24247	O1P	CYT	267	125.288	55.778	-48.489	1.00	64.50	A16S	ATOM	24300	N1	ADE	269	131.374	65.171	-41.987	1.00	58.11	A16S
ATOM	24248	O2P	CYT	267	126.063	56.159	-46.073	1.00	64.50	A16S	ATOM	24301	C6	ADE	269	131.057	64.404	-43.050	1.00	58.11	A16S
ATOM	24249	O5'	CYT	267	124.411	57.713	-47.142	1.00	77.95	A16S	ATOM	24302	N6	ADE	269	131.214	63.090	-42.955	1.00	58.11	A16S
ATOM	24250	C5'	CYT	267	123.314	58.035	-47.998	1.00	77.95	A16S	ATOM	24303	C5	ADE	269	130.592	65.044	-44.198	1.00	58.11	A16S
ATOM	24251	C4'	CYT	267	122.851	59.459	-47.774	1.00	77.95	A16S	ATOM	24304	N7	ADE	269	130.175	64.564	-45.431	1.00	58.11	A16S
ATOM	24252	O4'	CYT	267	122.340	59.603	-46.422	1.00	77.95	A16S	ATOM	24305	C8	ADE	269	129.879	65.652	-46.107	1.00	58.11	A16S
ATOM	24253	C1'	CYT	267	122.597	60.919	-45.954	1.00	77.95	A16S	ATOM	24306	C2'	ADE	269	131.148	68.861	-46.436	1.00	74.91	A16S
ATOM	24254	N1	CYT	267	123.471	60.838	-44.775	1.00	64.50	A16S	ATOM	24307	O2'	ADE	269	131.498	70.014	-45.709	1.00	74.91	A16S
ATOM	24255	C6	CYT	267	124.157	59.694	-44.479	1.00	64.50	A16S	ATOM	24308	C3'	ADE	269	130.666	69.240	-47.831	1.00	74.91	A16S
ATOM	24256	C2	CYT	267	123.592	61.962	-43.960	1.00	64.50	A16S	ATOM	24309	O3'	ADE	269	131.291	70.507	-48.128	1.00	74.91	A16S
ATOM	24257	O2	CYT	267	122.952	62.984	-44.255	1.00	64.50	A16S	ATOM	24310	P	GUA	270	130.555	71.915	-47.767	1.00	58.40	A16S
ATOM	24258	N3	CYT	267	124.398	61.911	-42.873	1.00	64.50	A16S	ATOM	24311	O1P	GUA	270	129.418	72.118	-48.709	1.00	59.41	A16S
ATOM	24259	C4	CYT	267	125.062	60.790	-42.591	1.00	64.50	A16S	ATOM	24312	O2P	GUA	270	131.590	72.978	-47.621	1.00	59.41	A16S
ATOM	24260	N4	CYT	267	125.840	60.781	-41.507	1.00	64.50	A16S	ATOM	24313	O5'	GUA	270	129.914	71.690	-46.327	1.00	58.40	A16S
ATOM	24261	C5	CYT	267	124.956	59.627	-43.407	1.00	64.50	A16S	ATOM	24314	C5'	GUA	270	130.163	72.578	-45.253	1.00	58.40	A16S
ATOM	24262	C2'	CYT	267	123.255	61.685	-47.102	1.00	77.95	A16S	ATOM	24315	C4'	GUA	270	129.550	72.025	-43.994	1.00	58.40	A16S
ATOM	24263	O2'	CYT	267	122.267	62.370	-47.846	1.00	77.95	A16S	ATOM	24316	O4'	GUA	270	129.957	70.641	-43.832	1.00	58.40	A16S
ATOM	24264	C3'	CYT	267	123.907	60.545	-47.875	1.00	77.95	A16S	ATOM	24317	C1'	GUA	270	130.324	70.398	-42.489	1.00	58.40	A16S
ATOM	24265	O3'	CYT	267	124.168	60.910	-49.222	1.00	77.95	A16S	ATOM	24318	N9	GUA	270	131.776	70.217	-42.456	1.00	59.41	A16S
ATOM	24266	P	ADE	268	125.647	61.382	-49.638	1.00	88.52	A16S	ATOM	24319	C4	GUA	270	132.563	69.939	-41.357	1.00	59.41	A16S
ATOM	24267	O1P	ADE	268	125.725	61.376	-51.126	1.00	63.58	A16S	ATOM	24320	N3	GUA	270	132.132	69.746	-40.090	1.00	59.41	A16S
ATOM	24268	O2P	ADE	268	126.604	60.557	-48.851	1.00	63.58	A16S	ATOM	24321	C2	GUA	270	133.137	69.532	-39.258	1.00	59.41	A16S
ATOM	24269	O5'	ADE	268	125.712	62.896	-49.145	1.00	88.52	A16S	ATOM	24322	N2	GUA	270	132.900	69.328	-37.963	1.00	59.41	A16S
ATOM	24270	C5'	ADE	268	124.808	63.859	-49.674	1.00	88.52	A16S	ATOM	24323	N1	GUA	270	134.452	69.505	-39.633	1.00	59.41	A16S
ATOM	24271	C4'	ADE	268	124.788	65.100	-48.813	1.00	88.52	A16S	ATOM	24324	C6	GUA	270	134.920	69.700	-40.924	1.00	59.41	A16S
ATOM	24272	O4'	ADE	268	124.413	64.737	-47.458	1.00	88.52	A16S	ATOM	24325	O6	GUA	270	136.137	69.667	-41.151	1.00	59.41	A16S
ATOM	24273	C1'	ADE	268	125.030	65.629	-46.543	1.00	88.52	A16S	ATOM	24326	C5	GUA	270	133.858	69.928	-41.832	1.00	59.41	A16S
ATOM	24274	N9	ADE	268	125.842	64.851	-45.608	1.00	63.58	A16S	ATOM	24327	N7	GUA	270	133.883	70.160	-43.197	1.00	59.41	A16S
ATOM	24275	C4	ADE	268	126.400	65.320	-44.441	1.00	63.58	A16S	ATOM	24328	C8	GUA	270	132.632	70.321	-43.521	1.00	59.41	A16S
ATOM	24276	N3	ADE	268	126.332	66.568	-43.946	1.00	63.58	A16S	ATOM	24329	C2'	GUA	270	129.841	71.614	-41.692	1.00	58.40	A16S
ATOM	24277	C2	ADE	268	126.972	66.648	-42.785	1.00	63.58	A16S	ATOM	24330	O2'	GUA	270	128.500	71.427	-41.290	1.00	58.40	A16S
ATOM	24278	N1	ADE	268	127.617	65.698	-42.108	1.00	63.58	A16S	ATOM	24331	C3'	GUA	270	129.990	72.719	-42.726	1.00	58.40	A16S
ATOM	24279	C6	ADE	268	127.665	64.455	-42.627	1.00	63.58	A16S	ATOM	24332	O3'	GUA	270	129.162	73.844	-42.471	1.00	58.40	A16S
ATOM	24280	N6	ADE	268	128.298	63.506	-41.939	1.00	63.58	A16S	ATOM	24333	P	GUA	271	129.824	75.198	-41.929	1.00	50.11	A16S
ATOM	24281	C5	ADE	268	127.034	64.237	-43.863	1.00	63.58	A16S	ATOM	24334	O1P	GUA	271	128.811	76.280	-41.874	1.00	49.62	A16S
ATOM	24282	N7	ADE	268	126.899	63.107	-44.660	1.00	63.58	A16S	ATOM	24335	O2P	GUA	271	131.072	75.413	-42.690	1.00	49.62	A16S
ATOM	24283	C8	ADE	268	126.189	63.524	-45.682	1.00	63.58	A16S	ATOM	24336	O5'	GUA	271	130.232	74.813	-40.441	1.00	50.11	A16S
ATOM	24284	C2'	ADE	268	125.839	66.632	-47.367	1.00	88.52	A16S	ATOM	24337	C5'	GUA	271	129.239	74.435	-39.498	1.00	50.11	A16S
ATOM	24285	O2'	ADE	268	125.043	67.774	-47.626	1.00	88.52	A16S	ATOM	24338	C4'	GUA	271	129.886	73.967	-38.222	1.00	50.11	A16S
ATOM	24286	C3'	ADE	268	126.110	65.826	-48.628	1.00	88.52	A16S	ATOM	24339	O4'	GUA	271	130.612	72.737	-38.479	1.00	50.11	A16S
ATOM	24287	O3'	ADE	268	126.384	66.689	-49.722	1.00	88.52	A16S	ATOM	24340	C1'	GUA	271	131.786	72.705	-37.679	1.00	50.11	A16S
ATOM	24288	P	ADE	269	127.871	66.760	-50.319	1.00	74.91	A16S	ATOM	24341	N9	GUA	271	132.942	72.725	-38.575	1.00	49.62	A16S
ATOM	24289	O1P	ADE	269	127.797	67.548	-51.569	1.00	58.11	A16S	ATOM	24342	C4	GUA	271	134.270	72.610	-38.222	1.00	49.62	A16S
ATOM	24290	O2P	ADE	269	128.461	65.396	-50.340	1.00	58.11	A16S	ATOM	24343	N3	GUA	271	134.748	72.430	-36.976	1.00	49.62	A16S
ATOM	24291	O5'	ADE	269	128.704	67.582	-49.241	1.00	74.91	A16S	ATOM	24344	C2	GUA	271	136.070	72.394	-36.954	1.00	49.62	A16S
ATOM	24292	C5'	ADE	269	128.399	68.935	-48.922	1.00	74.91	A16S	ATOM	24345	N2	GUA	271	136.719	72.235	-35.794	1.00	49.62	A16S

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ATOM  24346  N1  GUA  271     136.854  72.515 -38.064  1.00 49.62      A16S
ATOM  24347  C6  GUA  271     136.386  72.690 -39.355  1.00 49.62      A16S
ATOM  24348  O6  GUA  271     137.185  72.786 -40.286  1.00 49.62      A16S
ATOM  24349  C5  GUA  271     134.974  72.736 -39.399  1.00 49.62      A16S
ATOM  24350  N7  GUA  271     134.113  72.899 -40.476  1.00 49.62      A16S
ATOM  24351  C8  GUA  271     132.922  72.883 -39.944  1.00 49.62      A16S
ATOM  24352  C2' GUA  271     131.711  73.926 -36.752  1.00 50.11      A16S
ATOM  24353  O2' GUA  271     130.985  73.607 -35.580  1.00 50.11      A16S
ATOM  24354  C3' GUA  271     130.925  74.899 -37.611  1.00 50.11      A16S
ATOM  24355  O3' GUA  271     130.317  75.915 -36.807  1.00 50.11      A16S
ATOM  24356  P   CYT  272     130.920  77.410 -36.808  1.00 48.28      A16S
ATOM  24357  O1P CYT  272     130.050  78.234 -35.938  1.00 47.68      A16S
ATOM  24358  O2P CYT  272     131.172  77.839 -38.208  1.00 47.68      A16S
ATOM  24359  O5' CYT  272     132.312  77.240 -36.056  1.00 48.28      A16S
ATOM  24360  C5' CYT  272     132.337  76.757 -34.718  1.00 48.28      A16S
ATOM  24361  C4' CYT  272     133.752  76.666 -34.198  1.00 48.28      A16S
ATOM  24362  O4' CYT  272     134.447  75.537 -34.779  1.00 48.28      A16S
ATOM  24363  C1' CYT  272     135.843  75.786 -34.748  1.00 48.28      A16S
ATOM  24364  N1  CYT  272     136.346  75.746 -36.109  1.00 47.68      A16S
ATOM  24365  C6  CYT  272     135.519  75.925 -37.178  1.00 47.68      A16S
ATOM  24366  C2  CYT  272     137.693  75.555 -36.292  1.00 47.68      A16S
ATOM  24367  O2  CYT  272     138.395  75.352 -35.295  1.00 47.68      A16S
ATOM  24368  N3  CYT  272     138.204  75.589 -37.538  1.00 47.68      A16S
ATOM  24369  C4  CYT  272     137.402  75.794 -38.576  1.00 47.68      A16S
ATOM  24370  N4  CYT  272     137.950  75.849 -39.783  1.00 47.68      A16S
ATOM  24371  C5  CYT  272     136.004  75.959 -38.420  1.00 47.68      A16S
ATOM  24372  C2' CYT  272     136.042  77.201 -34.209  1.00 48.28      A16S
ATOM  24373  O2' CYT  272     136.354  77.176 -32.833  1.00 48.28      A16S
ATOM  24374  C3' CYT  272     134.685  77.818 -34.507  1.00 48.28      A16S
ATOM  24375  O3' CYT  272     134.445  78.946 -33.695  1.00 48.28      A16S
ATOM  24376  P   GUA  273     134.828  80.393 -34.254  1.00 51.90      A16S
ATOM  24377  O1P GUA  273     134.344  81.387 -33.261  1.00 55.98      A16S
ATOM  24378  O2P GUA  273     134.396  80.484 -35.671  1.00 55.98      A16S
ATOM  24379  O5' GUA  273     136.413  80.391 -34.211  1.00 51.90      A16S
ATOM  24380  C5' GUA  273     137.089  80.175 -32.983  1.00 51.90      A16S
ATOM  24381  C4' GUA  273     138.573  80.244 -33.196  1.00 51.90      A16S
ATOM  24382  O4' GUA  273     138.994  79.135 -34.029  1.00 51.90      A16S
ATOM  24383  C1' GUA  273     140.035  79.563 -34.886  1.00 51.90      A16S
ATOM  24384  N9  GUA  273     139.590  79.409 -36.263  1.00 55.98      A16S
ATOM  24385  C4  GUA  273     140.403  79.360 -37.364  1.00 55.98      A16S
ATOM  24386  N3  GUA  273     141.746  79.458 -37.354  1.00 55.98      A16S
ATOM  24387  C2  GUA  273     142.257  79.368 -38.565  1.00 55.98      A16S
ATOM  24388  N2  GUA  273     143.586  79.448 -38.736  1.00 55.98      A16S
ATOM  24389  N1  GUA  273     141.507  79.192 -39.696  1.00 55.98      A16S
ATOM  24390  C6  GUA  273     140.128  79.079 -39.731  1.00 55.98      A16S
ATOM  24391  O6  GUA  273     139.561  78.901 -40.807  1.00 55.98      A16S
ATOM  24392  C5  GUA  273     139.562  79.184 -38.435  1.00 55.98      A16S
ATOM  24393  N7  GUA  273     138.236  79.132 -38.018  1.00 55.98      A16S
ATOM  24394  C8  GUA  273     138.303  79.273 -36.721  1.00 55.98      A16S
ATOM  24395  C2' GUA  273     140.357  81.009 -34.521  1.00 51.90      A16S
ATOM  24396  O2' GUA  273     141.372  81.007 -33.545  1.00 51.90      A16S
ATOM  24397  C3' GUA  273     139.022  81.470 -33.962  1.00 51.90      A16S
ATOM  24398  O3' GUA  273     139.140  82.578 -33.084  1.00 51.90      A16S
ATOM  24399  P   ADE  274     138.984  84.064 -33.660  1.00 51.97      A16S
ATOM  24400  O1P ADE  274     138.109  84.829 -32.737  1.00 52.55      A16S
ATOM  24401  O2P ADE  274     138.603  83.926 -35.078  1.00 52.55      A16S
ATOM  24402  O5' ADE  274     140.460  84.660 -33.575  1.00 51.97      A16S
ATOM  24403  C5' ADE  274     140.881  85.441 -32.453  1.00 51.97      A16S
ATOM  24404  C4' ADE  274     142.173  86.156 -32.781  1.00 51.97      A16S
ATOM  24405  O4' ADE  274     143.202  85.152 -32.919  1.00 51.97      A16S
ATOM  24406  C1' ADE  274     144.047  85.482 -33.996  1.00 51.97      A16S
ATOM  24407  N9  ADE  274     144.190  84.308 -34.849  1.00 52.55      A16S
ATOM  24408  C4  ADE  274     145.398  83.806 -35.227  1.00 52.55      A16S
ATOM  24409  N3  ADE  274     146.595  84.309 -34.917  1.00 52.55      A16S
ATOM  24410  C2  ADE  274     147.551  83.554 -35.434  1.00 52.55      A16S
ATOM  24411  N1  ADE  274     147.445  82.430 -36.172  1.00 52.55      A16S
ATOM  24412  C6  ADE  274     146.216  81.958 -36.455  1.00 52.55      A16S
ATOM  24413  N6  ADE  274     146.114  80.849 -37.172  1.00 52.55      A16S
ATOM  24414  C5  ADE  274     145.125  82.668 -35.970  1.00 52.55      A16S
ATOM  24415  N7  ADE  274     143.759  82.464 -36.078  1.00 52.55      A16S
ATOM  24416  C8  ADE  274     143.243  83.469 -35.404  1.00 52.55      A16S
ATOM  24417  C2' ADE  274     143.539  86.753 -34.672  1.00 51.97      A16S
ATOM  24418  O2' ADE  274     144.392  87.824 -34.338  1.00 51.97      A16S
ATOM  24419  C3' ADE  274     142.123  86.897 -34.111  1.00 51.97      A16S
ATOM  24420  O3' ADE  274     141.772  88.301 -34.021  1.00 51.97      A16S
ATOM  24421  P   CYT  275     141.736  89.064 -32.601  1.00 50.86      A16S
ATOM  24422  O1P CYT  275     141.333  90.452 -32.923  1.00 83.75      A16S
ATOM  24423  O2P CYT  275     143.019  88.824 -31.903  1.00 83.75      A16S
ATOM  24424  O5' CYT  275     140.548  88.365 -31.784  1.00 50.86      A16S
ATOM  24425  C5' CYT  275     140.449  88.439 -30.338  1.00 50.86      A16S
ATOM  24426  C4' CYT  275     139.004  88.246 -29.896  1.00 50.86      A16S
ATOM  24427  O4' CYT  275     138.219  89.260 -30.552  1.00 50.86      A16S
ATOM  24428  C1' CYT  275     136.925  88.779 -30.764  1.00 50.86      A16S
ATOM  24429  N1  CYT  275     136.431  89.278 -32.037  1.00 83.75      A16S
ATOM  24430  C6  CYT  275     137.283  89.580 -33.054  1.00 83.75      A16S
ATOM  24431  C2  CYT  275     135.059  89.423 -32.197  1.00 83.75      A16S
ATOM  24432  O2  CYT  275     134.318  89.178 -31.233  1.00 83.75      A16S
ATOM  24433  N3  CYT  275     134.571  89.828 -33.388  1.00 83.75      A16S
ATOM  24434  C4  CYT  275     135.408  90.093 -34.390  1.00 83.75      A16S
ATOM  24435  N4  CYT  275     134.889  90.455 -35.564  1.00 83.75      A16S
ATOM  24436  C5  CYT  275     136.819  89.988 -34.238  1.00 83.75      A16S
ATOM  24437  C2' CYT  275     136.930  87.253 -30.677  1.00 50.86      A16S
ATOM  24438  O2' CYT  275     135.905  86.825 -29.790  1.00 50.86      A16S
ATOM  24439  C3' CYT  275     138.373  86.907 -30.274  1.00 50.86      A16S
ATOM  24440  O3' CYT  275     138.208  86.013 -29.153  1.00 50.86      A16S
ATOM  24441  P   GUA  276     139.420  85.687 -28.135  1.00 61.83      A16S
ATOM  24442  O1P GUA  276     138.811  84.983 -26.979  1.00 51.82      A16S
ATOM  24443  O2P GUA  276     140.246  86.898 -27.888  1.00 51.82      A16S
ATOM  24444  O5' GUA  276     140.289  84.588 -28.892  1.00 61.83      A16S
ATOM  24445  C5' GUA  276     139.775  83.283 -29.116  1.00 61.83      A16S
ATOM  24446  C4' GUA  276     140.908  82.322 -29.288  1.00 61.83      A16S
ATOM  24447  O4' GUA  276     141.764  82.903 -30.289  1.00 61.83      A16S
ATOM  24448  C1' GUA  276     143.110  82.780 -29.899  1.00 61.83      A16S
ATOM  24449  N9  GUA  276     143.689  84.116 -29.848  1.00 51.82      A16S
ATOM  24450  C4  GUA  276     144.937  84.468 -30.282  1.00 51.82      A16S
ATOM  24451  N3  GUA  276     145.853  83.632 -30.804  1.00 51.82      A16S
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ATOM	24452	C2	GUA	276	146.968	84.264	-31.126	1.00	51.82	A16S
ATOM	24453	N2	GUA	276	147.995	83.581	-31.650	1.00	51.82	A16S
ATOM	24454	N1	GUA	276	147.158	85.608	-30.957	1.00	51.82	A16S
ATOM	24455	C6	GUA	276	146.222	86.487	-30.433	1.00	51.82	A16S
ATOM	24456	O6	GUA	276	146.494	87.684	-30.340	1.00	51.82	A16S
ATOM	24457	C5	GUA	276	145.031	85.825	-30.073	1.00	51.82	A16S
ATOM	24458	N7	GUA	276	143.865	86.319	-29.512	1.00	51.82	A16S
ATOM	24459	C8	GUA	276	143.099	85.268	-29.393	1.00	51.82	A16S
ATOM	24460	C2'	GUA	276	143.166	81.922	-28.633	1.00	61.83	A16S
ATOM	24461	O2'	GUA	276	143.339	80.591	-29.047	1.00	61.83	A16S
ATOM	24462	C3'	GUA	276	141.781	82.140	-28.055	1.00	61.83	A16S
ATOM	24463	O3'	GUA	276	141.224	81.123	-27.182	1.00	61.83	A16S
ATOM	24464	P	ADE	277	141.769	79.588	-27.179	1.00	43.62	A16S
ATOM	24465	O1P	ADE	277	141.053	78.940	-26.064	1.00	51.35	A16S
ATOM	24466	O2P	ADE	277	143.254	79.499	-27.217	1.00	51.35	A16S
ATOM	24467	O5'	ADE	277	141.126	78.932	-28.480	1.00	43.62	A16S
ATOM	24468	C5'	ADE	277	139.717	78.675	-28.539	1.00	43.62	A16S
ATOM	24469	C4'	ADE	277	139.379	77.801	-29.731	1.00	43.62	A16S
ATOM	24470	O4'	ADE	277	139.861	78.431	-30.952	1.00	43.62	A16S
ATOM	24471	C1'	ADE	277	140.510	77.471	-31.765	1.00	43.62	A16S
ATOM	24472	N9	ADE	277	141.949	77.710	-31.675	1.00	51.35	A16S
ATOM	24473	C4	ADE	277	142.941	76.946	-32.233	1.00	51.35	A16S
ATOM	24474	N3	ADE	277	142.795	75.841	-32.980	1.00	51.35	A16S
ATOM	24475	C2	ADE	277	143.979	75.356	-33.336	1.00	51.35	A16S
ATOM	24476	N1	ADE	277	145.200	75.815	-33.053	1.00	51.35	A16S
ATOM	24477	C6	ADE	277	145.314	76.929	-32.303	1.00	51.35	A16S
ATOM	24478	N6	ADE	277	146.533	77.382	-32.023	1.00	51.35	A16S
ATOM	24479	C5	ADE	277	144.129	77.542	-31.860	1.00	51.35	A16S
ATOM	24480	N7	ADE	277	143.891	78.671	-31.092	1.00	51.35	A16S
ATOM	24481	C8	ADE	277	142.587	78.726	-31.013	1.00	51.35	A16S
ATOM	24482	C2'	ADE	277	140.107	76.108	-31.213	1.00	43.62	A16S
ATOM	24483	O2'	ADE	277	138.874	75.747	-31.793	1.00	43.62	A16S
ATOM	24484	C3'	ADE	277	139.988	76.407	-29.724	1.00	43.62	A16S
ATOM	24485	O3'	ADE	277	139.064	75.509	-29.124	1.00	43.62	A16S
ATOM	24486	P	CYT	278	139.556	74.430	-28.035	1.00	53.65	A16S
ATOM	24487	O1P	CYT	278	138.474	73.423	-27.982	1.00	48.02	A16S
ATOM	24488	O2P	CYT	278	139.952	75.146	-26.790	1.00	48.02	A16S
ATOM	24489	O5'	CYT	278	140.840	73.747	-28.689	1.00	53.65	A16S
ATOM	24490	C5'	CYT	278	140.711	72.810	-29.759	1.00	53.65	A16S
ATOM	24491	C4'	CYT	278	142.077	72.344	-30.225	1.00	53.65	A16S
ATOM	24492	O4'	CYT	278	142.777	73.421	-30.908	1.00	53.65	A16S
ATOM	24493	C1'	CYT	278	144.158	73.368	-30.596	1.00	53.65	A16S
ATOM	24494	N1	CYT	278	144.487	74.552	-29.797	1.00	48.02	A16S
ATOM	24495	C6	CYT	278	143.501	75.352	-29.293	1.00	48.02	A16S
ATOM	24496	C2	CYT	278	145.824	74.851	-29.560	1.00	48.02	A16S
ATOM	24497	O2	CYT	278	146.687	74.111	-30.032	1.00	48.02	A16S
ATOM	24498	N3	CYT	278	146.142	75.940	-28.826	1.00	48.02	A16S
ATOM	24499	C4	CYT	278	145.176	76.720	-28.345	1.00	48.02	A16S
ATOM	24500	N4	CYT	278	145.528	77.793	-27.648	1.00	48.02	A16S
ATOM	24501	C5	CYT	278	143.798	76.437	-28.566	1.00	48.02	A16S
ATOM	24502	C2'	CYT	278	144.383	72.074	-29.821	1.00	53.65	A16S
ATOM	24503	O2'	CYT	278	144.654	71.043	-30.746	1.00	53.65	A16S
ATOM	24504	C3'	CYT	278	143.036	71.917	-29.130	1.00	53.65	A16S
ATOM	24505	O3'	CYT	278	142.784	70.582	-28.715	1.00	53.65	A16S
ATOM	24506	P	GUA	279	143.116	70.142	-27.203	1.00	47.49	A16S
ATOM	24507	O1P	GUA	279	142.944	68.671	-27.168	1.00	50.01	A16S
ATOM	24508	O2P	GUA	279	142.369	70.993	-26.248	1.00	50.01	A16S
ATOM	24509	O5'	GUA	279	144.659	70.481	-27.026	1.00	47.49	A16S
ATOM	24510	C5'	GUA	279	145.640	69.784	-27.777	1.00	47.49	A16S
ATOM	24511	C4'	GUA	279	147.015	70.334	-27.482	1.00	47.49	A16S
ATOM	24512	O4'	GUA	279	147.142	71.683	-28.001	1.00	47.49	A16S
ATOM	24513	C1'	GUA	279	148.042	72.419	-27.191	1.00	47.49	A16S
ATOM	24514	N9	GUA	279	147.318	73.538	-26.603	1.00	50.01	A16S
ATOM	24515	C4	GUA	279	147.865	74.578	-25.900	1.00	50.01	A16S
ATOM	24516	N3	GUA	279	149.177	74.772	-25.664	1.00	50.01	A16S
ATOM	24517	C2	GUA	279	149.392	75.852	-24.936	1.00	50.01	A16S
ATOM	24518	N2	GUA	279	150.637	76.214	-24.627	1.00	50.01	A16S
ATOM	24519	N1	GUA	279	148.398	76.663	-24.459	1.00	50.01	A16S
ATOM	24520	C6	GUA	279	147.039	76.471	-24.677	1.00	50.01	A16S
ATOM	24521	O6	GUA	279	146.220	77.241	-24.172	1.00	50.01	A16S
ATOM	24522	C5	GUA	279	146.796	75.337	-25.481	1.00	50.01	A16S
ATOM	24523	N7	GUA	279	145.603	74.806	-25.943	1.00	50.01	A16S
ATOM	24524	C8	GUA	279	145.961	73.743	-26.607	1.00	50.01	A16S
ATOM	24525	C2'	GUA	279	148.548	71.458	-26.116	1.00	47.49	A16S
ATOM	24526	O2'	GUA	279	149.727	70.832	-26.577	1.00	47.49	A16S
ATOM	24527	C3'	GUA	279	147.388	70.481	-26.021	1.00	47.49	A16S
ATOM	24528	O3'	GUA	279	147.808	69.239	-25.487	1.00	47.49	A16S
ATOM	24529	P	GUA	280	147.688	68.970	-23.911	1.00	57.51	A16S
ATOM	24530	O1P	GUA	280	148.084	67.560	-23.669	1.00	50.47	A16S
ATOM	24531	O2P	GUA	280	146.357	69.433	-23.471	1.00	50.47	A16S
ATOM	24532	O5'	GUA	280	148.786	69.933	-23.275	1.00	57.51	A16S
ATOM	24533	C5'	GUA	280	150.162	69.779	-23.602	1.00	57.51	A16S
ATOM	24534	C4'	GUA	280	150.999	70.816	-22.885	1.00	57.51	A16S
ATOM	24535	O4'	GUA	280	150.786	72.138	-23.450	1.00	57.51	A16S
ATOM	24536	C1'	GUA	280	150.959	73.116	-22.435	1.00	57.51	A16S
ATOM	24537	N9	GUA	280	149.704	73.835	-22.262	1.00	50.47	A16S
ATOM	24538	C4	GUA	280	149.528	74.987	-21.543	1.00	50.47	A16S
ATOM	24539	N3	GUA	280	150.498	75.683	-20.910	1.00	50.47	A16S
ATOM	24540	C2	GUA	280	150.012	76.748	-20.289	1.00	50.47	A16S
ATOM	24541	N2	GUA	280	150.831	77.572	-19.627	1.00	50.47	A16S
ATOM	24542	N1	GUA	280	148.683	77.086	-20.277	1.00	50.47	A16S
ATOM	24543	C6	GUA	280	147.674	76.380	-20.914	1.00	50.47	A16S
ATOM	24544	O6	GUA	280	146.511	76.766	-20.824	1.00	50.47	A16S
ATOM	24545	C5	GUA	280	148.180	75.251	-21.601	1.00	50.47	A16S
ATOM	24546	N7	GUA	280	147.526	74.298	-22.365	1.00	50.47	A16S
ATOM	24547	C8	GUA	280	148.472	73.484	-22.742	1.00	50.47	A16S
ATOM	24548	C2'	GUA	280	151.315	72.372	-21.148	1.00	57.51	A16S
ATOM	24549	O2'	GUA	280	152.712	72.313	-21.010	1.00	57.51	A16S
ATOM	24550	C3'	GUA	280	150.708	71.003	-21.410	1.00	57.51	A16S
ATOM	24551	O3'	GUA	280	151.342	70.003	-20.633	1.00	57.51	A16S
ATOM	24552	P	GUA	281	150.857	69.745	-19.124	1.00	40.10	A16S
ATOM	24553	O1P	GUA	281	151.859	68.837	-18.501	1.00	40.37	A16S
ATOM	24554	O2P	GUA	281	149.417	69.362	-19.123	1.00	40.37	A16S
ATOM	24555	O5'	GUA	281	151.024	71.170	-18.438	1.00	40.10	A16S
ATOM	24556	C5'	GUA	281	152.315	71.666	-18.158	1.00	40.10	A16S
ATOM	24557	C4'	GUA	281	152.224	72.966	-17.417	1.00	40.10	A16S

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ATOM  24558  O4' GUA  281     151.492  73.927 -18.224  1.00 40.10      A16S
ATOM  24559  C1' GUA  281     150.901  74.892 -17.373  1.00 40.10      A16S
ATOM  24560  N9  GUA  281     149.475  74.941 -17.666  1.00 40.37      A16S
ATOM  24561  C4  GUA  281     148.595  75.900 -17.237  1.00 40.37      A16S
ATOM  24562  N3  GUA  281     148.902  76.972 -16.475  1.00 40.37      A16S
ATOM  24563  C2  GUA  281     147.842  77.712 -16.221  1.00 40.37      A16S
ATOM  24564  N2  GUA  281     147.970  78.824 -15.500  1.00 40.37      A16S
ATOM  24565  N1  GUA  281     146.581  77.417 -16.668  1.00 40.37      A16S
ATOM  24566  C6  GUA  281     146.248  76.328 -17.464  1.00 40.37      A16S
ATOM  24567  O6  GUA  281     145.085  76.175 -17.841  1.00 40.37      A16S
ATOM  24568  C5  GUA  281     147.372  75.526 -17.742  1.00 40.37      A16S
ATOM  24569  N7  GUA  281     147.479  74.352 -18.469  1.00 40.37      A16S
ATOM  24570  C8  GUA  281     148.746  74.047 -18.403  1.00 40.37      A16S
ATOM  24571  C2' GUA  281     151.194  74.446 -15.938  1.00 40.10      A16S
ATOM  24572  O2' GUA  281     152.377  75.061 -15.496  1.00 40.10      A16S
ATOM  24573  C3' GUA  281     151.419  72.958 -16.137  1.00 40.10      A16S
ATOM  24574  O3' GUA  281     152.133  72.378 -15.061  1.00 40.10      A16S
ATOM  24575  P   URI  282     151.319  71.640 -13.884  1.00 51.96      A16S
ATOM  24576  O1P URI  282     152.317  71.116 -12.917  1.00 54.65      A16S
ATOM  24577  O2P URI  282     150.324  70.714 -14.490  1.00 54.65      A16S
ATOM  24578  O5' URI  282     150.524  72.825 -13.177  1.00 51.96      A16S
ATOM  24579  C5' URI  282     151.230  73.857 -12.506  1.00 51.96      A16S
ATOM  24580  C4' URI  282     150.285  74.948 -12.082  1.00 51.96      A16S
ATOM  24581  O4' URI  282     149.728  75.602 -13.251  1.00 51.96      A16S
ATOM  24582  C1' URI  282     148.416  76.063 -12.958  1.00 51.96      A16S
ATOM  24583  N1  URI  282     147.470  75.358 -13.828  1.00 54.65      A16S
ATOM  24584  C6  URI  282     147.846  74.274 -14.577  1.00 54.65      A16S
ATOM  24585  C2  URI  282     146.176  75.817 -13.845  1.00 54.65      A16S
ATOM  24586  O2  URI  282     145.816  76.786 -13.205  1.00 54.65      A16S
ATOM  24587  N3  URI  282     145.318  75.101 -14.635  1.00 54.65      A16S
ATOM  24588  C4  URI  282     145.621  74.005 -15.393  1.00 54.65      A16S
ATOM  24589  O4  URI  282     144.733  73.464 -16.040  1.00 54.65      A16S
ATOM  24590  C5  URI  282     146.987  73.598 -15.337  1.00 54.65      A16S
ATOM  24591  C2' URI  282     148.139  75.700 -11.503  1.00 51.96      A16S
ATOM  24592  O2' URI  282     148.494  76.788 -10.678  1.00 51.96      A16S
ATOM  24593  C3' URI  282     149.051  74.495 -11.334  1.00 51.96      A16S
ATOM  24594  O3' URI  282     149.327  74.211  -9.976  1.00 51.96      A16S
ATOM  24595  P   ADE  283     148.325  73.263  -9.160  1.00 48.03      A16S
ATOM  24596  O1P ADE  283     148.829  73.231  -7.757  1.00 43.67      A16S
ATOM  24597  O2P ADE  283     148.064  71.988  -9.885  1.00 43.67      A16S
ATOM  24598  O5' ADE  283     146.967  74.080  -9.190  1.00 48.03      A16S
ATOM  24599  C5' ADE  283     146.888  75.321  -8.527  1.00 48.03      A16S
ATOM  24600  C4' ADE  283     145.476  75.804  -8.522  1.00 48.03      A16S
ATOM  24601  O4' ADE  283     145.078  76.140  -9.874  1.00 48.03      A16S
ATOM  24602  C1' ADE  283     143.712  75.824 -10.051  1.00 48.03      A16S
ATOM  24603  N9  ADE  283     143.644  74.795 -11.077  1.00 43.67      A16S
ATOM  24604  C4  ADE  283     142.574  74.501 -11.880  1.00 43.67      A16S
ATOM  24605  N3  ADE  283     141.385  75.123 -11.911  1.00 43.67      A16S
ATOM  24606  C2  ADE  283     140.578  74.539 -12.792  1.00 43.67      A16S
ATOM  24607  N1  ADE  283     140.807  73.486 -13.580  1.00 43.67      A16S
ATOM  24608  C6  ADE  283     142.016  72.889 -13.525  1.00 43.67      A16S
ATOM  24609  N6  ADE  283     142.243  71.831 -14.301  1.00 43.67      A16S
ATOM  24610  C5  ADE  283     142.962  73.416 -12.642  1.00 43.67      A16S
ATOM  24611  N7  ADE  283     144.267  73.055 -12.351  1.00 43.67      A16S
ATOM  24612  C8  ADE  283     144.627  73.907 -11.421  1.00 43.67      A16S
ATOM  24613  C2' ADE  283     143.186  75.358  -8.689  1.00 48.03      A16S
ATOM  24614  O2' ADE  283     142.743  76.486  -7.957  1.00 48.03      A16S
ATOM  24615  C3' ADE  283     144.451  74.781  -8.075  1.00 48.03      A16S
ATOM  24616  O3' ADE  283     144.416  74.730  -6.651  1.00 48.03      A16S
ATOM  24617  P   GUA  284     143.455  73.680  -5.916  1.00 43.18      A16S
ATOM  24618  O1P GUA  284     143.734  73.771  -4.465  1.00 43.01      A16S
ATOM  24619  O2P GUA  284     143.594  72.357  -6.619  1.00 43.01      A16S
ATOM  24620  O5' GUA  284     142.022  74.308  -6.186  1.00 43.18      A16S
ATOM  24621  C5' GUA  284     140.842  73.592  -5.910  1.00 43.18      A16S
ATOM  24622  C4' GUA  284     139.823  73.854  -6.985  1.00 43.18      A16S
ATOM  24623  O4' GUA  284     138.847  72.796  -6.924  1.00 43.18      A16S
ATOM  24624  C1' GUA  284     137.566  73.323  -7.135  1.00 43.18      A16S
ATOM  24625  N9  GUA  284     136.887  73.284  -5.854  1.00 43.01      A16S
ATOM  24626  C4  GUA  284     135.572  73.558  -5.629  1.00 43.01      A16S
ATOM  24627  N3  GUA  284     134.678  73.925  -6.562  1.00 43.01      A16S
ATOM  24628  C2  GUA  284     133.479  74.099  -6.049  1.00 43.01      A16S
ATOM  24629  N2  GUA  284     132.470  74.456  -6.847  1.00 43.01      A16S
ATOM  24630  N1  GUA  284     133.185  73.934  -4.721  1.00 43.01      A16S
ATOM  24631  C6  GUA  284     134.099  73.560  -3.744  1.00 43.01      A16S
ATOM  24632  O6  GUA  284     133.734  73.440  -2.576  1.00 43.01      A16S
ATOM  24633  C5  GUA  284     135.384  73.364  -4.284  1.00 43.01      A16S
ATOM  24634  N7  GUA  284     136.569  72.982  -3.671  1.00 43.01      A16S
ATOM  24635  C8  GUA  284     137.434  72.950  -4.644  1.00 43.01      A16S
ATOM  24636  C2' GUA  284     137.768  74.730  -7.674  1.00 43.18      A16S
ATOM  24637  O2' GUA  284     138.055  74.602  -9.045  1.00 43.18      A16S
ATOM  24638  C3' GUA  284     139.015  75.142  -6.923  1.00 43.18      A16S
ATOM  24639  O3' GUA  284     139.651  76.194  -7.640  1.00 43.18      A16S
ATOM  24640  P   CYT  285     139.380  77.729  -7.228  1.00 36.03      A16S
ATOM  24641  O1P CYT  285     140.276  78.559  -8.052  1.00 36.63      A16S
ATOM  24642  O2P CYT  285     139.453  77.825  -5.751  1.00 36.63      A16S
ATOM  24643  O5' CYT  285     137.890  78.046  -7.708  1.00 36.03      A16S
ATOM  24644  C5' CYT  285     137.646  78.633  -8.984  1.00 36.03      A16S
ATOM  24645  C4' CYT  285     136.196  79.045  -9.118  1.00 36.03      A16S
ATOM  24646  O4' CYT  285     135.367  77.883  -8.873  1.00 36.03      A16S
ATOM  24647  C1' CYT  285     134.204  78.259  -8.154  1.00 36.03      A16S
ATOM  24648  N1  CYT  285     134.299  77.725  -6.787  1.00 36.63      A16S
ATOM  24649  C6  CYT  285     135.502  77.363  -6.252  1.00 36.63      A16S
ATOM  24650  C2  CYT  285     133.138  77.638  -6.025  1.00 36.63      A16S
ATOM  24651  O2  CYT  285     132.052  77.860  -6.564  1.00 36.63      A16S
ATOM  24652  N3  CYT  285     133.224  77.299  -4.724  1.00 36.63      A16S
ATOM  24653  C4  CYT  285     134.409  77.017  -4.189  1.00 36.63      A16S
ATOM  24654  N4  CYT  285     134.456  76.774  -2.883  1.00 36.63      A16S
ATOM  24655  C5  CYT  285     135.602  77.000  -4.970  1.00 36.63      A16S
ATOM  24656  C2' CYT  285     134.188  79.785  -8.114  1.00 36.03      A16S
ATOM  24657  O2' CYT  285     133.489  80.278  -9.232  1.00 36.03      A16S
ATOM  24658  C3' CYT  285     135.677  80.094  -8.143  1.00 36.03      A16S
ATOM  24659  O3' CYT  285     135.914  81.429  -8.588  1.00 36.03      A16S
ATOM  24660  P   CYT  286     136.123  82.601  -7.507  1.00 38.02      A16S
ATOM  24661  O1P CYT  286     136.381  83.869  -8.220  1.00 44.93      A16S
ATOM  24662  O2P CYT  286     137.105  82.108  -6.506  1.00 44.93      A16S
ATOM  24663  O5' CYT  286     134.699  82.762  -6.812  1.00 38.02      A16S
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ATOM	24664	C5'	CYT	286	133.568	83.164	-7.572	1.00	38.02	A16S	ATOM	24717	C6	GUA	288	137.425	87.005	-2.015	1.00	51.68	A16S
ATOM	24665	C4'	CYT	286	132.312	83.092	-6.738	1.00	38.02	A16S	ATOM	24718	O6	GUA	288	137.867	87.344	-3.122	1.00	51.68	A16S
ATOM	24666	O4'	CYT	286	132.107	81.737	-6.263	1.00	38.02	A16S	ATOM	24719	C5	GUA	288	136.120	87.191	-1.486	1.00	51.68	A16S
ATOM	24667	C1'	CYT	286	131.446	81.769	-5.009	1.00	38.02	A16S	ATOM	24720	N7	GUA	288	135.012	87.814	-2.037	1.00	51.68	A16S
ATOM	24668	N1	CYT	286	132.316	81.189	-3.990	1.00	44.93	A16S	ATOM	24721	C8	GUA	288	134.081	87.674	-1.137	1.00	51.68	A16S
ATOM	24669	C6	CYT	286	133.634	80.923	-4.232	1.00	44.93	A16S	ATOM	24722	C2'	GUA	288	134.202	87.100	2.456	1.00	43.36	A16S
ATOM	24670	C2	CYT	286	131.770	80.959	-2.741	1.00	44.93	A16S	ATOM	24723	O2'	GUA	288	133.782	86.228	3.492	1.00	43.36	A16S
ATOM	24671	O2	CYT	286	130.562	81.151	-2.588	1.00	44.93	A16S	ATOM	24724	C3'	GUA	288	133.549	88.469	2.522	1.00	43.36	A16S
ATOM	24672	N3	CYT	286	132.563	80.530	-1.732	1.00	44.93	A16S	ATOM	24725	O3'	GUA	288	133.429	88.947	3.838	1.00	43.36	A16S
ATOM	24673	C4	CYT	286	133.859	80.311	-1.958	1.00	44.93	A16S	ATOM	24726	P	URI	289	134.267	90.228	4.266	1.00	44.20	A16S
ATOM	24674	N4	CYT	286	134.612	79.931	-0.928	1.00	44.93	A16S	ATOM	24727	O1P	URI	289	133.904	90.643	5.642	1.00	43.71	A16S
ATOM	24675	C5	CYT	286	134.437	80.487	-3.251	1.00	44.93	A16S	ATOM	24728	O2P	URI	289	134.121	91.196	3.152	1.00	43.71	A16S
ATOM	24676	C2'	CYT	286	131.226	83.238	-4.661	1.00	38.02	A16S	ATOM	24729	O5'	URI	289	135.749	89.661	4.288	1.00	44.20	A16S
ATOM	24677	O2'	CYT	286	129.936	83.624	-5.060	1.00	38.02	A16S	ATOM	24730	C5'	URI	289	136.058	88.529	5.072	1.00	44.20	A16S
ATOM	24678	C3'	CYT	286	132.334	83.897	-5.463	1.00	38.02	A16S	ATOM	24731	C4'	URI	289	137.493	88.122	4.868	1.00	44.20	A16S
ATOM	24679	O3'	CYT	286	132.048	85.249	-5.732	1.00	38.02	A16S	ATOM	24732	O4'	URI	289	137.674	87.474	3.586	1.00	44.20	A16S
ATOM	24680	P	GUA	287	132.468	86.360	-4.672	1.00	41.08	A16S	ATOM	24733	C1'	URI	289	138.956	87.785	3.070	1.00	44.20	A16S
ATOM	24681	O1P	GUA	287	132.259	87.655	-5.326	1.00	40.18	A16S	ATOM	24734	N1	URI	289	138.749	88.491	1.803	1.00	43.71	A16S
ATOM	24682	O2P	GUA	287	133.787	86.037	-4.099	1.00	40.18	A16S	ATOM	24735	C6	URI	289	137.548	89.074	1.536	1.00	43.71	A16S
ATOM	24683	O5'	GUA	287	131.381	86.184	-3.529	1.00	41.08	A16S	ATOM	24736	C2	URI	289	139.780	88.544	0.905	1.00	43.71	A16S
ATOM	24684	C5'	GUA	287	129.996	86.369	-3.808	1.00	41.08	A16S	ATOM	24737	O2	URI	289	140.866	88.038	1.112	1.00	43.71	A16S
ATOM	24685	C4'	GUA	287	129.191	86.199	-2.549	1.00	41.08	A16S	ATOM	24738	N3	URI	289	139.491	89.212	-0.253	1.00	43.71	A16S
ATOM	24686	O4'	GUA	287	129.278	84.821	-2.113	1.00	41.08	A16S	ATOM	24739	C4	URI	289	138.298	89.816	-0.585	1.00	43.71	A16S
ATOM	24687	C1'	GUA	287	129.330	84.772	-0.702	1.00	41.08	A16S	ATOM	24740	O4	URI	289	138.146	90.290	-1.707	1.00	43.71	A16S
ATOM	24688	N9	GUA	287	130.629	84.241	-0.329	1.00	40.18	A16S	ATOM	24741	C5	URI	289	137.296	89.718	0.407	1.00	43.71	A16S
ATOM	24689	C4	GUA	287	130.965	83.663	0.866	1.00	40.18	A16S	ATOM	24742	C2'	URI	289	139.670	88.632	4.123	1.00	44.20	A16S
ATOM	24690	N3	GUA	287	130.132	83.452	1.906	1.00	40.18	A16S	ATOM	24743	O2'	URI	289	140.434	87.775	4.939	1.00	44.20	A16S
ATOM	24691	C2	GUA	287	130.752	82.893	2.926	1.00	40.18	A16S	ATOM	24744	C3'	URI	289	138.489	89.255	4.859	1.00	44.20	A16S
ATOM	24692	N2	GUA	287	130.069	82.623	4.042	1.00	40.18	A16S	ATOM	24745	O3'	URI	289	138.797	89.607	6.192	1.00	44.20	A16S
ATOM	24693	N1	GUA	287	132.089	82.567	2.923	1.00	40.18	A16S	ATOM	24746	P	CYT	290	139.298	91.086	6.513	1.00	38.40	A16S
ATOM	24694	C6	GUA	287	132.967	82.791	1.859	1.00	40.18	A16S	ATOM	24747	O1P	CYT	290	139.465	91.191	7.983	1.00	41.22	A16S
ATOM	24695	O6	GUA	287	134.176	82.490	1.962	1.00	40.18	A16S	ATOM	24748	O2P	CYT	290	138.408	92.032	5.799	1.00	41.22	A16S
ATOM	24696	C5	GUA	287	132.307	83.377	0.764	1.00	40.18	A16S	ATOM	24749	O5'	CYT	290	140.731	91.140	5.823	1.00	38.40	A16S
ATOM	24697	N7	GUA	287	132.797	83.751	-0.475	1.00	40.18	A16S	ATOM	24750	C5'	CYT	290	141.846	90.499	6.418	1.00	38.40	A16S
ATOM	24698	C8	GUA	287	131.767	84.250	-1.093	1.00	40.18	A16S	ATOM	24751	C4'	CYT	290	143.078	90.730	5.588	1.00	38.40	A16S
ATOM	24699	C2'	GUA	287	129.172	86.204	-0.191	1.00	41.08	A16S	ATOM	24752	O4'	CYT	290	142.914	90.091	4.296	1.00	38.40	A16S
ATOM	24700	O2'	GUA	287	127.815	86.489	0.070	1.00	41.08	A16S	ATOM	24753	C1'	CYT	290	143.590	90.849	3.307	1.00	38.40	A16S
ATOM	24701	C3'	GUA	287	129.694	87.007	-1.367	1.00	41.08	A16S	ATOM	24754	N1	CYT	290	142.594	91.340	2.359	1.00	41.22	A16S
ATOM	24702	O3'	GUA	287	129.114	88.304	-1.375	1.00	41.08	A16S	ATOM	24755	C6	CYT	290	141.271	91.381	2.683	1.00	41.22	A16S
ATOM	24703	P	GUA	288	129.924	89.540	-0.753	1.00	43.36	A16S	ATOM	24756	C2	CYT	290	143.026	91.773	1.118	1.00	41.22	A16S
ATOM	24704	O1P	GUA	288	128.975	90.675	-0.665	1.00	51.68	A16S	ATOM	24757	O2	CYT	290	144.243	91.734	0.867	1.00	41.22	A16S
ATOM	24705	O2P	GUA	288	131.189	89.694	-1.511	1.00	51.68	A16S	ATOM	24758	N3	CYT	290	142.122	92.231	0.224	1.00	41.22	A16S
ATOM	24706	O5'	GUA	288	130.308	89.063	0.710	1.00	43.36	A16S	ATOM	24759	C4	CYT	290	140.834	92.267	0.547	1.00	41.22	A16S
ATOM	24707	C5'	GUA	288	131.551	89.418	1.285	1.00	43.36	A16S	ATOM	24760	N4	CYT	290	139.978	92.721	-0.359	1.00	41.22	A16S
ATOM	24708	C4'	GUA	288	132.176	88.213	1.934	1.00	43.36	A16S	ATOM	24761	C5	CYT	290	140.367	91.837	1.815	1.00	41.22	A16S
ATOM	24709	O4'	GUA	288	132.386	87.184	0.931	1.00	43.36	A16S	ATOM	24762	C2'	CYT	290	144.275	92.005	4.029	1.00	38.40	A16S
ATOM	24710	C1'	GUA	288	133.672	86.600	1.110	1.00	43.36	A16S	ATOM	24763	O2'	CYT	290	145.553	91.610	4.471	1.00	38.40	A16S
ATOM	24711	N9	GUA	288	134.500	86.985	-0.033	1.00	51.68	A16S	ATOM	24764	C3'	CYT	290	143.358	92.172	5.220	1.00	38.40	A16S
ATOM	24712	C4	GUA	288	135.831	86.700	-0.237	1.00	51.68	A16S	ATOM	24765	O3'	CYT	290	144.004	92.874	6.258	1.00	38.40	A16S
ATOM	24713	N3	GUA	288	136.644	86.050	0.614	1.00	51.68	A16S	ATOM	24766	P	URI	291	143.691	94.436	6.441	1.00	39.09	A16S
ATOM	24714	C2	GUA	288	137.866	85.899	0.119	1.00	51.68	A16S	ATOM	24767	O1P	URI	291	144.230	94.877	7.763	1.00	35.42	A16S
ATOM	24715	N2	GUA	288	138.821	85.281	0.847	1.00	51.68	A16S	ATOM	24768	O2P	URI	291	142.249	94.611	6.134	1.00	35.42	A16S
ATOM	24716	N1	GUA	288	138.247	86.340	-1.119	1.00	51.68	A16S	ATOM	24769	O5'	URI	291	144.516	95.116	5.259	1.00	39.09	A16S

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ATOM  24770  C5' URI  291     145.903  94.853   5.084  1.00 39.09      A16S
ATOM  24771  C4' URI  291     146.333  95.305   3.713  1.00 39.09      A16S
ATOM  24772  O4' URI  291     145.616  94.534   2.718  1.00 39.09      A16S
ATOM  24773  C1' URI  291     145.439  95.315   1.555  1.00 39.09      A16S
ATOM  24774  N1  URI  291     144.006  95.373   1.258  1.00 35.42      A16S
ATOM  24775  C6  URI  291     143.058  95.090   2.208  1.00 35.42      A16S
ATOM  24776  C2  URI  291     143.649  95.738  -0.020  1.00 35.42      A16S
ATOM  24777  O2  URI  291     144.472  96.002  -0.881  1.00 35.42      A16S
ATOM  24778  N3  URI  291     142.300  95.794  -0.251  1.00 35.42      A16S
ATOM  24779  C4  URI  291     141.299  95.533   0.651  1.00 35.42      A16S
ATOM  24780  O4  URI  291     140.127  95.655   0.297  1.00 35.42      A16S
ATOM  24781  C5  URI  291     141.750  95.156   1.955  1.00 35.42      A16S
ATOM  24782  C2' URI  291     146.007  96.709   1.832  1.00 39.09      A16S
ATOM  24783  O2' URI  291     147.282  96.842   1.234  1.00 39.09      A16S
ATOM  24784  C3' URI  291     146.003  96.744   3.358  1.00 39.09      A16S
ATOM  24785  O3' URI  291     147.001  97.620   3.853  1.00 39.09      A16S
ATOM  24786  P   GUA  292     146.622  99.137   4.206  1.00 36.18      A16S
ATOM  24787  O1P GUA  292     147.853  99.815   4.714  1.00 40.43      A16S
ATOM  24788  O2P GUA  292     145.404  99.109   5.042  1.00 40.43      A16S
ATOM  24789  O5' GUA  292     146.185  99.789   2.820  1.00 36.18      A16S
ATOM  24790  C5' GUA  292     147.148 100.179   1.847  1.00 36.18      A16S
ATOM  24791  C4' GUA  292     146.455 100.579   0.567  1.00 36.18      A16S
ATOM  24792  O4' GUA  292     145.676  99.454   0.093  1.00 36.18      A16S
ATOM  24793  C1' GUA  292     144.595  99.926  -0.693  1.00 36.18      A16S
ATOM  24794  N9  GUA  292     143.358  99.412  -0.137  1.00 40.43      A16S
ATOM  24795  C4  GUA  292     142.137  99.434  -0.751  1.00 40.43      A16S
ATOM  24796  N3  GUA  292     141.893  99.871  -2.000  1.00 40.43      A16S
ATOM  24797  C2  GUA  292     140.615  99.814  -2.299  1.00 40.43      A16S
ATOM  24798  N2  GUA  292     140.199 100.195  -3.511  1.00 40.43      A16S
ATOM  24799  N1  GUA  292     139.651  99.376  -1.437  1.00 40.43      A16S
ATOM  24800  C6  GUA  292     139.882  98.914  -0.149  1.00 40.43      A16S
ATOM  24801  O6  GUA  292     138.935  98.540   0.547  1.00 40.43      A16S
ATOM  24802  C5  GUA  292     141.252  98.955   0.179  1.00 40.43      A16S
ATOM  24803  N7  GUA  292     141.912  98.581   1.339  1.00 40.43      A16S
ATOM  24804  C8  GUA  292     143.163  98.864   1.101  1.00 40.43      A16S
ATOM  24805  C2' GUA  292     144.618 101.448  -0.610  1.00 36.18      A16S
ATOM  24806  O2' GUA  292     145.308 101.971  -1.718  1.00 36.18      A16S
ATOM  24807  C3' GUA  292     145.391 101.657   0.678  1.00 36.18      A16S
ATOM  24808  O3' GUA  292     145.951 102.954   0.703  1.00 36.18      A16S
ATOM  24809  P   ADE  293     145.480 103.992   1.818  1.00 36.82      A16S
ATOM  24810  O1P ADE  293     146.524 105.039   1.907  1.00 51.30      A16S
ATOM  24811  O2P ADE  293     145.140 103.196   3.025  1.00 51.30      A16S
ATOM  24812  O5' ADE  293     144.164 104.642   1.197  1.00 36.82      A16S
ATOM  24813  C5' ADE  293     143.107 105.110   2.037  1.00 36.82      A16S
ATOM  24814  C4' ADE  293     142.098 105.879   1.229  1.00 36.82      A16S
ATOM  24815  O4' ADE  293     142.742 107.054   0.687  1.00 36.82      A16S
ATOM  24816  C1' ADE  293     142.373 107.218  -0.671  1.00 36.82      A16S
ATOM  24817  N9  ADE  293     143.567 106.993  -1.481  1.00 51.30      A16S
ATOM  24818  C4  ADE  293     143.819 107.405  -2.770  1.00 51.30      A16S
ATOM  24819  N3  ADE  293     143.007 108.095  -3.591  1.00 51.30      A16S
ATOM  24820  C2  ADE  293     143.609 108.343  -4.752  1.00 51.30      A16S
ATOM  24821  N1  ADE  293     144.834 108.005  -5.156  1.00 51.30      A16S
ATOM  24822  C6  ADE  293     145.624 107.312  -4.308  1.00 51.30      A16S
ATOM  24823  N6  ADE  293     146.856 106.977  -4.698  1.00 51.30      A16S
ATOM  24824  C5  ADE  293     145.103 106.985  -3.051  1.00 51.30      A16S
ATOM  24825  N7  ADE  293     145.640 106.300  -1.973  1.00 51.30      A16S
ATOM  24826  C8  ADE  293     144.691 106.331  -1.075  1.00 51.30      A16S
ATOM  24827  C2' ADE  293     141.237 106.232  -0.949  1.00 36.82      A16S
ATOM  24828  O2' ADE  293     140.002 106.829  -0.633  1.00 36.82      A16S
ATOM  24829  C3' ADE  293     141.546 105.120   0.036  1.00 36.82      A16S
ATOM  24830  O3' ADE  293     140.332 104.478   0.403  1.00 36.82      A16S
ATOM  24831  P   GUA  294     140.114 102.919   0.073  1.00 33.98      A16S
ATOM  24832  O1P GUA  294     138.985 102.443   0.938  1.00 50.92      A16S
ATOM  24833  O2P GUA  294     141.455 102.284   0.191  1.00 50.92      A16S
ATOM  24834  O5' GUA  294     139.624 102.894  -1.439  1.00 33.98      A16S
ATOM  24835  C5' GUA  294     138.419 103.532  -1.800  1.00 33.98      A16S
ATOM  24836  C4' GUA  294     138.540 104.128  -3.177  1.00 33.98      A16S
ATOM  24837  O4' GUA  294     139.748 104.921  -3.212  1.00 33.98      A16S
ATOM  24838  C1' GUA  294     140.353 104.800  -4.479  1.00 33.98      A16S
ATOM  24839  N9  GUA  294     141.720 104.319  -4.300  1.00 50.92      A16S
ATOM  24840  C4  GUA  294     142.762 104.535  -5.162  1.00 50.92      A16S
ATOM  24841  N3  GUA  294     142.685 105.189  -6.336  1.00 50.92      A16S
ATOM  24842  C2  GUA  294     143.856 105.266  -6.931  1.00 50.92      A16S
ATOM  24843  N2  GUA  294     143.947 105.869  -8.116  1.00 50.92      A16S
ATOM  24844  N1  GUA  294     145.018 104.756  -6.413  1.00 50.92      A16S
ATOM  24845  C6  GUA  294     145.129 104.080  -5.205  1.00 50.92      A16S
ATOM  24846  O6  GUA  294     146.246 103.667  -4.823  1.00 50.92      A16S
ATOM  24847  C5  GUA  294     143.865 103.972  -4.558  1.00 50.92      A16S
ATOM  24848  N7  GUA  294     143.514 103.377  -3.355  1.00 50.92      A16S
ATOM  24849  C8  GUA  294     142.233 103.605  -3.244  1.00 50.92      A16S
ATOM  24850  C2' GUA  294     139.443 103.941  -5.358  1.00 33.98      A16S
ATOM  24851  O2' GUA  294     138.601 104.805  -6.087  1.00 33.98      A16S
ATOM  24852  C3' GUA  294     138.674 103.135  -4.320  1.00 33.98      A16S
ATOM  24853  O3' GUA  294     137.375 102.797  -4.800  1.00 33.98      A16S
ATOM  24854  P   ADE  295     137.111 101.362  -5.466  1.00 46.06      A16S
ATOM  24855  O1P ADE  295     135.701 101.305  -5.902  1.00 38.02      A16S
ATOM  24856  O2P ADE  295     137.636 100.294  -4.574  1.00 38.02      A16S
ATOM  24857  O5' ADE  295     137.979 101.420  -6.799  1.00 46.06      A16S
ATOM  24858  C5' ADE  295     137.436 101.922  -8.022  1.00 46.06      A16S
ATOM  24859  C4' ADE  295     138.491 101.904  -9.107  1.00 46.06      A16S
ATOM  24860  O4' ADE  295     139.587 102.758  -8.682  1.00 46.06      A16S
ATOM  24861  C1' ADE  295     140.824 102.164  -9.037  1.00 46.06      A16S
ATOM  24862  N9  ADE  295     141.449 101.670  -7.811  1.00 38.02      A16S
ATOM  24863  C4  ADE  295     142.787 101.600  -7.531  1.00 38.02      A16S
ATOM  24864  N3  ADE  295     143.802 101.964  -8.322  1.00 38.02      A16S
ATOM  24865  C2  ADE  295     144.964 101.787  -7.700  1.00 38.02      A16S
ATOM  24866  N1  ADE  295     145.207 101.324  -6.466  1.00 38.02      A16S
ATOM  24867  C6  ADE  295     144.158 100.967  -5.699  1.00 38.02      A16S
ATOM  24868  N6  ADE  295     144.390 100.518  -4.462  1.00 38.02      A16S
ATOM  24869  C5  ADE  295     142.875 101.100  -6.249  1.00 38.02      A16S
ATOM  24870  N7  ADE  295     141.617 100.839  -5.738  1.00 38.02      A16S
ATOM  24871  C8  ADE  295     140.811 101.192  -6.700  1.00 38.02      A16S
ATOM  24872  C2' ADE  295     140.475 101.023  -9.981  1.00 46.06      A16S
ATOM  24873  O2' ADE  295     140.256 101.526 -11.276  1.00 46.06      A16S
ATOM  24874  C3' ADE  295     139.165 100.568  -9.386  1.00 46.06      A16S
ATOM  24875  O3' ADE  295     138.483  99.772 -10.337  1.00 46.06      A16S
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ATOM	24876	P	GUA	296	138.414	98.173	-10.133	1.00	39.71	A16S	ATOM	24929	C1'	ADE	298	146.405	89.434	-3.634	1.00	43.77	A16S
ATOM	24877	O1P	GUA	296	137.915	97.596	-11.417	1.00	47.44	A16S	ATOM	24930	N9	ADE	298	144.994	89.692	-3.894	1.00	42.86	A16S
ATOM	24878	O2P	GUA	296	137.678	97.906	-8.870	1.00	47.44	A16S	ATOM	24931	C4	ADE	298	143.982	89.649	-2.968	1.00	42.86	A16S
ATOM	24879	O5'	GUA	296	139.918	97.696	-9.871	1.00	39.71	A16S	ATOM	24932	N3	ADE	298	144.093	89.427	-1.649	1.00	42.86	A16S
ATOM	24880	C5'	GUA	296	140.906	97.786	-10.885	1.00	39.71	A16S	ATOM	24933	C2	ADE	298	142.892	89.395	-1.078	1.00	42.86	A16S
ATOM	24881	C4'	GUA	296	142.285	97.624	-10.290	1.00	39.71	A16S	ATOM	24934	N1	ADE	298	141.688	89.549	-1.634	1.00	42.86	A16S
ATOM	24882	O4'	GUA	296	142.410	98.466	-9.110	1.00	39.71	A16S	ATOM	24935	C6	ADE	298	141.616	89.779	-2.961	1.00	42.86	A16S
ATOM	24883	C1'	GUA	296	143.329	97.882	-8.206	1.00	39.71	A16S	ATOM	24936	N6	ADE	298	140.419	89.924	-3.521	1.00	42.86	A16S
ATOM	24884	N9	GUA	296	142.642	97.646	-6.940	1.00	47.44	A16S	ATOM	24937	C5	ADE	298	142.815	89.842	-3.677	1.00	42.86	A16S
ATOM	24885	C4	GUA	296	143.222	97.308	-5.741	1.00	47.44	A16S	ATOM	24938	N7	ADE	298	143.087	90.053	-5.017	1.00	42.86	A16S
ATOM	24886	N3	GUA	296	144.544	97.172	-5.507	1.00	47.44	A16S	ATOM	24939	C8	ADE	298	144.393	89.965	-5.091	1.00	42.86	A16S
ATOM	24887	C2	GUA	296	144.788	96.840	-4.246	1.00	47.44	A16S	ATOM	24940	C2'	ADE	298	146.624	87.924	-3.547	1.00	43.77	A16S
ATOM	24888	N2	GUA	296	146.048	96.698	-3.813	1.00	47.44	A16S	ATOM	24941	O2'	ADE	298	147.683	87.665	-2.649	1.00	43.77	A16S
ATOM	24889	N1	GUA	296	143.814	96.632	-3.311	1.00	47.44	A16S	ATOM	24942	C3'	ADE	298	146.972	87.599	-4.994	1.00	43.77	A16S
ATOM	24890	C6	GUA	296	142.452	96.758	-3.535	1.00	47.44	A16S	ATOM	24943	O3'	ADE	298	147.612	86.332	-5.096	1.00	43.77	A16S
ATOM	24891	O6	GUA	296	141.659	96.537	-2.620	1.00	47.44	A16S	ATOM	24944	P	URI	299	146.783	85.071	-5.650	1.00	45.56	A16S
ATOM	24892	C5	GUA	296	142.175	97.136	-4.864	1.00	47.44	A16S	ATOM	24945	O1P	URI	299	147.765	83.989	-5.908	1.00	53.91	A16S
ATOM	24893	N7	GUA	296	140.964	97.380	-5.490	1.00	47.44	A16S	ATOM	24946	O2P	URI	299	145.917	85.555	-6.748	1.00	53.91	A16S
ATOM	24894	C8	GUA	296	141.290	97.684	-6.716	1.00	47.44	A16S	ATOM	24947	O5'	URI	299	145.840	84.631	-4.439	1.00	45.56	A16S
ATOM	24895	C2'	GUA	296	143.819	96.582	-8.858	1.00	39.71	A16S	ATOM	24948	C5'	URI	299	146.391	84.107	-3.232	1.00	45.56	A16S
ATOM	24896	O2'	GUA	296	144.972	96.823	-9.631	1.00	39.71	A16S	ATOM	24949	C4'	URI	299	145.377	84.183	-2.110	1.00	45.56	A16S
ATOM	24897	C3'	GUA	296	142.660	96.247	-9.779	1.00	39.71	A16S	ATOM	24950	O4'	URI	299	144.902	85.552	-2.022	1.00	45.56	A16S
ATOM	24898	O3'	GUA	296	143.137	95.434	-10.845	1.00	39.71	A16S	ATOM	24951	C1'	URI	299	143.528	85.564	-1.686	1.00	45.56	A16S
ATOM	24899	P	GUA	297	143.288	93.850	-10.636	1.00	41.67	A16S	ATOM	24952	N1	URI	299	142.786	86.102	-2.829	1.00	53.91	A16S
ATOM	24900	O1P	GUA	297	143.882	93.288	-11.876	1.00	39.81	A16S	ATOM	24953	C6	URI	299	143.422	86.429	-3.992	1.00	53.91	A16S
ATOM	24901	O2P	GUA	297	142.008	93.306	-10.134	1.00	39.81	A16S	ATOM	24954	C2	URI	299	141.425	86.258	-2.695	1.00	53.91	A16S
ATOM	24902	O5'	GUA	297	144.362	93.731	-9.471	1.00	41.67	A16S	ATOM	24955	O2	URI	299	140.828	86.001	-1.672	1.00	53.91	A16S
ATOM	24903	C5'	GUA	297	145.721	94.034	-9.721	1.00	41.67	A16S	ATOM	24956	N3	URI	299	140.788	86.735	-3.807	1.00	53.91	A16S
ATOM	24904	C4'	GUA	297	146.534	93.778	-8.487	1.00	41.67	A16S	ATOM	24957	C4	URI	299	141.363	87.075	-5.004	1.00	53.91	A16S
ATOM	24905	O4'	GUA	297	146.015	94.579	-7.394	1.00	41.67	A16S	ATOM	24958	O4	URI	299	140.656	87.504	-5.910	1.00	53.91	A16S
ATOM	24906	C1'	GUA	297	146.157	93.869	-6.178	1.00	41.67	A16S	ATOM	24959	C5	URI	299	142.776	86.899	-5.056	1.00	53.91	A16S
ATOM	24907	N9	GUA	297	144.827	93.695	-5.611	1.00	39.81	A16S	ATOM	24960	C2'	URI	299	143.134	84.124	-1.371	1.00	45.56	A16S
ATOM	24908	C4	GUA	297	144.509	93.427	-4.303	1.00	39.81	A16S	ATOM	24961	O2'	URI	299	143.333	83.891	0.010	1.00	45.56	A16S
ATOM	24909	N3	GUA	297	145.385	93.248	-3.294	1.00	39.81	A16S	ATOM	24962	C3'	URI	299	144.107	83.348	-2.253	1.00	45.56	A16S
ATOM	24910	C2	GUA	297	144.767	93.021	-2.145	1.00	39.81	A16S	ATOM	24963	O3'	URI	299	144.291	82.035	-1.721	1.00	45.56	A16S
ATOM	24911	N2	GUA	297	145.474	92.823	-1.027	1.00	39.81	A16S	ATOM	24964	P	GUA	300	143.760	80.752	-2.524	1.00	67.34	A16S
ATOM	24912	N1	GUA	297	143.405	92.976	-2.008	1.00	39.81	A16S	ATOM	24965	O1P	GUA	300	144.682	79.647	-2.202	1.00	51.34	A16S
ATOM	24913	C6	GUA	297	142.495	93.158	-3.037	1.00	39.81	A16S	ATOM	24966	O2P	GUA	300	143.540	81.128	-3.929	1.00	51.34	A16S
ATOM	24914	O6	GUA	297	141.283	93.103	-2.802	1.00	39.81	A16S	ATOM	24967	O5'	GUA	300	142.339	80.416	-1.887	1.00	67.34	A16S
ATOM	24915	C5	GUA	297	143.140	93.395	-4.263	1.00	39.81	A16S	ATOM	24968	C5'	GUA	300	142.162	80.169	-0.490	1.00	67.34	A16S
ATOM	24916	N7	GUA	297	142.608	93.619	-5.517	1.00	39.81	A16S	ATOM	24969	C4'	GUA	300	140.745	80.517	-0.105	1.00	67.34	A16S
ATOM	24917	C8	GUA	297	143.645	93.789	-6.284	1.00	39.81	A16S	ATOM	24970	O4'	GUA	300	140.509	81.808	-0.688	1.00	67.34	A16S
ATOM	24918	C2'	GUA	297	146.860	92.555	-6.510	1.00	41.67	A16S	ATOM	24971	C1'	GUA	300	139.160	81.920	-1.048	1.00	67.34	A16S
ATOM	24919	O2'	GUA	297	148.253	92.750	-6.423	1.00	41.67	A16S	ATOM	24972	N9	GUA	300	139.052	82.668	-2.290	1.00	51.34	A16S
ATOM	24920	C3'	GUA	297	146.454	92.362	-7.957	1.00	41.67	A16S	ATOM	24973	C4	GUA	300	137.932	83.307	-2.743	1.00	51.34	A16S
ATOM	24921	O3'	GUA	297	147.385	91.540	-8.632	1.00	41.67	A16S	ATOM	24974	N3	GUA	300	136.737	83.336	-2.126	1.00	51.34	A16S
ATOM	24922	P	ADE	298	147.017	90.021	-8.925	1.00	43.77	A16S	ATOM	24975	C2	GUA	300	135.858	84.035	-2.804	1.00	51.34	A16S
ATOM	24923	O1P	ADE	298	148.149	89.501	-9.716	1.00	42.86	A16S	ATOM	24976	N2	GUA	300	134.616	84.173	-2.348	1.00	51.34	A16S
ATOM	24924	O2P	ADE	298	145.642	89.959	-9.479	1.00	42.86	A16S	ATOM	24977	N1	GUA	300	136.131	84.654	-3.985	1.00	51.34	A16S
ATOM	24925	O5'	ADE	298	146.978	89.351	-7.481	1.00	43.77	A16S	ATOM	24978	C6	GUA	300	137.356	84.640	-4.632	1.00	51.34	A16S
ATOM	24926	C5'	ADE	298	148.174	89.054	-6.788	1.00	43.77	A16S	ATOM	24979	O6	GUA	300	137.497	85.243	-5.697	1.00	51.34	A16S
ATOM	24927	C4'	ADE	298	147.888	88.765	-5.332	1.00	43.77	A16S	ATOM	24980	C5	GUA	300	138.303	83.898	-3.924	1.00	51.34	A16S
ATOM	24928	O4'	ADE	298	147.174	89.891	-4.743	1.00	43.77	A16S	ATOM	24981	N7	GUA	300	139.632	83.636	-4.212	1.00	51.34	A16S

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ATOM	25088	O6	GUA	305	132.098	76.901	-1.167	1.00	50.05	A16S	ATOM	25141	C4'	ADE	308	132.838	66.464	-9.482	1.00	44.79	A16S
ATOM	25089	C5	GUA	305	129.756	77.285	-0.921	1.00	50.05	A16S	ATOM	25142	O4'	ADE	308	133.158	67.526	-8.546	1.00	44.79	A16S
ATOM	25090	N7	GUA	305	129.445	76.985	0.397	1.00	50.05	A16S	ATOM	25143	C1'	ADE	308	133.907	66.996	-7.467	1.00	44.79	A16S
ATOM	25091	C8	GUA	305	128.163	77.219	0.489	1.00	50.05	A16S	ATOM	25144	N9	ADE	308	133.112	67.131	-6.250	1.00	30.27	A16S
ATOM	25092	C2'	GUA	305	125.501	76.996	-1.781	1.00	45.98	A16S	ATOM	25145	C4	ADE	308	133.603	67.050	-4.976	1.00	30.27	A16S
ATOM	25093	O2'	GUA	305	124.553	77.602	-2.638	1.00	45.98	A16S	ATOM	25146	N3	ADE	308	134.874	66.840	-4.615	1.00	30.27	A16S
ATOM	25094	C3'	GUA	305	124.832	76.173	-0.700	1.00	45.98	A16S	ATOM	25147	C2	ADE	308	134.986	66.840	-3.296	1.00	30.27	A16S
ATOM	25095	O3'	GUA	305	123.774	75.421	-1.244	1.00	45.98	A16S	ATOM	25148	N1	ADE	308	134.044	67.013	-2.371	1.00	30.27	A16S
ATOM	25096	P	CYT	306	123.990	73.855	-1.491	1.00	36.88	A16S	ATOM	25149	C6	ADE	308	132.773	67.209	-2.770	1.00	30.27	A16S
ATOM	25097	O1P	CYT	306	122.632	73.249	-1.664	1.00	41.12	A16S	ATOM	25150	N6	ADE	308	131.833	67.368	-1.837	1.00	30.27	A16S
ATOM	25098	O2P	CYT	306	124.886	73.383	-0.407	1.00	41.12	A16S	ATOM	25151	C5	ADE	308	132.522	67.231	-4.142	1.00	30.27	A16S
ATOM	25099	O5'	CYT	306	124.778	73.771	-2.865	1.00	36.88	A16S	ATOM	25152	N7	ADE	308	131.361	67.411	-4.876	1.00	30.27	A16S
ATOM	25100	C5'	CYT	306	124.131	74.134	-4.064	1.00	36.88	A16S	ATOM	25153	C8	ADE	308	131.763	67.350	-6.119	1.00	30.27	A16S
ATOM	25101	C4'	CYT	306	125.132	74.345	-5.165	1.00	36.88	A16S	ATOM	25154	C2'	ADE	308	134.193	65.536	-7.808	1.00	44.79	A16S
ATOM	25102	O4'	CYT	306	126.092	75.360	-4.774	1.00	36.88	A16S	ATOM	25155	O2'	ADE	308	135.380	65.481	-8.566	1.00	44.79	A16S
ATOM	25103	C1'	CYT	306	127.326	75.109	-5.418	1.00	36.88	A16S	ATOM	25156	C3'	ADE	308	132.981	65.196	-8.659	1.00	44.79	A16S
ATOM	25104	N1	CYT	306	128.319	74.784	-4.398	1.00	41.12	A16S	ATOM	25157	O3'	ADE	308	133.209	64.055	-9.494	1.00	44.79	A16S
ATOM	25105	C6	CYT	306	127.972	74.640	-3.089	1.00	41.12	A16S	ATOM	25158	P	CYT	309	132.650	62.603	-9.048	1.00	38.03	A16S
ATOM	25106	C2	CYT	306	129.634	74.613	-4.797	1.00	41.12	A16S	ATOM	25159	O1P	CYT	309	132.782	61.702	-10.220	1.00	36.37	A16S
ATOM	25107	O2	CYT	306	129.908	74.747	-5.988	1.00	41.12	A16S	ATOM	25160	O2P	CYT	309	131.307	62.796	-8.421	1.00	36.37	A16S
ATOM	25108	N3	CYT	306	130.571	74.297	-3.886	1.00	41.12	A16S	ATOM	25161	O5'	CYT	309	133.668	62.135	-7.910	1.00	38.03	A16S
ATOM	25109	C4	CYT	306	130.226	74.143	-2.617	1.00	41.12	A16S	ATOM	25162	C5'	CYT	309	135.032	61.907	-8.217	1.00	38.03	A16S
ATOM	25110	N4	CYT	306	131.176	73.812	-1.761	1.00	41.12	A16S	ATOM	25163	C4'	CYT	309	135.869	61.938	-6.965	1.00	38.03	A16S
ATOM	25111	C5	CYT	306	128.886	74.319	-2.173	1.00	41.12	A16S	ATOM	25164	O4'	CYT	309	135.583	63.157	-6.247	1.00	38.03	A16S
ATOM	25112	C2'	CYT	306	127.083	73.903	-6.315	1.00	36.88	A16S	ATOM	25165	C1'	CYT	309	135.757	62.950	-4.858	1.00	38.03	A16S
ATOM	25113	O2'	CYT	306	126.515	74.358	-7.522	1.00	36.88	A16S	ATOM	25166	N1	CYT	309	134.508	63.289	-4.172	1.00	36.37	A16S
ATOM	25114	C3'	CYT	306	126.029	73.180	-5.509	1.00	36.88	A16S	ATOM	25167	C6	CYT	309	133.348	63.443	-4.872	1.00	36.37	A16S
ATOM	25115	O3'	CYT	306	125.352	72.231	-6.303	1.00	36.88	A16S	ATOM	25168	C2	CYT	309	134.525	63.460	-2.788	1.00	36.37	A16S
ATOM	25116	P	CYT	307	125.701	70.681	-6.135	1.00	40.13	A16S	ATOM	25169	O2	CYT	309	135.591	63.314	-2.183	1.00	36.37	A16S
ATOM	25117	O1P	CYT	307	124.633	69.907	-6.834	1.00	33.70	A16S	ATOM	25170	N3	CYT	309	133.382	63.786	-2.146	1.00	36.37	A16S
ATOM	25118	O2P	CYT	307	125.958	70.457	-4.700	1.00	33.70	A16S	ATOM	25171	C4	CYT	309	132.257	63.951	-2.841	1.00	36.37	A16S
ATOM	25119	O5'	CYT	307	127.084	70.519	-6.899	1.00	40.13	A16S	ATOM	25172	N4	CYT	309	131.159	64.297	-2.180	1.00	36.37	A16S
ATOM	25120	C5'	CYT	307	127.209	70.911	-8.259	1.00	40.13	A16S	ATOM	25173	C5	CYT	309	132.211	63.774	-4.253	1.00	36.37	A16S
ATOM	25121	C4'	CYT	307	128.654	70.874	-8.681	1.00	40.13	A16S	ATOM	25174	C2'	CYT	309	136.185	61.503	-4.671	1.00	38.03	A16S
ATOM	25122	O4'	CYT	307	129.412	71.833	-7.899	1.00	40.13	A16S	ATOM	25175	O2'	CYT	309	137.591	61.524	-4.657	1.00	38.03	A16S
ATOM	25123	C1'	CYT	307	130.693	71.310	-7.628	1.00	40.13	A16S	ATOM	25176	C3'	CYT	309	135.611	60.857	-5.930	1.00	38.03	A16S
ATOM	25124	N1	CYT	307	130.793	71.103	-6.188	1.00	33.70	A16S	ATOM	25177	O3'	CYT	309	136.278	59.639	-6.283	1.00	38.03	A16S
ATOM	25125	C6	CYT	307	129.681	71.136	-5.398	1.00	33.70	A16S	ATOM	25178	P	ADE	310	135.509	58.249	-6.133	1.00	53.84	A16S
ATOM	25126	C2	CYT	307	132.049	70.887	-5.631	1.00	33.70	A16S	ATOM	25179	O1P	ADE	310	136.155	57.253	-7.008	1.00	42.46	A16S
ATOM	25127	O2	CYT	307	133.039	70.841	-6.388	1.00	33.70	A16S	ATOM	25180	O2P	ADE	310	134.068	58.489	-6.243	1.00	42.46	A16S
ATOM	25128	N3	CYT	307	132.158	70.734	-4.289	1.00	33.70	A16S	ATOM	25181	O5'	ADE	310	135.818	57.820	-4.648	1.00	53.84	A16S
ATOM	25129	C4	CYT	307	131.064	70.789	-3.526	1.00	33.70	A16S	ATOM	25182	C5'	ADE	310	137.156	57.717	-4.208	1.00	53.84	A16S
ATOM	25130	N4	CYT	307	131.212	70.655	-2.216	1.00	33.70	A16S	ATOM	25183	C4'	ADE	310	137.195	57.894	-2.729	1.00	53.84	A16S
ATOM	25131	C5	CYT	307	129.770	70.989	-4.075	1.00	33.70	A16S	ATOM	25184	O4'	ADE	310	136.308	58.971	-2.432	1.00	53.84	A16S
ATOM	25132	C2'	CYT	307	130.816	70.018	-8.428	1.00	40.13	A16S	ATOM	25185	C1'	ADE	310	135.836	58.816	-1.134	1.00	53.84	A16S
ATOM	25133	O2'	CYT	307	131.243	70.371	-9.726	1.00	40.13	A16S	ATOM	25186	N9	ADE	310	134.498	59.364	-1.072	1.00	42.46	A16S
ATOM	25134	C3'	CYT	307	129.372	69.562	-8.442	1.00	40.13	A16S	ATOM	25187	C4	ADE	310	133.969	59.981	0.025	1.00	42.46	A16S
ATOM	25135	O3'	CYT	307	129.120	68.662	-9.506	1.00	40.13	A16S	ATOM	25188	N3	ADE	310	134.538	60.099	1.235	1.00	42.46	A16S
ATOM	25136	P	ADE	308	129.018	67.095	-9.195	1.00	44.79	A16S	ATOM	25189	C2	ADE	310	133.758	60.800	2.039	1.00	42.46	A16S
ATOM	25137	O1P	ADE	308	128.514	66.378	-10.392	1.00	30.27	A16S	ATOM	25190	N1	ADE	310	132.567	61.363	1.784	1.00	42.46	A16S
ATOM	25138	O2P	ADE	308	128.292	66.981	-7.905	1.00	30.27	A16S	ATOM	25191	C6	ADE	310	132.034	61.224	0.552	1.00	42.46	A16S
ATOM	25139	O5'	ADE	308	130.527	66.656	-8.963	1.00	44.79	A16S	ATOM	25192	N6	ADE	310	130.862	61.795	0.289	1.00	42.46	A16S
ATOM	25140	C5'	ADE	308	131.464	66.714	-10.020	1.00	44.79	A16S	ATOM	25193	C5	ADE	310	132.755	60.492	-0.383	1.00	42.46	A16S

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ATOM  25194  N7  ADE  310     132.497  60.153  -1.703  1.00 42.46      A16S
ATOM  25195  C8  ADE  310     133.555  59.466  -2.059  1.00 42.46      A16S
ATOM  25196  C2' ADE  310     136.112  57.395  -0.651  1.00 53.84      A16S
ATOM  25197  O2' ADE  310     137.064  57.511   0.394  1.00 53.84      A16S
ATOM  25198  C3' ADE  310     136.687  56.726  -1.901  1.00 53.84      A16S
ATOM  25199  O3' ADE  310     137.892  56.050  -1.557  1.00 53.84      A16S
ATOM  25200  P   GUA  311     137.880  54.536  -1.039  1.00 56.14      A16S
ATOM  25201  O1P GUA  311     137.216  53.731  -2.095  1.00 53.21      A16S
ATOM  25202  O2P GUA  311     137.385  54.468   0.359  1.00 53.21      A16S
ATOM  25203  O5' GUA  311     139.436  54.227  -1.013  1.00 56.14      A16S
ATOM  25204  C5' GUA  311     140.357  55.245  -0.649  1.00 56.14      A16S
ATOM  25205  C4' GUA  311     141.671  55.053  -1.369  1.00 56.14      A16S
ATOM  25206  O4' GUA  311     142.200  53.744  -1.030  1.00 56.14      A16S
ATOM  25207  C1' GUA  311     142.881  53.197  -2.149  1.00 56.14      A16S
ATOM  25208  N9  GUA  311     142.177  51.992  -2.583  1.00 53.21      A16S
ATOM  25209  C4  GUA  311     142.532  51.187  -3.637  1.00 53.21      A16S
ATOM  25210  N3  GUA  311     143.620  51.340  -4.416  1.00 53.21      A16S
ATOM  25211  C2  GUA  311     143.673  50.434  -5.370  1.00 53.21      A16S
ATOM  25212  N2  GUA  311     144.689  50.441  -6.241  1.00 53.21      A16S
ATOM  25213  N1  GUA  311     142.737  49.457  -5.545  1.00 53.21      A16S
ATOM  25214  C6  GUA  311     141.609  49.278  -4.755  1.00 53.21      A16S
ATOM  25215  O6  GUA  311     140.818  48.362  -5.010  1.00 53.21      A16S
ATOM  25216  C5  GUA  311     141.540  50.240  -3.724  1.00 53.21      A16S
ATOM  25217  N7  GUA  311     140.600  50.418  -2.719  1.00 53.21      A16S
ATOM  25218  C8  GUA  311     141.024  51.461  -2.062  1.00 53.21      A16S
ATOM  25219  C2' GUA  311     142.890  54.278  -3.233  1.00 56.14      A16S
ATOM  25220  O2' GUA  311     144.064  55.049  -3.091  1.00 56.14      A16S
ATOM  25221  C3' GUA  311     141.623  55.053  -2.889  1.00 56.14      A16S
ATOM  25222  O3' GUA  311     141.674  56.390  -3.392  1.00 56.14      A16S
ATOM  25223  P   GUA  312     141.012  56.751  -4.823  1.00 59.76      A16S
ATOM  25224  O1P GUA  312     141.204  58.219  -4.960  1.00 49.26      A16S
ATOM  25225  O2P GUA  312     139.640  56.175  -4.929  1.00 49.26      A16S
ATOM  25226  O5' GUA  312     141.922  56.014  -5.906  1.00 59.76      A16S
ATOM  25227  C5' GUA  312     142.955  56.712  -6.589  1.00 59.76      A16S
ATOM  25228  C4' GUA  312     143.368  55.957  -7.834  1.00 59.76      A16S
ATOM  25229  O4' GUA  312     143.784  54.602  -7.481  1.00 59.76      A16S
ATOM  25230  C1' GUA  312     143.413  53.702  -8.520  1.00 59.76      A16S
ATOM  25231  N9  GUA  312     142.385  52.801  -8.010  1.00 49.26      A16S
ATOM  25232  C4  GUA  312     141.937  51.649  -8.616  1.00 49.26      A16S
ATOM  25233  N3  GUA  312     142.386  51.140  -9.782  1.00 49.26      A16S
ATOM  25234  C2  GUA  312     141.769  50.015 -10.099  1.00 49.26      A16S
ATOM  25235  N2  GUA  312     142.105  49.369 -11.220  1.00 49.26      A16S
ATOM  25236  N1  GUA  312     140.781  49.442  -9.340  1.00 49.26      A16S
ATOM  25237  C6  GUA  312     140.295  49.954  -8.144  1.00 49.26      A16S
ATOM  25238  O6  GUA  312     139.393  49.367  -7.547  1.00 49.26      A16S
ATOM  25239  C5  GUA  312     140.957  51.154  -7.783  1.00 49.26      A16S
ATOM  25240  N7  GUA  312     140.794  51.973  -6.674  1.00 49.26      A16S
ATOM  25241  C8  GUA  312     141.662  52.935  -6.850  1.00 49.26      A16S
ATOM  25242  C2' GUA  312     142.854  54.559  -9.652  1.00 59.76      A16S
ATOM  25243  O2' GUA  312     143.920  54.958 -10.487  1.00 59.76      A16S
ATOM  25244  C3' GUA  312     142.276  55.721  -8.861  1.00 59.76      A16S
ATOM  25245  O3' GUA  312     142.056  56.852  -9.680  1.00 59.76      A16S
ATOM  25246  P   GUA  313     140.607  57.073 -10.328  1.00 63.14      A16S
ATOM  25247  O1P GUA  313     140.614  58.346 -11.102  1.00 57.74      A16S
ATOM  25248  O2P GUA  313     139.617  56.886  -9.226  1.00 57.74      A16S
ATOM  25249  O5' GUA  313     140.442  55.856 -11.346  1.00 63.14      A16S
ATOM  25250  C5' GUA  313     141.113  55.866 -12.594  1.00 63.14      A16S
ATOM  25251  C4' GUA  313     140.754  54.645 -13.406  1.00 63.14      A16S
ATOM  25252  O4' GUA  313     141.113  53.448 -12.663  1.00 63.14      A16S
ATOM  25253  C1' GUA  313     140.249  52.388 -13.030  1.00 63.14      A16S
ATOM  25254  N9  GUA  313     139.511  51.968 -11.847  1.00 57.74      A16S
ATOM  25255  C4  GUA  313     138.727  50.852 -11.750  1.00 57.74      A16S
ATOM  25256  N3  GUA  313     138.540  49.938 -12.718  1.00 57.74      A16S
ATOM  25257  C2  GUA  313     137.718  48.983 -12.339  1.00 57.74      A16S
ATOM  25258  N2  GUA  313     137.434  47.991 -13.190  1.00 57.74      A16S
ATOM  25259  N1  GUA  313     137.116  48.932 -11.102  1.00 57.74      A16S
ATOM  25260  C6  GUA  313     137.294  49.869 -10.091  1.00 57.74      A16S
ATOM  25261  O6  GUA  313     136.699  49.741  -9.017  1.00 57.74      A16S
ATOM  25262  C5  GUA  313     138.185  50.894 -10.486  1.00 57.74      A16S
ATOM  25263  N7  GUA  313     138.641  52.004  -9.793  1.00 57.74      A16S
ATOM  25264  C8  GUA  313     139.430  52.607 -10.639  1.00 57.74      A16S
ATOM  25265  C2' GUA  313     139.299  52.944 -14.090  1.00 63.14      A16S
ATOM  25266  O2' GUA  313     139.830  52.712 -15.380  1.00 63.14      A16S
ATOM  25267  C3' GUA  313     139.289  54.418 -13.714  1.00 63.14      A16S
ATOM  25268  O3' GUA  313     138.815  55.232 -14.776  1.00 63.14      A16S
ATOM  25269  P   GUA  314     137.305  55.790 -14.725  1.00 54.51      A16S
ATOM  25270  O1P GUA  314     137.163  56.807 -15.798  1.00 52.47      A16S
ATOM  25271  O2P GUA  314     137.062  56.175 -13.313  1.00 52.47      A16S
ATOM  25272  O5' GUA  314     136.394  54.544 -15.130  1.00 54.51      A16S
ATOM  25273  C5' GUA  314     136.405  54.078 -16.472  1.00 54.51      A16S
ATOM  25274  C4' GUA  314     135.842  52.676 -16.578  1.00 54.51      A16S
ATOM  25275  O4' GUA  314     136.475  51.788 -15.615  1.00 54.51      A16S
ATOM  25276  C1' GUA  314     135.572  50.734 -15.288  1.00 54.51      A16S
ATOM  25277  N9  GUA  314     135.293  50.786 -13.858  1.00 52.47      A16S
ATOM  25278  C4  GUA  314     134.579  49.862 -13.139  1.00 52.47      A16S
ATOM  25279  N3  GUA  314     134.025  48.737 -13.629  1.00 52.47      A16S
ATOM  25280  C2  GUA  314     133.409  48.044 -12.688  1.00 52.47      A16S
ATOM  25281  N2  GUA  314     132.824  46.880 -12.994  1.00 52.47      A16S
ATOM  25282  N1  GUA  314     133.329  48.436 -11.377  1.00 52.47      A16S
ATOM  25283  C6  GUA  314     133.882  49.595 -10.859  1.00 52.47      A16S
ATOM  25284  O6  GUA  314     133.741  49.858  -9.675  1.00 52.47      A16S
ATOM  25285  C5  GUA  314     134.559  50.337 -11.849  1.00 52.47      A16S
ATOM  25286  N7  GUA  314     135.246  51.538 -11.756  1.00 52.47      A16S
ATOM  25287  C8  GUA  314     135.666  51.764 -12.970  1.00 52.47      A16S
ATOM  25288  C2' GUA  314     134.294  50.985 -16.094  1.00 54.51      A16S
ATOM  25289  O2' GUA  314     134.367  50.318 -17.334  1.00 54.51      A16S
ATOM  25290  C3' GUA  314     134.366  52.487 -16.291  1.00 54.51      A16S
ATOM  25291  O3' GUA  314     133.601  52.841 -17.416  1.00 54.51      A16S
ATOM  25292  P   CYT  315     132.145  53.464 -17.206  1.00 58.74      A16S
ATOM  25293  O1P CYT  315     131.653  53.897 -18.542  1.00 50.39      A16S
ATOM  25294  O2P CYT  315     132.197  54.442 -16.085  1.00 50.39      A16S
ATOM  25295  O5' CYT  315     131.281  52.222 -16.710  1.00 58.74      A16S
ATOM  25296  C5' CYT  315     131.185  51.043 -17.492  1.00 58.74      A16S
ATOM  25297  C4' CYT  315     130.445  49.978 -16.730  1.00 58.74      A16S
ATOM  25298  O4' CYT  315     131.187  49.639 -15.533  1.00 58.74      A16S
ATOM  25299  C1' CYT  315     130.294  49.088 -14.584  1.00 58.74      A16S
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ATOM	25300	N1	CYT	315	130.478	49.758	-13.301	1.00	50.39	A16S	ATOM	25353	O3'	CYT	317	118.410	46.040	-11.495	1.00	47.84	A16S
ATOM	25301	C6	CYT	315	131.139	50.943	-13.203	1.00	50.39	A16S	ATOM	25354	P	URI	318	117.000	46.791	-11.474	1.00	45.06	A16S
ATOM	25302	C2	CYT	315	129.921	49.171	-12.176	1.00	50.39	A16S	ATOM	25355	O1P	URI	318	115.983	45.807	-11.941	1.00	49.98	A16S
ATOM	25303	O2	CYT	315	129.395	48.062	-12.292	1.00	50.39	A16S	ATOM	25356	O2P	URI	318	117.168	48.072	-12.201	1.00	49.98	A16S
ATOM	25304	N3	CYT	315	129.973	49.812	-10.994	1.00	50.39	A16S	ATOM	25357	O5'	URI	318	116.792	47.122	-9.928	1.00	45.06	A16S
ATOM	25305	C4	CYT	315	130.576	50.990	-10.911	1.00	50.39	A16S	ATOM	25358	C5'	URI	318	116.791	46.081	-8.953	1.00	45.06	A16S
ATOM	25306	N4	CYT	315	130.564	51.611	-9.739	1.00	50.39	A16S	ATOM	25359	C4'	URI	318	116.691	46.666	-7.563	1.00	45.06	A16S
ATOM	25307	C5	CYT	315	131.211	51.589	-12.035	1.00	50.39	A16S	ATOM	25360	O4'	URI	318	117.962	47.239	-7.168	1.00	45.06	A16S
ATOM	25308	C2'	CYT	315	128.872	49.304	-15.109	1.00	58.74	A16S	ATOM	25361	C1'	URI	318	117.740	48.374	-6.344	1.00	45.06	A16S
ATOM	25309	O2'	CYT	315	128.347	48.097	-15.628	1.00	58.74	A16S	ATOM	25362	N1	URI	318	118.376	49.533	-6.990	1.00	49.98	A16S
ATOM	25310	C3'	CYT	315	129.092	50.370	-16.172	1.00	58.74	A16S	ATOM	25363	C6	URI	318	118.457	49.625	-8.358	1.00	49.98	A16S
ATOM	25311	O3'	CYT	315	128.085	50.295	-17.164	1.00	58.74	A16S	ATOM	25364	C2	URI	318	118.898	50.524	-6.183	1.00	49.98	A16S
ATOM	25312	P	ADE	316	126.955	51.431	-17.222	1.00	55.16	A16S	ATOM	25365	O2	URI	318	118.835	50.490	-4.971	1.00	49.98	A16S
ATOM	25313	O1P	ADE	316	126.465	51.474	-18.626	1.00	54.97	A16S	ATOM	25366	N3	URI	318	119.501	51.559	-6.854	1.00	49.98	A16S
ATOM	25314	O2P	ADE	316	127.485	52.663	-16.585	1.00	54.97	A16S	ATOM	25367	C4	URI	318	119.630	51.704	-8.215	1.00	49.98	A16S
ATOM	25315	O5'	ADE	316	125.791	50.902	-16.280	1.00	55.16	A16S	ATOM	25368	O4	URI	318	120.280	52.642	-8.662	1.00	49.98	A16S
ATOM	25316	C5'	ADE	316	124.965	49.846	-16.706	1.00	55.16	A16S	ATOM	25369	C5	URI	318	119.049	50.652	-8.981	1.00	49.98	A16S
ATOM	25317	C4'	ADE	316	124.771	48.866	-15.591	1.00	55.16	A16S	ATOM	25370	C2'	URI	318	116.225	48.520	-6.175	1.00	45.06	A16S
ATOM	25318	O4'	ADE	316	125.893	48.963	-14.681	1.00	55.16	A16S	ATOM	25371	O2'	URI	318	115.809	47.865	-5.003	1.00	45.06	A16S
ATOM	25319	C1'	ADE	316	125.485	48.536	-13.400	1.00	55.16	A16S	ATOM	25372	C3'	URI	318	115.721	47.820	-7.425	1.00	45.06	A16S
ATOM	25320	N9	ADE	316	125.931	49.514	-12.406	1.00	54.97	A16S	ATOM	25373	O3'	URI	318	114.395	47.364	-7.287	1.00	45.06	A16S
ATOM	25321	C4	ADE	316	125.863	49.355	-11.042	1.00	54.97	A16S	ATOM	25374	P	GUA	319	113.193	48.323	-7.724	1.00	45.03	A16S
ATOM	25322	N3	ADE	316	125.389	48.295	-10.371	1.00	54.97	A16S	ATOM	25375	O1P	GUA	319	111.939	47.533	-7.773	1.00	58.06	A16S
ATOM	25323	C2	ADE	316	125.468	48.494	-9.066	1.00	54.97	A16S	ATOM	25376	O2P	GUA	319	113.636	49.072	-8.923	1.00	58.06	A16S
ATOM	25324	N1	ADE	316	125.936	49.548	-8.401	1.00	54.97	A16S	ATOM	25377	O5'	GUA	319	113.109	49.292	-6.483	1.00	45.03	A16S
ATOM	25325	C6	ADE	316	126.413	50.596	-9.102	1.00	54.97	A16S	ATOM	25378	C5'	GUA	319	112.489	50.542	-6.580	1.00	45.03	A16S
ATOM	25326	N6	ADE	316	126.892	51.638	-8.433	1.00	54.97	A16S	ATOM	25379	C4'	GUA	319	113.177	51.496	-5.657	1.00	45.03	A16S
ATOM	25327	C5	ADE	316	126.378	50.514	-10.500	1.00	54.97	A16S	ATOM	25380	O4'	GUA	319	114.608	51.375	-5.844	1.00	45.03	A16S
ATOM	25328	N7	ADE	316	126.775	51.390	-11.500	1.00	54.97	A16S	ATOM	25381	C1'	GUA	319	115.177	52.659	-6.007	1.00	45.03	A16S
ATOM	25329	C8	ADE	316	126.491	50.750	-12.609	1.00	54.97	A16S	ATOM	25382	N9	GUA	319	115.548	52.800	-7.411	1.00	58.06	A16S
ATOM	25330	C2'	ADE	316	123.970	48.304	-13.457	1.00	55.16	A16S	ATOM	25383	C4	GUA	319	116.486	53.651	-7.917	1.00	58.06	A16S
ATOM	25331	O2'	ADE	316	123.741	46.923	-13.648	1.00	55.16	A16S	ATOM	25384	N3	GUA	319	117.250	54.492	-7.199	1.00	58.06	A16S
ATOM	25332	C3'	ADE	316	123.577	49.102	-14.694	1.00	55.16	A16S	ATOM	25385	C2	GUA	319	118.026	55.221	-7.962	1.00	58.06	A16S
ATOM	25333	O3'	ADE	316	122.428	48.546	-15.331	1.00	55.16	A16S	ATOM	25386	N2	GUA	319	118.840	56.114	-7.406	1.00	58.06	A16S
ATOM	25334	P	CYT	317	120.958	48.898	-14.785	1.00	47.84	A16S	ATOM	25387	N1	GUA	319	118.056	55.131	-9.330	1.00	58.06	A16S
ATOM	25335	O1P	CYT	317	119.989	48.323	-15.750	1.00	50.14	A16S	ATOM	25388	C6	GUA	319	117.276	54.268	-10.096	1.00	58.06	A16S
ATOM	25336	O2P	CYT	317	120.877	50.336	-14.445	1.00	50.14	A16S	ATOM	25389	O6	GUA	319	117.369	54.274	-11.336	1.00	58.06	A16S
ATOM	25337	O5'	CYT	317	120.872	48.093	-13.416	1.00	47.84	A16S	ATOM	25390	C5	GUA	319	116.440	53.477	-9.285	1.00	58.06	A16S
ATOM	25338	C5'	CYT	317	120.934	46.669	-13.396	1.00	47.84	A16S	ATOM	25391	N7	GUA	319	115.509	52.506	-9.631	1.00	58.06	A16S
ATOM	25339	C4'	CYT	317	120.764	46.168	-11.984	1.00	47.84	A16S	ATOM	25392	C8	GUA	319	115.009	52.128	-8.486	1.00	58.06	A16S
ATOM	25340	O4'	CYT	317	121.917	46.549	-11.197	1.00	47.84	A16S	ATOM	25393	C2'	GUA	319	114.109	53.660	-5.562	1.00	45.03	A16S
ATOM	25341	C1'	CYT	317	121.514	46.800	-9.862	1.00	47.84	A16S	ATOM	25394	O2'	GUA	319	114.203	53.835	-4.174	1.00	45.03	A16S
ATOM	25342	N1	CYT	317	121.946	48.157	-9.510	1.00	50.14	A16S	ATOM	25395	C3'	GUA	319	112.836	52.931	-5.960	1.00	45.03	A16S
ATOM	25343	C6	CYT	317	122.249	49.063	-10.484	1.00	50.14	A16S	ATOM	25396	O3'	GUA	319	111.688	53.268	-5.205	1.00	45.03	A16S
ATOM	25344	C2	CYT	317	122.034	48.513	-8.159	1.00	50.14	A16S	ATOM	25397	P	ADE	320	110.357	53.747	-5.966	1.00	47.66	A16S
ATOM	25345	O2	CYT	317	121.766	47.660	-7.286	1.00	50.14	A16S	ATOM	25398	O1P	ADE	320	110.214	52.908	-7.191	1.00	45.08	A16S
ATOM	25346	N3	CYT	317	122.408	49.777	-7.836	1.00	50.14	A16S	ATOM	25399	O2P	ADE	320	109.234	53.803	-4.976	1.00	45.08	A16S
ATOM	25347	C4	CYT	317	122.685	50.658	-8.799	1.00	50.14	A16S	ATOM	25400	O5'	ADE	320	110.735	55.242	-6.380	1.00	47.66	A16S
ATOM	25348	N4	CYT	317	123.024	51.895	-8.437	1.00	50.14	A16S	ATOM	25401	C5'	ADE	320	110.021	55.941	-7.387	1.00	47.66	A16S
ATOM	25349	C5	CYT	317	122.620	50.311	-10.176	1.00	50.14	A16S	ATOM	25402	C4'	ADE	320	110.492	57.367	-7.437	1.00	47.66	A16S
ATOM	25350	C2'	CYT	317	119.994	46.602	-9.786	1.00	47.84	A16S	ATOM	25403	O4'	ADE	320	110.188	58.011	-6.183	1.00	47.66	A16S
ATOM	25351	O2'	CYT	317	119.664	45.304	-9.339	1.00	47.84	A16S	ATOM	25404	C1'	ADE	320	111.186	58.962	-5.882	1.00	47.66	A16S
ATOM	25352	C3'	CYT	317	119.590	46.773	-11.236	1.00	47.84	A16S	ATOM	25405	N9	ADE	320	111.695	58.668	-4.552	1.00	45.08	A16S

ATOM	25406	C4	ADE	320	112.359	59.540	-3.734	1.00	45.08	A16S
ATOM	25407	N3	ADE	320	112.720	60.795	-4.018	1.00	45.08	A16S
ATOM	25408	C2	ADE	320	113.301	61.354	-2.969	1.00	45.08	A16S
ATOM	25409	N1	ADE	320	113.546	60.837	-1.764	1.00	45.08	A16S
ATOM	25410	C6	ADE	320	113.179	59.568	-1.522	1.00	45.08	A16S
ATOM	25411	N6	ADE	320	113.432	59.050	-0.324	1.00	45.08	A16S
ATOM	25412	C5	ADE	320	112.556	58.869	-2.546	1.00	45.08	A16S
ATOM	25413	N7	ADE	320	112.070	57.576	-2.627	1.00	45.08	A16S
ATOM	25414	C8	ADE	320	111.578	57.503	-3.841	1.00	45.08	A16S
ATOM	25415	C2'	ADE	320	112.243	58.895	-6.980	1.00	47.66	A16S
ATOM	25416	O2'	ADE	320	112.015	59.902	-7.949	1.00	47.66	A16S
ATOM	25417	C3'	ADE	320	111.994	57.508	-7.542	1.00	47.66	A16S
ATOM	25418	O3'	ADE	320	112.408	57.434	-8.888	1.00	47.66	A16S
ATOM	25419	P	GUA	321	113.821	56.783	-9.223	1.00	46.32	A16S
ATOM	25420	O1P	GUA	321	113.956	56.783	-10.700	1.00	61.01	A16S
ATOM	25421	O2P	GUA	321	113.869	55.503	-8.483	1.00	61.01	A16S
ATOM	25422	O5'	GUA	321	114.864	57.796	-8.571	1.00	46.32	A16S
ATOM	25423	C5'	GUA	321	115.021	59.120	-9.079	1.00	46.32	A16S
ATOM	25424	C4'	GUA	321	115.929	59.910	-8.174	1.00	46.32	A16S
ATOM	25425	O4'	GUA	321	115.315	59.980	-6.869	1.00	46.32	A16S
ATOM	25426	C1'	GUA	321	116.284	59.783	-5.865	1.00	46.32	A16S
ATOM	25427	N9	GUA	321	115.885	58.609	-5.096	1.00	61.01	A16S
ATOM	25428	C4	GUA	321	116.016	58.425	-3.745	1.00	61.01	A16S
ATOM	25429	N3	GUA	321	116.595	59.279	-2.884	1.00	61.01	A16S
ATOM	25430	C2	GUA	321	116.566	58.824	-1.645	1.00	61.01	A16S
ATOM	25431	N2	GUA	321	117.141	59.525	-0.664	1.00	61.01	A16S
ATOM	25432	N1	GUA	321	115.983	57.642	-1.278	1.00	61.01	A16S
ATOM	25433	C6	GUA	321	115.365	56.754	-2.149	1.00	61.01	A16S
ATOM	25434	O6	GUA	321	114.845	55.720	-1.712	1.00	61.01	A16S
ATOM	25435	C5	GUA	321	115.424	57.211	-3.482	1.00	61.01	A16S
ATOM	25436	N7	GUA	321	114.959	56.627	-4.648	1.00	61.01	A16S
ATOM	25437	C8	GUA	321	115.260	57.488	-5.580	1.00	61.01	A16S
ATOM	25438	C2'	GUA	321	117.655	59.731	-6.544	1.00	46.32	A16S
ATOM	25439	O2'	GUA	321	118.241	61.015	-6.535	1.00	46.32	A16S
ATOM	25440	C3'	GUA	321	117.300	59.292	-7.958	1.00	46.32	A16S
ATOM	25441	O3'	GUA	321	118.201	59.881	-8.887	1.00	46.32	A16S
ATOM	25442	P	ADE	322	119.442	59.043	-9.462	1.00	45.59	A16S
ATOM	25443	O1P	ADE	322	120.209	59.993	-10.295	1.00	47.30	A16S
ATOM	25444	O2P	ADE	322	118.918	57.805	-10.086	1.00	47.30	A16S
ATOM	25445	O5'	ADE	322	120.335	58.710	-8.176	1.00	45.59	A16S
ATOM	25446	C5'	ADE	322	121.512	59.472	-7.863	1.00	45.59	A16S
ATOM	25447	C4'	ADE	322	122.629	58.556	-7.401	1.00	45.59	A16S
ATOM	25448	O4'	ADE	322	122.108	57.723	-6.349	1.00	45.59	A16S
ATOM	25449	C1'	ADE	322	122.845	56.529	-6.311	1.00	45.59	A16S
ATOM	25450	N9	ADE	322	122.018	55.456	-5.772	1.00	47.30	A16S
ATOM	25451	C4	ADE	322	121.939	55.123	-4.449	1.00	47.30	A16S
ATOM	25452	N3	ADE	322	122.589	55.701	-3.429	1.00	47.30	A16S
ATOM	25453	C2	ADE	322	122.256	55.123	-2.273	1.00	47.30	A16S
ATOM	25454	N1	ADE	322	121.412	54.110	-2.046	1.00	47.30	A16S
ATOM	25455	C6	ADE	322	120.781	53.555	-3.100	1.00	47.30	A16S
ATOM	25456	N6	ADE	322	119.943	52.551	-2.877	1.00	47.30	A16S
ATOM	25457	C5	ADE	322	121.049	54.076	-4.375	1.00	47.30	A16S
ATOM	25458	N7	ADE	322	120.582	53.743	-5.637	1.00	47.30	A16S
ATOM	25459	C8	ADE	322	121.187	54.589	-6.427	1.00	47.30	A16S
ATOM	25460	C2'	ADE	322	123.442	56.287	-7.697	1.00	45.59	A16S
ATOM	25461	O2'	ADE	322	124.816	56.029	-7.564	1.00	45.59	A16S
ATOM	25462	C3'	ADE	322	123.132	57.581	-8.459	1.00	45.59	A16S
ATOM	25463	O3'	ADE	322	124.385	57.949	-9.096	1.00	45.59	A16S
ATOM	25464	P	CYT	323	125.101	59.376	-8.830	1.00	58.13	A16S
ATOM	25465	O1P	CYT	323	125.321	59.554	-7.388	1.00	47.21	A16S
ATOM	25466	O2P	CYT	323	124.425	60.429	-9.610	1.00	47.21	A16S
ATOM	25467	O5'	CYT	323	126.573	59.215	-9.410	1.00	58.13	A16S
ATOM	25468	C5'	CYT	323	126.911	58.201	-10.355	1.00	58.13	A16S
ATOM	25469	C4'	CYT	323	126.795	56.849	-9.716	1.00	58.13	A16S
ATOM	25470	O4'	CYT	323	125.531	56.292	-10.125	1.00	58.13	A16S
ATOM	25471	C1'	CYT	323	125.604	54.891	-10.089	1.00	58.13	A16S
ATOM	25472	N1	CYT	323	124.856	54.376	-11.238	1.00	47.21	A16S
ATOM	25473	C6	CYT	323	123.604	53.844	-11.084	1.00	47.21	A16S
ATOM	25474	C2	CYT	323	125.443	54.439	-12.475	1.00	47.21	A16S
ATOM	25475	O2	CYT	323	126.590	54.913	-12.546	1.00	47.21	A16S
ATOM	25476	N3	CYT	323	124.762	53.983	-13.560	1.00	47.21	A16S
ATOM	25477	C4	CYT	323	123.540	53.461	-13.406	1.00	47.21	A16S
ATOM	25478	N4	CYT	323	122.904	53.012	-14.488	1.00	47.21	A16S
ATOM	25479	C5	CYT	323	122.917	53.375	-12.132	1.00	47.21	A16S
ATOM	25480	C2'	CYT	323	127.067	54.476	-9.877	1.00	58.13	A16S
ATOM	25481	O2'	CYT	323	127.198	53.979	-8.559	1.00	58.13	A16S
ATOM	25482	C3'	CYT	323	127.810	55.791	-10.100	1.00	58.13	A16S
ATOM	25483	O3'	CYT	323	129.005	55.973	-9.325	1.00	58.13	A16S
ATOM	25484	P	ADE	324	129.058	55.614	-7.735	1.00	47.77	A16S
ATOM	25485	O1P	ADE	324	129.969	56.639	-7.153	1.00	48.24	A16S
ATOM	25486	O2P	ADE	324	129.350	54.176	-7.500	1.00	48.24	A16S
ATOM	25487	O5'	ADE	324	127.626	55.937	-7.112	1.00	47.77	A16S
ATOM	25488	C5'	ADE	324	127.463	57.025	-6.192	1.00	47.77	A16S
ATOM	25489	C4'	ADE	324	127.033	56.520	-4.831	1.00	47.77	A16S
ATOM	25490	O4'	ADE	324	125.741	55.901	-4.925	1.00	47.77	A16S
ATOM	25491	C1'	ADE	324	125.633	54.914	-3.933	1.00	47.77	A16S
ATOM	25492	N9	ADE	324	124.888	53.787	-4.455	1.00	48.24	A16S
ATOM	25493	C4	ADE	324	124.325	52.809	-3.691	1.00	48.24	A16S
ATOM	25494	N3	ADE	324	124.395	52.684	-2.358	1.00	48.24	A16S
ATOM	25495	C2	ADE	324	123.698	51.643	-1.961	1.00	48.24	A16S
ATOM	25496	N1	ADE	324	122.994	50.774	-2.690	1.00	48.24	A16S
ATOM	25497	C6	ADE	324	122.955	50.929	-4.029	1.00	48.24	A16S
ATOM	25498	N6	ADE	324	122.263	50.061	-4.763	1.00	48.24	A16S
ATOM	25499	C5	ADE	324	123.648	51.994	-4.570	1.00	48.24	A16S
ATOM	25500	N7	ADE	324	123.806	52.434	-5.871	1.00	48.24	A16S
ATOM	25501	C8	ADE	324	124.560	53.493	-5.747	1.00	48.24	A16S
ATOM	25502	C2'	ADE	324	127.014	54.585	-3.384	1.00	47.77	A16S
ATOM	25503	O2'	ADE	324	127.011	54.863	-2.001	1.00	47.77	A16S
ATOM	25504	C3'	ADE	324	127.942	55.467	-4.229	1.00	47.77	A16S
ATOM	25505	O3'	ADE	324	128.893	56.064	-3.343	1.00	47.77	A16S
ATOM	25506	P	CYT	325	128.754	57.616	-2.902	1.00	60.87	A16S
ATOM	25507	O1P	CYT	325	127.378	57.855	-2.397	1.00	63.60	A16S
ATOM	25508	O2P	CYT	325	129.332	58.513	-3.936	1.00	63.60	A16S
ATOM	25509	O5'	CYT	325	129.695	57.695	-1.629	1.00	60.87	A16S
ATOM	25510	C5'	CYT	325	129.578	56.728	-0.606	1.00	60.87	A16S
ATOM	25511	C4'	CYT	325	130.940	56.297	-0.158	1.00	60.87	A16S

ATOM	25512	O4'	CYT	325	131.695	57.473	0.232	1.00	60.87	A16S	ATOM	25565	C5	GUA	327	126.724	50.564	-3.797	1.00	58.23	A16S
ATOM	25513	C1'	CYT	325	132.317	57.239	1.475	1.00	60.87	A16S	ATOM	25566	N7	GUA	327	127.413	51.244	-2.808	1.00	58.23	A16S
ATOM	25514	N1	CYT	325	131.514	57.926	2.484	1.00	63.60	A16S	ATOM	25567	C8	GUA	327	127.101	50.619	-1.710	1.00	58.23	A16S
ATOM	25515	C6	CYT	325	130.360	58.572	2.141	1.00	63.60	A16S	ATOM	25568	C2'	GUA	327	126.680	47.385	-0.883	1.00	50.29	A16S
ATOM	25516	C2	CYT	325	131.940	57.899	3.800	1.00	63.60	A16S	ATOM	25569	O2'	GUA	327	125.992	46.305	-0.307	1.00	50.29	A16S
ATOM	25517	O2	CYT	325	132.998	57.317	4.067	1.00	63.60	A16S	ATOM	25570	C3'	GUA	327	127.786	47.855	0.040	1.00	50.29	A16S
ATOM	25518	N3	CYT	325	131.194	58.505	4.751	1.00	63.60	A16S	ATOM	25571	O3'	GUA	327	128.443	46.697	0.541	1.00	50.29	A16S
ATOM	25519	C4	CYT	325	130.064	59.123	4.413	1.00	63.60	A16S	ATOM	25572	P	GUA	328	129.469	45.882	-0.407	1.00	40.03	A16S
ATOM	25520	N4	CYT	325	129.356	59.693	5.382	1.00	63.60	A16S	ATOM	25573	O1P	GUA	328	129.795	44.620	0.287	1.00	47.72	A16S
ATOM	25521	C5	CYT	325	129.610	59.179	3.065	1.00	63.60	A16S	ATOM	25574	O2P	GUA	328	130.569	46.810	-0.785	1.00	47.72	A16S
ATOM	25522	C2'	CYT	325	132.277	55.726	1.688	1.00	60.87	A16S	ATOM	25575	O5'	GUA	328	128.636	45.538	-1.723	1.00	40.03	A16S
ATOM	25523	O2'	CYT	325	133.342	55.094	0.997	1.00	60.87	A16S	ATOM	25576	C5'	GUA	328	127.815	44.385	-1.794	1.00	40.03	A16S
ATOM	25524	C3'	CYT	325	130.931	55.402	1.070	1.00	60.87	A16S	ATOM	25577	C4'	GUA	328	127.459	44.076	-3.234	1.00	40.03	A16S
ATOM	25525	O3'	CYT	325	130.832	54.038	0.688	1.00	60.87	A16S	ATOM	25578	O4'	GUA	328	126.825	45.242	-3.832	1.00	40.03	A16S
ATOM	25526	P	GUA	326	129.507	53.208	1.045	1.00	53.87	A16S	ATOM	25579	C1'	GUA	328	127.177	45.332	-5.202	1.00	40.03	A16S
ATOM	25527	O1P	GUA	326	129.494	52.023	0.146	1.00	61.91	A16S	ATOM	25580	N9	GUA	328	127.913	46.577	-5.393	1.00	47.72	A16S
ATOM	25528	O2P	GUA	326	128.333	54.130	1.069	1.00	61.91	A16S	ATOM	25581	C4	GUA	328	128.291	47.149	-6.586	1.00	47.72	A16S
ATOM	25529	O5'	GUA	326	129.771	52.688	2.525	1.00	53.87	A16S	ATOM	25582	N3	GUA	328	128.080	46.642	-7.813	1.00	47.72	A16S
ATOM	25530	C5'	GUA	326	130.915	51.898	2.823	1.00	53.87	A16S	ATOM	25583	C2	GUA	328	128.542	47.441	-8.762	1.00	47.72	A16S
ATOM	25531	C4'	GUA	326	131.087	51.756	4.317	1.00	53.87	A16S	ATOM	25584	N2	GUA	328	128.421	47.101	-10.039	1.00	47.72	A16S
ATOM	25532	O4'	GUA	326	131.407	53.047	4.906	1.00	53.87	A16S	ATOM	25585	N1	GUA	328	129.157	48.633	-8.528	1.00	47.72	A16S
ATOM	25533	C1'	GUA	326	130.864	53.118	6.220	1.00	53.87	A16S	ATOM	25586	C6	GUA	328	129.381	49.179	-7.275	1.00	47.72	A16S
ATOM	25534	N9	GUA	326	129.916	54.231	6.276	1.00	61.91	A16S	ATOM	25587	O6	GUA	328	129.931	50.286	-7.175	1.00	47.72	A16S
ATOM	25535	C4	GUA	326	129.237	54.677	7.383	1.00	61.91	A16S	ATOM	25588	C5	GUA	328	128.902	48.334	-6.245	1.00	47.72	A16S
ATOM	25536	N3	GUA	326	129.309	54.153	8.622	1.00	61.91	A16S	ATOM	25589	N7	GUA	328	128.935	48.494	-4.870	1.00	47.72	A16S
ATOM	25537	C2	GUA	326	128.530	54.794	9.477	1.00	61.91	A16S	ATOM	25590	C8	GUA	328	128.343	47.426	-4.407	1.00	47.72	A16S
ATOM	25538	N2	GUA	326	128.455	54.395	10.753	1.00	61.91	A16S	ATOM	25591	C2'	GUA	328	127.982	44.076	-5.532	1.00	40.03	A16S
ATOM	25539	N1	GUA	326	127.759	55.870	9.146	1.00	61.91	A16S	ATOM	25592	O2'	GUA	328	127.071	43.072	-5.930	1.00	40.03	A16S
ATOM	25540	C6	GUA	326	127.673	56.433	7.882	1.00	61.91	A16S	ATOM	25593	C3'	GUA	328	128.610	43.766	-4.180	1.00	40.03	A16S
ATOM	25541	O6	GUA	326	126.944	57.413	7.696	1.00	61.91	A16S	ATOM	25594	O3'	GUA	328	129.038	42.403	-4.087	1.00	40.03	A16S
ATOM	25542	C5	GUA	326	128.489	55.744	6.948	1.00	61.91	A16S	ATOM	25595	P	CYT	329	130.565	42.025	-4.442	1.00	49.15	A16S
ATOM	25543	N7	GUA	326	128.678	55.959	5.590	1.00	61.91	A16S	ATOM	25596	O1P	CYT	329	130.822	40.597	-4.125	1.00	62.74	A16S
ATOM	25544	C8	GUA	326	129.531	55.039	5.236	1.00	61.91	A16S	ATOM	25597	O2P	CYT	329	131.457	43.061	-3.865	1.00	62.74	A16S
ATOM	25545	C2'	GUA	326	130.231	51.752	6.501	1.00	53.87	A16S	ATOM	25598	O5'	CYT	329	130.584	42.183	-6.021	1.00	49.15	A16S
ATOM	25546	O2'	GUA	326	131.216	50.926	7.084	1.00	53.87	A16S	ATOM	25599	C5'	CYT	329	129.764	41.363	-6.831	1.00	49.15	A16S
ATOM	25547	C3'	GUA	326	129.861	51.310	5.089	1.00	53.87	A16S	ATOM	25600	C4'	CYT	329	130.124	41.555	-8.274	1.00	49.15	A16S
ATOM	25548	O3'	GUA	326	129.676	49.911	4.988	1.00	53.87	A16S	ATOM	25601	O4'	CYT	329	129.605	42.822	-8.748	1.00	49.15	A16S
ATOM	25549	P	GUA	327	128.297	49.331	4.397	1.00	50.29	A16S	ATOM	25602	C1'	CYT	329	130.532	43.404	-9.647	1.00	49.15	A16S
ATOM	25550	O1P	GUA	327	127.222	50.324	4.626	1.00	58.23	A16S	ATOM	25603	N1	CYT	329	131.006	44.663	-9.053	1.00	62.74	A16S
ATOM	25551	O2P	GUA	327	128.157	47.955	4.939	1.00	58.23	A16S	ATOM	25604	C6	CYT	329	130.951	44.865	-7.705	1.00	62.74	A16S
ATOM	25552	O5'	GUA	327	128.557	49.173	2.832	1.00	50.29	A16S	ATOM	25605	C2	CYT	329	131.508	45.655	-9.894	1.00	62.74	A16S
ATOM	25553	C5'	GUA	327	127.664	49.710	1.878	1.00	50.29	A16S	ATOM	25606	O2	CYT	329	131.537	45.444	-11.114	1.00	62.74	A16S
ATOM	25554	C4'	GUA	327	126.989	48.608	1.099	1.00	50.29	A16S	ATOM	25607	N3	CYT	329	131.943	46.820	-9.362	1.00	62.74	A16S
ATOM	25555	O4'	GUA	327	125.926	49.238	0.345	1.00	50.29	A16S	ATOM	25608	C4	CYT	329	131.879	47.012	-8.047	1.00	62.74	A16S
ATOM	25556	C1'	GUA	327	125.785	48.618	-0.917	1.00	50.29	A16S	ATOM	25609	N4	CYT	329	132.305	48.178	-7.567	1.00	62.74	A16S
ATOM	25557	N9	GUA	327	126.258	49.561	-1.919	1.00	58.23	A16S	ATOM	25610	C5	CYT	329	131.371	46.014	-7.165	1.00	62.74	A16S
ATOM	25558	C4	GUA	327	125.987	49.537	-3.261	1.00	58.23	A16S	ATOM	25611	C2'	CYT	329	131.642	42.374	-9.865	1.00	49.15	A16S
ATOM	25559	N3	GUA	327	125.176	48.663	-3.893	1.00	58.23	A16S	ATOM	25612	O2'	CYT	329	131.288	41.534	-10.949	1.00	49.15	A16S
ATOM	25560	C2	GUA	327	125.136	48.888	-5.193	1.00	58.23	A16S	ATOM	25613	C3'	CYT	329	131.611	41.638	-8.537	1.00	49.15	A16S
ATOM	25561	N2	GUA	327	124.361	48.141	-5.976	1.00	58.23	A16S	ATOM	25614	O3'	CYT	329	132.146	40.338	-8.634	1.00	49.15	A16S
ATOM	25562	N1	GUA	327	125.848	49.871	-5.817	1.00	58.23	A16S	ATOM	25615	P	CYT	330	133.709	40.105	-8.402	1.00	55.33	A16S
ATOM	25563	C6	GUA	327	126.687	50.776	-5.183	1.00	58.23	A16S	ATOM	25616	O1P	CYT	330	133.906	38.644	-8.519	1.00	52.85	A16S
ATOM	25564	O6	GUA	327	127.288	51.624	-5.843	1.00	58.23	A16S	ATOM	25617	O2P	CYT	330	134.128	40.811	-7.167	1.00	52.85	A16S

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ATOM  25618  O5' CYT   330     134.391  40.788  -9.669  1.00 55.33      A16S
ATOM  25619  C5' CYT   330     134.153  40.271 -10.973  1.00 55.33      A16S
ATOM  25620  C4' CYT   330     134.857  41.102 -12.009  1.00 55.33      A16S
ATOM  25621  O4' CYT   330     134.210  42.390 -12.131  1.00 55.33      A16S
ATOM  25622  C1' CYT   330     135.185  43.376 -12.430  1.00 55.33      A16S
ATOM  25623  N1  CYT   330     135.217  44.337 -11.323  1.00 52.85      A16S
ATOM  25624  C6  CYT   330     134.746  44.002 -10.087  1.00 52.85      A16S
ATOM  25625  C2  CYT   330     135.756  45.595 -11.553  1.00 52.85      A16S
ATOM  25626  O2  CYT   330     136.161  45.868 -12.692  1.00 52.85      A16S
ATOM  25627  N3  CYT   330     135.828  46.479 -10.536  1.00 52.85      A16S
ATOM  25628  C4  CYT   330     135.384  46.136  -9.330  1.00 52.85      A16S
ATOM  25629  N4  CYT   330     135.491  47.025  -8.349  1.00 52.85      A16S
ATOM  25630  C5  CYT   330     134.814  44.862  -9.073  1.00 52.85      A16S
ATOM  25631  C2' CYT   330     136.533  42.661 -12.565  1.00 55.33      A16S
ATOM  25632  O2' CYT   330     136.797  42.339 -13.916  1.00 55.33      A16S
ATOM  25633  C3' CYT   330     136.305  41.430 -11.706  1.00 55.33      A16S
ATOM  25634  O3' CYT   330     137.148  40.368 -12.109  1.00 55.33      A16S
ATOM  25635  P   CYT   331     138.565  40.164 -11.389  1.00 57.33      A16S
ATOM  25636  O1P CYT   331     139.058  38.843 -11.848  1.00 71.22      A16S
ATOM  25637  O2P CYT   331     138.429  40.433  -9.935  1.00 71.22      A16S
ATOM  25638  O5' CYT   331     139.479  41.302 -12.023  1.00 57.33      A16S
ATOM  25639  C5' CYT   331     139.753  41.324 -13.415  1.00 57.33      A16S
ATOM  25640  C4' CYT   331     140.499  42.579 -13.772  1.00 57.33      A16S
ATOM  25641  O4' CYT   331     139.623  43.723 -13.619  1.00 57.33      A16S
ATOM  25642  C1' CYT   331     140.376  44.838 -13.164  1.00 57.33      A16S
ATOM  25643  N1  CYT   331     139.874  45.245 -11.840  1.00 71.22      A16S
ATOM  25644  C6  CYT   331     139.038  44.440 -11.118  1.00 71.22      A16S
ATOM  25645  C2  CYT   331     140.277  46.477 -11.327  1.00 71.22      A16S
ATOM  25646  O2  CYT   331     141.027  47.191 -12.012  1.00 71.22      A16S
ATOM  25647  N3  CYT   331     139.842  46.863 -10.102  1.00 71.22      A16S
ATOM  25648  C4  CYT   331     139.036  46.068  -9.402  1.00 71.22      A16S
ATOM  25649  N4  CYT   331     138.647  46.484  -8.199  1.00 71.22      A16S
ATOM  25650  C5  CYT   331     138.599  44.810  -9.906  1.00 71.22      A16S
ATOM  25651  C2' CYT   331     141.836  44.394 -13.100  1.00 57.33      A16S
ATOM  25652  O2' CYT   331     142.483  44.664 -14.327  1.00 57.33      A16S
ATOM  25653  C3' CYT   331     141.671  42.904 -12.866  1.00 57.33      A16S
ATOM  25654  O3' CYT   331     142.839  42.206 -13.253  1.00 57.33      A16S
ATOM  25655  P   CYT   332     143.952  41.863 -12.155  1.00 64.18      A16S
ATOM  25656  O1P CYT   332     145.005  41.096 -12.853  1.00 52.19      A16S
ATOM  25657  O2P CYT   332     143.280  41.277 -10.970  1.00 52.19      A16S
ATOM  25658  O5' CYT   332     144.546  43.284 -11.755  1.00 64.18      A16S
ATOM  25659  C5' CYT   332     145.204  44.089 -12.718  1.00 64.18      A16S
ATOM  25660  C4' CYT   332     145.683  45.368 -12.085  1.00 64.18      A16S
ATOM  25661  O4' CYT   332     144.556  46.226 -11.778  1.00 64.18      A16S
ATOM  25662  C1' CYT   332     144.861  47.013 -10.636  1.00 64.18      A16S
ATOM  25663  N1  CYT   332     143.850  46.750  -9.596  1.00 52.19      A16S
ATOM  25664  C6  CYT   332     143.093  45.612  -9.616  1.00 52.19      A16S
ATOM  25665  C2  CYT   332     143.691  47.685  -8.565  1.00 52.19      A16S
ATOM  25666  O2  CYT   332     144.370  48.725  -8.587  1.00 52.19      A16S
ATOM  25667  N3  CYT   332     142.804  47.432  -7.574  1.00 52.19      A16S
ATOM  25668  C4  CYT   332     142.087  46.307  -7.590  1.00 52.19      A16S
ATOM  25669  N4  CYT   332     141.244  46.092  -6.577  1.00 52.19      A16S
ATOM  25670  C5  CYT   332     142.210  45.352  -8.642  1.00 52.19      A16S
ATOM  25671  C2' CYT   332     146.274  46.629 -10.186  1.00 64.18      A16S
ATOM  25672  O2' CYT   332     147.212  47.521 -10.751  1.00 64.18      A16S
ATOM  25673  C3' CYT   332     146.399  45.221 -10.754  1.00 64.18      A16S
ATOM  25674  O3' CYT   332     147.757  44.863 -10.965  1.00 64.18      A16S
ATOM  25675  P   ADE   333     148.551  44.027  -9.845  1.00 72.50      A16S
ATOM  25676  O1P ADE   333     149.834  43.633 -10.475  1.00 61.82      A16S
ATOM  25677  O2P ADE   333     147.665  42.985  -9.266  1.00 61.82      A16S
ATOM  25678  O5' ADE   333     148.890  45.107  -8.728  1.00 72.50      A16S
ATOM  25679  C5' ADE   333     149.762  46.191  -9.014  1.00 72.50      A16S
ATOM  25680  C4' ADE   333     149.763  47.168  -7.871  1.00 72.50      A16S
ATOM  25681  O4' ADE   333     148.457  47.779  -7.758  1.00 72.50      A16S
ATOM  25682  C1' ADE   333     148.176  48.055  -6.395  1.00 72.50      A16S
ATOM  25683  N9  ADE   333     146.924  47.391  -6.043  1.00 61.82      A16S
ATOM  25684  C4  ADE   333     146.138  47.666  -4.953  1.00 61.82      A16S
ATOM  25685  N3  ADE   333     146.369  48.569  -3.988  1.00 61.82      A16S
ATOM  25686  C2  ADE   333     145.382  48.565  -3.098  1.00 61.82      A16S
ATOM  25687  N1  ADE   333     144.274  47.822  -3.069  1.00 61.82      A16S
ATOM  25688  C6  ADE   333     144.070  46.929  -4.058  1.00 61.82      A16S
ATOM  25689  N6  ADE   333     142.957  46.200  -4.040  1.00 61.82      A16S
ATOM  25690  C5  ADE   333     145.046  46.828  -5.056  1.00 61.82      A16S
ATOM  25691  N7  ADE   333     145.149  46.026  -6.181  1.00 61.82      A16S
ATOM  25692  C8  ADE   333     146.279  46.396  -6.728  1.00 61.82      A16S
ATOM  25693  C2' ADE   333     149.382  47.598  -5.579  1.00 72.50      A16S
ATOM  25694  O2' ADE   333     150.228  48.711  -5.371  1.00 72.50      A16S
ATOM  25695  C3' ADE   333     149.995  46.557  -6.506  1.00 72.50      A16S
ATOM  25696  O3' ADE   333     151.386  46.416  -6.288  1.00 72.50      A16S
ATOM  25697  P   CYT   334     151.920  45.274  -5.299  1.00 73.06      A16S
ATOM  25698  O1P CYT   334     153.405  45.327  -5.378  1.00 57.98      A16S
ATOM  25699  O2P CYT   334     151.208  44.003  -5.594  1.00 57.98      A16S
ATOM  25700  O5' CYT   334     151.443  45.751  -3.853  1.00 73.06      A16S
ATOM  25701  C5' CYT   334     152.012  46.899  -3.234  1.00 73.06      A16S
ATOM  25702  C4' CYT   334     151.226  47.272  -2.001  1.00 73.06      A16S
ATOM  25703  O4' CYT   334     149.886  47.669  -2.381  1.00 73.06      A16S
ATOM  25704  C1' CYT   334     148.991  47.358  -1.329  1.00 73.06      A16S
ATOM  25705  N1  CYT   334     147.977  46.444  -1.840  1.00 57.98      A16S
ATOM  25706  C6  CYT   334     148.175  45.733  -2.985  1.00 57.98      A16S
ATOM  25707  C2  CYT   334     146.805  46.308  -1.121  1.00 57.98      A16S
ATOM  25708  O2  CYT   334     146.672  46.968  -0.076  1.00 57.98      A16S
ATOM  25709  N3  CYT   334     145.849  45.465  -1.564  1.00 57.98      A16S
ATOM  25710  C4  CYT   334     146.045  44.773  -2.682  1.00 57.98      A16S
ATOM  25711  N4  CYT   334     145.073  43.959  -3.089  1.00 57.98      A16S
ATOM  25712  C5  CYT   334     147.246  44.889  -3.436  1.00 57.98      A16S
ATOM  25713  C2' CYT   334     149.793  46.684  -0.218  1.00 73.06      A16S
ATOM  25714  O2' CYT   334     150.133  47.621   0.781  1.00 73.06      A16S
ATOM  25715  C3' CYT   334     150.989  46.158  -0.997  1.00 73.06      A16S
ATOM  25716  O3' CYT   334     152.105  45.983  -0.143  1.00 73.06      A16S
ATOM  25717  P   URI   335     152.332  44.571   0.582  1.00 80.36      A16S
ATOM  25718  O1P URI   335     153.666  44.662   1.218  1.00 63.55      A16S
ATOM  25719  O2P URI   335     152.063  43.496  -0.397  1.00 63.55      A16S
ATOM  25720  O5' URI   335     151.205  44.506   1.709  1.00 80.36      A16S
ATOM  25721  C5' URI   335     151.254  45.365   2.846  1.00 80.36      A16S
ATOM  25722  C4' URI   335     150.007  45.208   3.684  1.00 80.36      A16S
ATOM  25723  O4' URI   335     148.842  45.532   2.877  1.00 80.36      A16S
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ATOM	25724	C1'	URI	335	147.734	44.761	3.316	1.00	80.36	A16S	ATOM	25777	P	URI	338	146.855	32.022	8.719	1.00	97.08	A16S
ATOM	25725	N1	URI	335	147.223	43.980	2.181	1.00	63.55	A16S	ATOM	25778	O1P	URI	338	148.000	32.805	8.195	1.00	110.54	A16S
ATOM	25726	C6	URI	335	147.924	43.880	1.004	1.00	63.55	A16S	ATOM	25779	O2P	URI	338	147.039	31.164	9.911	1.00	110.54	A16S
ATOM	25727	C2	URI	335	145.996	43.350	2.342	1.00	63.55	A16S	ATOM	25780	O5'	URI	338	146.288	31.138	7.520	1.00	97.08	A16S
ATOM	25728	O2	URI	335	145.347	43.400	3.383	1.00	63.55	A16S	ATOM	25781	C5'	URI	338	145.152	30.301	7.706	1.00	97.08	A16S
ATOM	25729	N3	URI	335	145.556	42.659	1.245	1.00	63.55	A16S	ATOM	25782	C4'	URI	338	144.767	29.644	6.403	1.00	97.08	A16S
ATOM	25730	C4	URI	335	146.196	42.527	0.034	1.00	63.55	A16S	ATOM	25783	O4'	URI	338	144.494	30.678	5.422	1.00	97.08	A16S
ATOM	25731	O4	URI	335	145.648	41.885	-0.871	1.00	63.55	A16S	ATOM	25784	C1'	URI	338	144.899	30.239	4.137	1.00	97.08	A16S
ATOM	25732	C5	URI	335	147.467	43.194	-0.048	1.00	63.55	A16S	ATOM	25785	N1	URI	338	145.954	31.141	3.656	1.00	110.54	A16S
ATOM	25733	C2'	URI	335	148.215	43.873	4.462	1.00	80.36	A16S	ATOM	25786	C6	URI	338	146.765	31.825	4.531	1.00	110.54	A16S
ATOM	25734	O2'	URI	335	147.910	44.471	5.708	1.00	80.36	A16S	ATOM	25787	C2	URI	338	146.110	31.270	2.288	1.00	110.54	A16S
ATOM	25735	C3'	URI	335	149.708	43.802	4.174	1.00	80.36	A16S	ATOM	25788	O2	URI	338	145.397	30.689	1.484	1.00	110.54	A16S
ATOM	25736	O3'	URI	335	150.441	43.479	5.345	1.00	80.36	A16S	ATOM	25789	N3	URI	338	147.130	32.105	1.899	1.00	110.54	A16S
ATOM	25737	P	CYT	336	150.765	41.940	5.672	1.00	103.46	A16S	ATOM	25790	C4	URI	338	147.988	32.811	2.723	1.00	110.54	A16S
ATOM	25738	O1P	CYT	336	151.695	41.950	6.824	1.00	63.30	A16S	ATOM	25791	O4	URI	338	148.881	33.499	2.222	1.00	110.54	A16S
ATOM	25739	O2P	CYT	336	151.161	41.266	4.411	1.00	63.30	A16S	ATOM	25792	C5	URI	338	147.750	32.633	4.124	1.00	110.54	A16S
ATOM	25740	O5'	CYT	336	149.375	41.334	6.160	1.00	103.46	A16S	ATOM	25793	C2'	URI	338	145.388	28.797	4.289	1.00	97.08	A16S
ATOM	25741	C5'	CYT	336	148.883	41.626	7.462	1.00	103.46	A16S	ATOM	25794	O2'	URI	338	144.320	27.908	4.036	1.00	97.08	A16S
ATOM	25742	C4'	CYT	336	147.523	41.007	7.664	1.00	103.46	A16S	ATOM	25795	C3'	URI	338	145.837	28.789	5.744	1.00	97.08	A16S
ATOM	25743	O4'	CYT	336	146.609	41.537	6.668	1.00	103.46	A16S	ATOM	25796	O3'	URI	338	145.850	27.473	6.293	1.00	97.08	A16S
ATOM	25744	C1'	CYT	336	145.655	40.545	6.324	1.00	103.46	A16S	ATOM	25797	P	ADE	339	147.191	26.583	6.212	1.00	98.81	A16S
ATOM	25745	N1	CYT	336	145.837	40.195	4.914	1.00	63.30	A16S	ATOM	25798	O1P	ADE	339	148.357	27.497	6.318	1.00	113.30	A16S
ATOM	25746	C6	CYT	336	146.976	40.534	4.240	1.00	63.30	A16S	ATOM	25799	O2P	ADE	339	147.034	25.474	7.187	1.00	113.30	A16S
ATOM	25747	C2	CYT	336	144.816	39.503	4.274	1.00	63.30	A16S	ATOM	25800	O5'	ADE	339	147.164	25.974	4.739	1.00	98.81	A16S
ATOM	25748	O2	CYT	336	143.801	39.214	4.922	1.00	63.30	A16S	ATOM	25801	C5'	ADE	339	148.001	24.874	4.372	1.00	98.81	A16S
ATOM	25749	N3	CYT	336	144.955	39.169	2.975	1.00	63.30	A16S	ATOM	25802	C4'	ADE	339	147.161	23.751	3.811	1.00	98.81	A16S
ATOM	25750	C4	CYT	336	146.064	39.507	2.319	1.00	63.30	A16S	ATOM	25803	O4'	ADE	339	146.372	23.177	4.874	1.00	98.81	A16S
ATOM	25751	N4	CYT	336	146.157	39.162	1.032	1.00	63.30	A16S	ATOM	25804	C1'	ADE	339	145.033	23.036	4.463	1.00	98.81	A16S
ATOM	25752	C5	CYT	336	147.130	40.214	2.953	1.00	63.30	A16S	ATOM	25805	N9	ADE	339	144.237	23.862	5.363	1.00	113.30	A16S
ATOM	25753	C2'	CYT	336	145.932	39.335	7.208	1.00	103.46	A16S	ATOM	25806	C4	ADE	339	143.454	23.381	6.381	1.00	113.30	A16S
ATOM	25754	O2'	CYT	336	145.159	39.421	8.387	1.00	103.46	A16S	ATOM	25807	N3	ADE	339	143.213	22.094	6.680	1.00	113.30	A16S
ATOM	25755	C3'	CYT	336	147.420	39.506	7.456	1.00	103.46	A16S	ATOM	25808	C2	ADE	339	142.442	22.000	7.760	1.00	113.30	A16S
ATOM	25756	O3'	CYT	336	147.832	38.761	8.590	1.00	103.46	A16S	ATOM	25809	N1	ADE	339	141.927	22.973	8.521	1.00	113.30	A16S
ATOM	25757	P	CYT	337	148.327	37.249	8.392	1.00	105.04	A16S	ATOM	25810	C6	ADE	339	142.190	24.257	8.194	1.00	113.30	A16S
ATOM	25758	O1P	CYT	337	148.931	36.818	9.671	1.00	63.14	A16S	ATOM	25811	N6	ADE	339	141.686	25.225	8.963	1.00	113.30	A16S
ATOM	25759	O2P	CYT	337	149.123	37.199	7.140	1.00	63.14	A16S	ATOM	25812	C5	ADE	339	142.991	24.491	7.058	1.00	113.30	A16S
ATOM	25760	O5'	CYT	337	146.990	36.419	8.150	1.00	105.04	A16S	ATOM	25813	N7	ADE	339	143.435	25.655	6.446	1.00	113.30	A16S
ATOM	25761	C5'	CYT	337	146.045	36.235	9.195	1.00	105.04	A16S	ATOM	25814	C8	ADE	339	144.156	25.227	5.439	1.00	113.30	A16S
ATOM	25762	C4'	CYT	337	144.917	35.354	8.722	1.00	105.04	A16S	ATOM	25815	C2'	ADE	339	144.950	23.314	2.958	1.00	98.81	A16S
ATOM	25763	O4'	CYT	337	144.203	36.019	7.643	1.00	105.04	A16S	ATOM	25816	O2'	ADE	339	144.930	22.084	2.267	1.00	98.81	A16S
ATOM	25764	C1'	CYT	337	143.753	35.055	6.702	1.00	105.04	A16S	ATOM	25817	C3'	ADE	339	146.195	24.175	2.716	1.00	98.81	A16S
ATOM	25765	N1	CYT	337	144.493	35.256	5.453	1.00	63.14	A16S	ATOM	25818	O3'	ADE	339	146.872	24.005	1.460	1.00	98.81	A16S
ATOM	25766	C6	CYT	337	145.637	36.003	5.425	1.00	63.14	A16S	ATOM	25819	P	CYT	340	146.091	23.432	0.174	1.00	129.25	A16S
ATOM	25767	C2	CYT	337	144.012	34.652	4.283	1.00	63.14	A16S	ATOM	25820	O1P	CYT	340	146.304	21.961	0.159	1.00	104.71	A16S
ATOM	25768	O2	CYT	337	142.964	33.987	4.337	1.00	63.14	A16S	ATOM	25821	O2P	CYT	340	144.706	23.974	0.178	1.00	104.71	A16S
ATOM	25769	N3	CYT	337	144.700	34.808	3.126	1.00	63.14	A16S	ATOM	25822	O5'	CYT	340	146.892	24.039	-1.068	1.00	129.25	A16S
ATOM	25770	C4	CYT	337	145.822	35.535	3.112	1.00	63.14	A16S	ATOM	25823	C5'	CYT	340	146.200	24.560	-2.202	1.00	129.25	A16S
ATOM	25771	N4	CYT	337	146.469	35.658	1.954	1.00	63.14	A16S	ATOM	25824	C4'	CYT	340	146.647	25.977	-2.474	1.00	129.25	A16S
ATOM	25772	C5	CYT	337	146.329	36.167	4.288	1.00	63.14	A16S	ATOM	25825	O4'	CYT	340	146.558	26.715	-1.242	1.00	129.25	A16S
ATOM	25773	C2'	CYT	337	144.090	33.689	7.291	1.00	105.04	A16S	ATOM	25826	C1'	CYT	340	147.491	27.765	-1.269	1.00	129.25	A16S
ATOM	25774	O2'	CYT	337	143.020	33.243	8.100	1.00	105.04	A16S	ATOM	25827	N1	CYT	340	147.992	27.995	0.091	1.00	104.71	A16S
ATOM	25775	C3'	CYT	337	145.334	34.040	8.087	1.00	105.04	A16S	ATOM	25828	C6	CYT	340	147.825	27.058	1.071	1.00	104.71	A16S
ATOM	25776	O3'	CYT	337	145.667	33.049	9.042	1.00	105.04	A16S	ATOM	25829	C2	CYT	340	148.599	29.216	0.380	1.00	104.71	A16S

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ATOM  25830  O2  CYT  340     148.797  30.018  -0.544  1.00104.71      A16S
ATOM  25831  N3  CYT  340     148.956  29.492   1.657  1.00104.71      A16S
ATOM  25832  C4  CYT  340     148.741  28.591   2.617  1.00104.71      A16S
ATOM  25833  N4  CYT  340     149.062  28.921   3.871  1.00104.71      A16S
ATOM  25834  C5  CYT  340     148.176  27.315   2.337  1.00104.71      A16S
ATOM  25835  C2' CYT  340     148.494  27.522  -2.400  1.00129.25      A16S
ATOM  25836  O2' CYT  340     148.340  28.539  -3.370  1.00129.25      A16S
ATOM  25837  C3' CYT  340     148.092  26.138  -2.925  1.00129.25      A16S
ATOM  25838  O3' CYT  340     148.126  26.217  -4.350  1.00129.25      A16S
ATOM  25839  P   GUA  341     147.503  25.034  -5.248  1.00115.51      A16S
ATOM  25840  O1P GUA  341     147.814  25.340  -6.675  1.00105.95      A16S
ATOM  25841  O2P GUA  341     147.956  23.749  -4.655  1.00105.95      A16S
ATOM  25842  O5' GUA  341     145.918  25.136  -5.055  1.00115.51      A16S
ATOM  25843  C5' GUA  341     145.174  26.293  -5.459  1.00115.51      A16S
ATOM  25844  C4' GUA  341     143.689  25.980  -5.447  1.00115.51      A16S
ATOM  25845  O4' GUA  341     143.407  25.090  -4.344  1.00115.51      A16S
ATOM  25846  C1' GUA  341     142.118  25.357  -3.839  1.00115.51      A16S
ATOM  25847  N9  GUA  341     142.209  25.442  -2.385  1.00105.95      A16S
ATOM  25848  C4  GUA  341     142.817  26.427  -1.643  1.00105.95      A16S
ATOM  25849  N3  GUA  341     143.428  27.526  -2.129  1.00105.95      A16S
ATOM  25850  C2  GUA  341     143.938  28.276  -1.166  1.00105.95      A16S
ATOM  25851  N2  GUA  341     144.579  29.411  -1.475  1.00105.95      A16S
ATOM  25852  N1  GUA  341     143.858  27.969   0.172  1.00105.95      A16S
ATOM  25853  C6  GUA  341     143.237  26.840   0.696  1.00105.95      A16S
ATOM  25854  O6  GUA  341     143.230  26.652   1.921  1.00105.95      A16S
ATOM  25855  C5  GUA  341     142.679  26.030  -0.328  1.00105.95      A16S
ATOM  25856  N7  GUA  341     141.982  24.833  -0.246  1.00105.95      A16S
ATOM  25857  C8  GUA  341     141.719  24.526  -1.486  1.00105.95      A16S
ATOM  25858  C2' GUA  341     141.522  26.554  -4.587  1.00115.51      A16S
ATOM  25859  O2' GUA  341     140.555  26.102  -5.508  1.00115.51      A16S
ATOM  25860  C3' GUA  341     142.743  27.166  -5.276  1.00115.51      A16S
ATOM  25861  O3' GUA  341     142.359  27.690  -6.551  1.00115.51      A16S
ATOM  25862  P   GUA  342     142.308  29.283  -6.791  1.00124.35      A16S
ATOM  25863  O1P GUA  342     143.690  29.789  -6.576  1.00 82.08      A16S
ATOM  25864  O2P GUA  342     141.630  29.546  -8.086  1.00 82.08      A16S
ATOM  25865  O5' GUA  342     141.369  29.842  -5.625  1.00124.35      A16S
ATOM  25866  C5' GUA  342     140.039  29.354  -5.457  1.00124.35      A16S
ATOM  25867  C4' GUA  342     139.550  29.606  -4.044  1.00124.35      A16S
ATOM  25868  O4' GUA  342     140.632  29.314  -3.113  1.00124.35      A16S
ATOM  25869  C1' GUA  342     140.507  30.134  -1.958  1.00124.35      A16S
ATOM  25870  N9  GUA  342     141.668  31.014  -1.874  1.00 82.08      A16S
ATOM  25871  C4  GUA  342     142.123  31.648  -0.745  1.00 82.08      A16S
ATOM  25872  N3  GUA  342     141.588  31.546   0.486  1.00 82.08      A16S
ATOM  25873  C2  GUA  342     142.239  32.283   1.371  1.00 82.08      A16S
ATOM  25874  N2  GUA  342     141.835  32.299   2.652  1.00 82.08      A16S
ATOM  25875  N1  GUA  342     143.334  33.056   1.067  1.00 82.08      A16S
ATOM  25876  C6  GUA  342     143.905  33.172  -0.196  1.00 82.08      A16S
ATOM  25877  O6  GUA  342     144.899  33.888  -0.361  1.00 82.08      A16S
ATOM  25878  C5  GUA  342     143.210  32.391  -1.153  1.00 82.08      A16S
ATOM  25879  N7  GUA  342     143.439  32.224  -2.512  1.00 82.08      A16S
ATOM  25880  C8  GUA  342     142.505  31.395  -2.896  1.00 82.08      A16S
ATOM  25881  C2' GUA  342     139.234  30.951  -2.146  1.00124.35      A16S
ATOM  25882  O2' GUA  342     138.143  30.249  -1.585  1.00124.35      A16S
ATOM  25883  C3' GUA  342     139.167  31.028  -3.663  1.00124.35      A16S
ATOM  25884  O3' GUA  342     137.855  31.382  -4.094  1.00124.35      A16S
ATOM  25885  P   GUA  343     137.300  32.871  -3.811  1.00 92.65      A16S
ATOM  25886  O1P GUA  343     138.308  33.846  -4.307  1.00 71.86      A16S
ATOM  25887  O2P GUA  343     135.891  32.973  -4.274  1.00 71.86      A16S
ATOM  25888  O5' GUA  343     137.269  32.960  -2.226  1.00 92.65      A16S
ATOM  25889  C5' GUA  343     137.067  34.196  -1.581  1.00 92.65      A16S
ATOM  25890  C4' GUA  343     137.206  34.028  -0.097  1.00 92.65      A16S
ATOM  25891  O4' GUA  343     138.476  33.403   0.203  1.00 92.65      A16S
ATOM  25892  C1' GUA  343     139.087  34.060   1.298  1.00 92.65      A16S
ATOM  25893  N9  GUA  343     140.213  34.809   0.765  1.00 71.86      A16S
ATOM  25894  C4  GUA  343     141.019  35.669   1.456  1.00 71.86      A16S
ATOM  25895  N3  GUA  343     140.906  35.975   2.764  1.00 71.86      A16S
ATOM  25896  C2  GUA  343     141.830  36.832   3.151  1.00 71.86      A16S
ATOM  25897  N2  GUA  343     141.860  37.238   4.432  1.00 71.86      A16S
ATOM  25898  N1  GUA  343     142.790  37.352   2.312  1.00 71.86      A16S
ATOM  25899  C6  GUA  343     142.917  37.053   0.956  1.00 71.86      A16S
ATOM  25900  O6  GUA  343     143.813  37.584   0.280  1.00 71.86      A16S
ATOM  25901  C5  GUA  343     141.934  36.130   0.537  1.00 71.86      A16S
ATOM  25902  N7  GUA  343     141.707  35.568  -0.709  1.00 71.86      A16S
ATOM  25903  C8  GUA  343     140.675  34.793  -0.526  1.00 71.86      A16S
ATOM  25904  C2' GUA  343     138.033  34.991   1.889  1.00 92.65      A16S
ATOM  25905  O2' GUA  343     137.235  34.325   2.844  1.00 92.65      A16S
ATOM  25906  C3' GUA  343     137.261  35.344   0.636  1.00 92.65      A16S
ATOM  25907  O3' GUA  343     135.967  35.835   0.881  1.00 92.65      A16S
ATOM  25908  P   ADE  344     135.682  37.375   0.606  1.00 96.29      A16S
ATOM  25909  O1P ADE  344     134.264  37.664   0.943  1.00 68.00      A16S
ATOM  25910  O2P ADE  344     136.190  37.640  -0.767  1.00 68.00      A16S
ATOM  25911  O5' ADE  344     136.622  38.086   1.673  1.00 96.29      A16S
ATOM  25912  C5' ADE  344     136.518  37.741   3.047  1.00 96.29      A16S
ATOM  25913  C4' ADE  344     137.289  38.719   3.882  1.00 96.29      A16S
ATOM  25914  O4' ADE  344     138.710  38.431   3.825  1.00 96.29      A16S
ATOM  25915  C1' ADE  344     139.439  39.646   3.829  1.00 96.29      A16S
ATOM  25916  N9  ADE  344     140.141  39.742   2.555  1.00 68.00      A16S
ATOM  25917  C4  ADE  344     141.271  40.476   2.297  1.00 68.00      A16S
ATOM  25918  N3  ADE  344     141.943  41.263   3.152  1.00 68.00      A16S
ATOM  25919  C2  ADE  344     143.001  41.799   2.555  1.00 68.00      A16S
ATOM  25920  N1  ADE  344     143.432  41.646   1.302  1.00 68.00      A16S
ATOM  25921  C6  ADE  344     142.735  40.848   0.472  1.00 68.00      A16S
ATOM  25922  N6  ADE  344     143.172  40.690  -0.776  1.00 68.00      A16S
ATOM  25923  C5  ADE  344     141.589  40.227   0.978  1.00 68.00      A16S
ATOM  25924  N7  ADE  344     140.667  39.367   0.406  1.00 68.00      A16S
ATOM  25925  C8  ADE  344     139.828  39.113   1.380  1.00 68.00      A16S
ATOM  25926  C2' ADE  344     138.421  40.769   4.027  1.00 96.29      A16S
ATOM  25927  O2' ADE  344     138.236  40.993   5.408  1.00 96.29      A16S
ATOM  25928  C3' ADE  344     137.190  40.147   3.394  1.00 96.29      A16S
ATOM  25929  O3' ADE  344     135.981  40.748   3.818  1.00 96.29      A16S
ATOM  25930  P   GUA  345     135.575  42.185   3.236  1.00 70.36      A16S
ATOM  25931  O1P GUA  345     136.183  42.304   1.882  1.00 48.26      A16S
ATOM  25932  O2P GUA  345     134.104  42.346   3.399  1.00 48.26      A16S
ATOM  25933  O5' GUA  345     136.335  43.175   4.224  1.00 70.36      A16S
ATOM  25934  C5' GUA  345     136.613  44.508   3.848  1.00 70.36      A16S
ATOM  25935  C4' GUA  345     137.906  44.963   4.472  1.00 70.36      A16S
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ATOM	25936	O4'	GUA	345	138.963	44.028	4.140	1.00	70.36	A16S	ATOM	25989	C4	CYT	347	142.282	54.059	10.899	1.00	50.78	A16S
ATOM	25937	C1'	GUA	345	140.149	44.736	3.819	1.00	70.36	A16S	ATOM	25990	N4	CYT	347	143.229	53.361	11.530	1.00	50.78	A16S
ATOM	25938	N9	GUA	345	140.451	44.436	2.427	1.00	48.26	A16S	ATOM	25991	C5	CYT	347	141.885	53.688	9.583	1.00	50.78	A16S
ATOM	25939	C4	GUA	345	141.586	44.751	1.716	1.00	48.26	A16S	ATOM	25992	C2'	CYT	347	140.021	57.701	8.502	1.00	47.02	A16S
ATOM	25940	N3	GUA	345	142.646	45.443	2.173	1.00	48.26	A16S	ATOM	25993	O2'	CYT	347	139.015	58.690	8.478	1.00	47.02	A16S
ATOM	25941	C2	GUA	345	143.582	45.589	1.240	1.00	48.26	A16S	ATOM	25994	C3'	CYT	347	140.510	57.362	7.105	1.00	47.02	A16S
ATOM	25942	N2	GUA	345	144.701	46.284	1.514	1.00	48.26	A16S	ATOM	25995	O3'	CYT	347	140.572	58.512	6.287	1.00	47.02	A16S
ATOM	25943	N1	GUA	345	143.488	45.075	-0.027	1.00	48.26	A16S	ATOM	25996	P	ADE	348	141.956	59.314	6.116	1.00	51.70	A16S
ATOM	25944	C6	GUA	345	142.406	44.356	-0.513	1.00	48.26	A16S	ATOM	25997	O1P	ADE	348	142.854	59.098	7.281	1.00	50.77	A16S
ATOM	25945	O6	GUA	345	142.418	43.931	-1.676	1.00	48.26	A16S	ATOM	25998	O2P	ADE	348	142.449	59.007	4.747	1.00	50.77	A16S
ATOM	25946	C5	GUA	345	141.392	44.212	0.467	1.00	48.26	A16S	ATOM	25999	O5'	ADE	348	141.485	60.833	6.216	1.00	51.70	A16S
ATOM	25947	N7	GUA	345	140.157	43.590	0.388	1.00	48.26	A16S	ATOM	26000	C5'	ADE	348	141.397	61.641	5.065	1.00	51.70	A16S
ATOM	25948	C8	GUA	345	139.636	43.751	1.569	1.00	48.26	A16S	ATOM	26001	C4'	ADE	348	139.993	62.175	4.880	1.00	51.70	A16S
ATOM	25949	C2'	GUA	345	139.893	46.216	4.118	1.00	70.36	A16S	ATOM	26002	O4'	ADE	348	140.051	62.994	3.696	1.00	51.70	A16S
ATOM	25950	O2'	GUA	345	140.331	46.516	5.424	1.00	70.36	A16S	ATOM	26003	C1'	ADE	348	139.160	62.499	2.734	1.00	51.70	A16S
ATOM	25951	C3'	GUA	345	138.377	46.308	3.954	1.00	70.36	A16S	ATOM	26004	N9	ADE	348	139.941	61.689	1.807	1.00	50.77	A16S
ATOM	25952	O3'	GUA	345	137.778	47.341	4.732	1.00	70.36	A16S	ATOM	26005	C4	ADE	348	139.510	61.252	0.585	1.00	50.77	A16S
ATOM	25953	P	GUA	346	136.343	47.930	4.303	1.00	81.58	A16S	ATOM	26006	N3	ADE	348	138.308	61.469	0.027	1.00	50.77	A16S
ATOM	25954	O1P	GUA	346	135.448	47.861	5.482	1.00	56.37	A16S	ATOM	26007	C2	ADE	348	138.243	60.903	-1.161	1.00	50.77	A16S
ATOM	25955	O2P	GUA	346	135.925	47.284	3.035	1.00	56.37	A16S	ATOM	26008	N1	ADE	348	139.171	60.193	-1.807	1.00	50.77	A16S
ATOM	25956	O5'	GUA	346	136.646	49.465	4.013	1.00	81.58	A16S	ATOM	26009	C6	ADE	348	140.369	59.993	-1.215	1.00	50.77	A16S
ATOM	25957	C5'	GUA	346	137.292	50.282	4.988	1.00	81.58	A16S	ATOM	26010	N6	ADE	348	141.287	59.278	-1.858	1.00	50.77	A16S
ATOM	25958	C4'	GUA	346	138.402	51.067	4.343	1.00	81.58	A16S	ATOM	26011	C5	ADE	348	140.568	60.549	0.044	1.00	50.77	A16S
ATOM	25959	O4'	GUA	346	139.346	50.118	3.811	1.00	81.58	A16S	ATOM	26012	N7	ADE	348	141.651	60.540	0.911	1.00	50.77	A16S
ATOM	25960	C1'	GUA	346	139.912	50.631	2.633	1.00	81.58	A16S	ATOM	26013	C8	ADE	348	141.227	61.222	1.943	1.00	50.77	A16S
ATOM	25961	N9	GUA	346	139.881	49.595	1.610	1.00	56.37	A16S	ATOM	26014	C2'	ADE	348	138.089	61.720	3.487	1.00	51.70	A16S
ATOM	25962	C4	GUA	346	140.887	49.328	0.723	1.00	56.37	A16S	ATOM	26015	O2'	ADE	348	137.028	62.577	3.864	1.00	51.70	A16S
ATOM	25963	N3	GUA	346	142.061	49.979	0.653	1.00	56.37	A16S	ATOM	26016	C3'	ADE	348	138.903	61.131	4.635	1.00	51.70	A16S
ATOM	25964	C2	GUA	346	142.835	49.492	-0.290	1.00	56.37	A16S	ATOM	26017	O3'	ADE	348	138.110	60.934	5.808	1.00	51.70	A16S
ATOM	25965	N2	GUA	346	144.054	50.018	-0.481	1.00	56.37	A16S	ATOM	26018	P	GUA	349	136.810	59.975	5.763	1.00	42.46	A16S
ATOM	25966	N1	GUA	346	142.479	48.453	-1.113	1.00	56.37	A16S	ATOM	26019	O1P	GUA	349	137.245	58.582	5.988	1.00	59.28	A16S
ATOM	25967	C6	GUA	346	141.273	47.772	-1.062	1.00	56.37	A16S	ATOM	26020	O2P	GUA	349	135.982	60.288	4.575	1.00	59.28	A16S
ATOM	25968	O6	GUA	346	141.051	46.859	-1.858	1.00	56.37	A16S	ATOM	26021	O5'	GUA	349	136.015	60.395	7.082	1.00	42.46	A16S
ATOM	25969	C5	GUA	346	140.437	48.277	-0.040	1.00	56.37	A16S	ATOM	26022	C5'	GUA	349	135.227	61.584	7.120	1.00	42.46	A16S
ATOM	25970	N7	GUA	346	139.168	47.886	0.361	1.00	56.37	A16S	ATOM	26023	C4'	GUA	349	134.340	61.614	8.356	1.00	42.46	A16S
ATOM	25971	C8	GUA	346	138.876	48.699	1.341	1.00	56.37	A16S	ATOM	26024	O4'	GUA	349	133.635	60.347	8.485	1.00	42.46	A16S
ATOM	25972	C2'	GUA	346	139.209	51.942	2.270	1.00	81.58	A16S	ATOM	26025	C1'	GUA	349	133.406	60.069	9.854	1.00	42.46	A16S
ATOM	25973	O2'	GUA	346	140.055	53.041	2.552	1.00	81.58	A16S	ATOM	26026	N9	GUA	349	134.021	58.780	10.169	1.00	59.28	A16S
ATOM	25974	C3'	GUA	346	137.968	51.913	3.156	1.00	81.58	A16S	ATOM	26027	C4	GUA	349	134.001	58.104	11.378	1.00	59.28	A16S
ATOM	25975	O3'	GUA	346	137.664	53.278	3.488	1.00	81.58	A16S	ATOM	26028	N3	GUA	349	133.404	58.514	12.518	1.00	59.28	A16S
ATOM	25976	P	CYT	347	137.888	53.851	4.987	1.00	47.02	A16S	ATOM	26029	C2	GUA	349	133.585	57.650	13.507	1.00	59.28	A16S
ATOM	25977	O1P	CYT	347	136.525	54.118	5.608	1.00	50.78	A16S	ATOM	26030	N2	GUA	349	133.083	57.897	14.720	1.00	59.28	A16S
ATOM	25978	O2P	CYT	347	138.919	53.118	5.758	1.00	50.78	A16S	ATOM	26031	N1	GUA	349	134.277	56.483	13.381	1.00	59.28	A16S
ATOM	25979	O5'	CYT	347	138.586	55.245	4.726	1.00	47.02	A16S	ATOM	26032	C6	GUA	349	134.891	56.042	12.219	1.00	59.28	A16S
ATOM	25980	C5'	CYT	347	139.746	55.601	5.444	1.00	47.02	A16S	ATOM	26033	O6	GUA	349	135.488	54.969	12.213	1.00	59.28	A16S
ATOM	25981	C4'	CYT	347	139.378	56.497	6.595	1.00	47.02	A16S	ATOM	26034	C5	GUA	349	134.722	56.954	11.161	1.00	59.28	A16S
ATOM	25982	O4'	CYT	347	139.002	55.700	7.752	1.00	47.02	A16S	ATOM	26035	N7	GUA	349	135.181	56.899	9.857	1.00	59.28	A16S
ATOM	25983	C1'	CYT	347	139.414	56.365	8.935	1.00	47.02	A16S	ATOM	26036	C8	GUA	349	134.741	57.998	9.309	1.00	59.28	A16S
ATOM	25984	N1	CYT	347	140.402	55.524	9.615	1.00	50.78	A16S	ATOM	26037	C2'	GUA	349	133.968	61.250	10.651	1.00	42.46	A16S
ATOM	25985	C6	CYT	347	140.945	54.440	8.986	1.00	50.78	A16S	ATOM	26038	O2'	GUA	349	132.960	62.214	10.856	1.00	42.46	A16S
ATOM	25986	C2	CYT	347	140.795	55.857	10.909	1.00	50.78	A16S	ATOM	26039	C3'	GUA	349	135.020	61.795	9.703	1.00	42.46	A16S
ATOM	25987	O2	CYT	347	140.279	56.837	11.454	1.00	50.78	A16S	ATOM	26040	O3'	GUA	349	135.210	63.178	9.995	1.00	42.46	A16S
ATOM	25988	N3	CYT	347	141.735	55.104	11.533	1.00	50.78	A16S	ATOM	26041	P	CYT	350	136.177	63.620	11.211	1.00	46.10	A16S

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ATOM  26042  O1P CYT  350     135.970  65.071  11.440  1.00 61.42      A16S
ATOM  26043  O2P CYT  350     137.555  63.107  10.970  1.00 61.42      A16S
ATOM  26044  O5' CYT  350     135.587  62.855  12.476  1.00 46.10      A16S
ATOM  26045  C5' CYT  350     134.601  63.461  13.308  1.00 46.10      A16S
ATOM  26046  C4' CYT  350     134.662  62.876  14.694  1.00 46.10      A16S
ATOM  26047  O4' CYT  350     134.358  61.457  14.620  1.00 46.10      A16S
ATOM  26048  C1' CYT  350     135.098  60.756  15.605  1.00 46.10      A16S
ATOM  26049  N1  CYT  350     135.892  59.731  14.922  1.00 61.42      A16S
ATOM  26050  C6  CYT  350     136.063  59.774  13.569  1.00 61.42      A16S
ATOM  26051  C2  CYT  350     136.453  58.702  15.672  1.00 61.42      A16S
ATOM  26052  O2  CYT  350     136.313  58.712  16.904  1.00 61.42      A16S
ATOM  26053  N3  CYT  350     137.134  57.725  15.040  1.00 61.42      A16S
ATOM  26054  C4  CYT  350     137.262  57.755  13.715  1.00 61.42      A16S
ATOM  26055  N4  CYT  350     137.894  56.744  13.126  1.00 61.42      A16S
ATOM  26056  C5  CYT  350     136.734  58.816  12.932  1.00 61.42      A16S
ATOM  26057  C2' CYT  350     135.929  61.788  16.363  1.00 46.10      A16S
ATOM  26058  O2' CYT  350     135.222  62.205  17.509  1.00 46.10      A16S
ATOM  26059  C3' CYT  350     136.035  62.890  15.324  1.00 46.10      A16S
ATOM  26060  O3' CYT  350     136.339  64.128  15.911  1.00 46.10      A16S
ATOM  26061  P   ADE  351     137.869  64.557  16.039  1.00 57.50      A16S
ATOM  26062  O1P ADE  351     137.928  65.840  16.781  1.00 60.61      A16S
ATOM  26063  O2P ADE  351     138.477  64.447  14.684  1.00 60.61      A16S
ATOM  26064  O5' ADE  351     138.504  63.410  16.940  1.00 57.50      A16S
ATOM  26065  C5' ADE  351     138.461  63.501  18.348  1.00 57.50      A16S
ATOM  26066  C4' ADE  351     139.098  62.290  18.973  1.00 57.50      A16S
ATOM  26067  O4' ADE  351     138.425  61.093  18.501  1.00 57.50      A16S
ATOM  26068  C1' ADE  351     139.298  59.985  18.661  1.00 57.50      A16S
ATOM  26069  N9  ADE  351     139.483  59.322  17.374  1.00 60.61      A16S
ATOM  26070  C4  ADE  351     139.876  58.017  17.230  1.00 60.61      A16S
ATOM  26071  N3  ADE  351     140.077  57.119  18.209  1.00 60.61      A16S
ATOM  26072  C2  ADE  351     140.487  55.965  17.705  1.00 60.61      A16S
ATOM  26073  N1  ADE  351     140.719  55.632  16.430  1.00 60.61      A16S
ATOM  26074  C6  ADE  351     140.523  56.561  15.471  1.00 60.61      A16S
ATOM  26075  N6  ADE  351     140.803  56.235  14.207  1.00 60.61      A16S
ATOM  26076  C5  ADE  351     140.053  57.823  15.875  1.00 60.61      A16S
ATOM  26077  N7  ADE  351     139.718  58.971  15.171  1.00 60.61      A16S
ATOM  26078  C8  ADE  351     139.377  59.826  16.105  1.00 60.61      A16S
ATOM  26079  C2' ADE  351     140.635  60.543  19.150  1.00 57.50      A16S
ATOM  26080  O2' ADE  351     140.669  60.480  20.561  1.00 57.50      A16S
ATOM  26081  C3' ADE  351     140.553  61.982  18.657  1.00 57.50      A16S
ATOM  26082  O3' ADE  351     141.451  62.801  19.398  1.00 57.50      A16S
ATOM  26083  P   GUA  352     142.974  62.968  18.902  1.00 46.79      A16S
ATOM  26084  O1P GUA  352     143.747  63.658  19.966  1.00 64.18      A16S
ATOM  26085  O2P GUA  352     142.932  63.543  17.540  1.00 64.18      A16S
ATOM  26086  O5' GUA  352     143.522  61.475  18.783  1.00 46.79      A16S
ATOM  26087  C5' GUA  352     143.753  60.681  19.946  1.00 46.79      A16S
ATOM  26088  C4' GUA  352     144.258  59.310  19.560  1.00 46.79      A16S
ATOM  26089  O4' GUA  352     143.268  58.626  18.748  1.00 46.79      A16S
ATOM  26090  C1' GUA  352     143.923  57.787  17.807  1.00 46.79      A16S
ATOM  26091  N9  GUA  352     143.592  58.256  16.469  1.00 64.18      A16S
ATOM  26092  C4  GUA  352     143.921  57.640  15.289  1.00 64.18      A16S
ATOM  26093  N3  GUA  352     144.573  56.472  15.163  1.00 64.18      A16S
ATOM  26094  C2  GUA  352     144.758  56.147  13.897  1.00 64.18      A16S
ATOM  26095  N2  GUA  352     145.386  55.004  13.584  1.00 64.18      A16S
ATOM  26096  N1  GUA  352     144.344  56.914  12.842  1.00 64.18      A16S
ATOM  26097  C6  GUA  352     143.680  58.122  12.951  1.00 64.18      A16S
ATOM  26098  O6  GUA  352     143.364  58.737  11.938  1.00 64.18      A16S
ATOM  26099  C5  GUA  352     143.463  58.477  14.301  1.00 64.18      A16S
ATOM  26100  N7  GUA  352     142.836  59.588  14.849  1.00 64.18      A16S
ATOM  26101  C8  GUA  352     142.932  59.409  16.137  1.00 64.18      A16S
ATOM  26102  C2' GUA  352     145.428  57.931  18.043  1.00 46.79      A16S
ATOM  26103  O2' GUA  352     145.914  56.888  18.861  1.00 46.79      A16S
ATOM  26104  C3' GUA  352     145.499  59.300  18.698  1.00 46.79      A16S
ATOM  26105  O3' GUA  352     146.653  59.405  19.500  1.00 46.79      A16S
ATOM  26106  P   URI  353     148.060  59.746  18.814  1.00 49.56      A16S
ATOM  26107  O1P URI  353     149.028  59.980  19.918  1.00 57.58      A16S
ATOM  26108  O2P URI  353     147.838  60.811  17.800  1.00 57.58      A16S
ATOM  26109  O5' URI  353     148.435  58.398  18.046  1.00 49.56      A16S
ATOM  26110  C5' URI  353     148.691  57.192  18.757  1.00 49.56      A16S
ATOM  26111  C4' URI  353     149.272  56.157  17.829  1.00 49.56      A16S
ATOM  26112  O4' URI  353     148.281  55.737  16.859  1.00 49.56      A16S
ATOM  26113  C1' URI  353     148.909  55.490  15.613  1.00 49.56      A16S
ATOM  26114  N1  URI  353     148.327  56.402  14.623  1.00 57.58      A16S
ATOM  26115  C6  URI  353     147.660  57.537  15.012  1.00 57.58      A16S
ATOM  26116  C2  URI  353     148.479  56.086  13.287  1.00 57.58      A16S
ATOM  26117  O2  URI  353     149.053  55.086  12.900  1.00 57.58      A16S
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ATOM  26119  C4  URI  353     147.264  58.147  12.737  1.00 57.58      A16S
ATOM  26120  O4  URI  353     146.856  58.874  11.833  1.00 57.58      A16S
ATOM  26121  C5  URI  353     147.138  58.397  14.141  1.00 57.58      A16S
ATOM  26122  C2' URI  353     150.408  55.708  15.804  1.00 49.56      A16S
ATOM  26123  O2' URI  353     151.021  54.486  16.120  1.00 49.56      A16S
ATOM  26124  C3' URI  353     150.432  56.651  16.993  1.00 49.56      A16S
ATOM  26125  O3' URI  353     151.630  56.498  17.725  1.00 49.56      A16S
ATOM  26126  P   URI  354     152.913  57.361  17.325  1.00 56.03      A16S
ATOM  26127  O1P URI  354     154.018  56.968  18.238  1.00 66.74      A16S
ATOM  26128  O2P URI  354     152.491  58.782  17.242  1.00 66.74      A16S
ATOM  26129  O5' URI  354     153.253  56.878  15.848  1.00 56.03      A16S
ATOM  26130  C5' URI  354     153.714  55.560  15.593  1.00 56.03      A16S
ATOM  26131  C4' URI  354     153.870  55.356  14.110  1.00 56.03      A16S
ATOM  26132  O4' URI  354     152.571  55.419  13.472  1.00 56.03      A16S
ATOM  26133  C1' URI  354     152.708  55.974  12.176  1.00 56.03      A16S
ATOM  26134  N1  URI  354     151.836  57.149  12.069  1.00 66.74      A16S
ATOM  26135  C6  URI  354     151.413  57.836  13.175  1.00 66.74      A16S
ATOM  26136  C2  URI  354     151.474  57.547  10.804  1.00 66.74      A16S
ATOM  26137  O2  URI  354     151.810  56.946   9.803  1.00 66.74      A16S
ATOM  26138  N3  URI  354     150.702  58.673  10.751  1.00 66.74      A16S
ATOM  26139  C4  URI  354     150.254  59.414  11.809  1.00 66.74      A16S
ATOM  26140  O4  URI  354     149.572  60.415  11.593  1.00 66.74      A16S
ATOM  26141  C5  URI  354     150.653  58.926  13.092  1.00 66.74      A16S
ATOM  26142  C2' URI  354     154.178  56.345  11.976  1.00 56.03      A16S
ATOM  26143  O2' URI  354     154.826  55.351  11.223  1.00 56.03      A16S
ATOM  26144  C3' URI  354     154.677  56.432  13.409  1.00 56.03      A16S
ATOM  26145  O3' URI  354     156.057  56.128  13.477  1.00 56.03      A16S
ATOM  26146  P   ADE  355     157.130  57.201  12.959  1.00 52.20      A16S
ATOM  26147  O1P ADE  355     158.476  56.563  12.992  1.00 65.77      A16S
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ATOM	26148	O2P	ADE	355	156.897	58.465	13.714	1.00	65.77	A16S	ATOM	26201	N3	GUA	357	155.362	67.951	10.277	1.00	79.01	A16S
ATOM	26149	O5'	ADE	355	156.730	57.434	11.433	1.00	52.20	A16S	ATOM	26202	C2	GUA	357	154.674	67.769	11.387	1.00	79.01	A16S
ATOM	26150	C5'	ADE	355	157.216	56.584	10.406	1.00	52.20	A16S	ATOM	26203	N2	GUA	357	153.521	68.420	11.575	1.00	79.01	A16S
ATOM	26151	C4'	ADE	355	156.971	57.211	9.057	1.00	52.20	A16S	ATOM	26204	N1	GUA	357	155.060	66.932	12.398	1.00	79.01	A16S
ATOM	26152	O4'	ADE	355	155.542	57.324	8.811	1.00	52.20	A16S	ATOM	26205	C6	GUA	357	156.212	66.158	12.400	1.00	79.01	A16S
ATOM	26153	C1'	ADE	355	155.272	58.522	8.102	1.00	52.20	A16S	ATOM	26206	O6	GUA	357	156.454	65.411	13.361	1.00	79.01	A16S
ATOM	26154	N9	ADE	355	154.500	59.395	8.983	1.00	65.77	A16S	ATOM	26207	C5	GUA	357	156.966	66.351	11.220	1.00	79.01	A16S
ATOM	26155	C4	ADE	355	153.647	60.400	8.601	1.00	65.77	A16S	ATOM	26208	N7	GUA	357	158.171	65.792	10.824	1.00	79.01	A16S
ATOM	26156	N3	ADE	355	153.344	60.781	7.347	1.00	65.77	A16S	ATOM	26209	C8	GUA	357	158.399	66.322	9.654	1.00	79.01	A16S
ATOM	26157	C2	ADE	355	152.489	61.799	7.362	1.00	65.77	A16S	ATOM	26210	C2'	GUA	357	158.316	69.200	8.143	1.00	52.09	A16S
ATOM	26158	N1	ADE	355	151.940	62.430	8.407	1.00	65.77	A16S	ATOM	26211	O2'	GUA	357	157.809	70.256	7.351	1.00	52.09	A16S
ATOM	26159	C6	ADE	355	152.262	62.018	9.652	1.00	65.77	A16S	ATOM	26212	C3'	GUA	357	159.594	68.640	7.554	1.00	52.09	A16S
ATOM	26160	N6	ADE	355	151.707	62.639	10.694	1.00	65.77	A16S	ATOM	26213	O3'	GUA	357	160.439	69.691	7.132	1.00	52.09	A16S
ATOM	26161	C5	ADE	355	153.167	60.951	9.773	1.00	65.77	A16S	ATOM	26214	P	ADE	358	161.674	70.109	8.056	1.00	47.77	A16S
ATOM	26162	N7	ADE	355	153.708	60.307	10.876	1.00	65.77	A16S	ATOM	26215	O1P	ADE	358	161.996	68.898	8.845	1.00	51.78	A16S
ATOM	26163	C8	ADE	355	154.484	59.393	10.355	1.00	65.77	A16S	ATOM	26216	O2P	ADE	358	162.734	70.762	7.246	1.00	51.78	A16S
ATOM	26164	C2'	ADE	355	156.627	59.142	7.758	1.00	52.20	A16S	ATOM	26217	O5'	ADE	358	161.078	71.189	9.060	1.00	47.77	A16S
ATOM	26165	O2'	ADE	355	157.077	58.636	6.527	1.00	52.20	A16S	ATOM	26218	C5'	ADE	358	161.895	71.743	10.100	1.00	47.77	A16S
ATOM	26166	C3'	ADE	355	157.485	58.629	8.900	1.00	52.20	A16S	ATOM	26219	C4'	ADE	358	161.083	72.682	10.958	1.00	47.77	A16S
ATOM	26167	O3'	ADE	355	158.844	58.602	8.528	1.00	52.20	A16S	ATOM	26220	O4'	ADE	358	160.772	73.884	10.211	1.00	47.77	A16S
ATOM	26168	P	GUA	356	159.763	59.882	8.794	1.00	47.36	A16S	ATOM	26221	C1'	ADE	358	159.457	74.309	10.526	1.00	47.77	A16S
ATOM	26169	O1P	GUA	356	159.502	60.320	10.189	1.00	60.18	A16S	ATOM	26222	N9	ADE	358	158.678	74.282	9.297	1.00	51.78	A16S
ATOM	26170	O2P	GUA	356	161.149	59.555	8.375	1.00	60.18	A16S	ATOM	26223	C4	ADE	358	157.490	74.926	9.086	1.00	51.78	A16S
ATOM	26171	O5'	GUA	356	159.203	60.969	7.774	1.00	47.36	A16S	ATOM	26224	N3	ADE	358	156.803	75.666	9.969	1.00	51.78	A16S
ATOM	26172	C5'	GUA	356	159.432	60.848	6.375	1.00	47.36	A16S	ATOM	26225	C2	ADE	358	155.697	76.147	9.407	1.00	51.78	A16S
ATOM	26173	C4'	GUA	356	158.738	61.969	5.632	1.00	47.36	A16S	ATOM	26226	N1	ADE	358	155.243	75.991	8.151	1.00	51.78	A16S
ATOM	26174	O4'	GUA	356	157.300	61.858	5.809	1.00	47.36	A16S	ATOM	26227	C6	ADE	358	155.974	75.254	7.290	1.00	51.78	A16S
ATOM	26175	C1'	GUA	356	156.729	63.152	5.902	1.00	47.36	A16S	ATOM	26228	N6	ADE	358	155.547	75.127	6.042	1.00	51.78	A16S
ATOM	26176	N9	GUA	356	156.224	63.336	7.253	1.00	60.18	A16S	ATOM	26229	C5	ADE	358	157.154	74.673	7.768	1.00	51.78	A16S
ATOM	26177	C4	GUA	356	155.133	64.080	7.615	1.00	60.18	A16S	ATOM	26230	N7	ADE	358	158.102	73.859	7.167	1.00	51.78	A16S
ATOM	26178	N3	GUA	356	154.314	64.742	6.773	1.00	60.18	A16S	ATOM	26231	C8	ADE	358	158.980	73.651	8.116	1.00	51.78	A16S
ATOM	26179	C2	GUA	356	153.366	65.383	7.419	1.00	60.18	A16S	ATOM	26232	C2'	ADE	358	158.905	73.381	11.609	1.00	47.77	A16S
ATOM	26180	N2	GUA	356	152.469	66.091	6.740	1.00	60.18	A16S	ATOM	26233	O2'	ADE	358	159.110	73.916	12.900	1.00	47.77	A16S
ATOM	26181	N1	GUA	356	153.229	65.376	8.778	1.00	60.18	A16S	ATOM	26234	C3'	ADE	358	159.734	72.127	11.387	1.00	47.77	A16S
ATOM	26182	C6	GUA	356	154.063	64.706	9.663	1.00	60.18	A16S	ATOM	26235	O3'	ADE	358	159.854	71.408	12.601	1.00	47.77	A16S
ATOM	26183	O6	GUA	356	153.857	64.776	10.876	1.00	60.18	A16S	ATOM	26236	P	ADE	359	158.813	70.237	12.926	1.00	48.96	A16S
ATOM	26184	C5	GUA	356	155.082	64.011	8.987	1.00	60.18	A16S	ATOM	26237	O1P	ADE	359	159.148	69.705	14.275	1.00	65.70	A16S
ATOM	26185	N7	GUA	356	156.111	63.222	9.480	1.00	60.18	A16S	ATOM	26238	O2P	ADE	359	158.782	69.324	11.757	1.00	65.70	A16S
ATOM	26186	C8	GUA	356	156.757	62.837	8.415	1.00	60.18	A16S	ATOM	26239	O5'	ADE	359	157.416	70.990	13.011	1.00	48.96	A16S
ATOM	26187	C2'	GUA	356	157.846	64.152	5.625	1.00	47.36	A16S	ATOM	26240	C5'	ADE	359	157.109	71.848	14.103	1.00	48.96	A16S
ATOM	26188	O2'	GUA	356	157.903	64.398	4.244	1.00	47.36	A16S	ATOM	26241	C4'	ADE	359	155.672	72.289	14.009	1.00	48.96	A16S
ATOM	26189	C3'	GUA	356	159.057	63.375	6.109	1.00	47.36	A16S	ATOM	26242	O4'	ADE	359	155.503	73.114	12.831	1.00	48.96	A16S
ATOM	26190	O3'	GUA	356	160.252	63.861	5.523	1.00	47.36	A16S	ATOM	26243	C1'	ADE	359	154.261	72.828	12.215	1.00	48.96	A16S
ATOM	26191	P	GUA	357	161.312	64.626	6.442	1.00	52.09	A16S	ATOM	26244	N9	ADE	359	154.539	72.403	10.846	1.00	65.70	A16S
ATOM	26192	O1P	GUA	357	162.514	64.933	5.622	1.00	79.01	A16S	ATOM	26245	C4	ADE	359	153.935	72.867	9.702	1.00	65.70	A16S
ATOM	26193	O2P	GUA	357	161.456	63.849	7.698	1.00	79.01	A16S	ATOM	26246	N3	ADE	359	152.936	73.761	9.608	1.00	65.70	A16S
ATOM	26194	O5'	GUA	357	160.563	65.984	6.809	1.00	52.09	A16S	ATOM	26247	C2	ADE	359	152.633	73.992	8.334	1.00	65.70	A16S
ATOM	26195	C5'	GUA	357	159.965	66.786	5.791	1.00	52.09	A16S	ATOM	26248	N1	ADE	359	153.177	73.477	7.226	1.00	65.70	A16S
ATOM	26196	C4'	GUA	357	159.049	67.827	6.397	1.00	52.09	A16S	ATOM	26249	C6	ADE	359	154.183	72.588	7.355	1.00	65.70	A16S
ATOM	26197	O4'	GUA	357	157.879	67.192	6.974	1.00	52.09	A16S	ATOM	26250	N6	ADE	359	154.744	72.091	6.250	1.00	65.70	A16S
ATOM	26198	C1'	GUA	357	157.389	67.989	8.039	1.00	52.09	A16S	ATOM	26251	C5	ADE	359	154.588	72.246	8.654	1.00	65.70	A16S
ATOM	26199	N9	GUA	357	157.423	67.202	9.262	1.00	79.01	A16S	ATOM	26252	N7	ADE	359	155.561	71.380	9.130	1.00	65.70	A16S
ATOM	26200	C4	GUA	357	156.490	67.218	10.263	1.00	79.01	A16S	ATOM	26253	C8	ADE	359	155.484	71.503	10.432	1.00	65.70	A16S

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ATOM  26254  C2' ADE  359     153.524  71.822  13.098  1.00 48.96      A16S
ATOM  26255  O2' ADE  359     152.681  72.550  13.959  1.00 48.96      A16S
ATOM  26256  C3' ADE  359     154.677  71.154  13.842  1.00 48.96      A16S
ATOM  26257  O3' ADE  359     154.303  70.691  15.136  1.00 48.96      A16S
ATOM  26258  P   URI  360     153.479  69.323  15.293  1.00 54.37      A16S
ATOM  26259  O1P URI  360     153.585  68.902  16.712  1.00 68.55      A16S
ATOM  26260  O2P URI  360     153.893  68.396  14.212  1.00 68.55      A16S
ATOM  26261  O5' URI  360     151.966  69.747  15.026  1.00 54.37      A16S
ATOM  26262  C5' URI  360     151.199  70.388  16.039  1.00 54.37      A16S
ATOM  26263  C4' URI  360     149.836  70.728  15.511  1.00 54.37      A16S
ATOM  26264  O4' URI  360     149.994  71.604  14.381  1.00 54.37      A16S
ATOM  26265  C1' URI  360     148.876  71.469  13.543  1.00 54.37      A16S
ATOM  26266  N1  URI  360     149.311  71.541  12.147  1.00 68.55      A16S
ATOM  26267  C6  URI  360     150.394  70.863  11.673  1.00 68.55      A16S
ATOM  26268  C2  URI  360     148.565  72.346  11.325  1.00 68.55      A16S
ATOM  26269  O2  URI  360     147.594  72.948  11.720  1.00 68.55      A16S
ATOM  26270  N3  URI  360     148.990  72.426  10.031  1.00 68.55      A16S
ATOM  26271  C4  URI  360     150.064  71.798   9.491  1.00 68.55      A16S
ATOM  26272  O4  URI  360     150.354  72.023   8.320  1.00 68.55      A16S
ATOM  26273  C5  URI  360     150.791  70.960  10.405  1.00 68.55      A16S
ATOM  26274  C2' URI  360     148.107  70.208  13.943  1.00 54.37      A16S
ATOM  26275  O2' URI  360     146.868  70.580  14.504  1.00 54.37      A16S
ATOM  26276  C3' URI  360     149.046  69.554  14.959  1.00 54.37      A16S
ATOM  26277  O3' URI  360     148.270  68.985  16.008  1.00 54.37      A16S
ATOM  26278  P   CYT  361     148.555  67.491  16.505  1.00 53.33      A16S
ATOM  26279  O1P CYT  361     149.982  67.424  16.869  1.00 54.31      A16S
ATOM  26280  O2P CYT  361     148.004  66.542  15.515  1.00 54.31      A16S
ATOM  26281  O5' CYT  361     147.704  67.373  17.843  1.00 53.33      A16S
ATOM  26282  C5' CYT  361     148.217  67.850  19.086  1.00 53.33      A16S
ATOM  26283  C4' CYT  361     147.082  68.062  20.049  1.00 53.33      A16S
ATOM  26284  O4' CYT  361     146.297  69.168  19.575  1.00 53.33      A16S
ATOM  26285  C1' CYT  361     144.929  68.909  19.765  1.00 53.33      A16S
ATOM  26286  N1  CYT  361     144.204  69.437  18.601  1.00 54.31      A16S
ATOM  26287  C6  CYT  361     144.875  69.754  17.454  1.00 54.31      A16S
ATOM  26288  C2  CYT  361     142.830  69.646  18.691  1.00 54.31      A16S
ATOM  26289  O2  CYT  361     142.252  69.344  19.736  1.00 54.31      A16S
ATOM  26290  N3  CYT  361     142.167  70.182  17.635  1.00 54.31      A16S
ATOM  26291  C4  CYT  361     142.838  70.509  16.528  1.00 54.31      A16S
ATOM  26292  N4  CYT  361     142.162  71.055  15.521  1.00 54.31      A16S
ATOM  26293  C5  CYT  361     144.239  70.294  16.407  1.00 54.31      A16S
ATOM  26294  C2' CYT  361     144.727  67.445  20.173  1.00 53.33      A16S
ATOM  26295  O2' CYT  361     144.099  67.340  21.421  1.00 53.33      A16S
ATOM  26296  C3' CYT  361     146.147  66.869  20.134  1.00 53.33      A16S
ATOM  26297  O3' CYT  361     146.535  65.921  21.174  1.00 53.33      A16S
ATOM  26298  P   URI  362     146.662  66.373  22.737  1.00 59.03      A16S
ATOM  26299  O1P URI  362     146.537  67.846  22.875  1.00 74.32      A16S
ATOM  26300  O2P URI  362     147.871  65.703  23.265  1.00 74.32      A16S
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ATOM  26339  O1P CYT  364     137.477  57.485  23.708  1.00 68.13      A16S
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ATOM  26341  O5' CYT  364     137.503  59.803  24.642  1.00 51.53      A16S
ATOM  26342  C5' CYT  364     138.393  59.736  25.752  1.00 51.53      A16S
ATOM  26343  C4' CYT  364     137.951  60.720  26.803  1.00 51.53      A16S
ATOM  26344  O4' CYT  364     138.336  62.060  26.403  1.00 51.53      A16S
ATOM  26345  C1' CYT  364     137.269  62.958  26.656  1.00 51.53      A16S
ATOM  26346  N1  CYT  364     136.815  63.503  25.365  1.00 68.13      A16S
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ATOM  26349  O2  CYT  364     135.610  65.088  26.443  1.00 68.13      A16S
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ATOM  26353  C5  CYT  364     136.803  63.437  23.014  1.00 68.13      A16S
ATOM  26354  C2' CYT  364     136.179  62.187  27.409  1.00 51.53      A16S
ATOM  26355  O2' CYT  364     136.314  62.316  28.807  1.00 51.53      A16S
ATOM  26356  C3' CYT  364     136.440  60.764  26.954  1.00 51.53      A16S
ATOM  26357  O3' CYT  364     135.992  59.827  27.915  1.00 51.53      A16S
ATOM  26358  P   CYT  365     134.458  59.367  27.909  1.00 59.07      A16S
ATOM  26359  O1P CYT  365     134.120  58.924  26.526  1.00 58.47      A16S
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ATOM	26360	O2P	CYT	365	134.254	58.435	29.050	1.00	58.47	A16S	ATOM	26413	N3	CYT	367	123.033	63.126	20.207	1.00	62.21	A16S
ATOM	26361	O5'	CYT	365	133.661	60.707	28.223	1.00	59.07	A16S	ATOM	26414	C4	CYT	367	124.194	62.483	20.305	1.00	62.21	A16S
ATOM	26362	C5'	CYT	365	133.657	61.250	29.533	1.00	59.07	A16S	ATOM	26415	N4	CYT	367	124.897	62.298	19.194	1.00	62.21	A16S
ATOM	26363	C4'	CYT	365	132.513	62.215	29.695	1.00	59.07	A16S	ATOM	26416	C5	CYT	367	124.679	61.994	21.542	1.00	62.21	A16S
ATOM	26364	O4'	CYT	365	132.799	63.458	29.003	1.00	59.07	A16S	ATOM	26417	C2'	CYT	367	120.733	62.010	23.981	1.00	60.72	A16S
ATOM	26365	C1'	CYT	365	131.583	64.015	28.520	1.00	59.07	A16S	ATOM	26418	O2'	CYT	367	119.481	62.545	23.601	1.00	60.72	A16S
ATOM	26366	N1	CYT	365	131.665	64.138	27.056	1.00	58.47	A16S	ATOM	26419	C3'	CYT	367	120.962	61.600	25.450	1.00	60.72	A16S
ATOM	26367	C6	CYT	365	132.521	63.366	26.328	1.00	58.47	A16S	ATOM	26420	O3'	CYT	367	119.905	61.539	26.425	1.00	60.72	A16S
ATOM	26368	C2	CYT	365	130.846	65.060	26.423	1.00	58.47	A16S	ATOM	26421	P	ADE	368	118.872	62.761	26.599	1.00	50.44	A16S
ATOM	26369	O2	CYT	365	130.078	65.743	27.112	1.00	58.47	A16S	ATOM	26422	O1P	ADE	368	117.560	62.165	26.963	1.00	77.07	A16S
ATOM	26370	N3	CYT	365	130.905	65.189	25.079	1.00	58.47	A16S	ATOM	26423	O2P	ADE	368	118.957	63.666	25.429	1.00	77.07	A16S
ATOM	26371	C4	CYT	365	131.739	64.430	24.376	1.00	58.47	A16S	ATOM	26424	O5'	ADE	368	119.341	63.620	27.852	1.00	50.44	A16S
ATOM	26372	N4	CYT	365	131.759	64.582	23.057	1.00	58.47	A16S	ATOM	26425	C5'	ADE	368	118.345	64.149	28.737	1.00	50.44	A16S
ATOM	26373	C5	CYT	365	132.589	63.478	24.997	1.00	58.47	A16S	ATOM	26426	C4'	ADE	368	118.340	65.669	28.763	1.00	50.44	A16S
ATOM	26374	C2'	CYT	365	130.455	63.077	28.956	1.00	59.07	A16S	ATOM	26427	O4'	ADE	368	119.577	66.162	29.336	1.00	50.44	A16S
ATOM	26375	O2'	CYT	365	129.914	63.496	30.190	1.00	59.07	A16S	ATOM	26428	C1'	ADE	368	119.927	67.390	28.730	1.00	50.44	A16S
ATOM	26376	C3'	CYT	365	131.201	61.761	29.089	1.00	59.07	A16S	ATOM	26429	N9	ADE	368	121.160	67.173	27.978	1.00	77.07	A16S
ATOM	26377	O3'	CYT	365	130.510	60.870	29.940	1.00	59.07	A16S	ATOM	26430	C4	ADE	368	121.848	68.088	27.218	1.00	77.07	A16S
ATOM	26378	P	GUA	366	129.426	59.864	29.315	1.00	57.53	A16S	ATOM	26431	N3	ADE	368	121.538	69.379	27.010	1.00	77.07	A16S
ATOM	26379	O1P	GUA	366	128.929	59.013	30.433	1.00	61.47	A16S	ATOM	26432	C2	ADE	368	122.427	69.949	26.204	1.00	77.07	A16S
ATOM	26380	O2P	GUA	366	130.000	59.236	28.092	1.00	61.47	A16S	ATOM	26433	N1	ADE	368	123.510	69.420	25.627	1.00	77.07	A16S
ATOM	26381	O5'	GUA	366	128.231	60.800	28.866	1.00	57.53	A16S	ATOM	26434	C6	ADE	368	123.796	68.122	25.858	1.00	77.07	A16S
ATOM	26382	C5'	GUA	366	127.629	61.666	29.799	1.00	57.53	A16S	ATOM	26435	N6	ADE	368	124.881	67.591	25.288	1.00	77.07	A16S
ATOM	26383	C4'	GUA	366	126.702	62.597	29.089	1.00	57.53	A16S	ATOM	26436	C5	ADE	368	122.926	67.403	26.694	1.00	77.07	A16S
ATOM	26384	O4'	GUA	366	127.454	63.559	28.302	1.00	57.53	A16S	ATOM	26437	N7	ADE	368	122.923	66.085	27.121	1.00	77.07	A16S
ATOM	26385	C1'	GUA	366	126.702	63.910	27.151	1.00	57.53	A16S	ATOM	26438	C8	ADE	368	121.861	66.004	27.879	1.00	77.07	A16S
ATOM	26386	N9	GUA	366	127.460	63.539	25.963	1.00	61.47	A16S	ATOM	26439	C2'	ADE	368	118.746	67.801	27.843	1.00	50.44	A16S
ATOM	26387	C4	GUA	366	127.200	63.949	24.677	1.00	61.47	A16S	ATOM	26440	O2'	ADE	368	117.815	68.558	28.592	1.00	50.44	A16S
ATOM	26388	N3	GUA	366	126.216	64.791	24.297	1.00	61.47	A16S	ATOM	26441	C3'	ADE	368	118.155	66.450	27.470	1.00	50.44	A16S
ATOM	26389	C2	GUA	366	126.217	65.001	22.993	1.00	61.47	A16S	ATOM	26442	O3'	ADE	368	116.770	66.643	27.177	1.00	50.44	A16S
ATOM	26390	N2	GUA	366	125.309	65.828	22.446	1.00	61.47	A16S	ATOM	26443	P	ADE	369	116.322	67.168	25.717	1.00	59.38	A16S
ATOM	26391	N1	GUA	366	127.109	64.421	22.131	1.00	61.47	A16S	ATOM	26444	O1P	ADE	369	114.851	67.371	25.718	1.00	66.13	A16S
ATOM	26392	C6	GUA	366	128.130	63.554	22.501	1.00	61.47	A16S	ATOM	26445	O2P	ADE	369	116.927	66.258	24.711	1.00	66.13	A16S
ATOM	26393	O6	GUA	366	128.884	63.096	21.641	1.00	61.47	A16S	ATOM	26446	O5'	ADE	369	117.050	68.579	25.567	1.00	59.38	A16S
ATOM	26394	C5	GUA	366	128.142	63.326	23.899	1.00	61.47	A16S	ATOM	26447	C5'	ADE	369	116.462	69.786	26.038	1.00	59.38	A16S
ATOM	26395	N7	GUA	366	128.989	62.552	24.678	1.00	61.47	A16S	ATOM	26448	C4'	ADE	369	117.077	70.968	25.321	1.00	59.38	A16S
ATOM	26396	C8	GUA	366	128.548	62.712	25.894	1.00	61.47	A16S	ATOM	26449	O4'	ADE	369	118.520	70.941	25.492	1.00	59.38	A16S
ATOM	26397	C2'	GUA	366	125.396	63.129	27.237	1.00	57.53	A16S	ATOM	26450	C1'	ADE	369	119.157	71.339	24.288	1.00	59.38	A16S
ATOM	26398	O2'	GUA	366	124.476	63.923	27.939	1.00	57.53	A16S	ATOM	26451	N9	ADE	369	119.923	70.206	23.774	1.00	66.13	A16S
ATOM	26399	C3'	GUA	366	125.842	61.924	28.048	1.00	57.53	A16S	ATOM	26452	C4	ADE	369	120.814	70.239	22.729	1.00	66.13	A16S
ATOM	26400	O3'	GUA	366	124.793	61.173	28.647	1.00	57.53	A16S	ATOM	26453	N3	ADE	369	121.170	71.305	21.989	1.00	66.13	A16S
ATOM	26401	P	CYT	367	124.123	59.968	27.829	1.00	60.72	A16S	ATOM	26454	C2	ADE	369	122.064	70.956	21.069	1.00	66.13	A16S
ATOM	26402	O1P	CYT	367	123.168	59.278	28.725	1.00	62.21	A16S	ATOM	26455	N1	ADE	369	122.596	69.760	20.820	1.00	66.13	A16S
ATOM	26403	O2P	CYT	367	125.227	59.208	27.193	1.00	62.21	A16S	ATOM	26456	C6	ADE	369	122.211	68.712	21.577	1.00	66.13	A16S
ATOM	26404	O5'	CYT	367	123.291	60.752	26.733	1.00	60.72	A16S	ATOM	26457	N6	ADE	369	122.730	67.512	21.320	1.00	66.13	A16S
ATOM	26405	C5'	CYT	367	122.795	62.044	27.071	1.00	60.72	A16S	ATOM	26458	C5	ADE	369	121.276	68.948	22.591	1.00	66.13	A16S
ATOM	26406	C4'	CYT	367	121.945	62.600	25.977	1.00	60.72	A16S	ATOM	26459	N7	ADE	369	120.691	68.115	23.531	1.00	66.13	A16S
ATOM	26407	O4'	CYT	367	122.723	63.000	24.842	1.00	60.72	A16S	ATOM	26460	C8	ADE	369	119.903	68.908	24.208	1.00	66.13	A16S
ATOM	26408	C1'	CYT	367	121.884	63.001	23.721	1.00	60.72	A16S	ATOM	26461	C2'	ADE	369	118.064	71.754	23.309	1.00	59.38	A16S
ATOM	26409	N1	CYT	367	122.718	62.817	22.534	1.00	62.21	A16S	ATOM	26462	O2'	ADE	369	117.872	73.152	23.368	1.00	59.38	A16S
ATOM	26410	C6	CYT	367	123.918	62.178	22.621	1.00	62.21	A16S	ATOM	26463	C3'	ADE	369	116.883	70.946	23.820	1.00	59.38	A16S
ATOM	26411	C2	CYT	367	122.266	63.314	21.307	1.00	62.21	A16S	ATOM	26464	O3'	ADE	369	115.672	71.571	23.492	1.00	59.38	A16S
ATOM	26412	O2	CYT	367	121.158	63.921	21.259	1.00	62.21	A16S	ATOM	26465	P	URI	370	114.896	71.110	22.184	1.00	51.95	A16S

ATOM	26466	O1P	URI	370	113.659	71.916	22.089	1.00	65.60	A16S	ATOM	26519	C2	GUA	372	118.543	60.594	14.216	1.00	61.77	A16S
ATOM	26467	O2P	URI	370	114.811	69.637	22.249	1.00	65.60	A16S	ATOM	26520	N2	GUA	372	119.139	59.444	13.904	1.00	61.77	A16S
ATOM	26468	O5'	URI	370	115.876	71.529	21.001	1.00	51.95	A16S	ATOM	26521	N1	GUA	372	118.070	60.697	15.495	1.00	61.77	A16S
ATOM	26469	C5'	URI	370	116.125	72.908	20.704	1.00	51.95	A16S	ATOM	26522	C6	GUA	372	117.429	61.808	16.020	1.00	61.77	A16S
ATOM	26470	C4'	URI	370	116.924	73.037	19.425	1.00	51.95	A16S	ATOM	26523	O6	GUA	372	117.032	61.791	17.191	1.00	61.77	A16S
ATOM	26471	O4'	URI	370	118.313	72.684	19.664	1.00	51.95	A16S	ATOM	26524	C5	GUA	372	117.325	62.848	15.063	1.00	61.77	A16S
ATOM	26472	C1'	URI	370	118.841	72.025	18.524	1.00	51.95	A16S	ATOM	26525	N7	GUA	372	116.776	64.116	15.168	1.00	61.77	A16S
ATOM	26473	N1	URI	370	119.229	70.663	18.918	1.00	65.60	A16S	ATOM	26526	C8	GUA	372	116.950	64.641	13.989	1.00	61.77	A16S
ATOM	26474	C6	URI	370	118.633	70.029	19.982	1.00	65.60	A16S	ATOM	26527	C2'	GUA	372	117.048	63.286	10.740	1.00	42.64	A16S
ATOM	26475	C2	URI	370	120.197	70.032	18.169	1.00	65.60	A16S	ATOM	26528	O2'	GUA	372	117.824	62.896	9.626	1.00	42.64	A16S
ATOM	26476	O2	URI	370	120.766	70.570	17.239	1.00	65.60	A16S	ATOM	26529	C3'	GUA	372	116.023	64.342	10.369	1.00	42.64	A16S
ATOM	26477	N3	URI	370	120.476	68.743	18.551	1.00	65.60	A16S	ATOM	26530	O3'	GUA	372	115.496	64.098	9.085	1.00	42.64	A16S
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ATOM	26479	O4	URI	370	120.250	66.881	19.797	1.00	65.60	A16S	ATOM	26532	O1P	GUA	373	113.618	63.483	7.559	1.00	55.27	A16S
ATOM	26480	C5	URI	370	118.928	68.774	20.332	1.00	65.60	A16S	ATOM	26533	O2P	GUA	373	113.283	63.690	10.086	1.00	55.27	A16S
ATOM	26481	C2'	URI	370	117.745	72.023	17.452	1.00	51.95	A16S	ATOM	26534	O5'	GUA	373	114.548	61.776	9.141	1.00	46.50	A16S
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ATOM	26483	C3'	URI	370	116.490	72.118	18.300	1.00	51.95	A16S	ATOM	26536	C4'	GUA	373	115.440	59.635	8.523	1.00	46.50	A16S
ATOM	26484	O3'	URI	370	115.441	72.686	17.547	1.00	51.95	A16S	ATOM	26537	O4'	GUA	373	116.328	59.566	9.669	1.00	46.50	A16S
ATOM	26485	P	GUA	371	114.488	71.725	16.698	1.00	40.81	A16S	ATOM	26538	C1'	GUA	373	115.926	58.508	10.518	1.00	46.50	A16S
ATOM	26486	O1P	GUA	371	113.547	72.552	15.907	1.00	60.02	A16S	ATOM	26539	N9	GUA	373	115.528	59.094	11.788	1.00	55.27	A16S
ATOM	26487	O2P	GUA	371	113.959	70.731	17.663	1.00	60.02	A16S	ATOM	26540	C4	GUA	373	115.553	58.488	13.015	1.00	55.27	A16S
ATOM	26488	O5'	GUA	371	115.494	70.961	15.726	1.00	40.81	A16S	ATOM	26541	N3	GUA	373	115.963	57.232	13.270	1.00	55.27	A16S
ATOM	26489	C5'	GUA	371	115.994	71.579	14.551	1.00	40.81	A16S	ATOM	26542	C2	GUA	373	115.872	56.936	14.551	1.00	55.27	A16S
ATOM	26490	C4'	GUA	371	116.929	70.640	13.805	1.00	40.81	A16S	ATOM	26543	N2	GUA	373	116.248	55.727	14.984	1.00	55.27	A16S
ATOM	26491	O4'	GUA	371	118.107	70.342	14.616	1.00	40.81	A16S	ATOM	26544	N1	GUA	373	115.412	57.804	15.503	1.00	55.27	A16S
ATOM	26492	C1'	GUA	371	118.614	69.068	14.248	1.00	40.81	A16S	ATOM	26545	C6	GUA	373	114.987	59.100	15.259	1.00	55.27	A16S
ATOM	26493	N9	GUA	371	118.579	68.190	15.415	1.00	60.02	A16S	ATOM	26546	O6	GUA	373	114.594	59.806	16.191	1.00	55.27	A16S
ATOM	26494	C4	GUA	371	119.135	66.940	15.506	1.00	60.02	A16S	ATOM	26547	C5	GUA	373	115.080	59.428	13.893	1.00	55.27	A16S
ATOM	26495	N3	GUA	371	119.858	66.328	14.552	1.00	60.02	A16S	ATOM	26548	N7	GUA	373	114.764	60.603	13.231	1.00	55.27	A16S
ATOM	26496	C2	GUA	371	120.227	65.116	14.913	1.00	60.02	A16S	ATOM	26549	C8	GUA	373	115.049	60.358	11.987	1.00	55.27	A16S
ATOM	26497	N2	GUA	371	120.953	64.367	14.073	1.00	60.02	A16S	ATOM	26550	C2'	GUA	373	114.776	57.788	9.818	1.00	46.50	A16S
ATOM	26498	N1	GUA	371	119.912	64.550	16.117	1.00	60.02	A16S	ATOM	26551	O2'	GUA	373	115.303	56.746	9.022	1.00	46.50	A16S
ATOM	26499	C6	GUA	371	119.171	65.165	17.117	1.00	60.02	A16S	ATOM	26552	C3'	GUA	373	114.193	58.917	8.987	1.00	46.50	A16S
ATOM	26500	O6	GUA	371	118.940	64.562	18.172	1.00	60.02	A16S	ATOM	26553	O3'	GUA	373	113.465	58.428	7.882	1.00	46.50	A16S
ATOM	26501	C5	GUA	371	118.773	66.467	16.742	1.00	60.02	A16S	ATOM	26554	P	CYT	374	111.873	58.316	7.988	1.00	47.48	A16S
ATOM	26502	N7	GUA	371	118.042	67.415	17.435	1.00	60.02	A16S	ATOM	26555	O1P	CYT	374	111.341	57.939	6.655	1.00	54.63	A16S
ATOM	26503	C8	GUA	371	117.956	68.422	16.612	1.00	60.02	A16S	ATOM	26556	O2P	CYT	374	111.364	59.537	8.678	1.00	54.63	A16S
ATOM	26504	C2'	GUA	371	117.713	68.538	13.125	1.00	40.81	A16S	ATOM	26557	O5'	CYT	374	111.643	57.095	8.972	1.00	47.48	A16S
ATOM	26505	O2'	GUA	371	118.234	68.925	11.873	1.00	40.81	A16S	ATOM	26558	C5'	CYT	374	111.943	55.776	8.557	1.00	47.48	A16S
ATOM	26506	C3'	GUA	371	116.411	69.260	13.418	1.00	40.81	A16S	ATOM	26559	C4'	CYT	374	111.803	54.836	9.723	1.00	47.48	A16S
ATOM	26507	O3'	GUA	371	115.587	69.291	12.256	1.00	40.81	A16S	ATOM	26560	O4'	CYT	374	112.729	55.238	10.766	1.00	47.48	A16S
ATOM	26508	P	GUA	372	114.496	68.121	12.016	1.00	42.64	A16S	ATOM	26561	C1'	CYT	374	112.208	54.848	12.018	1.00	47.48	A16S
ATOM	26509	O1P	GUA	372	113.729	68.410	10.776	1.00	61.77	A16S	ATOM	26562	N1	CYT	374	112.100	56.032	12.861	1.00	54.63	A16S
ATOM	26510	O2P	GUA	372	113.769	67.863	13.292	1.00	61.77	A16S	ATOM	26563	C6	CYT	374	111.749	57.240	12.340	1.00	54.63	A16S
ATOM	26511	O5'	GUA	372	115.389	66.863	11.667	1.00	42.64	A16S	ATOM	26564	C2	CYT	374	112.343	55.895	14.217	1.00	54.63	A16S
ATOM	26512	C5'	GUA	372	116.126	66.863	10.467	1.00	42.64	A16S	ATOM	26565	O2	CYT	374	112.693	54.787	14.649	1.00	54.63	A16S
ATOM	26513	C4'	GUA	372	116.877	65.586	10.329	1.00	42.64	A16S	ATOM	26566	N3	CYT	374	112.198	56.960	15.027	1.00	54.63	A16S
ATOM	26514	O4'	GUA	372	117.749	65.436	11.468	1.00	42.64	A16S	ATOM	26567	C4	CYT	374	111.834	58.132	14.519	1.00	54.63	A16S
ATOM	26515	C1'	GUA	372	117.932	64.058	11.726	1.00	42.64	A16S	ATOM	26568	N4	CYT	374	111.686	59.147	15.358	1.00	54.63	A16S
ATOM	26516	N9	GUA	372	117.584	63.796	13.116	1.00	61.77	A16S	ATOM	26569	C5	CYT	374	111.602	58.309	13.128	1.00	54.63	A16S
ATOM	26517	C4	GUA	372	117.830	62.640	13.803	1.00	61.77	A16S	ATOM	26570	C2'	CYT	374	110.842	54.208	11.767	1.00	47.48	A16S
ATOM	26518	N3	GUA	372	118.443	61.549	13.312	1.00	61.77	A16S	ATOM	26571	O2'	CYT	374	111.010	52.807	11.661	1.00	47.48	A16S

ATOM	26572	C3'	CYT	374	110.463	54.843	10.440	1.00	47.48	A16S	ATOM	26625	N9	ADE	377	104.019	54.960	20.284	1.00	64.55	A16S
ATOM	26573	O3'	CYT	374	109.496	54.072	9.739	1.00	47.48	A16S	ATOM	26626	C4	ADE	377	104.454	53.744	20.745	1.00	64.55	A16S
ATOM	26574	P	GUA	375	107.937	54.475	9.833	1.00	47.52	A16S	ATOM	26627	N3	ADE	377	104.325	53.248	21.988	1.00	64.55	A16S
ATOM	26575	O1P	GUA	375	107.154	53.476	9.053	1.00	86.39	A16S	ATOM	26628	C2	ADE	377	104.864	52.032	22.063	1.00	64.55	A16S
ATOM	26576	O2P	GUA	375	107.796	55.919	9.507	1.00	86.39	A16S	ATOM	26629	N1	ADE	377	105.465	51.312	21.110	1.00	64.55	A16S
ATOM	26577	O5'	GUA	375	107.597	54.259	11.378	1.00	47.52	A16S	ATOM	26630	C6	ADE	377	105.571	51.840	19.875	1.00	64.55	A16S
ATOM	26578	C5'	GUA	375	107.566	52.950	11.950	1.00	47.52	A16S	ATOM	26631	N6	ADE	377	106.156	51.119	18.924	1.00	64.55	A16S
ATOM	26579	C4'	GUA	375	107.193	53.023	13.410	1.00	47.52	A16S	ATOM	26632	C5	ADE	377	105.052	53.125	19.665	1.00	64.55	A16S
ATOM	26580	O4'	GUA	375	108.257	53.657	14.159	1.00	47.52	A16S	ATOM	26633	N7	ADE	377	105.017	53.947	18.549	1.00	64.55	A16S
ATOM	26581	C1'	GUA	375	107.707	54.385	15.244	1.00	47.52	A16S	ATOM	26634	C8	ADE	377	104.400	55.020	18.969	1.00	64.55	A16S
ATOM	26582	N9	GUA	375	108.063	55.789	15.106	1.00	86.39	A16S	ATOM	26635	C2'	ADE	377	104.148	56.841	21.945	1.00	64.65	A16S
ATOM	26583	C4	GUA	375	108.065	56.717	16.111	1.00	86.39	A16S	ATOM	26636	O2'	ADE	377	103.435	57.168	23.121	1.00	64.65	A16S
ATOM	26584	N3	GUA	375	107.842	56.466	17.416	1.00	86.39	A16S	ATOM	26637	C3'	ADE	377	104.383	58.043	21.039	1.00	64.65	A16S
ATOM	26585	C2	GUA	375	107.840	57.573	18.133	1.00	86.39	A16S	ATOM	26638	O3'	ADE	377	104.616	59.202	21.818	1.00	64.65	A16S
ATOM	26586	N2	GUA	375	107.660	57.515	19.455	1.00	86.39	A16S	ATOM	26639	P	ADE	378	106.081	59.478	22.408	1.00	58.08	A16S
ATOM	26587	N1	GUA	375	108.021	58.824	17.608	1.00	86.39	A16S	ATOM	26640	O1P	ADE	378	106.039	60.748	23.186	1.00	75.70	A16S
ATOM	26588	C6	GUA	375	108.241	59.105	16.267	1.00	86.39	A16S	ATOM	26641	O2P	ADE	378	107.044	59.338	21.276	1.00	75.70	A16S
ATOM	26589	O6	GUA	375	108.350	60.279	15.894	1.00	86.39	A16S	ATOM	26642	O5'	ADE	378	106.337	58.282	23.434	1.00	58.08	A16S
ATOM	26590	C5	GUA	375	108.282	57.926	15.491	1.00	86.39	A16S	ATOM	26643	C5'	ADE	378	105.824	58.318	24.769	1.00	58.08	A16S
ATOM	26591	N7	GUA	375	108.495	57.750	14.133	1.00	86.39	A16S	ATOM	26644	C4'	ADE	378	106.134	57.021	25.479	1.00	58.08	A16S
ATOM	26592	C8	GUA	375	108.373	56.464	13.953	1.00	86.39	A16S	ATOM	26645	O4'	ADE	378	105.575	55.930	24.701	1.00	58.08	A16S
ATOM	26593	C2'	GUA	375	106.185	54.249	15.173	1.00	47.52	A16S	ATOM	26646	C1'	ADE	378	106.441	54.809	24.750	1.00	58.08	A16S
ATOM	26594	O2'	GUA	375	105.752	53.288	16.096	1.00	47.52	A16S	ATOM	26647	N9	ADE	378	106.928	54.543	23.402	1.00	75.70	A16S
ATOM	26595	C3'	GUA	375	105.968	53.865	13.714	1.00	47.52	A16S	ATOM	26648	C4	ADE	378	107.565	53.403	22.987	1.00	75.70	A16S
ATOM	26596	O3'	GUA	375	104.788	53.099	13.537	1.00	47.52	A16S	ATOM	26649	N3	ADE	378	107.870	52.327	23.728	1.00	75.70	A16S
ATOM	26597	P	CYT	376	103.534	53.736	12.773	1.00	56.92	A16S	ATOM	26650	C2	ADE	378	108.479	51.410	22.985	1.00	75.70	A16S
ATOM	26598	O1P	CYT	376	104.086	54.513	11.647	1.00	69.07	A16S	ATOM	26651	N1	ADE	378	108.789	51.442	21.681	1.00	75.70	A16S
ATOM	26599	O2P	CYT	376	102.549	52.652	12.497	1.00	69.07	A16S	ATOM	26652	C6	ADE	378	108.465	52.540	20.967	1.00	75.70	A16S
ATOM	26600	O5'	CYT	376	102.919	54.737	13.849	1.00	56.92	A16S	ATOM	26653	N6	ADE	378	108.762	52.572	19.663	1.00	75.70	A16S
ATOM	26601	C5'	CYT	376	102.010	55.757	13.462	1.00	56.92	A16S	ATOM	26654	C5	ADE	378	107.826	53.587	21.642	1.00	75.70	A16S
ATOM	26602	C4'	CYT	376	101.278	56.291	14.673	1.00	56.92	A16S	ATOM	26655	N7	ADE	378	107.373	54.825	21.220	1.00	75.70	A16S
ATOM	26603	O4'	CYT	376	100.397	55.256	15.198	1.00	56.92	A16S	ATOM	26656	C8	ADE	378	106.851	55.351	22.299	1.00	75.70	A16S
ATOM	26604	C1'	CYT	376	100.307	55.383	16.611	1.00	56.92	A16S	ATOM	26657	C2'	ADE	378	107.574	55.157	25.707	1.00	58.08	A16S
ATOM	26605	N1	CYT	376	100.909	54.196	17.235	1.00	69.07	A16S	ATOM	26658	O2'	ADE	378	107.221	54.717	26.998	1.00	58.08	A16S
ATOM	26606	C6	CYT	376	101.606	53.280	16.501	1.00	69.07	A16S	ATOM	26659	C3'	ADE	378	107.610	56.673	25.590	1.00	58.08	A16S
ATOM	26607	C2	CYT	376	100.784	54.044	18.613	1.00	69.07	A16S	ATOM	26660	O3'	ADE	378	108.172	57.232	26.765	1.00	58.08	A16S
ATOM	26608	O2	CYT	376	100.108	54.868	19.241	1.00	69.07	A16S	ATOM	26661	P	GUA	379	109.514	58.102	26.670	1.00	64.07	A16S
ATOM	26609	N3	CYT	376	101.399	53.009	19.228	1.00	69.07	A16S	ATOM	26662	O1P	GUA	379	110.035	58.244	28.054	1.00	75.26	A16S
ATOM	26610	C4	CYT	376	102.111	52.143	18.513	1.00	69.07	A16S	ATOM	26663	O2P	GUA	379	109.198	59.323	25.877	1.00	75.26	A16S
ATOM	26611	N4	CYT	376	102.737	51.164	19.169	1.00	69.07	A16S	ATOM	26664	O5'	GUA	379	110.517	57.198	25.818	1.00	64.07	A16S
ATOM	26612	C5	CYT	376	102.222	52.248	17.094	1.00	69.07	A16S	ATOM	26665	C5'	GUA	379	110.803	55.862	26.213	1.00	64.07	A16S
ATOM	26613	C2'	CYT	376	101.114	56.626	16.999	1.00	56.92	A16S	ATOM	26666	C4'	GUA	379	111.198	55.005	25.020	1.00	64.07	A16S
ATOM	26614	O2'	CYT	376	100.285	57.768	17.020	1.00	56.92	A16S	ATOM	26667	O4'	GUA	379	110.319	55.274	23.894	1.00	64.07	A16S
ATOM	26615	C3'	CYT	376	102.136	56.678	15.874	1.00	56.92	A16S	ATOM	26668	C1'	GUA	379	110.986	54.933	22.692	1.00	64.07	A16S
ATOM	26616	O3'	CYT	376	102.692	57.987	15.771	1.00	56.92	A16S	ATOM	26669	N9	GUA	379	110.962	56.078	21.790	1.00	75.26	A16S
ATOM	26617	P	ADE	377	104.088	58.330	16.509	1.00	64.65	A16S	ATOM	26670	C4	GUA	379	111.302	56.071	20.459	1.00	75.26	A16S
ATOM	26618	O1P	ADE	377	104.244	59.810	16.493	1.00	64.55	A16S	ATOM	26671	N3	GUA	379	111.742	55.003	19.760	1.00	75.26	A16S
ATOM	26619	O2P	ADE	377	105.153	57.478	15.925	1.00	64.55	A16S	ATOM	26672	C2	GUA	379	111.969	55.304	18.492	1.00	75.26	A16S
ATOM	26620	O5'	ADE	377	103.862	57.930	18.036	1.00	64.65	A16S	ATOM	26673	N2	GUA	379	112.416	54.364	17.652	1.00	75.26	A16S
ATOM	26621	C5'	ADE	377	103.140	58.787	18.921	1.00	64.65	A16S	ATOM	26674	N1	GUA	379	111.777	56.550	17.953	1.00	75.26	A16S
ATOM	26622	C4'	ADE	377	103.062	58.170	20.296	1.00	64.65	A16S	ATOM	26675	C6	GUA	379	111.324	57.662	18.654	1.00	75.26	A16S
ATOM	26623	O4'	ADE	377	102.599	56.803	20.142	1.00	64.65	A16S	ATOM	26676	O6	GUA	379	111.183	58.743	18.067	1.00	75.26	A16S
ATOM	26624	C1'	ADE	377	103.278	55.957	21.055	1.00	64.65	A16S	ATOM	26677	C5	GUA	379	111.081	57.355	20.017	1.00	75.26	A16S

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ATOM  26678  N7  GUA  379     110.627  58.158  21.052  1.00 75.26      A16S
ATOM  26679  C8  GUA  379     110.579  57.361  22.084  1.00 75.26      A16S
ATOM  26680  C2' GUA  379     112.398  54.492  23.071  1.00 64.07      A16S
ATOM  26681  O2' GUA  379     112.397  53.083  23.182  1.00 64.07      A16S
ATOM  26682  C3' GUA  379     112.580  55.180  24.416  1.00 64.07      A16S
ATOM  26683  O3' GUA  379     113.567  54.492  25.175  1.00 64.07      A16S
ATOM  26684  P   CYT  380     115.129  54.824  24.939  1.00 49.02      A16S
ATOM  26685  O1P CYT  380     115.940  54.074  25.937  1.00 64.51      A16S
ATOM  26686  O2P CYT  380     115.271  56.304  24.854  1.00 64.51      A16S
ATOM  26687  O5' CYT  380     115.441  54.235  23.490  1.00 49.02      A16S
ATOM  26688  C5' CYT  380     115.529  52.836  23.279  1.00 49.02      A16S
ATOM  26689  C4' CYT  380     115.994  52.553  21.876  1.00 49.02      A16S
ATOM  26690  O4' CYT  380     114.963  52.937  20.929  1.00 49.02      A16S
ATOM  26691  C1' CYT  380     115.571  53.428  19.743  1.00 49.02      A16S
ATOM  26692  N1  CYT  380     115.189  54.838  19.578  1.00 64.51      A16S
ATOM  26693  C6  CYT  380     114.844  55.604  20.656  1.00 64.51      A16S
ATOM  26694  C2  CYT  380     115.195  55.385  18.299  1.00 64.51      A16S
ATOM  26695  O2  CYT  380     115.507  54.667  17.346  1.00 64.51      A16S
ATOM  26696  N3  CYT  380     114.860  56.680  18.133  1.00 64.51      A16S
ATOM  26697  C4  CYT  380     114.529  57.420  19.188  1.00 64.51      A16S
ATOM  26698  N4  CYT  380     114.202  58.690  18.975  1.00 64.51      A16S
ATOM  26699  C5  CYT  380     114.515  56.887  20.508  1.00 64.51      A16S
ATOM  26700  C2' CYT  380     117.082  53.287  19.930  1.00 49.02      A16S
ATOM  26701  O2' CYT  380     117.524  52.036  19.478  1.00 49.02      A16S
ATOM  26702  C3' CYT  380     117.195  53.362  21.435  1.00 49.02      A16S
ATOM  26703  O3' CYT  380     118.400  52.779  21.855  1.00 49.02      A16S
ATOM  26704  P   CYT  381     119.679  53.708  22.041  1.00 56.63      A16S
ATOM  26705  O1P CYT  381     120.745  52.936  22.724  1.00 67.18      A16S
ATOM  26706  O2P CYT  381     119.192  54.978  22.634  1.00 67.18      A16S
ATOM  26707  O5' CYT  381     120.140  53.989  20.545  1.00 56.63      A16S
ATOM  26708  C5' CYT  381     120.411  52.915  19.660  1.00 56.63      A16S
ATOM  26709  C4' CYT  381     120.570  53.431  18.252  1.00 56.63      A16S
ATOM  26710  O4' CYT  381     119.287  53.859  17.729  1.00 56.63      A16S
ATOM  26711  C1' CYT  381     119.474  54.975  16.871  1.00 56.63      A16S
ATOM  26712  N1  CYT  381     118.835  56.139  17.492  1.00 67.18      A16S
ATOM  26713  C6  CYT  381     118.628  56.190  18.840  1.00 67.18      A16S
ATOM  26714  C2  CYT  381     118.468  57.205  16.683  1.00 67.18      A16S
ATOM  26715  O2  CYT  381     118.626  57.103  15.462  1.00 67.18      A16S
ATOM  26716  N3  CYT  381     117.944  58.316  17.247  1.00 67.18      A16S
ATOM  26717  C4  CYT  381     117.773  58.371  18.568  1.00 67.18      A16S
ATOM  26718  N4  CYT  381     117.280  59.494  19.091  1.00 67.18      A16S
ATOM  26719  C5  CYT  381     118.106  57.277  19.415  1.00 67.18      A16S
ATOM  26720  C2' CYT  381     120.983  55.197  16.763  1.00 56.63      A16S
ATOM  26721  O2' CYT  381     121.496  54.477  15.658  1.00 56.63      A16S
ATOM  26722  C3' CYT  381     121.444  54.658  18.107  1.00 56.63      A16S
ATOM  26723  O3' CYT  381     122.813  54.312  18.124  1.00 56.63      A16S
ATOM  26724  P   URI  382     123.821  55.161  19.036  1.00 50.80      A16S
ATOM  26725  O1P URI  382     125.142  54.465  19.079  1.00 67.17      A16S
ATOM  26726  O2P URI  382     123.110  55.489  20.297  1.00 67.17      A16S
ATOM  26727  O5' URI  382     124.006  56.508  18.219  1.00 50.80      A16S
ATOM  26728  C5' URI  382     123.956  56.493  16.800  1.00 50.80      A16S
ATOM  26729  C4' URI  382     123.934  57.896  16.268  1.00 50.80      A16S
ATOM  26730  O4' URI  382     122.592  58.436  16.177  1.00 50.80      A16S
ATOM  26731  C1' URI  382     122.664  59.852  16.241  1.00 50.80      A16S
ATOM  26732  N1  URI  382     121.780  60.326  17.314  1.00 67.17      A16S
ATOM  26733  C6  URI  382     121.820  59.783  18.572  1.00 67.17      A16S
ATOM  26734  C2  URI  382     120.930  61.361  17.018  1.00 67.17      A16S
ATOM  26735  O2  URI  382     120.822  61.819  15.903  1.00 67.17      A16S
ATOM  26736  N3  URI  382     120.202  61.835  18.077  1.00 67.17      A16S
ATOM  26737  C4  URI  382     120.225  61.372  19.379  1.00 67.17      A16S
ATOM  26738  O4  URI  382     119.638  62.012  20.266  1.00 67.17      A16S
ATOM  26739  C5  URI  382     121.089  60.255  19.587  1.00 67.17      A16S
ATOM  26740  C2' URI  382     124.136  60.209  16.486  1.00 50.80      A16S
ATOM  26741  O2' URI  382     124.709  60.474  15.224  1.00 50.80      A16S
ATOM  26742  C3' URI  382     124.657  58.917  17.114  1.00 50.80      A16S
ATOM  26743  O3' URI  382     126.047  58.661  16.986  1.00 50.80      A16S
ATOM  26744  P   GUA  383     127.104  59.500  17.841  1.00 59.86      A16S
ATOM  26745  O1P GUA  383     128.212  58.584  18.161  1.00 47.41      A16S
ATOM  26746  O2P GUA  383     126.389  60.191  18.932  1.00 47.41      A16S
ATOM  26747  O5' GUA  383     127.643  60.544  16.760  1.00 59.86      A16S
ATOM  26748  C5' GUA  383     128.075  61.850  17.125  1.00 59.86      A16S
ATOM  26749  C4' GUA  383     129.572  61.908  17.106  1.00 59.86      A16S
ATOM  26750  O4' GUA  383     130.074  60.965  18.052  1.00 59.86      A16S
ATOM  26751  C1' GUA  383     131.374  60.648  17.678  1.00 59.86      A16S
ATOM  26752  N9  GUA  383     131.807  59.428  18.333  1.00 47.41      A16S
ATOM  26753  C4  GUA  383     132.986  59.286  19.009  1.00 47.41      A16S
ATOM  26754  N3  GUA  383     133.947  60.227  19.123  1.00 47.41      A16S
ATOM  26755  C2  GUA  383     134.963  59.811  19.858  1.00 47.41      A16S
ATOM  26756  N2  GUA  383     136.018  60.615  20.057  1.00 47.41      A16S
ATOM  26757  N1  GUA  383     135.021  58.573  20.447  1.00 47.41      A16S
ATOM  26758  C6  GUA  383     134.038  57.589  20.340  1.00 47.41      A16S
ATOM  26759  O6  GUA  383     134.185  56.500  20.913  1.00 47.41      A16S
ATOM  26760  C5  GUA  383     132.952  58.023  19.540  1.00 47.41      A16S
ATOM  26761  N7  GUA  383     131.786  57.368  19.173  1.00 47.41      A16S
ATOM  26762  C8  GUA  383     131.142  58.240  18.448  1.00 47.41      A16S
ATOM  26763  C2' GUA  383     131.511  60.794  16.169  1.00 59.86      A16S
ATOM  26764  O2' GUA  383     132.662  61.563  16.016  1.00 59.86      A16S
ATOM  26765  C3' GUA  383     130.240  61.561  15.781  1.00 59.86      A16S
ATOM  26766  O3' GUA  383     130.688  62.824  15.305  1.00 59.86      A16S
ATOM  26767  P   ADE  384     130.579  63.221  13.762  1.00 56.01      A16S
ATOM  26768  O1P ADE  384     130.517  61.982  12.954  1.00 55.47      A16S
ATOM  26769  O2P ADE  384     131.670  64.191  13.519  1.00 55.47      A16S
ATOM  26770  O5' ADE  384     129.190  64.002  13.701  1.00 56.01      A16S
ATOM  26771  C5' ADE  384     128.705  64.448  12.456  1.00 56.01      A16S
ATOM  26772  C4' ADE  384     127.440  65.274  12.592  1.00 56.01      A16S
ATOM  26773  O4' ADE  384     126.331  64.499  13.104  1.00 56.01      A16S
ATOM  26774  C1' ADE  384     125.283  65.397  13.414  1.00 56.01      A16S
ATOM  26775  N9  ADE  384     124.768  65.116  14.749  1.00 55.47      A16S
ATOM  26776  C4  ADE  384     123.827  65.893  15.376  1.00 55.47      A16S
ATOM  26777  N3  ADE  384     123.235  66.995  14.890  1.00 55.47      A16S
ATOM  26778  C2  ADE  384     122.377  67.489  15.769  1.00 55.47      A16S
ATOM  26779  N1  ADE  384     122.064  67.044  16.986  1.00 55.47      A16S
ATOM  26780  C6  ADE  384     122.677  65.935  17.444  1.00 55.47      A16S
ATOM  26781  N6  ADE  384     122.360  65.498  18.659  1.00 55.47      A16S
ATOM  26782  C5  ADE  384     123.614  65.313  16.605  1.00 55.47      A16S
ATOM  26783  N7  ADE  384     124.408  64.184  16.755  1.00 55.47      A16S
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ATOM  26784  C8  ADE  384     125.070  64.110  15.625  1.00 55.47      A16S
ATOM  26785  C2' ADE  384     125.875  66.807  13.325  1.00 56.01      A16S
ATOM  26786  O2' ADE  384     125.594  67.320  12.037  1.00 56.01      A16S
ATOM  26787  C3' ADE  384     127.363  66.524  13.444  1.00 56.01      A16S
ATOM  26788  O3' ADE  384     128.029  67.616  12.835  1.00 56.01      A16S
ATOM  26789  P   CYT  385     128.662  68.777  13.749  1.00 52.83      A16S
ATOM  26790  O1P CYT  385     128.668  70.014  12.923  1.00 50.95      A16S
ATOM  26791  O2P CYT  385     129.931  68.283  14.346  1.00 50.95      A16S
ATOM  26792  O5' CYT  385     127.633  68.968  14.945  1.00 52.83      A16S
ATOM  26793  C5' CYT  385     126.452  69.729  14.781  1.00 52.83      A16S
ATOM  26794  C4' CYT  385     125.597  69.628  16.019  1.00 52.83      A16S
ATOM  26795  O4' CYT  385     125.383  68.223  16.322  1.00 52.83      A16S
ATOM  26796  C1' CYT  385     125.381  68.035  17.722  1.00 52.83      A16S
ATOM  26797  N1  CYT  385     126.536  67.194  18.060  1.00 50.95      A16S
ATOM  26798  C6  CYT  385     127.673  67.242  17.306  1.00 50.95      A16S
ATOM  26799  C2  CYT  385     126.460  66.346  19.163  1.00 50.95      A16S
ATOM  26800  O2  CYT  385     125.413  66.317  19.823  1.00 50.95      A16S
ATOM  26801  N3  CYT  385     127.532  65.581  19.483  1.00 50.95      A16S
ATOM  26802  C4  CYT  385     128.641  65.650  18.746  1.00 50.95      A16S
ATOM  26803  N4  CYT  385     129.680  64.907  19.105  1.00 50.95      A16S
ATOM  26804  C5  CYT  385     128.737  66.494  17.610  1.00 50.95      A16S
ATOM  26805  C2' CYT  385     125.418  69.432  18.348  1.00 52.83      A16S
ATOM  26806  O2' CYT  385     124.095  69.927  18.416  1.00 52.83      A16S
ATOM  26807  C3' CYT  385     126.184  70.213  17.295  1.00 52.83      A16S
ATOM  26808  O3' CYT  385     125.824  71.593  17.360  1.00 52.83      A16S
ATOM  26809  P   GUA  386     126.826  72.676  18.017  1.00 52.49      A16S
ATOM  26810  O1P GUA  386     126.398  73.997  17.486  1.00 59.93      A16S
ATOM  26811  O2P GUA  386     128.240  72.245  17.880  1.00 59.93      A16S
ATOM  26812  O5' GUA  386     126.477  72.651  19.566  1.00 52.49      A16S
ATOM  26813  C5' GUA  386     125.165  72.942  20.022  1.00 52.49      A16S
ATOM  26814  C4' GUA  386     125.028  72.516  21.454  1.00 52.49      A16S
ATOM  26815  O4' GUA  386     125.063  71.065  21.543  1.00 52.49      A16S
ATOM  26816  C1' GUA  386     125.798  70.678  22.689  1.00 52.49      A16S
ATOM  26817  N9  GUA  386     126.939  69.894  22.236  1.00 59.93      A16S
ATOM  26818  C4  GUA  386     127.644  68.956  22.954  1.00 59.93      A16S
ATOM  26819  N3  GUA  386     127.423  68.605  24.236  1.00 59.93      A16S
ATOM  26820  C2  GUA  386     128.247  67.655  24.637  1.00 59.93      A16S
ATOM  26821  N2  GUA  386     128.164  67.185  25.884  1.00 59.93      A16S
ATOM  26822  N1  GUA  386     129.212  67.097  23.844  1.00 59.93      A16S
ATOM  26823  C6  GUA  386     129.460  67.446  22.523  1.00 59.93      A16S
ATOM  26824  O6  GUA  386     130.362  66.878  21.891  1.00 59.93      A16S
ATOM  26825  C5  GUA  386     128.585  68.462  22.082  1.00 59.93      A16S
ATOM  26826  N7  GUA  386     128.493  69.092  20.852  1.00 59.93      A16S
ATOM  26827  C8  GUA  386     127.506  69.932  20.992  1.00 59.93      A16S
ATOM  26828  C2' GUA  386     126.177  71.959  23.443  1.00 52.49      A16S
ATOM  26829  O2' GUA  386     125.212  72.273  24.435  1.00 52.49      A16S
ATOM  26830  C3' GUA  386     126.184  72.982  22.316  1.00 52.49      A16S
ATOM  26831  O3' GUA  386     125.948  74.304  22.781  1.00 52.49      A16S
ATOM  26832  P   GUA  387     127.120  75.099  23.539  1.00 52.68      A16S
ATOM  26833  O1P GUA  387     126.455  76.047  24.462  1.00 59.77      A16S
ATOM  26834  O2P GUA  387     128.103  75.608  22.557  1.00 59.77      A16S
ATOM  26835  O5' GUA  387     127.812  73.960  24.398  1.00 52.68      A16S
ATOM  26836  C5' GUA  387     129.147  74.075  24.858  1.00 52.68      A16S
ATOM  26837  C4' GUA  387     129.420  72.972  25.849  1.00 52.68      A16S
ATOM  26838  O4' GUA  387     129.103  71.688  25.242  1.00 52.68      A16S
ATOM  26839  C1' GUA  387     129.965  70.695  25.766  1.00 52.68      A16S
ATOM  26840  N9  GUA  387     130.720  70.100  24.669  1.00 59.77      A16S
ATOM  26841  C4  GUA  387     131.618  69.071  24.780  1.00 59.77      A16S
ATOM  26842  N3  GUA  387     131.925  68.413  25.914  1.00 59.77      A16S
ATOM  26843  C2  GUA  387     132.844  67.493  25.716  1.00 59.77      A16S
ATOM  26844  N2  GUA  387     133.266  66.744  26.740  1.00 59.77      A16S
ATOM  26845  N1  GUA  387     133.417  67.238  24.500  1.00 59.77      A16S
ATOM  26846  C6  GUA  387     133.111  67.897  23.318  1.00 59.77      A16S
ATOM  26847  O6  GUA  387     133.686  67.581  22.278  1.00 59.77      A16S
ATOM  26848  C5  GUA  387     132.125  68.888  23.517  1.00 59.77      A16S
ATOM  26849  N7  GUA  387     131.536  69.765  22.620  1.00 59.77      A16S
ATOM  26850  C8  GUA  387     130.706  70.460  23.347  1.00 59.77      A16S
ATOM  26851  C2' GUA  387     130.878  71.386  26.784  1.00 52.68      A16S
ATOM  26852  O2' GUA  387     130.320  71.268  28.078  1.00 52.68      A16S
ATOM  26853  C3' GUA  387     130.860  72.816  26.272  1.00 52.68      A16S
ATOM  26854  O3' GUA  387     131.189  73.750  27.280  1.00 52.68      A16S
ATOM  26855  P   ADE  388     132.644  74.408  27.277  1.00 49.04      A16S
ATOM  26856  O1P ADE  388     132.641  75.635  28.109  1.00 63.19      A16S
ATOM  26857  O2P ADE  388     133.070  74.479  25.858  1.00 63.19      A16S
ATOM  26858  O5' ADE  388     133.559  73.313  27.977  1.00 49.04      A16S
ATOM  26859  C5' ADE  388     133.312  72.876  29.305  1.00 49.04      A16S
ATOM  26860  C4' ADE  388     134.114  71.635  29.579  1.00 49.04      A16S
ATOM  26861  O4' ADE  388     133.626  70.564  28.726  1.00 49.04      A16S
ATOM  26862  C1' ADE  388     134.712  69.735  28.328  1.00 49.04      A16S
ATOM  26863  N9  ADE  388     134.862  69.843  26.886  1.00 63.19      A16S
ATOM  26864  C4  ADE  388     135.704  69.091  26.110  1.00 63.19      A16S
ATOM  26865  N3  ADE  388     136.514  68.100  26.514  1.00 63.19      A16S
ATOM  26866  C2  ADE  388     137.207  67.621  25.486  1.00 63.19      A16S
ATOM  26867  N1  ADE  388     137.181  67.993  24.201  1.00 63.19      A16S
ATOM  26868  C6  ADE  388     136.349  68.990  23.838  1.00 63.19      A16S
ATOM  26869  N6  ADE  388     136.317  69.364  22.563  1.00 63.19      A16S
ATOM  26870  C5  ADE  388     135.566  69.577  24.829  1.00 63.19      A16S
ATOM  26871  N7  ADE  388     134.636  70.602  24.793  1.00 63.19      A16S
ATOM  26872  C8  ADE  388     134.244  70.714  26.036  1.00 63.19      A16S
ATOM  26873  C2' ADE  388     135.969  70.283  28.998  1.00 49.04      A16S
ATOM  26874  O2' ADE  388     136.240  69.557  30.183  1.00 49.04      A16S
ATOM  26875  C3' ADE  388     135.577  71.741  29.199  1.00 49.04      A16S
ATOM  26876  O3' ADE  388     136.336  72.369  30.206  1.00 49.04      A16S
ATOM  26877  P   GUA  389     137.773  72.975  29.834  1.00 53.79      A16S
ATOM  26878  O1P GUA  389     138.427  73.409  31.101  1.00 65.86      A16S
ATOM  26879  O2P GUA  389     137.589  73.955  28.735  1.00 65.86      A16S
ATOM  26880  O5' GUA  389     138.567  71.720  29.256  1.00 53.79      A16S
ATOM  26881  C5' GUA  389     138.891  70.626  30.100  1.00 53.79      A16S
ATOM  26882  C4' GUA  389     139.869  69.714  29.417  1.00 53.79      A16S
ATOM  26883  O4' GUA  389     139.246  69.081  28.271  1.00 53.79      A16S
ATOM  26884  C1' GUA  389     140.224  68.860  27.271  1.00 53.79      A16S
ATOM  26885  N9  GUA  389     139.801  69.535  26.054  1.00 65.86      A16S
ATOM  26886  C4  GUA  389     140.401  69.402  24.843  1.00 65.86      A16S
ATOM  26887  N3  GUA  389     141.478  68.648  24.591  1.00 65.86      A16S
ATOM  26888  C2  GUA  389     141.831  68.706  23.330  1.00 65.86      A16S
ATOM  26889  N2  GUA  389     142.882  68.022  22.926  1.00 65.86      A16S
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ATOM  26890  N1  GUA  389     141.177  69.442  22.379  1.00 65.86      A16S
ATOM  26891  C6  GUA  389     140.062  70.227  22.610  1.00 65.86      A16S
ATOM  26892  O6  GUA  389     139.549  70.844  21.672  1.00 65.86      A16S
ATOM  26893  C5  GUA  389     139.672  70.181  23.978  1.00 65.86      A16S
ATOM  26894  N7  GUA  389     138.635  70.811  24.647  1.00 65.86      A16S
ATOM  26895  C8  GUA  389     138.754  70.400  25.880  1.00 65.86      A16S
ATOM  26896  C2' GUA  389     141.549  69.422  27.786  1.00 53.79      A16S
ATOM  26897  O2' GUA  389     142.342  68.394  28.325  1.00 53.79      A16S
ATOM  26898  C3' GUA  389     141.062  70.422  28.823  1.00 53.79      A16S
ATOM  26899  O3' GUA  389     142.022  70.692  29.815  1.00 53.79      A16S
ATOM  26900  P   CYT  390     142.910  72.012  29.695  1.00 49.32      A16S
ATOM  26901  O1P CYT  390     143.669  72.204  30.956  1.00 54.91      A16S
ATOM  26902  O2P CYT  390     142.010  73.078  29.223  1.00 54.91      A16S
ATOM  26903  O5' CYT  390     143.917  71.639  28.522  1.00 49.32      A16S
ATOM  26904  C5' CYT  390     144.840  70.565  28.668  1.00 49.32      A16S
ATOM  26905  C4' CYT  390     145.640  70.396  27.401  1.00 49.32      A16S
ATOM  26906  O4' CYT  390     144.765  69.932  26.348  1.00 49.32      A16S
ATOM  26907  C1' CYT  390     145.210  70.447  25.104  1.00 49.32      A16S
ATOM  26908  N1  CYT  390     144.121  71.213  24.501  1.00 54.91      A16S
ATOM  26909  C6  CYT  390     143.100  71.724  25.250  1.00 54.91      A16S
ATOM  26910  C2  CYT  390     144.154  71.408  23.137  1.00 54.91      A16S
ATOM  26911  O2  CYT  390     145.098  70.936  22.503  1.00 54.91      A16S
ATOM  26912  N3  CYT  390     143.166  72.103  22.538  1.00 54.91      A16S
ATOM  26913  C4  CYT  390     142.169  72.595  23.266  1.00 54.91      A16S
ATOM  26914  N4  CYT  390     141.214  73.268  22.630  1.00 54.91      A16S
ATOM  26915  C5  CYT  390     142.109  72.416  24.677  1.00 54.91      A16S
ATOM  26916  C2' CYT  390     146.429  71.319  25.374  1.00 49.32      A16S
ATOM  26917  O2' CYT  390     147.601  70.574  25.149  1.00 49.32      A16S
ATOM  26918  C3' CYT  390     146.205  71.678  26.830  1.00 49.32      A16S
ATOM  26919  O3' CYT  390     147.399  72.044  27.467  1.00 49.32      A16S
ATOM  26920  P   GUA  391     147.743  73.596  27.623  1.00 62.32      A16S
ATOM  26921  O1P GUA  391     148.981  73.694  28.447  1.00 51.90      A16S
ATOM  26922  O2P GUA  391     146.514  74.324  28.041  1.00 51.90      A16S
ATOM  26923  O5' GUA  391     148.120  74.018  26.142  1.00 62.32      A16S
ATOM  26924  C5' GUA  391     149.349  73.593  25.583  1.00 62.32      A16S
ATOM  26925  C4' GUA  391     149.556  74.245  24.250  1.00 62.32      A16S
ATOM  26926  O4' GUA  391     148.586  73.719  23.316  1.00 62.32      A16S
ATOM  26927  C1' GUA  391     148.251  74.720  22.378  1.00 62.32      A16S
ATOM  26928  N9  GUA  391     146.812  74.935  22.425  1.00 51.90      A16S
ATOM  26929  C4  GUA  391     146.030  75.373  21.394  1.00 51.90      A16S
ATOM  26930  N3  GUA  391     146.454  75.639  20.145  1.00 51.90      A16S
ATOM  26931  C2  GUA  391     145.480  76.084  19.381  1.00 51.90      A16S
ATOM  26932  N2  GUA  391     145.734  76.405  18.099  1.00 51.90      A16S
ATOM  26933  N1  GUA  391     144.187  76.251  19.810  1.00 51.90      A16S
ATOM  26934  C6  GUA  391     143.723  75.975  21.090  1.00 51.90      A16S
ATOM  26935  O6  GUA  391     142.523  76.162  21.371  1.00 51.90      A16S
ATOM  26936  C5  GUA  391     144.765  75.495  21.920  1.00 51.90      A16S
ATOM  26937  N7  GUA  391     144.748  75.107  23.247  1.00 51.90      A16S
ATOM  26938  C8  GUA  391     145.981  74.774  23.501  1.00 51.90      A16S
ATOM  26939  C2' GUA  391     149.064  75.963  22.741  1.00 62.32      A16S
ATOM  26940  O2' GUA  391     150.278  75.875  22.050  1.00 62.32      A16S
ATOM  26941  C3' GUA  391     149.322  75.743  24.221  1.00 62.32      A16S
ATOM  26942  O3' GUA  391     150.510  76.413  24.631  1.00 62.32      A16S
ATOM  26943  P   ADE  392     150.470  77.449  25.863  1.00 60.12      A16S
ATOM  26944  O1P ADE  392     151.876  77.768  26.223  1.00 54.63      A16S
ATOM  26945  O2P ADE  392     149.529  76.966  26.908  1.00 54.63      A16S
ATOM  26946  O5' ADE  392     149.832  78.753  25.236  1.00 60.12      A16S
ATOM  26947  C5' ADE  392     150.512  79.444  24.222  1.00 60.12      A16S
ATOM  26948  C4' ADE  392     149.659  80.546  23.699  1.00 60.12      A16S
ATOM  26949  O4' ADE  392     149.418  81.507  24.758  1.00 60.12      A16S
ATOM  26950  C1' ADE  392     149.469  82.815  24.224  1.00 60.12      A16S
ATOM  26951  N9  ADE  392     150.574  83.526  24.867  1.00 54.63      A16S
ATOM  26952  C4  ADE  392     151.893  83.150  24.965  1.00 54.63      A16S
ATOM  26953  N3  ADE  392     152.461  82.034  24.496  1.00 54.63      A16S
ATOM  26954  C2  ADE  392     153.767  82.017  24.781  1.00 54.63      A16S
ATOM  26955  N1  ADE  392     154.508  82.919  25.435  1.00 54.63      A16S
ATOM  26956  C6  ADE  392     153.901  84.026  25.894  1.00 54.63      A16S
ATOM  26957  N6  ADE  392     154.633  84.925  26.551  1.00 54.63      A16S
ATOM  26958  C5  ADE  392     152.524  84.165  25.652  1.00 54.63      A16S
ATOM  26959  N7  ADE  392     151.626  85.160  25.978  1.00 54.63      A16S
ATOM  26960  C8  ADE  392     150.488  84.731  25.497  1.00 54.63      A16S
ATOM  26961  C2' ADE  392     149.600  82.664  22.709  1.00 60.12      A16S
ATOM  26962  O2' ADE  392     148.309  82.552  22.139  1.00 60.12      A16S
ATOM  26963  C3' ADE  392     150.349  81.347  22.625  1.00 60.12      A16S
ATOM  26964  O3' ADE  392     150.162  80.682  21.396  1.00 60.12      A16S
ATOM  26965  P   CYT  393     151.095  79.430  21.030  1.00 51.35      A16S
ATOM  26966  O1P CYT  393     150.484  78.247  21.663  1.00 50.51      A16S
ATOM  26967  O2P CYT  393     152.507  79.783  21.327  1.00 50.51      A16S
ATOM  26968  O5' CYT  393     150.891  79.268  19.463  1.00 51.35      A16S
ATOM  26969  C5' CYT  393     151.193  80.344  18.580  1.00 51.35      A16S
ATOM  26970  C4' CYT  393     149.968  80.751  17.806  1.00 51.35      A16S
ATOM  26971  O4' CYT  393     148.995  79.678  17.821  1.00 51.35      A16S
ATOM  26972  C1' CYT  393     147.689  80.220  17.759  1.00 51.35      A16S
ATOM  26973  N1  CYT  393     146.947  79.812  18.957  1.00 50.51      A16S
ATOM  26974  C6  CYT  393     147.595  79.375  20.079  1.00 50.51      A16S
ATOM  26975  C2  CYT  393     145.554  79.873  18.924  1.00 50.51      A16S
ATOM  26976  O2  CYT  393     145.004  80.284  17.896  1.00 50.51      A16S
ATOM  26977  N3  CYT  393     144.847  79.484  20.003  1.00 50.51      A16S
ATOM  26978  C4  CYT  393     145.483  79.040  21.086  1.00 50.51      A16S
ATOM  26979  N4  CYT  393     144.744  78.633  22.122  1.00 50.51      A16S
ATOM  26980  C5  CYT  393     146.911  78.983  21.156  1.00 50.51      A16S
ATOM  26981  C2' CYT  393     147.850  81.730  17.669  1.00 51.35      A16S
ATOM  26982  O2' CYT  393     147.928  82.045  16.297  1.00 51.35      A16S
ATOM  26983  C3' CYT  393     149.187  81.915  18.367  1.00 51.35      A16S
ATOM  26984  O3' CYT  393     149.821  83.107  17.951  1.00 51.35      A16S
ATOM  26985  P   GUA  394     149.502  84.483  18.698  1.00 47.03      A16S
ATOM  26986  O1P GUA  394     150.461  85.442  18.099  1.00 51.21      A16S
ATOM  26987  O2P GUA  394     149.491  84.272  20.168  1.00 51.21      A16S
ATOM  26988  O5' GUA  394     148.027  84.849  18.219  1.00 47.03      A16S
ATOM  26989  C5' GUA  394     147.779  85.181  16.861  1.00 47.03      A16S
ATOM  26990  C4' GUA  394     146.327  85.513  16.657  1.00 47.03      A16S
ATOM  26991  O4' GUA  394     145.518  84.354  16.958  1.00 47.03      A16S
ATOM  26992  C1' GUA  394     144.256  84.773  17.450  1.00 47.03      A16S
ATOM  26993  N9  GUA  394     144.017  84.132  18.739  1.00 51.21      A16S
ATOM  26994  C4  GUA  394     142.818  84.038  19.383  1.00 51.21      A16S
ATOM  26995  N3  GUA  394     141.657  84.551  18.951  1.00 51.21      A16S
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ATOM	26996	C2	GUA	394	140.661	84.293	19.777	1.00	51.21	A16S	ATOM	27049	O1P	GUA	397	140.220	96.592	25.495	1.00	56.21	A16S
ATOM	26997	N2	GUA	394	139.432	84.741	19.488	1.00	51.21	A16S	ATOM	27050	O2P	GUA	397	141.924	94.698	25.159	1.00	56.21	A16S
ATOM	26998	N1	GUA	394	140.797	83.577	20.943	1.00	51.21	A16S	ATOM	27051	O5'	GUA	397	139.962	94.393	26.661	1.00	46.02	A16S
ATOM	26999	C6	GUA	394	141.994	83.033	21.408	1.00	51.21	A16S	ATOM	27052	C5'	GUA	397	138.590	94.505	27.028	1.00	46.02	A16S
ATOM	27000	O6	GUA	394	142.014	82.386	22.469	1.00	51.21	A16S	ATOM	27053	C4'	GUA	397	138.324	93.716	28.285	1.00	46.02	A16S
ATOM	27001	C5	GUA	394	143.068	83.317	20.527	1.00	51.21	A16S	ATOM	27054	O4'	GUA	397	138.439	92.294	28.006	1.00	46.02	A16S
ATOM	27002	N7	GUA	394	144.411	82.983	20.614	1.00	51.21	A16S	ATOM	27055	C1'	GUA	397	139.011	91.629	29.129	1.00	46.02	A16S
ATOM	27003	C8	GUA	394	144.936	83.493	19.535	1.00	51.21	A16S	ATOM	27056	N9	GUA	397	140.268	91.005	28.718	1.00	56.21	A16S
ATOM	27004	C2'	GUA	394	144.277	86.298	17.508	1.00	47.03	A16S	ATOM	27057	C4	GUA	397	140.994	90.084	29.435	1.00	56.21	A16S
ATOM	27005	O2'	GUA	394	143.694	86.787	16.323	1.00	47.03	A16S	ATOM	27058	N3	GUA	397	140.659	89.571	30.637	1.00	56.21	A16S
ATOM	27006	C3'	GUA	394	145.772	86.577	17.579	1.00	47.03	A16S	ATOM	27059	C2	GUA	397	141.569	88.725	31.088	1.00	56.21	A16S
ATOM	27007	O3'	GUA	394	146.106	87.873	17.094	1.00	47.03	A16S	ATOM	27060	N2	GUA	397	141.394	88.128	32.274	1.00	56.21	A16S
ATOM	27008	P	CYT	395	146.233	89.104	18.123	1.00	47.54	A16S	ATOM	27061	N1	GUA	397	142.716	88.402	30.414	1.00	56.21	A16S
ATOM	27009	O1P	CYT	395	146.696	90.256	17.304	1.00	48.58	A16S	ATOM	27062	C6	GUA	397	143.085	88.908	29.176	1.00	56.21	A16S
ATOM	27010	O2P	CYT	395	147.004	88.701	19.325	1.00	48.58	A16S	ATOM	27063	O6	GUA	397	144.152	88.546	28.659	1.00	56.21	A16S
ATOM	27011	O5'	CYT	395	144.723	89.392	18.534	1.00	47.54	A16S	ATOM	27064	C5	GUA	397	142.111	89.824	28.674	1.00	56.21	A16S
ATOM	27012	C5'	CYT	395	143.834	89.948	17.578	1.00	47.54	A16S	ATOM	27065	N7	GUA	397	142.079	90.550	27.492	1.00	56.21	A16S
ATOM	27013	C4'	CYT	395	142.432	89.960	18.109	1.00	47.54	A16S	ATOM	27066	C8	GUA	397	140.968	91.230	27.560	1.00	56.21	A16S
ATOM	27014	O4'	CYT	395	141.990	88.600	18.332	1.00	47.54	A16S	ATOM	27067	C2'	GUA	397	139.192	92.688	30.218	1.00	46.02	A16S
ATOM	27015	C1'	CYT	395	141.128	88.559	19.456	1.00	47.54	A16S	ATOM	27068	O2'	GUA	397	138.031	92.716	31.019	1.00	46.02	A16S
ATOM	27016	N1	CYT	395	141.749	87.728	20.495	1.00	48.58	A16S	ATOM	27069	C3'	GUA	397	139.338	93.949	29.383	1.00	46.02	A16S
ATOM	27017	C6	CYT	395	143.096	87.525	20.528	1.00	48.58	A16S	ATOM	27070	O3'	GUA	397	139.021	95.116	30.106	1.00	46.02	A16S
ATOM	27018	C2	CYT	395	140.933	87.161	21.456	1.00	48.58	A16S	ATOM	27071	P	CYT	398	140.170	95.862	30.943	1.00	52.43	A16S
ATOM	27019	O2	CYT	395	139.712	87.358	21.379	1.00	48.58	A16S	ATOM	27072	O1P	CYT	398	139.444	96.819	31.818	1.00	53.81	A16S
ATOM	27020	N3	CYT	395	141.481	86.412	22.440	1.00	48.58	A16S	ATOM	27073	O2P	CYT	398	141.251	96.354	30.055	1.00	53.81	A16S
ATOM	27021	C4	CYT	395	142.794	86.220	22.469	1.00	48.58	A16S	ATOM	27074	O5'	CYT	398	140.781	94.715	31.866	1.00	52.43	A16S
ATOM	27022	N4	CYT	395	143.298	85.473	23.446	1.00	48.58	A16S	ATOM	27075	C5'	CYT	398	140.098	94.324	33.044	1.00	52.43	A16S
ATOM	27023	C5	CYT	395	143.654	86.785	21.490	1.00	48.58	A16S	ATOM	27076	C4'	CYT	398	140.934	93.384	33.873	1.00	52.43	A16S
ATOM	27024	C2'	CYT	395	140.951	90.001	19.926	1.00	47.54	A16S	ATOM	27077	O4'	CYT	398	141.174	92.153	33.148	1.00	52.43	A16S
ATOM	27025	O2'	CYT	395	139.821	90.548	19.289	1.00	47.54	A16S	ATOM	27078	C1'	CYT	398	142.253	91.471	33.767	1.00	52.43	A16S
ATOM	27026	C3'	CYT	395	142.256	90.622	19.456	1.00	47.54	A16S	ATOM	27079	N1	CYT	398	143.266	91.108	32.771	1.00	53.81	A16S
ATOM	27027	O3'	CYT	395	142.155	92.025	19.313	1.00	47.54	A16S	ATOM	27080	C6	CYT	398	143.391	91.781	31.591	1.00	53.81	A16S
ATOM	27028	P	CYT	396	142.598	92.974	20.527	1.00	46.02	A16S	ATOM	27081	C2	CYT	398	144.144	90.071	33.087	1.00	53.81	A16S
ATOM	27029	O1P	CYT	396	142.554	94.390	20.074	1.00	56.86	A16S	ATOM	27082	O2	CYT	398	143.966	89.440	34.144	1.00	53.81	A16S
ATOM	27030	O2P	CYT	396	143.859	92.426	21.080	1.00	56.86	A16S	ATOM	27083	N3	CYT	398	145.158	89.779	32.242	1.00	53.81	A16S
ATOM	27031	O5'	CYT	396	141.426	92.774	21.583	1.00	46.02	A16S	ATOM	27084	C4	CYT	398	145.299	90.467	31.113	1.00	53.81	A16S
ATOM	27032	C5'	CYT	396	140.122	93.262	21.301	1.00	46.02	A16S	ATOM	27085	N4	CYT	398	146.332	90.163	30.329	1.00	53.81	A16S
ATOM	27033	C4'	CYT	396	139.194	92.924	22.428	1.00	46.02	A16S	ATOM	27086	C5	CYT	398	144.389	91.500	30.743	1.00	53.81	A16S
ATOM	27034	O4'	CYT	396	138.963	91.491	22.437	1.00	46.02	A16S	ATOM	27087	C2'	CYT	398	142.855	92.439	34.785	1.00	52.43	A16S
ATOM	27035	C1'	CYT	396	138.890	91.024	23.776	1.00	46.02	A16S	ATOM	27088	O2'	CYT	398	142.337	92.125	36.058	1.00	52.43	A16S
ATOM	27036	N1	CYT	396	140.076	90.187	24.043	1.00	56.86	A16S	ATOM	27089	C3'	CYT	398	142.345	93.774	34.266	1.00	52.43	A16S
ATOM	27037	C6	CYT	396	141.230	90.365	23.339	1.00	56.86	A16S	ATOM	27090	O3'	CYT	398	142.419	94.759	35.289	1.00	52.43	A16S
ATOM	27038	C2	CYT	396	140.015	89.236	25.067	1.00	56.86	A16S	ATOM	27091	P	URI	399	143.848	95.420	35.650	1.00	51.18	A16S
ATOM	27039	O2	CYT	396	138.939	89.045	25.640	1.00	56.86	A16S	ATOM	27092	O1P	URI	399	143.618	96.560	36.570	1.00	59.30	A16S
ATOM	27040	N3	CYT	396	141.127	88.550	25.403	1.00	56.86	A16S	ATOM	27093	O2P	URI	399	144.598	95.643	34.385	1.00	59.30	A16S
ATOM	27041	C4	CYT	396	142.263	88.773	24.748	1.00	56.86	A16S	ATOM	27094	O5'	URI	399	144.607	94.295	36.485	1.00	51.18	A16S
ATOM	27042	N4	CYT	396	143.354	88.121	25.151	1.00	56.86	A16S	ATOM	27095	C5'	URI	399	144.099	93.872	37.747	1.00	51.18	A16S
ATOM	27043	C5	CYT	396	142.338	89.689	23.657	1.00	56.86	A16S	ATOM	27096	C4'	URI	399	145.023	92.867	38.382	1.00	51.18	A16S
ATOM	27044	C2'	CYT	396	138.917	92.277	24.656	1.00	46.02	A16S	ATOM	27097	O4'	URI	399	145.108	91.680	37.557	1.00	51.18	A16S
ATOM	27045	O2'	CYT	396	137.617	92.797	24.821	1.00	46.02	A16S	ATOM	27098	C1'	URI	399	146.412	91.135	37.652	1.00	51.18	A16S
ATOM	27046	C3'	CYT	396	139.765	93.198	23.802	1.00	46.02	A16S	ATOM	27099	N1	URI	399	147.010	91.147	36.315	1.00	59.30	A16S
ATOM	27047	O3'	CYT	396	139.624	94.554	24.176	1.00	46.02	A16S	ATOM	27100	C6	URI	399	146.431	91.826	35.276	1.00	59.30	A16S
ATOM	27048	P	GUA	397	140.524	95.138	25.371	1.00	46.02	A16S	ATOM	27101	C2	URI	399	148.190	90.467	36.151	1.00	59.30	A16S

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ATOM  27102  O2  URI   399     148.712  89.829  37.044  1.00 59.30      A16S
ATOM  27103  N3  URI   399     148.740  90.562  34.904  1.00 59.30      A16S
ATOM  27104  C4  URI   399     148.237  91.247  33.828  1.00 59.30      A16S
ATOM  27105  O4  URI   399     148.904  91.318  32.798  1.00 59.30      A16S
ATOM  27106  C5  URI   399     146.990  91.899  34.067  1.00 59.30      A16S
ATOM  27107  C2' URI   399     147.212  92.008  38.622  1.00 51.18      A16S
ATOM  27108  O2' URI   399     147.166  91.450  39.910  1.00 51.18      A16S
ATOM  27109  C3' URI   399     146.459  93.326  38.533  1.00 51.18      A16S
ATOM  27110  O3' URI   399     146.599  94.084  39.719  1.00 51.18      A16S
ATOM  27111  P   URI   400     147.796  95.132  39.845  1.00 54.24      A16S
ATOM  27112  O1P URI   400     147.614  95.877  41.119  1.00 67.44      A16S
ATOM  27113  O2P URI   400     147.883  95.874  38.562  1.00 67.44      A16S
ATOM  27114  O5' URI   400     149.075  94.203  39.994  1.00 54.24      A16S
ATOM  27115  C5' URI   400     149.234  93.410  41.152  1.00 54.24      A16S
ATOM  27116  C4' URI   400     150.481  92.579  41.054  1.00 54.24      A16S
ATOM  27117  O4' URI   400     150.364  91.663  39.941  1.00 54.24      A16S
ATOM  27118  C1' URI   400     151.633  91.477  39.350  1.00 54.24      A16S
ATOM  27119  N1  URI   400     151.542  91.881  37.943  1.00 67.44      A16S
ATOM  27120  C6  URI   400     150.490  92.633  37.480  1.00 67.44      A16S
ATOM  27121  C2  URI   400     152.537  91.461  37.099  1.00 67.44      A16S
ATOM  27122  O2  URI   400     153.501  90.833  37.485  1.00 67.44      A16S
ATOM  27123  N3  URI   400     152.366  91.808  35.784  1.00 67.44      A16S
ATOM  27124  C4  URI   400     151.332  92.532  35.248  1.00 67.44      A16S
ATOM  27125  O4  URI   400     151.280  92.693  34.033  1.00 67.44      A16S
ATOM  27126  C5  URI   400     150.356  92.967  36.195  1.00 67.44      A16S
ATOM  27127  C2' URI   400     152.648  92.267  40.180  1.00 54.24      A16S
ATOM  27128  O2' URI   400     153.190  91.403  41.159  1.00 54.24      A16S
ATOM  27129  C3' URI   400     151.764  93.344  40.794  1.00 54.24      A16S
ATOM  27130  O3' URI   400     152.282  93.778  42.039  1.00 54.24      A16S
ATOM  27131  P   GUA   401     153.357  94.958  42.092  1.00 66.70      A16S
ATOM  27132  O1P GUA   401     154.147  94.889  40.848  1.00 60.96      A16S
ATOM  27133  O2P GUA   401     154.036  94.844  43.398  1.00 60.96      A16S
ATOM  27134  O5' GUA   401     152.485  96.293  42.133  1.00 66.70      A16S
ATOM  27135  C5' GUA   401     151.584  96.602  41.081  1.00 66.70      A16S
ATOM  27136  C4' GUA   401     150.253  97.070  41.629  1.00 66.70      A16S
ATOM  27137  O4' GUA   401     149.823  96.191  42.701  1.00 66.70      A16S
ATOM  27138  C1' GUA   401     148.958  96.903  43.569  1.00 66.70      A16S
ATOM  27139  N9  GUA   401     149.493  96.863  44.923  1.00 60.96      A16S
ATOM  27140  C4  GUA   401     148.907  97.414  46.036  1.00 60.96      A16S
ATOM  27141  N3  GUA   401     147.730  98.070  46.068  1.00 60.96      A16S
ATOM  27142  C2  GUA   401     147.420  98.467  47.287  1.00 60.96      A16S
ATOM  27143  N2  GUA   401     146.275  99.118  47.504  1.00 60.96      A16S
ATOM  27144  N1  GUA   401     148.210  98.251  48.384  1.00 60.96      A16S
ATOM  27145  C6  GUA   401     149.427  97.585  48.374  1.00 60.96      A16S
ATOM  27146  O6  GUA   401     150.059  97.448  49.421  1.00 60.96      A16S
ATOM  27147  C5  GUA   401     149.766  97.141  47.076  1.00 60.96      A16S
ATOM  27148  N7  GUA   401     150.870  96.430  46.628  1.00 60.96      A16S
ATOM  27149  C8  GUA   401     150.665  96.288  45.345  1.00 60.96      A16S
ATOM  27150  C2' GUA   401     148.878  98.333  43.045  1.00 66.70      A16S
ATOM  27151  O2' GUA   401     147.734  98.416  42.221  1.00 66.70      A16S
ATOM  27152  C3' GUA   401     150.189  98.443  42.273  1.00 66.70      A16S
ATOM  27153  O3' GUA   401     150.096  99.449  41.269  1.00 66.70      A16S
ATOM  27154  P   GUA   402     150.404 100.986  41.635  1.00 63.25      A16S
ATOM  27155  O1P GUA   402     150.056 101.785  40.442  1.00 73.08      A16S
ATOM  27156  O2P GUA   402     151.774 101.078  42.204  1.00 73.08      A16S
ATOM  27157  O5' GUA   402     149.340 101.348  42.758  1.00 63.25      A16S
ATOM  27158  C5' GUA   402     147.994 101.625  42.414  1.00 63.25      A16S
ATOM  27159  C4' GUA   402     147.329 102.372  43.536  1.00 63.25      A16S
ATOM  27160  O4' GUA   402     147.125 101.477  44.658  1.00 63.25      A16S
ATOM  27161  C1' GUA   402     147.331 102.184  45.866  1.00 63.25      A16S
ATOM  27162  N9  GUA   402     148.432 101.550  46.576  1.00 73.08      A16S
ATOM  27163  C4  GUA   402     148.727 101.667  47.915  1.00 73.08      A16S
ATOM  27164  N3  GUA   402     148.062 102.421  48.813  1.00 73.08      A16S
ATOM  27165  C2  GUA   402     148.585 102.320  50.022  1.00 73.08      A16S
ATOM  27166  N2  GUA   402     148.063 103.014  51.032  1.00 73.08      A16S
ATOM  27167  N1  GUA   402     149.662 101.533  50.329  1.00 73.08      A16S
ATOM  27168  C6  GUA   402     150.357 100.747  49.423  1.00 73.08      A16S
ATOM  27169  O6  GUA   402     151.311 100.062  49.806  1.00 73.08      A16S
ATOM  27170  C5  GUA   402     149.819 100.857  48.119  1.00 73.08      A16S
ATOM  27171  N7  GUA   402     150.216 100.260  46.931  1.00 73.08      A16S
ATOM  27172  C8  GUA   402     149.368 100.705  46.045  1.00 73.08      A16S
ATOM  27173  C2' GUA   402     147.604 103.646  45.510  1.00 63.25      A16S
ATOM  27174  O2' GUA   402     146.386 104.362  45.567  1.00 63.25      A16S
ATOM  27175  C3' GUA   402     148.156 103.519  44.097  1.00 63.25      A16S
ATOM  27176  O3' GUA   402     147.926 104.700  43.337  1.00 63.25      A16S
ATOM  27177  P   ADE   403     148.938 105.944  43.459  1.00 72.65      A16S
ATOM  27178  O1P ADE   403     148.400 107.028  42.603  1.00 61.04      A16S
ATOM  27179  O2P ADE   403     150.325 105.456  43.246  1.00 61.04      A16S
ATOM  27180  O5' ADE   403     148.784 106.433  44.970  1.00 72.65      A16S
ATOM  27181  C5' ADE   403     147.768 107.366  45.332  1.00 72.65      A16S
ATOM  27182  C4' ADE   403     147.927 107.796  46.767  1.00 72.65      A16S
ATOM  27183  O4' ADE   403     147.742 106.657  47.645  1.00 72.65      A16S
ATOM  27184  C1' ADE   403     148.613 106.774  48.756  1.00 72.65      A16S
ATOM  27185  N9  ADE   403     149.557 105.663  48.716  1.00 61.04      A16S
ATOM  27186  C4  ADE   403     150.366 105.259  49.751  1.00 61.04      A16S
ATOM  27187  N3  ADE   403     150.437 105.787  50.988  1.00 61.04      A16S
ATOM  27188  C2  ADE   403     151.341 105.140  51.726  1.00 61.04      A16S
ATOM  27189  N1  ADE   403     152.123 104.104  51.395  1.00 61.04      A16S
ATOM  27190  C6  ADE   403     152.027 103.598  50.149  1.00 61.04      A16S
ATOM  27191  N6  ADE   403     152.804 102.565  49.827  1.00 61.04      A16S
ATOM  27192  C5  ADE   403     151.103 104.199  49.262  1.00 61.04      A16S
ATOM  27193  N7  ADE   403     150.758 103.936  47.944  1.00 61.04      A16S
ATOM  27194  C8  ADE   403     149.840 104.828  47.672  1.00 61.04      A16S
ATOM  27195  C2' ADE   403     149.336 108.117  48.634  1.00 72.65      A16S
ATOM  27196  O2' ADE   403     148.643 109.122  49.343  1.00 72.65      A16S
ATOM  27197  C3' ADE   403     149.298 108.338  47.131  1.00 72.65      A16S
ATOM  27198  O3' ADE   403     149.390 109.719  46.823  1.00 72.65      A16S
ATOM  27199  P   GUA   404     150.829 110.402  46.671  1.00 68.98      A16S
ATOM  27200  O1P GUA   404     150.566 111.805  46.289  1.00 68.30      A16S
ATOM  27201  O2P GUA   404     151.688 109.548  45.817  1.00 68.30      A16S
ATOM  27202  O5' GUA   404     151.459 110.359  48.133  1.00 68.98      A16S
ATOM  27203  C5' GUA   404     150.893 111.107  49.208  1.00 68.98      A16S
ATOM  27204  C4' GUA   404     151.505 110.680  50.525  1.00 68.98      A16S
ATOM  27205  O4' GUA   404     151.352 109.241  50.662  1.00 68.98      A16S
ATOM  27206  C1' GUA   404     152.427 108.722  51.425  1.00 68.98      A16S
ATOM  27207  N9  GUA   404     153.088 107.675  50.653  1.00 68.30      A16S
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ATOM  27208  C4  GUA  404     154.091 106.848  51.092  1.00 68.30      A16S
ATOM  27209  N3  GUA  404     154.664 106.879  52.312  1.00 68.30      A16S
ATOM  27210  C2  GUA  404     155.582 105.935  52.449  1.00 68.30      A16S
ATOM  27211  N2  GUA  404     156.249 105.816  53.599  1.00 68.30      A16S
ATOM  27212  N1  GUA  404     155.916 105.038  51.466  1.00 68.30      A16S
ATOM  27213  C6  GUA  404     155.346 104.992  50.199  1.00 68.30      A16S
ATOM  27214  O6  GUA  404     155.731 104.144  49.382  1.00 68.30      A16S
ATOM  27215  C5  GUA  404     154.351 105.997  50.040  1.00 68.30      A16S
ATOM  27216  N7  GUA  404     153.541 106.294  48.957  1.00 68.30      A16S
ATOM  27217  C8  GUA  404     152.816 107.300  49.362  1.00 68.30      A16S
ATOM  27218  C2' GUA  404     153.330 109.896  51.799  1.00 68.98      A16S
ATOM  27219  O2' GUA  404     152.917 110.394  53.051  1.00 68.98      A16S
ATOM  27220  C3' GUA  404     153.004 110.896  50.701  1.00 68.98      A16S
ATOM  27221  O3' GUA  404     153.289 112.210  51.178  1.00 68.98      A16S
ATOM  27222  P   GUA  405     154.703 112.903  50.824  1.00 67.03      A16S
ATOM  27223  O1P GUA  405     154.930 113.991  51.810  1.00 88.81      A16S
ATOM  27224  O2P GUA  405     154.686 113.224  49.376  1.00 88.81      A16S
ATOM  27225  O5' GUA  405     155.790 111.776  51.122  1.00 67.03      A16S
ATOM  27226  C5' GUA  405     156.225 111.549  52.450  1.00 67.03      A16S
ATOM  27227  C4' GUA  405     157.285 110.484  52.484  1.00 67.03      A16S
ATOM  27228  O4' GUA  405     156.718 109.206  52.111  1.00 67.03      A16S
ATOM  27229  C1' GUA  405     157.697 108.430  51.438  1.00 67.03      A16S
ATOM  27230  N9  GUA  405     157.197 108.129  50.102  1.00 88.81      A16S
ATOM  27231  C4  GUA  405     157.622 107.119  49.280  1.00 88.81      A16S
ATOM  27232  N3  GUA  405     158.592 106.229  49.557  1.00 88.81      A16S
ATOM  27233  C2  GUA  405     158.762 105.365  48.576  1.00 88.81      A16S
ATOM  27234  N2  GUA  405     159.692 104.413  48.680  1.00 88.81      A16S
ATOM  27235  N1  GUA  405     158.031 105.368  47.420  1.00 88.81      A16S
ATOM  27236  C6  GUA  405     157.015 106.267  47.122  1.00 88.81      A16S
ATOM  27237  O6  GUA  405     156.385 106.158  46.060  1.00 88.81      A16S
ATOM  27238  C5  GUA  405     156.839 107.212  48.154  1.00 88.81      A16S
ATOM  27239  N7  GUA  405     155.957 108.276  48.255  1.00 88.81      A16S
ATOM  27240  C8  GUA  405     156.206 108.791  49.425  1.00 88.81      A16S
ATOM  27241  C2' GUA  405     158.977 109.261  51.409  1.00 67.03      A16S
ATOM  27242  O2' GUA  405     159.769 108.923  52.525  1.00 67.03      A16S
ATOM  27243  C3' GUA  405     158.415 110.669  51.501  1.00 67.03      A16S
ATOM  27244  O3' GUA  405     159.364 111.571  52.023  1.00 67.03      A16S
ATOM  27245  P   ADE  406     159.524 113.011  51.353  1.00 76.05      A16S
ATOM  27246  O1P ADE  406     158.710 113.982  52.133  1.00 79.61      A16S
ATOM  27247  O2P ADE  406     159.273 112.853  49.899  1.00 79.61      A16S
ATOM  27248  O5' ADE  406     161.065 113.326  51.562  1.00 76.05      A16S
ATOM  27249  C5' ADE  406     161.708 113.036  52.792  1.00 76.05      A16S
ATOM  27250  C4' ADE  406     163.200 113.092  52.608  1.00 76.05      A16S
ATOM  27251  O4' ADE  406     163.680 111.850  52.037  1.00 76.05      A16S
ATOM  27252  C1' ADE  406     164.761 112.122  51.161  1.00 76.05      A16S
ATOM  27253  N9  ADE  406     164.400 111.636  49.829  1.00 79.61      A16S
ATOM  27254  C4  ADE  406     164.678 110.392  49.319  1.00 79.61      A16S
ATOM  27255  N3  ADE  406     165.315 109.385  49.936  1.00 79.61      A16S
ATOM  27256  C2  ADE  406     165.412 108.333  49.133  1.00 79.61      A16S
ATOM  27257  N1  ADE  406     164.976 108.181  47.880  1.00 79.61      A16S
ATOM  27258  C6  ADE  406     164.339 109.212  47.289  1.00 79.61      A16S
ATOM  27259  N6  ADE  406     163.897 109.058  46.039  1.00 79.61      A16S
ATOM  27260  C5  ADE  406     164.176 110.390  48.034  1.00 79.61      A16S
ATOM  27261  N7  ADE  406     163.583 111.608  47.737  1.00 79.61      A16S
ATOM  27262  C8  ADE  406     163.739 112.309  48.832  1.00 79.61      A16S
ATOM  27263  C2' ADE  406     165.016 113.632  51.201  1.00 76.05      A16S
ATOM  27264  O2' ADE  406     166.006 113.936  52.155  1.00 76.05      A16S
ATOM  27265  C3' ADE  406     163.655 114.152  51.624  1.00 76.05      A16S
ATOM  27266  O3' ADE  406     163.738 115.415  52.253  1.00 76.05      A16S
ATOM  27267  P   ADE  407     163.209 116.716  51.483  1.00102.63      A16S
ATOM  27268  O1P ADE  407     162.744 117.690  52.503  1.00193.23      A16S
ATOM  27269  O2P ADE  407     162.282 116.278  50.407  1.00193.23      A16S
ATOM  27270  O5' ADE  407     164.525 117.290  50.806  1.00102.63      A16S
ATOM  27271  C5' ADE  407     165.794 117.150  51.435  1.00102.63      A16S
ATOM  27272  C4' ADE  407     166.794 116.622  50.441  1.00102.63      A16S
ATOM  27273  O4' ADE  407     166.387 117.032  49.118  1.00102.63      A16S
ATOM  27274  C1' ADE  407     167.509 117.455  48.381  1.00102.63      A16S
ATOM  27275  N9  ADE  407     167.285 118.849  48.018  1.00193.23      A16S
ATOM  27276  C4  ADE  407     166.315 119.256  47.139  1.00193.23      A16S
ATOM  27277  N3  ADE  407     165.445 118.476  46.477  1.00193.23      A16S
ATOM  27278  C2  ADE  407     164.645 119.211  45.716  1.00193.23      A16S
ATOM  27279  N1  ADE  407     164.613 120.538  45.553  1.00193.23      A16S
ATOM  27280  C6  ADE  407     165.501 121.295  46.234  1.00193.23      A16S
ATOM  27281  N6  ADE  407     165.465 122.620  46.071  1.00193.23      A16S
ATOM  27282  C5  ADE  407     166.411 120.631  47.078  1.00193.23      A16S
ATOM  27283  N7  ADE  407     167.432 121.086  47.903  1.00193.23      A16S
ATOM  27284  C8  ADE  407     167.919 119.991  48.435  1.00193.23      A16S
ATOM  27285  C2' ADE  407     168.769 117.143  49.196  1.00102.63      A16S
ATOM  27286  O2' ADE  407     169.302 115.920  48.740  1.00102.63      A16S
ATOM  27287  C3' ADE  407     168.228 117.096  50.625  1.00102.63      A16S
ATOM  27288  O3' ADE  407     168.891 116.198  51.527  1.00102.63      A16S
ATOM  27289  P   GUA  408     170.385 115.669  51.224  1.00117.68      A16S
ATOM  27290  O1P GUA  408     171.015 115.419  52.547  1.00 85.53      A16S
ATOM  27291  O2P GUA  408     171.056 116.567  50.242  1.00 85.53      A16S
ATOM  27292  O5' GUA  408     170.146 114.239  50.560  1.00100.06      A16S
ATOM  27293  C5' GUA  408     168.826 113.824  50.273  1.00100.06      A16S
ATOM  27294  C4' GUA  408     168.756 112.364  49.898  1.00100.06      A16S
ATOM  27295  O4' GUA  408     167.349 112.114  49.682  1.00100.06      A16S
ATOM  27296  C1' GUA  408     167.150 111.648  48.377  1.00100.06      A16S
ATOM  27297  N9  GUA  408     166.631 112.764  47.595  1.00 85.53      A16S
ATOM  27298  C4  GUA  408     166.130 112.708  46.331  1.00 85.53      A16S
ATOM  27299  N3  GUA  408     166.117 111.624  45.544  1.00 85.53      A16S
ATOM  27300  C2  GUA  408     165.531 111.865  44.397  1.00 85.53      A16S
ATOM  27301  N2  GUA  408     165.469 110.913  43.491  1.00 85.53      A16S
ATOM  27302  N1  GUA  408     164.973 113.065  44.055  1.00 85.53      A16S
ATOM  27303  C6  GUA  408     164.967 114.198  44.855  1.00 85.53      A16S
ATOM  27304  O6  GUA  408     164.417 115.230  44.460  1.00 85.53      A16S
ATOM  27305  C5  GUA  408     165.624 113.964  46.078  1.00 85.53      A16S
ATOM  27306  N7  GUA  408     165.861 114.814  47.144  1.00 85.53      A16S
ATOM  27307  C8  GUA  408     166.476 114.064  48.016  1.00 85.53      A16S
ATOM  27308  C2' GUA  408     168.462 111.001  47.957  1.00100.06      A16S
ATOM  27309  O2' GUA  408     168.477 109.702  48.513  1.00100.06      A16S
ATOM  27310  C3' GUA  408     169.473 111.926  48.617  1.00100.06      A16S
ATOM  27311  O3' GUA  408     170.707 111.269  48.950  1.00100.06      A16S
ATOM  27312  P   ADE  409     171.101 109.842  48.283  1.00 86.02      A16S
ATOM  27313  O1P ADE  409     172.584 109.796  48.237  1.00 81.61      A16S
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ATOM  27314  O2P ADE  409     170.337 109.601  47.035  1.00 81.61      A16S
ATOM  27315  O5' ADE  409     170.652 108.755  49.366  1.00 86.02      A16S
ATOM  27316  C5' ADE  409     171.003 108.919  50.747  1.00 86.02      A16S
ATOM  27317  C4' ADE  409     171.207 107.577  51.435  1.00 86.02      A16S
ATOM  27318  O4' ADE  409     169.951 106.861  51.527  1.00 86.02      A16S
ATOM  27319  C1' ADE  409     170.201 105.466  51.525  1.00 86.02      A16S
ATOM  27320  N9  ADE  409     169.411 104.852  50.457  1.00 81.61      A16S
ATOM  27321  C4  ADE  409     169.301 103.508  50.200  1.00 81.61      A16S
ATOM  27322  N3  ADE  409     169.868 102.500  50.879  1.00 81.61      A16S
ATOM  27323  C2  ADE  409     169.564 101.331  50.324  1.00 81.61      A16S
ATOM  27324  N1  ADE  409     168.818 101.074  49.247  1.00 81.61      A16S
ATOM  27325  C6  ADE  409     168.263 102.111  48.587  1.00 81.61      A16S
ATOM  27326  N6  ADE  409     167.529 101.857  47.502  1.00 81.61      A16S
ATOM  27327  C5  ADE  409     168.501 103.402  49.081  1.00 81.61      A16S
ATOM  27328  N7  ADE  409     168.087 104.655  48.655  1.00 81.61      A16S
ATOM  27329  C8  ADE  409     168.650 105.478  49.503  1.00 81.61      A16S
ATOM  27330  C2' ADE  409     171.712 105.257  51.368  1.00 86.02      A16S
ATOM  27331  O2' ADE  409     172.284 104.999  52.627  1.00 86.02      A16S
ATOM  27332  C3' ADE  409     172.171 106.592  50.789  1.00 86.02      A16S
ATOM  27333  O3' ADE  409     173.513 106.871  51.192  1.00 86.02      A16S
ATOM  27334  P   ADE  410     174.748 106.416  50.260  1.00 78.47      A16S
ATOM  27335  O1P ADE  410     176.001 106.682  51.004  1.00 89.50      A16S
ATOM  27336  O2P ADE  410     174.564 107.008  48.912  1.00 89.50      A16S
ATOM  27337  O5' ADE  410     174.591 104.833  50.166  1.00 78.47      A16S
ATOM  27338  C5' ADE  410     174.919 104.017  51.277  1.00 78.47      A16S
ATOM  27339  C4' ADE  410     174.644 102.568  50.970  1.00 78.47      A16S
ATOM  27340  O4' ADE  410     173.228 102.397  50.701  1.00 78.47      A16S
ATOM  27341  C1' ADE  410     173.048 101.354  49.755  1.00 78.47      A16S
ATOM  27342  N9  ADE  410     172.353 101.907  48.589  1.00 89.50      A16S
ATOM  27343  C4  ADE  410     171.706 101.197  47.605  1.00 89.50      A16S
ATOM  27344  N3  ADE  410     171.556  99.865  47.523  1.00 89.50      A16S
ATOM  27345  C2  ADE  410     170.886  99.533  46.420  1.00 89.50      A16S
ATOM  27346  N1  ADE  410     170.390 100.318  45.459  1.00 89.50      A16S
ATOM  27347  C6  ADE  410     170.560 101.653  45.568  1.00 89.50      A16S
ATOM  27348  N6  ADE  410     170.078 102.435  44.598  1.00 89.50      A16S
ATOM  27349  C5  ADE  410     171.247 102.136  46.702  1.00 89.50      A16S
ATOM  27350  N7  ADE  410     171.578 103.418  47.117  1.00 89.50      A16S
ATOM  27351  C8  ADE  410     172.226 103.227  48.239  1.00 89.50      A16S
ATOM  27352  C2' ADE  410     174.441 100.801  49.429  1.00 78.47      A16S
ATOM  27353  O2' ADE  410     174.746  99.716  50.277  1.00 78.47      A16S
ATOM  27354  C3' ADE  410     175.323 102.001  49.736  1.00 78.47      A16S
ATOM  27355  O3' ADE  410     176.658 101.597  50.013  1.00 78.47      A16S
ATOM  27356  P   GUA  411     177.802 101.848  48.914  1.00 83.01      A16S
ATOM  27357  O1P GUA  411     179.128 101.481  49.467  1.00 79.96      A16S
ATOM  27358  O2P GUA  411     177.588 103.209  48.366  1.00 79.96      A16S
ATOM  27359  O5' GUA  411     177.456 100.805  47.768  1.00 83.01      A16S
ATOM  27360  C5' GUA  411     177.549  99.409  48.006  1.00 83.01      A16S
ATOM  27361  C4' GUA  411     176.820  98.653  46.923  1.00 83.01      A16S
ATOM  27362  O4' GUA  411     175.409  98.995  46.972  1.00 83.01      A16S
ATOM  27363  C1' GUA  411     174.887  99.058  45.658  1.00 83.01      A16S
ATOM  27364  N9  GUA  411     174.520 100.442  45.396  1.00 79.96      A16S
ATOM  27365  C4  GUA  411     173.776 100.905  44.343  1.00 79.96      A16S
ATOM  27366  N3  GUA  411     173.252 100.154  43.354  1.00 79.96      A16S
ATOM  27367  C2  GUA  411     172.594 100.888  42.475  1.00 79.96      A16S
ATOM  27368  N2  GUA  411     172.016 100.303  41.417  1.00 79.96      A16S
ATOM  27369  N1  GUA  411     172.456 102.252  42.563  1.00 79.96      A16S
ATOM  27370  C6  GUA  411     172.990 103.045  43.572  1.00 79.96      A16S
ATOM  27371  O6  GUA  411     172.818 104.269  43.550  1.00 79.96      A16S
ATOM  27372  C5  GUA  411     173.700 102.269  44.521  1.00 79.96      A16S
ATOM  27373  N7  GUA  411     174.381 102.654  45.667  1.00 79.96      A16S
ATOM  27374  C8  GUA  411     174.850 101.539  46.151  1.00 79.96      A16S
ATOM  27375  C2' GUA  411     175.991  98.555  44.730  1.00 83.01      A16S
ATOM  27376  O2' GUA  411     175.899  97.148  44.655  1.00 83.01      A16S
ATOM  27377  C3' GUA  411     177.229  98.986  45.498  1.00 83.01      A16S
ATOM  27378  O3' GUA  411     178.376  98.240  45.116  1.00 83.01      A16S
ATOM  27379  P   CYT  412     179.464  98.899  44.132  1.00 96.72      A16S
ATOM  27380  O1P CYT  412     180.540  97.891  43.953  1.00 81.23      A16S
ATOM  27381  O2P CYT  412     179.815 100.265  44.601  1.00 81.23      A16S
ATOM  27382  O5' CYT  412     178.681  99.049  42.752  1.00 96.72      A16S
ATOM  27383  C5' CYT  412     178.274  97.899  42.012  1.00 96.72      A16S
ATOM  27384  C4' CYT  412     177.495  98.314  40.790  1.00 96.72      A16S
ATOM  27385  O4' CYT  412     176.246  98.927  41.202  1.00 96.72      A16S
ATOM  27386  C1' CYT  412     175.938 100.006  40.337  1.00 96.72      A16S
ATOM  27387  N1  CYT  412     175.939 101.245  41.129  1.00 81.23      A16S
ATOM  27388  C6  CYT  412     176.657 101.336  42.287  1.00 81.23      A16S
ATOM  27389  C2  CYT  412     175.195 102.336  40.675  1.00 81.23      A16S
ATOM  27390  O2  CYT  412     174.557 102.226  39.624  1.00 81.23      A16S
ATOM  27391  N3  CYT  412     175.191 103.481  41.390  1.00 81.23      A16S
ATOM  27392  C4  CYT  412     175.897 103.562  42.516  1.00 81.23      A16S
ATOM  27393  N4  CYT  412     175.868 104.713  43.187  1.00 81.23      A16S
ATOM  27394  C5  CYT  412     176.666 102.466  43.005  1.00 81.23      A16S
ATOM  27395  C2' CYT  412     176.992 100.011  39.230  1.00 96.72      A16S
ATOM  27396  O2' CYT  412     176.541  99.234  38.141  1.00 96.72      A16S
ATOM  27397  C3' CYT  412     178.173  99.371  39.941  1.00 96.72      A16S
ATOM  27398  O3' CYT  412     179.085  98.781  39.030  1.00 96.72      A16S
ATOM  27399  P   CYT  413     180.405  99.587  38.603  1.00 71.39      A16S
ATOM  27400  O1P CYT  413     180.943 100.220  39.829  1.00 84.39      A16S
ATOM  27401  O2P CYT  413     181.273  98.686  37.799  1.00 84.39      A16S
ATOM  27402  O5' CYT  413     179.859 100.761  37.669  1.00 71.39      A16S
ATOM  27403  C5' CYT  413     179.347 100.480  36.371  1.00 71.39      A16S
ATOM  27404  C4' CYT  413     178.742 101.722  35.751  1.00 71.39      A16S
ATOM  27405  O4' CYT  413     177.609 102.166  36.536  1.00 71.39      A16S
ATOM  27406  C1' CYT  413     177.467 103.573  36.404  1.00 71.39      A16S
ATOM  27407  N1  CYT  413     177.540 104.167  37.739  1.00 84.39      A16S
ATOM  27408  C6  CYT  413     178.182 103.519  38.754  1.00 84.39      A16S
ATOM  27409  C2  CYT  413     176.952 105.412  37.955  1.00 84.39      A16S
ATOM  27410  O2  CYT  413     176.370 105.971  37.018  1.00 84.39      A16S
ATOM  27411  N3  CYT  413     177.032 105.975  39.178  1.00 84.39      A16S
ATOM  27412  C4  CYT  413     177.669 105.338  40.162  1.00 84.39      A16S
ATOM  27413  N4  CYT  413     177.735 105.931  41.350  1.00 84.39      A16S
ATOM  27414  C5  CYT  413     178.269 104.063  39.969  1.00 84.39      A16S
ATOM  27415  C2' CYT  413     178.595 104.067  35.499  1.00 71.39      A16S
ATOM  27416  O2' CYT  413     178.117 104.180  34.176  1.00 71.39      A16S
ATOM  27417  C3' CYT  413     179.623 102.955  35.665  1.00 71.39      A16S
ATOM  27418  O3' CYT  413     180.459 102.885  34.526  1.00 71.39      A16S
ATOM  27419  P   CYT  414     181.798 103.767  34.468  1.00 63.50      A16S
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ATOM  27420  O1P CYT  414     182.481 103.425  33.187  1.00 82.62      A16S
ATOM  27421  O2P CYT  414     182.519 103.597  35.757  1.00 82.62      A16S
ATOM  27422  O5' CYT  414     181.288 105.275  34.367  1.00 63.50      A16S
ATOM  27423  C5' CYT  414     180.782 105.769  33.145  1.00 63.50      A16S
ATOM  27424  C4' CYT  414     180.314 107.189  33.302  1.00 63.50      A16S
ATOM  27425  O4' CYT  414     179.290 107.269  34.328  1.00 63.50      A16S
ATOM  27426  C1' CYT  414     179.346 108.545  34.950  1.00 63.50      A16S
ATOM  27427  N1  CYT  414     179.612 108.355  36.388  1.00 82.62      A16S
ATOM  27428  C6  CYT  414     179.797 107.105  36.909  1.00 82.62      A16S
ATOM  27429  C2  CYT  414     179.676 109.478  37.215  1.00 82.62      A16S
ATOM  27430  O2  CYT  414     179.495 110.594  36.723  1.00 82.62      A16S
ATOM  27431  N3  CYT  414     179.933 109.317  38.528  1.00 82.62      A16S
ATOM  27432  C4  CYT  414     180.114 108.095  39.027  1.00 82.62      A16S
ATOM  27433  N4  CYT  414     180.361 107.986  40.331  1.00 82.62      A16S
ATOM  27434  C5  CYT  414     180.048 106.932  38.212  1.00 82.62      A16S
ATOM  27435  C2' CYT  414     180.456 109.323  34.244  1.00 63.50      A16S
ATOM  27436  O2' CYT  414     179.881 110.030  33.169  1.00 63.50      A16S
ATOM  27437  C3' CYT  414     181.347 108.190  33.763  1.00 63.50      A16S
ATOM  27438  O3' CYT  414     182.162 108.592  32.676  1.00 63.50      A16S
ATOM  27439  P   URI  415     183.679 109.036  32.945  1.00 79.84      A16S
ATOM  27440  O1P URI  415     184.257 109.389  31.626  1.00 60.54      A16S
ATOM  27441  O2P URI  415     184.343 107.999  33.779  1.00 60.54      A16S
ATOM  27442  O5' URI  415     183.531 110.373  33.803  1.00 79.84      A16S
ATOM  27443  C5' URI  415     183.082 111.583  33.192  1.00 79.84      A16S
ATOM  27444  C4' URI  415     183.018 112.707  34.206  1.00 79.84      A16S
ATOM  27445  O4' URI  415     182.065 112.361  35.243  1.00 79.84      A16S
ATOM  27446  C1' URI  415     182.484 112.909  36.480  1.00 79.84      A16S
ATOM  27447  N1  URI  415     182.713 111.803  37.417  1.00 60.54      A16S
ATOM  27448  C6  URI  415     182.909 110.521  36.968  1.00 60.54      A16S
ATOM  27449  C2  URI  415     182.745 112.099  38.762  1.00 60.54      A16S
ATOM  27450  O2  URI  415     182.517 113.223  39.197  1.00 60.54      A16S
ATOM  27451  N3  URI  415     183.041 111.031  39.582  1.00 60.54      A16S
ATOM  27452  C4  URI  415     183.282 109.727  39.190  1.00 60.54      A16S
ATOM  27453  O4  URI  415     183.633 108.899  40.023  1.00 60.54      A16S
ATOM  27454  C5  URI  415     183.181 109.501  37.787  1.00 60.54      A16S
ATOM  27455  C2' URI  415     183.760 113.711  36.213  1.00 79.84      A16S
ATOM  27456  O2' URI  415     183.444 115.067  35.976  1.00 79.84      A16S
ATOM  27457  C3' URI  415     184.297 113.022  34.967  1.00 79.84      A16S
ATOM  27458  O3' URI  415     185.152 113.898  34.233  1.00 79.84      A16S
ATOM  27459  P   URI  416     186.739 113.633  34.224  1.00 88.94      A16S
ATOM  27460  O1P URI  416     187.152 113.588  32.802  1.00 82.52      A16S
ATOM  27461  O2P URI  416     187.017 112.469  35.107  1.00 82.52      A16S
ATOM  27462  O5' URI  416     187.371 114.943  34.882  1.00 88.94      A16S
ATOM  27463  C5' URI  416     186.778 115.553  36.027  1.00 88.94      A16S
ATOM  27464  C4' URI  416     186.938 117.053  35.960  1.00 88.94      A16S
ATOM  27465  O4' URI  416     186.768 117.463  34.589  1.00 88.94      A16S
ATOM  27466  C1' URI  416     186.044 118.669  34.538  1.00 88.94      A16S
ATOM  27467  N1  URI  416     184.858 118.437  33.710  1.00 82.52      A16S
ATOM  27468  C6  URI  416     184.422 117.162  33.441  1.00 82.52      A16S
ATOM  27469  C2  URI  416     184.209 119.539  33.197  1.00 82.52      A16S
ATOM  27470  O2  URI  416     184.567 120.677  33.425  1.00 82.52      A16S
ATOM  27471  N3  URI  416     183.126 119.257  32.406  1.00 82.52      A16S
ATOM  27472  C4  URI  416     182.640 118.009  32.086  1.00 82.52      A16S
ATOM  27473  O4  URI  416     181.653 117.915  31.360  1.00 82.52      A16S
ATOM  27474  C5  URI  416     183.366 116.915  32.665  1.00 82.52      A16S
ATOM  27475  C2' URI  416     185.759 119.129  35.970  1.00 88.94      A16S
ATOM  27476  O2' URI  416     186.686 120.127  36.361  1.00 88.94      A16S
ATOM  27477  C3' URI  416     185.905 117.833  36.762  1.00 88.94      A16S
ATOM  27478  O3' URI  416     186.299 118.146  38.111  1.00 88.94      A16S
ATOM  27479  P   CYT  417     187.862 118.227  38.534  1.00105.66      A16S
ATOM  27480  O1P CYT  417     188.224 119.668  38.506  1.00 85.97      A16S
ATOM  27481  O2P CYT  417     188.712 117.252  37.809  1.00 85.97      A16S
ATOM  27482  O5' CYT  417     187.847 117.769  40.058  1.00105.66      A16S
ATOM  27483  C5' CYT  417     186.925 118.336  40.979  1.00105.66      A16S
ATOM  27484  C4' CYT  417     186.510 117.304  41.996  1.00105.66      A16S
ATOM  27485  O4' CYT  417     185.789 116.247  41.325  1.00105.66      A16S
ATOM  27486  C1' CYT  417     185.970 115.035  42.027  1.00105.66      A16S
ATOM  27487  N1  CYT  417     186.161 113.950  41.054  1.00 85.97      A16S
ATOM  27488  C6  CYT  417     186.535 114.220  39.768  1.00 85.97      A16S
ATOM  27489  C2  CYT  417     185.936 112.622  41.466  1.00 85.97      A16S
ATOM  27490  O2  CYT  417     185.612 112.400  42.642  1.00 85.97      A16S
ATOM  27491  N3  CYT  417     186.077 111.619  40.570  1.00 85.97      A16S
ATOM  27492  C4  CYT  417     186.431 111.897  39.312  1.00 85.97      A16S
ATOM  27493  N4  CYT  417     186.546 110.877  38.461  1.00 85.97      A16S
ATOM  27494  C5  CYT  417     186.680 113.235  38.871  1.00 85.97      A16S
ATOM  27495  C2' CYT  417     187.075 115.221  43.074  1.00105.66      A16S
ATOM  27496  O2' CYT  417     186.530 115.085  44.366  1.00105.66      A16S
ATOM  27497  C3' CYT  417     187.648 116.596  42.711  1.00105.66      A16S
ATOM  27498  O3' CYT  417     188.193 117.402  43.773  1.00105.66      A16S
ATOM  27499  P   GUA  418     187.331 117.733  45.109  1.00 81.14      A16S
ATOM  27500  O1P GUA  418     188.098 118.801  45.802  1.00 94.34      A16S
ATOM  27501  O2P GUA  418     186.981 116.497  45.856  1.00 94.34      A16S
ATOM  27502  O5' GUA  418     185.996 118.429  44.581  1.00 81.14      A16S
ATOM  27503  C5' GUA  418     184.707 117.979  44.996  1.00 81.14      A16S
ATOM  27504  C4' GUA  418     183.674 119.053  44.739  1.00 81.14      A16S
ATOM  27505  O4' GUA  418     183.951 119.707  43.475  1.00 81.14      A16S
ATOM  27506  C1' GUA  418     182.735 120.062  42.850  1.00 81.14      A16S
ATOM  27507  N9  GUA  418     182.734 119.529  41.489  1.00 94.34      A16S
ATOM  27508  C4  GUA  418     182.764 118.207  41.097  1.00 94.34      A16S
ATOM  27509  N3  GUA  418     182.778 117.131  41.912  1.00 94.34      A16S
ATOM  27510  C2  GUA  418     182.827 115.995  41.230  1.00 94.34      A16S
ATOM  27511  N2  GUA  418     182.844 114.822  41.881  1.00 94.34      A16S
ATOM  27512  N1  GUA  418     182.864 115.922  39.860  1.00 94.34      A16S
ATOM  27513  C6  GUA  418     182.857 117.016  39.003  1.00 94.34      A16S
ATOM  27514  O6  GUA  418     182.911 116.843  37.781  1.00 94.34      A16S
ATOM  27515  C5  GUA  418     182.794 118.237  39.718  1.00 94.34      A16S
ATOM  27516  N7  GUA  418     182.762 119.543  39.253  1.00 94.34      A16S
ATOM  27517  C8  GUA  418     182.723 120.271  40.334  1.00 94.34      A16S
ATOM  27518  C2' GUA  418     181.581 119.633  43.757  1.00 81.14      A16S
ATOM  27519  O2' GUA  418     181.130 120.743  44.503  1.00 81.14      A16S
ATOM  27520  C3' GUA  418     182.234 118.571  44.637  1.00 81.14      A16S
ATOM  27521  O3' GUA  418     181.629 118.575  45.924  1.00 81.14      A16S
ATOM  27522  P   GUA  419     180.537 117.460  46.308  1.00110.92      A16S
ATOM  27523  O1P GUA  419     179.713 118.022  47.406  1.00 90.95      A16S
ATOM  27524  O2P GUA  419     181.243 116.172  46.510  1.00 90.95      A16S
ATOM  27525  O5' GUA  419     179.602 117.346  45.023  1.00110.92      A16S
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ATOM  27526  C5' GUA  419     178.887 118.477  44.534  1.00110.92      A16S
ATOM  27527  C4' GUA  419     178.438 118.240  43.107  1.00110.92      A16S
ATOM  27528  O4' GUA  419     179.550 117.688  42.342  1.00110.92      A16S
ATOM  27529  C1' GUA  419     179.064 116.752  41.388  1.00110.92      A16S
ATOM  27530  N9  GUA  419     179.508 115.420  41.782  1.00 90.95      A16S
ATOM  27531  C4  GUA  419     179.575 114.311  40.975  1.00 90.95      A16S
ATOM  27532  N3  GUA  419     179.277 114.268  39.660  1.00 90.95      A16S
ATOM  27533  C2  GUA  419     179.420 113.050  39.160  1.00 90.95      A16S
ATOM  27534  N2  GUA  419     179.173 112.829  37.866  1.00 90.95      A16S
ATOM  27535  N1  GUA  419     179.819 111.962  39.895  1.00 90.95      A16S
ATOM  27536  C6  GUA  419     180.133 111.984  41.249  1.00 90.95      A16S
ATOM  27537  O6  GUA  419     180.485 110.945  41.816  1.00 90.95      A16S
ATOM  27538  C5  GUA  419     179.989 113.285  41.797  1.00 90.95      A16S
ATOM  27539  N7  GUA  419     180.199 113.744  43.089  1.00 90.95      A16S
ATOM  27540  C8  GUA  419     179.908 115.015  43.031  1.00 90.95      A16S
ATOM  27541  C2' GUA  419     177.543 116.837  41.447  1.00110.92      A16S
ATOM  27542  O2' GUA  419     177.102 117.852  40.572  1.00110.92      A16S
ATOM  27543  C3' GUA  419     177.343 117.206  42.907  1.00110.92      A16S
ATOM  27544  O3' GUA  419     176.051 117.748  43.142  1.00110.92      A16S
ATOM  27545  P   GUA  420     174.761 116.814  42.950  1.00 80.40      A16S
ATOM  27546  O1P GUA  420     173.587 117.457  43.594  1.00 78.84      A16S
ATOM  27547  O2P GUA  420     175.141 115.428  43.327  1.00 78.84      A16S
ATOM  27548  O5' GUA  420     174.534 116.846  41.381  1.00 80.40      A16S
ATOM  27549  C5' GUA  420     173.774 115.840  40.763  1.00 80.40      A16S
ATOM  27550  C4' GUA  420     174.255 115.599  39.360  1.00 80.40      A16S
ATOM  27551  O4' GUA  420     175.666 115.252  39.333  1.00 80.40      A16S
ATOM  27552  C1' GUA  420     175.868 114.138  38.473  1.00 80.40      A16S
ATOM  27553  N9  GUA  420     176.217 113.009  39.325  1.00 78.84      A16S
ATOM  27554  C4  GUA  420     176.287 111.671  38.986  1.00 78.84      A16S
ATOM  27555  N3  GUA  420     176.016 111.130  37.778  1.00 78.84      A16S
ATOM  27556  C2  GUA  420     176.196 109.810  37.773  1.00 78.84      A16S
ATOM  27557  N2  GUA  420     175.981 109.102  36.665  1.00 78.84      A16S
ATOM  27558  N1  GUA  420     176.605 109.088  38.857  1.00 78.84      A16S
ATOM  27559  C6  GUA  420     176.893 109.623  40.107  1.00 78.84      A16S
ATOM  27560  O6  GUA  420     177.272 108.881  41.021  1.00 78.84      A16S
ATOM  27561  C5  GUA  420     176.701 111.031  40.133  1.00 78.84      A16S
ATOM  27562  N7  GUA  420     176.867 111.936  41.170  1.00 78.84      A16S
ATOM  27563  C8  GUA  420     176.562 113.089  40.647  1.00 78.84      A16S
ATOM  27564  C2' GUA  420     174.559 113.940  37.715  1.00 80.40      A16S
ATOM  27565  O2' GUA  420     174.560 114.766  36.570  1.00 80.40      A16S
ATOM  27566  C3' GUA  420     173.569 114.392  38.773  1.00 80.40      A16S
ATOM  27567  O3' GUA  420     172.281 114.776  38.342  1.00 80.40      A16S
ATOM  27568  P   GUA  421     171.008 114.220  39.139  1.00 75.61      A16S
ATOM  27569  O1P GUA  421     169.861 115.137  38.908  1.00 72.47      A16S
ATOM  27570  O2P GUA  421     171.448 113.933  40.524  1.00 72.47      A16S
ATOM  27571  O5' GUA  421     170.755 112.817  38.430  1.00 75.61      A16S
ATOM  27572  C5' GUA  421     170.962 112.685  37.024  1.00 75.61      A16S
ATOM  27573  C4' GUA  421     171.099 111.238  36.640  1.00 75.61      A16S
ATOM  27574  O4' GUA  421     172.398 110.722  37.013  1.00 75.61      A16S
ATOM  27575  C1' GUA  421     172.291 109.326  37.247  1.00 75.61      A16S
ATOM  27576  N9  GUA  421     172.811 109.038  38.577  1.00 72.47      A16S
ATOM  27577  C4  GUA  421     173.240 107.820  39.032  1.00 72.47      A16S
ATOM  27578  N3  GUA  421     173.269 106.677  38.321  1.00 72.47      A16S
ATOM  27579  C2  GUA  421     173.751 105.671  39.029  1.00 72.47      A16S
ATOM  27580  N2  GUA  421     173.882 104.463  38.471  1.00 72.47      A16S
ATOM  27581  N1  GUA  421     174.152 105.775  40.337  1.00 72.47      A16S
ATOM  27582  C6  GUA  421     174.124 106.942  41.089  1.00 72.47      A16S
ATOM  27583  O6  GUA  421     174.507 106.927  42.261  1.00 72.47      A16S
ATOM  27584  C5  GUA  421     173.625 108.033  40.337  1.00 72.47      A16S
ATOM  27585  N7  GUA  421     173.444 109.360  40.693  1.00 72.47      A16S
ATOM  27586  C8  GUA  421     172.961 109.918  39.618  1.00 72.47      A16S
ATOM  27587  C2' GUA  421     170.812 108.949  37.107  1.00 75.61      A16S
ATOM  27588  O2' GUA  421     170.564 108.415  35.823  1.00 75.61      A16S
ATOM  27589  C3' GUA  421     170.137 110.295  37.323  1.00 75.61      A16S
ATOM  27590  O3' GUA  421     168.881 110.352  36.694  1.00 75.61      A16S
ATOM  27591  P   URI  422     167.591 109.840  37.478  1.00 65.21      A16S
ATOM  27592  O1P URI  422     166.433 110.090  36.590  1.00 80.82      A16S
ATOM  27593  O2P URI  422     167.611 110.425  38.837  1.00 80.82      A16S
ATOM  27594  O5' URI  422     167.817 108.265  37.600  1.00 65.21      A16S
ATOM  27595  C5' URI  422     167.658 107.416  36.466  1.00 65.21      A16S
ATOM  27596  C4' URI  422     167.998 105.986  36.819  1.00 65.21      A16S
ATOM  27597  O4' URI  422     169.353 105.943  37.327  1.00 65.21      A16S
ATOM  27598  C1' URI  422     169.465 104.925  38.305  1.00 65.21      A16S
ATOM  27599  N1  URI  422     169.960 105.536  39.547  1.00 80.82      A16S
ATOM  27600  C6  URI  422     169.841 106.887  39.769  1.00 80.82      A16S
ATOM  27601  C2  URI  422     170.560 104.711  40.484  1.00 80.82      A16S
ATOM  27602  O2  URI  422     170.673 103.505  40.335  1.00 80.82      A16S
ATOM  27603  N3  URI  422     171.022 105.351  41.604  1.00 80.82      A16S
ATOM  27604  C4  URI  422     170.943 106.700  41.882  1.00 80.82      A16S
ATOM  27605  O4  URI  422     171.453 107.134  42.915  1.00 80.82      A16S
ATOM  27606  C5  URI  422     170.299 107.481  40.874  1.00 80.82      A16S
ATOM  27607  C2' URI  422     168.099 104.245  38.423  1.00 65.21      A16S
ATOM  27608  O2' URI  422     168.060 103.096  37.604  1.00 65.21      A16S
ATOM  27609  C3' URI  422     167.165 105.332  37.910  1.00 65.21      A16S
ATOM  27610  O3' URI  422     166.009 104.727  37.345  1.00 65.21      A16S
ATOM  27611  P   GUA  423     164.650 104.636  38.199  1.00 63.35      A16S
ATOM  27612  O1P GUA  423     164.939 103.870  39.434  1.00 75.23      A16S
ATOM  27613  O2P GUA  423     163.558 104.185  37.300  1.00 75.23      A16S
ATOM  27614  O5' GUA  423     164.360 106.152  38.575  1.00 63.35      A16S
ATOM  27615  C5' GUA  423     163.107 106.548  39.110  1.00 63.35      A16S
ATOM  27616  C4' GUA  423     163.343 107.410  40.309  1.00 63.35      A16S
ATOM  27617  O4' GUA  423     163.953 106.599  41.331  1.00 63.35      A16S
ATOM  27618  C1' GUA  423     164.834 107.394  42.084  1.00 63.35      A16S
ATOM  27619  N9  GUA  423     165.997 106.603  42.467  1.00 75.23      A16S
ATOM  27620  C4  GUA  423     166.919 106.937  43.422  1.00 75.23      A16S
ATOM  27621  N3  GUA  423     166.944 108.085  44.127  1.00 75.23      A16S
ATOM  27622  C2  GUA  423     167.943 108.114  44.987  1.00 75.23      A16S
ATOM  27623  N2  GUA  423     168.132 109.196  45.743  1.00 75.23      A16S
ATOM  27624  N1  GUA  423     168.835 107.089  45.161  1.00 75.23      A16S
ATOM  27625  C6  GUA  423     168.827 105.894  44.452  1.00 75.23      A16S
ATOM  27626  O6  GUA  423     169.679 105.029  44.695  1.00 75.23      A16S
ATOM  27627  C5  GUA  423     167.769 105.859  43.505  1.00 75.23      A16S
ATOM  27628  N7  GUA  423     167.408 104.878  42.595  1.00 75.23      A16S
ATOM  27629  C8  GUA  423     166.359 105.368  41.995  1.00 75.23      A16S
ATOM  27630  C2' GUA  423     165.036 108.741  41.387  1.00 63.35      A16S
ATOM  27631  O2' GUA  423     164.394 109.713  42.162  1.00 63.35      A16S
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ATOM	27632	C3'	GUA	423	164.337	108.528	40.052	1.00	63.35	A16S	ATOM	27685	C4	ADE	426	164.141	103.165	48.960	1.00	72.90	A16S
ATOM	27633	O3'	GUA	423	163.640	109.667	39.522	1.00	63.35	A16S	ATOM	27686	N3	ADE	426	165.114	102.591	49.688	1.00	72.90	A16S
ATOM	27634	P	URI	424	162.674	110.568	40.460	1.00	77.62	A16S	ATOM	27687	C2	ADE	426	165.518	103.411	50.656	1.00	72.90	A16S
ATOM	27635	O1P	URI	424	161.602	111.056	39.576	1.00	75.57	A16S	ATOM	27688	N1	ADE	426	165.090	104.643	50.957	1.00	72.90	A16S
ATOM	27636	O2P	URI	424	163.490	111.553	41.206	1.00	75.57	A16S	ATOM	27689	C6	ADE	426	164.107	105.186	50.206	1.00	72.90	A16S
ATOM	27637	O5'	URI	424	161.980	109.553	41.483	1.00	77.62	A16S	ATOM	27690	N6	ADE	426	163.665	106.407	50.507	1.00	72.90	A16S
ATOM	27638	C5'	URI	424	160.681	109.842	42.001	1.00	77.62	A16S	ATOM	27691	C5	ADE	426	163.600	104.424	49.149	1.00	72.90	A16S
ATOM	27639	C4'	URI	424	160.181	108.738	42.916	1.00	77.62	A16S	ATOM	27692	N7	ADE	426	162.618	104.682	48.208	1.00	72.90	A16S
ATOM	27640	O4'	URI	424	161.016	108.612	44.089	1.00	77.62	A16S	ATOM	27693	C8	ADE	426	162.581	103.590	47.484	1.00	72.90	A16S
ATOM	27641	C1'	URI	424	160.253	107.976	45.089	1.00	77.62	A16S	ATOM	27694	C2'	ADE	426	163.228	100.177	48.203	1.00	69.16	A16S
ATOM	27642	N1	URI	424	160.735	108.295	46.437	1.00	75.57	A16S	ATOM	27695	O2'	ADE	426	164.077	99.064	48.008	1.00	69.16	A16S
ATOM	27643	C6	URI	424	160.689	109.558	46.966	1.00	75.57	A16S	ATOM	27696	C3'	ADE	426	161.815	99.936	47.684	1.00	69.16	A16S
ATOM	27644	C2	URI	424	161.221	107.231	47.173	1.00	75.57	A16S	ATOM	27697	O3'	ADE	426	161.342	98.634	48.001	1.00	69.16	A16S
ATOM	27645	O2	URI	424	161.275	106.108	46.727	1.00	75.57	A16S	ATOM	27698	P	ADE	427	160.350	98.441	49.249	1.00	84.58	A16S
ATOM	27646	N3	URI	424	161.636	107.529	48.442	1.00	75.57	A16S	ATOM	27699	O1P	ADE	427	160.025	96.998	49.339	1.00	70.89	A16S
ATOM	27647	C4	URI	424	161.612	108.761	49.043	1.00	75.57	A16S	ATOM	27700	O2P	ADE	427	159.255	99.436	49.129	1.00	70.89	A16S
ATOM	27648	O4	URI	424	162.066	108.882	50.183	1.00	75.57	A16S	ATOM	27701	O5'	ADE	427	161.261	98.822	50.500	1.00	84.58	A16S
ATOM	27649	C5	URI	424	161.094	109.823	48.217	1.00	75.57	A16S	ATOM	27702	C5'	ADE	427	162.444	98.076	50.782	1.00	84.58	A16S
ATOM	27650	C2'	URI	424	158.783	108.303	44.850	1.00	77.62	A16S	ATOM	27703	C4'	ADE	427	163.215	98.718	51.907	1.00	84.58	A16S
ATOM	27651	O2'	URI	424	158.071	107.097	44.832	1.00	77.62	A16S	ATOM	27704	O4'	ADE	427	163.732	99.998	51.469	1.00	84.58	A16S
ATOM	27652	C3'	URI	424	158.797	109.027	43.500	1.00	77.62	A16S	ATOM	27705	C1'	ADE	427	163.698	100.916	52.547	1.00	84.58	A16S
ATOM	27653	O3'	URI	424	157.720	108.458	42.742	1.00	77.62	A16S	ATOM	27706	N9	ADE	427	162.783	101.994	52.186	1.00	70.89	A16S
ATOM	27654	P	ADE	425	158.013	107.445	41.510	1.00	58.45	A16S	ATOM	27707	C4	ADE	427	162.766	103.261	52.711	1.00	70.89	A16S
ATOM	27655	O1P	ADE	425	158.416	108.255	40.331	1.00	66.03	A16S	ATOM	27708	N3	ADE	427	163.601	103.771	53.628	1.00	70.89	A16S
ATOM	27656	O2P	ADE	425	156.864	106.514	41.408	1.00	66.03	A16S	ATOM	27709	C2	ADE	427	163.275	105.030	53.908	1.00	70.89	A16S
ATOM	27657	O5'	ADE	425	159.257	106.559	41.943	1.00	58.45	A16S	ATOM	27710	N1	ADE	427	162.278	105.777	53.416	1.00	70.89	A16S
ATOM	27658	C5'	ADE	425	159.108	105.495	42.859	1.00	58.45	A16S	ATOM	27711	C6	ADE	427	161.451	105.227	52.501	1.00	70.89	A16S
ATOM	27659	C4'	ADE	425	160.051	104.375	42.509	1.00	58.45	A16S	ATOM	27712	N6	ADE	427	160.442	105.961	52.026	1.00	70.89	A16S
ATOM	27660	O4'	ADE	425	161.363	104.911	42.198	1.00	58.45	A16S	ATOM	27713	C5	ADE	427	161.701	103.903	52.111	1.00	70.89	A16S
ATOM	27661	C1'	ADE	425	162.356	104.019	42.668	1.00	58.45	A16S	ATOM	27714	N7	ADE	427	161.070	103.064	51.205	1.00	70.89	A16S
ATOM	27662	N9	ADE	425	163.152	104.708	43.678	1.00	66.03	A16S	ATOM	27715	C8	ADE	427	161.754	101.950	51.281	1.00	70.89	A16S
ATOM	27663	C4	ADE	425	164.252	104.197	44.320	1.00	66.03	A16S	ATOM	27716	C2'	ADE	427	163.228	100.144	53.784	1.00	84.58	A16S
ATOM	27664	N3	ADE	425	164.802	102.984	44.154	1.00	66.03	A16S	ATOM	27717	O2'	ADE	427	164.342	99.636	54.485	1.00	84.58	A16S
ATOM	27665	C2	ADE	425	165.859	102.837	44.945	1.00	66.03	A16S	ATOM	27718	C3'	ADE	427	162.406	99.032	53.152	1.00	84.58	A16S
ATOM	27666	N1	ADE	425	166.388	103.698	45.817	1.00	66.03	A16S	ATOM	27719	O3'	ADE	427	162.361	97.890	53.995	1.00	84.58	A16S
ATOM	27667	C6	ADE	425	165.810	104.909	45.961	1.00	66.03	A16S	ATOM	27720	P	CYT	428	160.947	97.339	54.519	1.00	76.30	A16S
ATOM	27668	N6	ADE	425	166.339	105.770	46.830	1.00	66.03	A16S	ATOM	27721	O1P	CYT	428	161.245	96.275	55.505	1.00	88.34	A16S
ATOM	27669	C5	ADE	425	164.682	105.190	45.179	1.00	66.03	A16S	ATOM	27722	O2P	CYT	428	160.065	97.036	53.366	1.00	88.34	A16S
ATOM	27670	N7	ADE	425	163.867	106.309	45.082	1.00	66.03	A16S	ATOM	27723	O5'	CYT	428	160.319	98.585	55.282	1.00	76.30	A16S
ATOM	27671	C8	ADE	425	162.975	105.971	44.182	1.00	66.03	A16S	ATOM	27724	C5'	CYT	428	160.950	99.136	56.428	1.00	76.30	A16S
ATOM	27672	C2'	ADE	425	161.634	102.794	43.228	1.00	58.45	A16S	ATOM	27725	C4'	CYT	428	160.362	100.489	56.737	1.00	76.30	A16S
ATOM	27673	O2'	ADE	425	161.434	101.847	42.202	1.00	58.45	A16S	ATOM	27726	O4'	CYT	428	160.654	101.403	55.645	1.00	76.30	A16S
ATOM	27674	C3'	ADE	425	160.308	103.400	43.644	1.00	58.45	A16S	ATOM	27727	C1'	CYT	428	159.572	102.304	55.472	1.00	76.30	A16S
ATOM	27675	O3'	ADE	425	159.283	102.416	43.731	1.00	58.45	A16S	ATOM	27728	N1	CYT	428	159.056	102.148	54.102	1.00	88.34	A16S
ATOM	27676	P	ADE	426	158.718	101.997	45.174	1.00	69.16	A16S	ATOM	27729	C6	CYT	428	159.339	101.031	53.366	1.00	88.34	A16S
ATOM	27677	O1P	ADE	426	157.782	100.858	45.004	1.00	72.90	A16S	ATOM	27730	C2	CYT	428	158.267	103.165	53.564	1.00	88.34	A16S
ATOM	27678	O2P	ADE	426	158.241	103.240	45.830	1.00	72.90	A16S	ATOM	27731	O2	CYT	428	158.029	104.158	54.252	1.00	88.34	A16S
ATOM	27679	O5'	ADE	426	160.024	101.464	45.916	1.00	69.16	A16S	ATOM	27732	N3	CYT	428	157.786	103.040	52.312	1.00	88.34	A16S
ATOM	27680	C5'	ADE	426	160.764	100.373	45.374	1.00	69.16	A16S	ATOM	27733	C4	CYT	428	158.065	101.950	51.599	1.00	88.34	A16S
ATOM	27681	C4'	ADE	426	162.008	100.105	46.191	1.00	69.16	A16S	ATOM	27734	N4	CYT	428	157.569	101.871	50.364	1.00	88.34	A16S
ATOM	27682	O4'	ADE	426	162.922	101.227	46.100	1.00	69.16	A16S	ATOM	27735	C5	CYT	428	158.867	100.891	52.120	1.00	88.34	A16S
ATOM	27683	C1'	ADE	426	163.688	101.313	47.293	1.00	69.16	A16S	ATOM	27736	C2'	CYT	428	158.533	101.984	56.551	1.00	76.30	A16S
ATOM	27684	N9	ADE	426	163.476	102.632	47.882	1.00	72.90	A16S	ATOM	27737	O2'	CYT	428	158.721	102.838	57.663	1.00	76.30	A16S

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ATOM  27738  C3' CYT   428     158.849 100.521  56.850  1.00 76.30      A16S
ATOM  27739  O3' CYT   428     158.440 100.140  58.155  1.00 76.30      A16S
ATOM  27740  P   URI   429     156.975  99.517  58.377  1.00 76.78      A16S
ATOM  27741  O1P URI   429     156.893  99.078  59.791  1.00 89.93      A16S
ATOM  27742  O2P URI   429     156.707  98.538  57.287  1.00 89.93      A16S
ATOM  27743  O5' URI   429     155.998 100.765  58.230  1.00 76.78      A16S
ATOM  27744  C5' URI   429     155.824 101.666  59.309  1.00 76.78      A16S
ATOM  27745  C4' URI   429     154.752 102.669  58.981  1.00 76.78      A16S
ATOM  27746  O4' URI   429     155.180 103.468  57.851  1.00 76.78      A16S
ATOM  27747  C1' URI   429     154.055 103.816  57.062  1.00 76.78      A16S
ATOM  27748  N1  URI   429     154.236 103.244  55.721  1.00 89.93      A16S
ATOM  27749  C6  URI   429     155.083 102.185  55.501  1.00 89.93      A16S
ATOM  27750  C2  URI   429     153.525 103.812  54.689  1.00 89.93      A16S
ATOM  27751  O2  URI   429     152.758 104.745  54.853  1.00 89.93      A16S
ATOM  27752  N3  URI   429     153.744 103.247  53.457  1.00 89.93      A16S
ATOM  27753  C4  URI   429     154.582 102.193  53.164  1.00 89.93      A16S
ATOM  27754  O4  URI   429     154.683 101.805  52.001  1.00 89.93      A16S
ATOM  27755  C5  URI   429     155.275 101.654  54.291  1.00 89.93      A16S
ATOM  27756  C2' URI   429     152.823 103.259  57.772  1.00 76.78      A16S
ATOM  27757  O2' URI   429     152.310 104.229  58.655  1.00 76.78      A16S
ATOM  27758  C3' URI   429     153.426 102.091  58.528  1.00 76.78      A16S
ATOM  27759  O3' URI   429     152.610 101.753  59.633  1.00 76.78      A16S
ATOM  27760  P   CYT   430     151.663 100.466  59.542  1.00 67.96      A16S
ATOM  27761  O1P CYT   430     151.296 100.092  60.930  1.00 89.07      A16S
ATOM  27762  O2P CYT   430     152.341  99.473  58.665  1.00 89.07      A16S
ATOM  27763  O5' CYT   430     150.354 100.985  58.797  1.00 67.96      A16S
ATOM  27764  C5' CYT   430     149.483 101.910  59.424  1.00 67.96      A16S
ATOM  27765  C4' CYT   430     148.785 102.739  58.384  1.00 67.96      A16S
ATOM  27766  O4' CYT   430     149.800 103.231  57.472  1.00 67.96      A16S
ATOM  27767  C1' CYT   430     149.255 103.333  56.164  1.00 67.96      A16S
ATOM  27768  N1  CYT   430     150.037 102.480  55.259  1.00 89.07      A16S
ATOM  27769  C6  CYT   430     150.991 101.631  55.738  1.00 89.07      A16S
ATOM  27770  C2  CYT   430     149.789 102.560  53.893  1.00 89.07      A16S
ATOM  27771  O2  CYT   430     148.908 103.330  53.495  1.00 89.07      A16S
ATOM  27772  N3  CYT   430     150.509 101.799  53.043  1.00 89.07      A16S
ATOM  27773  C4  CYT   430     151.444 100.978  53.518  1.00 89.07      A16S
ATOM  27774  N4  CYT   430     152.135 100.247  52.645  1.00 89.07      A16S
ATOM  27775  C5  CYT   430     151.712 100.870  54.910  1.00 89.07      A16S
ATOM  27776  C2' CYT   430     147.789 102.913  56.252  1.00 67.96      A16S
ATOM  27777  O2' CYT   430     146.985 104.063  56.436  1.00 67.96      A16S
ATOM  27778  C3' CYT   430     147.825 101.998  57.467  1.00 67.96      A16S
ATOM  27779  O3' CYT   430     146.535 101.870  58.045  1.00 67.96      A16S
ATOM  27780  P   CYT   431     145.697 100.519  57.813  1.00 74.05      A16S
ATOM  27781  O1P CYT   431     144.621 100.454  58.835  1.00 68.18      A16S
ATOM  27782  O2P CYT   431     146.675  99.406  57.694  1.00 68.18      A16S
ATOM  27783  O5' CYT   431     145.023 100.697  56.384  1.00 74.05      A16S
ATOM  27784  C5' CYT   431     144.298 101.869  56.049  1.00 74.05      A16S
ATOM  27785  C4' CYT   431     144.018 101.885  54.565  1.00 74.05      A16S
ATOM  27786  O4' CYT   431     145.228 102.176  53.814  1.00 74.05      A16S
ATOM  27787  C1' CYT   431     145.188 101.490  52.573  1.00 74.05      A16S
ATOM  27788  N1  CYT   431     146.355 100.608  52.486  1.00 68.18      A16S
ATOM  27789  C6  CYT   431     147.165 100.407  53.565  1.00 68.18      A16S
ATOM  27790  C2  CYT   431     146.619  99.968  51.277  1.00 68.18      A16S
ATOM  27791  O2  CYT   431     145.874 100.182  50.310  1.00 68.18      A16S
ATOM  27792  N3  CYT   431     147.677  99.131  51.191  1.00 68.18      A16S
ATOM  27793  C4  CYT   431     148.453  98.927  52.255  1.00 68.18      A16S
ATOM  27794  N4  CYT   431     149.470  98.080  52.133  1.00 68.18      A16S
ATOM  27795  C5  CYT   431     148.217  99.581  53.494  1.00 68.18      A16S
ATOM  27796  C2' CYT   431     143.881 100.702  52.524  1.00 74.05      A16S
ATOM  27797  O2' CYT   431     142.909 101.446  51.822  1.00 74.05      A16S
ATOM  27798  C3' CYT   431     143.566 100.552  54.005  1.00 74.05      A16S
ATOM  27799  O3' CYT   431     142.185 100.353  54.233  1.00 74.05      A16S
ATOM  27800  P   URI   432     141.605  98.864  54.264  1.00 67.88      A16S
ATOM  27801  O1P URI   432     140.210  98.932  54.768  1.00 66.54      A16S
ATOM  27802  O2P URI   432     142.601  97.997  54.945  1.00 66.54      A16S
ATOM  27803  O5' URI   432     141.550  98.444  52.733  1.00 67.88      A16S
ATOM  27804  C5' URI   432     140.641  99.074  51.837  1.00 67.88      A16S
ATOM  27805  C4' URI   432     140.923  98.627  50.425  1.00 67.88      A16S
ATOM  27806  O4' URI   432     142.319  98.901  50.132  1.00 67.88      A16S
ATOM  27807  C1' URI   432     142.821  97.912  49.256  1.00 67.88      A16S
ATOM  27808  N1  URI   432     143.980  97.288  49.900  1.00 66.54      A16S
ATOM  27809  C6  URI   432     144.242  97.486  51.226  1.00 66.54      A16S
ATOM  27810  C2  URI   432     144.804  96.513  49.118  1.00 66.54      A16S
ATOM  27811  O2  URI   432     144.578  96.292  47.943  1.00 66.54      A16S
ATOM  27812  N3  URI   432     145.898  95.999  49.763  1.00 66.54      A16S
ATOM  27813  C4  URI   432     146.233  96.172  51.085  1.00 66.54      A16S
ATOM  27814  O4  URI   432     147.270  95.672  51.518  1.00 66.54      A16S
ATOM  27815  C5  URI   432     145.312  96.969  51.832  1.00 66.54      A16S
ATOM  27816  C2' URI   432     141.674  96.951  48.944  1.00 67.88      A16S
ATOM  27817  O2' URI   432     141.002  97.393  47.787  1.00 67.88      A16S
ATOM  27818  C3' URI   432     140.793  97.136  50.165  1.00 67.88      A16S
ATOM  27819  O3' URI   432     139.454  96.801  49.849  1.00 67.88      A16S
ATOM  27820  P   GUA   433     138.939  95.311  50.113  1.00 73.69      A16S
ATOM  27821  O1P GUA   433     137.594  95.191  49.509  1.00 77.35      A16S
ATOM  27822  O2P GUA   433     139.125  95.005  51.548  1.00 77.35      A16S
ATOM  27823  O5' GUA   433     139.959  94.399  49.298  1.00 73.69      A16S
ATOM  27824  C5' GUA   433     139.832  94.181  47.892  1.00 73.69      A16S
ATOM  27825  C4' GUA   433     140.872  93.181  47.455  1.00 73.69      A16S
ATOM  27826  O4' GUA   433     142.140  93.686  47.929  1.00 73.69      A16S
ATOM  27827  C1' GUA   433     142.917  92.627  48.441  1.00 73.69      A16S
ATOM  27828  N9  GUA   433     143.417  92.996  49.760  1.00 77.35      A16S
ATOM  27829  C4  GUA   433     144.618  92.615  50.302  1.00 77.35      A16S
ATOM  27830  N3  GUA   433     145.532  91.814  49.717  1.00 77.35      A16S
ATOM  27831  C2  GUA   433     146.596  91.640  50.481  1.00 77.35      A16S
ATOM  27832  N2  GUA   433     147.610  90.875  50.054  1.00 77.35      A16S
ATOM  27833  N1  GUA   433     146.746  92.202  51.722  1.00 77.35      A16S
ATOM  27834  C6  GUA   433     145.815  93.021  52.348  1.00 77.35      A16S
ATOM  27835  O6  GUA   433     146.048  93.462  53.479  1.00 77.35      A16S
ATOM  27836  C5  GUA   433     144.673  93.225  51.535  1.00 77.35      A16S
ATOM  27837  N7  GUA   433     143.526  93.969  51.767  1.00 77.35      A16S
ATOM  27838  C8  GUA   433     142.809  93.800  50.690  1.00 77.35      A16S
ATOM  27839  C2' GUA   433     142.117  91.329  48.351  1.00 73.69      A16S
ATOM  27840  O2' GUA   433     142.579  90.595  47.244  1.00 73.69      A16S
ATOM  27841  C3' GUA   433     140.692  91.818  48.113  1.00 73.69      A16S
ATOM  27842  O3' GUA   433     140.039  90.821  47.290  1.00 73.69      A16S
ATOM  27843  P   ADE   434     139.682  91.101  45.726  1.00 52.17      A16S
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ATOM  27844  O1P ADE  434     139.533  92.552  45.466  1.00 79.96      A16S
ATOM  27845  O2P ADE  434     138.559  90.188  45.385  1.00 79.96      A16S
ATOM  27846  O5' ADE  434     140.952  90.569  44.926  1.00 52.17      A16S
ATOM  27847  C5' ADE  434     141.090  89.186  44.642  1.00 52.17      A16S
ATOM  27848  C4' ADE  434     141.751  88.980  43.296  1.00 52.17      A16S
ATOM  27849  O4' ADE  434     143.095  89.531  43.319  1.00 52.17      A16S
ATOM  27850  C1' ADE  434     143.982  88.676  42.611  1.00 52.17      A16S
ATOM  27851  N9  ADE  434     144.972  88.185  43.563  1.00 79.96      A16S
ATOM  27852  C4  ADE  434     146.123  87.501  43.278  1.00 79.96      A16S
ATOM  27853  N3  ADE  434     146.571  87.136  42.071  1.00 79.96      A16S
ATOM  27854  C2  ADE  434     147.739  86.511  42.176  1.00 79.96      A16S
ATOM  27855  N1  ADE  434     148.460  86.237  43.268  1.00 79.96      A16S
ATOM  27856  C6  ADE  434     147.983  86.624  44.466  1.00 79.96      A16S
ATOM  27857  N6  ADE  434     148.713  86.372  45.556  1.00 79.96      A16S
ATOM  27858  C5  ADE  434     146.744  87.285  44.491  1.00 79.96      A16S
ATOM  27859  N7  ADE  434     145.985  87.806  45.528  1.00 79.96      A16S
ATOM  27860  C8  ADE  434     144.946  88.324  44.925  1.00 79.96      A16S
ATOM  27861  C2' ADE  434     143.151  87.552  41.993  1.00 52.17      A16S
ATOM  27862  O2' ADE  434     142.808  87.842  40.659  1.00 52.17      A16S
ATOM  27863  C3' ADE  434     141.951  87.518  42.928  1.00 52.17      A16S
ATOM  27864  O3' ADE  434     140.799  86.989  42.287  1.00 52.17      A16S
ATOM  27865  P   ADE  435     140.441  85.439  42.478  1.00 73.56      A16S
ATOM  27866  O1P ADE  435     139.300  85.091  41.591  1.00 76.01      A16S
ATOM  27867  O2P ADE  435     140.330  85.197  43.937  1.00 76.01      A16S
ATOM  27868  O5' ADE  435     141.750  84.711  41.942  1.00 73.56      A16S
ATOM  27869  C5' ADE  435     142.078  83.421  42.406  1.00 73.56      A16S
ATOM  27870  C4' ADE  435     143.560  83.291  42.628  1.00 73.56      A16S
ATOM  27871  O4' ADE  435     144.098  84.479  43.265  1.00 73.56      A16S
ATOM  27872  C1' ADE  435     145.017  84.103  44.282  1.00 73.56      A16S
ATOM  27873  N9  ADE  435     144.457  84.526  45.565  1.00 76.01      A16S
ATOM  27874  C4  ADE  435     145.056  84.447  46.797  1.00 76.01      A16S
ATOM  27875  N3  ADE  435     146.278  83.971  47.082  1.00 76.01      A16S
ATOM  27876  C2  ADE  435     146.520  84.062  48.385  1.00 76.01      A16S
ATOM  27877  N1  ADE  435     145.742  84.538  49.360  1.00 76.01      A16S
ATOM  27878  C6  ADE  435     144.521  85.004  49.039  1.00 76.01      A16S
ATOM  27879  N6  ADE  435     143.741  85.473  50.012  1.00 76.01      A16S
ATOM  27880  C5  ADE  435     144.142  84.966  47.694  1.00 76.01      A16S
ATOM  27881  N7  ADE  435     142.987  85.363  47.041  1.00 76.01      A16S
ATOM  27882  C8  ADE  435     143.224  85.084  45.785  1.00 76.01      A16S
ATOM  27883  C2' ADE  435     145.207  82.588  44.176  1.00 73.56      A16S
ATOM  27884  O2' ADE  435     146.295  82.311  43.324  1.00 73.56      A16S
ATOM  27885  C3' ADE  435     143.870  82.164  43.587  1.00 73.56      A16S
ATOM  27886  O3' ADE  435     143.879  80.938  42.876  1.00 73.56      A16S
ATOM  27887  P   CYT  436     142.603  79.966  42.970  1.00 91.82      A16S
ATOM  27888  O1P CYT  436     142.903  78.806  42.102  1.00 79.37      A16S
ATOM  27889  O2P CYT  436     141.341  80.724  42.774  1.00 79.37      A16S
ATOM  27890  O5' CYT  436     142.606  79.489  44.485  1.00 91.82      A16S
ATOM  27891  C5' CYT  436     143.782  78.957  45.068  1.00 91.82      A16S
ATOM  27892  C4' CYT  436     143.787  79.227  46.545  1.00 91.82      A16S
ATOM  27893  O4' CYT  436     143.915  80.652  46.782  1.00 91.82      A16S
ATOM  27894  C1' CYT  436     143.219  80.993  47.968  1.00 91.82      A16S
ATOM  27895  N1  CYT  436     142.185  81.976  47.626  1.00 79.37      A16S
ATOM  27896  C6  CYT  436     141.758  82.126  46.338  1.00 79.37      A16S
ATOM  27897  C2  CYT  436     141.630  82.747  48.651  1.00 79.37      A16S
ATOM  27898  O2  CYT  436     142.059  82.607  49.808  1.00 79.37      A16S
ATOM  27899  N3  CYT  436     140.647  83.622  48.357  1.00 79.37      A16S
ATOM  27900  C4  CYT  436     140.224  83.749  47.099  1.00 79.37      A16S
ATOM  27901  N4  CYT  436     139.241  84.620  46.858  1.00 79.37      A16S
ATOM  27902  C5  CYT  436     140.787  82.989  46.033  1.00 79.37      A16S
ATOM  27903  C2' CYT  436     142.611  79.701  48.521  1.00 91.82      A16S
ATOM  27904  O2' CYT  436     143.482  79.111  49.463  1.00 91.82      A16S
ATOM  27905  C3' CYT  436     142.502  78.867  47.258  1.00 91.82      A16S
ATOM  27906  O3' CYT  436     142.465  77.483  47.543  1.00 91.82      A16S
ATOM  27907  P   CYT  437     141.066  76.706  47.486  1.00 80.61      A16S
ATOM  27908  O1P CYT  437     141.383  75.259  47.426  1.00 92.36      A16S
ATOM  27909  O2P CYT  437     140.232  77.318  46.427  1.00 92.36      A16S
ATOM  27910  O5' CYT  437     140.398  77.030  48.894  1.00 80.61      A16S
ATOM  27911  C5' CYT  437     141.023  76.617  50.105  1.00 80.61      A16S
ATOM  27912  C4' CYT  437     140.226  77.094  51.293  1.00 80.61      A16S
ATOM  27913  O4' CYT  437     140.301  78.540  51.398  1.00 80.61      A16S
ATOM  27914  C1' CYT  437     139.095  79.037  51.958  1.00 80.61      A16S
ATOM  27915  N1  CYT  437     138.498  80.001  51.019  1.00 92.36      A16S
ATOM  27916  C6  CYT  437     138.994  80.157  49.756  1.00 92.36      A16S
ATOM  27917  C2  CYT  437     137.410  80.762  51.446  1.00 92.36      A16S
ATOM  27918  O2  CYT  437     136.978  80.594  52.590  1.00 92.36      A16S
ATOM  27919  N3  CYT  437     136.856  81.660  50.607  1.00 92.36      A16S
ATOM  27920  C4  CYT  437     137.352  81.819  49.382  1.00 92.36      A16S
ATOM  27921  N4  CYT  437     136.785  82.737  48.594  1.00 92.36      A16S
ATOM  27922  C5  CYT  437     138.457  81.047  48.912  1.00 92.36      A16S
ATOM  27923  C2' CYT  437     138.195  77.833  52.220  1.00 80.61      A16S
ATOM  27924  O2' CYT  437     138.373  77.386  53.545  1.00 80.61      A16S
ATOM  27925  C3' CYT  437     138.738  76.840  51.210  1.00 80.61      A16S
ATOM  27926  O3' CYT  437     138.409  75.517  51.567  1.00 80.61      A16S
ATOM  27927  P   CYT  438     136.990  74.929  51.125  1.00 83.84      A16S
ATOM  27928  O1P CYT  438     136.931  73.528  51.609  1.00 97.08      A16S
ATOM  27929  O2P CYT  438     136.801  75.217  49.682  1.00 97.08      A16S
ATOM  27930  O5' CYT  438     135.953  75.823  51.936  1.00 83.84      A16S
ATOM  27931  C5' CYT  438     135.952  75.822  53.356  1.00 83.84      A16S
ATOM  27932  C4' CYT  438     134.797  76.635  53.877  1.00 83.84      A16S
ATOM  27933  O4' CYT  438     135.044  78.053  53.666  1.00 83.84      A16S
ATOM  27934  C1' CYT  438     133.811  78.717  53.413  1.00 83.84      A16S
ATOM  27935  N1  CYT  438     133.836  79.244  52.039  1.00 97.08      A16S
ATOM  27936  C6  CYT  438     134.790  78.840  51.148  1.00 97.08      A16S
ATOM  27937  C2  CYT  438     132.846  80.150  51.648  1.00 97.08      A16S
ATOM  27938  O2  CYT  438     132.015  80.530  52.486  1.00 97.08      A16S
ATOM  27939  N3  CYT  438     132.820  80.589  50.370  1.00 97.08      A16S
ATOM  27940  C4  CYT  438     133.739  80.169  49.502  1.00 97.08      A16S
ATOM  27941  N4  CYT  438     133.657  80.608  48.248  1.00 97.08      A16S
ATOM  27942  C5  CYT  438     134.778  79.274  49.881  1.00 97.08      A16S
ATOM  27943  C2' CYT  438     132.711  77.663  53.557  1.00 83.84      A16S
ATOM  27944  O2' CYT  438     132.217  77.627  54.884  1.00 83.84      A16S
ATOM  27945  C3' CYT  438     133.474  76.406  53.175  1.00 83.84      A16S
ATOM  27946  O3' CYT  438     132.815  75.237  53.613  1.00 83.84      A16S
ATOM  27947  P   GUA  439     131.604  74.654  52.742  1.00 80.96      A16S
ATOM  27948  O1P GUA  439     131.052  73.485  53.473  1.00 87.86      A16S
ATOM  27949  O2P GUA  439     132.059  74.492  51.340  1.00 87.86      A16S
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ATOM  27950  O5' GUA  439      130.529  75.828  52.767  1.00 80.96      A16S
ATOM  27951  C5' GUA  439      129.714  76.049  53.910  1.00 80.96      A16S
ATOM  27952  C4' GUA  439      128.616  77.027  53.580  1.00 80.96      A16S
ATOM  27953  O4' GUA  439      129.223  78.290  53.194  1.00 80.96      A16S
ATOM  27954  C1' GUA  439      128.412  78.933  52.219  1.00 80.96      A16S
ATOM  27955  N9  GUA  439      129.190  79.094  50.994  1.00 87.86      A16S
ATOM  27956  C4  GUA  439      128.883  79.921  49.939  1.00 87.86      A16S
ATOM  27957  N3  GUA  439      127.815  80.745  49.861  1.00 87.86      A16S
ATOM  27958  C2  GUA  439      127.786  81.411  48.719  1.00 87.86      A16S
ATOM  27959  N2  GUA  439      126.790  82.274  48.476  1.00 87.86      A16S
ATOM  27960  N1  GUA  439      128.732  81.278  47.735  1.00 87.86      A16S
ATOM  27961  C6  GUA  439      129.841  80.439  47.796  1.00 87.86      A16S
ATOM  27962  O6  GUA  439      130.636  80.400  46.852  1.00 87.86      A16S
ATOM  27963  C5  GUA  439      129.882  79.718  49.014  1.00 87.86      A16S
ATOM  27964  N7  GUA  439      130.803  78.789  49.478  1.00 87.86      A16S
ATOM  27965  C8  GUA  439      130.354  78.448  50.655  1.00 87.86      A16S
ATOM  27966  C2' GUA  439      127.194  78.037  51.991  1.00 80.96      A16S
ATOM  27967  O2' GUA  439      126.113  78.430  52.811  1.00 80.96      A16S
ATOM  27968  C3' GUA  439      127.762  76.680  52.372  1.00 80.96      A16S
ATOM  27969  O3' GUA  439      126.722  75.757  52.646  1.00 80.96      A16S
ATOM  27970  P   GUA  440      125.991  75.020  51.419  1.00 77.47      A16S
ATOM  27971  O1P GUA  440      124.923  74.136  51.954  1.00 86.59      A16S
ATOM  27972  O2P GUA  440      127.056  74.446  50.558  1.00 86.59      A16S
ATOM  27973  O5' GUA  440      125.260  76.199  50.637  1.00 77.47      A16S
ATOM  27974  C5' GUA  440      124.141  76.860  51.216  1.00 77.47      A16S
ATOM  27975  C4' GUA  440      123.534  77.845  50.241  1.00 77.47      A16S
ATOM  27976  O4' GUA  440      124.497  78.883  49.918  1.00 77.47      A16S
ATOM  27977  C1' GUA  440      124.285  79.329  48.589  1.00 77.47      A16S
ATOM  27978  N9  GUA  440      125.480  79.028  47.810  1.00 86.59      A16S
ATOM  27979  C4  GUA  440      125.823  79.592  46.610  1.00 86.59      A16S
ATOM  27980  N3  GUA  440      125.125  80.543  45.956  1.00 86.59      A16S
ATOM  27981  C2  GUA  440      125.708  80.888  44.821  1.00 86.59      A16S
ATOM  27982  N2  GUA  440      125.155  81.835  44.045  1.00 86.59      A16S
ATOM  27983  N1  GUA  440      126.877  80.335  44.365  1.00 86.59      A16S
ATOM  27984  C6  GUA  440      127.605  79.350  45.021  1.00 86.59      A16S
ATOM  27985  O6  GUA  440      128.638  78.910  44.514  1.00 86.59      A16S
ATOM  27986  C5  GUA  440      127.001  78.981  46.242  1.00 86.59      A16S
ATOM  27987  N7  GUA  440      127.399  78.059  47.201  1.00 86.59      A16S
ATOM  27988  C8  GUA  440      126.469  78.123  48.112  1.00 86.59      A16S
ATOM  27989  C2' GUA  440      123.071  78.573  48.056  1.00 77.47      A16S
ATOM  27990  O2' GUA  440      121.899  79.313  48.308  1.00 77.47      A16S
ATOM  27991  C3' GUA  440      123.126  77.301  48.886  1.00 77.47      A16S
ATOM  27992  O3' GUA  440      121.851  76.683  48.945  1.00 77.47      A16S
ATOM  27993  P   GUA  441      121.388  75.710  47.757  1.00 77.85      A16S
ATOM  27994  O1P GUA  441      119.904  75.747  47.719  1.00 76.34      A16S
ATOM  27995  O2P GUA  441      122.091  74.407  47.871  1.00 76.34      A16S
ATOM  27996  O5' GUA  441      121.917  76.443  46.448  1.00 77.85      A16S
ATOM  27997  C5' GUA  441      121.139  77.454  45.811  1.00 77.85      A16S
ATOM  27998  C4' GUA  441      121.657  77.702  44.415  1.00 77.85      A16S
ATOM  27999  O4' GUA  441      122.980  78.301  44.482  1.00 77.85      A16S
ATOM  28000  C1' GUA  441      123.794  77.775  43.447  1.00 77.85      A16S
ATOM  28001  N9  GUA  441      124.830  76.957  44.066  1.00 76.34      A16S
ATOM  28002  C4  GUA  441      126.073  76.689  43.554  1.00 76.34      A16S
ATOM  28003  N3  GUA  441      126.566  77.154  42.390  1.00 76.34      A16S
ATOM  28004  C2  GUA  441      127.790  76.713  42.163  1.00 76.34      A16S
ATOM  28005  N2  GUA  441      128.428  77.069  41.044  1.00 76.34      A16S
ATOM  28006  N1  GUA  441      128.479  75.885  43.015  1.00 76.34      A16S
ATOM  28007  C6  GUA  441      127.988  75.390  44.218  1.00 76.34      A16S
ATOM  28008  O6  GUA  441      128.687  74.640  44.907  1.00 76.34      A16S
ATOM  28009  C5  GUA  441      126.675  75.856  44.473  1.00 76.34      A16S
ATOM  28010  N7  GUA  441      125.829  75.614  45.543  1.00 76.34      A16S
ATOM  28011  C8  GUA  441      124.750  76.290  45.262  1.00 76.34      A16S
ATOM  28012  C2' GUA  441      122.879  76.936  42.558  1.00 77.85      A16S
ATOM  28013  O2' GUA  441      122.339  77.759  41.548  1.00 77.85      A16S
ATOM  28014  C3' GUA  441      121.862  76.452  43.581  1.00 77.85      A16S
ATOM  28015  O3' GUA  441      120.625  76.002  43.047  1.00 77.85      A16S
ATOM  28016  P   ADE  442      120.604  74.912  41.868  1.00 75.36      A16S
ATOM  28017  O1P ADE  442      119.301  74.203  41.955  1.00 58.39      A16S
ATOM  28018  O2P ADE  442      121.859  74.138  41.841  1.00 58.39      A16S
ATOM  28019  O5' ADE  442      120.534  75.843  40.590  1.00 75.36      A16S
ATOM  28020  C5' ADE  442      119.719  76.996  40.663  1.00 75.36      A16S
ATOM  28021  C4' ADE  442      119.853  77.831  39.433  1.00 75.36      A16S
ATOM  28022  O4' ADE  442      121.185  78.362  39.298  1.00 75.36      A16S
ATOM  28023  C1' ADE  442      121.355  78.770  37.962  1.00 75.36      A16S
ATOM  28024  N9  ADE  442      122.666  78.343  37.496  1.00 58.39      A16S
ATOM  28025  C4  ADE  442      123.349  78.916  36.451  1.00 58.39      A16S
ATOM  28026  N3  ADE  442      122.955  79.954  35.688  1.00 58.39      A16S
ATOM  28027  C2  ADE  442      123.875  80.234  34.773  1.00 58.39      A16S
ATOM  28028  N1  ADE  442      125.056  79.642  34.552  1.00 58.39      A16S
ATOM  28029  C6  ADE  442      125.417  78.606  35.338  1.00 58.39      A16S
ATOM  28030  N6  ADE  442      126.587  78.020  35.126  1.00 58.39      A16S
ATOM  28031  C5  ADE  442      124.530  78.209  36.343  1.00 58.39      A16S
ATOM  28032  N7  ADE  442      124.592  77.208  37.301  1.00 58.39      A16S
ATOM  28033  C8  ADE  442      123.466  77.333  37.960  1.00 58.39      A16S
ATOM  28034  C2' ADE  442      120.183  78.196  37.161  1.00 75.36      A16S
ATOM  28035  O2' ADE  442      119.259  79.243  36.980  1.00 75.36      A16S
ATOM  28036  C3' ADE  442      119.641  77.140  38.115  1.00 75.36      A16S
ATOM  28037  O3' ADE  442      118.246  76.950  37.968  1.00 75.36      A16S
ATOM  28038  P   CYT  443      117.664  76.307  36.624  1.00 58.57      A16S
ATOM  28039  O1P CYT  443      116.202  76.157  36.847  1.00 80.06      A16S
ATOM  28040  O2P CYT  443      118.476  75.120  36.243  1.00 80.06      A16S
ATOM  28041  O5' CYT  443      117.884  77.441  35.517  1.00 58.57      A16S
ATOM  28042  C5' CYT  443      117.077  78.616  35.506  1.00 58.57      A16S
ATOM  28043  C4' CYT  443      117.484  79.539  34.379  1.00 58.57      A16S
ATOM  28044  O4' CYT  443      118.882  79.902  34.508  1.00 58.57      A16S
ATOM  28045  C1' CYT  443      119.421  80.181  33.226  1.00 58.57      A16S
ATOM  28046  N1  CYT  443      120.603  79.336  33.028  1.00 80.06      A16S
ATOM  28047  C6  CYT  443      120.840  78.259  33.835  1.00 80.06      A16S
ATOM  28048  C2  CYT  443      121.485  79.653  32.002  1.00 80.06      A16S
ATOM  28049  O2  CYT  443      121.241  80.633  31.290  1.00 80.06      A16S
ATOM  28050  N3  CYT  443      122.578  78.885  31.809  1.00 80.06      A16S
ATOM  28051  C4  CYT  443      122.801  77.834  32.599  1.00 80.06      A16S
ATOM  28052  N4  CYT  443      123.885  77.101  32.367  1.00 80.06      A16S
ATOM  28053  C5  CYT  443      121.918  77.489  33.658  1.00 80.06      A16S
ATOM  28054  C2' CYT  443      118.315  79.924  32.204  1.00 58.57      A16S
ATOM  28055  O2' CYT  443      117.688  81.150  31.898  1.00 58.57      A16S
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ATOM  28056  C3' CYT  443     117.413  78.969  32.979  1.00 58.57      A16S
ATOM  28057  O3' CYT  443     116.073  78.957  32.516  1.00 58.57      A16S
ATOM  28058  P   GUA  444     115.382  77.551  32.169  1.00 54.32      A16S
ATOM  28059  O1P GUA  444     113.943  77.790  31.843  1.00 75.42      A16S
ATOM  28060  O2P GUA  444     115.739  76.607  33.261  1.00 75.42      A16S
ATOM  28061  O5' GUA  444     116.143  77.073  30.854  1.00 54.32      A16S
ATOM  28062  C5' GUA  444     116.125  77.869  29.676  1.00 54.32      A16S
ATOM  28063  C4' GUA  444     117.388  77.652  28.885  1.00 54.32      A16S
ATOM  28064  O4' GUA  444     118.521  77.879  29.763  1.00 54.32      A16S
ATOM  28065  C1' GUA  444     119.606  77.058  29.364  1.00 54.32      A16S
ATOM  28066  N9  GUA  444     119.958  76.212  30.494  1.00 75.42      A16S
ATOM  28067  C4  GUA  444     121.108  75.476  30.647  1.00 75.42      A16S
ATOM  28068  N3  GUA  444     122.135  75.417  29.774  1.00 75.42      A16S
ATOM  28069  C2  GUA  444     123.098  74.618  30.198  1.00 75.42      A16S
ATOM  28070  N2  GUA  444     124.194  74.444  29.457  1.00 75.42      A16S
ATOM  28071  N1  GUA  444     123.056  73.929  31.382  1.00 75.42      A16S
ATOM  28072  C6  GUA  444     122.011  73.973  32.296  1.00 75.42      A16S
ATOM  28073  O6  GUA  444     122.074  73.306  33.339  1.00 75.42      A16S
ATOM  28074  C5  GUA  444     120.972  74.833  31.857  1.00 75.42      A16S
ATOM  28075  N7  GUA  444     119.767  75.172  32.461  1.00 75.42      A16S
ATOM  28076  C8  GUA  444     119.200  75.988  31.617  1.00 75.42      A16S
ATOM  28077  C2' GUA  444     119.134  76.261  28.147  1.00 54.32      A16S
ATOM  28078  O2' GUA  444     119.452  76.967  26.967  1.00 54.32      A16S
ATOM  28079  C3' GUA  444     117.632  76.247  28.364  1.00 54.32      A16S
ATOM  28080  O3' GUA  444     116.965  76.037  27.131  1.00 54.32      A16S
ATOM  28081  P   ADE  445     116.415  74.580  26.773  1.00 70.32      A16S
ATOM  28082  O1P ADE  445     117.487  73.630  27.159  1.00 82.32      A16S
ATOM  28083  O2P ADE  445     115.909  74.593  25.379  1.00 82.32      A16S
ATOM  28084  O5' ADE  445     115.189  74.382  27.775  1.00 70.32      A16S
ATOM  28085  C5' ADE  445     113.815  74.578  27.383  1.00 70.32      A16S
ATOM  28086  C4' ADE  445     112.917  74.110  28.510  1.00 70.32      A16S
ATOM  28087  O4' ADE  445     113.239  72.735  28.761  1.00 70.32      A16S
ATOM  28088  C1' ADE  445     113.573  72.555  30.105  1.00 70.32      A16S
ATOM  28089  N9  ADE  445     114.778  71.737  30.160  1.00 82.32      A16S
ATOM  28090  C4  ADE  445     115.052  70.781  31.100  1.00 82.32      A16S
ATOM  28091  N3  ADE  445     114.307  70.458  32.167  1.00 82.32      A16S
ATOM  28092  C2  ADE  445     114.878  69.479  32.850  1.00 82.32      A16S
ATOM  28093  N1  ADE  445     116.017  68.826  32.600  1.00 82.32      A16S
ATOM  28094  C6  ADE  445     116.733  69.166  31.509  1.00 82.32      A16S
ATOM  28095  N6  ADE  445     117.851  68.488  31.239  1.00 82.32      A16S
ATOM  28096  C5  ADE  445     116.244  70.207  30.715  1.00 82.32      A16S
ATOM  28097  N7  ADE  445     116.731  70.812  29.568  1.00 82.32      A16S
ATOM  28098  C8  ADE  445     115.830  71.716  29.286  1.00 82.32      A16S
ATOM  28099  C2' ADE  445     113.556  73.889  30.858  1.00 70.32      A16S
ATOM  28100  O2' ADE  445     112.681  73.816  31.964  1.00 70.32      A16S
ATOM  28101  C3' ADE  445     113.137  74.909  29.792  1.00 70.32      A16S
ATOM  28102  O3' ADE  445     111.870  75.440  30.220  1.00 70.32      A16S
ATOM  28103  P   ADE  446     111.375  76.903  29.783  1.00 67.46      A16S
ATOM  28104  O1P ADE  446     112.440  77.553  28.980  1.00 67.49      A16S
ATOM  28105  O2P ADE  446     110.895  77.555  31.028  1.00 67.49      A16S
ATOM  28106  O5' ADE  446     110.118  76.617  28.842  1.00 67.46      A16S
ATOM  28107  C5' ADE  446     108.948  75.948  29.330  1.00 67.46      A16S
ATOM  28108  C4' ADE  446     108.542  74.845  28.371  1.00 67.46      A16S
ATOM  28109  O4' ADE  446     109.640  73.928  28.261  1.00 67.46      A16S
ATOM  28110  C1' ADE  446     109.142  72.698  27.810  1.00 67.46      A16S
ATOM  28111  N9  ADE  446     110.037  71.625  28.209  1.00 67.49      A16S
ATOM  28112  C4  ADE  446     110.806  70.956  27.300  1.00 67.49      A16S
ATOM  28113  N3  ADE  446     110.807  71.128  25.967  1.00 67.49      A16S
ATOM  28114  C2  ADE  446     111.707  70.338  25.400  1.00 67.49      A16S
ATOM  28115  N1  ADE  446     112.548  69.470  25.974  1.00 67.49      A16S
ATOM  28116  C6  ADE  446     112.523  69.333  27.317  1.00 67.49      A16S
ATOM  28117  N6  ADE  446     113.381  68.492  27.886  1.00 67.49      A16S
ATOM  28118  C5  ADE  446     111.597  70.101  28.032  1.00 67.49      A16S
ATOM  28119  N7  ADE  446     111.296  70.192  29.383  1.00 67.49      A16S
ATOM  28120  C8  ADE  446     110.354  71.103  29.432  1.00 67.49      A16S
ATOM  28121  C2' ADE  446     107.658  72.596  28.132  1.00 67.46      A16S
ATOM  28122  O2' ADE  446     107.024  72.399  26.905  1.00 67.46      A16S
ATOM  28123  C3' ADE  446     107.337  73.969  28.731  1.00 67.46      A16S
ATOM  28124  O3' ADE  446     106.171  74.501  28.077  1.00 67.46      A16S
ATOM  28125  P   ADE  447     104.828  73.602  27.913  1.00 58.87      A16S
ATOM  28126  O1P ADE  447     103.676  74.538  27.996  1.00 67.87      A16S
ATOM  28127  O2P ADE  447     104.901  72.435  28.841  1.00 67.87      A16S
ATOM  28128  O5' ADE  447     104.856  73.050  26.414  1.00 58.87      A16S
ATOM  28129  C5' ADE  447     104.444  71.710  26.118  1.00 58.87      A16S
ATOM  28130  C4' ADE  447     105.247  71.157  24.958  1.00 58.87      A16S
ATOM  28131  O4' ADE  447     106.662  71.207  25.258  1.00 58.87      A16S
ATOM  28132  C1' ADE  447     107.310  70.072  24.731  1.00 58.87      A16S
ATOM  28133  N9  ADE  447     107.861  69.332  25.859  1.00 67.87      A16S
ATOM  28134  C4  ADE  447     108.856  68.394  25.819  1.00 67.87      A16S
ATOM  28135  N3  ADE  447     109.502  67.947  24.736  1.00 67.87      A16S
ATOM  28136  C2  ADE  447     110.428  67.057  25.082  1.00 67.87      A16S
ATOM  28137  N1  ADE  447     110.755  66.597  26.297  1.00 67.87      A16S
ATOM  28138  C6  ADE  447     110.085  67.067  27.365  1.00 67.87      A16S
ATOM  28139  N6  ADE  447     110.418  66.611  28.573  1.00 67.87      A16S
ATOM  28140  C5  ADE  447     109.074  68.017  27.132  1.00 67.87      A16S
ATOM  28141  N7  ADE  447     108.217  68.695  27.984  1.00 67.87      A16S
ATOM  28142  C8  ADE  447     107.515  69.454  27.180  1.00 67.87      A16S
ATOM  28143  C2' ADE  447     106.281  69.322  23.887  1.00 58.87      A16S
ATOM  28144  O2' ADE  447     106.333  69.821  22.562  1.00 58.87      A16S
ATOM  28145  C3' ADE  447     104.981  69.714  24.575  1.00 58.87      A16S
ATOM  28146  O3' ADE  447     103.922  69.700  23.636  1.00 58.87      A16S
ATOM  28147  P   CYT  448     102.760  68.620  23.773  1.00 57.31      A16S
ATOM  28148  O1P CYT  448     101.771  68.875  22.693  1.00 65.41      A16S
ATOM  28149  O2P CYT  448     102.329  68.637  25.191  1.00 65.41      A16S
ATOM  28150  O5' CYT  448     103.482  67.239  23.439  1.00 57.31      A16S
ATOM  28151  C5' CYT  448     103.925  66.982  22.113  1.00 57.31      A16S
ATOM  28152  C4' CYT  448     104.889  65.829  22.082  1.00 57.31      A16S
ATOM  28153  O4' CYT  448     106.084  66.138  22.834  1.00 57.31      A16S
ATOM  28154  C1' CYT  448     106.675  64.934  23.284  1.00 57.31      A16S
ATOM  28155  N1  CYT  448     106.908  65.032  24.730  1.00 65.41      A16S
ATOM  28156  C6  CYT  448     105.970  65.578  25.554  1.00 65.41      A16S
ATOM  28157  C2  CYT  448     108.101  64.536  25.255  1.00 65.41      A16S
ATOM  28158  O2  CYT  448     108.952  64.072  24.480  1.00 65.41      A16S
ATOM  28159  N3  CYT  448     108.303  64.577  26.589  1.00 65.41      A16S
ATOM  28160  C4  CYT  448     107.371  65.095  27.386  1.00 65.41      A16S
ATOM  28161  N4  CYT  448     107.603  65.102  28.698  1.00 65.41      A16S
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ATOM  28162  C5  CYT   448     106.158  65.628  26.876  1.00 65.41      A16S
ATOM  28163  C2' CYT   448     105.708  63.802  22.927  1.00 57.31      A16S
ATOM  28164  O2' CYT   448     106.132  63.162  21.742  1.00 57.31      A16S
ATOM  28165  C3' CYT   448     104.402  64.562  22.732  1.00 57.31      A16S
ATOM  28166  O3' CYT   448     103.525  63.885  21.845  1.00 57.31      A16S
ATOM  28167  P   CYT   449     102.007  63.613  22.289  1.00 75.19      A16S
ATOM  28168  O1P CYT   449     101.397  62.751  21.247  1.00 69.63      A16S
ATOM  28169  O2P CYT   449     101.385  64.920  22.624  1.00 69.63      A16S
ATOM  28170  O5' CYT   449     102.145  62.785  23.640  1.00 75.19      A16S
ATOM  28171  C5' CYT   449     102.858  61.557  23.681  1.00 75.19      A16S
ATOM  28172  C4' CYT   449     103.001  61.105  25.110  1.00 75.19      A16S
ATOM  28173  O4' CYT   449     103.912  61.991  25.805  1.00 75.19      A16S
ATOM  28174  C1' CYT   449     103.463  62.198  27.133  1.00 75.19      A16S
ATOM  28175  N1  CYT   449     103.220  63.634  27.299  1.00 69.63      A16S
ATOM  28176  C6  CYT   449     102.960  64.424  26.216  1.00 69.63      A16S
ATOM  28177  C2  CYT   449     103.284  64.188  28.578  1.00 69.63      A16S
ATOM  28178  O2  CYT   449     103.476  63.441  29.547  1.00 69.63      A16S
ATOM  28179  N3  CYT   449     103.132  65.519  28.726  1.00 69.63      A16S
ATOM  28180  C4  CYT   449     102.915  66.286  27.658  1.00 69.63      A16S
ATOM  28181  N4  CYT   449     102.812  67.598  27.845  1.00 69.63      A16S
ATOM  28182  C5  CYT   449     102.805  65.741  26.348  1.00 69.63      A16S
ATOM  28183  C2' CYT   449     102.224  61.326  27.338  1.00 75.19      A16S
ATOM  28184  O2' CYT   449     102.606  60.087  27.903  1.00 75.19      A16S
ATOM  28185  C3' CYT   449     101.718  61.202  25.910  1.00 75.19      A16S
ATOM  28186  O3' CYT   449     100.910  60.059  25.714  1.00 75.19      A16S
ATOM  28187  P   CYT   450      99.324  60.209  25.800  1.00 82.45      A16S
ATOM  28188  O1P CYT   450      98.749  58.880  25.485  1.00100.59      A16S
ATOM  28189  O2P CYT   450      98.918  61.391  25.003  1.00100.59      A16S
ATOM  28190  O5' CYT   450      99.092  60.542  27.338  1.00 82.45      A16S
ATOM  28191  C5' CYT   450      99.380  59.571  28.332  1.00 82.45      A16S
ATOM  28192  C4' CYT   450      98.853  60.025  29.665  1.00 82.45      A16S
ATOM  28193  O4' CYT   450      99.697  61.085  30.181  1.00 82.45      A16S
ATOM  28194  C1' CYT   450      98.897  62.073  30.808  1.00 82.45      A16S
ATOM  28195  N1  CYT   450      99.006  63.302  30.007  1.00100.59      A16S
ATOM  28196  C6  CYT   450      99.295  63.240  28.672  1.00100.59      A16S
ATOM  28197  C2  CYT   450      98.811  64.536  30.630  1.00100.59      A16S
ATOM  28198  O2  CYT   450      98.551  64.562  31.839  1.00100.59      A16S
ATOM  28199  N3  CYT   450      98.909  65.668  29.897  1.00100.59      A16S
ATOM  28200  C4  CYT   450      99.187  65.595  28.595  1.00100.59      A16S
ATOM  28201  N4  CYT   450      99.264  66.733  27.909  1.00100.59      A16S
ATOM  28202  C5  CYT   450      99.394  64.350  27.936  1.00100.59      A16S
ATOM  28203  C2' CYT   450      97.470  61.517  30.860  1.00 82.45      A16S
ATOM  28204  O2' CYT   450      97.275  60.772  32.047  1.00 82.45      A16S
ATOM  28205  C3' CYT   450      97.459  60.626  29.627  1.00 82.45      A16S
ATOM  28206  O3' CYT   450      96.446  59.627  29.693  1.00 82.45      A16S
ATOM  28207  P   CYT   451      94.973  59.960  29.148  1.00 86.47      A16S
ATOM  28208  O1P CYT   451      94.142  58.739  29.308  1.00145.37      A16S
ATOM  28209  O2P CYT   451      95.109  60.583  27.807  1.00145.37      A16S
ATOM  28210  O5' CYT   451      94.439  61.070  30.161  1.00 86.47      A16S
ATOM  28211  C5' CYT   451      94.149  60.738  31.515  1.00 86.47      A16S
ATOM  28212  C4' CYT   451      93.572  61.932  32.246  1.00 86.47      A16S
ATOM  28213  O4' CYT   451      94.606  62.927  32.448  1.00 86.47      A16S
ATOM  28214  C1' CYT   451      94.040  64.227  32.362  1.00 86.47      A16S
ATOM  28215  N1  CYT   451      94.682  64.930  31.239  1.00145.37      A16S
ATOM  28216  C6  CYT   451      95.150  64.235  30.159  1.00145.37      A16S
ATOM  28217  C2  CYT   451      94.808  66.325  31.292  1.00145.37      A16S
ATOM  28218  O2  CYT   451      94.368  66.933  32.281  1.00145.37      A16S
ATOM  28219  N3  CYT   451      95.405  66.972  30.264  1.00145.37      A16S
ATOM  28220  C4  CYT   451      95.861  66.281  29.215  1.00145.37      A16S
ATOM  28221  N4  CYT   451      96.446  66.957  28.223  1.00145.37      A16S
ATOM  28222  C5  CYT   451      95.740  64.863  29.135  1.00145.37      A16S
ATOM  28223  C2' CYT   451      92.527  64.061  32.179  1.00 86.47      A16S
ATOM  28224  O2' CYT   451      91.868  64.145  33.429  1.00 86.47      A16S
ATOM  28225  C3' CYT   451      92.448  62.678  31.540  1.00 86.47      A16S
ATOM  28226  O3' CYT   451      91.183  62.067  31.777  1.00 86.47      A16S
ATOM  28227  P   CYT   452      89.968  62.338  30.763  1.00 88.66      A16S
ATOM  28228  O1P CYT   452      88.791  61.600  31.285  1.00130.07      A16S
ATOM  28229  O2P CYT   452      90.442  62.071  29.382  1.00130.07      A16S
ATOM  28230  O5' CYT   452      89.677  63.902  30.921  1.00 88.66      A16S
ATOM  28231  C5' CYT   452      89.032  64.422  32.087  1.00 88.66      A16S
ATOM  28232  C4' CYT   452      88.624  65.869  31.873  1.00 88.66      A16S
ATOM  28233  O4' CYT   452      89.792  66.728  31.867  1.00 88.66      A16S
ATOM  28234  C1' CYT   452      89.576  67.822  30.985  1.00 88.66      A16S
ATOM  28235  N1  CYT   452      90.630  67.813  29.960  1.00130.07      A16S
ATOM  28236  C6  CYT   452      91.440  66.724  29.797  1.00130.07      A16S
ATOM  28237  C2  CYT   452      90.790  68.939  29.149  1.00130.07      A16S
ATOM  28238  O2  CYT   452      90.041  69.911  29.318  1.00130.07      A16S
ATOM  28239  N3  CYT   452      91.753  68.937  28.201  1.00130.07      A16S
ATOM  28240  C4  CYT   452      92.535  67.866  28.047  1.00130.07      A16S
ATOM  28241  N4  CYT   452      93.466  67.902  27.092  1.00130.07      A16S
ATOM  28242  C5  CYT   452      92.395  66.707  28.862  1.00130.07      A16S
ATOM  28243  C2' CYT   452      88.178  67.670  30.388  1.00 88.66      A16S
ATOM  28244  O2' CYT   452      87.262  68.480  31.092  1.00 88.66      A16S
ATOM  28245  C3' CYT   452      87.934  66.176  30.556  1.00 88.66      A16S
ATOM  28246  O3' CYT   452      86.551  65.898  30.628  1.00 88.66      A16S
ATOM  28247  P   GUA   453      85.810  65.295  29.349  1.00 90.04      A16S
ATOM  28248  O1P GUA   453      84.377  65.151  29.705  1.00108.19      A16S
ATOM  28249  O2P GUA   453      86.581  64.108  28.900  1.00108.19      A16S
ATOM  28250  O5' GUA   453      85.945  66.437  28.244  1.00 90.04      A16S
ATOM  28251  C5' GUA   453      85.192  67.646  28.341  1.00 90.04      A16S
ATOM  28252  C4' GUA   453      85.665  68.654  27.311  1.00 90.04      A16S
ATOM  28253  O4' GUA   453      87.043  69.017  27.588  1.00 90.04      A16S
ATOM  28254  C1' GUA   453      87.738  69.198  26.367  1.00 90.04      A16S
ATOM  28255  N9  GUA   453      88.786  68.186  26.292  1.00108.19      A16S
ATOM  28256  C4  GUA   453      89.751  68.078  25.322  1.00108.19      A16S
ATOM  28257  N3  GUA   453      89.882  68.873  24.240  1.00108.19      A16S
ATOM  28258  C2  GUA   453      90.928  68.541  23.505  1.00108.19      A16S
ATOM  28259  N2  GUA   453      91.207  69.230  22.392  1.00108.19      A16S
ATOM  28260  N1  GUA   453      91.778  67.510  23.809  1.00108.19      A16S
ATOM  28261  C6  GUA   453      91.663  66.678  24.917  1.00108.19      A16S
ATOM  28262  O6  GUA   453      92.494  65.782  25.105  1.00108.19      A16S
ATOM  28263  C5  GUA   453      90.540  67.021  25.711  1.00108.19      A16S
ATOM  28264  N7  GUA   453      90.062  66.454  26.883  1.00108.19      A16S
ATOM  28265  C8  GUA   453      89.019  67.173  27.186  1.00108.19      A16S
ATOM  28266  C2' GUA   453      86.714  69.091  25.238  1.00 90.04      A16S
ATOM  28267  O2' GUA   453      86.188  70.371  24.936  1.00 90.04      A16S
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ATOM	28268	C3'	GUA	453	85.676	68.177	25.866	1.00 90.04	A16S	ATOM	28321	C4	GUA	456	89.641	71.333	19.227	1.00106.98	A16S
ATOM	28269	O3'	GUA	453	84.414	68.375	25.246	1.00 90.04	A16S	ATOM	28322	N3	GUA	456	89.543	72.575	18.706	1.00106.98	A16S
ATOM	28270	P	ADE	454	83.557	67.108	24.777	1.00113.19	A16S	ATOM	28323	C2	GUA	456	88.725	73.341	19.404	1.00106.98	A16S
ATOM	28271	O1P	ADE	454	82.205	67.600	24.413	1.00106.15	A16S	ATOM	28324	N2	GUA	456	88.513	74.610	19.022	1.00106.98	A16S
ATOM	28272	O2P	ADE	454	83.710	66.061	25.819	1.00106.15	A16S	ATOM	28325	N1	GUA	456	88.055	72.922	20.527	1.00106.98	A16S
ATOM	28273	O5'	ADE	454	84.258	66.601	23.441	1.00113.19	A16S	ATOM	28326	C6	GUA	456	88.135	71.647	21.079	1.00106.98	A16S
ATOM	28274	C5'	ADE	454	85.589	66.089	23.443	1.00113.19	A16S	ATOM	28327	O6	GUA	456	87.483	71.375	22.095	1.00106.98	A16S
ATOM	28275	C4'	ADE	454	85.933	65.586	22.066	1.00113.19	A16S	ATOM	28328	C5	GUA	456	89.012	70.813	20.338	1.00106.98	A16S
ATOM	28276	O4'	ADE	454	85.307	66.461	21.106	1.00113.19	A16S	ATOM	28329	N7	GUA	456	89.376	69.487	20.533	1.00106.98	A16S
ATOM	28277	C1'	ADE	454	86.117	66.556	19.959	1.00113.19	A16S	ATOM	28330	C8	GUA	456	90.205	69.233	19.558	1.00106.98	A16S
ATOM	28278	N9	ADE	454	86.215	67.969	19.581	1.00106.15	A16S	ATOM	28331	C2'	GUA	456	92.396	71.421	17.696	1.00 74.23	A16S
ATOM	28279	C4	ADE	454	86.846	68.494	18.478	1.00106.15	A16S	ATOM	28332	O2'	GUA	456	92.699	71.980	16.437	1.00 74.23	A16S
ATOM	28280	N3	ADE	454	87.548	67.831	17.543	1.00106.15	A16S	ATOM	28333	C3'	GUA	456	93.549	70.575	18.212	1.00 74.23	A16S
ATOM	28281	C2	ADE	454	87.991	68.666	16.605	1.00106.15	A16S	ATOM	28334	O3'	GUA	456	94.783	71.184	17.863	1.00 74.23	A16S
ATOM	28282	N1	ADE	454	87.827	69.989	16.503	1.00106.15	A16S	ATOM	28335	P	ADE	457	95.498	72.178	18.904	1.00 62.35	A16S
ATOM	28283	C6	ADE	454	87.119	70.627	17.459	1.00106.15	A16S	ATOM	28336	O1P	ADE	457	96.652	72.802	18.204	1.00 85.33	A16S
ATOM	28284	N6	ADE	454	86.960	71.947	17.357	1.00106.15	A16S	ATOM	28337	O2P	ADE	457	95.718	71.451	20.180	1.00 85.33	A16S
ATOM	28285	C5	ADE	454	86.592	69.852	18.510	1.00106.15	A16S	ATOM	28338	O5'	ADE	457	94.414	73.319	19.160	1.00 62.35	A16S
ATOM	28286	N7	ADE	454	85.837	70.183	19.626	1.00106.15	A16S	ATOM	28339	C5'	ADE	457	94.169	74.340	18.192	1.00 62.35	A16S
ATOM	28287	C8	ADE	454	85.649	69.037	20.230	1.00106.15	A16S	ATOM	28340	C4'	ADE	457	93.308	75.425	18.795	1.00 62.35	A16S
ATOM	28288	C2'	ADE	454	87.405	65.754	20.193	1.00113.19	A16S	ATOM	28341	O4'	ADE	457	91.962	74.930	19.000	1.00 62.35	A16S
ATOM	28289	O2'	ADE	454	87.312	64.515	19.518	1.00113.19	A16S	ATOM	28342	C1'	ADE	457	91.415	75.506	20.178	1.00 62.35	A16S
ATOM	28290	C3'	ADE	454	87.412	65.556	21.709	1.00113.19	A16S	ATOM	28343	N9	ADE	457	91.057	74.439	21.108	1.00 85.33	A16S
ATOM	28291	O3'	ADE	454	87.962	64.272	22.022	1.00113.19	A16S	ATOM	28344	C4	ADE	457	90.094	74.524	22.080	1.00 85.33	A16S
ATOM	28292	P	CYT	455	89.337	64.169	22.845	1.00162.79	A16S	ATOM	28345	N3	ADE	457	89.275	75.558	22.323	1.00 85.33	A16S
ATOM	28293	O1P	CYT	455	89.381	62.816	23.458	1.00121.76	A16S	ATOM	28346	C2	ADE	457	88.480	75.293	23.356	1.00 85.33	A16S
ATOM	28294	O2P	CYT	455	89.386	65.368	23.714	1.00121.76	A16S	ATOM	28347	N1	ADE	457	88.423	74.198	24.119	1.00 85.33	A16S
ATOM	28295	O5'	CYT	455	90.492	64.287	21.742	1.00162.79	A16S	ATOM	28348	C6	ADE	457	89.266	73.178	23.850	1.00 85.33	A16S
ATOM	28296	C5'	CYT	455	91.811	64.727	22.104	1.00162.79	A16S	ATOM	28349	N6	ADE	457	89.222	72.092	24.622	1.00 85.33	A16S
ATOM	28297	C4'	CYT	455	92.868	64.058	21.241	1.00162.79	A16S	ATOM	28350	C5	ADE	457	90.150	73.331	22.770	1.00 85.33	A16S
ATOM	28298	O4'	CYT	455	92.512	62.670	21.104	1.00162.79	A16S	ATOM	28351	N7	ADE	457	91.109	72.493	22.223	1.00 85.33	A16S
ATOM	28299	C1'	CYT	455	93.158	62.153	19.971	1.00162.79	A16S	ATOM	28352	C8	ADE	457	91.610	73.192	21.236	1.00 85.33	A16S
ATOM	28300	N1	CYT	455	92.350	61.073	19.395	1.00121.76	A16S	ATOM	28353	C2'	ADE	457	92.481	76.407	20.799	1.00 62.35	A16S
ATOM	28301	C6	CYT	455	91.003	61.210	19.204	1.00121.76	A16S	ATOM	28354	O2'	ADE	457	92.235	77.760	20.509	1.00 62.35	A16S
ATOM	28302	C2	CYT	455	92.996	59.879	19.057	1.00121.76	A16S	ATOM	28355	C3'	ADE	457	93.756	75.858	20.177	1.00 62.35	A16S
ATOM	28303	O2	CYT	455	94.225	59.795	19.220	1.00121.76	A16S	ATOM	28356	O3'	ADE	457	94.756	76.848	20.099	1.00 62.35	A16S
ATOM	28304	N3	CYT	455	92.271	58.850	18.567	1.00121.76	A16S	ATOM	28357	P	GUA	458	95.896	76.897	21.218	1.00 63.58	A16S
ATOM	28305	C4	CYT	455	90.952	58.980	18.410	1.00121.76	A16S	ATOM	28358	O1P	GUA	458	96.659	78.153	21.000	1.00109.08	A16S
ATOM	28306	N4	CYT	455	90.271	57.921	17.962	1.00121.76	A16S	ATOM	28359	O2P	GUA	458	96.604	75.592	21.209	1.00109.08	A16S
ATOM	28307	C5	CYT	455	90.270	60.198	18.718	1.00121.76	A16S	ATOM	28360	O5'	GUA	458	95.096	77.014	22.587	1.00 63.58	A16S
ATOM	28308	C2'	CYT	455	93.534	63.312	19.043	1.00162.79	A16S	ATOM	28361	C5'	GUA	458	94.230	78.111	22.835	1.00 63.58	A16S
ATOM	28309	O2'	CYT	455	94.936	63.317	18.860	1.00162.79	A16S	ATOM	28362	C4'	GUA	458	93.377	77.834	24.047	1.00 63.58	A16S
ATOM	28310	C3'	CYT	455	93.048	64.552	19.804	1.00162.79	A16S	ATOM	28363	O4'	GUA	458	92.419	76.778	23.763	1.00 63.58	A16S
ATOM	28311	O3'	CYT	455	94.181	65.424	19.692	1.00162.79	A16S	ATOM	28364	C1'	GUA	458	92.143	76.065	24.957	1.00 63.58	A16S
ATOM	28312	P	GUA	456	94.201	66.865	20.403	1.00 74.23	A16S	ATOM	28365	N9	GUA	458	92.499	74.667	24.752	1.00109.08	A16S
ATOM	28313	O1P	GUA	456	95.631	67.278	20.432	1.00106.98	A16S	ATOM	28366	C4	GUA	458	92.091	73.603	25.518	1.00109.08	A16S
ATOM	28314	O2P	GUA	456	93.432	66.829	21.666	1.00106.98	A16S	ATOM	28367	N3	GUA	458	91.266	73.663	26.585	1.00109.08	A16S
ATOM	28315	O5'	GUA	456	93.439	67.810	19.373	1.00 74.23	A16S	ATOM	28368	C2	GUA	458	91.076	72.473	27.128	1.00109.08	A16S
ATOM	28316	C5'	GUA	456	93.961	68.033	18.067	1.00 74.23	A16S	ATOM	28369	N2	GUA	458	90.284	72.347	28.197	1.00109.08	A16S
ATOM	28317	C4'	GUA	456	93.347	69.273	17.455	1.00 74.23	A16S	ATOM	28370	N1	GUA	458	91.649	71.317	26.661	1.00109.08	A16S
ATOM	28318	O4'	GUA	456	91.903	69.116	17.399	1.00 74.23	A16S	ATOM	28371	C6	GUA	458	92.499	71.232	25.564	1.00109.08	A16S
ATOM	28319	C1'	GUA	456	91.281	70.378	17.561	1.00 74.23	A16S	ATOM	28372	O6	GUA	458	92.963	70.135	25.227	1.00109.08	A16S
ATOM	28320	N9	GUA	456	90.412	70.312	18.732	1.00106.98	A16S	ATOM	28373	C5	GUA	458	92.713	72.501	24.972	1.00109.08	A16S

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ATOM  28374  N7  GUA  458      93.484  72.863  23.877  1.00109.08      A16S
ATOM  28375  C8  GUA  458      93.322  74.154  23.782  1.00109.08      A16S
ATOM  28376  C2' GUA  458      92.997  76.685  26.067  1.00 63.58      A16S
ATOM  28377  O2' GUA  458      92.262  77.653  26.772  1.00 63.58      A16S
ATOM  28378  C3' GUA  458      94.119  77.324  25.269  1.00 63.58      A16S
ATOM  28379  O3' GUA  458      94.691  78.393  26.003  1.00 63.58      A16S
ATOM  28380  P   GUA  459      95.654  78.075  27.248  1.00 86.85      A16S
ATOM  28381  O1P GUA  459      95.992  79.376  27.885  1.00103.29      A16S
ATOM  28382  O2P GUA  459      96.744  77.187  26.771  1.00103.29      A16S
ATOM  28383  O5' GUA  459      94.739  77.236  28.250  1.00 86.85      A16S
ATOM  28384  C5' GUA  459      93.993  77.875  29.282  1.00 86.85      A16S
ATOM  28385  C4' GUA  459      93.614  76.875  30.350  1.00 86.85      A16S
ATOM  28386  O4' GUA  459      92.787  75.840  29.759  1.00 86.85      A16S
ATOM  28387  C1' GUA  459      93.138  74.577  30.299  1.00 86.85      A16S
ATOM  28388  N9  GUA  459      93.717  73.788  29.221  1.00103.29      A16S
ATOM  28389  C4  GUA  459      94.044  72.452  29.249  1.00103.29      A16S
ATOM  28390  N3  GUA  459      93.885  71.616  30.296  1.00103.29      A16S
ATOM  28391  C2  GUA  459      94.289  70.387  30.011  1.00103.29      A16S
ATOM  28392  N2  GUA  459      94.192  69.419  30.936  1.00103.29      A16S
ATOM  28393  N1  GUA  459      94.814  70.014  28.798  1.00103.29      A16S
ATOM  28394  C6  GUA  459      94.988  70.859  27.706  1.00103.29      A16S
ATOM  28395  O6  GUA  459      95.475  70.422  26.649  1.00103.29      A16S
ATOM  28396  C5  GUA  459      94.552  72.176  27.997  1.00103.29      A16S
ATOM  28397  N7  GUA  459      94.543  73.312  27.201  1.00103.29      A16S
ATOM  28398  C8  GUA  459      94.043  74.240  27.968  1.00103.29      A16S
ATOM  28399  C2' GUA  459      94.120  74.830  31.439  1.00 86.85      A16S
ATOM  28400  O2' GUA  459      93.418  74.959  32.655  1.00 86.85      A16S
ATOM  28401  C3' GUA  459      94.772  76.130  30.991  1.00 86.85      A16S
ATOM  28402  O3' GUA  459      95.283  76.857  32.099  1.00 86.85      A16S
ATOM  28403  P   GUA  460      96.702  76.449  32.733  1.00 87.96      A16S
ATOM  28404  O1P GUA  460      97.005  77.421  33.813  1.00112.19      A16S
ATOM  28405  O2P GUA  460      97.666  76.263  31.619  1.00112.19      A16S
ATOM  28406  O5' GUA  460      96.439  75.035  33.418  1.00 87.96      A16S
ATOM  28407  C5' GUA  460      95.722  74.938  34.642  1.00 87.96      A16S
ATOM  28408  C4' GUA  460      95.681  73.504  35.110  1.00 87.96      A16S
ATOM  28409  O4' GUA  460      95.036  72.685  34.094  1.00 87.96      A16S
ATOM  28410  C1' GUA  460      95.619  71.388  34.086  1.00 87.96      A16S
ATOM  28411  N9  GUA  460      96.286  71.196  32.806  1.00112.19      A16S
ATOM  28412  C4  GUA  460      96.882  70.041  32.365  1.00112.19      A16S
ATOM  28413  N3  GUA  460      96.933  68.870  33.032  1.00112.19      A16S
ATOM  28414  C2  GUA  460      97.583  67.941  32.351  1.00112.19      A16S
ATOM  28415  N2  GUA  460      97.728  66.712  32.866  1.00112.19      A16S
ATOM  28416  N1  GUA  460      98.138  68.146  31.114  1.00112.19      A16S
ATOM  28417  C6  GUA  460      98.096  69.344  30.409  1.00112.19      A16S
ATOM  28418  O6  GUA  460      98.628  69.423  29.298  1.00112.19      A16S
ATOM  28419  C5  GUA  460      97.402  70.348  31.128  1.00112.19      A16S
ATOM  28420  N7  GUA  460      97.131  71.667  30.795  1.00112.19      A16S
ATOM  28421  C8  GUA  460      96.466  72.129  31.818  1.00112.19      A16S
ATOM  28422  C2' GUA  460      96.645  71.358  35.218  1.00 87.96      A16S
ATOM  28423  O2' GUA  460      96.063  70.870  36.412  1.00 87.96      A16S
ATOM  28424  C3' GUA  460      97.028  72.827  35.289  1.00 87.96      A16S
ATOM  28425  O3' GUA  460      97.642  73.145  36.526  1.00 87.96      A16S
ATOM  28426  P   GUA  461      99.225  72.944  36.692  1.00 94.15      A16S
ATOM  28427  O1P GUA  461      99.577  73.277  38.095  1.00105.13      A16S
ATOM  28428  O2P GUA  461      99.921  73.633  35.575  1.00105.13      A16S
ATOM  28429  O5' GUA  461      99.421  71.383  36.502  1.00 94.15      A16S
ATOM  28430  C5' GUA  461      98.807  70.482  37.397  1.00 94.15      A16S
ATOM  28431  C4' GUA  461      99.252  69.082  37.097  1.00 94.15      A16S
ATOM  28432  O4' GUA  461      98.770  68.692  35.784  1.00 94.15      A16S
ATOM  28433  C1' GUA  461      99.695  67.792  35.195  1.00 94.15      A16S
ATOM  28434  N9  GUA  461     100.206  68.398  33.973  1.00105.13      A16S
ATOM  28435  C4  GUA  461     100.816  67.736  32.942  1.00105.13      A16S
ATOM  28436  N3  GUA  461     101.024  66.406  32.873  1.00105.13      A16S
ATOM  28437  C2  GUA  461     101.649  66.062  31.764  1.00105.13      A16S
ATOM  28438  N2  GUA  461     101.938  64.775  31.535  1.00105.13      A16S
ATOM  28439  N1  GUA  461     102.038  66.955  30.799  1.00105.13      A16S
ATOM  28440  C6  GUA  461     101.836  68.331  30.853  1.00105.13      A16S
ATOM  28441  O6  GUA  461     102.239  69.051  29.933  1.00105.13      A16S
ATOM  28442  C5  GUA  461     101.163  68.711  32.036  1.00105.13      A16S
ATOM  28443  N7  GUA  461     100.765  69.962  32.482  1.00105.13      A16S
ATOM  28444  C8  GUA  461     100.199  69.727  33.633  1.00105.13      A16S
ATOM  28445  C2' GUA  461     100.817  67.581  36.212  1.00 94.15      A16S
ATOM  28446  O2' GUA  461     100.530  66.466  37.034  1.00 94.15      A16S
ATOM  28447  C3' GUA  461     100.751  68.887  36.983  1.00 94.15      A16S
ATOM  28448  O3' GUA  461     101.379  68.788  38.251  1.00 94.15      A16S
ATOM  28449  P   ADE  462     102.952  69.086  38.376  1.00 95.01      A16S
ATOM  28450  O1P ADE  462     103.278  69.143  39.825  1.00113.32      A16S
ATOM  28451  O2P ADE  462     103.266  70.252  37.508  1.00113.32      A16S
ATOM  28452  O5' ADE  462     103.628  67.776  37.765  1.00 95.01      A16S
ATOM  28453  C5' ADE  462     103.378  66.497  38.347  1.00 95.01      A16S
ATOM  28454  C4' ADE  462     103.878  65.384  37.450  1.00 95.01      A16S
ATOM  28455  O4' ADE  462     103.158  65.396  36.187  1.00 95.01      A16S
ATOM  28456  C1' ADE  462     104.025  64.992  35.138  1.00 95.01      A16S
ATOM  28457  N9  ADE  462     104.227  66.139  34.258  1.00113.32      A16S
ATOM  28458  C4  ADE  462     104.779  66.110  33.003  1.00113.32      A16S
ATOM  28459  N3  ADE  462     105.231  65.036  32.336  1.00113.32      A16S
ATOM  28460  C2  ADE  462     105.700  65.389  31.144  1.00113.32      A16S
ATOM  28461  N1  ADE  462     105.764  66.603  30.583  1.00113.32      A16S
ATOM  28462  C6  ADE  462     105.299  67.662  31.281  1.00113.32      A16S
ATOM  28463  N6  ADE  462     105.358  68.874  30.724  1.00113.32      A16S
ATOM  28464  C5  ADE  462     104.777  67.420  32.562  1.00113.32      A16S
ATOM  28465  N7  ADE  462     104.233  68.262  33.522  1.00113.32      A16S
ATOM  28466  C8  ADE  462     103.922  67.455  34.505  1.00113.32      A16S
ATOM  28467  C2' ADE  462     105.336  64.567  35.796  1.00 95.01      A16S
ATOM  28468  O2' ADE  462     105.288  63.192  36.104  1.00 95.01      A16S
ATOM  28469  C3' ADE  462     105.334  65.449  37.034  1.00 95.01      A16S
ATOM  28470  O3' ADE  462     106.188  64.944  38.045  1.00 95.01      A16S
ATOM  28471  P   CYT  463     107.727  65.397  38.068  1.00 89.81      A16S
ATOM  28472  O1P CYT  463     108.366  64.754  39.244  1.00 79.39      A16S
ATOM  28473  O2P CYT  463     107.791  66.879  37.910  1.00 79.39      A16S
ATOM  28474  O5' CYT  463     108.324  64.695  36.773  1.00 89.81      A16S
ATOM  28475  C5' CYT  463     108.189  63.290  36.601  1.00 89.81      A16S
ATOM  28476  C4' CYT  463     109.043  62.824  35.455  1.00 89.81      A16S
ATOM  28477  O4' CYT  463     108.397  63.100  34.184  1.00 89.81      A16S
ATOM  28478  C1' CYT  463     109.385  63.423  33.212  1.00 89.81      A16S
ATOM  28479  N1  CYT  463     109.164  64.807  32.752  1.00 79.39      A16S
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ATOM  28480  C6  CYT  463     108.519  65.717  33.539  1.00 79.39      A16S
ATOM  28481  C2  CYT  463     109.636  65.179  31.495  1.00 79.39      A16S
ATOM  28482  O2  CYT  463     110.209  64.336  30.798  1.00 79.39      A16S
ATOM  28483  N3  CYT  463     109.456  66.446  31.068  1.00 79.39      A16S
ATOM  28484  C4  CYT  463     108.828  67.326  31.843  1.00 79.39      A16S
ATOM  28485  N4  CYT  463     108.671  68.564  31.376  1.00 79.39      A16S
ATOM  28486  C5  CYT  463     108.333  66.975  33.128  1.00 79.39      A16S
ATOM  28487  C2' CYT  463     110.739  63.258  33.902  1.00 89.81      A16S
ATOM  28488  O2' CYT  463     111.190  61.934  33.739  1.00 89.81      A16S
ATOM  28489  C3' CYT  463     110.362  63.551  35.341  1.00 89.81      A16S
ATOM  28490  O3' CYT  463     111.303  63.070  36.276  1.00 89.81      A16S
ATOM  28491  P   URI  464     112.492  64.032  36.745  1.00 83.00      A16S
ATOM  28492  O1P URI  464     113.357  63.285  37.695  1.00 89.86      A16S
ATOM  28493  O2P URI  464     111.916  65.343  37.148  1.00 89.86      A16S
ATOM  28494  O5' URI  464     113.307  64.220  35.393  1.00 83.00      A16S
ATOM  28495  C5' URI  464     113.751  63.083  34.659  1.00 83.00      A16S
ATOM  28496  C4' URI  464     114.428  63.518  33.391  1.00 83.00      A16S
ATOM  28497  O4' URI  464     113.450  64.002  32.434  1.00 83.00      A16S
ATOM  28498  C1' URI  464     114.006  65.074  31.688  1.00 83.00      A16S
ATOM  28499  N1  URI  464     113.219  66.285  31.953  1.00 89.86      A16S
ATOM  28500  C6  URI  464     112.556  66.476  33.138  1.00 89.86      A16S
ATOM  28501  C2  URI  464     113.181  67.232  30.961  1.00 89.86      A16S
ATOM  28502  O2  URI  464     113.750  67.083  29.900  1.00 89.86      A16S
ATOM  28503  N3  URI  464     112.453  68.357  31.254  1.00 89.86      A16S
ATOM  28504  C4  URI  464     111.768  68.619  32.419  1.00 89.86      A16S
ATOM  28505  O4  URI  464     111.163  69.687  32.539  1.00 89.86      A16S
ATOM  28506  C5  URI  464     111.849  67.582  33.400  1.00 89.86      A16S
ATOM  28507  C2' URI  464     115.447  65.238  32.158  1.00 83.00      A16S
ATOM  28508  O2' URI  464     116.296  64.459  31.351  1.00 83.00      A16S
ATOM  28509  C3' URI  464     115.346  64.701  33.573  1.00 83.00      A16S
ATOM  28510  O3' URI  464     116.597  64.323  34.100  1.00 83.00      A16S
ATOM  28511  P   GUA  465     117.667  65.462  34.416  1.00 62.18      A16S
ATOM  28512  O1P GUA  465     117.152  66.370  35.471  1.00 92.34      A16S
ATOM  28513  O2P GUA  465     118.033  66.011  33.088  1.00 92.34      A16S
ATOM  28514  O5' GUA  465     118.918  64.712  35.017  1.00 62.18      A16S
ATOM  28515  C5' GUA  465     120.084  65.451  35.280  1.00 62.18      A16S
ATOM  28516  C4' GUA  465     120.752  65.845  33.973  1.00 62.18      A16S
ATOM  28517  O4' GUA  465     119.957  66.783  33.199  1.00 62.18      A16S
ATOM  28518  C1' GUA  465     120.813  67.655  32.482  1.00 62.18      A16S
ATOM  28519  N9  GUA  465     120.441  69.021  32.835  1.00 92.34      A16S
ATOM  28520  C4  GUA  465     120.038  70.025  31.974  1.00 92.34      A16S
ATOM  28521  N3  GUA  465     120.032  69.968  30.624  1.00 92.34      A16S
ATOM  28522  C2  GUA  465     119.536  71.074  30.083  1.00 92.34      A16S
ATOM  28523  N2  GUA  465     119.505  71.216  28.753  1.00 92.34      A16S
ATOM  28524  N1  GUA  465     119.043  72.124  30.805  1.00 92.34      A16S
ATOM  28525  C6  GUA  465     119.019  72.195  32.190  1.00 92.34      A16S
ATOM  28526  O6  GUA  465     118.502  73.172  32.745  1.00 92.34      A16S
ATOM  28527  C5  GUA  465     119.605  71.044  32.785  1.00 92.34      A16S
ATOM  28528  N7  GUA  465     119.823  70.735  34.120  1.00 92.34      A16S
ATOM  28529  C8  GUA  465     120.336  69.535  34.099  1.00 92.34      A16S
ATOM  28530  C2' GUA  465     122.245  67.250  32.825  1.00 62.18      A16S
ATOM  28531  O2' GUA  465     122.685  66.252  31.932  1.00 62.18      A16S
ATOM  28532  C3' GUA  465     122.062  66.568  34.159  1.00 62.18      A16S
ATOM  28533  O3' GUA  465     123.054  65.579  34.277  1.00 62.18      A16S
ATOM  28534  P   ADE  466     124.566  66.027  34.298  1.00 61.58      A16S
ATOM  28535  O1P ADE  466     125.315  65.179  35.264  1.00 70.99      A16S
ATOM  28536  O2P ADE  466     124.487  67.497  34.521  1.00 70.99      A16S
ATOM  28537  O5' ADE  466     125.068  65.723  32.816  1.00 61.58      A16S
ATOM  28538  C5' ADE  466     126.071  64.744  32.574  1.00 61.58      A16S
ATOM  28539  C4' ADE  466     126.975  65.192  31.454  1.00 61.58      A16S
ATOM  28540  O4' ADE  466     126.189  65.395  30.254  1.00 61.58      A16S
ATOM  28541  C1' ADE  466     126.661  66.530  29.562  1.00 61.58      A16S
ATOM  28542  N9  ADE  466     125.597  67.528  29.595  1.00 70.99      A16S
ATOM  28543  C4  ADE  466     125.611  68.791  29.065  1.00 70.99      A16S
ATOM  28544  N3  ADE  466     126.608  69.379  28.396  1.00 70.99      A16S
ATOM  28545  C2  ADE  466     126.269  70.609  28.050  1.00 70.99      A16S
ATOM  28546  N1  ADE  466     125.132  71.271  28.277  1.00 70.99      A16S
ATOM  28547  C6  ADE  466     124.148  70.648  28.948  1.00 70.99      A16S
ATOM  28548  N6  ADE  466     123.009  71.306  29.168  1.00 70.99      A16S
ATOM  28549  C5  ADE  466     124.385  69.338  29.372  1.00 70.99      A16S
ATOM  28550  N7  ADE  466     123.608  68.433  30.072  1.00 70.99      A16S
ATOM  28551  C8  ADE  466     124.372  67.380  30.175  1.00 70.99      A16S
ATOM  28552  C2' ADE  466     127.947  66.976  30.261  1.00 61.58      A16S
ATOM  28553  O2' ADE  466     129.043  66.309  29.671  1.00 61.58      A16S
ATOM  28554  C3' ADE  466     127.698  66.503  31.683  1.00 61.58      A16S
ATOM  28555  O3' ADE  466     128.935  66.214  32.301  1.00 61.58      A16S
ATOM  28556  P   CYT  467     129.407  67.052  33.574  1.00 58.90      A16S
ATOM  28557  O1P CYT  467     130.724  66.507  33.992  1.00 65.21      A16S
ATOM  28558  O2P CYT  467     128.273  67.078  34.537  1.00 65.21      A16S
ATOM  28559  O5' CYT  467     129.664  68.516  33.010  1.00 58.90      A16S
ATOM  28560  C5' CYT  467     130.623  68.738  31.983  1.00 58.90      A16S
ATOM  28561  C4' CYT  467     130.350  70.048  31.284  1.00 58.90      A16S
ATOM  28562  O4' CYT  467     129.031  70.007  30.685  1.00 58.90      A16S
ATOM  28563  C1' CYT  467     128.436  71.288  30.768  1.00 58.90      A16S
ATOM  28564  N1  CYT  467     127.202  71.170  31.551  1.00 65.21      A16S
ATOM  28565  C6  CYT  467     126.962  70.076  32.334  1.00 65.21      A16S
ATOM  28566  C2  CYT  467     126.272  72.197  31.477  1.00 65.21      A16S
ATOM  28567  O2  CYT  467     126.526  73.173  30.768  1.00 65.21      A16S
ATOM  28568  N3  CYT  467     125.122  72.106  32.180  1.00 65.21      A16S
ATOM  28569  C4  CYT  467     124.894  71.037  32.943  1.00 65.21      A16S
ATOM  28570  N4  CYT  467     123.748  70.989  33.622  1.00 65.21      A16S
ATOM  28571  C5  CYT  467     125.832  69.970  33.043  1.00 65.21      A16S
ATOM  28572  C2' CYT  467     129.461  72.235  31.393  1.00 58.90      A16S
ATOM  28573  O2' CYT  467     130.180  72.906  30.377  1.00 58.90      A16S
ATOM  28574  C3' CYT  467     130.324  71.266  32.187  1.00 58.90      A16S
ATOM  28575  O3' CYT  467     131.640  71.764  32.349  1.00 58.90      A16S
ATOM  28576  P   GUA  468     132.170  72.156  33.811  1.00 80.13      A16S
ATOM  28577  O1P GUA  468     131.637  73.511  34.084  1.00 78.53      A16S
ATOM  28578  O2P GUA  468     133.636  71.930  33.818  1.00 78.53      A16S
ATOM  28579  O5' GUA  468     131.465  71.088  34.774  1.00 80.13      A16S
ATOM  28580  C5' GUA  468     131.705  71.060  36.192  1.00 80.13      A16S
ATOM  28581  C4' GUA  468     130.389  71.063  36.943  1.00 80.13      A16S
ATOM  28582  O4' GUA  468     129.663  72.221  36.494  1.00 80.13      A16S
ATOM  28583  C1' GUA  468     128.301  72.002  36.722  1.00 80.13      A16S
ATOM  28584  N9  GUA  468     127.508  72.794  35.796  1.00 78.53      A16S
ATOM  28585  C4  GUA  468     126.159  73.041  35.896  1.00 78.53      A16S
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ATOM  28586  N3  GUA  468      125.336  72.572  36.856  1.00 78.53      A16S
ATOM  28587  C2  GUA  468      124.093  72.985  36.685  1.00 78.53      A16S
ATOM  28588  N2  GUA  468      123.137  72.612  37.552  1.00 78.53      A16S
ATOM  28589  N1  GUA  468      123.693  73.794  35.656  1.00 78.53      A16S
ATOM  28590  C6  GUA  468      124.525  74.290  34.664  1.00 78.53      A16S
ATOM  28591  O6  GUA  468      124.065  75.017  33.789  1.00 78.53      A16S
ATOM  28592  C5  GUA  468      125.857  73.854  34.833  1.00 78.53      A16S
ATOM  28593  N7  GUA  468      126.990  74.111  34.072  1.00 78.53      A16S
ATOM  28594  C8  GUA  468      127.944  73.457  34.680  1.00 78.53      A16S
ATOM  28595  C2' GUA  468      128.038  70.496  36.773  1.00 80.13      A16S
ATOM  28596  O2' GUA  468      127.376  70.186  37.986  1.00 80.13      A16S
ATOM  28597  C3' GUA  468      129.442  69.885  36.692  1.00 80.13      A16S
ATOM  28598  O3' GUA  468      129.407  68.944  37.781  1.00 80.13      A16S
ATOM  28599  P   GUA  469      130.746  68.256  38.348  1.00 83.34      A16S
ATOM  28600  O1P GUA  469      131.683  68.009  37.226  1.00 89.41      A16S
ATOM  28601  O2P GUA  469      130.285  67.120  39.183  1.00 89.41      A16S
ATOM  28602  O5' GUA  469      131.401  69.350  39.304  1.00 83.34      A16S
ATOM  28603  C5' GUA  469      130.953  69.534  40.652  1.00 83.34      A16S
ATOM  28604  C4' GUA  469      130.287  70.881  40.785  1.00 83.34      A16S
ATOM  28605  O4' GUA  469      128.912  70.693  41.166  1.00 83.34      A16S
ATOM  28606  C1' GUA  469      128.422  71.923  41.641  1.00 83.34      A16S
ATOM  28607  N9  GUA  469      127.506  71.701  42.749  1.00 89.41      A16S
ATOM  28608  C4  GUA  469      126.308  72.329  42.884  1.00 89.41      A16S
ATOM  28609  N3  GUA  469      125.817  73.250  42.040  1.00 89.41      A16S
ATOM  28610  C2  GUA  469      124.636  73.677  42.411  1.00 89.41      A16S
ATOM  28611  N2  GUA  469      124.020  74.601  41.670  1.00 89.41      A16S
ATOM  28612  N1  GUA  469      123.977  73.231  43.532  1.00 89.41      A16S
ATOM  28613  C6  GUA  469      124.467  72.276  44.421  1.00 89.41      A16S
ATOM  28614  O6  GUA  469      123.790  71.938  45.403  1.00 89.41      A16S
ATOM  28615  C5  GUA  469      125.747  71.815  44.027  1.00 89.41      A16S
ATOM  28616  N7  GUA  469      126.593  70.885  44.612  1.00 89.41      A16S
ATOM  28617  C8  GUA  469      127.630  70.855  43.819  1.00 89.41      A16S
ATOM  28618  C2' GUA  469      129.607  72.847  41.921  1.00 83.34      A16S
ATOM  28619  O2' GUA  469      129.626  73.847  40.925  1.00 83.34      A16S
ATOM  28620  C3' GUA  469      130.797  71.900  41.800  1.00 83.34      A16S
ATOM  28621  O3' GUA  469      131.945  72.579  41.275  1.00 83.34      A16S
ATOM  28622  P   URI  470      132.208  74.151  41.590  1.00 85.51      A16S
ATOM  28623  O1P URI  470      133.637  74.258  41.977  1.00 62.38      A16S
ATOM  28624  O2P URI  470      131.174  74.758  42.472  1.00 62.38      A16S
ATOM  28625  O5' URI  470      132.091  74.832  40.155  1.00 85.51      A16S
ATOM  28626  C5' URI  470      133.108  74.622  39.182  1.00 85.51      A16S
ATOM  28627  C4' URI  470      132.702  75.207  37.856  1.00 85.51      A16S
ATOM  28628  O4' URI  470      131.572  74.479  37.321  1.00 85.51      A16S
ATOM  28629  C1' URI  470      130.763  75.361  36.568  1.00 85.51      A16S
ATOM  28630  N1  URI  470      129.439  75.393  37.183  1.00 62.38      A16S
ATOM  28631  C6  URI  470      129.179  74.753  38.364  1.00 62.38      A16S
ATOM  28632  C2  URI  470      128.467  76.089  36.525  1.00 62.38      A16S
ATOM  28633  O2  URI  470      128.681  76.669  35.479  1.00 62.38      A16S
ATOM  28634  N3  URI  470      127.238  76.083  37.132  1.00 62.38      A16S
ATOM  28635  C4  URI  470      126.906  75.455  38.311  1.00 62.38      A16S
ATOM  28636  O4  URI  470      125.753  75.503  38.712  1.00 62.38      A16S
ATOM  28637  C5  URI  470      127.974  74.761  38.936  1.00 62.38      A16S
ATOM  28638  C2' URI  470      131.415  76.738  36.611  1.00 85.51      A16S
ATOM  28639  O2' URI  470      132.227  76.915  35.469  1.00 85.51      A16S
ATOM  28640  C3' URI  470      132.214  76.640  37.898  1.00 85.51      A16S
ATOM  28641  O3' URI  470      133.304  77.544  37.890  1.00 85.51      A16S
ATOM  28642  P   ADE  471      133.105  79.014  38.491  1.00 76.24      A16S
ATOM  28643  O1P ADE  471      134.360  79.765  38.233  1.00 71.91      A16S
ATOM  28644  O2P ADE  471      132.602  78.868  39.886  1.00 71.91      A16S
ATOM  28645  O5' ADE  471      131.933  79.634  37.604  1.00 76.24      A16S
ATOM  28646  C5' ADE  471      132.174  80.029  36.264  1.00 76.24      A16S
ATOM  28647  C4' ADE  471      130.994  80.798  35.729  1.00 76.24      A16S
ATOM  28648  O4' ADE  471      129.821  79.955  35.790  1.00 76.24      A16S
ATOM  28649  C1' ADE  471      128.681  80.745  36.053  1.00 76.24      A16S
ATOM  28650  N9  ADE  471      128.073  80.261  37.288  1.00 71.91      A16S
ATOM  28651  C4  ADE  471      126.797  80.530  37.698  1.00 71.91      A16S
ATOM  28652  N3  ADE  471      125.897  81.302  37.076  1.00 71.91      A16S
ATOM  28653  C2  ADE  471      124.753  81.317  37.748  1.00 71.91      A16S
ATOM  28654  N1  ADE  471      124.427  80.685  38.878  1.00 71.91      A16S
ATOM  28655  C6  ADE  471      125.352  79.909  39.473  1.00 71.91      A16S
ATOM  28656  N6  ADE  471      125.011  79.259  40.587  1.00 71.91      A16S
ATOM  28657  C5  ADE  471      126.619  79.826  38.869  1.00 71.91      A16S
ATOM  28658  N7  ADE  471      127.779  79.148  39.213  1.00 71.91      A16S
ATOM  28659  C8  ADE  471      128.612  79.442  38.247  1.00 71.91      A16S
ATOM  28660  C2' ADE  471      129.136  82.200  36.110  1.00 76.24      A16S
ATOM  28661  O2' ADE  471      128.997  82.774  34.828  1.00 76.24      A16S
ATOM  28662  C3' ADE  471      130.597  82.041  36.504  1.00 76.24      A16S
ATOM  28663  O3' ADE  471      131.359  83.158  36.065  1.00 76.24      A16S
ATOM  28664  P   CYT  472      131.736  84.324  37.100  1.00 66.03      A16S
ATOM  28665  O1P CYT  472      132.148  85.495  36.288  1.00 77.27      A16S
ATOM  28666  O2P CYT  472      132.671  83.771  38.112  1.00 77.27      A16S
ATOM  28667  O5' CYT  472      130.350  84.674  37.803  1.00 66.03      A16S
ATOM  28668  C5' CYT  472      129.342  85.406  37.112  1.00 66.03      A16S
ATOM  28669  C4' CYT  472      128.068  85.425  37.921  1.00 66.03      A16S
ATOM  28670  O4' CYT  472      127.591  84.060  38.066  1.00 66.03      A16S
ATOM  28671  C1' CYT  472      127.039  83.877  39.366  1.00 66.03      A16S
ATOM  28672  N1  CYT  472      127.868  82.905  40.092  1.00 77.27      A16S
ATOM  28673  C6  CYT  472      129.156  82.654  39.711  1.00 77.27      A16S
ATOM  28674  C2  CYT  472      127.316  82.243  41.186  1.00 77.27      A16S
ATOM  28675  O2  CYT  472      126.150  82.505  41.513  1.00 77.27      A16S
ATOM  28676  N3  CYT  472      128.064  81.341  41.860  1.00 77.27      A16S
ATOM  28677  C4  CYT  472      129.316  81.097  41.477  1.00 77.27      A16S
ATOM  28678  N4  CYT  472      130.013  80.195  42.159  1.00 77.27      A16S
ATOM  28679  C5  CYT  472      129.909  81.767  40.371  1.00 77.27      A16S
ATOM  28680  C2' CYT  472      127.050  85.239  40.057  1.00 66.03      A16S
ATOM  28681  O2' CYT  472      125.818  85.904  39.876  1.00 66.03      A16S
ATOM  28682  C3' CYT  472      128.221  85.912  39.355  1.00 66.03      A16S
ATOM  28683  O3' CYT  472      128.162  87.324  39.477  1.00 66.03      A16S
ATOM  28684  P   CYT  473      128.813  88.020  40.763  1.00 71.45      A16S
ATOM  28685  O1P CYT  473      128.731  89.488  40.583  1.00 77.19      A16S
ATOM  28686  O2P CYT  473      130.128  87.382  41.000  1.00 77.19      A16S
ATOM  28687  O5' CYT  473      127.832  87.611  41.946  1.00 71.45      A16S
ATOM  28688  C5' CYT  473      126.482  88.060  41.957  1.00 71.45      A16S
ATOM  28689  C4' CYT  473      125.793  87.594  43.214  1.00 71.45      A16S
ATOM  28690  O4' CYT  473      125.606  86.152  43.163  1.00 71.45      A16S
ATOM  28691  C1' CYT  473      125.790  85.599  44.461  1.00 71.45      A16S
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ATOM	28692	N1	CYT	473	126.983	84.737	44.430	1.00	77.19	A16S	ATOM	28745	C8	GUA	475	131.339	86.083	51.606	1.00	104.74	A16S
ATOM	28693	C6	CYT	473	127.906	84.854	43.431	1.00	77.19	A16S	ATOM	28746	C2'	GUA	475	132.249	86.756	54.908	1.00	69.48	A16S
ATOM	28694	C2	CYT	473	127.164	83.797	45.449	1.00	77.19	A16S	ATOM	28747	O2'	GUA	475	132.137	86.474	56.283	1.00	69.48	A16S
ATOM	28695	O2	CYT	473	126.300	83.702	46.337	1.00	77.19	A16S	ATOM	28748	C3'	GUA	475	131.778	88.157	54.545	1.00	69.48	A16S
ATOM	28696	N3	CYT	473	128.272	83.015	45.442	1.00	77.19	A16S	ATOM	28749	O3'	GUA	475	132.186	89.113	55.508	1.00	69.48	A16S
ATOM	28697	C4	CYT	473	129.173	83.145	44.463	1.00	77.19	A16S	ATOM	28750	P	GUA	476	133.654	89.766	55.404	1.00	75.28	A16S
ATOM	28698	N4	CYT	473	130.258	82.360	44.493	1.00	77.19	A16S	ATOM	28751	O1P	GUA	476	133.869	90.602	56.614	1.00	109.51	A16S
ATOM	28699	C5	CYT	473	129.005	84.086	43.408	1.00	77.19	A16S	ATOM	28752	O2P	GUA	476	133.806	90.374	54.057	1.00	109.51	A16S
ATOM	28700	C2'	CYT	473	125.966	86.777	45.420	1.00	71.45	A16S	ATOM	28753	O5'	GUA	476	134.639	88.522	55.505	1.00	75.28	A16S
ATOM	28701	O2'	CYT	473	124.706	87.190	45.918	1.00	71.45	A16S	ATOM	28754	C5'	GUA	476	134.769	87.807	56.718	1.00	75.28	A16S
ATOM	28702	C3'	CYT	473	126.588	87.810	44.490	1.00	71.45	A16S	ATOM	28755	C4'	GUA	476	135.846	86.771	56.592	1.00	75.28	A16S
ATOM	28703	O3'	CYT	473	126.477	89.137	44.989	1.00	71.45	A16S	ATOM	28756	O4'	GUA	476	135.502	85.857	55.521	1.00	75.28	A16S
ATOM	28704	P	GUA	474	127.668	89.743	45.884	1.00	82.84	A16S	ATOM	28757	C1'	GUA	476	136.690	85.401	54.892	1.00	75.28	A16S
ATOM	28705	O1P	GUA	474	127.381	91.184	46.087	1.00	85.69	A16S	ATOM	28758	N9	GUA	476	136.611	85.719	53.469	1.00	109.51	A16S
ATOM	28706	O2P	GUA	474	128.980	89.327	45.328	1.00	85.69	A16S	ATOM	28759	C4	GUA	476	137.434	85.241	52.474	1.00	109.51	A16S
ATOM	28707	O5'	GUA	474	127.501	88.992	47.271	1.00	82.84	A16S	ATOM	28760	N3	GUA	476	138.474	84.400	52.640	1.00	109.51	A16S
ATOM	28708	C5'	GUA	474	126.449	89.327	48.157	1.00	82.84	A16S	ATOM	28761	C2	GUA	476	139.063	84.114	51.493	1.00	109.51	A16S
ATOM	28709	C4'	GUA	474	126.581	88.522	49.416	1.00	82.84	A16S	ATOM	28762	N2	GUA	476	140.114	83.289	51.470	1.00	109.51	A16S
ATOM	28710	O4'	GUA	474	126.456	87.115	49.071	1.00	82.84	A16S	ATOM	28763	N1	GUA	476	138.665	84.613	50.280	1.00	109.51	A16S
ATOM	28711	C1'	GUA	474	127.290	86.342	49.919	1.00	82.84	A16S	ATOM	28764	C6	GUA	476	137.597	85.477	50.084	1.00	109.51	A16S
ATOM	28712	N9	GUA	474	128.283	85.668	49.093	1.00	85.69	A16S	ATOM	28765	O6	GUA	476	137.317	85.860	48.943	1.00	109.51	A16S
ATOM	28713	C4	GUA	474	129.129	84.667	49.498	1.00	85.69	A16S	ATOM	28766	C5	GUA	476	136.956	85.796	51.307	1.00	109.51	A16S
ATOM	28714	N3	GUA	474	129.155	84.099	50.722	1.00	85.69	A16S	ATOM	28767	N7	GUA	476	135.864	86.614	51.562	1.00	109.51	A16S
ATOM	28715	C2	GUA	474	130.099	83.174	50.820	1.00	85.69	A16S	ATOM	28768	C8	GUA	476	135.698	86.540	52.855	1.00	109.51	A16S
ATOM	28716	N2	GUA	474	130.261	82.495	51.970	1.00	85.69	A16S	ATOM	28769	C2'	GUA	476	137.867	86.077	55.596	1.00	75.28	A16S
ATOM	28717	N1	GUA	474	130.955	82.844	49.799	1.00	85.69	A16S	ATOM	28770	O2'	GUA	476	138.380	85.230	56.603	1.00	75.28	A16S
ATOM	28718	C6	GUA	474	130.950	83.417	48.534	1.00	85.69	A16S	ATOM	28771	C3'	GUA	476	137.198	87.312	56.177	1.00	75.28	A16S
ATOM	28719	O6	GUA	474	131.779	83.052	47.694	1.00	85.69	A16S	ATOM	28772	O3'	GUA	476	137.916	87.798	57.297	1.00	75.28	A16S
ATOM	28720	C5	GUA	474	129.928	84.402	48.410	1.00	85.69	A16S	ATOM	28773	P	GUA	477	139.064	88.898	57.082	1.00	72.55	A16S
ATOM	28721	N7	GUA	474	129.566	85.195	47.331	1.00	85.69	A16S	ATOM	28774	O1P	GUA	477	139.807	89.025	58.366	1.00	88.51	A16S
ATOM	28722	C8	GUA	474	128.583	85.925	47.781	1.00	85.69	A16S	ATOM	28775	O2P	GUA	477	138.429	90.098	56.477	1.00	88.51	A16S
ATOM	28723	C2'	GUA	474	127.946	87.315	50.901	1.00	82.84	A16S	ATOM	28776	O5'	GUA	477	140.041	88.234	56.011	1.00	72.55	A16S
ATOM	28724	O2'	GUA	474	127.155	87.433	52.066	1.00	82.84	A16S	ATOM	28777	C5'	GUA	477	141.005	87.260	56.400	1.00	72.55	A16S
ATOM	28725	C3'	GUA	474	127.942	88.595	50.087	1.00	82.84	A16S	ATOM	28778	C4'	GUA	477	141.882	86.891	55.222	1.00	72.55	A16S
ATOM	28726	O3'	GUA	474	128.075	89.733	50.921	1.00	82.84	A16S	ATOM	28779	O4'	GUA	477	141.082	86.229	54.204	1.00	72.55	A16S
ATOM	28727	P	GUA	475	129.540	90.197	51.393	1.00	69.48	A16S	ATOM	28780	C1'	GUA	477	141.464	86.686	52.921	1.00	72.55	A16S
ATOM	28728	O1P	GUA	475	129.374	91.448	52.173	1.00	104.74	A16S	ATOM	28781	N9	GUA	477	140.382	87.525	52.428	1.00	88.51	A16S
ATOM	28729	O2P	GUA	475	130.446	90.178	50.223	1.00	104.74	A16S	ATOM	28782	C4	GUA	477	140.106	87.840	51.122	1.00	88.51	A16S
ATOM	28730	O5'	GUA	475	130.022	89.059	52.399	1.00	69.48	A16S	ATOM	28783	N3	GUA	477	140.777	87.398	50.039	1.00	88.51	A16S
ATOM	28731	C5'	GUA	475	129.511	89.002	53.727	1.00	69.48	A16S	ATOM	28784	C2	GUA	477	140.279	87.891	48.917	1.00	88.51	A16S
ATOM	28732	C4'	GUA	475	130.273	87.988	54.540	1.00	69.48	A16S	ATOM	28785	N2	GUA	477	140.812	87.551	47.739	1.00	88.51	A16S
ATOM	28733	O4'	GUA	475	130.071	86.666	53.978	1.00	69.48	A16S	ATOM	28786	N1	GUA	477	139.217	88.754	48.867	1.00	88.51	A16S
ATOM	28734	C1'	GUA	475	131.253	85.898	54.132	1.00	69.48	A16S	ATOM	28787	C6	GUA	477	138.516	89.225	49.968	1.00	88.51	A16S
ATOM	28735	N9	GUA	475	131.770	85.583	52.808	1.00	104.74	A16S	ATOM	28788	O6	GUA	477	137.580	90.015	49.810	1.00	88.51	A16S
ATOM	28736	C4	GUA	475	132.814	84.738	52.527	1.00	104.74	A16S	ATOM	28789	C5	GUA	477	139.027	88.695	51.175	1.00	88.51	A16S
ATOM	28737	N3	GUA	475	133.522	84.031	53.427	1.00	104.74	A16S	ATOM	28790	N7	GUA	477	138.619	88.894	52.485	1.00	88.51	A16S
ATOM	28738	C2	GUA	475	134.472	83.315	52.853	1.00	104.74	A16S	ATOM	28791	C8	GUA	477	139.447	88.178	53.191	1.00	88.51	A16S
ATOM	28739	N2	GUA	475	135.268	82.539	53.600	1.00	104.74	A16S	ATOM	28792	C2'	GUA	477	142.755	87.484	53.108	1.00	72.55	A16S
ATOM	28740	N1	GUA	475	134.712	83.304	51.506	1.00	104.74	A16S	ATOM	28793	O2'	GUA	477	143.878	86.629	53.053	1.00	72.55	A16S
ATOM	28741	C6	GUA	475	133.998	84.029	50.561	1.00	104.74	A16S	ATOM	28794	C3'	GUA	477	142.550	88.053	54.503	1.00	72.55	A16S
ATOM	28742	O6	GUA	475	134.307	83.954	49.367	1.00	104.74	A16S	ATOM	28795	O3'	GUA	477	143.795	88.381	55.114	1.00	72.55	A16S
ATOM	28743	C5	GUA	475	132.968	84.791	51.161	1.00	104.74	A16S	ATOM	28796	P	URI	478	144.584	89.703	54.652	1.00	81.77	A16S
ATOM	28744	N7	GUA	475	132.028	85.638	50.592	1.00	104.74	A16S	ATOM	28797	O1P	URI	478	145.118	90.422	55.840	1.00	73.28	A16S

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ATOM  28798  O2P URI   478     143.686  90.416  53.708  1.00 73.28      A16S
ATOM  28799  O5' URI   478     145.832  89.120  53.860  1.00 81.77      A16S
ATOM  28800  C5' URI   478     146.775  88.296  54.522  1.00 81.77      A16S
ATOM  28801  C4' URI   478     147.733  87.705  53.524  1.00 81.77      A16S
ATOM  28802  O4' URI   478     147.002  86.846  52.612  1.00 81.77      A16S
ATOM  28803  C1' URI   478     147.556  86.953  51.314  1.00 81.77      A16S
ATOM  28804  N1  URI   478     146.535  87.530  50.435  1.00 73.28      A16S
ATOM  28805  C6  URI   478     145.459  88.210  50.943  1.00 73.28      A16S
ATOM  28806  C2  URI   478     146.701  87.370  49.084  1.00 73.28      A16S
ATOM  28807  O2  URI   478     147.650  86.784  48.603  1.00 73.28      A16S
ATOM  28808  N3  URI   478     145.719  87.924  48.314  1.00 73.28      A16S
ATOM  28809  C4  URI   478     144.619  88.609  48.755  1.00 73.28      A16S
ATOM  28810  O4  URI   478     143.778  88.955  47.946  1.00 73.28      A16S
ATOM  28811  C5  URI   478     144.523  88.747  50.168  1.00 73.28      A16S
ATOM  28812  C2' URI   478     148.786  87.855  51.419  1.00 81.77      A16S
ATOM  28813  O2' URI   478     149.928  87.058  51.640  1.00 81.77      A16S
ATOM  28814  C3' URI   478     148.424  88.712  52.623  1.00 81.77      A16S
ATOM  28815  O3' URI   478     149.577  89.226  53.267  1.00 81.77      A16S
ATOM  28816  P   ADE   479     150.069  90.717  52.948  1.00 94.25      A16S
ATOM  28817  O1P ADE   479     151.075  91.049  53.981  1.00 91.97      A16S
ATOM  28818  O2P ADE   479     148.880  91.585  52.788  1.00 91.97      A16S
ATOM  28819  O5' ADE   479     150.815  90.585  51.541  1.00 94.25      A16S
ATOM  28820  C5' ADE   479     151.925  91.427  51.221  1.00 94.25      A16S
ATOM  28821  C4' ADE   479     151.979  91.703  49.734  1.00 94.25      A16S
ATOM  28822  O4' ADE   479     150.669  92.041  49.261  1.00 94.25      A16S
ATOM  28823  C1' ADE   479     150.815  92.794  48.095  1.00 94.25      A16S
ATOM  28824  N9  ADE   479     149.616  93.579  47.870  1.00 91.97      A16S
ATOM  28825  C4  ADE   479     149.006  93.661  46.648  1.00 91.97      A16S
ATOM  28826  N3  ADE   479     149.421  93.096  45.503  1.00 91.97      A16S
ATOM  28827  C2  ADE   479     148.577  93.368  44.517  1.00 91.97      A16S
ATOM  28828  N1  ADE   479     147.447  94.084  44.543  1.00 91.97      A16S
ATOM  28829  C6  ADE   479     147.060  94.641  45.712  1.00 91.97      A16S
ATOM  28830  N6  ADE   479     145.932  95.358  45.731  1.00 91.97      A16S
ATOM  28831  C5  ADE   479     147.878  94.426  46.839  1.00 91.97      A16S
ATOM  28832  N7  ADE   479     147.791  94.844  48.161  1.00 91.97      A16S
ATOM  28833  C8  ADE   479     148.851  94.318  48.727  1.00 91.97      A16S
ATOM  28834  C2' ADE   479     152.169  93.503  48.117  1.00 94.25      A16S
ATOM  28835  O2' ADE   479     152.856  93.259  46.903  1.00 94.25      A16S
ATOM  28836  C3' ADE   479     152.856  92.890  49.345  1.00 94.25      A16S
ATOM  28837  O3' ADE   479     154.165  92.487  48.920  1.00 94.25      A16S
ATOM  28838  P   ADE   480     154.592  90.925  48.911  1.00 86.73      A16S
ATOM  28839  O1P ADE   480     154.231  90.302  50.205  1.00 85.43      A16S
ATOM  28840  O2P ADE   480     156.000  90.866  48.446  1.00 85.43      A16S
ATOM  28841  O5' ADE   480     153.689  90.231  47.791  1.00 86.73      A16S
ATOM  28842  C5' ADE   480     153.962  88.886  47.377  1.00 86.73      A16S
ATOM  28843  C4' ADE   480     153.140  88.508  46.156  1.00 86.73      A16S
ATOM  28844  O4' ADE   480     151.743  88.453  46.504  1.00 86.73      A16S
ATOM  28845  C1' ADE   480     150.964  88.739  45.367  1.00 86.73      A16S
ATOM  28846  N9  ADE   480     149.814  89.533  45.790  1.00 85.43      A16S
ATOM  28847  C4  ADE   480     148.753  89.949  45.018  1.00 85.43      A16S
ATOM  28848  N3  ADE   480     148.581  89.771  43.700  1.00 85.43      A16S
ATOM  28849  C2  ADE   480     147.420  90.287  43.303  1.00 85.43      A16S
ATOM  28850  N1  ADE   480     146.480  90.904  44.015  1.00 85.43      A16S
ATOM  28851  C6  ADE   480     146.678  91.064  45.337  1.00 85.43      A16S
ATOM  28852  N6  ADE   480     145.731  91.671  46.051  1.00 85.43      A16S
ATOM  28853  C5  ADE   480     147.879  90.573  45.884  1.00 85.43      A16S
ATOM  28854  N7  ADE   480     148.395  90.587  47.173  1.00 85.43      A16S
ATOM  28855  C8  ADE   480     149.544  89.969  47.060  1.00 85.43      A16S
ATOM  28856  C2' ADE   480     151.865  89.290  44.256  1.00 86.73      A16S
ATOM  28857  O2' ADE   480     151.856  88.413  43.154  1.00 86.73      A16S
ATOM  28858  C3' ADE   480     153.218  89.437  44.957  1.00 86.73      A16S
ATOM  28859  O3' ADE   480     154.396  89.178  44.162  1.00 86.73      A16S
ATOM  28860  P   URI   481     154.642  87.733  43.443  1.00 70.50      A16S
ATOM  28861  O1P URI   481     153.430  86.865  43.448  1.00 71.60      A16S
ATOM  28862  O2P URI   481     155.918  87.189  43.973  1.00 71.60      A16S
ATOM  28863  O5' URI   481     154.957  88.133  41.931  1.00 70.50      A16S
ATOM  28864  C5' URI   481     154.091  87.746  40.870  1.00 70.50      A16S
ATOM  28865  C4' URI   481     154.898  87.244  39.697  1.00 70.50      A16S
ATOM  28866  O4' URI   481     154.000  86.589  38.770  1.00 70.50      A16S
ATOM  28867  C1' URI   481     154.474  86.769  37.453  1.00 70.50      A16S
ATOM  28868  N1  URI   481     153.415  87.414  36.665  1.00 71.60      A16S
ATOM  28869  C6  URI   481     152.270  87.887  37.257  1.00 71.60      A16S
ATOM  28870  C2  URI   481     153.607  87.520  35.301  1.00 71.60      A16S
ATOM  28871  O2  URI   481     154.614  87.125  34.743  1.00 71.60      A16S
ATOM  28872  N3  URI   481     152.576  88.107  34.616  1.00 71.60      A16S
ATOM  28873  C4  URI   481     151.402  88.587  35.145  1.00 71.60      A16S
ATOM  28874  O4  URI   481     150.545  89.030  34.390  1.00 71.60      A16S
ATOM  28875  C5  URI   481     151.283  88.455  36.562  1.00 71.60      A16S
ATOM  28876  C2' URI   481     155.785  87.558  37.528  1.00 70.50      A16S
ATOM  28877  O2' URI   481     156.866  86.649  37.516  1.00 70.50      A16S
ATOM  28878  C3' URI   481     155.642  88.280  38.862  1.00 70.50      A16S
ATOM  28879  O3' URI   481     156.927  88.561  39.415  1.00 70.50      A16S
ATOM  28880  P   ADE   482     157.795  89.802  38.864  1.00 67.07      A16S
ATOM  28881  O1P ADE   482     159.166  89.646  39.370  1.00 53.99      A16S
ATOM  28882  O2P ADE   482     157.083  91.072  39.105  1.00 53.99      A16S
ATOM  28883  O5' ADE   482     157.848  89.574  37.294  1.00 67.07      A16S
ATOM  28884  C5' ADE   482     158.925  88.868  36.683  1.00 67.07      A16S
ATOM  28885  C4' ADE   482     159.179  89.430  35.310  1.00 67.07      A16S
ATOM  28886  O4' ADE   482     157.960  89.359  34.552  1.00 67.07      A16S
ATOM  28887  C1' ADE   482     157.919  90.425  33.640  1.00 67.07      A16S
ATOM  28888  N9  ADE   482     156.521  90.751  33.360  1.00 53.99      A16S
ATOM  28889  C4  ADE   482     155.993  90.921  32.102  1.00 53.99      A16S
ATOM  28890  N3  ADE   482     156.654  90.887  30.932  1.00 53.99      A16S
ATOM  28891  C2  ADE   482     155.814  91.050  29.918  1.00 53.99      A16S
ATOM  28892  N1  ADE   482     154.485  91.223  29.937  1.00 53.99      A16S
ATOM  28893  C6  ADE   482     153.853  91.252  31.129  1.00 53.99      A16S
ATOM  28894  N6  ADE   482     152.526  91.411  31.144  1.00 53.99      A16S
ATOM  28895  C5  ADE   482     154.636  91.103  32.284  1.00 53.99      A16S
ATOM  28896  N7  ADE   482     154.318  91.092  33.631  1.00 53.99      A16S
ATOM  28897  C8  ADE   482     155.472  90.890  34.226  1.00 53.99      A16S
ATOM  28898  C2' ADE   482     158.891  91.517  34.095  1.00 67.07      A16S
ATOM  28899  O2' ADE   482     159.808  91.819  33.088  1.00 67.07      A16S
ATOM  28900  C3' ADE   482     159.551  90.898  35.324  1.00 67.07      A16S
ATOM  28901  O3' ADE   482     160.982  91.035  35.409  1.00 67.07      A16S
ATOM  28902  P   GUA   483     161.966  90.486  34.228  1.00 53.13      A16S
ATOM  28903  O1P GUA   483     162.867  89.479  34.840  1.00 54.39      A16S
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ATOM	28904	O2P	GUA	483	162.560	91.648	33.522	1.00	54.39	A16S	ATOM	28957	N2	GUA	485	162.837	99.418	22.157	1.00	60.04	A16S
ATOM	28905	O5'	GUA	483	161.036	89.693	33.210	1.00	53.13	A16S	ATOM	28958	N1	GUA	485	163.529	98.325	24.046	1.00	60.04	A16S
ATOM	28906	C5'	GUA	483	161.590	88.695	32.360	1.00	53.13	A16S	ATOM	28959	C6	GUA	485	163.921	97.240	24.825	1.00	60.04	A16S
ATOM	28907	C4'	GUA	483	160.800	88.592	31.082	1.00	53.13	A16S	ATOM	28960	O6	GUA	485	164.245	97.411	26.011	1.00	60.04	A16S
ATOM	28908	O4'	GUA	483	159.670	89.502	31.127	1.00	53.13	A16S	ATOM	28961	C5	GUA	485	163.900	96.039	24.082	1.00	60.04	A16S
ATOM	28909	C1'	GUA	483	159.447	90.046	29.835	1.00	53.13	A16S	ATOM	28962	N7	GUA	485	164.197	94.740	24.470	1.00	60.04	A16S
ATOM	28910	N9	GUA	483	159.668	91.486	29.906	1.00	54.39	A16S	ATOM	28963	C8	GUA	485	164.027	94.034	23.388	1.00	60.04	A16S
ATOM	28911	C4	GUA	483	159.105	92.451	29.108	1.00	54.39	A16S	ATOM	28964	C2'	GUA	485	164.677	94.547	20.094	1.00	46.23	A16S
ATOM	28912	N3	GUA	483	158.259	92.237	28.083	1.00	54.39	A16S	ATOM	28965	O2'	GUA	485	164.317	94.745	18.739	1.00	46.23	A16S
ATOM	28913	C2	GUA	483	157.892	93.370	27.506	1.00	54.39	A16S	ATOM	28966	C3'	GUA	485	165.412	93.238	20.316	1.00	46.23	A16S
ATOM	28914	N2	GUA	483	157.050	93.348	26.464	1.00	54.39	A16S	ATOM	28967	O3'	GUA	485	166.326	92.981	19.271	1.00	46.23	A16S
ATOM	28915	N1	GUA	483	158.318	94.609	27.910	1.00	54.39	A16S	ATOM	28968	P	CYT	486	167.836	93.498	19.399	1.00	41.08	A16S
ATOM	28916	C6	GUA	483	159.177	94.849	28.973	1.00	54.39	A16S	ATOM	28969	O1P	CYT	486	168.549	92.940	18.220	1.00	52.41	A16S
ATOM	28917	O6	GUA	483	159.471	96.007	29.279	1.00	54.39	A16S	ATOM	28970	O2P	CYT	486	168.316	93.163	20.770	1.00	52.41	A16S
ATOM	28918	C5	GUA	483	159.591	93.647	29.584	1.00	54.39	A16S	ATOM	28971	O5'	CYT	486	167.709	95.087	19.265	1.00	41.08	A16S
ATOM	28919	N7	GUA	483	160.461	93.437	30.641	1.00	54.39	A16S	ATOM	28972	C5'	CYT	486	167.166	95.685	18.088	1.00	41.08	A16S
ATOM	28920	C8	GUA	483	160.479	92.143	30.790	1.00	54.39	A16S	ATOM	28973	C4'	CYT	486	166.710	97.106	18.357	1.00	41.08	A16S
ATOM	28921	C2'	GUA	483	160.421	89.349	28.878	1.00	53.13	A16S	ATOM	28974	O4'	CYT	486	165.767	97.095	19.457	1.00	41.08	A16S
ATOM	28922	O2'	GUA	483	159.800	88.214	28.303	1.00	53.13	A16S	ATOM	28975	C1'	CYT	486	165.875	98.303	20.198	1.00	41.08	A16S
ATOM	28923	C3'	GUA	483	161.557	88.991	29.826	1.00	53.13	A16S	ATOM	28976	N1	CYT	486	166.265	97.979	21.572	1.00	52.41	A16S
ATOM	28924	O3'	GUA	483	162.331	87.905	29.334	1.00	53.13	A16S	ATOM	28977	C6	CYT	486	166.711	96.733	21.901	1.00	52.41	A16S
ATOM	28925	P	CYT	484	163.743	88.193	28.619	1.00	56.87	A16S	ATOM	28978	C2	CYT	486	166.190	98.977	22.537	1.00	52.41	A16S
ATOM	28926	O1P	CYT	484	164.346	86.864	28.343	1.00	53.24	A16S	ATOM	28979	O2	CYT	486	165.740	100.085	22.217	1.00	52.41	A16S
ATOM	28927	O2P	CYT	484	164.503	89.190	29.414	1.00	53.24	A16S	ATOM	28980	N3	CYT	486	166.599	98.711	23.793	1.00	52.41	A16S
ATOM	28928	O5'	CYT	484	163.337	88.882	27.239	1.00	56.87	A16S	ATOM	28981	C4	CYT	486	167.045	97.495	24.101	1.00	52.41	A16S
ATOM	28929	C5'	CYT	484	162.720	88.120	26.204	1.00	56.87	A16S	ATOM	28982	N4	CYT	486	167.440	97.275	25.348	1.00	52.41	A16S
ATOM	28930	C4'	CYT	484	162.354	89.004	25.036	1.00	56.87	A16S	ATOM	28983	C5	CYT	486	167.106	96.451	23.142	1.00	52.41	A16S
ATOM	28931	O4'	CYT	484	161.258	89.887	25.390	1.00	56.87	A16S	ATOM	28984	C2'	CYT	486	166.937	99.161	19.518	1.00	41.08	A16S
ATOM	28932	C1'	CYT	484	161.401	91.115	24.699	1.00	56.87	A16S	ATOM	28985	O2'	CYT	486	166.299	100.069	18.650	1.00	41.08	A16S
ATOM	28933	N1	CYT	484	161.598	92.174	25.694	1.00	53.24	A16S	ATOM	28986	C3'	CYT	486	167.771	98.102	18.803	1.00	41.08	A16S
ATOM	28934	C6	CYT	484	162.192	91.899	26.892	1.00	53.24	A16S	ATOM	28987	O3'	CYT	486	168.491	98.659	17.703	1.00	41.08	A16S
ATOM	28935	C2	CYT	484	161.183	93.477	25.394	1.00	53.24	A16S	ATOM	28988	P	CYT	487	170.029	99.069	17.893	1.00	56.90	A16S
ATOM	28936	O2	CYT	484	160.613	93.694	24.313	1.00	53.24	A16S	ATOM	28989	O1P	CYT	487	170.664	99.204	16.549	1.00	50.15	A16S
ATOM	28937	N3	CYT	484	161.404	94.462	26.293	1.00	53.24	A16S	ATOM	28990	O2P	CYT	487	170.630	98.157	18.898	1.00	50.15	A16S
ATOM	28938	C4	CYT	484	161.998	94.184	27.451	1.00	53.24	A16S	ATOM	28991	O5'	CYT	487	169.953	100.500	18.571	1.00	56.90	A16S
ATOM	28939	N4	CYT	484	162.206	95.184	28.300	1.00	53.24	A16S	ATOM	28992	C5'	CYT	487	169.408	101.600	17.877	1.00	56.90	A16S
ATOM	28940	C5	CYT	484	162.408	92.865	27.790	1.00	53.24	A16S	ATOM	28993	C4'	CYT	487	169.489	102.822	18.737	1.00	56.90	A16S
ATOM	28941	C2'	CYT	484	162.621	90.972	23.791	1.00	56.87	A16S	ATOM	28994	O4'	CYT	487	168.665	102.619	19.908	1.00	56.90	A16S
ATOM	28942	O2'	CYT	484	162.220	90.452	22.547	1.00	56.87	A16S	ATOM	28995	C1'	CYT	487	169.253	103.265	21.018	1.00	56.90	A16S
ATOM	28943	C3'	CYT	484	163.436	89.946	24.551	1.00	56.87	A16S	ATOM	28996	N1	CYT	487	169.493	102.265	22.063	1.00	50.15	A16S
ATOM	28944	O3'	CYT	484	164.332	89.283	23.682	1.00	56.87	A16S	ATOM	28997	C6	CYT	487	169.447	100.931	21.783	1.00	50.15	A16S
ATOM	28945	P	GUA	485	165.652	90.041	23.199	1.00	46.23	A16S	ATOM	28998	C2	CYT	487	169.765	102.703	23.352	1.00	50.15	A16S
ATOM	28946	O1P	GUA	485	166.384	89.145	22.308	1.00	60.04	A16S	ATOM	28999	O2	CYT	487	169.796	103.920	23.570	1.00	50.15	A16S
ATOM	28947	O2P	GUA	485	166.347	90.635	24.359	1.00	60.04	A16S	ATOM	29000	N3	CYT	487	169.989	101.797	24.326	1.00	50.15	A16S
ATOM	28948	O5'	GUA	485	165.109	91.222	22.292	1.00	46.23	A16S	ATOM	29001	C4	CYT	487	169.949	100.497	24.042	1.00	50.15	A16S
ATOM	28949	C5'	GUA	485	164.571	90.951	21.003	1.00	46.23	A16S	ATOM	29002	N4	CYT	487	170.193	99.636	25.025	1.00	50.15	A16S
ATOM	28950	C4'	GUA	485	164.272	92.237	20.291	1.00	46.23	A16S	ATOM	29003	C5	CYT	487	169.665	100.022	22.734	1.00	50.15	A16S
ATOM	28951	O4'	GUA	485	163.196	92.919	20.981	1.00	46.23	A16S	ATOM	29004	C2'	CYT	487	170.517	103.953	20.511	1.00	56.90	A16S
ATOM	28952	C1'	GUA	485	163.427	94.322	20.946	1.00	46.23	A16S	ATOM	29005	O2'	CYT	487	170.154	105.247	20.091	1.00	56.90	A16S
ATOM	28953	N9	GUA	485	163.646	94.788	22.309	1.00	60.04	A16S	ATOM	29006	C3'	CYT	487	170.863	103.094	19.310	1.00	56.90	A16S
ATOM	28954	C4	GUA	485	163.541	96.083	22.754	1.00	60.04	A16S	ATOM	29007	O3'	CYT	487	171.628	103.833	18.368	1.00	56.90	A16S
ATOM	28955	N3	GUA	485	163.177	97.150	22.014	1.00	60.04	A16S	ATOM	29008	P	GUA	488	173.154	103.419	18.073	1.00	60.91	A16S
ATOM	28956	C2	GUA	485	163.182	98.262	22.723	1.00	60.04	A16S	ATOM	29009	O1P	GUA	488	173.956	103.889	19.231	1.00	51.01	A16S

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ATOM  29010  O2P GUA  488     173.188 101.980  17.684  1.00 51.01      A16S
ATOM  29011  O5' GUA  488     173.541 104.298  16.804  1.00 60.91      A16S
ATOM  29012  C5' GUA  488     174.228 105.523  16.971  1.00 60.91      A16S
ATOM  29013  C4' GUA  488     174.443 106.191  15.641  1.00 60.91      A16S
ATOM  29014  O4' GUA  488     175.292 105.369  14.808  1.00 60.91      A16S
ATOM  29015  C1' GUA  488     174.919 105.528  13.454  1.00 60.91      A16S
ATOM  29016  N9  GUA  488     174.559 104.215  12.932  1.00 51.01      A16S
ATOM  29017  C4  GUA  488     174.321 103.890  11.619  1.00 51.01      A16S
ATOM  29018  N3  GUA  488     174.358 104.739  10.572  1.00 51.01      A16S
ATOM  29019  C2  GUA  488     174.101 104.129   9.430  1.00 51.01      A16S
ATOM  29020  N2  GUA  488     174.086 104.825   8.297  1.00 51.01      A16S
ATOM  29021  N1  GUA  488     173.836 102.791   9.318  1.00 51.01      A16S
ATOM  29022  C6  GUA  488     173.798 101.893  10.380  1.00 51.01      A16S
ATOM  29023  O6  GUA  488     173.564 100.695  10.169  1.00 51.01      A16S
ATOM  29024  C5  GUA  488     174.060 102.539  11.619  1.00 51.01      A16S
ATOM  29025  N7  GUA  488     174.119 102.026  12.908  1.00 51.01      A16S
ATOM  29026  C8  GUA  488     174.414 103.056  13.651  1.00 51.01      A16S
ATOM  29027  C2' GUA  488     173.789 106.556  13.420  1.00 60.91      A16S
ATOM  29028  O2' GUA  488     174.351 107.841  13.267  1.00 60.91      A16S
ATOM  29029  C3' GUA  488     173.198 106.392  14.807  1.00 60.91      A16S
ATOM  29030  O3' GUA  488     172.561 107.585  15.218  1.00 60.91      A16S
ATOM  29031  P   GUA  489     170.979 107.745  15.023  1.00 45.59      A16S
ATOM  29032  O1P GUA  489     170.605 109.006  15.726  1.00 52.97      A16S
ATOM  29033  O2P GUA  489     170.341 106.457  15.420  1.00 52.97      A16S
ATOM  29034  O5' GUA  489     170.805 107.992  13.455  1.00 45.59      A16S
ATOM  29035  C5' GUA  489     171.189 109.233  12.876  1.00 45.59      A16S
ATOM  29036  C4' GUA  489     170.946 109.219  11.391  1.00 45.59      A16S
ATOM  29037  O4' GUA  489     171.790 108.213  10.780  1.00 45.59      A16S
ATOM  29038  C1' GUA  489     171.098 107.587   9.719  1.00 45.59      A16S
ATOM  29039  N9  GUA  489     170.945 106.177  10.062  1.00 52.97      A16S
ATOM  29040  C4  GUA  489     170.695 105.148   9.184  1.00 52.97      A16S
ATOM  29041  N3  GUA  489     170.502 105.273   7.855  1.00 52.97      A16S
ATOM  29042  C2  GUA  489     170.326 104.108   7.275  1.00 52.97      A16S
ATOM  29043  N2  GUA  489     170.107 104.054   5.959  1.00 52.97      A16S
ATOM  29044  N1  GUA  489     170.348 102.912   7.940  1.00 52.97      A16S
ATOM  29045  C6  GUA  489     170.544 102.760   9.304  1.00 52.97      A16S
ATOM  29046  O6  GUA  489     170.561 101.632   9.799  1.00 52.97      A16S
ATOM  29047  C5  GUA  489     170.717 104.004   9.946  1.00 52.97      A16S
ATOM  29048  N7  GUA  489     170.932 104.307  11.284  1.00 52.97      A16S
ATOM  29049  C8  GUA  489     171.054 105.607  11.306  1.00 52.97      A16S
ATOM  29050  C2' GUA  489     169.768 108.319   9.557  1.00 45.59      A16S
ATOM  29051  O2' GUA  489     169.900 109.371   8.629  1.00 45.59      A16S
ATOM  29052  C3' GUA  489     169.549 108.812  10.975  1.00 45.59      A16S
ATOM  29053  O3' GUA  489     168.645 109.895  11.037  1.00 45.59      A16S
ATOM  29054  P   CYT  490     167.193 109.653  11.659  1.00 52.44      A16S
ATOM  29055  O1P CYT  490     166.510 110.967  11.647  1.00 51.39      A16S
ATOM  29056  O2P CYT  490     167.342 108.899  12.939  1.00 51.39      A16S
ATOM  29057  O5' CYT  490     166.478 108.716  10.590  1.00 52.44      A16S
ATOM  29058  C5' CYT  490     166.072 109.248   9.335  1.00 52.44      A16S
ATOM  29059  C4' CYT  490     165.582 108.151   8.430  1.00 52.44      A16S
ATOM  29060  O4' CYT  490     166.657 107.202   8.202  1.00 52.44      A16S
ATOM  29061  C1' CYT  490     166.111 105.913   7.997  1.00 52.44      A16S
ATOM  29062  N1  CYT  490     166.653 105.002   9.018  1.00 51.39      A16S
ATOM  29063  C6  CYT  490     166.996 105.463  10.254  1.00 51.39      A16S
ATOM  29064  C2  CYT  490     166.795 103.641   8.710  1.00 51.39      A16S
ATOM  29065  O2  CYT  490     166.510 103.252   7.576  1.00 51.39      A16S
ATOM  29066  N3  CYT  490     167.247 102.789   9.653  1.00 51.39      A16S
ATOM  29067  C4  CYT  490     167.572 103.247  10.859  1.00 51.39      A16S
ATOM  29068  N4  CYT  490     168.025 102.377  11.757  1.00 51.39      A16S
ATOM  29069  C5  CYT  490     167.452 104.627  11.199  1.00 51.39      A16S
ATOM  29070  C2' CYT  490     164.589 106.060   8.080  1.00 52.44      A16S
ATOM  29071  O2' CYT  490     164.121 106.263   6.764  1.00 52.44      A16S
ATOM  29072  C3' CYT  490     164.448 107.296   8.962  1.00 52.44      A16S
ATOM  29073  O3' CYT  490     163.207 107.970   8.761  1.00 52.44      A16S
ATOM  29074  P   CYT  491     162.106 108.031   9.939  1.00 60.19      A16S
ATOM  29075  O1P CYT  491     161.249 106.830   9.840  1.00 47.25      A16S
ATOM  29076  O2P CYT  491     161.500 109.379   9.889  1.00 47.25      A16S
ATOM  29077  O5' CYT  491     162.920 107.928  11.305  1.00 60.19      A16S
ATOM  29078  C5' CYT  491     162.356 108.338  12.568  1.00 60.19      A16S
ATOM  29079  C4' CYT  491     163.087 107.624  13.674  1.00 60.19      A16S
ATOM  29080  O4' CYT  491     162.862 106.229  13.451  1.00 60.19      A16S
ATOM  29081  C1' CYT  491     164.056 105.527  13.598  1.00 60.19      A16S
ATOM  29082  N1  CYT  491     164.073 104.468  12.609  1.00 47.25      A16S
ATOM  29083  C6  CYT  491     163.646 104.691  11.333  1.00 47.25      A16S
ATOM  29084  C2  CYT  491     164.513 103.222  12.997  1.00 47.25      A16S
ATOM  29085  O2  CYT  491     164.906 103.071  14.163  1.00 47.25      A16S
ATOM  29086  N3  CYT  491     164.503 102.212  12.109  1.00 47.25      A16S
ATOM  29087  C4  CYT  491     164.078 102.428  10.866  1.00 47.25      A16S
ATOM  29088  N4  CYT  491     164.085 101.403  10.015  1.00 47.25      A16S
ATOM  29089  C5  CYT  491     163.628 103.705  10.437  1.00 47.25      A16S
ATOM  29090  C2' CYT  491     165.243 106.486  13.598  1.00 60.19      A16S
ATOM  29091  O2' CYT  491     166.067 106.227  14.714  1.00 60.19      A16S
ATOM  29092  C3' CYT  491     164.587 107.869  13.589  1.00 60.19      A16S
ATOM  29093  O3' CYT  491     165.068 108.553  14.754  1.00 60.19      A16S
ATOM  29094  P   ADE  492     164.284 109.825  15.369  1.00 42.86      A16S
ATOM  29095  O1P ADE  492     163.590 110.594  14.297  1.00 51.42      A16S
ATOM  29096  O2P ADE  492     165.315 110.495  16.232  1.00 51.42      A16S
ATOM  29097  O5' ADE  492     163.153 109.235  16.324  1.00 42.86      A16S
ATOM  29098  C5' ADE  492     162.434 110.099  17.210  1.00 42.86      A16S
ATOM  29099  C4' ADE  492     162.467 109.558  18.619  1.00 42.86      A16S
ATOM  29100  O4' ADE  492     161.532 108.447  18.766  1.00 42.86      A16S
ATOM  29101  C1' ADE  492     162.086 107.444  19.614  1.00 42.86      A16S
ATOM  29102  N9  ADE  492     162.406 106.280  18.787  1.00 51.42      A16S
ATOM  29103  C4  ADE  492     162.320 104.948  19.129  1.00 51.42      A16S
ATOM  29104  N3  ADE  492     161.872 104.424  20.280  1.00 51.42      A16S
ATOM  29105  C2  ADE  492     161.967 103.096  20.259  1.00 51.42      A16S
ATOM  29106  N1  ADE  492     162.419 102.293  19.293  1.00 51.42      A16S
ATOM  29107  C6  ADE  492     162.856 102.850  18.147  1.00 51.42      A16S
ATOM  29108  N6  ADE  492     163.303 102.051  17.177  1.00 51.42      A16S
ATOM  29109  C5  ADE  492     162.813 104.249  18.043  1.00 51.42      A16S
ATOM  29110  N7  ADE  492     163.178 105.118  17.024  1.00 51.42      A16S
ATOM  29111  C8  ADE  492     162.907 106.304  17.509  1.00 51.42      A16S
ATOM  29112  C2' ADE  492     163.377 108.036  20.175  1.00 42.86      A16S
ATOM  29113  O2' ADE  492     163.071 108.679  21.375  1.00 42.86      A16S
ATOM  29114  C3' ADE  492     163.785 108.939  19.016  1.00 42.86      A16S
ATOM  29115  O3' ADE  492     164.875 109.865  19.084  1.00 42.86      A16S
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ATOM  29116  P   ADE  493     165.231 110.605  20.444  1.00 51.48      A16S
ATOM  29117  O1P ADE  493     163.914 110.999  20.993  1.00 74.33      A16S
ATOM  29118  O2P ADE  493     166.244 111.647  20.159  1.00 74.33      A16S
ATOM  29119  O5' ADE  493     165.902 109.500  21.364  1.00 51.48      A16S
ATOM  29120  C5' ADE  493     165.852 109.628  22.778  1.00 51.48      A16S
ATOM  29121  C4' ADE  493     166.400 108.391  23.417  1.00 51.48      A16S
ATOM  29122  O4' ADE  493     165.692 107.239  22.893  1.00 51.48      A16S
ATOM  29123  C1' ADE  493     166.603 106.184  22.660  1.00 51.48      A16S
ATOM  29124  N9  ADE  493     166.570 105.868  21.234  1.00 74.33      A16S
ATOM  29125  C4  ADE  493     166.254 104.648  20.697  1.00 74.33      A16S
ATOM  29126  N3  ADE  493     165.934 103.529  21.363  1.00 74.33      A16S
ATOM  29127  C2  ADE  493     165.685 102.539  20.517  1.00 74.33      A16S
ATOM  29128  N1  ADE  493     165.712 102.541  19.183  1.00 74.33      A16S
ATOM  29129  C6  ADE  493     166.033 103.684  18.542  1.00 74.33      A16S
ATOM  29130  N6  ADE  493     166.050 103.684  17.206  1.00 74.33      A16S
ATOM  29131  C5  ADE  493     166.327 104.807  19.328  1.00 74.33      A16S
ATOM  29132  N7  ADE  493     166.693 106.104  19.004  1.00 74.33      A16S
ATOM  29133  C8  ADE  493     166.826 106.691  20.168  1.00 74.33      A16S
ATOM  29134  C2' ADE  493     167.967 106.635  23.192  1.00 51.48      A16S
ATOM  29135  O2' ADE  493     168.069 106.241  24.543  1.00 51.48      A16S
ATOM  29136  C3' ADE  493     167.857 108.148  23.084  1.00 51.48      A16S
ATOM  29137  O3' ADE  493     168.619 108.771  24.099  1.00 51.48      A16S
ATOM  29138  P   CYT  494     169.329 110.173  23.815  1.00 63.44      A16S
ATOM  29139  O1P CYT  494     169.216 110.965  25.064  1.00 58.76      A16S
ATOM  29140  O2P CYT  494     168.782 110.714  22.553  1.00 58.76      A16S
ATOM  29141  O5' CYT  494     170.832 109.730  23.566  1.00 63.44      A16S
ATOM  29142  C5' CYT  494     171.909 110.637  23.662  1.00 63.44      A16S
ATOM  29143  C4' CYT  494     172.993 110.014  24.492  1.00 63.44      A16S
ATOM  29144  O4' CYT  494     172.715 108.625  24.690  1.00 63.44      A16S
ATOM  29145  C1' CYT  494     173.911 108.003  25.053  1.00 63.44      A16S
ATOM  29146  N1  CYT  494     173.836 106.570  24.785  1.00 58.76      A16S
ATOM  29147  C6  CYT  494     173.682 106.074  23.527  1.00 58.76      A16S
ATOM  29148  C2  CYT  494     173.907 105.714  25.876  1.00 58.76      A16S
ATOM  29149  O2  CYT  494     174.073 106.202  27.003  1.00 58.76      A16S
ATOM  29150  N3  CYT  494     173.792 104.385  25.690  1.00 58.76      A16S
ATOM  29151  C4  CYT  494     173.614 103.905  24.466  1.00 58.76      A16S
ATOM  29152  N4  CYT  494     173.477 102.585  24.333  1.00 58.76      A16S
ATOM  29153  C5  CYT  494     173.563 104.758  23.323  1.00 58.76      A16S
ATOM  29154  C2' CYT  494     175.084 108.811  24.495  1.00 63.44      A16S
ATOM  29155  O2' CYT  494     175.912 109.095  25.587  1.00 63.44      A16S
ATOM  29156  C3' CYT  494     174.407 110.068  23.937  1.00 63.44      A16S
ATOM  29157  O3' CYT  494     174.988 111.258  24.489  1.00 63.44      A16S
ATOM  29158  P   URI  495     176.568 111.535  24.363  1.00 53.15      A16S
ATOM  29159  O1P URI  495     176.689 113.012  24.372  1.00 60.71      A16S
ATOM  29160  O2P URI  495     177.091 110.751  23.199  1.00 60.71      A16S
ATOM  29161  O5' URI  495     177.204 110.964  25.718  1.00 53.15      A16S
ATOM  29162  C5' URI  495     178.434 110.216  25.701  1.00 53.15      A16S
ATOM  29163  C4' URI  495     178.578 109.376  26.958  1.00 53.15      A16S
ATOM  29164  O4' URI  495     177.453 108.471  27.094  1.00 53.15      A16S
ATOM  29165  C1' URI  495     177.863 107.288  27.756  1.00 53.15      A16S
ATOM  29166  N1  URI  495     177.509 106.121  26.936  1.00 60.71      A16S
ATOM  29167  C6  URI  495     177.183 106.236  25.611  1.00 60.71      A16S
ATOM  29168  C2  URI  495     177.523 104.895  27.552  1.00 60.71      A16S
ATOM  29169  O2  URI  495     177.794 104.753  28.722  1.00 60.71      A16S
ATOM  29170  N3  URI  495     177.207 103.834  26.751  1.00 60.71      A16S
ATOM  29171  C4  URI  495     176.876 103.872  25.425  1.00 60.71      A16S
ATOM  29172  O4  URI  495     176.620 102.820  24.838  1.00 60.71      A16S
ATOM  29173  C5  URI  495     176.872 105.182  24.853  1.00 60.71      A16S
ATOM  29174  C2' URI  495     179.362 107.407  28.023  1.00 53.15      A16S
ATOM  29175  O2' URI  495     179.560 107.834  29.356  1.00 53.15      A16S
ATOM  29176  C3' URI  495     179.777 108.444  26.988  1.00 53.15      A16S
ATOM  29177  O3' URI  495     180.950 109.135  27.393  1.00 53.15      A16S
ATOM  29178  P   CYT  496     182.400 108.510  27.066  1.00 59.59      A16S
ATOM  29179  O1P CYT  496     183.379 109.578  27.421  1.00 67.04      A16S
ATOM  29180  O2P CYT  496     182.386 107.955  25.688  1.00 67.04      A16S
ATOM  29181  O5' CYT  496     182.554 107.290  28.086  1.00 59.59      A16S
ATOM  29182  C5' CYT  496     183.070 107.506  29.395  1.00 59.59      A16S
ATOM  29183  C4' CYT  496     183.353 106.191  30.072  1.00 59.59      A16S
ATOM  29184  O4' CYT  496     182.113 105.456  30.218  1.00 59.59      A16S
ATOM  29185  C1' CYT  496     182.363 104.067  30.069  1.00 59.59      A16S
ATOM  29186  N1  CYT  496     181.653 103.610  28.874  1.00 67.04      A16S
ATOM  29187  C6  CYT  496     181.298 104.496  27.898  1.00 67.04      A16S
ATOM  29188  C2  CYT  496     181.355 102.255  28.741  1.00 67.04      A16S
ATOM  29189  O2  CYT  496     181.689 101.474  29.645  1.00 67.04      A16S
ATOM  29190  N3  CYT  496     180.718 101.827  27.634  1.00 67.04      A16S
ATOM  29191  C4  CYT  496     180.381 102.698  26.683  1.00 67.04      A16S
ATOM  29192  N4  CYT  496     179.755 102.232  25.602  1.00 67.04      A16S
ATOM  29193  C5  CYT  496     180.671 104.087  26.796  1.00 67.04      A16S
ATOM  29194  C2' CYT  496     183.875 103.890  29.915  1.00 59.59      A16S
ATOM  29195  O2' CYT  496     184.466 103.662  31.170  1.00 59.59      A16S
ATOM  29196  C3' CYT  496     184.276 105.234  29.331  1.00 59.59      A16S
ATOM  29197  O3' CYT  496     185.634 105.519  29.626  1.00 59.59      A16S
ATOM  29198  P   CYT  497     186.806 104.794  28.799  1.00 61.97      A16S
ATOM  29199  O1P CYT  497     188.064 105.183  29.479  1.00 65.50      A16S
ATOM  29200  O2P CYT  497     186.642 105.077  27.352  1.00 65.50      A16S
ATOM  29201  O5' CYT  497     186.573 103.239  29.061  1.00 61.97      A16S
ATOM  29202  C5' CYT  497     186.923 102.656  30.312  1.00 61.97      A16S
ATOM  29203  C4' CYT  497     186.679 101.164  30.292  1.00 61.97      A16S
ATOM  29204  O4' CYT  497     185.266 100.898  30.111  1.00 61.97      A16S
ATOM  29205  C1' CYT  497     185.099  99.720  29.338  1.00 61.97      A16S
ATOM  29206  N1  CYT  497     184.442 100.084  28.078  1.00 65.50      A16S
ATOM  29207  C6  CYT  497     184.389 101.382  27.660  1.00 65.50      A16S
ATOM  29208  C2  CYT  497     183.877  99.076  27.312  1.00 65.50      A16S
ATOM  29209  O2  CYT  497     183.952  97.910  27.719  1.00 65.50      A16S
ATOM  29210  N3  CYT  497     183.267  99.390  26.149  1.00 65.50      A16S
ATOM  29211  C4  CYT  497     183.219 100.659  25.746  1.00 65.50      A16S
ATOM  29212  N4  CYT  497     182.611 100.927  24.590  1.00 65.50      A16S
ATOM  29213  C5  CYT  497     183.793 101.711  26.510  1.00 65.50      A16S
ATOM  29214  C2' CYT  497     186.491  99.149  29.081  1.00 61.97      A16S
ATOM  29215  O2' CYT  497     186.842  98.220  30.079  1.00 61.97      A16S
ATOM  29216  C3' CYT  497     187.336 100.405  29.155  1.00 61.97      A16S
ATOM  29217  O3' CYT  497     188.667 100.061  29.459  1.00 61.97      A16S
ATOM  29218  P   GUA  498     189.687  99.783  28.267  1.00 66.38      A16S
ATOM  29219  O1P GUA  498     191.049  99.736  28.856  1.00 65.82      A16S
ATOM  29220  O2P GUA  498     189.379 100.775  27.201  1.00 65.82      A16S
ATOM  29221  O5' GUA  498     189.272  98.336  27.741  1.00 66.38      A16S
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ATOM	29222	C5'	GUA	498	189.275	97.207	28.602	1.00	66.38	A16S	ATOM	29275	C6	GUA	500	190.856	100.013	20.265	1.00	70.02	A16S
ATOM	29223	C4'	GUA	498	188.627	96.026	27.915	1.00	66.38	A16S	ATOM	29276	O6	GUA	500	190.857	100.467	21.413	1.00	70.02	A16S
ATOM	29224	O4'	GUA	498	187.224	96.323	27.683	1.00	66.38	A16S	ATOM	29277	C5	GUA	500	191.451	98.819	19.780	1.00	70.02	A16S
ATOM	29225	C1'	GUA	498	186.810	95.752	26.449	1.00	66.38	A16S	ATOM	29278	N7	GUA	500	192.186	97.843	20.439	1.00	70.02	A16S
ATOM	29226	N9	GUA	498	186.501	96.834	25.519	1.00	65.82	A16S	ATOM	29279	C8	GUA	500	192.473	96.972	19.509	1.00	70.02	A16S
ATOM	29227	C4	GUA	498	185.824	96.719	24.328	1.00	65.82	A16S	ATOM	29280	C2'	GUA	500	193.380	96.182	16.442	1.00	67.97	A16S
ATOM	29228	N3	GUA	498	185.325	95.580	23.807	1.00	65.82	A16S	ATOM	29281	O2'	GUA	500	193.641	96.900	15.262	1.00	67.97	A16S
ATOM	29229	C2	GUA	498	184.741	95.789	22.645	1.00	65.82	A16S	ATOM	29282	C3'	GUA	500	193.317	94.654	16.329	1.00	67.97	A16S
ATOM	29230	N2	GUA	498	184.214	94.766	21.981	1.00	65.82	A16S	ATOM	29283	O3'	GUA	500	193.656	94.062	15.052	1.00	67.97	A16S
ATOM	29231	N1	GUA	498	184.637	97.016	22.046	1.00	65.82	A16S	ATOM	29284	P	CYT	501	193.257	94.808	13.667	1.00	66.92	A16S
ATOM	29232	C6	GUA	498	185.139	98.203	22.566	1.00	65.82	A16S	ATOM	29285	O1P	CYT	501	194.482	95.182	12.925	1.00	67.95	A16S
ATOM	29233	O6	GUA	498	184.995	99.262	21.945	1.00	65.82	A16S	ATOM	29286	O2P	CYT	501	192.251	95.844	13.967	1.00	67.95	A16S
ATOM	29234	C5	GUA	498	185.781	97.994	23.808	1.00	65.82	A16S	ATOM	29287	O5'	CYT	501	192.438	93.743	12.808	1.00	66.92	A16S
ATOM	29235	N7	GUA	498	186.423	98.892	24.649	1.00	65.82	A16S	ATOM	29288	C5'	CYT	501	191.088	94.054	12.435	1.00	66.92	A16S
ATOM	29236	C8	GUA	498	186.830	98.162	25.650	1.00	65.82	A16S	ATOM	29289	C4'	CYT	501	190.815	93.763	10.968	1.00	66.92	A16S
ATOM	29237	C2'	GUA	498	187.980	94.915	25.947	1.00	66.38	A16S	ATOM	29290	O4'	CYT	501	189.714	94.611	10.561	1.00	66.92	A16S
ATOM	29238	O2'	GUA	498	187.897	93.617	26.492	1.00	66.38	A16S	ATOM	29291	C1'	CYT	501	189.827	94.920	9.190	1.00	66.92	A16S
ATOM	29239	C3'	GUA	498	189.149	95.686	26.528	1.00	66.38	A16S	ATOM	29292	N1	CYT	501	189.407	96.316	8.974	1.00	67.95	A16S
ATOM	29240	O3'	GUA	498	190.309	94.871	26.560	1.00	66.38	A16S	ATOM	29293	C6	CYT	501	189.358	97.199	10.015	1.00	67.95	A16S
ATOM	29241	P	URI	499	191.475	95.122	25.486	1.00	77.16	A16S	ATOM	29294	C2	CYT	501	189.030	96.725	7.683	1.00	67.95	A16S
ATOM	29242	O1P	URI	499	192.577	94.174	25.771	1.00	76.36	A16S	ATOM	29295	O2	CYT	501	189.116	95.917	6.741	1.00	67.95	A16S
ATOM	29243	O2P	URI	499	191.744	96.580	25.457	1.00	76.36	A16S	ATOM	29296	N3	CYT	501	188.589	97.991	7.495	1.00	67.95	A16S
ATOM	29244	O5'	URI	499	190.822	94.728	24.090	1.00	77.16	A16S	ATOM	29297	C4	CYT	501	188.537	98.837	8.524	1.00	67.95	A16S
ATOM	29245	C5'	URI	499	190.259	93.436	23.873	1.00	77.16	A16S	ATOM	29298	N4	CYT	501	188.100	100.071	8.295	1.00	67.95	A16S
ATOM	29246	C4'	URI	499	189.491	93.414	22.567	1.00	77.16	A16S	ATOM	29299	C5	CYT	501	188.933	98.456	9.835	1.00	67.95	A16S
ATOM	29247	O4'	URI	499	188.402	94.373	22.625	1.00	77.16	A16S	ATOM	29300	C2'	CYT	501	191.219	94.519	8.700	1.00	66.92	A16S
ATOM	29248	C1'	URI	499	188.142	94.876	21.326	1.00	77.16	A16S	ATOM	29301	O2'	CYT	501	191.112	93.498	7.737	1.00	66.92	A16S
ATOM	29249	N1	URI	499	188.116	96.349	21.384	1.00	76.36	A16S	ATOM	29302	C3'	CYT	501	191.926	94.082	9.982	1.00	66.92	A16S
ATOM	29250	C6	URI	499	188.635	97.031	22.458	1.00	76.36	A16S	ATOM	29303	O3'	CYT	501	192.729	92.908	9.785	1.00	66.92	A16S
ATOM	29251	C2	URI	499	187.535	97.031	20.327	1.00	76.36	A16S	ATOM	29304	P	CYT	502	192.025	91.473	9.496	1.00	53.40	A16S
ATOM	29252	O2	URI	499	187.088	96.468	19.340	1.00	76.36	A16S	ATOM	29305	O1P	CYT	502	193.007	90.625	8.775	1.00	57.24	A16S
ATOM	29253	N3	URI	499	187.501	98.399	20.467	1.00	76.36	A16S	ATOM	29306	O2P	CYT	502	190.665	91.623	8.946	1.00	57.24	A16S
ATOM	29254	C4	URI	499	187.988	99.140	21.525	1.00	76.36	A16S	ATOM	29307	O5'	CYT	502	191.852	90.856	10.948	1.00	53.40	A16S
ATOM	29255	O4	URI	499	187.826	100.370	21.539	1.00	76.36	A16S	ATOM	29308	C5'	CYT	502	190.705	90.104	11.282	1.00	53.40	A16S
ATOM	29256	C5	URI	499	188.595	98.364	22.559	1.00	76.36	A16S	ATOM	29309	C4'	CYT	502	190.718	89.781	12.748	1.00	53.40	A16S
ATOM	29257	C2'	URI	499	189.164	94.246	20.371	1.00	77.16	A16S	ATOM	29310	O4'	CYT	502	190.738	90.998	13.516	1.00	53.40	A16S
ATOM	29258	O2'	URI	499	188.574	93.128	19.738	1.00	77.16	A16S	ATOM	29311	C1'	CYT	502	190.202	90.730	14.794	1.00	53.40	A16S
ATOM	29259	C3'	URI	499	190.274	93.822	21.329	1.00	77.16	A16S	ATOM	29312	N1	CYT	502	189.449	91.895	15.270	1.00	57.24	A16S
ATOM	29260	O3'	URI	499	190.993	92.700	20.820	1.00	77.16	A16S	ATOM	29313	C6	CYT	502	189.135	92.931	14.436	1.00	57.24	A16S
ATOM	29261	P	GUA	500	192.518	92.877	20.332	1.00	67.97	A16S	ATOM	29314	C2	CYT	502	189.086	91.934	16.600	1.00	57.24	A16S
ATOM	29262	O1P	GUA	500	193.036	91.519	20.016	1.00	70.02	A16S	ATOM	29315	O2	CYT	502	189.358	90.958	17.315	1.00	57.24	A16S
ATOM	29263	O2P	GUA	500	193.224	93.726	21.328	1.00	70.02	A16S	ATOM	29316	N3	CYT	502	188.450	93.024	17.082	1.00	57.24	A16S
ATOM	29264	O5'	GUA	500	192.432	93.722	18.978	1.00	67.97	A16S	ATOM	29317	C4	CYT	502	188.166	94.044	16.270	1.00	57.24	A16S
ATOM	29265	C5'	GUA	500	191.852	93.193	17.773	1.00	67.97	A16S	ATOM	29318	N4	CYT	502	187.548	95.111	16.789	1.00	57.24	A16S
ATOM	29266	C4'	GUA	500	191.897	94.250	16.697	1.00	67.97	A16S	ATOM	29319	C5	CYT	502	188.505	94.018	14.891	1.00	57.24	A16S
ATOM	29267	O4'	GUA	500	191.222	95.410	17.206	1.00	67.97	A16S	ATOM	29320	C2'	CYT	502	189.449	89.401	14.737	1.00	53.40	A16S
ATOM	29268	C1'	GUA	500	192.018	96.551	17.039	1.00	67.97	A16S	ATOM	29321	O2'	CYT	502	190.134	88.461	15.523	1.00	53.40	A16S
ATOM	29269	N9	GUA	500	191.959	97.310	18.282	1.00	70.02	A16S	ATOM	29322	C3'	CYT	502	189.487	89.064	13.249	1.00	53.40	A16S
ATOM	29270	C4	GUA	500	191.314	98.508	18.448	1.00	70.02	A16S	ATOM	29323	O3'	CYT	502	189.698	87.685	13.065	1.00	53.40	A16S
ATOM	29271	N3	GUA	500	190.670	99.192	17.485	1.00	70.02	A16S	ATOM	29324	P	ADE	503	188.453	86.738	12.787	1.00	52.15	A16S
ATOM	29272	C2	GUA	500	190.123	100.299	17.948	1.00	70.02	A16S	ATOM	29325	O1P	ADE	503	188.937	85.326	12.780	1.00	62.90	A16S
ATOM	29273	N2	GUA	500	189.440	101.099	17.118	1.00	70.02	A16S	ATOM	29326	O2P	ADE	503	187.744	87.288	11.599	1.00	62.90	A16S
ATOM	29274	N1	GUA	500	190.202	100.702	19.255	1.00	70.02	A16S	ATOM	29327	O5'	ADE	503	187.542	86.950	14.074	1.00	52.15	A16S

ATOM	29328	C5'	ADE	503	187.840	86.282	15.292	1.00	52.15	A16S	ATOM	29381	N3	CYT	505	179.003	94.411	9.940	1.00	44.23	A16S
ATOM	29329	C4'	ADE	503	187.012	86.854	16.420	1.00	52.15	A16S	ATOM	29382	C4	CYT	505	179.525	93.237	9.590	1.00	44.23	A16S
ATOM	29330	O4'	ADE	503	187.336	88.262	16.600	1.00	52.15	A16S	ATOM	29383	N4	CYT	505	180.191	93.175	8.439	1.00	44.23	A16S
ATOM	29331	C1'	ADE	503	186.180	88.969	17.025	1.00	52.15	A16S	ATOM	29384	C5	CYT	505	179.376	92.077	10.400	1.00	44.23	A16S
ATOM	29332	N9	ADE	503	185.939	90.073	16.086	1.00	62.90	A16S	ATOM	29385	C2'	CYT	505	175.842	93.377	12.943	1.00	49.55	A16S
ATOM	29333	C4	ADE	503	185.459	91.325	16.397	1.00	62.90	A16S	ATOM	29386	O2'	CYT	505	175.156	94.325	13.736	1.00	49.55	A16S
ATOM	29334	N3	ADE	503	185.093	91.781	17.604	1.00	62.90	A16S	ATOM	29387	C3'	CYT	505	175.639	91.950	13.429	1.00	49.55	A16S
ATOM	29335	C2	ADE	503	184.712	93.051	17.530	1.00	62.90	A16S	ATOM	29388	O3'	CYT	505	174.320	91.772	13.921	1.00	49.55	A16S
ATOM	29336	N1	ADE	503	184.657	93.861	16.470	1.00	62.90	A16S	ATOM	29389	P	ADE	506	173.190	91.174	12.957	1.00	48.96	A16S
ATOM	29337	C6	ADE	503	185.026	93.375	15.267	1.00	62.90	A16S	ATOM	29390	O1P	ADE	506	171.878	91.447	13.601	1.00	55.71	A16S
ATOM	29338	N6	ADE	503	184.972	94.190	14.207	1.00	62.90	A16S	ATOM	29391	O2P	ADE	506	173.569	89.781	12.614	1.00	55.71	A16S
ATOM	29339	C5	ADE	503	185.451	92.033	15.209	1.00	62.90	A16S	ATOM	29392	O5'	ADE	506	173.293	92.084	11.659	1.00	48.96	A16S
ATOM	29340	N7	ADE	503	185.894	91.240	14.162	1.00	62.90	A16S	ATOM	29393	C5'	ADE	506	172.846	93.428	11.696	1.00	48.96	A16S
ATOM	29341	C8	ADE	503	186.165	90.089	14.731	1.00	62.90	A16S	ATOM	29394	C4'	ADE	506	172.901	94.026	10.321	1.00	48.96	A16S
ATOM	29342	C2'	ADE	503	185.054	87.942	17.156	1.00	52.15	A16S	ATOM	29395	O4'	ADE	506	174.271	94.286	9.939	1.00	48.96	A16S
ATOM	29343	O2'	ADE	503	185.046	87.441	18.471	1.00	52.15	A16S	ATOM	29396	C1'	ADE	506	174.446	93.996	8.566	1.00	48.96	A16S
ATOM	29344	C3'	ADE	503	185.514	86.861	16.192	1.00	52.15	A16S	ATOM	29397	N9	ADE	506	175.379	92.872	8.469	1.00	55.71	A16S
ATOM	29345	O3'	ADE	503	184.926	85.595	16.472	1.00	52.15	A16S	ATOM	29398	C4	ADE	506	176.393	92.701	7.558	1.00	55.71	A16S
ATOM	29346	P	GUA	504	183.719	85.079	15.544	1.00	58.64	A16S	ATOM	29399	N3	ADE	506	176.766	93.548	6.584	1.00	55.71	A16S
ATOM	29347	O1P	GUA	504	183.276	83.715	15.951	1.00	47.37	A16S	ATOM	29400	C2	ADE	506	177.775	93.033	5.881	1.00	55.71	A16S
ATOM	29348	O2P	GUA	504	184.120	85.331	14.136	1.00	47.37	A16S	ATOM	29401	N1	ADE	506	178.397	91.846	6.024	1.00	55.71	A16S
ATOM	29349	O5'	GUA	504	182.547	86.097	15.888	1.00	58.64	A16S	ATOM	29402	C6	ADE	506	177.982	91.018	7.004	1.00	55.71	A16S
ATOM	29350	C5'	GUA	504	181.842	86.767	14.852	1.00	58.64	A16S	ATOM	29403	N6	ADE	506	178.563	89.825	7.121	1.00	55.71	A16S
ATOM	29351	C4'	GUA	504	181.419	88.136	15.315	1.00	58.64	A16S	ATOM	29404	C5	ADE	506	176.943	91.460	7.834	1.00	55.71	A16S
ATOM	29352	O4'	GUA	504	182.515	89.078	15.147	1.00	58.64	A16S	ATOM	29405	N7	ADE	506	176.314	90.878	8.922	1.00	55.71	A16S
ATOM	29353	C1'	GUA	504	181.989	90.375	14.890	1.00	58.64	A16S	ATOM	29406	C8	ADE	506	175.401	91.754	9.263	1.00	55.71	A16S
ATOM	29354	N9	GUA	504	182.467	90.839	13.588	1.00	47.37	A16S	ATOM	29407	C2'	ADE	506	173.047	93.695	8.010	1.00	48.96	A16S
ATOM	29355	C4	GUA	504	182.254	92.087	13.056	1.00	47.37	A16S	ATOM	29408	O2'	ADE	506	172.428	94.900	7.630	1.00	48.96	A16S
ATOM	29356	N3	GUA	504	181.585	93.094	13.655	1.00	47.37	A16S	ATOM	29409	C3'	ADE	506	172.359	93.131	9.235	1.00	48.96	A16S
ATOM	29357	C2	GUA	504	181.532	94.172	12.897	1.00	47.37	A16S	ATOM	29410	O3'	ADE	506	170.967	93.329	9.192	1.00	48.96	A16S
ATOM	29358	N2	GUA	504	180.896	95.264	13.334	1.00	47.37	A16S	ATOM	29411	P	GUA	507	170.029	92.274	8.445	1.00	50.72	A16S
ATOM	29359	N1	GUA	504	182.101	94.263	11.654	1.00	47.37	A16S	ATOM	29412	O1P	GUA	507	168.751	92.176	9.196	1.00	47.72	A16S
ATOM	29360	C6	GUA	504	182.818	93.252	11.025	1.00	47.37	A16S	ATOM	29413	O2P	GUA	507	170.806	91.044	8.174	1.00	47.72	A16S
ATOM	29361	O6	GUA	504	183.337	93.466	9.915	1.00	47.37	A16S	ATOM	29414	O5'	GUA	507	169.750	93.003	7.064	1.00	50.72	A16S
ATOM	29362	C5	GUA	504	182.860	92.070	11.822	1.00	47.37	A16S	ATOM	29415	C5'	GUA	507	168.826	92.470	6.142	1.00	50.72	A16S
ATOM	29363	N7	GUA	504	183.444	90.836	11.576	1.00	47.37	A16S	ATOM	29416	C4'	GUA	507	168.078	93.586	5.475	1.00	50.72	A16S
ATOM	29364	C8	GUA	504	183.191	90.140	12.652	1.00	47.37	A16S	ATOM	29417	O4'	GUA	507	167.233	94.249	6.441	1.00	50.72	A16S
ATOM	29365	C2'	GUA	504	180.469	90.227	14.895	1.00	58.64	A16S	ATOM	29418	C1'	GUA	507	167.147	95.622	6.122	1.00	50.72	A16S
ATOM	29366	O2'	GUA	504	179.957	90.463	16.191	1.00	58.64	A16S	ATOM	29419	N9	GUA	507	167.577	96.364	7.293	1.00	47.72	A16S
ATOM	29367	C3'	GUA	504	180.331	88.774	14.485	1.00	58.64	A16S	ATOM	29420	C4	GUA	507	167.480	97.709	7.488	1.00	47.72	A16S
ATOM	29368	O3'	GUA	504	179.067	88.233	14.817	1.00	58.64	A16S	ATOM	29421	N3	GUA	507	167.014	98.596	6.601	1.00	47.72	A16S
ATOM	29369	P	CYT	505	177.893	88.251	13.727	1.00	49.55	A16S	ATOM	29422	C2	GUA	507	167.012	99.814	7.087	1.00	47.72	A16S
ATOM	29370	O1P	CYT	505	176.760	87.437	14.249	1.00	44.23	A16S	ATOM	29423	N2	GUA	507	166.596	100.829	6.326	1.00	47.72	A16S
ATOM	29371	O2P	CYT	505	178.472	87.935	12.400	1.00	44.23	A16S	ATOM	29424	N1	GUA	507	167.418	100.132	8.353	1.00	47.72	A16S
ATOM	29372	O5'	CYT	505	177.464	89.781	13.700	1.00	49.55	A16S	ATOM	29425	C6	GUA	507	167.881	99.224	9.293	1.00	47.72	A16S
ATOM	29373	C5'	CYT	505	177.085	90.451	14.892	1.00	49.55	A16S	ATOM	29426	O6	GUA	507	168.168	99.602	10.434	1.00	47.72	A16S
ATOM	29374	C4'	CYT	505	176.648	91.849	14.563	1.00	49.55	A16S	ATOM	29427	C5	GUA	507	167.923	97.926	8.770	1.00	47.72	A16S
ATOM	29375	O4'	CYT	505	177.786	92.598	14.080	1.00	49.55	A16S	ATOM	29428	N7	GUA	507	168.340	96.742	9.353	1.00	47.72	A16S
ATOM	29376	C1'	CYT	505	177.348	93.555	13.134	1.00	49.55	A16S	ATOM	29429	C8	GUA	507	168.120	95.843	8.436	1.00	47.72	A16S
ATOM	29377	N1	CYT	505	178.122	93.401	11.895	1.00	44.23	A16S	ATOM	29430	C2'	GUA	507	167.995	95.863	4.874	1.00	50.72	A16S
ATOM	29378	C6	CYT	505	178.670	92.201	11.534	1.00	44.23	A16S	ATOM	29431	O2'	GUA	507	167.151	95.806	3.745	1.00	50.72	A16S
ATOM	29379	C2	CYT	505	178.292	94.521	11.088	1.00	44.23	A16S	ATOM	29432	C3'	GUA	507	168.960	94.689	4.936	1.00	50.72	A16S
ATOM	29380	O2	CYT	505	177.784	95.599	11.447	1.00	44.23	A16S	ATOM	29433	O3'	GUA	507	169.419	94.309	3.656	1.00	50.72	A16S

ATOM	29434	P	CYT	508	170.972	94.449	3.301	1.00	51.06	A16S	ATOM	29487	N1	GUA	510	178.755	96.646	8.285	1.00	46.82	A16S
ATOM	29435	O1P	CYT	508	171.238	93.514	2.176	1.00	50.96	A16S	ATOM	29488	C6	GUA	510	179.170	96.457	6.971	1.00	46.82	A16S
ATOM	29436	O2P	CYT	508	171.783	94.352	4.549	1.00	50.96	A16S	ATOM	29489	O6	GUA	510	179.701	95.388	6.652	1.00	46.82	A16S
ATOM	29437	O5'	CYT	508	171.080	95.931	2.735	1.00	51.06	A16S	ATOM	29490	C5	GUA	510	178.899	97.611	6.164	1.00	46.82	A16S
ATOM	29438	C5'	CYT	508	170.403	96.299	1.543	1.00	51.06	A16S	ATOM	29491	N7	GUA	510	179.156	97.868	4.821	1.00	46.82	A16S
ATOM	29439	C4'	CYT	508	170.258	97.790	1.480	1.00	51.06	A16S	ATOM	29492	C8	GUA	510	178.714	99.086	4.637	1.00	46.82	A16S
ATOM	29440	O4'	CYT	508	169.417	98.215	2.572	1.00	51.06	A16S	ATOM	29493	C2'	GUA	510	178.706	101.780	6.828	1.00	51.75	A16S
ATOM	29441	C1'	CYT	508	169.825	99.495	3.008	1.00	51.06	A16S	ATOM	29494	O2'	GUA	510	178.003	102.805	7.488	1.00	51.75	A16S
ATOM	29442	N1	CYT	508	170.088	99.422	4.445	1.00	50.96	A16S	ATOM	29495	C3'	GUA	510	179.567	102.390	5.743	1.00	51.75	A16S
ATOM	29443	C6	CYT	508	170.405	98.238	5.035	1.00	50.96	A16S	ATOM	29496	O3'	GUA	510	180.262	103.515	6.264	1.00	51.75	A16S
ATOM	29444	C2	CYT	508	170.003	100.593	5.202	1.00	50.96	A16S	ATOM	29497	P	CYT	511	181.788	103.367	6.749	1.00	44.03	A16S
ATOM	29445	O2	CYT	508	169.729	101.666	4.629	1.00	50.96	A16S	ATOM	29498	O1P	CYT	511	182.283	104.742	7.002	1.00	49.68	A16S
ATOM	29446	N3	CYT	508	170.227	100.532	6.532	1.00	50.96	A16S	ATOM	29499	O2P	CYT	511	182.501	102.500	5.779	1.00	49.68	A16S
ATOM	29447	C4	CYT	508	170.545	99.367	7.100	1.00	50.96	A16S	ATOM	29500	O5'	CYT	511	181.695	102.588	8.134	1.00	44.03	A16S
ATOM	29448	N4	CYT	508	170.781	99.356	8.413	1.00	50.96	A16S	ATOM	29501	C5'	CYT	511	180.984	103.138	9.214	1.00	44.03	A16S
ATOM	29449	C5	CYT	508	170.642	98.165	6.346	1.00	50.96	A16S	ATOM	29502	C4'	CYT	511	180.854	102.139	10.327	1.00	44.03	A16S
ATOM	29450	C2'	CYT	508	171.048	99.900	2.186	1.00	51.06	A16S	ATOM	29503	O4'	CYT	511	180.176	100.946	9.856	1.00	44.03	A16S
ATOM	29451	O2'	CYT	508	170.675	100.731	1.109	1.00	51.06	A16S	ATOM	29504	C1'	CYT	511	180.460	99.879	10.755	1.00	44.03	A16S
ATOM	29452	C3'	CYT	508	171.545	98.553	1.707	1.00	51.06	A16S	ATOM	29505	N1	CYT	511	180.998	98.745	10.008	1.00	49.68	A16S
ATOM	29453	O3'	CYT	508	172.259	98.695	0.499	1.00	51.06	A16S	ATOM	29506	C6	CYT	511	181.450	98.886	8.725	1.00	49.68	A16S
ATOM	29454	P	CYT	509	173.833	98.473	0.506	1.00	42.82	A16S	ATOM	29507	C2	CYT	511	181.063	97.508	10.651	1.00	49.68	A16S
ATOM	29455	O1P	CYT	509	174.305	98.269	-0.879	1.00	40.63	A16S	ATOM	29508	O2	CYT	511	180.615	97.411	11.798	1.00	49.68	A16S
ATOM	29456	O2P	CYT	509	174.088	97.429	1.531	1.00	40.63	A16S	ATOM	29509	N3	CYT	511	181.607	96.455	10.007	1.00	49.68	A16S
ATOM	29457	O5'	CYT	509	174.391	99.855	1.045	1.00	42.82	A16S	ATOM	29510	C4	CYT	511	182.073	96.605	8.761	1.00	49.68	A16S
ATOM	29458	C5'	CYT	509	174.351	101.024	0.245	1.00	42.82	A16S	ATOM	29511	N4	CYT	511	182.637	95.544	8.172	1.00	49.68	A16S
ATOM	29459	C4'	CYT	509	174.536	102.248	1.115	1.00	42.82	A16S	ATOM	29512	C5	CYT	511	181.991	97.852	8.068	1.00	49.68	A16S
ATOM	29460	O4'	CYT	509	173.508	102.237	2.143	1.00	42.82	A16S	ATOM	29513	C2'	CYT	511	181.508	100.405	11.734	1.00	44.03	A16S
ATOM	29461	C1'	CYT	509	173.980	102.926	3.283	1.00	42.82	A16S	ATOM	29514	O2'	CYT	511	180.862	100.902	12.892	1.00	44.03	A16S
ATOM	29462	N1	CYT	509	173.967	102.017	4.423	1.00	40.63	A16S	ATOM	29515	C3'	CYT	511	182.111	101.528	10.912	1.00	44.03	A16S
ATOM	29463	C6	CYT	509	174.032	100.668	4.253	1.00	40.63	A16S	ATOM	29516	O3'	CYT	511	182.838	102.421	11.732	1.00	44.03	A16S
ATOM	29464	C2	CYT	509	173.900	102.567	5.703	1.00	40.63	A16S	ATOM	29517	P	GUA	512	184.435	102.483	11.589	1.00	49.29	A16S
ATOM	29465	O2	CYT	509	173.801	103.798	5.816	1.00	40.63	A16S	ATOM	29518	O1P	GUA	512	184.899	103.570	12.488	1.00	59.65	A16S
ATOM	29466	N3	CYT	509	173.932	101.755	6.777	1.00	40.63	A16S	ATOM	29519	O2P	GUA	512	184.730	102.561	10.140	1.00	59.65	A16S
ATOM	29467	C4	CYT	509	174.000	100.434	6.604	1.00	40.63	A16S	ATOM	29520	O5'	GUA	512	184.914	101.067	12.151	1.00	49.29	A16S
ATOM	29468	N4	CYT	509	174.022	99.664	7.691	1.00	40.63	A16S	ATOM	29521	C5'	GUA	512	184.783	100.764	13.538	1.00	49.29	A16S
ATOM	29469	C5	CYT	509	174.047	99.844	5.307	1.00	40.63	A16S	ATOM	29522	C4'	GUA	512	185.492	99.472	13.891	1.00	49.29	A16S
ATOM	29470	C2'	CYT	509	175.405	103.372	2.971	1.00	42.82	A16S	ATOM	29523	O4'	GUA	512	184.742	98.337	13.391	1.00	49.29	A16S
ATOM	29471	O2'	CYT	509	175.382	104.664	2.400	1.00	42.82	A16S	ATOM	29524	C1'	GUA	512	185.636	97.294	13.041	1.00	49.29	A16S
ATOM	29472	C3'	CYT	509	175.813	102.338	1.943	1.00	42.82	A16S	ATOM	29525	N9	GUA	512	185.531	97.078	11.605	1.00	59.65	A16S
ATOM	29473	O3'	CYT	509	176.909	102.854	1.203	1.00	42.82	A16S	ATOM	29526	C4	GUA	512	185.785	95.912	10.923	1.00	59.65	A16S
ATOM	29474	P	GUA	510	178.288	102.030	1.136	1.00	51.75	A16S	ATOM	29527	N3	GUA	512	186.105	94.720	11.472	1.00	59.65	A16S
ATOM	29475	O1P	GUA	510	179.188	102.860	0.309	1.00	46.82	A16S	ATOM	29528	C2	GUA	512	186.351	93.801	10.554	1.00	59.65	A16S
ATOM	29476	O2P	GUA	510	178.041	100.611	0.766	1.00	46.82	A16S	ATOM	29529	N2	GUA	512	186.666	92.555	10.933	1.00	59.65	A16S
ATOM	29477	O5'	GUA	510	178.868	102.024	2.610	1.00	51.75	A16S	ATOM	29530	N1	GUA	512	186.302	94.040	9.199	1.00	59.65	A16S
ATOM	29478	C5'	GUA	510	178.865	103.194	3.389	1.00	51.75	A16S	ATOM	29531	C6	GUA	512	185.977	95.265	8.612	1.00	59.65	A16S
ATOM	29479	C4'	GUA	510	178.476	102.846	4.795	1.00	51.75	A16S	ATOM	29532	O6	GUA	512	185.988	95.392	7.381	1.00	59.65	A16S
ATOM	29480	O4'	GUA	510	177.631	101.662	4.748	1.00	51.75	A16S	ATOM	29533	C5	GUA	512	185.685	96.246	9.588	1.00	59.65	A16S
ATOM	29481	C1'	GUA	510	177.704	100.997	5.989	1.00	51.75	A16S	ATOM	29534	N7	GUA	512	185.310	97.573	9.439	1.00	59.65	A16S
ATOM	29482	N9	GUA	510	178.202	99.648	5.782	1.00	46.82	A16S	ATOM	29535	C8	GUA	512	185.218	98.021	10.660	1.00	59.65	A16S
ATOM	29483	C4	GUA	510	178.289	98.695	6.759	1.00	46.82	A16S	ATOM	29536	C2'	GUA	512	187.043	97.764	13.426	1.00	49.29	A16S
ATOM	29484	N3	GUA	510	177.890	98.845	8.040	1.00	46.82	A16S	ATOM	29537	O2'	GUA	512	187.348	97.349	14.737	1.00	49.29	A16S
ATOM	29485	C2	GUA	510	178.163	97.780	8.773	1.00	46.82	A16S	ATOM	29538	C3'	GUA	512	186.895	99.275	13.346	1.00	49.29	A16S
ATOM	29486	N2	GUA	510	177.874	97.773	10.072	1.00	46.82	A16S	ATOM	29539	O3'	GUA	512	187.855	99.916	14.178	1.00	49.29	A16S

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ATOM  29540  P   GUA  513     188.961 100.877  13.522  1.00 67.72      A16S
ATOM  29541  O1P GUA  513     189.575 101.669  14.613  1.00 76.29      A16S
ATOM  29542  O2P GUA  513     188.371 101.571  12.350  1.00 76.29      A16S
ATOM  29543  O5' GUA  513     190.044  99.869  12.959  1.00 67.72      A16S
ATOM  29544  C5' GUA  513     190.571  98.853  13.783  1.00 67.72      A16S
ATOM  29545  C4' GUA  513     191.923  98.436  13.273  1.00 67.72      A16S
ATOM  29546  O4' GUA  513     191.798  97.830  11.968  1.00 67.72      A16S
ATOM  29547  C1' GUA  513     193.003  98.016  11.260  1.00 67.72      A16S
ATOM  29548  N9  GUA  513     192.686  98.368   9.878  1.00 76.29      A16S
ATOM  29549  C4  GUA  513     192.177  99.550   9.429  1.00 76.29      A16S
ATOM  29550  N3  GUA  513     191.897 100.621  10.188  1.00 76.29      A16S
ATOM  29551  C2  GUA  513     191.402 101.608   9.470  1.00 76.29      A16S
ATOM  29552  N2  GUA  513     191.083 102.770  10.064  1.00 76.29      A16S
ATOM  29553  N1  GUA  513     191.186 101.536   8.114  1.00 76.29      A16S
ATOM  29554  C6  GUA  513     191.465 100.434   7.317  1.00 76.29      A16S
ATOM  29555  O6  GUA  513     191.222 100.466   6.107  1.00 76.29      A16S
ATOM  29556  C5  GUA  513     192.009  99.385   8.065  1.00 76.29      A16S
ATOM  29557  N7  GUA  513     192.427  98.128   7.663  1.00 76.29      A16S
ATOM  29558  C8  GUA  513     192.824  97.559   8.768  1.00 76.29      A16S
ATOM  29559  C2' GUA  513     193.898  98.966  12.067  1.00 67.72      A16S
ATOM  29560  O2' GUA  513     194.895  98.196  12.709  1.00 67.72      A16S
ATOM  29561  C3' GUA  513     192.918  99.561  13.076  1.00 67.72      A16S
ATOM  29562  O3' GUA  513     193.534  99.816  14.338  1.00 67.72      A16S
ATOM  29563  P   URI  514     194.688 100.926  14.460  1.00 86.87      A16S
ATOM  29564  O1P URI  514     194.550 101.863  13.313  1.00 88.13      A16S
ATOM  29565  O2P URI  514     195.978 100.227  14.698  1.00 88.13      A16S
ATOM  29566  O5' URI  514     194.316 101.728  15.777  1.00 86.87      A16S
ATOM  29567  C5' URI  514     193.009 102.235  15.964  1.00 86.87      A16S
ATOM  29568  C4' URI  514     192.791 102.534  17.417  1.00 86.87      A16S
ATOM  29569  O4' URI  514     192.987 101.328  18.173  1.00 86.87      A16S
ATOM  29570  C1' URI  514     193.465 101.657  19.453  1.00 86.87      A16S
ATOM  29571  N1  URI  514     194.392 100.600  19.885  1.00 88.13      A16S
ATOM  29572  C6  URI  514     195.074  99.846  18.960  1.00 88.13      A16S
ATOM  29573  C2  URI  514     194.521 100.346  21.251  1.00 88.13      A16S
ATOM  29574  O2  URI  514     193.966 101.011  22.117  1.00 88.13      A16S
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ATOM  29577  O4  URI  514     196.567  97.452  21.104  1.00 88.13      A16S
ATOM  29578  C5  URI  514     195.842  98.810  19.300  1.00 88.13      A16S
ATOM  29579  C2' URI  514     193.885 103.134  19.472  1.00 86.87      A16S
ATOM  29580  O2' URI  514     193.000 103.807  20.333  1.00 86.87      A16S
ATOM  29581  C3' URI  514     193.758 103.549  17.997  1.00 86.87      A16S
ATOM  29582  O3' URI  514     193.121 104.815  17.755  1.00 86.87      A16S
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ATOM  29585  O2P ADE  515     194.811 105.843  19.315  1.00189.16      A16S
ATOM  29586  O5' ADE  515     192.458 106.699  19.278  1.00 95.29      A16S
ATOM  29587  C5' ADE  515     192.292 106.259  20.630  1.00 95.29      A16S
ATOM  29588  C4' ADE  515     190.883 106.517  21.143  1.00 95.29      A16S
ATOM  29589  O4' ADE  515     190.659 107.931  21.317  1.00 95.29      A16S
ATOM  29590  C1' ADE  515     189.270 108.156  21.400  1.00 95.29      A16S
ATOM  29591  N9  ADE  515     188.954 109.410  20.723  1.00189.16      A16S
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ATOM  29594  C2  ADE  515     185.513 110.100  20.280  1.00189.16      A16S
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ATOM  29596  C6  ADE  515     186.768 111.846  19.425  1.00189.16      A16S
ATOM  29597  N6  ADE  515     186.815 113.037  18.819  1.00189.16      A16S
ATOM  29598  C5  ADE  515     187.911 111.124  19.822  1.00189.16      A16S
ATOM  29599  N7  ADE  515     189.269 111.396  19.724  1.00189.16      A16S
ATOM  29600  C8  ADE  515     189.841 110.350  20.266  1.00189.16      A16S
ATOM  29601  C2' ADE  515     188.539 106.898  20.908  1.00 95.29      A16S
ATOM  29602  O2' ADE  515     187.879 106.282  21.996  1.00 95.29      A16S
ATOM  29603  C3' ADE  515     189.676 106.035  20.347  1.00 95.29      A16S
ATOM  29604  O3' ADE  515     189.429 104.659  20.659  1.00 95.29      A16S
ATOM  29605  P   ADE  516     188.257 103.838  19.905  1.00 86.50      A16S
ATOM  29606  O1P ADE  516     187.513 103.026  20.930  1.00 49.01      A16S
ATOM  29607  O2P ADE  516     188.857 103.161  18.741  1.00 49.01      A16S
ATOM  29608  O5' ADE  516     187.290 104.954  19.322  1.00 86.50      A16S
ATOM  29609  C5' ADE  516     185.999 105.123  19.863  1.00 86.50      A16S
ATOM  29610  C4' ADE  516     184.952 104.881  18.809  1.00 86.50      A16S
ATOM  29611  O4' ADE  516     185.281 103.712  18.034  1.00 86.50      A16S
ATOM  29612  C1' ADE  516     184.097 103.018  17.705  1.00 86.50      A16S
ATOM  29613  N9  ADE  516     184.350 101.587  17.867  1.00 49.01      A16S
ATOM  29614  C4  ADE  516     183.806 100.553  17.133  1.00 49.01      A16S
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ATOM  29618  C6  ADE  516     184.137  98.206  16.891  1.00 49.01      A16S
ATOM  29619  N6  ADE  516     184.700  97.033  17.169  1.00 49.01      A16S
ATOM  29620  C5  ADE  516     184.469  99.410  17.542  1.00 49.01      A16S
ATOM  29621  N7  ADE  516     185.371  99.705  18.553  1.00 49.01      A16S
ATOM  29622  C8  ADE  516     185.247 101.002  18.720  1.00 49.01      A16S
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ATOM  29631  C5' URI  517     180.352 105.540  20.493  1.00 66.37      A16S
ATOM  29632  C4' URI  517     178.890 105.417  20.783  1.00 66.37      A16S
ATOM  29633  O4' URI  517     178.265 106.716  20.741  1.00 66.37      A16S
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ATOM  29643  C2' URI  517     176.674 105.074  20.111  1.00 66.37      A16S
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ATOM  29645  C3' URI  517     178.088 104.625  19.780  1.00 66.37      A16S
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ATOM  29646  O3' URI  517     178.274 103.237  20.005  1.00 66.37      A16S
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ATOM  29650  O5' ADE  518     177.811 102.153  17.779  1.00 56.71      A16S
ATOM  29651  C5' ADE  518     176.903 101.041  17.817  1.00 56.71      A16S
ATOM  29652  C4' ADE  518     176.965 100.287  16.508  1.00 56.71      A16S
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ATOM  29654  C1' ADE  518     177.458 100.795  14.312  1.00 56.71      A16S
ATOM  29655  N9  ADE  518     177.791 101.989  13.552  1.00 43.82      A16S
ATOM  29656  C4  ADE  518     177.610 102.119  12.201  1.00 43.82      A16S
ATOM  29657  N3  ADE  518     177.199 101.171  11.348  1.00 43.82      A16S
ATOM  29658  C2  ADE  518     177.083 101.668  10.139  1.00 43.82      A16S
ATOM  29659  N1  ADE  518     177.303 102.914   9.715  1.00 43.82      A16S
ATOM  29660  C6  ADE  518     177.710 103.839  10.601  1.00 43.82      A16S
ATOM  29661  N6  ADE  518     177.911 105.088  10.180  1.00 43.82      A16S
ATOM  29662  C5  ADE  518     177.888 103.436  11.910  1.00 43.82      A16S
ATOM  29663  N7  ADE  518     178.300 104.114  13.043  1.00 43.82      A16S
ATOM  29664  C8  ADE  518     178.244 103.205  13.988  1.00 43.82      A16S
ATOM  29665  C2' ADE  518     178.580  99.850  14.742  1.00 56.71      A16S
ATOM  29666  O2' ADE  518     178.522  98.617  14.036  1.00 56.71      A16S
ATOM  29667  C3' ADE  518     178.342  99.711  16.248  1.00 56.71      A16S
ATOM  29668  O3' ADE  518     178.303  98.324  16.557  1.00 56.71      A16S
ATOM  29669  P   CYT  519     176.908  97.622  16.958  1.00 46.46      A16S
ATOM  29670  O1P CYT  519     175.987  97.711  15.802  1.00 52.93      A16S
ATOM  29671  O2P CYT  519     176.477  98.128  18.277  1.00 52.93      A16S
ATOM  29672  O5' CYT  519     177.329  96.102  17.156  1.00 46.46      A16S
ATOM  29673  C5' CYT  519     177.771  95.309  16.054  1.00 46.46      A16S
ATOM  29674  C4' CYT  519     179.015  94.530  16.427  1.00 46.46      A16S
ATOM  29675  O4' CYT  519     180.186  95.376  16.342  1.00 46.46      A16S
ATOM  29676  C1' CYT  519     181.130  94.963  17.306  1.00 46.46      A16S
ATOM  29677  N1  CYT  519     181.501  96.136  18.102  1.00 52.93      A16S
ATOM  29678  C6  CYT  519     180.909  97.342  17.874  1.00 52.93      A16S
ATOM  29679  C2  CYT  519     182.479  96.008  19.083  1.00 52.93      A16S
ATOM  29680  O2  CYT  519     182.981  94.904  19.283  1.00 52.93      A16S
ATOM  29681  N3  CYT  519     182.850  97.092  19.787  1.00 52.93      A16S
ATOM  29682  C4  CYT  519     182.272  98.266  19.549  1.00 52.93      A16S
ATOM  29683  N4  CYT  519     182.667  99.304  20.263  1.00 52.93      A16S
ATOM  29684  C5  CYT  519     181.265  98.424  18.568  1.00 52.93      A16S
ATOM  29685  C2' CYT  519     180.526  93.801  18.103  1.00 46.46      A16S
ATOM  29686  O2' CYT  519     181.002  92.558  17.611  1.00 46.46      A16S
ATOM  29687  C3' CYT  519     179.038  93.988  17.844  1.00 46.46      A16S
ATOM  29688  O3' CYT  519     178.345  92.754  17.916  1.00 46.46      A16S
ATOM  29689  P   GUA  520     177.294  92.514  19.092  1.00 49.24      A16S
ATOM  29690  O1P GUA  520     176.597  91.253  18.765  1.00 67.55      A16S
ATOM  29691  O2P GUA  520     176.512  93.750  19.294  1.00 67.55      A16S
ATOM  29692  O5' GUA  520     178.202  92.288  20.377  1.00 49.24      A16S
ATOM  29693  C5' GUA  520     178.760  91.008  20.673  1.00 49.24      A16S
ATOM  29694  C4' GUA  520     179.485  91.051  21.998  1.00 49.24      A16S
ATOM  29695  O4' GUA  520     180.657  91.897  21.880  1.00 49.24      A16S
ATOM  29696  C1' GUA  520     180.877  92.582  23.103  1.00 49.24      A16S
ATOM  29697  N9  GUA  520     180.783  94.013  22.846  1.00 67.55      A16S
ATOM  29698  C4  GUA  520     181.346  95.010  23.599  1.00 67.55      A16S
ATOM  29699  N3  GUA  520     182.086  94.836  24.711  1.00 67.55      A16S
ATOM  29700  C2  GUA  520     182.509  95.984  25.204  1.00 67.55      A16S
ATOM  29701  N2  GUA  520     183.270  95.988  26.305  1.00 67.55      A16S
ATOM  29702  N1  GUA  520     182.221  97.210  24.653  1.00 67.55      A16S
ATOM  29703  C6  GUA  520     181.459  97.414  23.507  1.00 67.55      A16S
ATOM  29704  O6  GUA  520     181.266  98.565  23.087  1.00 67.55      A16S
ATOM  29705  C5  GUA  520     181.002  96.186  22.966  1.00 67.55      A16S
ATOM  29706  N7  GUA  520     180.230  95.931  21.844  1.00 67.55      A16S
ATOM  29707  C8  GUA  520     180.126  94.631  21.813  1.00 67.55      A16S
ATOM  29708  C2' GUA  520     179.805  92.114  24.085  1.00 49.24      A16S
ATOM  29709  O2' GUA  520     180.268  91.038  24.881  1.00 49.24      A16S
ATOM  29710  C3' GUA  520     178.705  91.690  23.130  1.00 49.24      A16S
ATOM  29711  O3' GUA  520     177.820  90.788  23.761  1.00 49.24      A16S
ATOM  29712  P   GUA  521     176.541  91.367  24.524  1.00 52.65      A16S
ATOM  29713  O1P GUA  521     175.683  90.218  24.904  1.00 66.45      A16S
ATOM  29714  O2P GUA  521     176.001  92.438  23.662  1.00 66.45      A16S
ATOM  29715  O5' GUA  521     177.144  92.019  25.844  1.00 52.65      A16S
ATOM  29716  C5' GUA  521     177.776  91.197  26.819  1.00 52.65      A16S
ATOM  29717  C4' GUA  521     178.404  92.037  27.904  1.00 52.65      A16S
ATOM  29718  O4' GUA  521     179.411  92.909  27.334  1.00 52.65      A16S
ATOM  29719  C1' GUA  521     179.514  94.082  28.119  1.00 52.65      A16S
ATOM  29720  N9  GUA  521     179.315  95.231  27.248  1.00 66.45      A16S
ATOM  29721  C4  GUA  521     179.716  96.523  27.487  1.00 66.45      A16S
ATOM  29722  N3  GUA  521     180.372  96.964  28.581  1.00 66.45      A16S
ATOM  29723  C2  GUA  521     180.619  98.263  28.513  1.00 66.45      A16S
ATOM  29724  N2  GUA  521     181.269  98.879  29.505  1.00 66.45      A16S
ATOM  29725  N1  GUA  521     180.248  99.059  27.462  1.00 66.45      A16S
ATOM  29726  C6  GUA  521     179.575  98.622  26.328  1.00 66.45      A16S
ATOM  29727  O6  GUA  521     179.288  99.423  25.434  1.00 66.45      A16S
ATOM  29728  C5  GUA  521     179.308  97.237  26.384  1.00 66.45      A16S
ATOM  29729  N7  GUA  521     178.665  96.414  25.474  1.00 66.45      A16S
ATOM  29730  C8  GUA  521     178.694  95.235  26.028  1.00 66.45      A16S
ATOM  29731  C2' GUA  521     178.472  93.975  29.232  1.00 52.65      A16S
ATOM  29732  O2' GUA  521     179.107  93.413  30.350  1.00 52.65      A16S
ATOM  29733  C3' GUA  521     177.480  92.995  28.626  1.00 52.65      A16S
ATOM  29734  O3' GUA  521     176.753  92.301  29.630  1.00 52.65      A16S
ATOM  29735  P   ADE  522     175.389  92.930  30.203  1.00 63.39      A16S
ATOM  29736  O1P ADE  522     174.835  91.942  31.169  1.00 70.30      A16S
ATOM  29737  O2P ADE  522     174.554  93.399  29.067  1.00 70.30      A16S
ATOM  29738  O5' ADE  522     175.874  94.214  31.009  1.00 63.39      A16S
ATOM  29739  C5' ADE  522     176.635  94.077  32.201  1.00 63.39      A16S
ATOM  29740  C4' ADE  522     177.173  95.417  32.633  1.00 63.39      A16S
ATOM  29741  O4' ADE  522     178.017  95.956  31.585  1.00 63.39      A16S
ATOM  29742  C1' ADE  522     177.923  97.369  31.583  1.00 63.39      A16S
ATOM  29743  N9  ADE  522     177.425  97.797  30.280  1.00 70.30      A16S
ATOM  29744  C4  ADE  522     177.563  99.053  29.747  1.00 70.30      A16S
ATOM  29745  N3  ADE  522     178.189 100.105  30.298  1.00 70.30      A16S
ATOM  29746  C2  ADE  522     178.117 101.165  29.499  1.00 70.30      A16S
ATOM  29747  N1  ADE  522     177.538 101.284  28.302  1.00 70.30      A16S
ATOM  29748  C6  ADE  522     176.920 100.207  27.774  1.00 70.30      A16S
ATOM  29749  N6  ADE  522     176.348 100.329  26.577  1.00 70.30      A16S
ATOM  29750  C5  ADE  522     176.921  99.017  28.527  1.00 70.30      A16S
ATOM  29751  N7  ADE  522     176.392  97.756  28.289  1.00 70.30      A16S
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ATOM	29752	C8	ADE	522	176.724	97.070	29.353	1.00	70.30	A16S
ATOM	29753	C2'	ADE	522	176.973	97.762	32.714	1.00	63.39	A16S
ATOM	29754	O2'	ADE	522	177.716	98.031	33.880	1.00	63.39	A16S
ATOM	29755	C3'	ADE	522	176.138	96.502	32.857	1.00	63.39	A16S
ATOM	29756	O3'	ADE	522	175.600	96.404	34.163	1.00	63.39	A16S
ATOM	29757	P	GUA	523	174.088	96.863	34.438	1.00	56.99	A16S
ATOM	29758	O1P	GUA	523	173.783	96.432	35.824	1.00	69.68	A16S
ATOM	29759	O2P	GUA	523	173.235	96.385	33.320	1.00	69.68	A16S
ATOM	29760	O5'	GUA	523	174.158	98.457	34.395	1.00	56.99	A16S
ATOM	29761	C5'	GUA	523	174.745	99.189	35.464	1.00	56.99	A16S
ATOM	29762	C4'	GUA	523	174.773	100.667	35.146	1.00	56.99	A16S
ATOM	29763	O4'	GUA	523	175.666	100.899	34.031	1.00	56.99	A16S
ATOM	29764	C1'	GUA	523	175.200	102.006	33.274	1.00	56.99	A16S
ATOM	29765	N9	GUA	523	174.915	101.548	31.920	1.00	69.68	A16S
ATOM	29766	C4	GUA	523	174.837	102.334	30.801	1.00	69.68	A16S
ATOM	29767	N3	GUA	523	175.051	103.661	30.754	1.00	69.68	A16S
ATOM	29768	C2	GUA	523	174.881	104.145	29.540	1.00	69.68	A16S
ATOM	29769	N2	GUA	523	175.075	105.448	29.312	1.00	69.68	A16S
ATOM	29770	N1	GUA	523	174.513	103.389	28.460	1.00	69.68	A16S
ATOM	29771	C6	GUA	523	174.280	102.019	28.486	1.00	69.68	A16S
ATOM	29772	O6	GUA	523	173.931	101.429	27.454	1.00	69.68	A16S
ATOM	29773	C5	GUA	523	174.482	101.483	29.782	1.00	69.68	A16S
ATOM	29774	N7	GUA	523	174.372	100.177	30.244	1.00	69.68	A16S
ATOM	29775	C8	GUA	523	174.643	100.265	31.516	1.00	69.68	A16S
ATOM	29776	C2'	GUA	523	173.939	102.538	33.960	1.00	56.99	A16S
ATOM	29777	O2'	GUA	523	174.252	103.619	34.811	1.00	56.99	A16S
ATOM	29778	C3'	GUA	523	173.462	101.306	34.715	1.00	56.99	A16S
ATOM	29779	O3'	GUA	523	172.698	101.709	35.835	1.00	56.99	A16S
ATOM	29780	P	GUA	524	171.102	101.780	35.722	1.00	62.83	A16S
ATOM	29781	O1P	GUA	524	170.588	102.312	37.008	1.00	62.49	A16S
ATOM	29782	O2P	GUA	524	170.641	100.459	35.240	1.00	62.49	A16S
ATOM	29783	O5'	GUA	524	170.833	102.889	34.614	1.00	62.83	A16S
ATOM	29784	C5'	GUA	524	171.037	104.262	34.916	1.00	62.83	A16S
ATOM	29785	C4'	GUA	524	170.975	105.105	33.659	1.00	62.83	A16S
ATOM	29786	O4'	GUA	524	172.000	104.670	32.720	1.00	62.83	A16S
ATOM	29787	C1'	GUA	524	171.551	104.894	31.393	1.00	62.83	A16S
ATOM	29788	N9	GUA	524	171.424	103.605	30.729	1.00	62.49	A16S
ATOM	29789	C4	GUA	524	171.197	103.410	29.393	1.00	62.49	A16S
ATOM	29790	N3	GUA	524	171.102	104.380	28.456	1.00	62.49	A16S
ATOM	29791	C2	GUA	524	170.877	103.885	27.253	1.00	62.49	A16S
ATOM	29792	N2	GUA	524	170.772	104.711	26.203	1.00	62.49	A16S
ATOM	29793	N1	GUA	524	170.743	102.543	26.995	1.00	62.49	A16S
ATOM	29794	C6	GUA	524	170.835	101.532	27.950	1.00	62.49	A16S
ATOM	29795	O6	GUA	524	170.696	100.354	27.617	1.00	62.49	A16S
ATOM	29796	C5	GUA	524	171.088	102.050	29.236	1.00	62.49	A16S
ATOM	29797	N7	GUA	524	171.270	101.398	30.447	1.00	62.49	A16S
ATOM	29798	C8	GUA	524	171.472	102.362	31.302	1.00	62.49	A16S
ATOM	29799	C2'	GUA	524	170.174	105.547	31.495	1.00	62.83	A16S
ATOM	29800	O2'	GUA	524	170.267	106.958	31.462	1.00	62.83	A16S
ATOM	29801	C3'	GUA	524	169.705	105.013	32.835	1.00	62.83	A16S
ATOM	29802	O3'	GUA	524	168.656	105.812	33.338	1.00	62.83	A16S
ATOM	29803	P	GUA	525	167.148	105.400	33.005	1.00	58.81	A16S
ATOM	29804	O1P	GUA	525	166.227	106.352	33.655	1.00	52.15	A16S
ATOM	29805	O2P	GUA	525	167.022	103.949	33.282	1.00	52.15	A16S
ATOM	29806	O5'	GUA	525	167.014	105.648	31.440	1.00	58.81	A16S
ATOM	29807	C5'	GUA	525	167.288	106.921	30.885	1.00	58.81	A16S
ATOM	29808	C4'	GUA	525	167.150	106.870	29.389	1.00	58.81	A16S
ATOM	29809	O4'	GUA	525	168.080	105.895	28.851	1.00	58.81	A16S
ATOM	29810	C1'	GUA	525	167.538	105.322	27.676	1.00	58.81	A16S
ATOM	29811	N9	GUA	525	167.480	103.881	27.856	1.00	52.15	A16S
ATOM	29812	C4	GUA	525	167.236	102.952	26.875	1.00	52.15	A16S
ATOM	29813	N3	GUA	525	167.016	103.217	25.568	1.00	52.15	A16S
ATOM	29814	C2	GUA	525	166.766	102.119	24.878	1.00	52.15	A16S
ATOM	29815	N2	GUA	525	166.479	102.206	23.575	1.00	52.15	A16S
ATOM	29816	N1	GUA	525	166.765	100.858	25.419	1.00	52.15	A16S
ATOM	29817	C6	GUA	525	167.000	100.563	26.758	1.00	52.15	A16S
ATOM	29818	O6	GUA	525	166.974	99.392	27.144	1.00	52.15	A16S
ATOM	29819	C5	GUA	525	167.245	101.736	27.514	1.00	52.15	A16S
ATOM	29820	N7	GUA	525	167.505	101.896	28.867	1.00	52.15	A16S
ATOM	29821	C8	GUA	525	167.642	103.183	29.022	1.00	52.15	A16S
ATOM	29822	C2'	GUA	525	166.147	105.920	27.472	1.00	58.81	A16S
ATOM	29823	O2'	GUA	525	166.224	106.971	26.528	1.00	58.81	A16S
ATOM	29824	C3'	GUA	525	165.808	106.386	28.883	1.00	58.81	A16S
ATOM	29825	O3'	GUA	525	164.866	107.444	28.867	1.00	58.81	A16S
ATOM	29826	P	CYT	526	163.311	107.097	28.738	1.00	46.71	A16S
ATOM	29827	O1P	CYT	526	162.565	108.377	28.799	1.00	54.26	A16S
ATOM	29828	O2P	CYT	526	163.005	106.008	29.709	1.00	54.26	A16S
ATOM	29829	O5'	CYT	526	163.165	106.519	27.261	1.00	46.71	A16S
ATOM	29830	C5'	CYT	526	163.211	107.394	26.141	1.00	46.71	A16S
ATOM	29831	C4'	CYT	526	162.929	106.642	24.864	1.00	46.71	A16S
ATOM	29832	O4'	CYT	526	163.974	105.665	24.617	1.00	46.71	A16S
ATOM	29833	C1'	CYT	526	163.415	104.539	23.959	1.00	46.71	A16S
ATOM	29834	N1	CYT	526	163.554	103.382	24.841	1.00	54.26	A16S
ATOM	29835	C6	CYT	526	163.847	103.542	26.164	1.00	54.26	A16S
ATOM	29836	C2	CYT	526	163.381	102.105	24.303	1.00	54.26	A16S
ATOM	29837	O2	CYT	526	163.084	101.996	23.103	1.00	54.26	A16S
ATOM	29838	N3	CYT	526	163.533	101.026	25.101	1.00	54.26	A16S
ATOM	29839	C4	CYT	526	163.831	101.191	26.388	1.00	54.26	A16S
ATOM	29840	N4	CYT	526	163.987	100.102	27.132	1.00	54.26	A16S
ATOM	29841	C5	CYT	526	163.989	102.484	26.967	1.00	54.26	A16S
ATOM	29842	C2'	CYT	526	161.944	104.852	23.704	1.00	46.71	A16S
ATOM	29843	O2'	CYT	526	161.809	105.495	22.460	1.00	46.71	A16S
ATOM	29844	C3'	CYT	526	161.657	105.812	24.842	1.00	46.71	A16S
ATOM	29845	O3'	CYT	526	160.525	106.603	24.544	1.00	46.71	A16S
ATOM	29846	P	GUA	527	159.070	106.055	24.913	1.00	47.76	A16S
ATOM	29847	O1P	GUA	527	158.103	107.056	24.397	1.00	52.66	A16S
ATOM	29848	O2P	GUA	527	159.070	105.687	26.356	1.00	52.66	A16S
ATOM	29849	O5'	GUA	527	158.930	104.714	24.060	1.00	47.76	A16S
ATOM	29850	C5'	GUA	527	158.797	104.758	22.639	1.00	47.76	A16S
ATOM	29851	C4'	GUA	527	158.599	103.364	22.066	1.00	47.76	A16S
ATOM	29852	O4'	GUA	527	159.750	102.528	22.358	1.00	47.76	A16S
ATOM	29853	C1'	GUA	527	159.343	101.169	22.411	1.00	47.76	A16S
ATOM	29854	N9	GUA	527	159.725	100.606	23.701	1.00	52.66	A16S
ATOM	29855	C4	GUA	527	159.926	99.278	23.978	1.00	52.66	A16S
ATOM	29856	N3	GUA	527	159.791	98.259	23.109	1.00	52.66	A16S
ATOM	29857	C2	GUA	527	160.082	97.097	23.667	1.00	52.66	A16S

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ATOM  29858  N2  GUA  527     160.008  95.968  22.949  1.00 52.66      A16S
ATOM  29859  N1  GUA  527     160.470  96.949  24.969  1.00 52.66      A16S
ATOM  29860  C6  GUA  527     160.612  97.983  25.880  1.00 52.66      A16S
ATOM  29861  O6  GUA  527     160.976  97.738  27.032  1.00 52.66      A16S
ATOM  29862  C5  GUA  527     160.303  99.234  25.300  1.00 52.66      A16S
ATOM  29863  N7  GUA  527     160.318 100.506  25.850  1.00 52.66      A16S
ATOM  29864  C8  GUA  527     159.965 101.286  24.867  1.00 52.66      A16S
ATOM  29865  C2' GUA  527     157.834 101.134  22.180  1.00 47.76      A16S
ATOM  29866  O2' GUA  527     157.589 100.861  20.814  1.00 47.76      A16S
ATOM  29867  C3' GUA  527     157.429 102.546  22.587  1.00 47.76      A16S
ATOM  29868  O3' GUA  527     156.212 102.910  21.952  1.00 47.76      A16S
ATOM  29869  P   CYT  528     154.833 102.830  22.773  1.00 51.43      A16S
ATOM  29870  O1P CYT  528     153.779 103.281  21.827  1.00 54.00      A16S
ATOM  29871  O2P CYT  528     154.992 103.516  24.083  1.00 54.00      A16S
ATOM  29872  O5' CYT  528     154.626 101.281  23.072  1.00 51.43      A16S
ATOM  29873  C5' CYT  528     153.955 100.463  22.137  1.00 51.43      A16S
ATOM  29874  C4' CYT  528     154.188  99.006  22.446  1.00 51.43      A16S
ATOM  29875  O4' CYT  528     155.594  98.803  22.737  1.00 51.43      A16S
ATOM  29876  C1' CYT  528     155.739  97.604  23.476  1.00 51.43      A16S
ATOM  29877  N1  CYT  528     156.457  97.896  24.706  1.00 54.00      A16S
ATOM  29878  C6  CYT  528     156.659  99.177  25.119  1.00 54.00      A16S
ATOM  29879  C2  CYT  528     156.899  96.827  25.474  1.00 54.00      A16S
ATOM  29880  O2  CYT  528     156.753  95.683  25.036  1.00 54.00      A16S
ATOM  29881  N3  CYT  528     157.476  97.064  26.667  1.00 54.00      A16S
ATOM  29882  C4  CYT  528     157.635  98.315  27.085  1.00 54.00      A16S
ATOM  29883  N4  CYT  528     158.176  98.502  28.281  1.00 54.00      A16S
ATOM  29884  C5  CYT  528     157.237  99.430  26.295  1.00 54.00      A16S
ATOM  29885  C2' CYT  528     154.332  97.124  23.820  1.00 51.43      A16S
ATOM  29886  O2' CYT  528     153.934  96.169  22.872  1.00 51.43      A16S
ATOM  29887  C3' CYT  528     153.539  98.410  23.682  1.00 51.43      A16S
ATOM  29888  O3' CYT  528     152.164  98.105  23.479  1.00 51.43      A16S
ATOM  29889  P   GUA  529     151.200  97.938  24.753  1.00 42.60      A16S
ATOM  29890  O1P GUA  529     149.853  97.568  24.261  1.00 54.94      A16S
ATOM  29891  O2P GUA  529     151.367  99.126  25.621  1.00 54.94      A16S
ATOM  29892  O5' GUA  529     151.813  96.684  25.516  1.00 42.60      A16S
ATOM  29893  C5' GUA  529     151.766  95.399  24.921  1.00 42.60      A16S
ATOM  29894  C4' GUA  529     152.375  94.375  25.837  1.00 42.60      A16S
ATOM  29895  O4' GUA  529     153.747  94.743  26.117  1.00 42.60      A16S
ATOM  29896  C1' GUA  529     154.096  94.314  27.424  1.00 42.60      A16S
ATOM  29897  N9  GUA  529     154.560  95.481  28.166  1.00 54.94      A16S
ATOM  29898  C4  GUA  529     155.334  95.480  29.300  1.00 54.94      A16S
ATOM  29899  N3  GUA  529     155.820  94.391  29.928  1.00 54.94      A16S
ATOM  29900  C2  GUA  529     156.532  94.712  30.998  1.00 54.94      A16S
ATOM  29901  N2  GUA  529     157.099  93.753  31.740  1.00 54.94      A16S
ATOM  29902  N1  GUA  529     156.740  95.995  31.422  1.00 54.94      A16S
ATOM  29903  C6  GUA  529     156.239  97.132  30.802  1.00 54.94      A16S
ATOM  29904  O6  GUA  529     156.465  98.247  31.291  1.00 54.94      A16S
ATOM  29905  C5  GUA  529     155.487  96.805  29.638  1.00 54.94      A16S
ATOM  29906  N7  GUA  529     154.839  97.625  28.726  1.00 54.94      A16S
ATOM  29907  C8  GUA  529     154.305  96.797  27.872  1.00 54.94      A16S
ATOM  29908  C2' GUA  529     152.865  93.617  28.026  1.00 42.60      A16S
ATOM  29909  O2' GUA  529     152.972  92.215  27.849  1.00 42.60      A16S
ATOM  29910  C3' GUA  529     151.728  94.223  27.205  1.00 42.60      A16S
ATOM  29911  O3' GUA  529     150.612  93.344  27.077  1.00 42.60      A16S
ATOM  29912  P   ADE  530     149.654  93.055  28.334  1.00 47.93      A16S
ATOM  29913  O1P ADE  530     148.281  92.804  27.825  1.00 58.46      A16S
ATOM  29914  O2P ADE  530     149.868  94.088  29.369  1.00 58.46      A16S
ATOM  29915  O5' ADE  530     150.195  91.671  28.889  1.00 47.93      A16S
ATOM  29916  C5' ADE  530     149.553  90.463  28.522  1.00 47.93      A16S
ATOM  29917  C4' ADE  530     150.569  89.434  28.107  1.00 47.93      A16S
ATOM  29918  O4' ADE  530     151.683  89.444  29.006  1.00 47.93      A16S
ATOM  29919  C1' ADE  530     152.226  88.161  29.011  1.00 47.93      A16S
ATOM  29920  N9  ADE  530     153.124  87.994  30.139  1.00 58.46      A16S
ATOM  29921  C4  ADE  530     154.452  87.711  29.970  1.00 58.46      A16S
ATOM  29922  N3  ADE  530     155.085  87.500  28.809  1.00 58.46      A16S
ATOM  29923  C2  ADE  530     156.378  87.296  29.015  1.00 58.46      A16S
ATOM  29924  N1  ADE  530     157.054  87.282  30.161  1.00 58.46      A16S
ATOM  29925  C6  ADE  530     156.383  87.496  31.311  1.00 58.46      A16S
ATOM  29926  N6  ADE  530     157.064  87.487  32.452  1.00 58.46      A16S
ATOM  29927  C5  ADE  530     155.003  87.719  31.228  1.00 58.46      A16S
ATOM  29928  N7  ADE  530     154.028  87.965  32.187  1.00 58.46      A16S
ATOM  29929  C8  ADE  530     152.928  88.108  31.487  1.00 58.46      A16S
ATOM  29930  C2' ADE  530     151.102  87.159  28.783  1.00 47.93      A16S
ATOM  29931  O2' ADE  530     151.643  86.078  28.062  1.00 47.93      A16S
ATOM  29932  C3' ADE  530     150.010  88.022  28.111  1.00 47.93      A16S
ATOM  29933  O3' ADE  530     149.777  87.537  26.773  1.00 47.93      A16S
ATOM  29934  P   GUA  531     149.295  88.525  25.573  1.00 50.19      A16S
ATOM  29935  O1P GUA  531     147.877  88.964  25.736  1.00 48.87      A16S
ATOM  29936  O2P GUA  531     149.706  87.835  24.334  1.00 48.87      A16S
ATOM  29937  O5' GUA  531     150.205  89.819  25.660  1.00 50.19      A16S
ATOM  29938  C5' GUA  531     151.053  90.185  24.585  1.00 50.19      A16S
ATOM  29939  C4' GUA  531     152.434  90.457  25.111  1.00 50.19      A16S
ATOM  29940  O4' GUA  531     152.953  89.246  25.719  1.00 50.19      A16S
ATOM  29941  C1' GUA  531     154.352  89.173  25.512  1.00 50.19      A16S
ATOM  29942  N9  GUA  531     154.633  87.929  24.799  1.00 48.87      A16S
ATOM  29943  C4  GUA  531     155.863  87.346  24.600  1.00 48.87      A16S
ATOM  29944  N3  GUA  531     157.052  87.837  25.006  1.00 48.87      A16S
ATOM  29945  C2  GUA  531     158.054  87.035  24.674  1.00 48.87      A16S
ATOM  29946  N2  GUA  531     159.313  87.373  24.977  1.00 48.87      A16S
ATOM  29947  N1  GUA  531     157.899  85.848  24.013  1.00 48.87      A16S
ATOM  29948  C6  GUA  531     156.686  85.330  23.585  1.00 48.87      A16S
ATOM  29949  O6  GUA  531     156.658  84.251  22.985  1.00 48.87      A16S
ATOM  29950  C5  GUA  531     155.605  86.178  23.925  1.00 48.87      A16S
ATOM  29951  N7  GUA  531     154.248  86.034  23.688  1.00 48.87      A16S
ATOM  29952  C8  GUA  531     153.713  87.097  24.219  1.00 48.87      A16S
ATOM  29953  C2' GUA  531     154.767  90.454  24.784  1.00 50.19      A16S
ATOM  29954  O2' GUA  531     155.147  91.433  25.733  1.00 50.19      A16S
ATOM  29955  C3' GUA  531     153.472  90.818  24.072  1.00 50.19      A16S
ATOM  29956  O3' GUA  531     153.394  92.201  23.773  1.00 50.19      A16S
ATOM  29957  P   CYT  532     153.575  92.682  22.259  1.00 43.34      A16S
ATOM  29958  O1P CYT  532     153.128  94.088  22.177  1.00 44.77      A16S
ATOM  29959  O2P CYT  532     152.941  91.659  21.386  1.00 44.77      A16S
ATOM  29960  O5' CYT  532     155.149  92.617  22.028  1.00 43.34      A16S
ATOM  29961  C5' CYT  532     156.036  93.400  22.811  1.00 43.34      A16S
ATOM  29962  C4' CYT  532     157.433  92.841  22.720  1.00 43.34      A16S
ATOM  29963  O4' CYT  532     157.411  91.461  23.151  1.00 43.34      A16S
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ATOM	29964	C1'	CYT	532	158.416	90.736	22.463	1.00	43.34	A16S	ATOM	30017	O2'	URI	534	164.441	85.804	12.445	1.00	39.14	A16S
ATOM	29965	N1	CYT	532	157.802	89.562	21.840	1.00	44.77	A16S	ATOM	30018	C3'	URI	534	163.519	88.095	12.285	1.00	39.14	A16S
ATOM	29966	C6	CYT	532	156.451	89.451	21.746	1.00	44.77	A16S	ATOM	30019	O3'	URI	534	164.515	88.351	11.310	1.00	39.14	A16S
ATOM	29967	C2	CYT	532	158.627	88.545	21.364	1.00	44.77	A16S	ATOM	30020	P	URI	535	164.079	88.661	9.799	1.00	45.20	A16S
ATOM	29968	O2	CYT	532	159.853	88.692	21.424	1.00	44.77	A16S	ATOM	30021	O1P	URI	535	165.269	89.158	9.068	1.00	41.28	A16S
ATOM	29969	N3	CYT	532	158.075	87.435	20.849	1.00	44.77	A16S	ATOM	30022	O2P	URI	535	162.842	89.474	9.834	1.00	41.28	A16S
ATOM	29970	C4	CYT	532	156.756	87.323	20.787	1.00	44.77	A16S	ATOM	30023	O5'	URI	535	163.668	87.236	9.226	1.00	45.20	A16S
ATOM	29971	N4	CYT	532	156.250	86.202	20.296	1.00	44.77	A16S	ATOM	30024	C5'	URI	535	164.637	86.221	9.013	1.00	45.20	A16S
ATOM	29972	C5	CYT	532	155.891	88.356	21.233	1.00	44.77	A16S	ATOM	30025	C4'	URI	535	163.941	84.919	8.761	1.00	45.20	A16S
ATOM	29973	C2'	CYT	532	159.070	91.682	21.466	1.00	43.34	A16S	ATOM	30026	O4'	URI	535	163.120	84.622	9.918	1.00	45.20	A16S
ATOM	29974	O2'	CYT	532	160.252	92.206	22.023	1.00	43.34	A16S	ATOM	30027	C1'	URI	535	161.962	83.914	9.509	1.00	45.20	A16S
ATOM	29975	C3'	CYT	532	158.003	92.750	21.320	1.00	43.34	A16S	ATOM	30028	N1	URI	535	160.784	84.665	9.941	1.00	41.28	A16S
ATOM	29976	O3'	CYT	532	158.626	93.955	20.963	1.00	43.34	A16S	ATOM	30029	C6	URI	535	160.869	85.962	10.378	1.00	41.28	A16S
ATOM	29977	P	GUA	533	158.879	94.271	19.419	1.00	51.89	A16S	ATOM	30030	C2	URI	535	159.575	84.006	9.880	1.00	41.28	A16S
ATOM	29978	O1P	GUA	533	159.601	95.568	19.453	1.00	41.13	A16S	ATOM	30031	O2	URI	535	159.478	82.854	9.504	1.00	41.28	A16S
ATOM	29979	O2P	GUA	533	157.586	94.151	18.692	1.00	41.13	A16S	ATOM	30032	N3	URI	535	158.490	84.741	10.274	1.00	41.28	A16S
ATOM	29980	O5'	GUA	533	159.779	93.069	18.866	1.00	51.89	A16S	ATOM	30033	C4	URI	535	158.495	86.039	10.715	1.00	41.28	A16S
ATOM	29981	C5'	GUA	533	161.181	93.218	18.691	1.00	51.89	A16S	ATOM	30034	O4	URI	535	157.425	86.584	10.972	1.00	41.28	A16S
ATOM	29982	C4'	GUA	533	161.824	91.911	18.263	1.00	51.89	A16S	ATOM	30035	C5	URI	535	159.794	86.655	10.761	1.00	41.28	A16S
ATOM	29983	O4'	GUA	533	161.237	90.797	18.986	1.00	51.89	A16S	ATOM	30036	C2'	URI	535	162.007	83.805	7.990	1.00	45.20	A16S
ATOM	29984	C1'	GUA	533	161.533	89.592	18.298	1.00	51.89	A16S	ATOM	30037	O2'	URI	535	162.527	82.545	7.628	1.00	45.20	A16S
ATOM	29985	N9	GUA	533	160.313	88.819	18.117	1.00	41.13	A16S	ATOM	30038	C3'	URI	535	162.916	84.973	7.648	1.00	45.20	A16S
ATOM	29986	C4	GUA	533	160.248	87.516	17.714	1.00	41.13	A16S	ATOM	30039	O3'	URI	535	163.503	84.863	6.366	1.00	45.20	A16S
ATOM	29987	N3	GUA	533	161.301	86.718	17.453	1.00	41.13	A16S	ATOM	30040	P	ADE	536	162.832	85.645	5.139	1.00	41.66	A16S
ATOM	29988	C2	GUA	533	160.917	85.516	17.052	1.00	41.13	A16S	ATOM	30041	O1P	ADE	536	163.719	85.429	3.974	1.00	40.32	A16S
ATOM	29989	N2	GUA	533	161.827	84.585	16.750	1.00	41.13	A16S	ATOM	30042	O2P	ADE	536	162.515	87.030	5.568	1.00	40.32	A16S
ATOM	29990	N1	GUA	533	159.611	85.137	16.916	1.00	41.13	A16S	ATOM	30043	O5'	ADE	536	161.471	84.858	4.902	1.00	41.66	A16S
ATOM	29991	C6	GUA	533	158.515	85.947	17.172	1.00	41.13	A16S	ATOM	30044	C5'	ADE	536	161.505	83.509	4.504	1.00	41.66	A16S
ATOM	29992	O6	GUA	533	157.373	85.508	16.992	1.00	41.13	A16S	ATOM	30045	C4'	ADE	536	160.114	82.989	4.307	1.00	41.66	A16S
ATOM	29993	C5	GUA	533	158.908	87.229	17.612	1.00	41.13	A16S	ATOM	30046	O4'	ADE	536	159.439	82.834	5.576	1.00	41.66	A16S
ATOM	29994	N7	GUA	533	158.144	88.325	17.974	1.00	41.13	A16S	ATOM	30047	C1'	ADE	536	158.056	83.087	5.411	1.00	41.66	A16S
ATOM	29995	C8	GUA	533	159.020	89.242	18.274	1.00	41.13	A16S	ATOM	30048	N9	ADE	536	157.717	84.228	6.254	1.00	40.32	A16S
ATOM	29996	C2'	GUA	533	162.134	89.995	16.952	1.00	51.89	A16S	ATOM	30049	C4	ADE	536	156.509	84.515	6.839	1.00	40.32	A16S
ATOM	29997	O2'	GUA	533	163.547	89.914	17.030	1.00	51.89	A16S	ATOM	30050	N3	ADE	536	155.381	83.791	6.789	1.00	40.32	A16S
ATOM	29998	C3'	GUA	533	161.665	91.439	16.832	1.00	51.89	A16S	ATOM	30051	C2	ADE	536	154.408	84.398	7.452	1.00	40.32	A16S
ATOM	29999	O3'	GUA	533	162.538	92.121	15.945	1.00	51.89	A16S	ATOM	30052	N1	ADE	536	154.429	85.560	8.109	1.00	40.32	A16S
ATOM	30000	P	URI	534	162.344	91.935	14.364	1.00	39.14	A16S	ATOM	30053	C6	ADE	536	155.582	86.258	8.140	1.00	40.32	A16S
ATOM	30001	O1P	URI	534	163.379	92.726	13.652	1.00	38.02	A16S	ATOM	30054	N6	ADE	536	155.615	87.422	8.790	1.00	40.32	A16S
ATOM	30002	O2P	URI	534	160.909	92.158	14.066	1.00	38.02	A16S	ATOM	30055	C5	ADE	536	156.684	85.720	7.481	1.00	40.32	A16S
ATOM	30003	O5'	URI	534	162.646	90.395	14.105	1.00	39.14	A16S	ATOM	30056	N7	ADE	536	157.982	86.173	7.328	1.00	40.32	A16S
ATOM	30004	C5'	URI	534	163.983	89.948	14.014	1.00	39.14	A16S	ATOM	30057	C8	ADE	536	158.553	85.250	6.600	1.00	40.32	A16S
ATOM	30005	C4'	URI	534	164.031	88.490	13.651	1.00	39.14	A16S	ATOM	30058	C2'	ADE	536	157.832	83.375	3.923	1.00	41.66	A16S
ATOM	30006	O4'	URI	534	163.161	87.758	14.542	1.00	39.14	A16S	ATOM	30059	O2'	ADE	536	157.509	82.169	3.272	1.00	41.66	A16S
ATOM	30007	C1'	URI	534	162.715	86.581	13.905	1.00	39.14	A16S	ATOM	30060	C3'	ADE	536	159.203	83.881	3.500	1.00	41.66	A16S
ATOM	30008	N1	URI	534	161.254	86.602	13.929	1.00	38.02	A16S	ATOM	30061	O3'	ADE	536	159.457	83.651	2.123	1.00	41.66	A16S
ATOM	30009	C6	URI	534	160.571	87.740	14.245	1.00	38.02	A16S	ATOM	30062	P	CYT	537	159.217	84.831	1.067	1.00	39.72	A16S
ATOM	30010	C2	URI	534	160.602	85.438	13.619	1.00	38.02	A16S	ATOM	30063	O1P	CYT	537	159.722	84.389	-0.267	1.00	40.51	A16S
ATOM	30011	O2	URI	534	161.196	84.416	13.317	1.00	38.02	A16S	ATOM	30064	O2P	CYT	537	159.730	86.093	1.670	1.00	40.51	A16S
ATOM	30012	N3	URI	534	159.237	85.518	13.663	1.00	38.02	A16S	ATOM	30065	O5'	CYT	537	157.632	84.894	0.998	1.00	39.72	A16S
ATOM	30013	C4	URI	534	158.490	86.626	13.975	1.00	38.02	A16S	ATOM	30066	C5'	CYT	537	156.890	83.835	0.420	1.00	39.72	A16S
ATOM	30014	O4	URI	534	157.272	86.540	14.007	1.00	38.02	A16S	ATOM	30067	C4'	CYT	537	155.425	84.037	0.687	1.00	39.72	A16S
ATOM	30015	C5	URI	534	159.244	87.790	14.274	1.00	38.02	A16S	ATOM	30068	O4'	CYT	537	155.209	83.957	2.119	1.00	39.72	A16S
ATOM	30016	C2'	URI	534	163.271	86.600	12.481	1.00	39.14	A16S	ATOM	30069	C1'	CYT	537	154.139	84.811	2.481	1.00	39.72	A16S

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ATOM  30070  N1  CYT  537     154.614  85.801   3.451  1.00 40.51      A16S
ATOM  30071  C6  CYT  537     155.919  86.179   3.498  1.00 40.51      A16S
ATOM  30072  C2  CYT  537     153.682  86.375   4.309  1.00 40.51      A16S
ATOM  30073  O2  CYT  537     152.505  85.972   4.271  1.00 40.51      A16S
ATOM  30074  N3  CYT  537     154.074  87.343   5.158  1.00 40.51      A16S
ATOM  30075  C4  CYT  537     155.343  87.726   5.180  1.00 40.51      A16S
ATOM  30076  N4  CYT  537     155.683  88.697   6.029  1.00 40.51      A16S
ATOM  30077  C5  CYT  537     156.323  87.133   4.336  1.00 40.51      A16S
ATOM  30078  C2' CYT  537     153.654  85.510   1.212  1.00 39.72      A16S
ATOM  30079  O2' CYT  537     152.530  84.832   0.705  1.00 39.72      A16S
ATOM  30080  C3' CYT  537     154.878  85.407   0.318  1.00 39.72      A16S
ATOM  30081  O3' CYT  537     154.525  85.510  -1.059  1.00 39.72      A16S
ATOM  30082  P   CYT  538     154.430  86.968  -1.750  1.00 43.71      A16S
ATOM  30083  O1P CYT  538     154.374  86.769  -3.225  1.00 49.16      A16S
ATOM  30084  O2P CYT  538     155.459  87.869  -1.177  1.00 49.16      A16S
ATOM  30085  O5' CYT  538     153.018  87.517  -1.265  1.00 43.71      A16S
ATOM  30086  C5' CYT  538     151.816  87.036  -1.841  1.00 43.71      A16S
ATOM  30087  C4' CYT  538     150.652  87.833  -1.329  1.00 43.71      A16S
ATOM  30088  O4' CYT  538     150.560  87.652   0.105  1.00 43.71      A16S
ATOM  30089  C1' CYT  538     150.086  88.840   0.711  1.00 43.71      A16S
ATOM  30090  N1  CYT  538     151.120  89.325   1.627  1.00 49.16      A16S
ATOM  30091  C6  CYT  538     152.392  88.846   1.558  1.00 49.16      A16S
ATOM  30092  C2  CYT  538     150.783  90.294   2.564  1.00 49.16      A16S
ATOM  30093  O2  CYT  538     149.608  90.692   2.623  1.00 49.16      A16S
ATOM  30094  N3  CYT  538     151.734  90.773   3.387  1.00 49.16      A16S
ATOM  30095  C4  CYT  538     152.976  90.306   3.307  1.00 49.16      A16S
ATOM  30096  N4  CYT  538     153.885  90.806   4.140  1.00 49.16      A16S
ATOM  30097  C5  CYT  538     153.341  89.303   2.371  1.00 49.16      A16S
ATOM  30098  C2' CYT  538     149.795  89.825  -0.419  1.00 43.71      A16S
ATOM  30099  O2' CYT  538     148.437  89.683  -0.793  1.00 43.71      A16S
ATOM  30100  C3' CYT  538     150.762  89.335  -1.489  1.00 43.71      A16S
ATOM  30101  O3' CYT  538     150.354  89.725  -2.788  1.00 43.71      A16S
ATOM  30102  P   CYT  539     151.146  90.896  -3.546  1.00 40.49      A16S
ATOM  30103  O1P CYT  539     150.883  90.750  -5.001  1.00 36.73      A16S
ATOM  30104  O2P CYT  539     152.543  90.955  -3.042  1.00 36.73      A16S
ATOM  30105  O5' CYT  539     150.424  92.225  -3.068  1.00 40.49      A16S
ATOM  30106  C5' CYT  539     149.036  92.399  -3.269  1.00 40.49      A16S
ATOM  30107  C4' CYT  539     148.522  93.452  -2.337  1.00 40.49      A16S
ATOM  30108  O4' CYT  539     148.618  92.993  -0.966  1.00 40.49      A16S
ATOM  30109  C1' CYT  539     148.794  94.105  -0.109  1.00 40.49      A16S
ATOM  30110  N1  CYT  539     150.044  93.919   0.619  1.00 36.73      A16S
ATOM  30111  C6  CYT  539     151.023  93.116   0.122  1.00 36.73      A16S
ATOM  30112  C2  CYT  539     150.226  94.593   1.835  1.00 36.73      A16S
ATOM  30113  O2  CYT  539     149.306  95.311   2.270  1.00 36.73      A16S
ATOM  30114  N3  CYT  539     151.395  94.442   2.503  1.00 36.73      A16S
ATOM  30115  C4  CYT  539     152.344  93.653   2.007  1.00 36.73      A16S
ATOM  30116  N4  CYT  539     153.464  93.518   2.697  1.00 36.73      A16S
ATOM  30117  C5  CYT  539     152.178  92.959   0.779  1.00 36.73      A16S
ATOM  30118  C2' CYT  539     148.878  95.331  -1.012  1.00 40.49      A16S
ATOM  30119  O2' CYT  539     147.587  95.880  -1.141  1.00 40.49      A16S
ATOM  30120  C3' CYT  539     149.370  94.691  -2.293  1.00 40.49      A16S
ATOM  30121  O3' CYT  539     149.144  95.474  -3.425  1.00 40.49      A16S
ATOM  30122  P   GUA  540     150.259  96.513  -3.881  1.00 42.68      A16S
ATOM  30123  O1P GUA  540     149.670  97.228  -5.037  1.00 51.17      A16S
ATOM  30124  O2P GUA  540     151.562  95.833  -4.022  1.00 51.17      A16S
ATOM  30125  O5' GUA  540     150.365  97.503  -2.644  1.00 42.68      A16S
ATOM  30126  C5' GUA  540     149.279  98.353  -2.308  1.00 42.68      A16S
ATOM  30127  C4' GUA  540     149.629  99.178  -1.106  1.00 42.68      A16S
ATOM  30128  O4' GUA  540     150.064  98.280  -0.059  1.00 42.68      A16S
ATOM  30129  C1' GUA  540     151.049  98.919   0.734  1.00 42.68      A16S
ATOM  30130  N9  GUA  540     152.219  98.053   0.800  1.00 51.17      A16S
ATOM  30131  C4  GUA  540     153.291  98.208   1.628  1.00 51.17      A16S
ATOM  30132  N3  GUA  540     153.464  99.204   2.509  1.00 51.17      A16S
ATOM  30133  C2  GUA  540     154.594  99.080   3.177  1.00 51.17      A16S
ATOM  30134  N2  GUA  540     154.929  99.997   4.090  1.00 51.17      A16S
ATOM  30135  N1  GUA  540     155.478  98.054   2.996  1.00 51.17      A16S
ATOM  30136  C6  GUA  540     155.315  97.016   2.092  1.00 51.17      A16S
ATOM  30137  O6  GUA  540     156.178  96.140   1.998  1.00 51.17      A16S
ATOM  30138  C5  GUA  540     154.111  97.140   1.370  1.00 51.17      A16S
ATOM  30139  N7  GUA  540     153.571  96.331   0.387  1.00 51.17      A16S
ATOM  30140  C8  GUA  540     152.451  96.916   0.074  1.00 51.17      A16S
ATOM  30141  C2' GUA  540     151.293 100.303   0.135  1.00 42.68      A16S
ATOM  30142  O2' GUA  540     150.492 101.227   0.840  1.00 42.68      A16S
ATOM  30143  C3' GUA  540     150.801 100.117  -1.293  1.00 42.68      A16S
ATOM  30144  O3' GUA  540     150.298 101.338  -1.790  1.00 42.68      A16S
ATOM  30145  P   GUA  541     150.843 101.930  -3.179  1.00 30.37      A16S
ATOM  30146  O1P GUA  541     149.766 102.839  -3.740  1.00 45.70      A16S
ATOM  30147  O2P GUA  541     151.334 100.781  -3.994  1.00 45.70      A16S
ATOM  30148  O5' GUA  541     152.074 102.808  -2.707  1.00 30.37      A16S
ATOM  30149  C5' GUA  541     151.883 103.818  -1.750  1.00 30.37      A16S
ATOM  30150  C4' GUA  541     153.129 103.989  -0.941  1.00 30.37      A16S
ATOM  30151  O4' GUA  541     153.391 102.776  -0.200  1.00 30.37      A16S
ATOM  30152  C1' GUA  541     154.781 102.630  -0.016  1.00 30.37      A16S
ATOM  30153  N9  GUA  541     155.139 101.301  -0.491  1.00 45.70      A16S
ATOM  30154  C4  GUA  541     156.061 100.450   0.068  1.00 45.70      A16S
ATOM  30155  N3  GUA  541     156.799 100.690   1.172  1.00 45.70      A16S
ATOM  30156  C2  GUA  541     157.581  99.675   1.469  1.00 45.70      A16S
ATOM  30157  N2  GUA  541     158.363  99.733   2.538  1.00 45.70      A16S
ATOM  30158  N1  GUA  541     157.650  98.529   0.741  1.00 45.70      A16S
ATOM  30159  C6  GUA  541     156.909  98.264  -0.403  1.00 45.70      A16S
ATOM  30160  O6  GUA  541     157.060  97.188  -1.002  1.00 45.70      A16S
ATOM  30161  C5  GUA  541     156.049  99.332  -0.725  1.00 45.70      A16S
ATOM  30162  N7  GUA  541     155.128  99.467  -1.753  1.00 45.70      A16S
ATOM  30163  C8  GUA  541     154.616 100.651  -1.575  1.00 45.70      A16S
ATOM  30164  C2' GUA  541     155.465 103.794  -0.743  1.00 30.37      A16S
ATOM  30165  O2' GUA  541     155.728 104.789   0.211  1.00 30.37      A16S
ATOM  30166  C3' GUA  541     154.390 104.203  -1.748  1.00 30.37      A16S
ATOM  30167  O3' GUA  541     154.430 105.572  -2.100  1.00 30.37      A16S
ATOM  30168  P   ADE  542     155.250 106.039  -3.377  1.00 42.82      A16S
ATOM  30169  O1P ADE  542     156.641 106.166  -2.897  1.00 40.37      A16S
ATOM  30170  O2P ADE  542     154.591 107.179  -4.027  1.00 40.37      A16S
ATOM  30171  O5' ADE  542     155.191 104.786  -4.341  1.00 42.82      A16S
ATOM  30172  C5' ADE  542     155.128 104.945  -5.753  1.00 42.82      A16S
ATOM  30173  C4' ADE  542     154.823 103.613  -6.372  1.00 42.82      A16S
ATOM  30174  O4' ADE  542     156.006 102.793  -6.298  1.00 42.82      A16S
ATOM  30175  C1' ADE  542     155.625 101.454  -6.107  1.00 42.82      A16S
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ATOM	30176	N9	ADE	542	156.679	100.726	-5.395	1.00	40.37	A16S	ATOM	30229	O3'	URI	544	155.172	100.424	-11.908	1.00	47.10	A16S
ATOM	30177	C4	ADE	542	157.231	100.960	-4.159	1.00	40.37	A16S	ATOM	30230	P	CYT	545	154.125	99.287	-11.508	1.00	44.15	A16S
ATOM	30178	N3	ADE	542	156.960	101.967	-3.319	1.00	40.37	A16S	ATOM	30231	O1P	CYT	545	153.237	99.936	-10.518	1.00	40.28	A16S
ATOM	30179	C2	ADE	542	157.653	101.831	-2.193	1.00	40.37	A16S	ATOM	30232	O2P	CYT	545	154.762	97.997	-11.172	1.00	40.28	A16S
ATOM	30180	N1	ADE	542	158.526	100.886	-1.847	1.00	40.37	A16S	ATOM	30233	O5'	CYT	545	153.358	99.030	-12.876	1.00	44.15	A16S
ATOM	30181	C6	ADE	542	158.794	99.901	-2.725	1.00	40.37	A16S	ATOM	30234	C5'	CYT	545	152.485	99.998	-13.466	1.00	44.15	A16S
ATOM	30182	N6	ADE	542	159.696	98.974	-2.398	1.00	40.37	A16S	ATOM	30235	C4'	CYT	545	151.822	99.354	-14.640	1.00	44.15	A16S
ATOM	30183	C5	ADE	542	158.113	99.918	-3.941	1.00	40.37	A16S	ATOM	30236	O4'	CYT	545	152.874	99.004	-15.547	1.00	44.15	A16S
ATOM	30184	N7	ADE	542	158.141	99.062	-5.025	1.00	40.37	A16S	ATOM	30237	C1'	CYT	545	152.635	97.714	-16.029	1.00	44.15	A16S
ATOM	30185	C8	ADE	542	157.290	99.592	-5.864	1.00	40.37	A16S	ATOM	30238	N1	CYT	545	153.880	97.100	-16.455	1.00	40.28	A16S
ATOM	30186	C2'	ADE	542	154.184	101.394	-5.581	1.00	42.82	A16S	ATOM	30239	C6	CYT	545	155.053	97.300	-15.784	1.00	40.28	A16S
ATOM	30187	O2'	ADE	542	153.403	100.514	-6.353	1.00	42.82	A16S	ATOM	30240	C2	CYT	545	153.838	96.308	-17.568	1.00	40.28	A16S
ATOM	30188	C3'	ADE	542	153.778	102.873	-5.558	1.00	42.82	A16S	ATOM	30241	O2	CYT	545	152.761	96.173	-18.142	1.00	40.28	A16S
ATOM	30189	O3'	ADE	542	152.434	103.295	-5.868	1.00	42.82	A16S	ATOM	30242	N3	CYT	545	154.965	95.711	-18.004	1.00	40.28	A16S
ATOM	30190	P	URI	543	151.769	102.996	-7.301	1.00	38.54	A16S	ATOM	30243	C4	CYT	545	156.109	95.904	-17.353	1.00	40.28	A16S
ATOM	30191	O1P	URI	543	150.336	103.326	-7.145	1.00	83.69	A16S	ATOM	30244	N4	CYT	545	157.201	95.298	-17.814	1.00	40.28	A16S
ATOM	30192	O2P	URI	543	152.144	101.664	-7.822	1.00	83.69	A16S	ATOM	30245	C5	CYT	545	156.184	96.729	-16.199	1.00	40.28	A16S
ATOM	30193	O5'	URI	543	152.386	104.080	-8.267	1.00	38.54	A16S	ATOM	30246	C2'	CYT	545	151.829	96.940	-14.994	1.00	44.15	A16S
ATOM	30194	C5'	URI	543	153.081	103.677	-9.429	1.00	38.54	A16S	ATOM	30247	O2'	CYT	545	150.957	96.056	-15.638	1.00	44.15	A16S
ATOM	30195	C4'	URI	543	153.425	104.874	-10.273	1.00	38.54	A16S	ATOM	30248	C3'	CYT	545	151.163	98.053	-14.181	1.00	44.15	A16S
ATOM	30196	O4'	URI	543	152.213	105.379	-10.886	1.00	38.54	A16S	ATOM	30249	O3'	CYT	545	149.758	98.024	-14.508	1.00	44.15	A16S
ATOM	30197	C1'	URI	543	152.224	106.796	-10.890	1.00	38.54	A16S	ATOM	30250	P	ADE	546	148.702	99.009	-13.786	1.00	34.65	A16S
ATOM	30198	N1	URI	543	151.117	107.263	-10.044	1.00	83.69	A16S	ATOM	30251	O1P	ADE	546	148.984	99.144	-12.330	1.00	41.63	A16S
ATOM	30199	C6	URI	543	150.800	106.628	-8.873	1.00	83.69	A16S	ATOM	30252	O2P	ADE	546	147.365	98.542	-14.233	1.00	41.63	A16S
ATOM	30200	C2	URI	543	150.404	108.357	-10.473	1.00	83.69	A16S	ATOM	30253	O5'	ADE	546	148.968	100.444	-14.424	1.00	34.65	A16S
ATOM	30201	O2	URI	543	150.666	108.951	-11.504	1.00	83.69	A16S	ATOM	30254	C5'	ADE	546	148.294	101.575	-13.900	1.00	34.65	A16S
ATOM	30202	N3	URI	543	149.372	108.732	-9.652	1.00	83.69	A16S	ATOM	30255	C4'	ADE	546	148.719	102.834	-14.608	1.00	34.65	A16S
ATOM	30203	C4	URI	543	148.998	108.138	-8.466	1.00	83.69	A16S	ATOM	30256	O4'	ADE	546	150.014	103.261	-14.175	1.00	34.65	A16S
ATOM	30204	O4	URI	543	148.070	108.616	-7.811	1.00	83.69	A16S	ATOM	30257	C1'	ADE	546	150.516	104.157	-15.128	1.00	34.65	A16S
ATOM	30205	C5	URI	543	149.792	107.016	-8.092	1.00	83.69	A16S	ATOM	30258	N9	ADE	546	151.960	104.026	-15.146	1.00	41.63	A16S
ATOM	30206	C2'	URI	543	153.616	107.226	-10.430	1.00	38.54	A16S	ATOM	30259	C4	ADE	546	152.754	103.180	-15.877	1.00	41.63	A16S
ATOM	30207	O2'	URI	543	154.409	107.283	-11.600	1.00	38.54	A16S	ATOM	30260	N3	ADE	546	152.371	102.282	-16.800	1.00	41.63	A16S
ATOM	30208	C3'	URI	543	153.982	106.065	-9.518	1.00	38.54	A16S	ATOM	30261	C2	ADE	546	153.427	101.619	-17.271	1.00	41.63	A16S
ATOM	30209	O3'	URI	543	155.349	105.903	-9.084	1.00	38.54	A16S	ATOM	30262	N1	ADE	546	154.719	101.742	-16.942	1.00	41.63	A16S
ATOM	30210	P	URI	544	156.505	105.448	-10.108	1.00	47.10	A16S	ATOM	30263	C6	ADE	546	155.057	102.653	-16.003	1.00	41.63	A16S
ATOM	30211	O1P	URI	544	157.703	105.383	-9.250	1.00	55.20	A16S	ATOM	30264	N6	ADE	546	156.323	102.767	-15.637	1.00	41.63	A16S
ATOM	30212	O2P	URI	544	156.535	106.244	-11.350	1.00	55.20	A16S	ATOM	30265	C5	ADE	546	154.046	103.422	-15.448	1.00	41.63	A16S
ATOM	30213	O5'	URI	544	156.116	103.964	-10.510	1.00	47.10	A16S	ATOM	30266	N7	ADE	546	154.069	104.427	-14.494	1.00	41.63	A16S
ATOM	30214	C5'	URI	544	156.389	103.454	-11.815	1.00	47.10	A16S	ATOM	30267	C8	ADE	546	152.810	104.753	-14.356	1.00	41.63	A16S
ATOM	30215	C4'	URI	544	156.839	102.024	-11.704	1.00	47.10	A16S	ATOM	30268	C2'	ADE	546	149.738	103.979	-16.437	1.00	34.65	A16S
ATOM	30216	O4'	URI	544	158.084	101.995	-11.012	1.00	47.10	A16S	ATOM	30269	O2'	ADE	546	149.041	105.177	-16.739	1.00	34.65	A16S
ATOM	30217	C1'	URI	544	158.184	100.785	-10.323	1.00	47.10	A16S	ATOM	30270	C3'	ADE	546	148.794	102.815	-16.120	1.00	34.65	A16S
ATOM	30218	N1	URI	544	159.115	100.950	-9.205	1.00	55.20	A16S	ATOM	30271	O3'	ADE	546	147.503	103.165	-16.571	1.00	34.65	A16S
ATOM	30219	C6	URI	544	159.123	102.078	-8.438	1.00	55.20	A16S	ATOM	30272	P	CYT	547	146.978	102.672	-17.993	1.00	38.03	A16S
ATOM	30220	C2	URI	544	159.994	99.925	-8.975	1.00	55.20	A16S	ATOM	30273	O1P	CYT	547	147.400	101.262	-18.137	1.00	50.62	A16S
ATOM	30221	O2	URI	544	159.999	98.908	-9.641	1.00	55.20	A16S	ATOM	30274	O2P	CYT	547	147.344	103.676	-19.033	1.00	50.62	A16S
ATOM	30222	N3	URI	544	160.863	100.133	-7.943	1.00	55.20	A16S	ATOM	30275	O5'	CYT	547	145.404	102.677	-17.777	1.00	38.03	A16S
ATOM	30223	C4	URI	544	160.927	101.236	-7.133	1.00	55.20	A16S	ATOM	30276	C5'	CYT	547	144.501	103.167	-18.761	1.00	38.03	A16S
ATOM	30224	O4	URI	544	161.726	101.257	-6.199	1.00	55.20	A16S	ATOM	30277	C4'	CYT	547	143.206	103.556	-18.090	1.00	38.03	A16S
ATOM	30225	C5	URI	544	159.976	102.253	-7.438	1.00	55.20	A16S	ATOM	30278	O4'	CYT	547	142.669	102.393	-17.400	1.00	38.03	A16S
ATOM	30226	C2'	URI	544	156.778	100.258	-10.029	1.00	47.10	A16S	ATOM	30279	C1'	CYT	547	142.022	102.806	-16.214	1.00	38.03	A16S
ATOM	30227	O2'	URI	544	156.733	98.873	-10.291	1.00	47.10	A16S	ATOM	30280	N1	CYT	547	142.596	102.093	-15.072	1.00	50.62	A16S
ATOM	30228	C3'	URI	544	155.886	101.148	-10.908	1.00	47.10	A16S	ATOM	30281	C6	CYT	547	143.717	101.329	-15.200	1.00	50.62	A16S

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ATOM  30282  C2  CYT   547     141.970 102.222 -13.838  1.00 50.62      A16S
ATOM  30283  O2  CYT   547     140.970 102.943 -13.753  1.00 50.62      A16S
ATOM  30284  N3  CYT   547     142.469 101.575 -12.768  1.00 50.62      A16S
ATOM  30285  C4  CYT   547     143.558 100.829 -12.896  1.00 50.62      A16S
ATOM  30286  N4  CYT   547     144.007 100.200 -11.813  1.00 50.62      A16S
ATOM  30287  C5  CYT   547     144.233 100.689 -14.144  1.00 50.62      A16S
ATOM  30288  C2' CYT   547     142.181 104.322 -16.095  1.00 38.03      A16S
ATOM  30289  O2' CYT   547     141.020 104.923 -16.601  1.00 38.03      A16S
ATOM  30290  C3' CYT   547     143.382 104.583 -16.986  1.00 38.03      A16S
ATOM  30291  O3' CYT   547     143.296 105.884 -17.537  1.00 38.03      A16S
ATOM  30292  P   URI   548     144.338 107.017 -17.080  1.00 40.89      A16S
ATOM  30293  O1P URI   548     144.101 108.185 -17.968  1.00 52.88      A16S
ATOM  30294  O2P URI   548     145.705 106.423 -16.985  1.00 52.88      A16S
ATOM  30295  O5' URI   548     143.849 107.414 -15.622  1.00 40.89      A16S
ATOM  30296  C5' URI   548     142.593 108.043 -15.440  1.00 40.89      A16S
ATOM  30297  C4' URI   548     142.178 107.961 -14.005  1.00 40.89      A16S
ATOM  30298  O4' URI   548     142.037 106.568 -13.650  1.00 40.89      A16S
ATOM  30299  C1' URI   548     142.278 106.415 -12.261  1.00 40.89      A16S
ATOM  30300  N1  URI   548     143.301 105.383 -12.075  1.00 52.88      A16S
ATOM  30301  C6  URI   548     144.285 105.185 -13.008  1.00 52.88      A16S
ATOM  30302  C2  URI   548     143.245 104.630 -10.926  1.00 52.88      A16S
ATOM  30303  O2  URI   548     142.386 104.780 -10.082  1.00 52.88      A16S
ATOM  30304  N3  URI   548     144.241 103.693 -10.801  1.00 52.88      A16S
ATOM  30305  C4  URI   548     145.266 103.445 -11.696  1.00 52.88      A16S
ATOM  30306  O4  URI   548     146.093 102.572 -11.445  1.00 52.88      A16S
ATOM  30307  C5  URI   548     145.248 104.267 -12.860  1.00 52.88      A16S
ATOM  30308  C2' URI   548     142.706 107.784 -11.729  1.00 40.89      A16S
ATOM  30309  O2' URI   548     141.578 108.455 -11.198  1.00 40.89      A16S
ATOM  30310  C3' URI   548     143.199 108.450 -13.001  1.00 40.89      A16S
ATOM  30311  O3' URI   548     143.172 109.860 -12.885  1.00 40.89      A16S
ATOM  30312  P   GUA   549     144.545 110.660 -12.667  1.00 37.78      A16S
ATOM  30313  O1P GUA   549     144.210 112.067 -12.996  1.00 39.03      A16S
ATOM  30314  O2P GUA   549     145.064 110.316 -11.323  1.00 39.03      A16S
ATOM  30315  O5' GUA   549     145.525 110.052 -13.782  1.00 37.78      A16S
ATOM  30316  C5' GUA   549     146.879 110.517 -13.987  1.00 37.78      A16S
ATOM  30317  C4' GUA   549     147.810 109.329 -14.149  1.00 37.78      A16S
ATOM  30318  O4' GUA   549     147.990 108.741 -12.864  1.00 37.78      A16S
ATOM  30319  C1' GUA   549     147.984 107.357 -12.996  1.00 37.78      A16S
ATOM  30320  N9  GUA   549     147.495 106.765 -11.767  1.00 39.03      A16S
ATOM  30321  C4  GUA   549     148.004 105.646 -11.179  1.00 39.03      A16S
ATOM  30322  N3  GUA   549     149.010 104.890 -11.666  1.00 39.03      A16S
ATOM  30323  C2  GUA   549     149.305 103.895 -10.862  1.00 39.03      A16S
ATOM  30324  N2  GUA   549     150.267 103.037 -11.191  1.00 39.03      A16S
ATOM  30325  N1  GUA   549     148.672 103.670  -9.667  1.00 39.03      A16S
ATOM  30326  C6  GUA   549     147.642 104.449  -9.143  1.00 39.03      A16S
ATOM  30327  O6  GUA   549     147.171 104.186  -8.038  1.00 39.03      A16S
ATOM  30328  C5  GUA   549     147.300 105.497 -10.008  1.00 39.03      A16S
ATOM  30329  N7  GUA   549     146.337 106.484  -9.885  1.00 39.03      A16S
ATOM  30330  C8  GUA   549     146.486 107.213 -10.956  1.00 39.03      A16S
ATOM  30331  C2' GUA   549     147.272 106.961 -14.285  1.00 37.78      A16S
ATOM  30332  O2' GUA   549     147.971 105.923 -14.918  1.00 37.78      A16S
ATOM  30333  C3' GUA   549     147.228 108.267 -15.073  1.00 37.78      A16S
ATOM  30334  O3' GUA   549     147.995 108.005 -16.268  1.00 37.78      A16S
ATOM  30335  P   GUA   550     149.052 109.083 -16.871  1.00 41.33      A16S
ATOM  30336  O1P GUA   550     149.103 110.325 -16.071  1.00 39.28      A16S
ATOM  30337  O2P GUA   550     148.794 109.160 -18.340  1.00 39.28      A16S
ATOM  30338  O5' GUA   550     150.484 108.416 -16.689  1.00 41.33      A16S
ATOM  30339  C5' GUA   550     151.342 108.861 -15.662  1.00 41.33      A16S
ATOM  30340  C4' GUA   550     152.769 108.506 -15.969  1.00 41.33      A16S
ATOM  30341  O4' GUA   550     152.920 107.064 -16.006  1.00 41.33      A16S
ATOM  30342  C1' GUA   550     153.986 106.724 -16.874  1.00 41.33      A16S
ATOM  30343  N9  GUA   550     153.502 105.753 -17.851  1.00 39.28      A16S
ATOM  30344  C4  GUA   550     154.266 104.876 -18.588  1.00 39.28      A16S
ATOM  30345  N3  GUA   550     155.607 104.736 -18.521  1.00 39.28      A16S
ATOM  30346  C2  GUA   550     156.044 103.801 -19.344  1.00 39.28      A16S
ATOM  30347  N2  GUA   550     157.345 103.512 -19.394  1.00 39.28      A16S
ATOM  30348  N1  GUA   550     155.234 103.074 -20.173  1.00 39.28      A16S
ATOM  30349  C6  GUA   550     153.857 103.199 -20.256  1.00 39.28      A16S
ATOM  30350  O6  GUA   550     153.223 102.479 -21.025  1.00 39.28      A16S
ATOM  30351  C5  GUA   550     153.373 104.192 -19.378  1.00 39.28      A16S
ATOM  30352  N7  GUA   550     152.079 104.622 -19.141  1.00 39.28      A16S
ATOM  30353  C8  GUA   550     152.205 105.544 -18.227  1.00 39.28      A16S
ATOM  30354  C2' GUA   550     154.487 108.026 -17.512  1.00 41.33      A16S
ATOM  30355  O2' GUA   550     155.642 108.449 -16.822  1.00 41.33      A16S
ATOM  30356  C3' GUA   550     153.296 108.962 -17.309  1.00 41.33      A16S
ATOM  30357  O3' GUA   550     153.698 110.322 -17.213  1.00 41.33      A16S
ATOM  30358  P   GUA   551     154.326 111.074 -18.500  1.00 41.28      A16S
ATOM  30359  O1P GUA   551     154.748 112.419 -18.044  1.00 40.19      A16S
ATOM  30360  O2P GUA   551     153.463 110.951 -19.706  1.00 40.19      A16S
ATOM  30361  O5' GUA   551     155.627 110.217 -18.799  1.00 41.28      A16S
ATOM  30362  C5' GUA   551     156.197 110.177 -20.089  1.00 41.28      A16S
ATOM  30363  C4' GUA   551     157.097 108.989 -20.193  1.00 41.28      A16S
ATOM  30364  O4' GUA   551     156.298 107.788 -20.063  1.00 41.28      A16S
ATOM  30365  C1' GUA   551     156.884 106.751 -20.831  1.00 41.28      A16S
ATOM  30366  N9  GUA   551     155.871 106.183 -21.720  1.00 40.19      A16S
ATOM  30367  C4  GUA   551     156.055 105.223 -22.687  1.00 40.19      A16S
ATOM  30368  N3  GUA   551     157.218 104.623 -23.002  1.00 40.19      A16S
ATOM  30369  C2  GUA   551     157.075 103.749 -23.985  1.00 40.19      A16S
ATOM  30370  N2  GUA   551     158.130 103.071 -24.426  1.00 40.19      A16S
ATOM  30371  N1  GUA   551     155.888 103.481 -24.606  1.00 40.19      A16S
ATOM  30372  C6  GUA   551     154.676 104.080 -24.298  1.00 40.19      A16S
ATOM  30373  O6  GUA   551     153.661 103.761 -24.924  1.00 40.19      A16S
ATOM  30374  C5  GUA   551     154.812 105.022 -23.246  1.00 40.19      A16S
ATOM  30375  N7  GUA   551     153.868 105.827 -22.639  1.00 40.19      A16S
ATOM  30376  C8  GUA   551     154.541 106.498 -21.744  1.00 40.19      A16S
ATOM  30377  C2' GUA   551     158.127 107.345 -21.501  1.00 41.28      A16S
ATOM  30378  O2' GUA   551     159.218 107.114 -20.636  1.00 41.28      A16S
ATOM  30379  C3' GUA   551     157.783 108.829 -21.526  1.00 41.28      A16S
ATOM  30380  O3' GUA   551     158.936 109.673 -21.562  1.00 41.28      A16S
ATOM  30381  P   CYT   552     159.235 110.566 -22.873  1.00 36.60      A16S
ATOM  30382  O1P CYT   552     160.254 111.603 -22.577  1.00 42.11      A16S
ATOM  30383  O2P CYT   552     157.940 110.967 -23.468  1.00 42.11      A16S
ATOM  30384  O5' CYT   552     159.903 109.527 -23.866  1.00 36.60      A16S
ATOM  30385  C5' CYT   552     161.194 109.004 -23.617  1.00 36.60      A16S
ATOM  30386  C4' CYT   552     161.557 108.042 -24.706  1.00 36.60      A16S
ATOM  30387  O4' CYT   552     160.748 106.851 -24.585  1.00 36.60      A16S
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ATOM	30388	C1'	CYT	552	160.498	106.325	-25.874	1.00	36.60	A16S	ATOM	30441	O2'	URI	554	172.936	111.558	-24.864	1.00	35.54	A16S
ATOM	30389	N1	CYT	552	159.051	106.230	-26.070	1.00	42.11	A16S	ATOM	30442	C3'	URI	554	171.112	110.024	-25.393	1.00	35.54	A16S
ATOM	30390	C6	CYT	552	158.188	107.013	-25.357	1.00	42.11	A16S	ATOM	30443	O3'	URI	554	172.063	109.009	-25.157	1.00	35.54	A16S
ATOM	30391	C2	CYT	552	158.566	105.323	-27.012	1.00	42.11	A16S	ATOM	30444	P	ADE	555	171.570	107.512	-24.850	1.00	40.57	A16S
ATOM	30392	O2	CYT	552	159.378	104.623	-27.637	1.00	42.11	A16S	ATOM	30445	O1P	ADE	555	172.779	106.630	-24.994	1.00	51.91	A16S
ATOM	30393	N3	CYT	552	157.229	105.231	-27.218	1.00	42.11	A16S	ATOM	30446	O2P	ADE	555	170.327	107.204	-25.623	1.00	51.91	A16S
ATOM	30394	C4	CYT	552	156.397	106.003	-26.523	1.00	42.11	A16S	ATOM	30447	O5'	ADE	555	171.181	107.500	-23.308	1.00	40.57	A16S
ATOM	30395	N4	CYT	552	155.104	105.889	-26.762	1.00	42.11	A16S	ATOM	30448	C5'	ADE	555	169.911	107.936	-22.863	1.00	40.57	A16S
ATOM	30396	C5	CYT	552	156.864	106.932	-25.549	1.00	42.11	A16S	ATOM	30449	C4'	ADE	555	169.737	107.571	-21.418	1.00	40.57	A16S
ATOM	30397	C2'	CYT	552	161.168	107.249	-26.886	1.00	36.60	A16S	ATOM	30450	O4'	ADE	555	169.045	108.611	-20.719	1.00	40.57	A16S
ATOM	30398	O2'	CYT	552	162.440	106.724	-27.165	1.00	36.60	A16S	ATOM	30451	C1'	ADE	555	168.523	108.082	-19.531	1.00	40.57	A16S
ATOM	30399	C3'	CYT	552	161.267	108.545	-26.104	1.00	36.60	A16S	ATOM	30452	N9	ADE	555	167.266	108.767	-19.259	1.00	51.91	A16S
ATOM	30400	O3'	CYT	552	162.385	109.279	-26.551	1.00	36.60	A16S	ATOM	30453	C4	ADE	555	167.172	109.899	-18.490	1.00	51.91	A16S
ATOM	30401	P	GUA	553	162.181	110.687	-27.288	1.00	39.40	A16S	ATOM	30454	N3	ADE	555	168.163	110.509	-17.825	1.00	51.91	A16S
ATOM	30402	O1P	GUA	553	161.842	111.655	-26.217	1.00	45.11	A16S	ATOM	30455	C2	ADE	555	167.720	111.604	-17.230	1.00	51.91	A16S
ATOM	30403	O2P	GUA	553	161.241	110.484	-28.427	1.00	45.11	A16S	ATOM	30456	N1	ADE	555	166.498	112.126	-17.232	1.00	51.91	A16S
ATOM	30404	O5'	GUA	553	163.634	111.023	-27.876	1.00	39.40	A16S	ATOM	30457	C6	ADE	555	165.529	111.498	-17.915	1.00	51.91	A16S
ATOM	30405	C5'	GUA	553	164.113	110.368	-29.054	1.00	39.40	A16S	ATOM	30458	N6	ADE	555	164.323	112.047	-17.934	1.00	51.91	A16S
ATOM	30406	C4'	GUA	553	165.342	111.057	-29.591	1.00	39.40	A16S	ATOM	30459	C5	ADE	555	165.864	110.307	-18.574	1.00	51.91	A16S
ATOM	30407	O4'	GUA	553	165.045	112.450	-29.826	1.00	39.40	A16S	ATOM	30460	N7	ADE	555	165.126	109.415	-19.336	1.00	51.91	A16S
ATOM	30408	C1'	GUA	553	166.146	113.247	-29.427	1.00	39.40	A16S	ATOM	30461	C8	ADE	555	166.005	108.515	-19.708	1.00	51.91	A16S
ATOM	30409	N9	GUA	553	165.695	114.152	-28.372	1.00	45.11	A16S	ATOM	30462	C2'	ADE	555	168.548	106.552	-19.640	1.00	40.57	A16S
ATOM	30410	C4	GUA	553	166.475	114.943	-27.560	1.00	45.11	A16S	ATOM	30463	O2'	ADE	555	169.511	106.065	-18.729	1.00	40.57	A16S
ATOM	30411	N3	GUA	553	167.819	115.002	-27.562	1.00	45.11	A16S	ATOM	30464	C3'	ADE	555	168.958	106.317	-21.099	1.00	40.57	A16S
ATOM	30412	C2	GUA	553	168.274	115.857	-26.658	1.00	45.11	A16S	ATOM	30465	O3'	ADE	555	169.853	105.217	-21.164	1.00	40.57	A16S
ATOM	30413	N2	GUA	553	169.588	116.015	-26.492	1.00	45.11	A16S	ATOM	30466	P	ADE	556	169.733	104.126	-22.344	1.00	37.91	A16S
ATOM	30414	N1	GUA	553	167.477	116.610	-25.845	1.00	45.11	A16S	ATOM	30467	O1P	ADE	556	170.994	103.346	-22.258	1.00	46.93	A16S
ATOM	30415	C6	GUA	553	166.094	116.570	-25.834	1.00	45.11	A16S	ATOM	30468	O2P	ADE	556	169.325	104.725	-23.667	1.00	46.93	A16S
ATOM	30416	O6	GUA	553	165.471	117.300	-25.068	1.00	45.11	A16S	ATOM	30469	O5'	ADE	556	168.596	103.151	-21.824	1.00	37.91	A16S
ATOM	30417	C5	GUA	553	165.591	115.641	-26.772	1.00	45.11	A16S	ATOM	30470	C5'	ADE	556	168.830	101.765	-21.697	1.00	37.91	A16S
ATOM	30418	N7	GUA	553	164.286	115.282	-27.061	1.00	45.11	A16S	ATOM	30471	C4'	ADE	556	167.536	101.039	-21.876	1.00	37.91	A16S
ATOM	30419	C8	GUA	553	164.396	114.397	-28.012	1.00	45.11	A16S	ATOM	30472	O4'	ADE	556	166.692	101.192	-20.701	1.00	37.91	A16S
ATOM	30420	C2'	GUA	553	167.287	112.309	-29.026	1.00	39.40	A16S	ATOM	30473	C1'	ADE	556	165.358	101.435	-21.101	1.00	37.91	A16S
ATOM	30421	O2'	GUA	553	168.131	112.092	-30.129	1.00	39.40	A16S	ATOM	30474	N9	ADE	556	164.958	102.724	-20.542	1.00	46.93	A16S
ATOM	30422	C3'	GUA	553	166.547	111.034	-28.668	1.00	39.40	A16S	ATOM	30475	C4	ADE	556	163.710	103.081	-20.100	1.00	46.93	A16S
ATOM	30423	O3'	GUA	553	167.365	109.927	-29.014	1.00	39.40	A16S	ATOM	30476	N3	ADE	556	162.585	102.358	-20.170	1.00	46.93	A16S
ATOM	30424	P	URI	554	167.650	108.787	-27.928	1.00	35.54	A16S	ATOM	30477	C2	ADE	556	161.585	103.000	-19.595	1.00	46.93	A16S
ATOM	30425	O1P	URI	554	168.058	107.568	-28.664	1.00	49.26	A16S	ATOM	30478	N1	ADE	556	161.579	104.187	-18.988	1.00	46.93	A16S
ATOM	30426	O2P	URI	554	166.463	108.748	-27.023	1.00	49.26	A16S	ATOM	30479	C6	ADE	556	162.729	104.886	-18.924	1.00	46.93	A16S
ATOM	30427	O5'	URI	554	168.895	109.345	-27.101	1.00	35.54	A16S	ATOM	30480	N6	ADE	556	162.736	106.058	-18.280	1.00	46.93	A16S
ATOM	30428	C5'	URI	554	170.175	109.503	-27.714	1.00	35.54	A16S	ATOM	30481	C5	ADE	556	163.858	104.327	-19.525	1.00	46.93	A16S
ATOM	30429	C4'	URI	554	171.063	110.375	-26.864	1.00	35.54	A16S	ATOM	30482	N7	ADE	556	165.160	104.779	-19.661	1.00	46.93	A16S
ATOM	30430	O4'	URI	554	170.579	111.743	-26.893	1.00	35.54	A16S	ATOM	30483	C8	ADE	556	165.766	103.800	-20.281	1.00	46.93	A16S
ATOM	30431	C1'	URI	554	170.833	112.361	-25.643	1.00	35.54	A16S	ATOM	30484	C2'	ADE	556	165.300	101.280	-22.624	1.00	37.91	A16S
ATOM	30432	N1	URI	554	169.554	112.802	-25.078	1.00	49.26	A16S	ATOM	30485	O2'	ADE	556	164.975	99.929	-22.885	1.00	37.91	A16S
ATOM	30433	C6	URI	554	168.364	112.303	-25.528	1.00	49.26	A16S	ATOM	30486	C3'	ADE	556	166.736	101.610	-23.024	1.00	37.91	A16S
ATOM	30434	C2	URI	554	169.597	113.750	-24.091	1.00	49.26	A16S	ATOM	30487	O3'	ADE	556	167.169	100.943	-24.196	1.00	37.91	A16S
ATOM	30435	O2	URI	554	170.642	114.183	-23.644	1.00	49.26	A16S	ATOM	30488	P	ADE	557	167.260	101.739	-25.585	1.00	41.87	A16S
ATOM	30436	N3	URI	554	168.377	114.176	-23.642	1.00	49.26	A16S	ATOM	30489	O1P	ADE	557	167.948	100.829	-26.536	1.00	48.20	A16S
ATOM	30437	C4	URI	554	167.147	113.750	-24.074	1.00	49.26	A16S	ATOM	30490	O2P	ADE	557	167.783	103.143	-25.383	1.00	48.20	A16S
ATOM	30438	O4	URI	554	166.138	114.350	-23.703	1.00	49.26	A16S	ATOM	30491	O5'	ADE	557	165.747	101.765	-26.063	1.00	41.87	A16S
ATOM	30439	C5	URI	554	167.192	112.730	-25.073	1.00	49.26	A16S	ATOM	30492	C5'	ADE	557	165.019	100.553	-26.200	1.00	41.87	A16S
ATOM	30440	C2'	URI	554	171.551	111.340	-24.764	1.00	35.54	A16S	ATOM	30493	C4'	ADE	557	163.555	100.853	-26.322	1.00	41.87	A16S

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ATOM  30494  O4' ADE  557     163.062 101.356 -25.065  1.00 41.87      A16S
ATOM  30495  C1' ADE  557     162.164 102.411 -25.297  1.00 41.87      A16S
ATOM  30496  N9  ADE  557     162.690 103.588 -24.618  1.00 48.20      A16S
ATOM  30497  C4  ADE  557     162.050 104.267 -23.615  1.00 48.20      A16S
ATOM  30498  N3  ADE  557     160.840 103.997 -23.096  1.00 48.20      A16S
ATOM  30499  C2  ADE  557     160.551 104.856 -22.127  1.00 48.20      A16S
ATOM  30500  N1  ADE  557     161.278 105.871 -21.653  1.00 48.20      A16S
ATOM  30501  C6  ADE  557     162.486 106.109 -22.191  1.00 48.20      A16S
ATOM  30502  N6  ADE  557     163.203 107.112 -21.706  1.00 48.20      A16S
ATOM  30503  C5  ADE  557     162.911 105.276 -23.230  1.00 48.20      A16S
ATOM  30504  N7  ADE  557     164.072 105.242 -23.989  1.00 48.20      A16S
ATOM  30505  C8  ADE  557     163.886 104.227 -24.799  1.00 48.20      A16S
ATOM  30506  C2' ADE  557     161.968 102.545 -26.807  1.00 41.87      A16S
ATOM  30507  O2' ADE  557     160.807 101.827 -27.188  1.00 41.87      A16S
ATOM  30508  C3' ADE  557     163.252 101.924 -27.346  1.00 41.87      A16S
ATOM  30509  O3' ADE  557     163.016 101.258 -28.581  1.00 41.87      A16S
ATOM  30510  P   GUA  558     163.918 101.583 -29.868  1.00 37.23      A16S
ATOM  30511  O1P GUA  558     163.492 100.594 -30.889  1.00 45.49      A16S
ATOM  30512  O2P GUA  558     165.345 101.691 -29.493  1.00 45.49      A16S
ATOM  30513  O5' GUA  558     163.389 102.994 -30.346  1.00 37.23      A16S
ATOM  30514  C5' GUA  558     162.014 103.167 -30.566  1.00 37.23      A16S
ATOM  30515  C4' GUA  558     161.731 103.264 -32.032  1.00 37.23      A16S
ATOM  30516  O4' GUA  558     160.334 103.472 -32.217  1.00 37.23      A16S
ATOM  30517  C1' GUA  558     160.106 104.656 -32.922  1.00 37.23      A16S
ATOM  30518  N9  GUA  558     159.011 105.325 -32.237  1.00 45.49      A16S
ATOM  30519  C4  GUA  558     157.696 105.130 -32.543  1.00 45.49      A16S
ATOM  30520  N3  GUA  558     157.233 104.360 -33.541  1.00 45.49      A16S
ATOM  30521  C2  GUA  558     155.920 104.323 -33.571  1.00 45.49      A16S
ATOM  30522  N2  GUA  558     155.303 103.596 -34.493  1.00 45.49      A16S
ATOM  30523  N1  GUA  558     155.111 104.992 -32.702  1.00 45.49      A16S
ATOM  30524  C6  GUA  558     155.550 105.800 -31.668  1.00 45.49      A16S
ATOM  30525  O6  GUA  558     154.722 106.370 -30.948  1.00 45.49      A16S
ATOM  30526  C5  GUA  558     156.991 105.844 -31.612  1.00 45.49      A16S
ATOM  30527  N7  GUA  558     157.857 106.507 -30.745  1.00 45.49      A16S
ATOM  30528  C8  GUA  558     159.046 106.177 -31.167  1.00 45.49      A16S
ATOM  30529  C2' GUA  558     161.432 105.346 -33.271  1.00 37.23      A16S
ATOM  30530  O2' GUA  558     161.559 105.604 -34.643  1.00 37.23      A16S
ATOM  30531  C3' GUA  558     162.472 104.407 -32.660  1.00 37.23      A16S
ATOM  30532  O3' GUA  558     163.540 103.847 -33.444  1.00 37.23      A16S
ATOM  30533  P   GUA  559     163.267 102.953 -34.787  1.00 34.36      A16S
ATOM  30534  O1P GUA  559     164.572 102.299 -34.978  1.00 47.15      A16S
ATOM  30535  O2P GUA  559     162.699 103.759 -35.900  1.00 47.15      A16S
ATOM  30536  O5' GUA  559     162.227 101.782 -34.437  1.00 34.36      A16S
ATOM  30537  C5' GUA  559     162.622 100.384 -34.462  1.00 34.36      A16S
ATOM  30538  C4' GUA  559     161.802  99.569 -35.472  1.00 34.36      A16S
ATOM  30539  O4' GUA  559     160.401  99.655 -35.191  1.00 34.36      A16S
ATOM  30540  C1' GUA  559     159.690  99.375 -36.371  1.00 34.36      A16S
ATOM  30541  N9  GUA  559     158.372  99.991 -36.313  1.00 47.15      A16S
ATOM  30542  C4  GUA  559     157.180  99.426 -36.687  1.00 47.15      A16S
ATOM  30543  N3  GUA  559     157.004  98.176 -37.142  1.00 47.15      A16S
ATOM  30544  C2  GUA  559     155.735  97.937 -37.445  1.00 47.15      A16S
ATOM  30545  N2  GUA  559     155.370  96.731 -37.890  1.00 47.15      A16S
ATOM  30546  N1  GUA  559     154.728  98.857 -37.333  1.00 47.15      A16S
ATOM  30547  C6  GUA  559     154.892 100.155 -36.878  1.00 47.15      A16S
ATOM  30548  O6  GUA  559     153.921 100.932 -36.850  1.00 47.15      A16S
ATOM  30549  C5  GUA  559     156.240 100.411 -36.517  1.00 47.15      A16S
ATOM  30550  N7  GUA  559     156.821 101.556 -36.005  1.00 47.15      A16S
ATOM  30551  C8  GUA  559     158.084 101.259 -35.900  1.00 47.15      A16S
ATOM  30552  C2' GUA  559     160.557  99.824 -37.548  1.00 34.36      A16S
ATOM  30553  O2' GUA  559     160.521  98.881 -38.597  1.00 34.36      A16S
ATOM  30554  C3' GUA  559     161.955  99.950 -36.936  1.00 34.36      A16S
ATOM  30555  O3' GUA  559     162.648  98.930 -37.673  1.00 34.36      A16S
ATOM  30556  P   GUA  560     164.141  98.477 -37.302  1.00 41.79      A16S
ATOM  30557  O1P GUA  560     164.403  97.392 -38.267  1.00 30.44      A16S
ATOM  30558  O2P GUA  560     164.245  98.202 -35.871  1.00 30.44      A16S
ATOM  30559  O5' GUA  560     165.062  99.702 -37.715  1.00 41.79      A16S
ATOM  30560  C5' GUA  560     164.486 100.845 -38.315  1.00 41.79      A16S
ATOM  30561  C4' GUA  560     165.107 101.125 -39.655  1.00 41.79      A16S
ATOM  30562  O4' GUA  560     165.697  99.939 -40.225  1.00 41.79      A16S
ATOM  30563  C1' GUA  560     165.588  99.995 -41.633  1.00 41.79      A16S
ATOM  30564  N9  GUA  560     164.928  98.783 -42.066  1.00 30.44      A16S
ATOM  30565  C4  GUA  560     164.416  98.539 -43.318  1.00 30.44      A16S
ATOM  30566  N3  GUA  560     164.420  99.397 -44.355  1.00 30.44      A16S
ATOM  30567  C2  GUA  560     163.866  98.870 -45.427  1.00 30.44      A16S
ATOM  30568  N2  GUA  560     163.770  99.583 -46.553  1.00 30.44      A16S
ATOM  30569  N1  GUA  560     163.364  97.609 -45.473  1.00 30.44      A16S
ATOM  30570  C6  GUA  560     163.356  96.712 -44.419  1.00 30.44      A16S
ATOM  30571  O6  GUA  560     162.894  95.585 -44.579  1.00 30.44      A16S
ATOM  30572  C5  GUA  560     163.925  97.262 -43.267  1.00 30.44      A16S
ATOM  30573  N7  GUA  560     164.100  96.717 -42.000  1.00 30.44      A16S
ATOM  30574  C8  GUA  560     164.699  97.660 -41.321  1.00 30.44      A16S
ATOM  30575  C2' GUA  560     164.751 101.217 -41.998  1.00 41.79      A16S
ATOM  30576  O2' GUA  560     165.548 102.264 -42.500  1.00 41.79      A16S
ATOM  30577  C3' GUA  560     164.061 101.499 -40.674  1.00 41.79      A16S
ATOM  30578  O3' GUA  560     163.633 102.826 -40.488  1.00 41.79      A16S
ATOM  30579  P   CYT  561     162.067 103.122 -40.378  1.00 41.02      A16S
ATOM  30580  O1P CYT  561     162.017 104.472 -39.737  1.00 21.75      A16S
ATOM  30581  O2P CYT  561     161.372 101.962 -39.725  1.00 21.75      A16S
ATOM  30582  O5' CYT  561     161.628 103.211 -41.904  1.00 41.02      A16S
ATOM  30583  C5' CYT  561     162.115 104.257 -42.717  1.00 41.02      A16S
ATOM  30584  C4' CYT  561     161.766 104.007 -44.158  1.00 41.02      A16S
ATOM  30585  O4' CYT  561     162.382 102.771 -44.589  1.00 41.02      A16S
ATOM  30586  C1' CYT  561     161.594 102.182 -45.599  1.00 41.02      A16S
ATOM  30587  N1  CYT  561     161.164 100.878 -45.117  1.00 21.75      A16S
ATOM  30588  C6  CYT  561     161.340 100.513 -43.816  1.00 21.75      A16S
ATOM  30589  C2  CYT  561     160.592  99.998 -46.023  1.00 21.75      A16S
ATOM  30590  O2  CYT  561     160.410 100.385 -47.177  1.00 21.75      A16S
ATOM  30591  N3  CYT  561     160.247  98.757 -45.624  1.00 21.75      A16S
ATOM  30592  C4  CYT  561     160.450  98.394 -44.363  1.00 21.75      A16S
ATOM  30593  N4  CYT  561     160.124  97.158 -44.017  1.00 21.75      A16S
ATOM  30594  C5  CYT  561     161.005  99.287 -43.400  1.00 21.75      A16S
ATOM  30595  C2' CYT  561     160.429 103.125 -45.855  1.00 41.02      A16S
ATOM  30596  O2' CYT  561     160.821 104.078 -46.821  1.00 41.02      A16S
ATOM  30597  C3' CYT  561     160.305 103.788 -44.498  1.00 41.02      A16S
ATOM  30598  O3' CYT  561     159.610 105.017 -44.626  1.00 41.02      A16S
ATOM  30599  P   GUA  562     158.047 105.072 -44.294  1.00 50.88      A16S
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ATOM	30600	O1P	GUA	562	157.713	106.518	-44.269	1.00	42.61	A16S	ATOM	30653	C2	GUA	564	149.941	96.920	-43.882	1.00	39.79	A16S
ATOM	30601	O2P	GUA	562	157.803	104.227	-43.095	1.00	42.61	A16S	ATOM	30654	N2	GUA	564	149.961	95.742	-43.225	1.00	39.79	A16S
ATOM	30602	O5'	GUA	562	157.325	104.362	-45.527	1.00	50.88	A16S	ATOM	30655	N1	GUA	564	150.374	98.022	-43.191	1.00	39.79	A16S
ATOM	30603	C5'	GUA	562	157.420	104.909	-46.828	1.00	50.88	A16S	ATOM	30656	C6	GUA	564	150.405	99.317	-43.691	1.00	39.79	A16S
ATOM	30604	C4'	GUA	562	157.168	103.846	-47.873	1.00	50.88	A16S	ATOM	30657	O6	GUA	564	150.803	100.239	-42.986	1.00	39.79	A16S
ATOM	30605	O4'	GUA	562	157.825	102.620	-47.470	1.00	50.88	A16S	ATOM	30658	C5	GUA	564	149.941	99.375	-45.008	1.00	39.79	A16S
ATOM	30606	C1'	GUA	562	157.179	101.528	-48.088	1.00	50.88	A16S	ATOM	30659	N7	GUA	564	149.796	100.462	-45.863	1.00	39.79	A16S
ATOM	30607	N9	GUA	562	156.961	100.483	-47.098	1.00	42.61	A16S	ATOM	30660	C8	GUA	564	149.324	99.941	-46.965	1.00	39.79	A16S
ATOM	30608	C4	GUA	562	156.487	99.231	-47.353	1.00	42.61	A16S	ATOM	30661	C2'	GUA	564	147.152	97.326	-47.650	1.00	51.50	A16S
ATOM	30609	N3	GUA	562	156.114	98.767	-48.558	1.00	42.61	A16S	ATOM	30662	O2'	GUA	564	146.918	96.011	-48.109	1.00	51.50	A16S
ATOM	30610	C2	GUA	562	155.703	97.513	-48.499	1.00	42.61	A16S	ATOM	30663	C3'	GUA	564	146.448	98.381	-48.489	1.00	51.50	A16S
ATOM	30611	N2	GUA	562	155.281	96.900	-49.614	1.00	42.61	A16S	ATOM	30664	O3'	GUA	564	145.172	97.894	-48.894	1.00	51.50	A16S
ATOM	30612	N1	GUA	562	155.670	96.769	-47.345	1.00	42.61	A16S	ATOM	30665	P	URI	565	143.890	98.096	-47.943	1.00	51.20	A16S
ATOM	30613	C6	GUA	562	156.044	97.228	-46.086	1.00	42.61	A16S	ATOM	30666	O1P	URI	565	142.769	98.294	-48.887	1.00	41.98	A16S
ATOM	30614	O6	GUA	562	155.961	96.471	-45.096	1.00	42.61	A16S	ATOM	30667	O2P	URI	565	144.168	99.123	-46.893	1.00	41.98	A16S
ATOM	30615	C5	GUA	562	156.486	98.581	-46.139	1.00	42.61	A16S	ATOM	30668	O5'	URI	565	143.715	96.686	-47.222	1.00	51.20	A16S
ATOM	30616	N7	GUA	562	156.938	99.420	-45.132	1.00	42.61	A16S	ATOM	30669	C5'	URI	565	143.506	95.511	-47.974	1.00	51.20	A16S
ATOM	30617	C8	GUA	562	157.204	100.539	-45.748	1.00	42.61	A16S	ATOM	30670	C4'	URI	565	143.394	94.317	-47.062	1.00	51.20	A16S
ATOM	30618	C2'	GUA	562	155.911	102.054	-48.763	1.00	50.88	A16S	ATOM	30671	O4'	URI	565	144.702	93.907	-46.592	1.00	51.20	A16S
ATOM	30619	O2'	GUA	562	156.159	102.208	-50.145	1.00	50.88	A16S	ATOM	30672	C1'	URI	565	144.578	93.318	-45.306	1.00	51.20	A16S
ATOM	30620	C3'	GUA	562	155.729	103.404	-48.082	1.00	50.88	A16S	ATOM	30673	N1	URI	565	145.340	94.124	-44.346	1.00	41.98	A16S
ATOM	30621	O3'	GUA	562	155.058	104.305	-48.963	1.00	50.88	A16S	ATOM	30674	C6	URI	565	145.793	95.385	-44.649	1.00	41.98	A16S
ATOM	30622	P	URI	563	153.454	104.429	-48.907	1.00	45.70	A16S	ATOM	30675	C2	URI	565	145.572	93.564	-43.121	1.00	41.98	A16S
ATOM	30623	O1P	URI	563	153.061	105.519	-49.845	1.00	51.02	A16S	ATOM	30676	O2	URI	565	145.200	92.448	-42.846	1.00	41.98	A16S
ATOM	30624	O2P	URI	563	153.026	104.495	-47.487	1.00	51.02	A16S	ATOM	30677	N3	URI	565	146.263	94.353	-42.237	1.00	41.98	A16S
ATOM	30625	O5'	URI	563	152.950	103.027	-49.472	1.00	45.70	A16S	ATOM	30678	C4	URI	565	146.743	95.626	-42.467	1.00	41.98	A16S
ATOM	30626	C5'	URI	563	152.834	102.782	-50.871	1.00	45.70	A16S	ATOM	30679	O4	URI	565	147.331	96.226	-41.566	1.00	41.98	A16S
ATOM	30627	C4'	URI	563	152.329	101.375	-51.103	1.00	45.70	A16S	ATOM	30680	C5	URI	565	146.470	96.135	-43.777	1.00	41.98	A16S
ATOM	30628	O4'	URI	563	153.243	100.440	-50.461	1.00	45.70	A16S	ATOM	30681	C2'	URI	565	143.094	93.341	-44.955	1.00	51.20	A16S
ATOM	30629	C1'	URI	563	152.528	99.308	-49.997	1.00	45.70	A16S	ATOM	30682	O2'	URI	565	142.510	92.124	-45.366	1.00	51.20	A16S
ATOM	30630	N1	URI	563	152.718	99.210	-48.545	1.00	51.02	A16S	ATOM	30683	C3'	URI	565	142.625	94.527	-45.780	1.00	51.20	A16S
ATOM	30631	C6	URI	563	153.222	100.263	-47.828	1.00	51.02	A16S	ATOM	30684	O3'	URI	565	141.233	94.504	-45.990	1.00	51.20	A16S
ATOM	30632	C2	URI	563	152.386	98.019	-47.925	1.00	51.02	A16S	ATOM	30685	P	ADE	566	140.291	95.396	-45.052	1.00	46.73	A16S
ATOM	30633	O2	URI	563	151.924	97.070	-48.527	1.00	51.02	A16S	ATOM	30686	O1P	ADE	566	138.944	95.385	-45.665	1.00	41.52	A16S
ATOM	30634	N3	URI	563	152.620	97.985	-46.574	1.00	51.02	A16S	ATOM	30687	O2P	ADE	566	140.976	96.694	-44.795	1.00	41.52	A16S
ATOM	30635	C4	URI	563	153.142	98.999	-45.799	1.00	51.02	A16S	ATOM	30688	O5'	ADE	566	140.248	94.605	-43.674	1.00	46.73	A16S
ATOM	30636	O4	URI	563	153.379	98.794	-44.610	1.00	51.02	A16S	ATOM	30689	C5'	ADE	566	139.766	93.280	-43.616	1.00	46.73	A16S
ATOM	30637	C5	URI	563	153.440	100.200	-46.512	1.00	51.02	A16S	ATOM	30690	C4'	ADE	566	140.059	92.706	-42.267	1.00	46.73	A16S
ATOM	30638	C2'	URI	563	151.074	99.505	-50.409	1.00	45.70	A16S	ATOM	30691	O4'	ADE	566	141.494	92.657	-42.090	1.00	46.73	A16S
ATOM	30639	O2'	URI	563	150.876	98.898	-51.674	1.00	45.70	A16S	ATOM	30692	C1'	ADE	566	141.821	92.956	-40.743	1.00	46.73	A16S
ATOM	30640	C3'	URI	563	150.990	101.024	-50.473	1.00	45.70	A16S	ATOM	30693	N9	ADE	566	142.626	94.168	-40.744	1.00	41.52	A16S
ATOM	30641	O3'	URI	563	149.898	101.451	-51.277	1.00	45.70	A16S	ATOM	30694	C4	ADE	566	143.418	94.645	-39.729	1.00	41.52	A16S
ATOM	30642	P	GUA	564	148.573	102.038	-50.577	1.00	51.50	A16S	ATOM	30695	N3	ADE	566	143.616	94.100	-38.516	1.00	41.52	A16S
ATOM	30643	O1P	GUA	564	147.657	102.441	-51.675	1.00	39.79	A16S	ATOM	30696	C2	ADE	566	144.452	94.846	-37.799	1.00	41.52	A16S
ATOM	30644	O2P	GUA	564	148.971	103.041	-49.565	1.00	39.79	A16S	ATOM	30697	N1	ADE	566	145.063	95.981	-38.132	1.00	41.52	A16S
ATOM	30645	O5'	GUA	564	147.942	100.795	-49.805	1.00	51.50	A16S	ATOM	30698	C6	ADE	566	144.843	96.494	-39.361	1.00	41.52	A16S
ATOM	30646	C5'	GUA	564	147.334	99.731	-50.520	1.00	51.50	A16S	ATOM	30699	N6	ADE	566	145.458	97.625	-39.711	1.00	41.52	A16S
ATOM	30647	C4'	GUA	564	147.363	98.466	-49.699	1.00	51.50	A16S	ATOM	30700	C5	ADE	566	143.978	95.806	-40.210	1.00	41.52	A16S
ATOM	30648	O4'	GUA	564	148.688	98.335	-49.137	1.00	51.50	A16S	ATOM	30701	N7	ADE	566	143.546	96.060	-41.501	1.00	41.52	A16S
ATOM	30649	C1'	GUA	564	148.616	97.680	-47.892	1.00	51.50	A16S	ATOM	30702	C8	ADE	566	142.749	95.060	-41.769	1.00	41.52	A16S
ATOM	30650	N9	GUA	564	149.141	98.579	-46.875	1.00	39.79	A16S	ATOM	30703	C2'	ADE	566	140.505	93.127	-39.995	1.00	46.73	A16S
ATOM	30651	C4	GUA	564	149.539	98.212	-45.618	1.00	39.79	A16S	ATOM	30704	O2'	ADE	566	140.130	91.878	-39.468	1.00	46.73	A16S
ATOM	30652	N3	GUA	564	149.514	96.963	-45.121	1.00	39.79	A16S	ATOM	30705	C3'	ADE	566	139.590	93.570	-41.119	1.00	46.73	A16S

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ATOM  30706  O3' ADE   566     138.248  93.277 -40.825  1.00 46.73      A16S
ATOM  30707  P   GUA   567     137.280  94.454 -40.342  1.00 46.14      A16S
ATOM  30708  O1P GUA   567     136.048  93.791 -39.829  1.00 42.59      A16S
ATOM  30709  O2P GUA   567     137.189  95.483 -41.420  1.00 42.59      A16S
ATOM  30710  O5' GUA   567     138.018  95.078 -39.083  1.00 46.14      A16S
ATOM  30711  C5' GUA   567     138.075  94.349 -37.873  1.00 46.14      A16S
ATOM  30712  C4' GUA   567     139.012  95.016 -36.909  1.00 46.14      A16S
ATOM  30713  O4' GUA   567     140.321  95.151 -37.519  1.00 46.14      A16S
ATOM  30714  C1' GUA   567     140.959  96.305 -37.009  1.00 46.14      A16S
ATOM  30715  N9  GUA   567     141.238  97.200 -38.123  1.00 42.59      A16S
ATOM  30716  C4  GUA   567     142.051  98.298 -38.088  1.00 42.59      A16S
ATOM  30717  N3  GUA   567     142.738  98.736 -37.016  1.00 42.59      A16S
ATOM  30718  C2  GUA   567     143.443  99.812 -37.290  1.00 42.59      A16S
ATOM  30719  N2  GUA   567     144.187 100.374 -36.333  1.00 42.59      A16S
ATOM  30720  N1  GUA   567     143.475 100.415 -38.521  1.00 42.59      A16S
ATOM  30721  C6  GUA   567     142.781  99.975 -39.644  1.00 42.59      A16S
ATOM  30722  O6  GUA   567     142.893 100.584 -40.721  1.00 42.59      A16S
ATOM  30723  C5  GUA   567     142.015  98.820 -39.358  1.00 42.59      A16S
ATOM  30724  N7  GUA   567     141.193  98.066 -40.175  1.00 42.59      A16S
ATOM  30725  C8  GUA   567     140.753  97.115 -39.399  1.00 42.59      A16S
ATOM  30726  C2' GUA   567     139.999  96.923 -35.997  1.00 46.14      A16S
ATOM  30727  O2' GUA   567     140.259  96.359 -34.733  1.00 46.14      A16S
ATOM  30728  C3' GUA   567     138.668  96.440 -36.542  1.00 46.14      A16S
ATOM  30729  O3' GUA   567     137.666  96.463 -35.549  1.00 46.14      A16S
ATOM  30730  P   GUA   568     136.850  97.813 -35.282  1.00 38.57      A16S
ATOM  30731  O1P GUA   568     135.958  97.473 -34.140  1.00 39.32      A16S
ATOM  30732  O2P GUA   568     136.257  98.298 -36.554  1.00 39.32      A16S
ATOM  30733  O5' GUA   568     137.971  98.846 -34.799  1.00 38.57      A16S
ATOM  30734  C5' GUA   568     138.484  98.792 -33.473  1.00 38.57      A16S
ATOM  30735  C4' GUA   568     139.317 100.015 -33.174  1.00 38.57      A16S
ATOM  30736  O4' GUA   568     140.484 100.008 -34.028  1.00 38.57      A16S
ATOM  30737  C1' GUA   568     140.796 101.322 -34.436  1.00 38.57      A16S
ATOM  30738  N9  GUA   568     140.564 101.378 -35.870  1.00 39.32      A16S
ATOM  30739  C4  GUA   568     141.064 102.286 -36.777  1.00 39.32      A16S
ATOM  30740  N3  GUA   568     141.887 103.326 -36.504  1.00 39.32      A16S
ATOM  30741  C2  GUA   568     142.156 104.045 -37.595  1.00 39.32      A16S
ATOM  30742  N2  GUA   568     142.931 105.141 -37.513  1.00 39.32      A16S
ATOM  30743  N1  GUA   568     141.673 103.744 -38.848  1.00 39.32      A16S
ATOM  30744  C6  GUA   568     140.840 102.670 -39.145  1.00 39.32      A16S
ATOM  30745  O6  GUA   568     140.462 102.485 -40.301  1.00 39.32      A16S
ATOM  30746  C5  GUA   568     140.532 101.912 -37.993  1.00 39.32      A16S
ATOM  30747  N7  GUA   568     139.732 100.788 -37.855  1.00 39.32      A16S
ATOM  30748  C8  GUA   568     139.784 100.508 -36.583  1.00 39.32      A16S
ATOM  30749  C2' GUA   568     139.882 102.242 -33.635  1.00 38.57      A16S
ATOM  30750  O2' GUA   568     140.486 102.510 -32.389  1.00 38.57      A16S
ATOM  30751  C3' GUA   568     138.667 101.354 -33.451  1.00 38.57      A16S
ATOM  30752  O3' GUA   568     137.904 101.779 -32.328  1.00 38.57      A16S
ATOM  30753  P   CYT   569     136.578 102.674 -32.551  1.00 42.50      A16S
ATOM  30754  O1P CYT   569     136.032 102.990 -31.189  1.00 31.72      A16S
ATOM  30755  O2P CYT   569     135.718 101.994 -33.564  1.00 31.72      A16S
ATOM  30756  O5' CYT   569     137.116 104.006 -33.231  1.00 42.50      A16S
ATOM  30757  C5' CYT   569     137.855 104.935 -32.477  1.00 42.50      A16S
ATOM  30758  C4' CYT   569     138.458 105.969 -33.377  1.00 42.50      A16S
ATOM  30759  O4' CYT   569     139.275 105.303 -34.369  1.00 42.50      A16S
ATOM  30760  C1' CYT   569     139.424 106.159 -35.489  1.00 42.50      A16S
ATOM  30761  N1  CYT   569     138.993 105.459 -36.682  1.00 31.72      A16S
ATOM  30762  C6  CYT   569     138.279 104.301 -36.611  1.00 31.72      A16S
ATOM  30763  C2  CYT   569     139.297 106.025 -37.899  1.00 31.72      A16S
ATOM  30764  O2  CYT   569     139.990 107.037 -37.914  1.00 31.72      A16S
ATOM  30765  N3  CYT   569     138.832 105.462 -39.028  1.00 31.72      A16S
ATOM  30766  C4  CYT   569     138.088 104.360 -38.958  1.00 31.72      A16S
ATOM  30767  N4  CYT   569     137.595 103.870 -40.090  1.00 31.72      A16S
ATOM  30768  C5  CYT   569     137.805 103.722 -37.719  1.00 31.72      A16S
ATOM  30769  C2' CYT   569     138.504 107.354 -35.265  1.00 42.50      A16S
ATOM  30770  O2' CYT   569     139.276 108.437 -34.782  1.00 42.50      A16S
ATOM  30771  C3' CYT   569     137.521 106.775 -34.253  1.00 42.50      A16S
ATOM  30772  O3' CYT   569     136.816 107.784 -33.541  1.00 42.50      A16S
ATOM  30773  P   GUA   570     135.339 108.196 -34.026  1.00 50.26      A16S
ATOM  30774  O1P GUA   570     134.759 109.148 -33.045  1.00 41.35      A16S
ATOM  30775  O2P GUA   570     134.611 106.952 -34.356  1.00 41.35      A16S
ATOM  30776  O5' GUA   570     135.591 108.985 -35.378  1.00 50.26      A16S
ATOM  30777  C5' GUA   570     136.417 110.138 -35.402  1.00 50.26      A16S
ATOM  30778  C4' GUA   570     136.403 110.717 -36.781  1.00 50.26      A16S
ATOM  30779  O4' GUA   570     136.830 109.694 -37.690  1.00 50.26      A16S
ATOM  30780  C1' GUA   570     136.174 109.855 -38.917  1.00 50.26      A16S
ATOM  30781  N9  GUA   570     135.881 108.528 -39.419  1.00 41.35      A16S
ATOM  30782  C4  GUA   570     135.716 108.160 -40.730  1.00 41.35      A16S
ATOM  30783  N3  GUA   570     135.827 108.970 -41.803  1.00 41.35      A16S
ATOM  30784  C2  GUA   570     135.583 108.326 -42.928  1.00 41.35      A16S
ATOM  30785  N2  GUA   570     135.626 108.970 -44.099  1.00 41.35      A16S
ATOM  30786  N1  GUA   570     135.268 107.000 -42.985  1.00 41.35      A16S
ATOM  30787  C6  GUA   570     135.137 106.158 -41.887  1.00 41.35      A16S
ATOM  30788  O6  GUA   570     134.807 104.986 -42.045  1.00 41.35      A16S
ATOM  30789  C5  GUA   570     135.401 106.823 -40.693  1.00 41.35      A16S
ATOM  30790  N7  GUA   570     135.402 106.351 -39.390  1.00 41.35      A16S
ATOM  30791  C8  GUA   570     135.698 107.397 -38.669  1.00 41.35      A16S
ATOM  30792  C2' GUA   570     134.957 110.778 -38.726  1.00 50.26      A16S
ATOM  30793  O2' GUA   570     134.990 111.897 -39.596  1.00 50.26      A16S
ATOM  30794  C3' GUA   570     135.012 111.125 -37.236  1.00 50.26      A16S
ATOM  30795  O3' GUA   570     134.935 112.530 -37.003  1.00 50.26      A16S
ATOM  30796  P   GUA   571     133.658 113.355 -37.477  1.00 43.37      A16S
ATOM  30797  O1P GUA   571     133.393 114.330 -36.388  1.00 52.42      A16S
ATOM  30798  O2P GUA   571     132.612 112.365 -37.869  1.00 52.42      A16S
ATOM  30799  O5' GUA   571     134.140 114.170 -38.755  1.00 43.37      A16S
ATOM  30800  C5' GUA   571     135.130 115.182 -38.627  1.00 43.37      A16S
ATOM  30801  C4' GUA   571     134.859 116.334 -39.573  1.00 43.37      A16S
ATOM  30802  O4' GUA   571     134.982 115.912 -40.955  1.00 43.37      A16S
ATOM  30803  C1' GUA   571     134.224 116.782 -41.775  1.00 43.37      A16S
ATOM  30804  N9  GUA   571     133.393 115.982 -42.667  1.00 52.42      A16S
ATOM  30805  C4  GUA   571     132.558 116.452 -43.655  1.00 52.42      A16S
ATOM  30806  N3  GUA   571     132.335 117.747 -43.960  1.00 52.42      A16S
ATOM  30807  C2  GUA   571     131.470 117.880 -44.953  1.00 52.42      A16S
ATOM  30808  N2  GUA   571     131.112 119.100 -45.370  1.00 52.42      A16S
ATOM  30809  N1  GUA   571     130.886 116.829 -45.602  1.00 52.42      A16S
ATOM  30810  C6  GUA   571     131.106 115.490 -45.310  1.00 52.42      A16S
ATOM  30811  O6  GUA   571     130.528 114.620 -45.961  1.00 52.42      A16S
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ATOM	30812	C5	GUA	571	132.019	115.330	-44.241	1.00	52.42	A16S	ATOM	30865	O4'	URI	574	119.066	118.795	-42.024	1.00	56.90	A16S
ATOM	30813	N7	GUA	571	132.497	114.179	-43.633	1.00	52.42	A16S	ATOM	30866	C1'	URI	574	118.498	117.530	-42.333	1.00	56.90	A16S
ATOM	30814	C8	GUA	571	133.302	114.614	-42.703	1.00	52.42	A16S	ATOM	30867	N1	URI	574	119.498	116.487	-42.083	1.00	72.59	A16S
ATOM	30815	C2'	GUA	571	133.452	117.727	-40.852	1.00	43.37	A16S	ATOM	30868	C6	URI	574	120.593	116.711	-41.295	1.00	72.59	A16S
ATOM	30816	O2'	GUA	571	134.161	118.942	-40.778	1.00	43.37	A16S	ATOM	30869	C2	URI	574	119.278	115.257	-42.663	1.00	72.59	A16S
ATOM	30817	C3'	GUA	571	133.484	116.970	-39.528	1.00	43.37	A16S	ATOM	30870	O2	URI	574	118.329	115.026	-43.385	1.00	72.59	A16S
ATOM	30818	O3'	GUA	571	133.415	117.869	-38.430	1.00	43.37	A16S	ATOM	30871	N3	URI	574	120.207	114.305	-42.372	1.00	72.59	A16S
ATOM	30819	P	CYT	572	131.988	118.332	-37.860	1.00	51.72	A16S	ATOM	30872	C4	URI	574	121.307	114.452	-41.586	1.00	72.59	A16S
ATOM	30820	O1P	CYT	572	132.280	119.414	-36.875	1.00	39.77	A16S	ATOM	30873	O4	URI	574	122.017	113.474	-41.375	1.00	72.59	A16S
ATOM	30821	O2P	CYT	572	131.200	117.149	-37.443	1.00	39.77	A16S	ATOM	30874	C5	URI	574	121.484	115.762	-41.033	1.00	72.59	A16S
ATOM	30822	O5'	CYT	572	131.261	118.967	-39.124	1.00	51.72	A16S	ATOM	30875	C2'	URI	574	117.289	117.337	-41.420	1.00	56.90	A16S
ATOM	30823	C5'	CYT	572	131.279	120.370	-39.329	1.00	51.72	A16S	ATOM	30876	O2'	URI	574	116.112	117.717	-42.103	1.00	56.90	A16S
ATOM	30824	C4'	CYT	572	130.188	120.779	-40.288	1.00	51.72	A16S	ATOM	30877	C3'	URI	574	117.635	118.272	-40.271	1.00	56.90	A16S
ATOM	30825	O4'	CYT	572	130.417	120.166	-41.580	1.00	51.72	A16S	ATOM	30878	O3'	URI	574	116.463	118.647	-39.572	1.00	56.90	A16S
ATOM	30826	C1'	CYT	572	129.185	120.059	-42.262	1.00	51.72	A16S	ATOM	30879	P	GUA	575	115.988	117.767	-38.321	1.00	62.36	A16S
ATOM	30827	N1	CYT	572	128.995	118.674	-42.672	1.00	39.77	A16S	ATOM	30880	O1P	GUA	575	114.870	118.497	-37.677	1.00	56.23	A16S
ATOM	30828	C6	CYT	572	129.544	117.643	-41.971	1.00	39.77	A16S	ATOM	30881	O2P	GUA	575	117.202	117.435	-37.526	1.00	56.23	A16S
ATOM	30829	C2	CYT	572	128.224	118.430	-43.796	1.00	39.77	A16S	ATOM	30882	O5'	GUA	575	115.423	116.427	-38.977	1.00	62.36	A16S
ATOM	30830	O2	CYT	572	127.767	119.396	-44.412	1.00	39.77	A16S	ATOM	30883	C5'	GUA	575	114.208	116.434	-39.710	1.00	62.36	A16S
ATOM	30831	N3	CYT	572	127.998	117.158	-44.189	1.00	39.77	A16S	ATOM	30884	C4'	GUA	575	113.928	115.064	-40.281	1.00	62.36	A16S
ATOM	30832	C4	CYT	572	128.523	116.152	-43.496	1.00	39.77	A16S	ATOM	30885	O4'	GUA	575	114.985	114.707	-41.207	1.00	62.36	A16S
ATOM	30833	N4	CYT	572	128.265	114.910	-43.905	1.00	39.77	A16S	ATOM	30886	C1'	GUA	575	115.156	113.295	-41.216	1.00	62.36	A16S
ATOM	30834	C5	CYT	572	129.337	116.375	-42.345	1.00	39.77	A16S	ATOM	30887	N9	GUA	575	116.527	112.996	-40.825	1.00	56.23	A16S
ATOM	30835	C2'	CYT	572	128.085	120.513	-41.304	1.00	51.72	A16S	ATOM	30888	C4	GUA	575	117.191	111.809	-41.008	1.00	56.23	A16S
ATOM	30836	O2'	CYT	572	127.793	121.866	-41.575	1.00	51.72	A16S	ATOM	30889	N3	GUA	575	116.713	110.721	-41.645	1.00	56.23	A16S
ATOM	30837	C3'	CYT	572	128.768	120.354	-39.956	1.00	51.72	A16S	ATOM	30890	C2	GUA	575	117.581	109.725	-41.642	1.00	56.23	A16S
ATOM	30838	O3'	CYT	572	128.182	121.239	-39.014	1.00	51.72	A16S	ATOM	30891	N2	GUA	575	117.287	108.574	-42.256	1.00	56.23	A16S
ATOM	30839	P	CYT	573	126.791	120.845	-38.314	1.00	50.23	A16S	ATOM	30892	N1	GUA	575	118.808	109.785	-41.040	1.00	56.23	A16S
ATOM	30840	O1P	CYT	573	126.459	121.928	-37.348	1.00	50.59	A16S	ATOM	30893	C6	GUA	575	119.316	110.886	-40.360	1.00	56.23	A16S
ATOM	30841	O2P	CYT	573	126.893	119.446	-37.832	1.00	50.59	A16S	ATOM	30894	O6	GUA	575	120.430	110.816	-39.809	1.00	56.23	A16S
ATOM	30842	O5'	CYT	573	125.744	120.835	-39.521	1.00	50.23	A16S	ATOM	30895	C5	GUA	575	118.409	111.975	-40.390	1.00	56.23	A16S
ATOM	30843	C5'	CYT	573	125.127	122.037	-39.966	1.00	50.23	A16S	ATOM	30896	N7	GUA	575	118.528	113.258	-39.873	1.00	56.23	A16S
ATOM	30844	C4'	CYT	573	123.962	121.730	-40.881	1.00	50.23	A16S	ATOM	30897	C8	GUA	575	117.392	113.829	-40.163	1.00	56.23	A16S
ATOM	30845	O4'	CYT	573	124.449	121.079	-42.082	1.00	50.23	A16S	ATOM	30898	C2'	GUA	575	114.154	112.716	-40.216	1.00	62.36	A16S
ATOM	30846	C1'	CYT	573	123.446	120.220	-42.597	1.00	50.23	A16S	ATOM	30899	O2'	GUA	575	112.985	112.320	-40.899	1.00	62.36	A16S
ATOM	30847	N1	CYT	573	123.978	118.859	-42.679	1.00	50.59	A16S	ATOM	30900	C3'	GUA	575	113.921	113.908	-39.299	1.00	62.36	A16S
ATOM	30848	C6	CYT	573	125.111	118.499	-42.011	1.00	50.59	A16S	ATOM	30901	O3'	GUA	575	112.669	113.805	-38.640	1.00	62.36	A16S
ATOM	30849	C2	CYT	573	123.279	117.926	-43.427	1.00	50.59	A16S	ATOM	30902	P	GUA	576	112.539	112.898	-37.321	1.00	53.81	A16S
ATOM	30850	O2	CYT	573	122.291	118.299	-44.068	1.00	50.59	A16S	ATOM	30903	O1P	GUA	576	111.155	113.070	-36.817	1.00	61.66	A16S
ATOM	30851	N3	CYT	573	123.690	116.646	-43.444	1.00	50.59	A16S	ATOM	30904	O2P	GUA	576	113.684	113.195	-36.419	1.00	61.66	A16S
ATOM	30852	C4	CYT	573	124.771	116.289	-42.757	1.00	50.59	A16S	ATOM	30905	O5'	GUA	576	112.694	111.408	-37.873	1.00	53.81	A16S
ATOM	30853	N4	CYT	573	125.116	115.000	-42.768	1.00	50.59	A16S	ATOM	30906	C5'	GUA	576	111.675	110.819	-38.661	1.00	53.81	A16S
ATOM	30854	C5	CYT	573	125.540	117.233	-42.020	1.00	50.59	A16S	ATOM	30907	C4'	GUA	576	111.979	109.366	-38.915	1.00	53.81	A16S
ATOM	30855	C2'	CYT	573	122.254	120.282	-41.641	1.00	50.23	A16S	ATOM	30908	O4'	GUA	576	113.120	109.236	-39.797	1.00	53.81	A16S
ATOM	30856	O2'	CYT	573	121.293	121.174	-42.157	1.00	50.23	A16S	ATOM	30909	C1'	GUA	576	113.841	108.061	-39.471	1.00	53.81	A16S
ATOM	30857	C3'	CYT	573	122.914	120.764	-40.354	1.00	50.23	A16S	ATOM	30910	N9	GUA	576	115.162	108.463	-39.011	1.00	61.66	A16S
ATOM	30858	O3'	CYT	573	121.976	121.398	-39.484	1.00	50.23	A16S	ATOM	30911	C4	GUA	576	116.250	107.650	-38.830	1.00	61.66	A16S
ATOM	30859	P	URI	574	121.097	120.499	-38.477	1.00	56.90	A16S	ATOM	30912	N3	GUA	576	116.305	106.329	-39.092	1.00	61.66	A16S
ATOM	30860	O1P	URI	574	120.293	121.417	-37.634	1.00	72.59	A16S	ATOM	30913	C2	GUA	576	117.492	105.819	-38.809	1.00	61.66	A16S
ATOM	30861	O2P	URI	574	122.005	119.527	-37.825	1.00	72.59	A16S	ATOM	30914	N2	GUA	576	117.728	104.517	-39.030	1.00	61.66	A16S
ATOM	30862	O5'	URI	574	120.113	119.698	-39.446	1.00	56.90	A16S	ATOM	30915	N1	GUA	576	118.537	106.548	-38.294	1.00	61.66	A16S
ATOM	30863	C5'	URI	574	119.119	120.395	-40.195	1.00	56.90	A16S	ATOM	30916	C6	GUA	576	118.499	107.909	-38.017	1.00	61.66	A16S
ATOM	30864	C4'	URI	574	118.267	119.440	-41.004	1.00	56.90	A16S	ATOM	30917	O6	GUA	576	119.498	108.477	-37.551	1.00	61.66	A16S

ATOM	30918	C5	GUA	576	117.237	108.468	-38.331	1.00	61.66	A16S	ATOM	30971	P	CYT	579	116.835	100.189	-28.801	1.00	49.44	A16S
ATOM	30919	N7	GUA	576	116.786	109.775	-38.226	1.00	61.66	A16S	ATOM	30972	O1P	CYT	579	116.005	99.801	-29.968	1.00	67.35	A16S
ATOM	30920	C8	GUA	576	115.553	109.724	-38.644	1.00	61.66	A16S	ATOM	30973	O2P	CYT	579	116.556	99.593	-27.474	1.00	67.35	A16S
ATOM	30921	C2'	GUA	576	113.070	107.360	-38.352	1.00	53.81	A16S	ATOM	30974	O5'	CYT	579	118.349	99.822	-29.146	1.00	49.44	A16S
ATOM	30922	O2'	GUA	576	112.163	106.433	-38.899	1.00	53.81	A16S	ATOM	30975	C5'	CYT	579	118.801	98.463	-29.132	1.00	49.44	A16S
ATOM	30923	C3'	GUA	576	112.345	108.527	-37.706	1.00	53.81	A16S	ATOM	30976	C4'	CYT	579	120.311	98.399	-29.297	1.00	49.44	A16S
ATOM	30924	O3'	GUA	576	111.176	108.057	-37.063	1.00	53.81	A16S	ATOM	30977	O4'	CYT	579	120.679	98.770	-30.652	1.00	49.44	A16S
ATOM	30925	P	GUA	577	111.238	107.607	-35.527	1.00	64.99	A16S	ATOM	30978	C1'	CYT	579	121.795	99.649	-30.625	1.00	49.44	A16S
ATOM	30926	O1P	GUA	577	109.895	107.071	-35.202	1.00	68.08	A16S	ATOM	30979	N1	CYT	579	121.324	100.995	-30.961	1.00	67.35	A16S
ATOM	30927	O2P	GUA	577	111.801	108.712	-34.708	1.00	68.08	A16S	ATOM	30980	C6	CYT	579	120.000	101.248	-31.183	1.00	67.35	A16S
ATOM	30928	O5'	GUA	577	112.259	106.384	-35.529	1.00	64.99	A16S	ATOM	30981	C2	CYT	579	122.253	102.010	-31.038	1.00	67.35	A16S
ATOM	30929	C5'	GUA	577	111.872	105.122	-36.052	1.00	64.99	A16S	ATOM	30982	O2	CYT	579	123.440	101.738	-30.833	1.00	67.35	A16S
ATOM	30930	C4'	GUA	577	113.000	104.126	-35.923	1.00	64.99	A16S	ATOM	30983	N3	CYT	579	121.843	103.263	-31.333	1.00	67.35	A16S
ATOM	30931	O4'	GUA	577	114.153	104.598	-36.668	1.00	64.99	A16S	ATOM	30984	C4	CYT	579	120.548	103.506	-31.545	1.00	67.35	A16S
ATOM	30932	C1'	GUA	577	115.335	104.133	-36.044	1.00	64.99	A16S	ATOM	30985	N4	CYT	579	120.183	104.760	-31.828	1.00	67.35	A16S
ATOM	30933	N9	GUA	577	116.129	105.288	-35.648	1.00	68.08	A16S	ATOM	30986	C5	CYT	579	119.572	102.477	-31.474	1.00	67.35	A16S
ATOM	30934	C4	GUA	577	117.472	105.285	-35.357	1.00	68.08	A16S	ATOM	30987	C2'	CYT	579	122.352	99.630	-29.207	1.00	49.44	A16S
ATOM	30935	N3	GUA	577	118.292	104.217	-35.420	1.00	68.08	A16S	ATOM	30988	O2'	CYT	579	123.369	98.662	-29.116	1.00	49.44	A16S
ATOM	30936	C2	GUA	577	119.524	104.522	-35.067	1.00	68.08	A16S	ATOM	30989	C3'	CYT	579	121.091	99.348	-28.401	1.00	49.44	A16S
ATOM	30937	N2	GUA	577	120.472	103.585	-35.089	1.00	68.08	A16S	ATOM	30990	O3'	CYT	579	121.353	98.784	-27.131	1.00	49.44	A16S
ATOM	30938	N1	GUA	577	119.920	105.770	-34.668	1.00	68.08	A16S	ATOM	30991	P	GUA	580	121.284	99.720	-25.827	1.00	55.22	A16S
ATOM	30939	C6	GUA	577	119.096	106.883	-34.584	1.00	68.08	A16S	ATOM	30992	O1P	GUA	580	121.054	98.818	-24.665	1.00	55.64	A16S
ATOM	30940	O6	GUA	577	119.555	107.957	-34.187	1.00	68.08	A16S	ATOM	30993	O2P	GUA	580	120.312	100.841	-26.094	1.00	55.64	A16S
ATOM	30941	C5	GUA	577	117.769	106.579	-34.982	1.00	68.08	A16S	ATOM	30994	O5'	GUA	580	122.762	100.321	-25.703	1.00	55.22	A16S
ATOM	30942	N7	GUA	577	116.640	107.387	-35.060	1.00	68.08	A16S	ATOM	30995	C5'	GUA	580	123.911	99.480	-25.833	1.00	55.22	A16S
ATOM	30943	C8	GUA	577	115.694	106.580	-35.464	1.00	68.08	A16S	ATOM	30996	C4'	GUA	580	125.137	100.306	-26.135	1.00	55.22	A16S
ATOM	30944	C2'	GUA	577	114.910	103.285	-34.841	1.00	64.99	A16S	ATOM	30997	O4'	GUA	580	124.959	100.996	-27.399	1.00	55.22	A16S
ATOM	30945	O2'	GUA	577	114.786	101.936	-35.238	1.00	64.99	A16S	ATOM	30998	C1'	GUA	580	125.508	102.304	-27.311	1.00	55.22	A16S
ATOM	30946	C3'	GUA	577	113.543	103.871	-34.524	1.00	64.99	A16S	ATOM	30999	N9	GUA	580	124.432	103.287	-27.448	1.00	55.64	A16S
ATOM	30947	O3'	GUA	577	112.755	102.892	-33.859	1.00	64.99	A16S	ATOM	31000	C4	GUA	580	124.563	104.656	-27.325	1.00	55.64	A16S
ATOM	30948	P	GUA	578	112.479	103.019	-32.284	1.00	73.96	A16S	ATOM	31001	N3	GUA	580	125.710	105.328	-27.099	1.00	55.64	A16S
ATOM	30949	O1P	GUA	578	111.815	101.774	-31.838	1.00	60.71	A16S	ATOM	31002	C2	GUA	580	125.515	106.629	-27.017	1.00	55.64	A16S
ATOM	30950	O2P	GUA	578	111.821	104.322	-32.043	1.00	60.71	A16S	ATOM	31003	N2	GUA	580	126.539	107.445	-26.799	1.00	55.64	A16S
ATOM	30951	O5'	GUA	578	113.927	103.047	-31.619	1.00	73.96	A16S	ATOM	31004	N1	GUA	580	124.304	107.232	-27.140	1.00	55.64	A16S
ATOM	30952	C5'	GUA	578	114.738	101.870	-31.477	1.00	73.96	A16S	ATOM	31005	C6	GUA	580	123.107	106.580	-27.363	1.00	55.64	A16S
ATOM	30953	C4'	GUA	578	116.086	102.287	-30.953	1.00	73.96	A16S	ATOM	31006	O6	GUA	580	122.068	107.236	-27.428	1.00	55.64	A16S
ATOM	30954	O4'	GUA	578	116.354	103.493	-31.692	1.00	73.96	A16S	ATOM	31007	C5	GUA	580	123.293	105.160	-27.471	1.00	55.64	A16S
ATOM	30955	C1'	GUA	578	116.935	104.443	-30.852	1.00	73.96	A16S	ATOM	31008	N7	GUA	580	122.380	104.135	-27.709	1.00	55.64	A16S
ATOM	30956	N9	GUA	578	116.360	105.747	-31.135	1.00	60.71	A16S	ATOM	31009	C8	GUA	580	123.100	103.047	-27.695	1.00	55.64	A16S
ATOM	30957	C4	GUA	578	117.062	106.914	-31.190	1.00	60.71	A16S	ATOM	31010	C2'	GUA	580	126.200	102.412	-25.951	1.00	55.22	A16S
ATOM	30958	N3	GUA	578	118.392	107.040	-31.003	1.00	60.71	A16S	ATOM	31011	O2'	GUA	580	127.554	102.052	-26.064	1.00	55.22	A16S
ATOM	30959	C2	GUA	578	118.777	108.292	-31.068	1.00	60.71	A16S	ATOM	31012	C3'	GUA	580	125.408	101.411	-25.133	1.00	55.22	A16S
ATOM	30960	N2	GUA	578	120.061	108.602	-30.889	1.00	60.71	A16S	ATOM	31013	O3'	GUA	580	126.180	100.932	-24.052	1.00	55.22	A16S
ATOM	30961	N1	GUA	578	117.926	109.339	-31.309	1.00	60.71	A16S	ATOM	31014	P	URI	581	125.651	101.157	-22.564	1.00	42.09	A16S
ATOM	30962	C6	GUA	578	116.559	109.228	-31.518	1.00	60.71	A16S	ATOM	31015	O1P	URI	581	124.325	100.495	-22.518	1.00	57.21	A16S
ATOM	30963	O6	GUA	578	115.888	110.240	-31.736	1.00	60.71	A16S	ATOM	31016	O2P	URI	581	126.694	100.802	-21.570	1.00	57.21	A16S
ATOM	30964	C5	GUA	578	116.131	107.890	-31.441	1.00	60.71	A16S	ATOM	31017	O5'	URI	581	125.448	102.729	-22.484	1.00	42.09	A16S
ATOM	30965	N7	GUA	578	114.867	107.341	-31.565	1.00	60.71	A16S	ATOM	31018	C5'	URI	581	126.548	103.613	-22.654	1.00	42.09	A16S
ATOM	30966	C8	GUA	578	115.053	106.064	-31.380	1.00	60.71	A16S	ATOM	31019	C4'	URI	581	126.055	105.033	-22.691	1.00	42.09	A16S
ATOM	30967	C2'	GUA	578	116.876	103.974	-29.397	1.00	73.96	A16S	ATOM	31020	O4'	URI	581	125.315	105.249	-23.918	1.00	42.09	A16S
ATOM	30968	O2'	GUA	578	118.182	103.793	-28.871	1.00	73.96	A16S	ATOM	31021	C1'	URI	581	124.245	106.140	-23.678	1.00	42.09	A16S
ATOM	30969	C3'	GUA	578	116.078	102.672	-29.470	1.00	73.96	A16S	ATOM	31022	N1	URI	581	123.000	105.458	-24.064	1.00	57.21	A16S
ATOM	30970	O3'	GUA	578	116.832	101.792	-28.601	1.00	73.96	A16S	ATOM	31023	C6	URI	581	122.974	104.102	-24.274	1.00	57.21	A16S

ATOM	31024	C2	URI	581	121.859	106.220	-24.218	1.00	57.21	A16S	ATOM	31077	O5'	CYT	584	115.272	107.677	-12.228	1.00	48.99	A16S
ATOM	31025	O2	URI	581	121.852	107.421	-24.048	1.00	57.21	A16S	ATOM	31078	C5'	CYT	584	114.217	108.630	-12.104	1.00	48.99	A16S
ATOM	31026	N3	URI	581	120.730	105.519	-24.584	1.00	57.21	A16S	ATOM	31079	C4'	CYT	584	112.875	107.981	-12.358	1.00	48.99	A16S
ATOM	31027	C4	URI	581	120.635	104.155	-24.817	1.00	57.21	A16S	ATOM	31080	O4'	CYT	584	112.734	107.646	-13.763	1.00	48.99	A16S
ATOM	31028	O4	URI	581	119.563	103.662	-25.204	1.00	57.21	A16S	ATOM	31081	C1'	CYT	584	111.950	106.470	-13.896	1.00	48.99	A16S
ATOM	31029	C5	URI	581	121.863	103.444	-24.636	1.00	57.21	A16S	ATOM	31082	N1	CYT	584	112.781	105.445	-14.538	1.00	59.92	A16S
ATOM	31030	C2'	URI	581	124.334	106.555	-22.206	1.00	42.09	A16S	ATOM	31083	C6	CYT	584	114.143	105.489	-14.449	1.00	59.92	A16S
ATOM	31031	O2'	URI	581	125.124	107.712	-22.069	1.00	42.09	A16S	ATOM	31084	C2	CYT	584	112.160	104.431	-15.252	1.00	59.92	A16S
ATOM	31032	C3'	URI	581	125.056	105.368	-21.608	1.00	42.09	A16S	ATOM	31085	O2	CYT	584	110.928	104.410	-15.298	1.00	59.92	A16S
ATOM	31033	O3'	URI	581	125.716	105.717	-20.410	1.00	42.09	A16S	ATOM	31086	N3	CYT	584	112.914	103.499	-15.877	1.00	59.92	A16S
ATOM	31034	P	CYT	582	124.982	105.460	-19.005	1.00	51.07	A16S	ATOM	31087	C4	CYT	584	114.244	103.562	-15.802	1.00	59.92	A16S
ATOM	31035	O1P	CYT	582	124.283	104.160	-19.080	1.00	51.67	A16S	ATOM	31088	N4	CYT	584	114.952	102.643	-16.452	1.00	59.92	A16S
ATOM	31036	O2P	CYT	582	125.923	105.713	-17.896	1.00	51.67	A16S	ATOM	31089	C5	CYT	584	114.905	104.577	-15.061	1.00	59.92	A16S
ATOM	31037	O5'	CYT	582	123.872	106.595	-18.972	1.00	51.07	A16S	ATOM	31090	C2'	CYT	584	111.495	106.077	-12.491	1.00	48.99	A16S
ATOM	31038	C5'	CYT	582	124.215	107.954	-18.764	1.00	51.07	A16S	ATOM	31091	O2'	CYT	584	110.249	106.680	-12.213	1.00	48.99	A16S
ATOM	31039	C4'	CYT	582	122.965	108.785	-18.777	1.00	51.07	A16S	ATOM	31092	C3'	CYT	584	112.617	106.666	-11.648	1.00	48.99	A16S
ATOM	31040	O4'	CYT	582	122.344	108.649	-20.078	1.00	51.07	A16S	ATOM	31093	O3'	CYT	584	112.243	106.849	-10.290	1.00	48.99	A16S
ATOM	31041	C1'	CYT	582	120.938	108.766	-19.943	1.00	51.07	A16S	ATOM	31094	P	ADE	585	112.439	105.638	-9.252	1.00	57.33	A16S
ATOM	31042	N1	CYT	582	120.316	107.546	-20.452	1.00	51.67	A16S	ATOM	31095	O1P	ADE	585	112.109	106.166	-7.900	1.00	65.23	A16S
ATOM	31043	C6	CYT	582	121.046	106.421	-20.696	1.00	51.67	A16S	ATOM	31096	O2P	ADE	585	113.753	104.985	-9.477	1.00	65.23	A16S
ATOM	31044	C2	CYT	582	118.948	107.561	-20.684	1.00	51.67	A16S	ATOM	31097	O5'	ADE	585	111.327	104.590	-9.705	1.00	57.33	A16S
ATOM	31045	O2	CYT	582	118.321	108.600	-20.439	1.00	51.67	A16S	ATOM	31098	C5'	ADE	585	109.942	104.892	-9.595	1.00	57.33	A16S
ATOM	31046	N3	CYT	582	118.340	106.454	-21.168	1.00	51.67	A16S	ATOM	31099	C4'	ADE	585	109.128	103.738	-10.118	1.00	57.33	A16S
ATOM	31047	C4	CYT	582	119.058	105.365	-21.424	1.00	51.67	A16S	ATOM	31100	O4'	ADE	585	109.390	103.598	-11.535	1.00	57.33	A16S
ATOM	31048	N4	CYT	582	118.428	104.311	-21.935	1.00	51.67	A16S	ATOM	31101	C1'	ADE	585	109.362	102.226	-11.892	1.00	57.33	A16S
ATOM	31049	C5	CYT	582	120.461	105.315	-21.178	1.00	51.67	A16S	ATOM	31102	N9	ADE	585	110.681	101.858	-12.405	1.00	65.23	A16S
ATOM	31050	C2'	CYT	582	120.641	108.958	-18.463	1.00	51.07	A16S	ATOM	31103	C4	ADE	585	110.967	100.759	-13.177	1.00	65.23	A16S
ATOM	31051	O2'	CYT	582	120.558	110.338	-18.174	1.00	51.07	A16S	ATOM	31104	N3	ADE	585	110.107	99.836	-13.626	1.00	65.23	A16S
ATOM	31052	C3'	CYT	582	121.862	108.310	-17.850	1.00	51.07	A16S	ATOM	31105	C2	ADE	585	110.741	98.914	-14.340	1.00	65.23	A16S
ATOM	31053	O3'	CYT	582	122.041	108.749	-16.527	1.00	51.07	A16S	ATOM	31106	N1	ADE	585	112.037	98.813	-14.630	1.00	65.23	A16S
ATOM	31054	P	CYT	583	121.347	107.931	-15.346	1.00	51.35	A16S	ATOM	31107	C6	ADE	585	112.875	99.755	-14.157	1.00	65.23	A16S
ATOM	31055	O1P	CYT	583	121.503	106.493	-15.675	1.00	54.93	A16S	ATOM	31108	N6	ADE	585	114.171	99.646	-14.433	1.00	65.23	A16S
ATOM	31056	O2P	CYT	583	121.832	108.449	-14.035	1.00	54.93	A16S	ATOM	31109	C5	ADE	585	112.327	100.794	-13.393	1.00	65.23	A16S
ATOM	31057	O5'	CYT	583	119.807	108.276	-15.514	1.00	51.35	A16S	ATOM	31110	N7	ADE	585	112.893	101.904	-12.783	1.00	65.23	A16S
ATOM	31058	C5'	CYT	583	119.338	109.607	-15.357	1.00	51.35	A16S	ATOM	31111	C8	ADE	585	111.876	102.503	-12.214	1.00	65.23	A16S
ATOM	31059	C4'	CYT	583	117.839	109.637	-15.494	1.00	51.35	A16S	ATOM	31112	C2'	ADE	585	109.004	101.432	-10.636	1.00	57.33	A16S
ATOM	31060	O4'	CYT	583	117.459	109.244	-16.833	1.00	51.35	A16S	ATOM	31113	O2'	ADE	585	107.618	101.188	-10.579	1.00	57.33	A16S
ATOM	31061	C1'	CYT	583	116.192	108.622	-16.793	1.00	51.35	A16S	ATOM	31114	C3'	ADE	585	109.485	102.373	-9.546	1.00	57.33	A16S
ATOM	31062	N1	CYT	583	116.266	107.317	-17.454	1.00	54.93	A16S	ATOM	31115	O3'	ADE	585	108.806	102.113	-8.330	1.00	57.33	A16S
ATOM	31063	C6	CYT	583	117.411	106.578	-17.467	1.00	54.93	A16S	ATOM	31116	P	URI	586	109.389	101.016	-7.317	1.00	57.12	A16S
ATOM	31064	C2	CYT	583	115.120	106.840	-18.056	1.00	54.93	A16S	ATOM	31117	O1P	URI	586	108.419	100.909	-6.192	1.00	66.79	A16S
ATOM	31065	O2	CYT	583	114.111	107.555	-18.050	1.00	54.93	A16S	ATOM	31118	O2P	URI	586	110.809	101.351	-7.035	1.00	66.79	A16S
ATOM	31066	N3	CYT	583	115.125	105.627	-18.636	1.00	54.93	A16S	ATOM	31119	O5'	URI	586	109.345	99.658	-8.152	1.00	57.12	A16S
ATOM	31067	C4	CYT	583	116.234	104.902	-18.637	1.00	54.93	A16S	ATOM	31120	C5'	URI	586	108.108	99.042	-8.476	1.00	57.12	A16S
ATOM	31068	N4	CYT	583	116.185	103.711	-19.220	1.00	54.93	A16S	ATOM	31121	C4'	URI	586	108.349	97.748	-9.209	1.00	57.12	A16S
ATOM	31069	C5	CYT	583	117.437	105.370	-18.040	1.00	54.93	A16S	ATOM	31122	O4'	URI	586	108.924	98.030	-10.513	1.00	57.12	A16S
ATOM	31070	C2'	CYT	583	115.787	108.493	-15.328	1.00	51.35	A16S	ATOM	31123	C1'	URI	586	109.854	97.012	-10.856	1.00	57.12	A16S
ATOM	31071	O2'	CYT	583	114.947	109.567	-15.017	1.00	51.35	A16S	ATOM	31124	N1	URI	586	111.195	97.611	-10.903	1.00	66.79	A16S
ATOM	31072	C3'	CYT	583	117.125	108.622	-14.633	1.00	51.35	A16S	ATOM	31125	C6	URI	586	111.546	98.636	-10.059	1.00	66.79	A16S
ATOM	31073	O3'	CYT	583	116.968	109.135	-13.334	1.00	51.35	A16S	ATOM	31126	C2	URI	586	112.109	97.082	-11.796	1.00	66.79	A16S
ATOM	31074	P	CYT	584	116.799	108.124	-12.113	1.00	48.99	A16S	ATOM	31127	O2	URI	586	111.822	96.222	-12.601	1.00	66.79	A16S
ATOM	31075	O1P	CYT	584	117.031	108.918	-10.878	1.00	59.92	A16S	ATOM	31128	N3	URI	586	113.373	97.605	-11.712	1.00	66.79	A16S
ATOM	31076	O2P	CYT	584	117.628	106.923	-12.380	1.00	59.92	A16S	ATOM	31129	C4	URI	586	113.804	98.594	-10.853	1.00	66.79	A16S

ATOM	31130	O4	URI	586	115.013	98.832	-10.766	1.00	66.79	A16S	ATOM	31183	C5'	GUA	589	119.499	87.776	-4.953	1.00	62.78	A16S
ATOM	31131	C5	URI	586	112.781	99.132	-10.004	1.00	66.79	A16S	ATOM	31184	C4'	GUA	589	120.705	88.658	-5.126	1.00	62.78	A16S
ATOM	31132	C2'	URI	586	109.783	95.963	-9.743	1.00	57.12	A16S	ATOM	31185	O4'	GUA	589	120.359	89.792	-5.963	1.00	62.78	A16S
ATOM	31133	O2'	URI	586	108.807	94.991	-10.021	1.00	57.12	A16S	ATOM	31186	C1'	GUA	589	121.043	90.944	-5.504	1.00	62.78	A16S
ATOM	31134	C3'	URI	586	109.362	96.817	-8.567	1.00	57.12	A16S	ATOM	31187	N9	GUA	589	120.048	91.920	-5.071	1.00	84.35	A16S
ATOM	31135	O3'	URI	586	108.792	96.019	-7.551	1.00	57.12	A16S	ATOM	31188	C4	GUA	589	120.189	93.284	-5.074	1.00	84.35	A16S
ATOM	31136	P	GUA	587	109.755	95.315	-6.482	1.00	61.40	A16S	ATOM	31189	N3	GUA	589	121.277	93.966	-5.486	1.00	84.35	A16S
ATOM	31137	O1P	GUA	587	108.924	94.782	-5.374	1.00	63.50	A16S	ATOM	31190	C2	GUA	589	121.114	95.274	-5.371	1.00	84.35	A16S
ATOM	31138	O2P	GUA	587	110.865	96.252	-6.168	1.00	63.50	A16S	ATOM	31191	N2	GUA	589	122.101	96.102	-5.736	1.00	84.35	A16S
ATOM	31139	O5'	GUA	587	110.340	94.091	-7.313	1.00	61.40	A16S	ATOM	31192	N1	GUA	589	119.974	95.866	-4.890	1.00	84.35	A16S
ATOM	31140	C5'	GUA	587	109.468	93.109	-7.857	1.00	61.40	A16S	ATOM	31193	C6	GUA	589	118.839	95.185	-4.463	1.00	84.35	A16S
ATOM	31141	C4'	GUA	587	110.260	92.024	-8.542	1.00	61.40	A16S	ATOM	31194	O6	GUA	589	117.856	95.820	-4.054	1.00	84.35	A16S
ATOM	31142	O4'	GUA	587	110.780	92.496	-9.816	1.00	61.40	A16S	ATOM	31195	C5	GUA	589	119.001	93.776	-4.580	1.00	84.35	A16S
ATOM	31143	C1'	GUA	587	112.043	91.894	-10.064	1.00	61.40	A16S	ATOM	31196	N7	GUA	589	118.128	92.740	-4.277	1.00	84.35	A16S
ATOM	31144	N9	GUA	587	113.071	92.935	-10.058	1.00	63.50	A16S	ATOM	31197	C8	GUA	589	118.791	91.660	-4.584	1.00	84.35	A16S
ATOM	31145	C4	GUA	587	114.343	92.839	-10.591	1.00	63.50	A16S	ATOM	31198	C2'	GUA	589	121.992	90.489	-4.393	1.00	62.78	A16S
ATOM	31146	N3	GUA	587	114.863	91.768	-11.231	1.00	63.50	A16S	ATOM	31199	O2'	GUA	589	123.222	90.127	-4.986	1.00	62.78	A16S
ATOM	31147	C2	GUA	587	116.114	91.975	-11.612	1.00	63.50	A16S	ATOM	31200	C3'	GUA	589	121.256	89.270	-3.850	1.00	62.78	A16S
ATOM	31148	N2	GUA	587	116.773	91.021	-12.268	1.00	63.50	A16S	ATOM	31201	O3'	GUA	589	122.147	88.344	-3.230	1.00	62.78	A16S
ATOM	31149	N1	GUA	587	116.805	93.132	-11.381	1.00	63.50	A16S	ATOM	31202	P	ADE	590	122.421	88.422	-1.647	1.00	66.71	A16S
ATOM	31150	C6	GUA	587	116.301	94.246	-10.729	1.00	63.50	A16S	ATOM	31203	O1P	ADE	590	122.645	89.839	-1.250	1.00	89.47	A16S
ATOM	31151	O6	GUA	587	117.017	95.238	-10.575	1.00	63.50	A16S	ATOM	31204	O2P	ADE	590	123.463	87.409	-1.355	1.00	89.47	A16S
ATOM	31152	C5	GUA	587	114.948	94.045	-10.313	1.00	63.50	A16S	ATOM	31205	O5'	ADE	590	121.044	87.963	-0.992	1.00	66.71	A16S
ATOM	31153	N7	GUA	587	114.078	94.885	-9.629	1.00	63.50	A16S	ATOM	31206	C5'	ADE	590	120.502	86.683	-1.282	1.00	66.71	A16S
ATOM	31154	C8	GUA	587	112.979	94.189	-9.505	1.00	63.50	A16S	ATOM	31207	C4'	ADE	590	119.580	86.230	-0.175	1.00	66.71	A16S
ATOM	31155	C2'	GUA	587	112.256	90.889	-8.934	1.00	61.40	A16S	ATOM	31208	O4'	ADE	590	119.442	84.794	-0.315	1.00	66.71	A16S
ATOM	31156	O2'	GUA	587	111.629	89.679	-9.287	1.00	61.40	A16S	ATOM	31209	C1'	ADE	590	119.739	84.161	0.913	1.00	66.71	A16S
ATOM	31157	C3'	GUA	587	111.496	91.555	-7.807	1.00	61.40	A16S	ATOM	31210	N9	ADE	590	121.097	83.628	0.813	1.00	89.47	A16S
ATOM	31158	O3'	GUA	587	111.167	90.617	-6.807	1.00	61.40	A16S	ATOM	31211	C4	ADE	590	121.650	82.650	1.601	1.00	89.47	A16S
ATOM	31159	P	URI	588	112.165	90.394	-5.569	1.00	52.22	A16S	ATOM	31212	N3	ADE	590	121.062	81.995	2.615	1.00	89.47	A16S
ATOM	31160	O1P	URI	588	111.617	89.252	-4.802	1.00	59.67	A16S	ATOM	31213	C2	ADE	590	121.897	81.105	3.141	1.00	89.47	A16S
ATOM	31161	O2P	URI	588	112.442	91.676	-4.883	1.00	59.67	A16S	ATOM	31214	N1	ADE	590	123.160	80.821	2.798	1.00	89.47	A16S
ATOM	31162	O5'	URI	588	113.525	89.912	-6.237	1.00	52.22	A16S	ATOM	31215	C6	ADE	590	123.725	81.505	1.782	1.00	89.47	A16S
ATOM	31163	C5'	URI	588	113.666	88.592	-6.748	1.00	52.22	A16S	ATOM	31216	N6	ADE	590	124.992	81.231	1.454	1.00	89.47	A16S
ATOM	31164	C4'	URI	588	115.065	88.390	-7.260	1.00	52.22	A16S	ATOM	31217	C5	ADE	590	122.939	82.473	1.133	1.00	89.47	A16S
ATOM	31165	O4'	URI	588	115.291	89.339	-8.331	1.00	52.22	A16S	ATOM	31218	N7	ADE	590	123.197	83.327	0.068	1.00	89.47	A16S
ATOM	31166	C1'	URI	588	116.653	89.727	-8.337	1.00	52.22	A16S	ATOM	31219	C8	ADE	590	122.078	83.990	-0.080	1.00	89.47	A16S
ATOM	31167	N1	URI	588	116.726	91.169	-8.101	1.00	59.67	A16S	ATOM	31220	C2'	ADE	590	119.615	85.233	1.988	1.00	66.71	A16S
ATOM	31168	C6	URI	588	115.677	91.877	-7.593	1.00	59.67	A16S	ATOM	31221	O2'	ADE	590	118.276	85.373	2.396	1.00	66.71	A16S
ATOM	31169	C2	URI	588	117.920	91.766	-8.370	1.00	59.67	A16S	ATOM	31222	C3'	ADE	590	120.112	86.451	1.236	1.00	66.71	A16S
ATOM	31170	O2	URI	588	118.834	91.165	-8.891	1.00	59.67	A16S	ATOM	31223	O3'	ADE	590	119.557	87.618	1.817	1.00	66.71	A16S
ATOM	31171	N3	URI	588	118.006	93.086	-8.017	1.00	59.67	A16S	ATOM	31224	P	ADE	591	120.278	88.289	3.087	1.00	55.67	A16S
ATOM	31172	C4	URI	588	117.017	93.847	-7.457	1.00	59.67	A16S	ATOM	31225	O1P	ADE	591	119.287	89.130	3.800	1.00	45.49	A16S
ATOM	31173	O4	URI	588	117.269	94.996	-7.104	1.00	59.67	A16S	ATOM	31226	O2P	ADE	591	121.579	88.890	2.617	1.00	45.49	A16S
ATOM	31174	C5	URI	588	115.778	93.164	-7.268	1.00	59.67	A16S	ATOM	31227	O5'	ADE	591	120.613	87.071	4.055	1.00	55.67	A16S
ATOM	31175	C2'	URI	588	117.352	88.991	-7.189	1.00	52.22	A16S	ATOM	31228	C5'	ADE	591	119.667	86.597	4.993	1.00	55.67	A16S
ATOM	31176	O2'	URI	588	118.024	87.838	-7.652	1.00	52.22	A16S	ATOM	31229	C4'	ADE	591	120.291	85.525	5.852	1.00	55.67	A16S
ATOM	31177	C3'	URI	588	116.179	88.689	-6.268	1.00	52.22	A16S	ATOM	31230	O4'	ADE	591	120.728	84.424	5.012	1.00	55.67	A16S
ATOM	31178	O3'	URI	588	116.463	87.562	-5.457	1.00	52.22	A16S	ATOM	31231	C1'	ADE	591	121.941	83.895	5.518	1.00	55.67	A16S
ATOM	31179	P	GUA	589	117.080	87.767	-3.990	1.00	62.78	A16S	ATOM	31232	N9	ADE	591	123.000	84.207	4.573	1.00	45.49	A16S
ATOM	31180	O1P	GUA	589	117.369	86.411	-3.461	1.00	84.35	A16S	ATOM	31233	C4	ADE	591	124.256	83.664	4.566	1.00	45.49	A16S
ATOM	31181	O2P	GUA	589	116.212	88.688	-3.224	1.00	84.35	A16S	ATOM	31234	N3	ADE	591	124.742	82.737	5.400	1.00	45.49	A16S
ATOM	31182	O5'	GUA	589	118.479	88.470	-4.252	1.00	62.78	A16S	ATOM	31235	C2	ADE	591	126.016	82.463	5.105	1.00	45.49	A16S

ATOM	31236	N1	ADE	591	126.798	82.983	4.152	1.00	45.49	A16S	ATOM	31289	C3'	GUA	593	130.639	90.136	8.856	1.00	52.66	A16S
ATOM	31237	C6	ADE	591	126.277	83.929	3.344	1.00	45.49	A16S	ATOM	31290	O3'	GUA	593	131.642	90.636	9.716	1.00	52.66	A16S
ATOM	31238	N6	ADE	591	127.061	84.483	2.424	1.00	45.49	A16S	ATOM	31291	P	ADE	594	131.465	92.078	10.382	1.00	51.27	A16S
ATOM	31239	C5	ADE	591	124.931	84.288	3.538	1.00	45.49	A16S	ATOM	31292	O1P	ADE	594	132.735	92.365	11.078	1.00	63.19	A16S
ATOM	31240	N7	ADE	591	124.105	85.199	2.895	1.00	45.49	A16S	ATOM	31293	O2P	ADE	594	130.186	92.112	11.137	1.00	63.19	A16S
ATOM	31241	C8	ADE	591	122.973	85.107	3.544	1.00	45.49	A16S	ATOM	31294	O5'	ADE	594	131.413	93.057	9.135	1.00	51.27	A16S
ATOM	31242	C2'	ADE	591	122.229	84.612	6.832	1.00	55.67	A16S	ATOM	31295	C5'	ADE	594	132.623	93.444	8.499	1.00	51.27	A16S
ATOM	31243	O2'	ADE	591	121.644	83.900	7.894	1.00	55.67	A16S	ATOM	31296	C4'	ADE	594	132.357	94.481	7.445	1.00	51.27	A16S
ATOM	31244	C3'	ADE	591	121.546	85.944	6.594	1.00	55.67	A16S	ATOM	31297	O4'	ADE	594	131.477	93.914	6.444	1.00	51.27	A16S
ATOM	31245	O3'	ADE	591	121.225	86.549	7.830	1.00	55.67	A16S	ATOM	31298	C1'	ADE	594	130.608	94.915	5.954	1.00	51.27	A16S
ATOM	31246	P	ADE	592	122.238	87.609	8.475	1.00	47.58	A16S	ATOM	31299	N9	ADE	594	129.248	94.538	6.314	1.00	63.19	A16S
ATOM	31247	O1P	ADE	592	121.840	87.833	9.894	1.00	57.69	A16S	ATOM	31300	C4	ADE	594	128.120	94.983	5.687	1.00	63.19	A16S
ATOM	31248	O2P	ADE	592	122.333	88.768	7.545	1.00	57.69	A16S	ATOM	31301	N3	ADE	594	128.059	95.801	4.633	1.00	63.19	A16S
ATOM	31249	O5'	ADE	592	123.643	86.867	8.450	1.00	47.58	A16S	ATOM	31302	C2	ADE	594	126.796	96.041	4.307	1.00	63.19	A16S
ATOM	31250	C5'	ADE	592	123.966	85.894	9.417	1.00	47.58	A16S	ATOM	31303	N1	ADE	594	125.677	95.591	4.874	1.00	63.19	A16S
ATOM	31251	C4'	ADE	592	125.366	85.403	9.188	1.00	47.58	A16S	ATOM	31304	C6	ADE	594	125.780	94.766	5.935	1.00	63.19	A16S
ATOM	31252	O4'	ADE	592	125.458	84.906	7.831	1.00	47.58	A16S	ATOM	31305	N6	ADE	594	124.662	94.316	6.506	1.00	63.19	A16S
ATOM	31253	C1'	ADE	592	126.774	85.104	7.348	1.00	47.58	A16S	ATOM	31306	C5	ADE	594	127.062	94.433	6.376	1.00	63.19	A16S
ATOM	31254	N9	ADE	592	126.704	85.949	6.171	1.00	57.69	A16S	ATOM	31307	N7	ADE	594	127.513	93.632	7.413	1.00	63.19	A16S
ATOM	31255	C4	ADE	592	127.762	86.267	5.366	1.00	57.69	A16S	ATOM	31308	C8	ADE	594	128.817	93.722	7.331	1.00	63.19	A16S
ATOM	31256	N3	ADE	592	129.034	85.865	5.506	1.00	57.69	A16S	ATOM	31309	C2'	ADE	594	131.002	96.229	6.633	1.00	51.27	A16S
ATOM	31257	C2	ADE	592	129.789	86.365	4.532	1.00	57.69	A16S	ATOM	31310	O2'	ADE	594	131.894	96.967	5.816	1.00	51.27	A16S
ATOM	31258	N1	ADE	592	129.441	87.157	3.515	1.00	57.69	A16S	ATOM	31311	C3'	ADE	594	131.627	95.716	7.923	1.00	51.27	A16S
ATOM	31259	C6	ADE	592	128.154	87.544	3.410	1.00	57.69	A16S	ATOM	31312	O3'	ADE	594	132.515	96.650	8.521	1.00	51.27	A16S
ATOM	31260	N6	ADE	592	127.807	88.338	2.394	1.00	57.69	A16S	ATOM	31313	P	CYT	595	132.038	97.462	9.823	1.00	49.71	A16S
ATOM	31261	C5	ADE	592	127.254	87.083	4.382	1.00	57.69	A16S	ATOM	31314	O1P	CYT	595	133.182	98.226	10.371	1.00	56.01	A16S
ATOM	31262	N7	ADE	592	125.896	87.284	4.571	1.00	57.69	A16S	ATOM	31315	O2P	CYT	595	131.310	96.509	10.700	1.00	56.01	A16S
ATOM	31263	C8	ADE	592	125.621	86.588	5.642	1.00	57.69	A16S	ATOM	31316	O5'	CYT	595	130.979	98.492	9.246	1.00	49.71	A16S
ATOM	31264	C2'	ADE	592	127.560	85.803	8.449	1.00	47.58	A16S	ATOM	31317	C5'	CYT	595	131.387	99.573	8.436	1.00	49.71	A16S
ATOM	31265	O2'	ADE	592	128.219	84.837	9.222	1.00	47.58	A16S	ATOM	31318	C4'	CYT	595	130.206	100.456	8.153	1.00	49.71	A16S
ATOM	31266	C3'	ADE	592	126.442	86.470	9.228	1.00	47.58	A16S	ATOM	31319	O4'	CYT	595	129.247	99.745	7.332	1.00	49.71	A16S
ATOM	31267	O3'	ADE	592	126.854	86.729	10.556	1.00	47.58	A16S	ATOM	31320	C1'	CYT	595	127.930	100.123	7.693	1.00	49.71	A16S
ATOM	31268	P	GUA	593	127.159	88.240	11.007	1.00	52.66	A16S	ATOM	31321	N1	CYT	595	127.198	98.911	8.086	1.00	56.01	A16S
ATOM	31269	O1P	GUA	593	127.690	88.202	12.393	1.00	57.01	A16S	ATOM	31322	C6	CYT	595	127.874	97.797	8.493	1.00	56.01	A16S
ATOM	31270	O2P	GUA	593	125.954	89.053	10.699	1.00	57.01	A16S	ATOM	31323	C2	CYT	595	125.797	98.914	8.049	1.00	56.01	A16S
ATOM	31271	O5'	GUA	593	128.328	88.701	10.029	1.00	52.66	A16S	ATOM	31324	O2	CYT	595	125.207	99.927	7.658	1.00	56.01	A16S
ATOM	31272	C5'	GUA	593	129.638	88.147	10.143	1.00	52.66	A16S	ATOM	31325	N3	CYT	595	125.127	97.813	8.441	1.00	56.01	A16S
ATOM	31273	C4'	GUA	593	130.512	88.632	9.011	1.00	52.66	A16S	ATOM	31326	C4	CYT	595	125.799	96.735	8.848	1.00	56.01	A16S
ATOM	31274	O4'	GUA	593	129.938	88.217	7.746	1.00	52.66	A16S	ATOM	31327	N4	CYT	595	125.102	95.675	9.236	1.00	56.01	A16S
ATOM	31275	C1'	GUA	593	130.225	89.186	6.758	1.00	52.66	A16S	ATOM	31328	C5	CYT	595	127.220	96.699	8.878	1.00	56.01	A16S
ATOM	31276	N9	GUA	593	128.970	89.773	6.320	1.00	57.01	A16S	ATOM	31329	C2'	CYT	595	128.052	101.145	8.823	1.00	49.71	A16S
ATOM	31277	C4	GUA	593	128.813	90.626	5.270	1.00	57.01	A16S	ATOM	31330	O2'	CYT	595	127.994	102.441	8.280	1.00	49.71	A16S
ATOM	31278	N3	GUA	593	129.794	91.063	4.462	1.00	57.01	A16S	ATOM	31331	C3'	CYT	595	129.419	100.801	9.393	1.00	49.71	A16S
ATOM	31279	C2	GUA	593	129.346	91.906	3.558	1.00	57.01	A16S	ATOM	31332	O3'	CYT	595	130.035	101.869	10.081	1.00	49.71	A16S
ATOM	31280	N2	GUA	593	130.199	92.472	2.704	1.00	57.01	A16S	ATOM	31333	P	CYT	596	129.872	101.967	11.664	1.00	53.58	A16S
ATOM	31281	N1	GUA	593	128.033	92.265	3.437	1.00	57.01	A16S	ATOM	31334	O1P	CYT	596	130.657	103.135	12.136	1.00	59.71	A16S
ATOM	31282	C6	GUA	593	127.006	91.819	4.259	1.00	57.01	A16S	ATOM	31335	O2P	CYT	596	130.128	100.625	12.249	1.00	59.71	A16S
ATOM	31283	O6	GUA	593	125.853	92.208	4.069	1.00	57.01	A16S	ATOM	31336	O5'	CYT	596	128.324	102.307	11.831	1.00	53.58	A16S
ATOM	31284	C5	GUA	593	127.478	90.936	5.245	1.00	57.01	A16S	ATOM	31337	C5'	CYT	596	127.830	103.611	11.542	1.00	53.58	A16S
ATOM	31285	N7	GUA	593	126.803	90.284	6.261	1.00	57.01	A16S	ATOM	31338	C4'	CYT	596	126.383	103.739	11.964	1.00	53.58	A16S
ATOM	31286	C8	GUA	593	127.729	89.602	6.872	1.00	57.01	A16S	ATOM	31339	O4'	CYT	596	125.540	102.940	11.094	1.00	53.58	A16S
ATOM	31287	C2'	GUA	593	131.108	90.238	7.421	1.00	52.66	A16S	ATOM	31340	C1'	CYT	596	124.413	102.477	11.823	1.00	53.58	A16S
ATOM	31288	O2'	GUA	593	132.455	89.839	7.316	1.00	52.66	A16S	ATOM	31341	N1	CYT	596	124.437	101.008	11.835	1.00	59.71	A16S

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ATOM  31342  C6  CYT  596     125.587 100.323  11.568  1.00 59.71      A16S
ATOM  31343  C2  CYT  596     123.262 100.325  12.133  1.00 59.71      A16S
ATOM  31344  O2  CYT  596     122.244 100.978  12.386  1.00 59.71      A16S
ATOM  31345  N3  CYT  596     123.266  98.974  12.144  1.00 59.71      A16S
ATOM  31346  C4  CYT  596     124.394  98.312  11.880  1.00 59.71      A16S
ATOM  31347  N4  CYT  596     124.359  96.978  11.900  1.00 59.71      A16S
ATOM  31348  C5  CYT  596     125.611  98.988  11.582  1.00 59.71      A16S
ATOM  31349  C2' CYT  596     124.525 103.055  13.235  1.00 53.58      A16S
ATOM  31350  O2' CYT  596     123.847 104.282  13.281  1.00 53.58      A16S
ATOM  31351  C3' CYT  596     126.026 103.253  13.361  1.00 53.58      A16S
ATOM  31352  O3' CYT  596     126.314 104.241  14.336  1.00 53.58      A16S
ATOM  31353  P   ADE  597     126.234 103.872  15.898  1.00 59.83      A16S
ATOM  31354  O1P ADE  597     126.585 105.108  16.642  1.00 65.85      A16S
ATOM  31355  O2P ADE  597     127.003 102.632  16.145  1.00 65.85      A16S
ATOM  31356  O5' ADE  597     124.689 103.584  16.144  1.00 59.83      A16S
ATOM  31357  C5' ADE  597     123.739 104.633  16.024  1.00 59.83      A16S
ATOM  31358  C4' ADE  597     122.363 104.145  16.392  1.00 59.83      A16S
ATOM  31359  O4' ADE  597     121.873 103.217  15.392  1.00 59.83      A16S
ATOM  31360  C1' ADE  597     121.149 102.178  16.028  1.00 59.83      A16S
ATOM  31361  N9  ADE  597     121.894 100.935  15.839  1.00 65.85      A16S
ATOM  31362  C4  ADE  597     121.381  99.663  15.873  1.00 65.85      A16S
ATOM  31363  N3  ADE  597     120.107  99.302  16.090  1.00 65.85      A16S
ATOM  31364  C2  ADE  597     119.981  97.983  16.047  1.00 65.85      A16S
ATOM  31365  N1  ADE  597     120.910  97.055  15.820  1.00 65.85      A16S
ATOM  31366  C6  ADE  597     122.179  97.453  15.600  1.00 65.85      A16S
ATOM  31367  N6  ADE  597     123.106  96.531  15.356  1.00 65.85      A16S
ATOM  31368  C5  ADE  597     122.447  98.824  15.634  1.00 65.85      A16S
ATOM  31369  N7  ADE  597     123.616  99.549  15.465  1.00 65.85      A16S
ATOM  31370  C8  ADE  597     123.234 100.792  15.594  1.00 65.85      A16S
ATOM  31371  C2' ADE  597     121.036 102.550  17.509  1.00 59.83      A16S
ATOM  31372  O2' ADE  597     119.856 103.288  17.735  1.00 59.83      A16S
ATOM  31373  C3' ADE  597     122.293 103.381  17.697  1.00 59.83      A16S
ATOM  31374  O3' ADE  597     122.181 104.273  18.786  1.00 59.83      A16S
ATOM  31375  P   CYT  598     122.732 103.828  20.219  1.00 66.94      A16S
ATOM  31376  O1P CYT  598     122.688 105.012  21.118  1.00 74.32      A16S
ATOM  31377  O2P CYT  598     124.020 103.118  20.015  1.00 74.32      A16S
ATOM  31378  O5' CYT  598     121.639 102.777  20.716  1.00 66.94      A16S
ATOM  31379  C5' CYT  598     120.319 103.198  21.032  1.00 66.94      A16S
ATOM  31380  C4' CYT  598     119.401 102.008  21.145  1.00 66.94      A16S
ATOM  31381  O4' CYT  598     119.431 101.284  19.887  1.00 66.94      A16S
ATOM  31382  C1' CYT  598     119.310  99.890  20.135  1.00 66.94      A16S
ATOM  31383  N1  CYT  598     120.563  99.236  19.716  1.00 74.32      A16S
ATOM  31384  C6  CYT  598     121.723  99.952  19.621  1.00 74.32      A16S
ATOM  31385  C2  CYT  598     120.553  97.866  19.415  1.00 74.32      A16S
ATOM  31386  O2  CYT  598     119.490  97.235  19.504  1.00 74.32      A16S
ATOM  31387  N3  CYT  598     121.701  97.268  19.034  1.00 74.32      A16S
ATOM  31388  C4  CYT  598     122.825  97.976  18.949  1.00 74.32      A16S
ATOM  31389  N4  CYT  598     123.932  97.338  18.581  1.00 74.32      A16S
ATOM  31390  C5  CYT  598     122.864  99.368  19.243  1.00 74.32      A16S
ATOM  31391  C2' CYT  598     119.044  99.741  21.632  1.00 66.94      A16S
ATOM  31392  O2' CYT  598     117.660  99.851  21.888  1.00 66.94      A16S
ATOM  31393  C3' CYT  598     119.775 100.952  22.171  1.00 66.94      A16S
ATOM  31394  O3' CYT  598     119.274 101.253  23.459  1.00 66.94      A16S
ATOM  31395  P   GUA  599     120.044 100.693  24.756  1.00 75.22      A16S
ATOM  31396  O1P GUA  599     119.233 101.112  25.925  1.00 68.66      A16S
ATOM  31397  O2P GUA  599     121.476 101.082  24.676  1.00 68.66      A16S
ATOM  31398  O5' GUA  599     119.970  99.102  24.627  1.00 75.22      A16S
ATOM  31399  C5' GUA  599     118.741  98.412  24.827  1.00 75.22      A16S
ATOM  31400  C4' GUA  599     118.903  96.932  24.562  1.00 75.22      A16S
ATOM  31401  O4' GUA  599     119.439  96.733  23.232  1.00 75.22      A16S
ATOM  31402  C1' GUA  599     120.101  95.482  23.182  1.00 75.22      A16S
ATOM  31403  N9  GUA  599     121.462  95.677  22.694  1.00 68.66      A16S
ATOM  31404  C4  GUA  599     122.300  94.682  22.265  1.00 68.66      A16S
ATOM  31405  N3  GUA  599     121.998  93.371  22.207  1.00 68.66      A16S
ATOM  31406  C2  GUA  599     123.014  92.652  21.782  1.00 68.66      A16S
ATOM  31407  N2  GUA  599     122.895  91.328  21.693  1.00 68.66      A16S
ATOM  31408  N1  GUA  599     124.225  93.176  21.420  1.00 68.66      A16S
ATOM  31409  C6  GUA  599     124.557  94.524  21.460  1.00 68.66      A16S
ATOM  31410  O6  GUA  599     125.684  94.893  21.102  1.00 68.66      A16S
ATOM  31411  C5  GUA  599     123.476  95.311  21.934  1.00 68.66      A16S
ATOM  31412  N7  GUA  599     123.377  96.679  22.141  1.00 68.66      A16S
ATOM  31413  C8  GUA  599     122.162  96.850  22.587  1.00 68.66      A16S
ATOM  31414  C2' GUA  599     120.079  94.896  24.592  1.00 75.22      A16S
ATOM  31415  O2' GUA  599     119.005  93.988  24.684  1.00 75.22      A16S
ATOM  31416  C3' GUA  599     119.862  96.143  25.435  1.00 75.22      A16S
ATOM  31417  O3' GUA  599     119.239  95.787  26.657  1.00 75.22      A16S
ATOM  31418  P   GUA  600     120.126  95.259  27.886  1.00 60.17      A16S
ATOM  31419  O1P GUA  600     119.166  95.061  28.994  1.00 59.29      A16S
ATOM  31420  O2P GUA  600     121.302  96.139  28.088  1.00 59.29      A16S
ATOM  31421  O5' GUA  600     120.643  93.825  27.416  1.00 60.17      A16S
ATOM  31422  C5' GUA  600     119.782  92.684  27.466  1.00 60.17      A16S
ATOM  31423  C4' GUA  600     120.570  91.401  27.287  1.00 60.17      A16S
ATOM  31424  O4' GUA  600     121.121  91.349  25.948  1.00 60.17      A16S
ATOM  31425  C1' GUA  600     122.352  90.654  25.968  1.00 60.17      A16S
ATOM  31426  N9  GUA  600     123.395  91.514  25.419  1.00 59.29      A16S
ATOM  31427  C4  GUA  600     124.609  91.096  24.933  1.00 59.29      A16S
ATOM  31428  N3  GUA  600     125.041  89.821  24.888  1.00 59.29      A16S
ATOM  31429  C2  GUA  600     126.242  89.724  24.353  1.00 59.29      A16S
ATOM  31430  N2  GUA  600     126.811  88.516  24.211  1.00 59.29      A16S
ATOM  31431  N1  GUA  600     126.974  90.797  23.910  1.00 59.29      A16S
ATOM  31432  C6  GUA  600     126.559  92.121  23.953  1.00 59.29      A16S
ATOM  31433  O6  GUA  600     127.312  93.016  23.533  1.00 59.29      A16S
ATOM  31434  C5  GUA  600     125.252  92.238  24.515  1.00 59.29      A16S
ATOM  31435  N7  GUA  600     124.459  93.358  24.737  1.00 59.29      A16S
ATOM  31436  C8  GUA  600     123.370  92.880  25.276  1.00 59.29      A16S
ATOM  31437  C2' GUA  600     122.615  90.220  27.407  1.00 60.17      A16S
ATOM  31438  O2' GUA  600     122.193  88.882  27.544  1.00 60.17      A16S
ATOM  31439  C3' GUA  600     121.778  91.228  28.188  1.00 60.17      A16S
ATOM  31440  O3' GUA  600     121.413  90.761  29.486  1.00 60.17      A16S
ATOM  31441  P   CYT  601     122.199  91.313  30.782  1.00 48.59      A16S
ATOM  31442  O1P CYT  601     121.593  90.656  31.968  1.00 69.21      A16S
ATOM  31443  O2P CYT  601     122.239  92.796  30.716  1.00 69.21      A16S
ATOM  31444  O5' CYT  601     123.683  90.739  30.606  1.00 48.59      A16S
ATOM  31445  C5' CYT  601     123.913  89.355  30.823  1.00 48.59      A16S
ATOM  31446  C4' CYT  601     125.302  88.900  30.391  1.00 48.59      A16S
ATOM  31447  O4' CYT  601     125.562  89.114  28.985  1.00 48.59      A16S
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ATOM	31448	C1'	CYT	601	126.900	88.730	28.747	1.00	48.59	A16S	ATOM	31501	P	ADE	604	129.986	96.072	25.883	1.00	45.44	A16S
ATOM	31449	N1	CYT	601	127.555	89.631	27.789	1.00	69.21	A16S	ATOM	31502	O1P	ADE	604	129.369	97.154	25.079	1.00	62.57	A16S
ATOM	31450	C6	CYT	601	127.237	90.954	27.691	1.00	69.21	A16S	ATOM	31503	O2P	ADE	604	129.197	94.863	26.201	1.00	62.57	A16S
ATOM	31451	C2	CYT	601	128.562	89.092	26.999	1.00	69.21	A16S	ATOM	31504	O5'	ADE	604	131.345	95.654	25.170	1.00	45.44	A16S
ATOM	31452	O2	CYT	601	128.777	87.881	27.067	1.00	69.21	A16S	ATOM	31505	C5'	ADE	604	132.286	96.654	24.784	1.00	45.44	A16S
ATOM	31453	N3	CYT	601	129.270	89.891	26.179	1.00	69.21	A16S	ATOM	31506	C4'	ADE	604	133.643	96.042	24.544	1.00	45.44	A16S
ATOM	31454	C4	CYT	601	128.985	91.186	26.110	1.00	69.21	A16S	ATOM	31507	O4'	ADE	604	134.139	95.469	25.781	1.00	45.44	A16S
ATOM	31455	N4	CYT	601	129.731	91.941	25.301	1.00	69.21	A16S	ATOM	31508	C1'	ADE	604	134.839	94.272	25.507	1.00	45.44	A16S
ATOM	31456	C5	CYT	601	127.923	91.764	26.873	1.00	69.21	A16S	ATOM	31509	N9	ADE	604	134.118	93.176	26.153	1.00	62.57	A16S
ATOM	31457	C2'	CYT	601	127.616	88.701	30.104	1.00	48.59	A16S	ATOM	31510	C4	ADE	604	134.647	91.969	26.535	1.00	62.57	A16S
ATOM	31458	O2'	CYT	601	127.870	87.350	30.429	1.00	48.59	A16S	ATOM	31511	N3	ADE	604	135.923	91.571	26.432	1.00	62.57	A16S
ATOM	31459	C3'	CYT	601	126.597	89.365	31.036	1.00	48.59	A16S	ATOM	31512	C2	ADE	604	136.063	90.333	26.882	1.00	62.57	A16S
ATOM	31460	O3'	CYT	601	126.736	88.827	32.356	1.00	48.59	A16S	ATOM	31513	N1	ADE	604	135.144	89.510	27.380	1.00	62.57	A16S
ATOM	31461	P	URI	602	128.122	89.004	33.183	1.00	53.38	A16S	ATOM	31514	C6	ADE	604	133.871	89.940	27.468	1.00	62.57	A16S
ATOM	31462	O1P	URI	602	129.270	88.552	32.349	1.00	64.93	A16S	ATOM	31515	N6	ADE	604	132.952	89.107	27.949	1.00	62.57	A16S
ATOM	31463	O2P	URI	602	127.919	88.411	34.529	1.00	64.93	A16S	ATOM	31516	C5	ADE	604	133.592	91.238	27.038	1.00	62.57	A16S
ATOM	31464	O5'	URI	602	128.301	90.570	33.379	1.00	53.38	A16S	ATOM	31517	N7	ADE	604	132.419	91.981	27.007	1.00	62.57	A16S
ATOM	31465	C5'	URI	602	127.238	91.366	33.848	1.00	53.38	A16S	ATOM	31518	C8	ADE	604	132.785	93.123	26.479	1.00	62.57	A16S
ATOM	31466	C4'	URI	602	127.738	92.749	34.116	1.00	53.38	A16S	ATOM	31519	C2'	ADE	604	134.914	94.135	23.982	1.00	45.44	A16S
ATOM	31467	O4'	URI	602	128.619	92.720	35.258	1.00	53.38	A16S	ATOM	31520	O2'	ADE	604	136.098	94.749	23.508	1.00	45.44	A16S
ATOM	31468	C1'	URI	602	129.674	93.642	35.070	1.00	53.38	A16S	ATOM	31521	C3'	ADE	604	133.670	94.898	23.550	1.00	45.44	A16S
ATOM	31469	N1	URI	602	130.927	92.886	35.130	1.00	64.93	A16S	ATOM	31522	O3'	ADE	604	133.807	95.415	22.231	1.00	45.44	A16S
ATOM	31470	C6	URI	602	131.082	91.702	34.460	1.00	64.93	A16S	ATOM	31523	P	ADE	605	133.096	94.664	21.005	1.00	55.91	A16S
ATOM	31471	C2	URI	602	131.940	93.407	35.893	1.00	64.93	A16S	ATOM	31524	O1P	ADE	605	133.458	95.415	19.779	1.00	57.15	A16S
ATOM	31472	O2	URI	602	131.842	94.472	36.480	1.00	64.93	A16S	ATOM	31525	O2P	ADE	605	131.661	94.451	21.342	1.00	57.15	A16S
ATOM	31473	N3	URI	602	133.075	92.643	35.944	1.00	64.93	A16S	ATOM	31526	O5'	ADE	605	133.850	93.258	20.941	1.00	55.91	A16S
ATOM	31474	C4	URI	602	133.293	91.449	35.314	1.00	64.93	A16S	ATOM	31527	C5'	ADE	605	135.193	93.192	20.481	1.00	55.91	A16S
ATOM	31475	O4	URI	602	134.364	90.876	35.473	1.00	64.93	A16S	ATOM	31528	C4'	ADE	605	135.805	91.847	20.787	1.00	55.91	A16S
ATOM	31476	C5	URI	602	132.203	90.985	34.524	1.00	64.93	A16S	ATOM	31529	O4'	ADE	605	135.854	91.631	22.221	1.00	55.91	A16S
ATOM	31477	C2'	URI	602	129.443	94.337	33.728	1.00	53.38	A16S	ATOM	31530	C1'	ADE	605	135.780	90.239	22.485	1.00	55.91	A16S
ATOM	31478	O2'	URI	602	128.758	95.561	33.911	1.00	53.38	A16S	ATOM	31531	N9	ADE	605	134.551	89.973	23.216	1.00	57.15	A16S
ATOM	31479	C3'	URI	602	128.594	93.305	33.003	1.00	53.38	A16S	ATOM	31532	C4	ADE	605	134.272	88.830	23.918	1.00	57.15	A16S
ATOM	31480	O3'	URI	602	127.770	93.889	32.019	1.00	53.38	A16S	ATOM	31533	N3	ADE	605	135.094	87.789	24.138	1.00	57.15	A16S
ATOM	31481	P	CYT	603	128.058	93.583	30.478	1.00	52.93	A16S	ATOM	31534	C2	ADE	605	134.467	86.836	24.816	1.00	57.15	A16S
ATOM	31482	O1P	CYT	603	126.914	94.153	29.707	1.00	56.03	A16S	ATOM	31535	N1	ADE	605	133.209	86.810	25.264	1.00	57.15	A16S
ATOM	31483	O2P	CYT	603	128.382	92.143	30.347	1.00	56.03	A16S	ATOM	31536	C6	ADE	605	132.417	87.877	25.029	1.00	57.15	A16S
ATOM	31484	O5'	CYT	603	129.394	94.399	30.173	1.00	52.93	A16S	ATOM	31537	N6	ADE	605	131.161	87.850	25.472	1.00	57.15	A16S
ATOM	31485	C5'	CYT	603	129.403	95.813	30.218	1.00	52.93	A16S	ATOM	31538	C5	ADE	605	132.965	88.953	24.326	1.00	57.15	A16S
ATOM	31486	C4'	CYT	603	130.689	96.349	29.650	1.00	52.93	A16S	ATOM	31539	N7	ADE	605	132.443	90.175	23.933	1.00	57.15	A16S
ATOM	31487	O4'	CYT	603	131.781	95.918	30.488	1.00	52.93	A16S	ATOM	31540	C8	ADE	605	133.431	90.747	23.296	1.00	57.15	A16S
ATOM	31488	C1'	CYT	603	132.958	95.826	29.713	1.00	52.93	A16S	ATOM	31541	C2'	ADE	605	135.689	89.533	21.132	1.00	55.91	A16S
ATOM	31489	N1	CYT	603	133.541	94.498	29.920	1.00	56.03	A16S	ATOM	31542	O2'	ADE	605	136.981	89.145	20.713	1.00	55.91	A16S
ATOM	31490	C6	CYT	603	132.754	93.416	30.191	1.00	56.03	A16S	ATOM	31543	C3'	ADE	605	135.074	90.625	20.269	1.00	55.91	A16S
ATOM	31491	C2	CYT	603	134.914	94.367	29.851	1.00	56.03	A16S	ATOM	31544	O3'	ADE	605	135.378	90.412	18.903	1.00	55.91	A16S
ATOM	31492	O2	CYT	603	135.586	95.364	29.584	1.00	56.03	A16S	ATOM	31545	P	CYT	606	134.189	90.333	17.824	1.00	56.24	A16S
ATOM	31493	N3	CYT	603	135.476	93.166	30.078	1.00	56.03	A16S	ATOM	31546	O1P	CYT	606	134.794	89.825	16.569	1.00	48.95	A16S
ATOM	31494	C4	CYT	603	134.706	92.117	30.363	1.00	56.03	A16S	ATOM	31547	O2P	CYT	606	133.426	91.607	17.809	1.00	48.95	A16S
ATOM	31495	N4	CYT	603	135.300	90.951	30.603	1.00	56.03	A16S	ATOM	31548	O5'	CYT	606	133.236	89.193	18.384	1.00	56.24	A16S
ATOM	31496	C5	CYT	603	133.292	92.217	30.418	1.00	56.03	A16S	ATOM	31549	C5'	CYT	606	133.693	87.853	18.475	1.00	56.24	A16S
ATOM	31497	C2'	CYT	603	132.588	96.145	28.263	1.00	52.93	A16S	ATOM	31550	C4'	CYT	606	132.753	87.053	19.322	1.00	56.24	A16S
ATOM	31498	O2'	CYT	603	132.878	97.505	28.010	1.00	52.93	A16S	ATOM	31551	O4'	CYT	606	132.792	87.560	20.682	1.00	56.24	A16S
ATOM	31499	C3'	CYT	603	131.087	95.888	28.257	1.00	52.93	A16S	ATOM	31552	C1'	CYT	606	131.485	87.534	21.231	1.00	56.24	A16S
ATOM	31500	O3'	CYT	603	130.475	96.711	27.271	1.00	52.93	A16S	ATOM	31553	N1	CYT	606	131.029	88.914	21.424	1.00	48.95	A16S

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ATOM  31554  C6  CYT  606     131.728  89.974  20.919  1.00 48.95      A16S
ATOM  31555  C2  CYT  606     129.848  89.119  22.132  1.00 48.95      A16S
ATOM  31556  O2  CYT  606     129.239  88.131  22.573  1.00 48.95      A16S
ATOM  31557  N3  CYT  606     129.395  90.380  22.317  1.00 48.95      A16S
ATOM  31558  C4  CYT  606     130.083  91.408  21.827  1.00 48.95      A16S
ATOM  31559  N4  CYT  606     129.604  92.624  22.044  1.00 48.95      A16S
ATOM  31560  C5  CYT  606     131.294  91.227  21.094  1.00 48.95      A16S
ATOM  31561  C2' CYT  606     130.593  86.813  20.220  1.00 56.24      A16S
ATOM  31562  O2' CYT  606     130.619  85.432  20.526  1.00 56.24      A16S
ATOM  31563  C3' CYT  606     131.294  87.168  18.917  1.00 56.24      A16S
ATOM  31564  O3' CYT  606     131.000  86.260  17.868  1.00 56.24      A16S
ATOM  31565  P   CYT  607     129.955  86.676  16.719  1.00 45.20      A16S
ATOM  31566  O1P CYT  607     129.872  85.566  15.731  1.00 65.24      A16S
ATOM  31567  O2P CYT  607     130.285  88.049  16.246  1.00 65.24      A16S
ATOM  31568  O5' CYT  607     128.574  86.736  17.498  1.00 45.20      A16S
ATOM  31569  C5' CYT  607     128.028  85.567  18.049  1.00 45.20      A16S
ATOM  31570  C4' CYT  607     126.839  85.907  18.897  1.00 45.20      A16S
ATOM  31571  O4' CYT  607     127.275  86.733  19.995  1.00 45.20      A16S
ATOM  31572  C1' CYT  607     126.225  87.601  20.364  1.00 45.20      A16S
ATOM  31573  N1  CYT  607     126.706  88.972  20.231  1.00 65.24      A16S
ATOM  31574  C6  CYT  607     127.847  89.249  19.541  1.00 65.24      A16S
ATOM  31575  C2  CYT  607     125.967  89.987  20.807  1.00 65.24      A16S
ATOM  31576  O2  CYT  607     124.950  89.690  21.457  1.00 65.24      A16S
ATOM  31577  N3  CYT  607     126.371  91.261  20.652  1.00 65.24      A16S
ATOM  31578  C4  CYT  607     127.475  91.527  19.962  1.00 65.24      A16S
ATOM  31579  N4  CYT  607     127.830  92.801  19.819  1.00 65.24      A16S
ATOM  31580  C5  CYT  607     128.264  90.501  19.384  1.00 65.24      A16S
ATOM  31581  C2' CYT  607     125.042  87.327  19.432  1.00 45.20      A16S
ATOM  31582  O2' CYT  607     124.136  86.457  20.075  1.00 45.20      A16S
ATOM  31583  C3' CYT  607     125.742  86.714  18.230  1.00 45.20      A16S
ATOM  31584  O3' CYT  607     124.876  85.851  17.510  1.00 45.20      A16S
ATOM  31585  P   GUA  608     123.742  86.469  16.565  1.00 48.85      A16S
ATOM  31586  O1P GUA  608     123.022  85.357  15.893  1.00 57.40      A16S
ATOM  31587  O2P GUA  608     124.369  87.533  15.748  1.00 57.40      A16S
ATOM  31588  O5' GUA  608     122.715  87.131  17.586  1.00 48.85      A16S
ATOM  31589  C5' GUA  608     121.771  86.325  18.278  1.00 48.85      A16S
ATOM  31590  C4' GUA  608     120.629  87.167  18.770  1.00 48.85      A16S
ATOM  31591  O4' GUA  608     121.151  88.137  19.705  1.00 48.85      A16S
ATOM  31592  C1' GUA  608     120.460  89.362  19.557  1.00 48.85      A16S
ATOM  31593  N9  GUA  608     121.431  90.364  19.141  1.00 57.40      A16S
ATOM  31594  C4  GUA  608     121.262  91.720  19.165  1.00 57.40      A16S
ATOM  31595  N3  GUA  608     120.161  92.368  19.587  1.00 57.40      A16S
ATOM  31596  C2  GUA  608     120.295  93.676  19.493  1.00 57.40      A16S
ATOM  31597  N2  GUA  608     119.293  94.480  19.877  1.00 57.40      A16S
ATOM  31598  N1  GUA  608     121.420  94.295  19.015  1.00 57.40      A16S
ATOM  31599  C6  GUA  608     122.561  93.646  18.566  1.00 57.40      A16S
ATOM  31600  O6  GUA  608     123.513  94.303  18.132  1.00 57.40      A16S
ATOM  31601  C5  GUA  608     122.435  92.244  18.675  1.00 57.40      A16S
ATOM  31602  N7  GUA  608     123.331  91.234  18.359  1.00 57.40      A16S
ATOM  31603  C8  GUA  608     122.693  90.137  18.650  1.00 57.40      A16S
ATOM  31604  C2' GUA  608     119.347  89.136  18.533  1.00 48.85      A16S
ATOM  31605  O2' GUA  608     118.158  88.763  19.195  1.00 48.85      A16S
ATOM  31606  C3' GUA  608     119.926  87.995  17.711  1.00 48.85      A16S
ATOM  31607  O3' GUA  608     118.896  87.249  17.086  1.00 48.85      A16S
ATOM  31608  P   URI  609     118.320  87.736  15.679  1.00 51.63      A16S
ATOM  31609  O1P URI  609     117.237  86.825  15.258  1.00 56.73      A16S
ATOM  31610  O2P URI  609     119.480  87.952  14.782  1.00 56.73      A16S
ATOM  31611  O5' URI  609     117.655  89.134  16.034  1.00 51.63      A16S
ATOM  31612  C5' URI  609     116.457  89.187  16.797  1.00 51.63      A16S
ATOM  31613  C4' URI  609     115.949  90.608  16.880  1.00 51.63      A16S
ATOM  31614  O4' URI  609     116.826  91.401  17.723  1.00 51.63      A16S
ATOM  31615  C1' URI  609     116.899  92.728  17.221  1.00 51.63      A16S
ATOM  31616  N1  URI  609     118.277  92.970  16.775  1.00 56.73      A16S
ATOM  31617  C6  URI  609     119.101  91.935  16.432  1.00 56.73      A16S
ATOM  31618  C2  URI  609     118.705  94.271  16.702  1.00 56.73      A16S
ATOM  31619  O2  URI  609     118.007  95.217  17.025  1.00 56.73      A16S
ATOM  31620  N3  URI  609     119.985  94.431  16.243  1.00 56.73      A16S
ATOM  31621  C4  URI  609     120.856  93.443  15.870  1.00 56.73      A16S
ATOM  31622  O4  URI  609     121.974  93.746  15.459  1.00 56.73      A16S
ATOM  31623  C5  URI  609     120.341  92.121  15.994  1.00 56.73      A16S
ATOM  31624  C2' URI  609     115.904  92.815  16.066  1.00 51.63      A16S
ATOM  31625  O2' URI  609     114.641  93.196  16.569  1.00 51.63      A16S
ATOM  31626  C3' URI  609     115.904  91.379  15.574  1.00 51.63      A16S
ATOM  31627  O3' URI  609     114.715  91.100  14.872  1.00 51.63      A16S
ATOM  31628  P   GUA  610     114.658  91.358  13.295  1.00 66.19      A16S
ATOM  31629  O1P GUA  610     113.301  90.982  12.831  1.00 68.78      A16S
ATOM  31630  O2P GUA  610     115.852  90.735  12.674  1.00 68.78      A16S
ATOM  31631  O5' GUA  610     114.794  92.937  13.163  1.00 66.19      A16S
ATOM  31632  C5' GUA  610     113.753  93.784  13.609  1.00 66.19      A16S
ATOM  31633  C4' GUA  610     114.191  95.223  13.558  1.00 66.19      A16S
ATOM  31634  O4' GUA  610     115.326  95.429  14.441  1.00 66.19      A16S
ATOM  31635  C1' GUA  610     116.134  96.476  13.926  1.00 66.19      A16S
ATOM  31636  N9  GUA  610     117.452  95.939  13.609  1.00 68.78      A16S
ATOM  31637  C4  GUA  610     118.565  96.674  13.276  1.00 68.78      A16S
ATOM  31638  N3  GUA  610     118.639  98.019  13.221  1.00 68.78      A16S
ATOM  31639  C2  GUA  610     119.839  98.430  12.859  1.00 68.78      A16S
ATOM  31640  N2  GUA  610     120.093  99.734  12.764  1.00 68.78      A16S
ATOM  31641  N1  GUA  610     120.882  97.592  12.563  1.00 68.78      A16S
ATOM  31642  C6  GUA  610     120.826  96.207  12.604  1.00 68.78      A16S
ATOM  31643  O6  GUA  610     121.815  95.548  12.294  1.00 68.78      A16S
ATOM  31644  C5  GUA  610     119.547  95.748  13.009  1.00 68.78      A16S
ATOM  31645  N7  GUA  610     119.070  94.458  13.193  1.00 68.78      A16S
ATOM  31646  C8  GUA  610     117.825  94.621  13.551  1.00 68.78      A16S
ATOM  31647  C2' GUA  610     115.446  96.971  12.654  1.00 66.19      A16S
ATOM  31648  O2' GUA  610     114.540  97.999  12.978  1.00 66.19      A16S
ATOM  31649  C3' GUA  610     114.707  95.720  12.224  1.00 66.19      A16S
ATOM  31650  O3' GUA  610     113.651  96.052  11.346  1.00 66.19      A16S
ATOM  31651  P   GUA  611     113.960  96.238   9.786  1.00 76.73      A16S
ATOM  31652  O1P GUA  611     112.679  96.544   9.101  1.00 66.06      A16S
ATOM  31653  O2P GUA  611     114.781  95.092   9.322  1.00 66.06      A16S
ATOM  31654  O5' GUA  611     114.865  97.545   9.750  1.00 76.73      A16S
ATOM  31655  C5' GUA  611     114.323  98.811  10.096  1.00 76.73      A16S
ATOM  31656  C4' GUA  611     115.346  99.891   9.858  1.00 76.73      A16S
ATOM  31657  O4' GUA  611     116.503  99.651  10.708  1.00 76.73      A16S
ATOM  31658  C1' GUA  611     117.687 100.030  10.022  1.00 76.73      A16S
ATOM  31659  N9  GUA  611     118.483  98.829   9.795  1.00 66.06      A16S
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ATOM  31660  C4  GUA  611     119.836  98.767   9.562  1.00 66.06      A16S
ATOM  31661  N3  GUA  611     120.683  99.815   9.506  1.00 66.06      A16S
ATOM  31662  C2  GUA  611     121.924  99.430   9.259  1.00 66.06      A16S
ATOM  31663  N2  GUA  611     122.899 100.338   9.166  1.00 66.06      A16S
ATOM  31664  N1  GUA  611     122.300  98.123   9.087  1.00 66.06      A16S
ATOM  31665  C6  GUA  611     121.443  97.030   9.146  1.00 66.06      A16S
ATOM  31666  O6  GUA  611     121.884  95.889   8.984  1.00 66.06      A16S
ATOM  31667  C5  GUA  611     120.116  97.426   9.401  1.00 66.06      A16S
ATOM  31668  N7  GUA  611     118.966  96.664   9.529  1.00 66.06      A16S
ATOM  31669  C8  GUA  611     118.024  97.536   9.763  1.00 66.06      A16S
ATOM  31670  C2' GUA  611     117.240 100.677   8.713  1.00 76.73      A16S
ATOM  31671  O2' GUA  611     117.034 102.052   8.944  1.00 76.73      A16S
ATOM  31672  C3' GUA  611     115.934  99.941   8.459  1.00 76.73      A16S
ATOM  31673  O3' GUA  611     115.085 100.645   7.561  1.00 76.73      A16S
ATOM  31674  P   GUA  612     115.271 100.448   5.977  1.00 81.04      A16S
ATOM  31675  O1P GUA  612     114.284 101.320   5.298  1.00 76.92      A16S
ATOM  31676  O2P GUA  612     115.301  99.003   5.664  1.00 76.92      A16S
ATOM  31677  O5' GUA  612     116.725 101.026   5.702  1.00 81.04      A16S
ATOM  31678  C5' GUA  612     117.028 102.385   5.981  1.00 81.04      A16S
ATOM  31679  C4' GUA  612     118.444 102.686   5.578  1.00 81.04      A16S
ATOM  31680  O4' GUA  612     119.371 102.015   6.473  1.00 81.04      A16S
ATOM  31681  C1' GUA  612     120.513 101.591   5.742  1.00 81.04      A16S
ATOM  31682  N9  GUA  612     120.557 100.135   5.772  1.00 76.92      A16S
ATOM  31683  C4  GUA  612     121.670  99.349   5.606  1.00 76.92      A16S
ATOM  31684  N3  GUA  612     122.929  99.788   5.407  1.00 76.92      A16S
ATOM  31685  C2  GUA  612     123.782  98.788   5.268  1.00 76.92      A16S
ATOM  31686  N2  GUA  612     125.076  99.038   5.073  1.00 76.92      A16S
ATOM  31687  N1  GUA  612     123.428  97.464   5.313  1.00 76.92      A16S
ATOM  31688  C6  GUA  612     122.141  96.988   5.512  1.00 76.92      A16S
ATOM  31689  O6  GUA  612     121.932  95.773   5.525  1.00 76.92      A16S
ATOM  31690  C5  GUA  612     121.213  98.049   5.674  1.00 76.92      A16S
ATOM  31691  N7  GUA  612     119.843  98.020   5.894  1.00 76.92      A16S
ATOM  31692  C8  GUA  612     119.499  99.278   5.948  1.00 76.92      A16S
ATOM  31693  C2' GUA  612     120.335 102.105   4.314  1.00 81.04      A16S
ATOM  31694  O2' GUA  612     120.911 103.388   4.188  1.00 81.04      A16S
ATOM  31695  C3' GUA  612     118.821 102.145   4.217  1.00 81.04      A16S
ATOM  31696  O3' GUA  612     118.362 102.992   3.186  1.00 81.04      A16S
ATOM  31697  P   GUA  613     118.079 102.375   1.737  1.00 92.68      A16S
ATOM  31698  O1P GUA  613     117.317 103.403   0.984  1.00 83.17      A16S
ATOM  31699  O2P GUA  613     117.505 101.018   1.918  1.00 83.17      A16S
ATOM  31700  O5' GUA  613     119.536 102.247   1.105  1.00 92.68      A16S
ATOM  31701  C5' GUA  613     120.404 103.379   1.077  1.00 92.68      A16S
ATOM  31702  C4' GUA  613     121.833 102.953   0.840  1.00 92.68      A16S
ATOM  31703  O4' GUA  613     122.260 102.079   1.916  1.00 92.68      A16S
ATOM  31704  C1' GUA  613     123.162 101.108   1.413  1.00 92.68      A16S
ATOM  31705  N9  GUA  613     122.578  99.788   1.621  1.00 83.17      A16S
ATOM  31706  C4  GUA  613     123.251  98.591   1.636  1.00 83.17      A16S
ATOM  31707  N3  GUA  613     124.584  98.428   1.482  1.00 83.17      A16S
ATOM  31708  C2  GUA  613     124.936  97.153   1.539  1.00 83.17      A16S
ATOM  31709  N2  GUA  613     126.229  96.809   1.424  1.00 83.17      A16S
ATOM  31710  N1  GUA  613     124.045  96.120   1.720  1.00 83.17      A16S
ATOM  31711  C6  GUA  613     122.670  96.267   1.880  1.00 83.17      A16S
ATOM  31712  O6  GUA  613     121.957  95.270   2.035  1.00 83.17      A16S
ATOM  31713  C5  GUA  613     122.282  97.630   1.833  1.00 83.17      A16S
ATOM  31714  N7  GUA  613     121.028  98.212   1.953  1.00 83.17      A16S
ATOM  31715  C8  GUA  613     121.252  99.491   1.824  1.00 83.17      A16S
ATOM  31716  C2' GUA  613     123.384 101.423  -0.068  1.00 92.68      A16S
ATOM  31717  O2' GUA  613     124.522 102.245  -0.216  1.00 92.68      A16S
ATOM  31718  C3' GUA  613     122.091 102.147  -0.420  1.00 92.68      A16S
ATOM  31719  O3' GUA  613     122.263 103.001  -1.547  1.00 92.68      A16S
ATOM  31720  P   GUA  614     121.974 102.437  -3.026  1.00101.64      A16S
ATOM  31721  O1P GUA  614     120.570 101.943  -3.047  1.00112.75      A16S
ATOM  31722  O2P GUA  614     122.406 103.464  -4.011  1.00112.75      A16S
ATOM  31723  O5' GUA  614     122.958 101.188  -3.151  1.00101.64      A16S
ATOM  31724  C5' GUA  614     124.370 101.376  -3.222  1.00101.64      A16S
ATOM  31725  C4' GUA  614     125.072 100.046  -3.375  1.00101.64      A16S
ATOM  31726  O4' GUA  614     124.963  99.274  -2.151  1.00101.64      A16S
ATOM  31727  C1' GUA  614     124.814  97.899  -2.468  1.00101.64      A16S
ATOM  31728  N9  GUA  614     123.493  97.480  -2.011  1.00112.75      A16S
ATOM  31729  C4  GUA  614     123.036  96.191  -1.904  1.00112.75      A16S
ATOM  31730  N3  GUA  614     123.734  95.077  -2.207  1.00112.75      A16S
ATOM  31731  C2  GUA  614     123.023  93.980  -2.008  1.00112.75      A16S
ATOM  31732  N2  GUA  614     123.563  92.779  -2.267  1.00112.75      A16S
ATOM  31733  N1  GUA  614     121.730  93.979  -1.543  1.00112.75      A16S
ATOM  31734  C6  GUA  614     120.993  95.115  -1.223  1.00112.75      A16S
ATOM  31735  O6  GUA  614     119.831  95.002  -0.809  1.00112.75      A16S
ATOM  31736  C5  GUA  614     121.744  96.299  -1.438  1.00112.75      A16S
ATOM  31737  N7  GUA  614     121.394  97.630  -1.257  1.00112.75      A16S
ATOM  31738  C8  GUA  614     122.461  98.293  -1.608  1.00112.75      A16S
ATOM  31739  C2' GUA  614     124.979  97.768  -3.984  1.00101.64      A16S
ATOM  31740  O2' GUA  614     126.335  97.523  -4.300  1.00101.64      A16S
ATOM  31741  C3' GUA  614     124.509  99.137  -4.450  1.00101.64      A16S
ATOM  31742  O3' GUA  614     125.055  99.478  -5.710  1.00101.64      A16S
ATOM  31743  P   ADE  615     124.084  99.984  -6.882  1.00 77.39      A16S
ATOM  31744  O1P ADE  615     123.921 101.456  -6.740  1.00111.18      A16S
ATOM  31745  O2P ADE  615     122.882  99.112  -6.888  1.00111.18      A16S
ATOM  31746  O5' ADE  615     124.922  99.701  -8.207  1.00 77.39      A16S
ATOM  31747  C5' ADE  615     126.247 100.190  -8.339  1.00 77.39      A16S
ATOM  31748  C4' ADE  615     127.163  99.085  -8.792  1.00 77.39      A16S
ATOM  31749  O4' ADE  615     127.270  98.073  -7.756  1.00 77.39      A16S
ATOM  31750  C1' ADE  615     127.416  96.793  -8.355  1.00 77.39      A16S
ATOM  31751  N9  ADE  615     126.287  95.953  -7.948  1.00111.18      A16S
ATOM  31752  C4  ADE  615     126.269  94.580  -7.915  1.00111.18      A16S
ATOM  31753  N3  ADE  615     127.279  93.744  -8.207  1.00111.18      A16S
ATOM  31754  C2  ADE  615     126.890  92.478  -8.083  1.00111.18      A16S
ATOM  31755  N1  ADE  615     125.696  91.989  -7.732  1.00111.18      A16S
ATOM  31756  C6  ADE  615     124.701  92.856  -7.451  1.00111.18      A16S
ATOM  31757  N6  ADE  615     123.504  92.369  -7.118  1.00111.18      A16S
ATOM  31758  C5  ADE  615     124.988  94.228  -7.534  1.00111.18      A16S
ATOM  31759  N7  ADE  615     124.217  95.358  -7.304  1.00111.18      A16S
ATOM  31760  C8  ADE  615     125.033  96.351  -7.557  1.00111.18      A16S
ATOM  31761  C2' ADE  615     127.451  97.008  -9.872  1.00 77.39      A16S
ATOM  31762  O2' ADE  615     128.786  97.092 -10.319  1.00 77.39      A16S
ATOM  31763  C3' ADE  615     126.692  98.322 -10.012  1.00 77.39      A16S
ATOM  31764  O3' ADE  615     127.046  99.016 -11.197  1.00 77.39      A16S
ATOM  31765  P   GUA  616     126.257  98.715 -12.565  1.00 64.58      A16S
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ATOM	31766	O1P	GUA	616	127.151	99.146	-13.673	1.00	74.16	A16S	ATOM	31819	C2	GUA	618	113.091	93.264	-13.765	1.00	63.37	A16S
ATOM	31767	O2P	GUA	616	124.870	99.250	-12.500	1.00	74.16	A16S	ATOM	31820	N2	GUA	618	111.827	93.036	-13.398	1.00	63.37	A16S
ATOM	31768	O5'	GUA	616	126.182	97.125	-12.616	1.00	64.58	A16S	ATOM	31821	N1	GUA	618	113.620	94.463	-13.371	1.00	63.37	A16S
ATOM	31769	C5'	GUA	616	127.306	96.359	-13.033	1.00	64.58	A16S	ATOM	31822	C6	GUA	618	114.915	94.890	-13.635	1.00	63.37	A16S
ATOM	31770	C4'	GUA	616	126.917	94.914	-13.190	1.00	64.58	A16S	ATOM	31823	O6	GUA	618	115.291	96.004	-13.238	1.00	63.37	A16S
ATOM	31771	O4'	GUA	616	126.585	94.361	-11.886	1.00	64.58	A16S	ATOM	31824	C5	GUA	618	115.639	93.919	-14.367	1.00	63.37	A16S
ATOM	31772	C1'	GUA	616	125.519	93.438	-12.021	1.00	64.58	A16S	ATOM	31825	N7	GUA	618	116.946	93.931	-14.824	1.00	63.37	A16S
ATOM	31773	N9	GUA	616	124.358	93.975	-11.316	1.00	74.16	A16S	ATOM	31826	C8	GUA	618	117.080	92.789	-15.437	1.00	63.37	A16S
ATOM	31774	C4	GUA	616	123.324	93.249	-10.779	1.00	74.16	A16S	ATOM	31827	C2'	GUA	618	114.834	90.751	-17.204	1.00	52.44	A16S
ATOM	31775	N3	GUA	616	123.215	91.904	-10.782	1.00	74.16	A16S	ATOM	31828	O2'	GUA	618	114.067	89.567	-17.210	1.00	52.44	A16S
ATOM	31776	C2	GUA	616	122.104	91.496	-10.197	1.00	74.16	A16S	ATOM	31829	C3'	GUA	618	115.863	90.843	-18.324	1.00	52.44	A16S
ATOM	31777	N2	GUA	616	121.838	90.180	-10.110	1.00	74.16	A16S	ATOM	31830	O3'	GUA	618	115.367	90.447	-19.591	1.00	52.44	A16S
ATOM	31778	N1	GUA	616	121.175	92.345	-9.654	1.00	74.16	A16S	ATOM	31831	P	URI	619	114.773	91.562	-20.575	1.00	49.23	A16S
ATOM	31779	C6	GUA	616	121.265	93.731	-9.642	1.00	74.16	A16S	ATOM	31832	O1P	URI	619	114.373	90.948	-21.862	1.00	53.69	A16S
ATOM	31780	O6	GUA	616	120.364	94.398	-9.129	1.00	74.16	A16S	ATOM	31833	O2P	URI	619	115.693	92.715	-20.563	1.00	53.69	A16S
ATOM	31781	C5	GUA	616	122.451	94.181	-10.264	1.00	74.16	A16S	ATOM	31834	O5'	URI	619	113.457	92.019	-19.828	1.00	49.23	A16S
ATOM	31782	N7	GUA	616	122.931	95.466	-10.461	1.00	74.16	A16S	ATOM	31835	C5'	URI	619	112.404	91.101	-19.620	1.00	49.23	A16S
ATOM	31783	C8	GUA	616	124.065	95.296	-11.082	1.00	74.16	A16S	ATOM	31836	C4'	URI	619	111.278	91.797	-18.937	1.00	49.23	A16S
ATOM	31784	C2'	GUA	616	125.250	93.298	-13.522	1.00	64.58	A16S	ATOM	31837	O4'	URI	619	111.708	92.214	-17.616	1.00	49.23	A16S
ATOM	31785	O2'	GUA	616	126.051	92.272	-14.066	1.00	64.58	A16S	ATOM	31838	C1'	URI	619	111.035	93.412	-17.268	1.00	49.23	A16S
ATOM	31786	C3'	GUA	616	125.672	94.669	-14.018	1.00	64.58	A16S	ATOM	31839	N1	URI	619	112.032	94.436	-16.936	1.00	53.69	A16S
ATOM	31787	O3'	GUA	616	125.952	94.659	-15.405	1.00	64.58	A16S	ATOM	31840	C6	URI	619	113.326	94.358	-17.376	1.00	53.69	A16S
ATOM	31788	P	CYT	617	124.777	94.995	-16.448	1.00	44.79	A16S	ATOM	31841	C2	URI	619	111.609	95.496	-16.172	1.00	53.69	A16S
ATOM	31789	O1P	CYT	617	125.325	94.891	-17.829	1.00	61.61	A16S	ATOM	31842	O2	URI	619	110.467	95.595	-15.765	1.00	53.69	A16S
ATOM	31790	O2P	CYT	617	124.127	96.255	-16.008	1.00	61.61	A16S	ATOM	31843	N3	URI	619	112.563	96.439	-15.908	1.00	53.69	A16S
ATOM	31791	O5'	CYT	617	123.730	93.814	-16.234	1.00	44.79	A16S	ATOM	31844	C4	URI	619	113.862	96.432	-16.326	1.00	53.69	A16S
ATOM	31792	C5'	CYT	617	123.995	92.501	-16.729	1.00	44.79	A16S	ATOM	31845	O4	URI	619	114.579	97.388	-16.060	1.00	53.69	A16S
ATOM	31793	C4'	CYT	617	122.870	91.557	-16.365	1.00	44.79	A16S	ATOM	31846	C5	URI	619	114.232	95.298	-17.105	1.00	53.69	A16S
ATOM	31794	O4'	CYT	617	122.759	91.489	-14.915	1.00	44.79	A16S	ATOM	31847	C2'	URI	619	110.177	93.809	-18.472	1.00	49.23	A16S
ATOM	31795	C1'	CYT	617	121.399	91.345	-14.547	1.00	44.79	A16S	ATOM	31848	O2'	URI	619	108.880	93.263	-18.354	1.00	49.23	A16S
ATOM	31796	N1	CYT	617	120.975	92.558	-13.835	1.00	61.61	A16S	ATOM	31849	C3'	URI	619	110.913	93.112	-19.590	1.00	49.23	A16S
ATOM	31797	C6	CYT	617	121.700	93.714	-13.910	1.00	61.61	A16S	ATOM	31850	O3'	URI	619	110.069	92.924	-20.701	1.00	49.23	A16S
ATOM	31798	C2	CYT	617	119.799	92.515	-13.097	1.00	61.61	A16S	ATOM	31851	P	GUA	620	109.858	94.135	-21.721	1.00	62.00	A16S
ATOM	31799	O2	CYT	617	119.195	91.443	-13.006	1.00	61.61	A16S	ATOM	31852	O1P	GUA	620	108.962	93.682	-22.817	1.00	56.20	A16S
ATOM	31800	N3	CYT	617	119.352	93.639	-12.497	1.00	61.61	A16S	ATOM	31853	O2P	GUA	620	111.202	94.676	-22.048	1.00	56.20	A16S
ATOM	31801	C4	CYT	617	120.047	94.768	-12.597	1.00	61.61	A16S	ATOM	31854	O5'	GUA	620	109.081	95.218	-20.849	1.00	62.00	A16S
ATOM	31802	N4	CYT	617	119.558	95.851	-12.004	1.00	61.61	A16S	ATOM	31855	C5'	GUA	620	107.702	95.063	-20.570	1.00	62.00	A16S
ATOM	31803	C5	CYT	617	121.274	94.833	-13.313	1.00	61.61	A16S	ATOM	31856	C4'	GUA	620	107.171	96.302	-19.908	1.00	62.00	A16S
ATOM	31804	C2'	CYT	617	120.619	91.156	-15.844	1.00	44.79	A16S	ATOM	31857	O4'	GUA	620	107.790	96.473	-18.602	1.00	62.00	A16S
ATOM	31805	O2'	CYT	617	120.618	89.779	-16.140	1.00	44.79	A16S	ATOM	31858	C1'	GUA	620	107.920	97.858	-18.313	1.00	62.00	A16S
ATOM	31806	C3'	CYT	617	121.476	91.952	-16.816	1.00	44.79	A16S	ATOM	31859	N9	GUA	620	109.342	98.168	-18.234	1.00	56.20	A16S
ATOM	31807	O3'	CYT	617	121.243	91.569	-18.161	1.00	44.79	A16S	ATOM	31860	C4	GUA	620	109.920	99.279	-17.662	1.00	56.20	A16S
ATOM	31808	P	GUA	618	119.951	92.140	-18.941	1.00	52.44	A16S	ATOM	31861	N3	GUA	620	109.271	100.282	-17.034	1.00	56.20	A16S
ATOM	31809	O1P	GUA	618	119.906	91.575	-20.321	1.00	63.37	A16S	ATOM	31862	C2	GUA	620	110.109	101.213	-16.589	1.00	56.20	A16S
ATOM	31810	O2P	GUA	618	119.940	93.611	-18.739	1.00	63.37	A16S	ATOM	31863	N2	GUA	620	109.647	102.276	-15.929	1.00	56.20	A16S
ATOM	31811	O5'	GUA	618	118.706	91.516	-18.172	1.00	52.44	A16S	ATOM	31864	N1	GUA	620	111.470	101.168	-16.755	1.00	56.20	A16S
ATOM	31812	C5'	GUA	618	118.314	90.172	-18.409	1.00	52.44	A16S	ATOM	31865	C6	GUA	620	112.160	100.150	-17.395	1.00	56.20	A16S
ATOM	31813	C4'	GUA	618	116.953	89.919	-17.827	1.00	52.44	A16S	ATOM	31866	O6	GUA	620	113.395	100.207	-17.476	1.00	56.20	A16S
ATOM	31814	O4'	GUA	618	116.997	90.199	-16.405	1.00	52.44	A16S	ATOM	31867	C5	GUA	620	111.272	99.138	-17.878	1.00	56.20	A16S
ATOM	31815	C1'	GUA	618	115.743	90.707	-15.979	1.00	52.44	A16S	ATOM	31868	N7	GUA	620	111.537	97.962	-18.563	1.00	56.20	A16S
ATOM	31816	N9	GUA	618	115.943	92.028	-15.404	1.00	63.37	A16S	ATOM	31869	C8	GUA	620	110.367	97.419	-18.745	1.00	56.20	A16S
ATOM	31817	C4	GUA	618	115.011	92.749	-14.719	1.00	63.37	A16S	ATOM	31870	C2'	GUA	620	107.276	98.599	-19.488	1.00	62.00	A16S
ATOM	31818	N3	GUA	618	113.751	92.359	-14.460	1.00	63.37	A16S	ATOM	31871	O2'	GUA	620	105.896	98.777	-19.254	1.00	62.00	A16S

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ATOM  31872  C3' GUA  620     107.496  97.604 -20.610  1.00 62.00      A16S
ATOM  31873  O3' GUA  620     106.623  97.860 -21.695  1.00 62.00      A16S
ATOM  31874  P   GUA  621     107.124  98.791 -22.904  1.00 56.23      A16S
ATOM  31875  O1P GUA  621     108.524  98.380 -23.199  1.00 64.14      A16S
ATOM  31876  O2P GUA  621     106.103  98.744 -23.993  1.00 64.14      A16S
ATOM  31877  O5' GUA  621     107.145 100.257 -22.270  1.00 56.23      A16S
ATOM  31878  C5' GUA  621     105.964 100.821 -21.711  1.00 56.23      A16S
ATOM  31879  C4' GUA  621     106.270 102.123 -21.006  1.00 56.23      A16S
ATOM  31880  O4' GUA  621     107.075 101.881 -19.816  1.00 56.23      A16S
ATOM  31881  C1' GUA  621     107.925 102.999 -19.582  1.00 56.23      A16S
ATOM  31882  N9  GUA  621     109.310 102.570 -19.765  1.00 64.14      A16S
ATOM  31883  C4  GUA  621     110.441 103.264 -19.389  1.00 64.14      A16S
ATOM  31884  N3  GUA  621     110.472 104.437 -18.724  1.00 64.14      A16S
ATOM  31885  C2  GUA  621     111.705 104.859 -18.525  1.00 64.14      A16S
ATOM  31886  N2  GUA  621     111.920 105.984 -17.856  1.00 64.14      A16S
ATOM  31887  N1  GUA  621     112.820 104.203 -18.961  1.00 64.14      A16S
ATOM  31888  C6  GUA  621     112.821 103.003 -19.659  1.00 64.14      A16S
ATOM  31889  O6  GUA  621     113.892 102.508 -20.031  1.00 64.14      A16S
ATOM  31890  C5  GUA  621     111.500 102.516 -19.858  1.00 64.14      A16S
ATOM  31891  N7  GUA  621     111.050 101.361 -20.483  1.00 64.14      A16S
ATOM  31892  C8  GUA  621     109.749 101.430 -20.394  1.00 64.14      A16S
ATOM  31893  C2' GUA  621     107.581 104.033 -20.659  1.00 56.23      A16S
ATOM  31894  O2' GUA  621     106.574 104.930 -20.248  1.00 56.23      A16S
ATOM  31895  C3' GUA  621     107.096 103.134 -21.776  1.00 56.23      A16S
ATOM  31896  O3' GUA  621     106.355 103.876 -22.722  1.00 56.23      A16S
ATOM  31897  P   GUA  622     107.104 104.453 -24.023  1.00 70.82      A16S
ATOM  31898  O1P GUA  622     108.004 103.385 -24.527  1.00 60.92      A16S
ATOM  31899  O2P GUA  622     106.100 105.052 -24.944  1.00 60.92      A16S
ATOM  31900  O5' GUA  622     108.000 105.632 -23.433  1.00 70.82      A16S
ATOM  31901  C5' GUA  622     107.391 106.742 -22.780  1.00 70.82      A16S
ATOM  31902  C4' GUA  622     108.439 107.675 -22.215  1.00 70.82      A16S
ATOM  31903  O4' GUA  622     109.270 106.954 -21.263  1.00 70.82      A16S
ATOM  31904  C1' GUA  622     110.570 107.530 -21.237  1.00 70.82      A16S
ATOM  31905  N9  GUA  622     111.550 106.518 -21.620  1.00 60.92      A16S
ATOM  31906  C4  GUA  622     112.921 106.635 -21.522  1.00 60.92      A16S
ATOM  31907  N3  GUA  622     113.592 107.692 -21.032  1.00 60.92      A16S
ATOM  31908  C2  GUA  622     114.896 107.520 -21.093  1.00 60.92      A16S
ATOM  31909  N2  GUA  622     115.711 108.475 -20.658  1.00 60.92      A16S
ATOM  31910  N1  GUA  622     115.496 106.401 -21.582  1.00 60.92      A16S
ATOM  31911  C6  GUA  622     114.831 105.296 -22.085  1.00 60.92      A16S
ATOM  31912  O6  GUA  622     115.476 104.330 -22.493  1.00 60.92      A16S
ATOM  31913  C5  GUA  622     113.425 105.468 -22.040  1.00 60.92      A16S
ATOM  31914  N7  GUA  622     112.399 104.626 -22.447  1.00 60.92      A16S
ATOM  31915  C8  GUA  622     111.306 105.286 -22.170  1.00 60.92      A16S
ATOM  31916  C2' GUA  622     110.560 108.685 -22.239  1.00 70.82      A16S
ATOM  31917  O2' GUA  622     110.243 109.885 -21.570  1.00 70.82      A16S
ATOM  31918  C3' GUA  622     109.459 108.242 -23.188  1.00 70.82      A16S
ATOM  31919  O3' GUA  622     108.960 109.345 -23.931  1.00 70.82      A16S
ATOM  31920  P   ADE  623     109.756 109.838 -25.239  1.00 50.19      A16S
ATOM  31921  O1P ADE  623     109.077 111.040 -25.790  1.00 59.16      A16S
ATOM  31922  O2P ADE  623     110.005 108.661 -26.111  1.00 59.16      A16S
ATOM  31923  O5' ADE  623     111.135 110.354 -24.655  1.00 50.19      A16S
ATOM  31924  C5' ADE  623     111.181 111.548 -23.888  1.00 50.19      A16S
ATOM  31925  C4' ADE  623     112.602 112.023 -23.764  1.00 50.19      A16S
ATOM  31926  O4' ADE  623     113.367 111.074 -22.982  1.00 50.19      A16S
ATOM  31927  C1' ADE  623     114.690 111.026 -23.467  1.00 50.19      A16S
ATOM  31928  N9  ADE  623     114.955 109.679 -23.966  1.00 59.16      A16S
ATOM  31929  C4  ADE  623     116.177 109.060 -23.948  1.00 59.16      A16S
ATOM  31930  N3  ADE  623     117.326 109.553 -23.460  1.00 59.16      A16S
ATOM  31931  C2  ADE  623     118.312 108.686 -23.631  1.00 59.16      A16S
ATOM  31932  N1  ADE  623     118.286 107.474 -24.189  1.00 59.16      A16S
ATOM  31933  C6  ADE  623     117.114 107.007 -24.665  1.00 59.16      A16S
ATOM  31934  N6  ADE  623     117.089 105.793 -25.216  1.00 59.16      A16S
ATOM  31935  C5  ADE  623     115.988 107.832 -24.548  1.00 59.16      A16S
ATOM  31936  N7  ADE  623     114.665 107.667 -24.924  1.00 59.16      A16S
ATOM  31937  C8  ADE  623     114.093 108.787 -24.553  1.00 59.16      A16S
ATOM  31938  C2' ADE  623     114.804 112.093 -24.557  1.00 50.19      A16S
ATOM  31939  O2' ADE  623     115.199 113.306 -23.946  1.00 50.19      A16S
ATOM  31940  C3' ADE  623     113.374 112.156 -25.066  1.00 50.19      A16S
ATOM  31941  O3' ADE  623     113.097 113.434 -25.627  1.00 50.19      A16S
ATOM  31942  P   URI  624     113.066 113.634 -27.222  1.00 55.88      A16S
ATOM  31943  O1P URI  624     112.539 114.992 -27.499  1.00 67.18      A16S
ATOM  31944  O2P URI  624     112.440 112.449 -27.860  1.00 67.18      A16S
ATOM  31945  O5' URI  624     114.591 113.675 -27.644  1.00 55.88      A16S
ATOM  31946  C5' URI  624     115.559 114.312 -26.826  1.00 55.88      A16S
ATOM  31947  C4' URI  624     116.908 113.835 -27.239  1.00 55.88      A16S
ATOM  31948  O4' URI  624     117.024 112.441 -26.921  1.00 55.88      A16S
ATOM  31949  C1' URI  624     117.747 111.792 -27.930  1.00 55.88      A16S
ATOM  31950  N1  URI  624     117.243 110.415 -28.032  1.00 67.18      A16S
ATOM  31951  C6  URI  624     115.917 110.143 -28.225  1.00 67.18      A16S
ATOM  31952  C2  URI  624     118.161 109.395 -27.898  1.00 67.18      A16S
ATOM  31953  O2  URI  624     119.347 109.597 -27.714  1.00 67.18      A16S
ATOM  31954  N3  URI  624     117.638 108.128 -27.972  1.00 67.18      A16S
ATOM  31955  C4  URI  624     116.317 107.787 -28.160  1.00 67.18      A16S
ATOM  31956  O4  URI  624     116.008 106.601 -28.291  1.00 67.18      A16S
ATOM  31957  C5  URI  624     115.435 108.897 -28.285  1.00 67.18      A16S
ATOM  31958  C2' URI  624     117.831 112.701 -29.171  1.00 55.88      A16S
ATOM  31959  O2' URI  624     119.175 112.934 -29.495  1.00 55.88      A16S
ATOM  31960  C3' URI  624     117.077 113.969 -28.738  1.00 55.88      A16S
ATOM  31961  O3' URI  624     117.760 115.231 -28.853  1.00 55.88      A16S
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ATOM  31965  O5' ADE  625     119.932 115.979 -29.884  1.00 52.06      A16S
ATOM  31966  C5' ADE  625     120.404 117.294 -29.613  1.00 52.06      A16S
ATOM  31967  C4' ADE  625     121.683 117.243 -28.805  1.00 52.06      A16S
ATOM  31968  O4' ADE  625     121.403 116.734 -27.477  1.00 52.06      A16S
ATOM  31969  C1' ADE  625     122.480 115.928 -27.035  1.00 52.06      A16S
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ATOM  31973  C2  ADE  625     123.937 112.348 -24.948  1.00 43.62      A16S
ATOM  31974  N1  ADE  625     123.220 111.216 -25.031  1.00 43.62      A16S
ATOM  31975  C6  ADE  625     122.081 111.228 -25.747  1.00 43.62      A16S
ATOM  31976  N6  ADE  625     121.368 110.107 -25.827  1.00 43.62      A16S
ATOM  31977  C5  ADE  625     121.713 112.436 -26.370  1.00 43.62      A16S
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ATOM  31981  O2' ADE  625     124.402 117.169 -27.766  1.00 52.06      A16S
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ATOM  31986  O2P CYT  626     124.853 116.968 -32.514  1.00 51.04      A16S
ATOM  31987  O5' CYT  626     125.193 115.144 -30.847  1.00 49.19      A16S
ATOM  31988  C5' CYT  626     126.366 115.673 -30.229  1.00 49.19      A16S
ATOM  31989  C4' CYT  626     127.162 114.565 -29.575  1.00 49.19      A16S
ATOM  31990  O4' CYT  626     126.446 114.058 -28.414  1.00 49.19      A16S
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ATOM  32002  C3' CYT  626     127.388 113.324 -30.418  1.00 49.19      A16S
ATOM  32003  O3' CYT  626     128.491 113.462 -31.279  1.00 49.19      A16S
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ATOM  32007  O5' GUA  627     128.727 111.088 -32.118  1.00 47.44      A16S
ATOM  32008  C5' GUA  627     129.991 110.613 -31.664  1.00 47.44      A16S
ATOM  32009  C4' GUA  627     129.946 109.120 -31.419  1.00 47.44      A16S
ATOM  32010  O4' GUA  627     129.206 108.822 -30.203  1.00 47.44      A16S
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ATOM  32019  O6  GUA  627     122.603 107.090 -30.860  1.00 69.25      A16S
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ATOM  32030  O5' CYT  628     128.543 106.472 -34.834  1.00 52.46      A16S
ATOM  32031  C5' CYT  628     129.059 105.239 -34.344  1.00 52.46      A16S
ATOM  32032  C4' CYT  628     127.960 104.196 -34.294  1.00 52.46      A16S
ATOM  32033  O4' CYT  628     126.958 104.591 -33.322  1.00 52.46      A16S
ATOM  32034  C1' CYT  628     125.670 104.227 -33.787  1.00 52.46      A16S
ATOM  32035  N1  CYT  628     124.847 105.444 -33.833  1.00 71.85      A16S
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ATOM  32038  O2  CYT  628     123.021 104.198 -34.273  1.00 71.85      A16S
ATOM  32039  N3  CYT  628     122.727 106.438 -34.121  1.00 71.85      A16S
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ATOM  32068  O1P CYT  630     124.867 100.724 -43.107  1.00 59.17      A16S
ATOM  32069  O2P CYT  630     125.343 103.060 -42.178  1.00 59.17      A16S
ATOM  32070  O5' CYT  630     123.024 102.350 -42.720  1.00 60.06      A16S
ATOM  32071  C5' CYT  630     121.958 101.419 -42.862  1.00 60.06      A16S
ATOM  32072  C4' CYT  630     120.658 102.147 -43.094  1.00 60.06      A16S
ATOM  32073  O4' CYT  630     120.272 102.876 -41.898  1.00 60.06      A16S
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ATOM  32079  N3  CYT  630     120.436 107.446 -40.977  1.00 59.17      A16S
ATOM  32080  C4  CYT  630     121.754 107.336 -40.821  1.00 59.17      A16S
ATOM  32081  N4  CYT  630     122.423 108.402 -40.369  1.00 59.17      A16S
ATOM  32082  C5  CYT  630     122.448 106.127 -41.120  1.00 59.17      A16S
ATOM  32083  C2' CYT  630     119.512 104.088 -43.790  1.00 60.06      A16S
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ATOM	32084	O2'	CYT	630	118.280	103.539	-44.217	1.00	60.06	A16S	ATOM	32137	C4'	GUA	633	120.864	116.714	-50.857	1.00	81.36	A16S
ATOM	32085	C3'	CYT	630	120.701	103.215	-44.165	1.00	60.06	A16S	ATOM	32138	O4'	GUA	633	120.920	116.264	-49.480	1.00	81.36	A16S
ATOM	32086	O3'	CYT	630	120.548	102.646	-45.449	1.00	60.06	A16S	ATOM	32139	C1'	GUA	633	121.920	117.001	-48.797	1.00	81.36	A16S
ATOM	32087	P	ADE	631	121.137	103.418	-46.721	1.00	68.16	A16S	ATOM	32140	N9	GUA	633	122.904	116.086	-48.233	1.00	65.01	A16S
ATOM	32088	O1P	ADE	631	120.987	102.525	-47.905	1.00	75.06	A16S	ATOM	32141	C4	GUA	633	123.907	116.451	-47.381	1.00	65.01	A16S
ATOM	32089	O2P	ADE	631	122.477	103.929	-46.352	1.00	75.06	A16S	ATOM	32142	N3	GUA	633	124.110	117.692	-46.898	1.00	65.01	A16S
ATOM	32090	O5'	ADE	631	120.175	104.677	-46.868	1.00	68.16	A16S	ATOM	32143	C2	GUA	633	125.163	117.747	-46.114	1.00	65.01	A16S
ATOM	32091	C5'	ADE	631	118.821	104.508	-47.246	1.00	68.16	A16S	ATOM	32144	N2	GUA	633	125.491	118.902	-45.531	1.00	65.01	A16S
ATOM	32092	C4'	ADE	631	118.087	105.816	-47.147	1.00	68.16	A16S	ATOM	32145	N1	GUA	633	125.968	116.672	-45.839	1.00	65.01	A16S
ATOM	32093	O4'	ADE	631	118.037	106.241	-45.761	1.00	68.16	A16S	ATOM	32146	C6	GUA	633	125.776	115.384	-46.325	1.00	65.01	A16S
ATOM	32094	C1'	ADE	631	117.977	107.660	-45.709	1.00	68.16	A16S	ATOM	32147	O6	GUA	633	126.560	114.487	-46.011	1.00	65.01	A16S
ATOM	32095	N9	ADE	631	119.133	108.154	-44.964	1.00	75.06	A16S	ATOM	32148	C5	GUA	633	124.635	115.308	-47.158	1.00	65.01	A16S
ATOM	32096	C4	ADE	631	119.297	109.440	-44.508	1.00	75.06	A16S	ATOM	32149	N7	GUA	633	124.082	114.231	-47.836	1.00	65.01	A16S
ATOM	32097	N3	ADE	631	118.430	110.460	-44.620	1.00	75.06	A16S	ATOM	32150	C8	GUA	633	123.052	114.739	-48.457	1.00	65.01	A16S
ATOM	32098	C2	ADE	631	118.931	111.566	-44.071	1.00	75.06	A16S	ATOM	32151	C2'	GUA	633	122.593	117.888	-49.842	1.00	81.36	A16S
ATOM	32099	N1	ADE	631	120.114	111.755	-43.475	1.00	75.06	A16S	ATOM	32152	O2'	GUA	633	121.955	119.142	-49.873	1.00	81.36	A16S
ATOM	32100	C6	ADE	631	120.967	110.711	-43.388	1.00	75.06	A16S	ATOM	32153	C3'	GUA	633	122.300	117.111	-51.107	1.00	81.36	A16S
ATOM	32101	N6	ADE	631	122.156	110.905	-42.816	1.00	75.06	A16S	ATOM	32154	O3'	GUA	633	122.425	117.958	-52.227	1.00	81.36	A16S
ATOM	32102	C5	ADE	631	120.547	109.476	-43.920	1.00	75.06	A16S	ATOM	32155	P	CYT	634	123.841	118.069	-52.970	1.00	49.71	A16S
ATOM	32103	N7	ADE	631	121.152	108.228	-43.979	1.00	75.06	A16S	ATOM	32156	O1P	CYT	634	123.648	118.888	-54.199	1.00	65.02	A16S
ATOM	32104	C8	ADE	631	120.272	107.481	-44.601	1.00	75.06	A16S	ATOM	32157	O2P	CYT	634	124.389	116.689	-53.080	1.00	65.02	A16S
ATOM	32105	C2'	ADE	631	118.010	108.151	-47.156	1.00	68.16	A16S	ATOM	32158	O5'	CYT	634	124.744	118.891	-51.951	1.00	49.71	A16S
ATOM	32106	O2'	ADE	631	116.693	108.285	-47.644	1.00	68.16	A16S	ATOM	32159	C5'	CYT	634	124.315	120.140	-51.461	1.00	49.71	A16S
ATOM	32107	C3'	ADE	631	118.741	107.002	-47.824	1.00	68.16	A16S	ATOM	32160	C4'	CYT	634	125.313	120.684	-50.476	1.00	49.71	A16S
ATOM	32108	O3'	ADE	631	118.546	107.003	-49.225	1.00	68.16	A16S	ATOM	32161	O4'	CYT	634	125.450	119.777	-49.357	1.00	49.71	A16S
ATOM	32109	P	GUA	632	119.624	107.726	-50.172	1.00	72.66	A16S	ATOM	32162	C1'	CYT	634	126.751	119.898	-48.812	1.00	49.71	A16S
ATOM	32110	O1P	GUA	632	119.165	107.481	-51.563	1.00	70.61	A16S	ATOM	32163	N1	CYT	634	127.358	118.560	-48.761	1.00	65.02	A16S
ATOM	32111	O2P	GUA	632	120.990	107.331	-49.769	1.00	70.61	A16S	ATOM	32164	C6	CYT	634	126.861	117.535	-49.519	1.00	65.02	A16S
ATOM	32112	O5'	GUA	632	119.462	109.277	-49.858	1.00	72.66	A16S	ATOM	32165	C2	CYT	634	128.447	118.344	-47.910	1.00	65.02	A16S
ATOM	32113	C5'	GUA	632	118.289	109.951	-50.266	1.00	72.66	A16S	ATOM	32166	O2	CYT	634	128.891	119.298	-47.251	1.00	65.02	A16S
ATOM	32114	C4'	GUA	632	118.276	111.367	-49.760	1.00	72.66	A16S	ATOM	32167	N3	CYT	634	128.985	117.104	-47.828	1.00	65.02	A16S
ATOM	32115	O4'	GUA	632	118.432	111.383	-48.316	1.00	72.66	A16S	ATOM	32168	C4	CYT	634	128.476	116.108	-48.557	1.00	65.02	A16S
ATOM	32116	C1'	GUA	632	118.948	112.650	-47.928	1.00	72.66	A16S	ATOM	32169	N4	CYT	634	129.019	114.905	-48.431	1.00	65.02	A16S
ATOM	32117	N9	GUA	632	120.193	112.462	-47.190	1.00	70.61	A16S	ATOM	32170	C5	CYT	634	127.384	116.304	-49.445	1.00	65.02	A16S
ATOM	32118	C4	GUA	632	120.786	113.401	-46.389	1.00	70.61	A16S	ATOM	32171	C2'	CYT	634	127.509	120.911	-49.670	1.00	49.71	A16S
ATOM	32119	N3	GUA	632	120.310	114.638	-46.143	1.00	70.61	A16S	ATOM	32172	O2'	CYT	634	127.378	122.166	-49.047	1.00	49.71	A16S
ATOM	32120	C2	GUA	632	121.091	115.313	-45.318	1.00	70.61	A16S	ATOM	32173	C3'	CYT	634	126.732	120.840	-50.980	1.00	49.71	A16S
ATOM	32121	N2	GUA	632	120.753	116.559	-44.950	1.00	70.61	A16S	ATOM	32174	O3'	CYT	634	126.808	122.049	-51.731	1.00	49.71	A16S
ATOM	32122	N1	GUA	632	122.256	114.815	-44.789	1.00	70.61	A16S	ATOM	32175	P	URI	635	128.067	122.329	-52.686	1.00	69.88	A16S
ATOM	32123	C6	GUA	632	122.770	113.545	-45.036	1.00	70.61	A16S	ATOM	32176	O1P	URI	635	127.643	123.260	-53.748	1.00	54.17	A16S
ATOM	32124	O6	GUA	632	123.835	113.200	-44.511	1.00	70.61	A16S	ATOM	32177	O2P	URI	635	128.670	121.037	-53.068	1.00	54.17	A16S
ATOM	32125	C5	GUA	632	121.933	112.806	-45.913	1.00	70.61	A16S	ATOM	32178	O5'	URI	635	129.020	123.149	-51.718	1.00	69.88	A16S
ATOM	32126	N7	GUA	632	122.061	111.517	-46.407	1.00	70.61	A16S	ATOM	32179	C5'	URI	635	130.372	123.377	-52.044	1.00	69.88	A16S
ATOM	32127	C8	GUA	632	121.005	111.355	-47.158	1.00	70.61	A16S	ATOM	32180	C4'	URI	635	131.231	123.019	-50.868	1.00	69.88	A16S
ATOM	32128	C2'	GUA	632	119.206	113.424	-49.219	1.00	72.66	A16S	ATOM	32181	O4'	URI	635	130.761	121.788	-50.312	1.00	69.88	A16S
ATOM	32129	O2'	GUA	632	118.061	114.188	-49.540	1.00	72.66	A16S	ATOM	32182	C1'	URI	635	131.848	121.070	-49.805	1.00	69.88	A16S
ATOM	32130	C3'	GUA	632	119.405	112.276	-50.189	1.00	72.66	A16S	ATOM	32183	N1	URI	635	131.641	119.658	-50.119	1.00	54.17	A16S
ATOM	32131	O3'	GUA	632	119.296	112.707	-51.531	1.00	72.66	A16S	ATOM	32184	C6	URI	635	130.722	119.265	-51.055	1.00	54.17	A16S
ATOM	32132	P	GUA	633	120.631	113.117	-52.332	1.00	81.36	A16S	ATOM	32185	C2	URI	635	132.358	118.744	-49.397	1.00	54.17	A16S
ATOM	32133	O1P	GUA	633	120.219	113.449	-53.723	1.00	65.01	A16S	ATOM	32186	O2	URI	635	133.247	119.073	-48.626	1.00	54.17	A16S
ATOM	32134	O2P	GUA	633	121.690	112.092	-52.104	1.00	65.01	A16S	ATOM	32187	N3	URI	635	132.005	117.432	-49.617	1.00	54.17	A16S
ATOM	32135	O5'	GUA	633	121.101	114.461	-51.623	1.00	81.36	A16S	ATOM	32188	C4	URI	635	131.043	116.971	-50.490	1.00	54.17	A16S
ATOM	32136	C5'	GUA	633	120.305	115.624	-51.723	1.00	81.36	A16S	ATOM	32189	O4	URI	635	130.706	115.797	-50.446	1.00	54.17	A16S

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ATOM  32190  C5  URI  635     130.405 117.988 -51.258  1.00 54.17      A16S
ATOM  32191  C2' URI  635     133.162 121.739 -50.214  1.00 69.88      A16S
ATOM  32192  O2' URI  635     133.769 122.232 -49.039  1.00 69.88      A16S
ATOM  32193  C3' URI  635     132.704 122.838 -51.175  1.00 69.88      A16S
ATOM  32194  O3' URI  635     133.286 124.089 -50.832  1.00 69.88      A16S
ATOM  32195  P   ADE  636     134.718 124.487 -51.396  1.00 61.25      A16S
ATOM  32196  O1P ADE  636     134.619 125.867 -51.903  1.00 52.94      A16S
ATOM  32197  O2P ADE  636     135.100 123.398 -52.313  1.00 52.94      A16S
ATOM  32198  O5' ADE  636     135.654 124.508 -50.101  1.00 61.25      A16S
ATOM  32199  C5' ADE  636     136.388 123.349 -49.686  1.00 61.25      A16S
ATOM  32200  C4' ADE  636     136.764 123.463 -48.224  1.00 61.25      A16S
ATOM  32201  O4' ADE  636     135.645 123.895 -47.448  1.00 61.25      A16S
ATOM  32202  C1' ADE  636     135.884 123.506 -46.131  1.00 61.25      A16S
ATOM  32203  N9  ADE  636     134.681 123.674 -45.329  1.00 52.94      A16S
ATOM  32204  C4  ADE  636     133.428 123.197 -45.586  1.00 52.94      A16S
ATOM  32205  N3  ADE  636     133.045 122.452 -46.630  1.00 52.94      A16S
ATOM  32206  C2  ADE  636     131.748 122.187 -46.559  1.00 52.94      A16S
ATOM  32207  N1  ADE  636     130.859 122.552 -45.626  1.00 52.94      A16S
ATOM  32208  C6  ADE  636     131.289 123.296 -44.586  1.00 52.94      A16S
ATOM  32209  N6  ADE  636     130.414 123.643 -43.640  1.00 52.94      A16S
ATOM  32210  C5  ADE  636     132.637 123.652 -44.555  1.00 52.94      A16S
ATOM  32211  N7  ADE  636     133.381 124.399 -43.657  1.00 52.94      A16S
ATOM  32212  C8  ADE  636     134.585 124.376 -44.160  1.00 52.94      A16S
ATOM  32213  C2' ADE  636     136.654 122.185 -46.152  1.00 61.25      A16S
ATOM  32214  O2' ADE  636     137.612 122.200 -45.115  1.00 61.25      A16S
ATOM  32215  C3' ADE  636     137.310 122.209 -47.540  1.00 61.25      A16S
ATOM  32216  O3' ADE  636     138.672 122.510 -47.240  1.00 61.25      A16S
ATOM  32217  P   GUA  637     139.875 121.724 -47.932  1.00 54.01      A16S
ATOM  32218  O1P GUA  637     141.070 122.420 -47.423  1.00 48.91      A16S
ATOM  32219  O2P GUA  637     139.668 121.600 -49.397  1.00 48.91      A16S
ATOM  32220  O5' GUA  637     139.867 120.284 -47.261  1.00 54.01      A16S
ATOM  32221  C5' GUA  637     140.575 120.052 -46.050  1.00 54.01      A16S
ATOM  32222  C4' GUA  637     140.581 118.584 -45.728  1.00 54.01      A16S
ATOM  32223  O4' GUA  637     139.208 118.122 -45.638  1.00 54.01      A16S
ATOM  32224  C1' GUA  637     139.103 116.816 -46.166  1.00 54.01      A16S
ATOM  32225  N9  GUA  637     138.231 116.863 -47.334  1.00 48.91      A16S
ATOM  32226  C4  GUA  637     137.663 115.788 -47.973  1.00 48.91      A16S
ATOM  32227  N3  GUA  637     137.810 114.493 -47.629  1.00 48.91      A16S
ATOM  32228  C2  GUA  637     137.151 113.692 -48.439  1.00 48.91      A16S
ATOM  32229  N2  GUA  637     137.180 112.374 -48.250  1.00 48.91      A16S
ATOM  32230  N1  GUA  637     136.415 114.123 -49.500  1.00 48.91      A16S
ATOM  32231  C6  GUA  637     136.262 115.447 -49.880  1.00 48.91      A16S
ATOM  32232  O6  GUA  637     135.597 115.721 -50.879  1.00 48.91      A16S
ATOM  32233  C5  GUA  637     136.947 116.320 -49.015  1.00 48.91      A16S
ATOM  32234  N7  GUA  637     137.047 117.703 -49.029  1.00 48.91      A16S
ATOM  32235  C8  GUA  637     137.819 117.980 -48.015  1.00 48.91      A16S
ATOM  32236  C2' GUA  637     140.524 116.371 -46.488  1.00 54.01      A16S
ATOM  32237  O2' GUA  637     141.069 115.791 -45.326  1.00 54.01      A16S
ATOM  32238  C3' GUA  637     141.179 117.701 -46.799  1.00 54.01      A16S
ATOM  32239  O3' GUA  637     142.590 117.637 -46.668  1.00 54.01      A16S
ATOM  32240  P   ADE  638     143.503 117.561 -47.989  1.00 51.46      A16S
ATOM  32241  O1P ADE  638     144.894 117.311 -47.547  1.00 53.46      A16S
ATOM  32242  O2P ADE  638     143.202 118.755 -48.834  1.00 53.46      A16S
ATOM  32243  O5' ADE  638     142.984 116.249 -48.735  1.00 51.46      A16S
ATOM  32244  C5' ADE  638     143.190 114.961 -48.167  1.00 51.46      A16S
ATOM  32245  C4' ADE  638     142.479 113.900 -48.976  1.00 51.46      A16S
ATOM  32246  O4' ADE  638     141.050 114.089 -48.872  1.00 51.46      A16S
ATOM  32247  C1' ADE  638     140.435 113.731 -50.094  1.00 51.46      A16S
ATOM  32248  N9  ADE  638     139.853 114.932 -50.668  1.00 53.46      A16S
ATOM  32249  C4  ADE  638     138.939 114.962 -51.688  1.00 53.46      A16S
ATOM  32250  N3  ADE  638     138.401 113.911 -52.330  1.00 53.46      A16S
ATOM  32251  C2  ADE  638     137.557 114.321 -53.272  1.00 53.46      A16S
ATOM  32252  N1  ADE  638     137.214 115.566 -53.616  1.00 53.46      A16S
ATOM  32253  C6  ADE  638     137.773 116.599 -52.944  1.00 53.46      A16S
ATOM  32254  N6  ADE  638     137.431 117.844 -53.276  1.00 53.46      A16S
ATOM  32255  C5  ADE  638     138.688 116.297 -51.926  1.00 53.46      A16S
ATOM  32256  N7  ADE  638     139.430 117.097 -51.067  1.00 53.46      A16S
ATOM  32257  C8  ADE  638     140.098 116.239 -50.339  1.00 53.46      A16S
ATOM  32258  C2' ADE  638     141.524 113.197 -51.018  1.00 51.46      A16S
ATOM  32259  O2' ADE  638     141.614 111.792 -50.933  1.00 51.46      A16S
ATOM  32260  C3' ADE  638     142.744 113.914 -50.470  1.00 51.46      A16S
ATOM  32261  O3' ADE  638     143.926 113.213 -50.800  1.00 51.46      A16S
ATOM  32262  P   CYT  639     144.854 113.758 -51.982  1.00 54.43      A16S
ATOM  32263  O1P CYT  639     146.144 113.046 -51.834  1.00 52.29      A16S
ATOM  32264  O2P CYT  639     144.822 115.243 -51.962  1.00 52.29      A16S
ATOM  32265  O5' CYT  639     144.138 113.263 -53.317  1.00 54.43      A16S
ATOM  32266  C5' CYT  639     144.099 111.886 -53.654  1.00 54.43      A16S
ATOM  32267  C4' CYT  639     142.993 111.616 -54.649  1.00 54.43      A16S
ATOM  32268  O4' CYT  639     141.729 112.080 -54.095  1.00 54.43      A16S
ATOM  32269  C1' CYT  639     140.886 112.529 -55.148  1.00 54.43      A16S
ATOM  32270  N1  CYT  639     140.718 113.975 -55.027  1.00 52.29      A16S
ATOM  32271  C6  CYT  639     141.470 114.712 -54.163  1.00 52.29      A16S
ATOM  32272  C2  CYT  639     139.794 114.589 -55.853  1.00 52.29      A16S
ATOM  32273  O2  CYT  639     139.087 113.880 -56.572  1.00 52.29      A16S
ATOM  32274  N3  CYT  639     139.683 115.932 -55.852  1.00 52.29      A16S
ATOM  32275  C4  CYT  639     140.456 116.655 -55.047  1.00 52.29      A16S
ATOM  32276  N4  CYT  639     140.356 117.981 -55.120  1.00 52.29      A16S
ATOM  32277  C5  CYT  639     141.375 116.047 -54.141  1.00 52.29      A16S
ATOM  32278  C2' CYT  639     141.626 112.243 -56.450  1.00 54.43      A16S
ATOM  32279  O2' CYT  639     141.325 110.946 -56.918  1.00 54.43      A16S
ATOM  32280  C3' CYT  639     143.061 112.358 -55.973  1.00 54.43      A16S
ATOM  32281  O3' CYT  639     143.964 111.787 -56.904  1.00 54.43      A16S
ATOM  32282  P   GUA  640     144.796 112.760 -57.871  1.00 64.44      A16S
ATOM  32283  O1P GUA  640     145.994 112.000 -58.323  1.00 59.58      A16S
ATOM  32284  O2P GUA  640     144.957 114.082 -57.202  1.00 59.58      A16S
ATOM  32285  O5' GUA  640     143.839 113.003 -59.115  1.00 64.44      A16S
ATOM  32286  C5' GUA  640     143.162 111.926 -59.737  1.00 64.44      A16S
ATOM  32287  C4' GUA  640     142.015 112.454 -60.549  1.00 64.44      A16S
ATOM  32288  O4' GUA  640     141.073 113.131 -59.668  1.00 64.44      A16S
ATOM  32289  C1' GUA  640     140.466 114.205 -60.365  1.00 64.44      A16S
ATOM  32290  N9  GUA  640     140.829 115.458 -59.713  1.00 59.58      A16S
ATOM  32291  C4  GUA  640     140.409 116.714 -60.084  1.00 59.58      A16S
ATOM  32292  N3  GUA  640     139.572 117.000 -61.102  1.00 59.58      A16S
ATOM  32293  C2  GUA  640     139.344 118.297 -61.206  1.00 59.58      A16S
ATOM  32294  N2  GUA  640     138.506 118.751 -62.149  1.00 59.58      A16S
ATOM  32295  N1  GUA  640     139.912 119.242 -60.391  1.00 59.58      A16S
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ATOM	32296	C6	GUA	640	140.785	118.975	-59.349	1.00	59.58	A16S	ATOM	32349	O1P	GUA	643	146.634	120.791	-72.675	1.00	65.31	A16S
ATOM	32297	O6	GUA	640	141.256	119.905	-58.696	1.00	59.58	A16S	ATOM	32350	O2P	GUA	643	147.016	119.590	-70.447	1.00	65.31	A16S
ATOM	32298	C5	GUA	640	141.017	117.579	-59.206	1.00	59.58	A16S	ATOM	32351	O5'	GUA	643	147.258	122.076	-70.639	1.00	65.88	A16S
ATOM	32299	N7	GUA	640	141.794	116.883	-58.290	1.00	59.58	A16S	ATOM	32352	C5'	GUA	643	146.875	123.352	-71.125	1.00	65.88	A16S
ATOM	32300	C8	GUA	640	141.651	115.629	-58.630	1.00	59.58	A16S	ATOM	32353	C4'	GUA	643	147.424	124.440	-70.243	1.00	65.88	A16S
ATOM	32301	C2'	GUA	640	141.004	114.145	-61.792	1.00	64.44	A16S	ATOM	32354	O4'	GUA	643	146.807	124.374	-68.931	1.00	65.88	A16S
ATOM	32302	O2'	GUA	640	140.195	113.264	-62.546	1.00	64.44	A16S	ATOM	32355	C1'	GUA	643	147.724	124.849	-67.953	1.00	65.88	A16S
ATOM	32303	C3'	GUA	640	142.370	113.537	-61.548	1.00	64.44	A16S	ATOM	32356	N9	GUA	643	147.941	123.789	-66.977	1.00	65.31	A16S
ATOM	32304	O3'	GUA	640	142.922	113.008	-62.744	1.00	64.44	A16S	ATOM	32357	C4	GUA	643	148.514	123.926	-65.738	1.00	65.31	A16S
ATOM	32305	P	GUA	641	143.788	113.964	-63.706	1.00	59.19	A16S	ATOM	32358	N3	GUA	643	148.960	125.074	-65.195	1.00	65.31	A16S
ATOM	32306	O1P	GUA	641	144.262	113.134	-64.843	1.00	53.49	A16S	ATOM	32359	C2	GUA	643	149.464	124.886	-63.991	1.00	65.31	A16S
ATOM	32307	O2P	GUA	641	144.774	114.712	-62.881	1.00	53.49	A16S	ATOM	32360	N2	GUA	643	149.930	125.923	-63.293	1.00	65.31	A16S
ATOM	32308	O5'	GUA	641	142.735	115.041	-64.232	1.00	59.19	A16S	ATOM	32361	N1	GUA	643	149.542	123.666	-63.376	1.00	65.31	A16S
ATOM	32309	C5'	GUA	641	141.705	114.693	-65.158	1.00	59.19	A16S	ATOM	32362	C6	GUA	643	149.094	122.469	-63.918	1.00	65.31	A16S
ATOM	32310	C4'	GUA	641	141.100	115.948	-65.732	1.00	59.19	A16S	ATOM	32363	O6	GUA	643	149.218	121.419	-63.280	1.00	65.31	A16S
ATOM	32311	O4'	GUA	641	140.545	116.730	-64.645	1.00	59.19	A16S	ATOM	32364	C5	GUA	643	148.535	122.659	-65.203	1.00	65.31	A16S
ATOM	32312	C1'	GUA	641	140.742	118.109	-64.896	1.00	59.19	A16S	ATOM	32365	N7	GUA	643	147.974	121.744	-66.083	1.00	65.31	A16S
ATOM	32313	N9	GUA	641	141.540	118.655	-63.803	1.00	53.49	A16S	ATOM	32366	C8	GUA	643	147.635	122.460	-67.120	1.00	65.31	A16S
ATOM	32314	C4	GUA	641	141.745	119.983	-63.516	1.00	53.49	A16S	ATOM	32367	C2'	GUA	643	149.014	125.218	-68.688	1.00	65.88	A16S
ATOM	32315	N3	GUA	641	141.262	121.031	-64.216	1.00	53.49	A16S	ATOM	32368	O2'	GUA	643	149.037	126.607	-68.959	1.00	65.88	A16S
ATOM	32316	C2	GUA	641	141.649	122.188	-63.696	1.00	53.49	A16S	ATOM	32369	C3'	GUA	643	148.903	124.349	-69.936	1.00	65.88	A16S
ATOM	32317	N2	GUA	641	141.282	123.342	-64.265	1.00	53.49	A16S	ATOM	32370	O3'	GUA	643	149.686	124.840	-71.012	1.00	65.88	A16S
ATOM	32318	N1	GUA	641	142.434	122.299	-62.576	1.00	53.49	A16S	ATOM	32371	P	GUA	644	151.219	124.382	-71.137	1.00	94.03	A16S
ATOM	32319	C6	GUA	641	142.933	121.231	-61.841	1.00	53.49	A16S	ATOM	32372	O1P	GUA	644	151.954	125.425	-71.897	1.00	63.74	A16S
ATOM	32320	O6	GUA	641	143.627	121.445	-60.844	1.00	53.49	A16S	ATOM	32373	O2P	GUA	644	151.292	122.960	-71.574	1.00	63.74	A16S
ATOM	32321	C5	GUA	641	142.540	119.994	-62.389	1.00	53.49	A16S	ATOM	32374	O5'	GUA	644	151.717	124.462	-69.637	1.00	94.03	A16S
ATOM	32322	N7	GUA	641	142.833	118.706	-61.982	1.00	53.49	A16S	ATOM	32375	C5'	GUA	644	153.085	124.588	-69.341	1.00	94.03	A16S
ATOM	32323	C8	GUA	641	142.223	117.944	-62.850	1.00	53.49	A16S	ATOM	32376	C4'	GUA	644	153.295	125.713	-68.367	1.00	94.03	A16S
ATOM	32324	C2'	GUA	641	141.401	118.231	-66.269	1.00	59.19	A16S	ATOM	32377	O4'	GUA	644	152.200	125.767	-67.415	1.00	94.03	A16S
ATOM	32325	O2'	GUA	641	140.400	118.401	-67.248	1.00	59.19	A16S	ATOM	32378	C1'	GUA	644	152.717	125.727	-66.098	1.00	94.03	A16S
ATOM	32326	C3'	GUA	641	142.101	116.888	-66.379	1.00	59.19	A16S	ATOM	32379	N9	GUA	644	152.576	124.346	-65.646	1.00	63.74	A16S
ATOM	32327	O3'	GUA	641	142.329	116.513	-67.727	1.00	59.19	A16S	ATOM	32380	C4	GUA	644	152.917	123.834	-64.418	1.00	63.74	A16S
ATOM	32328	P	URI	642	143.770	116.767	-68.384	1.00	61.15	A16S	ATOM	32381	N3	GUA	644	153.451	124.525	-63.393	1.00	63.74	A16S
ATOM	32329	O1P	URI	642	143.780	116.138	-69.727	1.00	64.67	A16S	ATOM	32382	C2	GUA	644	153.681	123.754	-62.349	1.00	63.74	A16S
ATOM	32330	O2P	URI	642	144.818	116.401	-67.407	1.00	64.67	A16S	ATOM	32383	N2	GUA	644	154.230	124.281	-61.254	1.00	63.74	A16S
ATOM	32331	O5'	URI	642	143.814	118.344	-68.552	1.00	61.15	A16S	ATOM	32384	N1	GUA	644	153.396	122.412	-62.305	1.00	63.74	A16S
ATOM	32332	C5'	URI	642	143.004	118.980	-69.517	1.00	61.15	A16S	ATOM	32385	C6	GUA	644	152.840	121.679	-63.348	1.00	63.74	A16S
ATOM	32333	C4'	URI	642	143.163	120.469	-69.418	1.00	61.15	A16S	ATOM	32386	O6	GUA	644	152.613	120.472	-63.206	1.00	63.74	A16S
ATOM	32334	O4'	URI	642	142.685	120.926	-68.131	1.00	61.15	A16S	ATOM	32387	C5	GUA	644	152.603	122.492	-64.482	1.00	63.74	A16S
ATOM	32335	C1'	URI	642	143.448	122.041	-67.710	1.00	61.15	A16S	ATOM	32388	N7	GUA	644	152.077	122.167	-65.726	1.00	63.74	A16S
ATOM	32336	N1	URI	642	144.088	121.681	-66.446	1.00	64.67	A16S	ATOM	32389	C8	GUA	644	152.078	123.295	-66.380	1.00	63.74	A16S
ATOM	32337	C6	URI	642	144.263	120.368	-66.098	1.00	64.67	A16S	ATOM	32390	C2'	GUA	644	154.179	126.162	-66.217	1.00	94.03	A16S
ATOM	32338	C2	URI	642	144.512	122.699	-65.637	1.00	64.67	A16S	ATOM	32391	O2'	GUA	644	154.281	127.571	-66.239	1.00	94.03	A16S
ATOM	32339	O2	URI	642	144.349	123.871	-65.911	1.00	64.67	A16S	ATOM	32392	C3'	GUA	644	154.547	125.512	-67.540	1.00	94.03	A16S
ATOM	32340	N3	URI	642	145.133	122.295	-64.489	1.00	64.67	A16S	ATOM	32393	O3'	GUA	644	155.662	126.062	-68.211	1.00	94.03	A16S
ATOM	32341	C4	URI	642	145.357	120.997	-64.085	1.00	64.67	A16S	ATOM	32394	P	GUA	645	156.919	125.123	-68.523	1.00	79.70	A16S
ATOM	32342	O4	URI	642	145.974	120.787	-63.042	1.00	64.67	A16S	ATOM	32395	O1P	GUA	645	157.829	125.929	-69.376	1.00	53.14	A16S
ATOM	32343	C5	URI	642	144.866	120.001	-64.977	1.00	64.67	A16S	ATOM	32396	O2P	GUA	645	156.454	123.791	-68.997	1.00	53.14	A16S
ATOM	32344	C2'	URI	642	144.479	122.328	-68.801	1.00	61.15	A16S	ATOM	32397	O5'	GUA	645	157.578	124.963	-67.086	1.00	79.70	A16S
ATOM	32345	O2'	URI	642	143.987	123.347	-69.644	1.00	61.15	A16S	ATOM	32398	C5'	GUA	645	157.799	126.117	-66.295	1.00	79.70	A16S
ATOM	32346	C3'	URI	642	144.592	120.962	-69.471	1.00	61.15	A16S	ATOM	32399	C4'	GUA	645	158.276	125.745	-64.919	1.00	79.70	A16S
ATOM	32347	O3'	URI	642	145.007	121.033	-70.824	1.00	61.15	A16S	ATOM	32400	O4'	GUA	645	157.212	125.138	-64.149	1.00	79.70	A16S
ATOM	32348	P	GUA	643	146.541	120.774	-71.196	1.00	65.88	A16S	ATOM	32401	C1'	GUA	645	157.795	124.401	-63.091	1.00	79.70	A16S

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ATOM  32402  N9  GUA  645     157.237 123.056 -63.074  1.00 53.14      A16S
ATOM  32403  C4  GUA  645     157.265 122.193 -62.001  1.00 53.14      A16S
ATOM  32404  N3  GUA  645     157.811 122.449 -60.788  1.00 53.14      A16S
ATOM  32405  C2  GUA  645     157.683 121.420 -59.963  1.00 53.14      A16S
ATOM  32406  N2  GUA  645     158.173 121.487 -58.716  1.00 53.14      A16S
ATOM  32407  N1  GUA  645     157.066 120.247 -60.296  1.00 53.14      A16S
ATOM  32408  C6  GUA  645     156.497 119.963 -61.531  1.00 53.14      A16S
ATOM  32409  O6  GUA  645     155.959 118.869 -61.716  1.00 53.14      A16S
ATOM  32410  C5  GUA  645     156.633 121.050 -62.434  1.00 53.14      A16S
ATOM  32411  N7  GUA  645     156.223 121.184 -63.756  1.00 53.14      A16S
ATOM  32412  C8  GUA  645     156.598 122.391 -64.092  1.00 53.14      A16S
ATOM  32413  C2' GUA  645     159.307 124.388 -63.324  1.00 79.70      A16S
ATOM  32414  O2' GUA  645     159.893 125.381 -62.507  1.00 79.70      A16S
ATOM  32415  C3' GUA  645     159.388 124.723 -64.807  1.00 79.70      A16S
ATOM  32416  O3' GUA  645     160.645 125.294 -65.147  1.00 79.70      A16S
ATOM  32417  P   ADE  646     161.881 124.338 -65.542  1.00 56.70      A16S
ATOM  32418  O1P ADE  646     162.914 125.237 -66.132  1.00 52.17      A16S
ATOM  32419  O2P ADE  646     161.410 123.156 -66.311  1.00 52.17      A16S
ATOM  32420  O5' ADE  646     162.441 123.848 -64.139  1.00 56.70      A16S
ATOM  32421  C5' ADE  646     162.982 124.789 -63.223  1.00 56.70      A16S
ATOM  32422  C4' ADE  646     163.333 124.105 -61.934  1.00 56.70      A16S
ATOM  32423  O4' ADE  646     162.121 123.679 -61.259  1.00 56.70      A16S
ATOM  32424  C1' ADE  646     162.340 122.434 -60.618  1.00 56.70      A16S
ATOM  32425  N9  ADE  646     161.492 121.432 -61.251  1.00 52.17      A16S
ATOM  32426  C4  ADE  646     161.032 120.283 -60.658  1.00 52.17      A16S
ATOM  32427  N3  ADE  646     161.243 119.877 -59.395  1.00 52.17      A16S
ATOM  32428  C2  ADE  646     160.671 118.695 -59.182  1.00 52.17      A16S
ATOM  32429  N1  ADE  646     159.972 117.930 -60.020  1.00 52.17      A16S
ATOM  32430  C6  ADE  646     159.779 118.367 -61.280  1.00 52.17      A16S
ATOM  32431  N6  ADE  646     159.093 117.596 -62.120  1.00 52.17      A16S
ATOM  32432  C5  ADE  646     160.326 119.611 -61.633  1.00 52.17      A16S
ATOM  32433  N7  ADE  646     160.313 120.338 -62.815  1.00 52.17      A16S
ATOM  32434  C8  ADE  646     161.015 121.409 -62.533  1.00 52.17      A16S
ATOM  32435  C2' ADE  646     163.813 122.096 -60.810  1.00 56.70      A16S
ATOM  32436  O2' ADE  646     164.536 122.623 -59.717  1.00 56.70      A16S
ATOM  32437  C3' ADE  646     164.098 122.814 -62.121  1.00 56.70      A16S
ATOM  32438  O3' ADE  646     165.476 123.057 -62.353  1.00 56.70      A16S
ATOM  32439  P   GUA  647     166.336 121.970 -63.160  1.00 51.80      A16S
ATOM  32440  O1P GUA  647     167.714 122.527 -63.254  1.00 54.68      A16S
ATOM  32441  O2P GUA  647     165.601 121.594 -64.397  1.00 54.68      A16S
ATOM  32442  O5' GUA  647     166.368 120.714 -62.176  1.00 51.80      A16S
ATOM  32443  C5' GUA  647     166.882 120.857 -60.862  1.00 51.80      A16S
ATOM  32444  C4' GUA  647     166.659 119.606 -60.073  1.00 51.80      A16S
ATOM  32445  O4' GUA  647     165.246 119.351 -59.925  1.00 51.80      A16S
ATOM  32446  C1' GUA  647     165.037 117.958 -59.760  1.00 51.80      A16S
ATOM  32447  N9  GUA  647     164.049 117.531 -60.739  1.00 54.68      A16S
ATOM  32448  C4  GUA  647     163.240 116.417 -60.675  1.00 54.68      A16S
ATOM  32449  N3  GUA  647     163.169 115.535 -59.653  1.00 54.68      A16S
ATOM  32450  C2  GUA  647     162.331 114.541 -59.919  1.00 54.68      A16S
ATOM  32451  N2  GUA  647     162.136 113.556 -59.035  1.00 54.68      A16S
ATOM  32452  N1  GUA  647     161.623 114.430 -61.079  1.00 54.68      A16S
ATOM  32453  C6  GUA  647     161.684 115.320 -62.141  1.00 54.68      A16S
ATOM  32454  O6  GUA  647     161.022 115.106 -63.153  1.00 54.68      A16S
ATOM  32455  C5  GUA  647     162.567 116.391 -61.875  1.00 54.68      A16S
ATOM  32456  N7  GUA  647     162.907 117.488 -62.653  1.00 54.68      A16S
ATOM  32457  C8  GUA  647     163.777 118.139 -61.935  1.00 54.68      A16S
ATOM  32458  C2' GUA  647     166.388 117.264 -59.973  1.00 51.80      A16S
ATOM  32459  O2' GUA  647     166.954 116.915 -58.727  1.00 51.80      A16S
ATOM  32460  C3' GUA  647     167.176 118.341 -60.717  1.00 51.80      A16S
ATOM  32461  O3' GUA  647     168.568 118.258 -60.453  1.00 51.80      A16S
ATOM  32462  P   ADE  648     169.585 117.800 -61.610  1.00 55.93      A16S
ATOM  32463  O1P ADE  648     170.463 118.964 -61.873  1.00 45.15      A16S
ATOM  32464  O2P ADE  648     168.836 117.181 -62.738  1.00 45.15      A16S
ATOM  32465  O5' ADE  648     170.456 116.685 -60.878  1.00 55.93      A16S
ATOM  32466  C5' ADE  648     171.013 115.626 -61.621  1.00 55.93      A16S
ATOM  32467  C4' ADE  648     171.234 114.417 -60.754  1.00 55.93      A16S
ATOM  32468  O4' ADE  648     172.460 114.497 -59.987  1.00 55.93      A16S
ATOM  32469  C1' ADE  648     172.383 113.554 -58.937  1.00 55.93      A16S
ATOM  32470  N9  ADE  648     172.826 114.178 -57.696  1.00 45.15      A16S
ATOM  32471  C4  ADE  648     173.399 113.499 -56.649  1.00 45.15      A16S
ATOM  32472  N3  ADE  648     173.640 112.182 -56.572  1.00 45.15      A16S
ATOM  32473  C2  ADE  648     174.236 111.885 -55.431  1.00 45.15      A16S
ATOM  32474  N1  ADE  648     174.586 112.686 -54.431  1.00 45.15      A16S
ATOM  32475  C6  ADE  648     174.331 113.999 -54.537  1.00 45.15      A16S
ATOM  32476  N6  ADE  648     174.692 114.789 -53.536  1.00 45.15      A16S
ATOM  32477  C5  ADE  648     173.704 114.449 -55.702  1.00 45.15      A16S
ATOM  32478  N7  ADE  648     173.318 115.712 -56.134  1.00 45.15      A16S
ATOM  32479  C8  ADE  648     172.796 115.494 -57.319  1.00 45.15      A16S
ATOM  32480  C2' ADE  648     170.943 113.042 -58.895  1.00 55.93      A16S
ATOM  32481  O2' ADE  648     170.883 111.792 -59.559  1.00 55.93      A16S
ATOM  32482  C3' ADE  648     170.215 114.121 -59.685  1.00 55.93      A16S
ATOM  32483  O3' ADE  648     169.027 113.619 -60.254  1.00 55.93      A16S
ATOM  32484  P   GUA  649     167.659 113.715 -59.425  1.00 47.91      A16S
ATOM  32485  O1P GUA  649     166.611 114.152 -60.393  1.00 47.29      A16S
ATOM  32486  O2P GUA  649     167.902 114.509 -58.192  1.00 47.29      A16S
ATOM  32487  O5' GUA  649     167.362 112.200 -59.024  1.00 47.91      A16S
ATOM  32488  C5' GUA  649     167.342 111.787 -57.664  1.00 47.91      A16S
ATOM  32489  C4' GUA  649     166.383 110.640 -57.487  1.00 47.91      A16S
ATOM  32490  O4' GUA  649     165.043 111.085 -57.826  1.00 47.91      A16S
ATOM  32491  C1' GUA  649     164.294 109.995 -58.341  1.00 47.91      A16S
ATOM  32492  N9  GUA  649     163.867 110.307 -59.698  1.00 47.29      A16S
ATOM  32493  C4  GUA  649     163.151 109.475 -60.525  1.00 47.29      A16S
ATOM  32494  N3  GUA  649     162.697 108.245 -60.207  1.00 47.29      A16S
ATOM  32495  C2  GUA  649     162.049 107.684 -61.211  1.00 47.29      A16S
ATOM  32496  N2  GUA  649     161.515 106.461 -61.063  1.00 47.29      A16S
ATOM  32497  N1  GUA  649     161.875 108.280 -62.434  1.00 47.29      A16S
ATOM  32498  C6  GUA  649     162.345 109.541 -62.783  1.00 47.29      A16S
ATOM  32499  O6  GUA  649     162.159 109.972 -63.921  1.00 47.29      A16S
ATOM  32500  C5  GUA  649     163.021 110.161 -61.710  1.00 47.29      A16S
ATOM  32501  N7  GUA  649     163.619 111.412 -61.625  1.00 47.29      A16S
ATOM  32502  C8  GUA  649     164.105 111.456 -60.413  1.00 47.29      A16S
ATOM  32503  C2' GUA  649     165.219 108.785 -58.328  1.00 47.91      A16S
ATOM  32504  O2' GUA  649     165.023 108.091 -57.113  1.00 47.91      A16S
ATOM  32505  C3' GUA  649     166.571 109.465 -58.420  1.00 47.91      A16S
ATOM  32506  O3' GUA  649     167.611 108.609 -58.007  1.00 47.91      A16S
ATOM  32507  P   GUA  650     168.472 107.846 -59.123  1.00 47.58      A16S
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ATOM	32508	O1P	GUA	650	169.668	107.222	-58.490	1.00	43.78	A16S	ATOM	32561	N1	URI	652	168.214	101.719	-70.251	1.00	40.96	A16S
ATOM	32509	O2P	GUA	650	168.659	108.810	-60.247	1.00	43.78	A16S	ATOM	32562	C6	URI	652	168.555	101.939	-68.961	1.00	40.96	A16S
ATOM	32510	O5'	GUA	650	167.486	106.702	-59.617	1.00	47.58	A16S	ATOM	32563	C2	URI	652	168.287	102.712	-71.188	1.00	40.96	A16S
ATOM	32511	C5'	GUA	650	167.034	105.707	-58.727	1.00	47.58	A16S	ATOM	32564	O2	URI	652	167.954	102.548	-72.347	1.00	40.96	A16S
ATOM	32512	C4'	GUA	650	166.042	104.837	-59.422	1.00	47.58	A16S	ATOM	32565	N3	URI	652	168.763	103.913	-70.728	1.00	40.96	A16S
ATOM	32513	O4'	GUA	650	164.999	105.707	-59.919	1.00	47.58	A16S	ATOM	32566	C4	URI	652	169.156	104.195	-69.445	1.00	40.96	A16S
ATOM	32514	C1'	GUA	650	164.488	105.192	-61.137	1.00	47.58	A16S	ATOM	32567	O4	URI	652	169.636	105.293	-69.188	1.00	40.96	A16S
ATOM	32515	N9	GUA	650	164.705	106.178	-62.188	1.00	43.78	A16S	ATOM	32568	C5	URI	652	169.014	103.111	-68.532	1.00	40.96	A16S
ATOM	32516	C4	GUA	650	164.300	106.061	-63.489	1.00	43.78	A16S	ATOM	32569	C2'	URI	652	168.918	99.684	-71.410	1.00	59.88	A16S
ATOM	32517	N3	GUA	650	163.663	105.002	-64.019	1.00	43.78	A16S	ATOM	32570	O2'	URI	652	168.365	98.811	-72.375	1.00	59.88	A16S
ATOM	32518	C2	GUA	650	163.381	105.179	-65.286	1.00	43.78	A16S	ATOM	32571	C3'	URI	652	169.550	98.922	-70.255	1.00	59.88	A16S
ATOM	32519	N2	GUA	650	162.760	104.214	-65.961	1.00	43.78	A16S	ATOM	32572	O3'	URI	652	170.306	97.819	-70.733	1.00	59.88	A16S
ATOM	32520	N1	GUA	650	163.687	106.313	-65.985	1.00	43.78	A16S	ATOM	32573	P	GUA	653	171.898	97.956	-70.866	1.00	54.18	A16S
ATOM	32521	C6	GUA	650	164.331	107.428	-65.457	1.00	43.78	A16S	ATOM	32574	O1P	GUA	653	172.415	96.566	-70.998	1.00	50.78	A16S
ATOM	32522	O6	GUA	650	164.533	108.425	-66.174	1.00	43.78	A16S	ATOM	32575	O2P	GUA	653	172.384	98.817	-69.762	1.00	50.78	A16S
ATOM	32523	C5	GUA	650	164.658	107.238	-64.093	1.00	43.78	A16S	ATOM	32576	O5'	GUA	653	172.099	98.757	-72.230	1.00	54.18	A16S
ATOM	32524	N7	GUA	650	165.301	108.076	-63.194	1.00	43.78	A16S	ATOM	32577	C5'	GUA	653	171.581	98.247	-73.452	1.00	54.18	A16S
ATOM	32525	C8	GUA	650	165.313	107.400	-62.078	1.00	43.78	A16S	ATOM	32578	C4'	GUA	653	171.447	99.352	-74.470	1.00	54.18	A16S
ATOM	32526	C2'	GUA	650	165.221	103.882	-61.395	1.00	47.58	A16S	ATOM	32579	O4'	GUA	653	170.637	100.415	-73.907	1.00	54.18	A16S
ATOM	32527	O2'	GUA	650	164.481	102.851	-60.771	1.00	47.58	A16S	ATOM	32580	C1'	GUA	653	171.039	101.657	-74.455	1.00	54.18	A16S
ATOM	32528	C3'	GUA	650	166.533	104.163	-60.690	1.00	47.58	A16S	ATOM	32581	N9	GUA	653	171.415	102.530	-73.356	1.00	50.78	A16S
ATOM	32529	O3'	GUA	650	167.220	102.961	-60.409	1.00	47.58	A16S	ATOM	32582	C4	GUA	653	171.694	103.863	-73.442	1.00	50.78	A16S
ATOM	32530	P	GUA	651	168.442	102.510	-61.349	1.00	57.28	A16S	ATOM	32583	N3	GUA	653	171.668	104.604	-74.567	1.00	50.78	A16S
ATOM	32531	O1P	GUA	651	169.136	101.412	-60.634	1.00	46.98	A16S	ATOM	32584	C2	GUA	653	171.969	105.873	-74.329	1.00	50.78	A16S
ATOM	32532	O2P	GUA	651	169.200	103.724	-61.773	1.00	46.98	A16S	ATOM	32585	N2	GUA	653	171.972	106.763	-75.333	1.00	50.78	A16S
ATOM	32533	O5'	GUA	651	167.726	101.858	-62.609	1.00	57.28	A16S	ATOM	32586	N1	GUA	653	172.284	106.361	-73.088	1.00	50.78	A16S
ATOM	32534	C5'	GUA	651	167.058	100.611	-62.478	1.00	57.28	A16S	ATOM	32587	C6	GUA	653	172.322	105.604	-71.922	1.00	50.78	A16S
ATOM	32535	C4'	GUA	651	166.390	100.241	-63.773	1.00	57.28	A16S	ATOM	32588	O6	GUA	653	172.627	106.138	-70.852	1.00	50.78	A16S
ATOM	32536	O4'	GUA	651	165.440	101.278	-64.132	1.00	57.28	A16S	ATOM	32589	C5	GUA	653	171.988	104.256	-72.164	1.00	50.78	A16S
ATOM	32537	C1'	GUA	651	165.382	101.396	-65.541	1.00	57.28	A16S	ATOM	32590	N7	GUA	653	171.897	103.190	-71.290	1.00	50.78	A16S
ATOM	32538	N9	GUA	651	165.849	102.727	-65.891	1.00	46.98	A16S	ATOM	32591	C8	GUA	653	171.556	102.185	-72.045	1.00	50.78	A16S
ATOM	32539	C4	GUA	651	165.799	103.296	-67.136	1.00	46.98	A16S	ATOM	32592	C2'	GUA	653	172.203	101.386	-75.406	1.00	54.18	A16S
ATOM	32540	N3	GUA	651	165.307	102.716	-68.247	1.00	46.98	A16S	ATOM	32593	O2'	GUA	653	171.715	101.302	-76.727	1.00	54.18	A16S
ATOM	32541	C2	GUA	651	165.370	103.518	-69.291	1.00	46.98	A16S	ATOM	32594	C3'	GUA	653	172.727	100.064	-74.861	1.00	54.18	A16S
ATOM	32542	N2	GUA	651	164.895	103.099	-70.476	1.00	46.98	A16S	ATOM	32595	O3'	GUA	653	173.435	99.333	-75.846	1.00	54.18	A16S
ATOM	32543	N1	GUA	651	165.895	104.787	-69.250	1.00	46.98	A16S	ATOM	32596	P	GUA	654	175.036	99.248	-75.764	1.00	63.89	A16S
ATOM	32544	C6	GUA	651	166.419	105.399	-68.117	1.00	46.98	A16S	ATOM	32597	O1P	GUA	654	175.449	98.268	-76.798	1.00	55.61	A16S
ATOM	32545	O6	GUA	651	166.880	106.541	-68.192	1.00	46.98	A16S	ATOM	32598	O2P	GUA	654	175.400	99.006	-74.358	1.00	55.61	A16S
ATOM	32546	C5	GUA	651	166.339	104.555	-66.987	1.00	46.98	A16S	ATOM	32599	O5'	GUA	654	175.511	100.716	-76.175	1.00	63.89	A16S
ATOM	32547	N7	GUA	651	166.725	104.774	-65.670	1.00	46.98	A16S	ATOM	32600	C5'	GUA	654	175.122	101.246	-77.429	1.00	63.89	A16S
ATOM	32548	C8	GUA	651	166.419	103.661	-65.057	1.00	46.98	A16S	ATOM	32601	C4'	GUA	654	175.106	102.755	-77.416	1.00	63.89	A16S
ATOM	32549	C2'	GUA	651	166.293	100.312	-66.109	1.00	57.28	A16S	ATOM	32602	O4'	GUA	654	174.406	103.261	-76.252	1.00	63.89	A16S
ATOM	32550	O2'	GUA	651	165.560	99.119	-66.264	1.00	57.28	A16S	ATOM	32603	C1'	GUA	654	174.736	104.634	-76.099	1.00	63.89	A16S
ATOM	32551	C3'	GUA	651	167.298	100.167	-64.983	1.00	57.28	A16S	ATOM	32604	N9	GUA	654	175.082	104.916	-74.715	1.00	55.61	A16S
ATOM	32552	O3'	GUA	651	167.949	98.908	-65.041	1.00	57.28	A16S	ATOM	32605	C4	GUA	654	175.308	106.167	-74.198	1.00	55.61	A16S
ATOM	32553	P	URI	652	169.394	98.794	-65.731	1.00	59.88	A16S	ATOM	32606	N3	GUA	654	175.230	107.330	-74.880	1.00	55.61	A16S
ATOM	32554	O1P	URI	652	169.847	97.398	-65.525	1.00	40.96	A16S	ATOM	32607	C2	GUA	654	175.509	108.372	-74.111	1.00	55.61	A16S
ATOM	32555	O2P	URI	652	170.219	99.930	-65.231	1.00	40.96	A16S	ATOM	32608	N2	GUA	654	175.483	109.611	-74.622	1.00	55.61	A16S
ATOM	32556	O5'	URI	652	169.114	99.022	-67.283	1.00	59.88	A16S	ATOM	32609	N1	GUA	654	175.833	108.278	-72.786	1.00	55.61	A16S
ATOM	32557	C5'	URI	652	168.488	98.011	-68.061	1.00	59.88	A16S	ATOM	32610	C6	GUA	654	175.916	107.091	-72.065	1.00	55.61	A16S
ATOM	32558	C4'	URI	652	168.316	98.465	-69.496	1.00	59.88	A16S	ATOM	32611	O6	GUA	654	176.211	107.120	-70.867	1.00	55.61	A16S
ATOM	32559	O4'	URI	652	167.458	99.634	-69.549	1.00	59.88	A16S	ATOM	32612	C5	GUA	654	175.626	105.965	-72.876	1.00	55.61	A16S
ATOM	32560	C1'	URI	652	167.777	100.402	-70.697	1.00	59.88	A16S	ATOM	32613	N7	GUA	654	175.600	104.611	-72.565	1.00	55.61	A16S

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ATOM  32689  C5' ADE  658     192.423 114.795 -70.944  1.00 59.91      A16S
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ATOM  32703  C2' ADE  658     192.820 113.510 -67.453  1.00 59.91      A16S
ATOM  32704  O2' ADE  658     193.159 114.634 -66.673  1.00 59.91      A16S
ATOM  32705  C3' ADE  658     193.393 113.634 -68.853  1.00 59.91      A16S
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ATOM  32710  O5' ADE  659     195.829 112.049 -67.705  1.00 54.91      A16S
ATOM  32711  C5' ADE  659     196.087 112.608 -66.423  1.00 54.91      A16S
ATOM  32712  C4' ADE  659     195.726 111.619 -65.350  1.00 54.91      A16S
ATOM  32713  O4' ADE  659     194.325 111.258 -65.483  1.00 54.91      A16S
ATOM  32714  C1' ADE  659     194.137 109.919 -65.049  1.00 54.91      A16S
ATOM  32715  N9  ADE  659     193.606 109.139 -66.161  1.00 45.96      A16S
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ATOM  32717  N3  ADE  659     192.870 107.156 -64.971  1.00 45.96      A16S
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ATOM  32719  N1  ADE  659     191.989 105.487 -66.465  1.00 45.96      A16S
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ATOM	32720	C6	ADE	659	192.187	106.250	-67.554	1.00	45.96	A16S	ATOM	32773	C5'	CYT	662	202.263	96.996	-66.569	1.00	56.55	A16S
ATOM	32721	N6	ADE	659	191.841	105.760	-68.746	1.00	45.96	A16S	ATOM	32774	C4'	CYT	662	201.490	96.422	-67.708	1.00	56.55	A16S
ATOM	32722	C5	ADE	659	192.749	107.518	-67.367	1.00	45.96	A16S	ATOM	32775	O4'	CYT	662	200.283	97.207	-67.860	1.00	56.55	A16S
ATOM	32723	N7	ADE	659	193.080	108.529	-68.255	1.00	45.96	A16S	ATOM	32776	C1'	CYT	662	199.936	97.285	-69.231	1.00	56.55	A16S
ATOM	32724	C8	ADE	659	193.578	109.472	-67.489	1.00	45.96	A16S	ATOM	32777	N1	CYT	662	199.973	98.692	-69.622	1.00	36.48	A16S
ATOM	32725	C2'	ADE	659	195.508	109.398	-64.620	1.00	54.91	A16S	ATOM	32778	C6	CYT	662	200.613	99.621	-68.855	1.00	36.48	A16S
ATOM	32726	O2'	ADE	659	195.634	109.616	-63.236	1.00	54.91	A16S	ATOM	32779	C2	CYT	662	199.348	99.064	-70.807	1.00	36.48	A16S
ATOM	32727	C3'	ADE	659	196.430	110.282	-65.451	1.00	54.91	A16S	ATOM	32780	O2	CYT	662	198.771	98.187	-71.468	1.00	36.48	A16S
ATOM	32728	O3'	ADE	659	197.746	110.377	-64.925	1.00	54.91	A16S	ATOM	32781	N3	CYT	662	199.388	100.364	-71.205	1.00	36.48	A16S
ATOM	32729	P	URI	660	198.907	109.395	-65.470	1.00	50.02	A16S	ATOM	32782	C4	CYT	662	200.019	101.264	-70.454	1.00	36.48	A16S
ATOM	32730	O1P	URI	660	200.187	109.947	-64.944	1.00	51.64	A16S	ATOM	32783	N4	CYT	662	200.045	102.524	-70.879	1.00	36.48	A16S
ATOM	32731	O2P	URI	660	198.770	109.148	-66.928	1.00	51.64	A16S	ATOM	32784	C5	CYT	662	200.659	100.907	-69.228	1.00	36.48	A16S
ATOM	32732	O5'	URI	660	198.608	108.003	-64.746	1.00	50.02	A16S	ATOM	32785	C2'	CYT	662	200.964	96.456	-69.997	1.00	56.55	A16S
ATOM	32733	C5'	URI	660	198.727	107.874	-63.338	1.00	50.02	A16S	ATOM	32786	O2'	CYT	662	200.462	95.141	-70.153	1.00	56.55	A16S
ATOM	32734	C4'	URI	660	198.153	106.559	-62.886	1.00	50.02	A16S	ATOM	32787	C3'	CYT	662	202.160	96.568	-69.057	1.00	56.55	A16S
ATOM	32735	O4'	URI	660	196.768	106.477	-63.309	1.00	50.02	A16S	ATOM	32788	O3'	CYT	662	203.171	95.578	-69.241	1.00	56.55	A16S
ATOM	32736	C1'	URI	660	196.419	105.117	-63.520	1.00	50.02	A16S	ATOM	32789	P	CYT	663	204.559	95.985	-69.944	1.00	70.41	A16S
ATOM	32737	N1	URI	660	195.910	104.970	-64.889	1.00	51.64	A16S	ATOM	32790	O1P	CYT	663	205.540	94.919	-69.629	1.00	58.08	A16S
ATOM	32738	C6	URI	660	195.961	106.002	-65.788	1.00	51.64	A16S	ATOM	32791	O2P	CYT	663	204.891	97.399	-69.613	1.00	58.08	A16S
ATOM	32739	C2	URI	660	195.377	103.751	-65.237	1.00	51.64	A16S	ATOM	32792	O5'	CYT	663	204.193	95.905	-71.492	1.00	70.41	A16S
ATOM	32740	O2	URI	660	195.300	102.830	-64.458	1.00	51.64	A16S	ATOM	32793	C5'	CYT	663	203.527	94.766	-72.024	1.00	70.41	A16S
ATOM	32741	N3	URI	660	194.931	103.655	-66.529	1.00	51.64	A16S	ATOM	32794	C4'	CYT	663	202.917	95.099	-73.362	1.00	70.41	A16S
ATOM	32742	C4	URI	660	194.954	104.645	-67.480	1.00	51.64	A16S	ATOM	32795	O4'	CYT	663	201.804	96.010	-73.184	1.00	70.41	A16S
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ATOM	32744	C5	URI	660	195.511	105.887	-67.039	1.00	51.64	A16S	ATOM	32797	N1	CYT	663	201.885	98.251	-73.840	1.00	58.08	A16S
ATOM	32745	C2'	URI	660	197.677	104.286	-63.270	1.00	50.02	A16S	ATOM	32798	C6	CYT	663	202.311	98.510	-72.570	1.00	58.08	A16S
ATOM	32746	O2'	URI	660	197.676	103.807	-61.942	1.00	50.02	A16S	ATOM	32799	C2	CYT	663	201.597	99.307	-74.721	1.00	58.08	A16S
ATOM	32747	C3'	URI	660	198.760	105.323	-63.516	1.00	50.02	A16S	ATOM	32800	O2	CYT	663	201.235	99.045	-75.873	1.00	58.08	A16S
ATOM	32748	O3'	URI	660	199.980	104.961	-62.897	1.00	50.02	A16S	ATOM	32801	N3	CYT	663	201.726	100.579	-74.293	1.00	58.08	A16S
ATOM	32749	P	URI	661	201.187	104.421	-63.809	1.00	53.87	A16S	ATOM	32802	C4	CYT	663	202.130	100.821	-73.046	1.00	58.08	A16S
ATOM	32750	O1P	URI	661	202.415	104.323	-62.977	1.00	38.95	A16S	ATOM	32803	N4	CYT	663	202.225	102.096	-72.657	1.00	58.08	A16S
ATOM	32751	O2P	URI	661	201.184	105.276	-65.028	1.00	38.95	A16S	ATOM	32804	C5	CYT	663	202.449	99.767	-72.135	1.00	58.08	A16S
ATOM	32752	O5'	URI	661	200.748	102.941	-64.198	1.00	53.87	A16S	ATOM	32805	C2'	CYT	663	202.810	96.456	-75.281	1.00	70.41	A16S
ATOM	32753	C5'	URI	661	200.609	101.950	-63.198	1.00	53.87	A16S	ATOM	32806	O2'	CYT	663	202.271	95.519	-76.187	1.00	70.41	A16S
ATOM	32754	C4'	URI	661	199.896	100.744	-63.755	1.00	53.87	A16S	ATOM	32807	C3'	CYT	663	203.822	95.838	-74.331	1.00	70.41	A16S
ATOM	32755	O4'	URI	661	198.545	101.088	-64.152	1.00	53.87	A16S	ATOM	32808	O3'	CYT	663	204.707	94.948	-74.995	1.00	70.41	A16S
ATOM	32756	C1'	URI	661	198.184	100.350	-65.308	1.00	53.87	A16S	ATOM	32809	P	CYT	664	206.243	95.373	-75.224	1.00	76.13	A16S
ATOM	32757	N1	URI	661	197.985	101.314	-66.392	1.00	38.95	A16S	ATOM	32810	O1P	CYT	664	206.959	94.093	-75.453	1.00	61.16	A16S
ATOM	32758	C6	URI	661	198.339	102.629	-66.225	1.00	38.95	A16S	ATOM	32811	O2P	CYT	664	206.704	96.291	-74.151	1.00	61.16	A16S
ATOM	32759	C2	URI	661	197.430	100.864	-67.576	1.00	38.95	A16S	ATOM	32812	O5'	CYT	664	206.206	96.229	-76.566	1.00	76.13	A16S
ATOM	32760	O2	URI	661	197.098	99.708	-67.749	1.00	38.95	A16S	ATOM	32813	C5'	CYT	664	205.768	95.640	-77.779	1.00	76.13	A16S
ATOM	32761	N3	URI	661	197.279	101.824	-68.546	1.00	38.95	A16S	ATOM	32814	C4'	CYT	664	205.476	96.703	-78.801	1.00	76.13	A16S
ATOM	32762	C4	URI	661	197.623	103.161	-68.445	1.00	38.95	A16S	ATOM	32815	O4'	CYT	664	204.351	97.509	-78.366	1.00	76.13	A16S
ATOM	32763	O4	URI	661	197.503	103.899	-69.428	1.00	38.95	A16S	ATOM	32816	C1'	CYT	664	204.467	98.810	-78.925	1.00	76.13	A16S
ATOM	32764	C5	URI	661	198.177	103.542	-67.179	1.00	38.95	A16S	ATOM	32817	N1	CYT	664	204.527	99.797	-77.837	1.00	61.16	A16S
ATOM	32765	C2'	URI	661	199.334	99.388	-65.600	1.00	53.87	A16S	ATOM	32818	C6	CYT	664	204.905	99.442	-76.571	1.00	61.16	A16S
ATOM	32766	O2'	URI	661	199.117	98.136	-64.967	1.00	53.87	A16S	ATOM	32819	C2	CYT	664	204.216	101.128	-78.135	1.00	61.16	A16S
ATOM	32767	C3'	URI	661	200.504	100.158	-65.010	1.00	53.87	A16S	ATOM	32820	O2	CYT	664	203.828	101.404	-79.278	1.00	61.16	A16S
ATOM	32768	O3'	URI	661	201.581	99.307	-64.670	1.00	53.87	A16S	ATOM	32821	N3	CYT	664	204.340	102.072	-77.175	1.00	61.16	A16S
ATOM	32769	P	CYT	662	202.895	99.305	-65.580	1.00	56.55	A16S	ATOM	32822	C4	CYT	664	204.741	101.725	-75.951	1.00	61.16	A16S
ATOM	32770	O1P	CYT	662	203.928	98.589	-64.794	1.00	36.48	A16S	ATOM	32823	N4	CYT	664	204.884	102.692	-75.044	1.00	61.16	A16S
ATOM	32771	O2P	CYT	662	203.160	100.692	-66.065	1.00	36.48	A16S	ATOM	32824	C5	CYT	664	205.023	100.366	-75.605	1.00	61.16	A16S
ATOM	32772	O5'	CYT	662	202.484	98.371	-66.794	1.00	56.55	A16S	ATOM	32825	C2'	CYT	664	205.770	98.830	-79.728	1.00	76.13	A16S

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ATOM  32826  O2' CYT   664     205.515  98.516 -81.082  1.00 76.13      A16S
ATOM  32827  C3' CYT   664     206.557  97.742 -79.020  1.00 76.13      A16S
ATOM  32828  O3' CYT   664     207.625  97.259 -79.816  1.00 76.13      A16S
ATOM  32829  P   GUA   665     209.103  97.853 -79.597  1.00 82.28      A16S
ATOM  32830  O1P GUA   665     210.017  97.020 -80.417  1.00 74.37      A16S
ATOM  32831  O2P GUA   665     209.367  98.015 -78.148  1.00 74.37      A16S
ATOM  32832  O5' GUA   665     209.029  99.302 -80.248  1.00 82.28      A16S
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ATOM  32834  C4' GUA   665     208.689 100.889 -82.011  1.00 82.28      A16S
ATOM  32835  O4' GUA   665     207.463 101.415 -81.440  1.00 82.28      A16S
ATOM  32836  C1' GUA   665     207.634 102.793 -81.148  1.00 82.28      A16S
ATOM  32837  N9  GUA   665     207.569 102.968 -79.704  1.00 74.37      A16S
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ATOM  32840  C2  GUA   665     207.584 106.355 -78.754  1.00 74.37      A16S
ATOM  32841  N2  GUA   665     207.586 107.627 -79.169  1.00 74.37      A16S
ATOM  32842  N1  GUA   665     207.603 106.155 -77.400  1.00 74.37      A16S
ATOM  32843  C6  GUA   665     207.607 104.915 -76.775  1.00 74.37      A16S
ATOM  32844  O6  GUA   665     207.641 104.847 -75.543  1.00 74.37      A16S
ATOM  32845  C5  GUA   665     207.577 103.861 -77.713  1.00 74.37      A16S
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ATOM  32847  C8  GUA   665     207.548 101.996 -78.734  1.00 74.37      A16S
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ATOM  32851  O3' GUA   665     210.948 101.773 -82.191  1.00 82.28      A16S
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ATOM  32856  C5' GUA   666     212.201 104.339 -82.482  1.00 85.47      A16S
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ATOM  33004  O3' CYT  672     212.218 108.292 -59.047  1.00 50.23      A16S
ATOM  33005  P   GUA  673     211.636 109.051 -57.755  1.00 45.23      A16S
ATOM  33006  O1P GUA  673     210.736 110.127 -58.256  1.00 49.33      A16S
ATOM  33007  O2P GUA  673     212.762 109.400 -56.852  1.00 49.33      A16S
ATOM  33008  O5' GUA  673     210.793 107.942 -56.989  1.00 45.23      A16S
ATOM  33009  C5' GUA  673     209.848 107.140 -57.659  1.00 45.23      A16S
ATOM  33010  C4' GUA  673     209.620 105.885 -56.863  1.00 45.23      A16S
ATOM  33011  O4' GUA  673     210.840 105.107 -56.873  1.00 45.23      A16S
ATOM  33012  C1' GUA  673     211.043 104.514 -55.605  1.00 45.23      A16S
ATOM  33013  N9  GUA  673     212.295 105.033 -55.070  1.00 49.33      A16S
ATOM  33014  C4  GUA  673     213.082 104.437 -54.121  1.00 49.33      A16S
ATOM  33015  N3  GUA  673     212.826 103.270 -53.504  1.00 49.33      A16S
ATOM  33016  C2  GUA  673     213.792 102.930 -52.680  1.00 49.33      A16S
ATOM  33017  N2  GUA  673     213.729 101.769 -52.012  1.00 49.33      A16S
ATOM  33018  N1  GUA  673     214.899 103.691 -52.457  1.00 49.33      A16S
ATOM  33019  C6  GUA  673     215.176 104.901 -53.077  1.00 49.33      A16S
ATOM  33020  O6  GUA  673     216.214 105.507 -52.805  1.00 49.33      A16S
ATOM  33021  C5  GUA  673     214.170 105.265 -53.975  1.00 49.33      A16S
ATOM  33022  N7  GUA  673     214.066 106.374 -54.802  1.00 49.33      A16S
ATOM  33023  C8  GUA  673     212.934 106.198 -55.429  1.00 49.33      A16S
ATOM  33024  C2' GUA  673     209.812 104.823 -54.753  1.00 45.23      A16S
ATOM  33025  O2' GUA  673     208.863 103.784 -54.898  1.00 45.23      A16S
ATOM  33026  C3' GUA  673     209.340 106.122 -55.387  1.00 45.23      A16S
ATOM  33027  O3' GUA  673     207.954 106.332 -55.186  1.00 45.23      A16S
ATOM  33028  P   GUA  674     207.460 107.523 -54.237  1.00 52.08      A16S
ATOM  33029  O1P GUA  674     205.989 107.565 -54.434  1.00 40.04      A16S
ATOM  33030  O2P GUA  674     208.256 108.745 -54.498  1.00 40.04      A16S
ATOM  33031  O5' GUA  674     207.767 106.965 -52.778  1.00 52.08      A16S
ATOM  33032  C5' GUA  674     207.021 105.862 -52.282  1.00 52.08      A16S
ATOM  33033  C4' GUA  674     207.728 105.224 -51.124  1.00 52.08      A16S
ATOM  33034  O4' GUA  674     208.989 104.666 -51.573  1.00 52.08      A16S
ATOM  33035  C1' GUA  674     209.946 104.756 -50.528  1.00 52.08      A16S
ATOM  33036  N9  GUA  674     211.022 105.636 -50.962  1.00 40.04      A16S
ATOM  33037  C4  GUA  674     212.326 105.582 -50.557  1.00 40.04      A16S
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ATOM	33038	N3	GUA	674	212.861	104.655	-49.742	1.00	40.04	A16S	ATOM	33091	O2'	GUA	676	212.878	111.580	-39.717	1.00	66.54	A16S
ATOM	33039	C2	GUA	674	214.134	104.887	-49.517	1.00	40.04	A16S	ATOM	33092	C3'	GUA	676	211.204	110.854	-41.325	1.00	66.54	A16S
ATOM	33040	N2	GUA	674	214.838	104.043	-48.757	1.00	40.04	A16S	ATOM	33093	O3'	GUA	676	211.709	111.905	-42.131	1.00	66.54	A16S
ATOM	33041	N1	GUA	674	214.814	105.959	-50.030	1.00	40.04	A16S	ATOM	33094	P	ADE	677	212.630	111.553	-43.391	1.00	55.84	A16S
ATOM	33042	C6	GUA	674	214.268	106.921	-50.869	1.00	40.04	A16S	ATOM	33095	O1P	ADE	677	212.884	112.821	-44.135	1.00	45.73	A16S
ATOM	33043	O6	GUA	674	214.959	107.848	-51.278	1.00	40.04	A16S	ATOM	33096	O2P	ADE	677	212.030	110.388	-44.100	1.00	45.73	A16S
ATOM	33044	C5	GUA	674	212.931	106.671	-51.134	1.00	40.04	A16S	ATOM	33097	O5'	ADE	677	213.977	111.060	-42.711	1.00	55.84	A16S
ATOM	33045	N7	GUA	674	212.037	107.371	-51.923	1.00	40.04	A16S	ATOM	33098	C5'	ADE	677	214.695	110.007	-43.297	1.00	55.84	A16S
ATOM	33046	C8	GUA	674	210.920	106.711	-51.803	1.00	40.04	A16S	ATOM	33099	C4'	ADE	677	215.615	109.364	-42.305	1.00	55.84	A16S
ATOM	33047	C2'	GUA	674	209.227	105.358	-49.318	1.00	52.08	A16S	ATOM	33100	O4'	ADE	677	214.896	108.865	-41.154	1.00	55.84	A16S
ATOM	33048	O2'	GUA	674	208.757	104.308	-48.496	1.00	52.08	A16S	ATOM	33101	C1'	ADE	677	215.303	107.539	-40.872	1.00	55.84	A16S
ATOM	33049	C3'	GUA	674	208.121	106.156	-49.998	1.00	52.08	A16S	ATOM	33102	N9	ADE	677	214.180	106.664	-41.190	1.00	45.73	A16S
ATOM	33050	O3'	GUA	674	207.007	106.356	-49.150	1.00	52.08	A16S	ATOM	33103	C4	ADE	677	214.075	105.318	-40.960	1.00	45.73	A16S
ATOM	33051	P	URI	675	206.662	107.830	-48.621	1.00	48.54	A16S	ATOM	33104	N3	ADE	677	214.997	104.515	-40.419	1.00	45.73	A16S
ATOM	33052	O1P	URI	675	205.194	107.842	-48.387	1.00	67.61	A16S	ATOM	33105	C2	ADE	677	214.524	103.282	-40.307	1.00	45.73	A16S
ATOM	33053	O2P	URI	675	207.275	108.841	-49.518	1.00	67.61	A16S	ATOM	33106	N1	ADE	677	213.328	102.800	-40.649	1.00	45.73	A16S
ATOM	33054	O5'	URI	675	207.388	107.868	-47.215	1.00	48.54	A16S	ATOM	33107	C6	ADE	677	212.429	103.638	-41.198	1.00	45.73	A16S
ATOM	33055	C5'	URI	675	207.086	106.865	-46.272	1.00	48.54	A16S	ATOM	33108	N6	ADE	677	211.231	103.161	-41.535	1.00	45.73	A16S
ATOM	33056	C4'	URI	675	208.176	106.749	-45.257	1.00	48.54	A16S	ATOM	33109	C5	ADE	677	212.808	104.963	-41.373	1.00	45.73	A16S
ATOM	33057	O4'	URI	675	209.393	106.285	-45.875	1.00	48.54	A16S	ATOM	33110	N7	ADE	677	212.135	106.055	-41.888	1.00	45.73	A16S
ATOM	33058	C1'	URI	675	210.492	106.755	-45.128	1.00	48.54	A16S	ATOM	33111	C8	ADE	677	212.991	107.037	-41.763	1.00	45.73	A16S
ATOM	33059	N1	URI	675	211.403	107.444	-46.044	1.00	67.61	A16S	ATOM	33112	C2'	ADE	677	216.537	107.283	-41.723	1.00	55.84	A16S
ATOM	33060	C6	URI	675	210.978	107.950	-47.249	1.00	67.61	A16S	ATOM	33113	O2'	ADE	677	217.629	107.764	-40.994	1.00	55.84	A16S
ATOM	33061	C2	URI	675	212.712	107.550	-45.651	1.00	67.61	A16S	ATOM	33114	C3'	ADE	677	216.228	108.145	-42.930	1.00	55.84	A16S
ATOM	33062	O2	URI	675	213.112	107.132	-44.585	1.00	67.61	A16S	ATOM	33115	O3'	ADE	677	217.342	108.630	-43.633	1.00	55.84	A16S
ATOM	33063	N3	URI	675	213.539	108.162	-46.550	1.00	67.61	A16S	ATOM	33116	P	ADE	678	217.460	108.366	-45.210	1.00	47.56	A16S
ATOM	33064	C4	URI	675	213.195	108.669	-47.773	1.00	67.61	A16S	ATOM	33117	O1P	ADE	678	218.524	109.290	-45.696	1.00	41.21	A16S
ATOM	33065	O4	URI	675	214.078	109.110	-48.495	1.00	67.61	A16S	ATOM	33118	O2P	ADE	678	216.120	108.424	-45.847	1.00	41.21	A16S
ATOM	33066	C5	URI	675	211.810	108.544	-48.109	1.00	67.61	A16S	ATOM	33119	O5'	ADE	678	217.985	106.860	-45.221	1.00	47.56	A16S
ATOM	33067	C2'	URI	675	209.936	107.639	-44.011	1.00	48.54	A16S	ATOM	33120	C5'	ADE	678	217.225	105.815	-45.800	1.00	47.56	A16S
ATOM	33068	O2'	URI	675	209.764	106.823	-42.867	1.00	48.54	A16S	ATOM	33121	C4'	ADE	678	217.372	104.550	-44.990	1.00	47.56	A16S
ATOM	33069	C3'	URI	675	208.588	108.036	-44.592	1.00	48.54	A16S	ATOM	33122	O4'	ADE	678	216.339	104.513	-43.974	1.00	47.56	A16S
ATOM	33070	O3'	URI	675	207.645	108.293	-43.575	1.00	48.54	A16S	ATOM	33123	C1'	ADE	678	215.735	103.228	-43.945	1.00	47.56	A16S
ATOM	33071	P	GUA	676	207.401	109.793	-43.071	1.00	66.54	A16S	ATOM	33124	N9	ADE	678	214.360	103.354	-44.438	1.00	41.21	A16S
ATOM	33072	O1P	GUA	676	206.109	109.722	-42.336	1.00	40.24	A16S	ATOM	33125	C4	ADE	678	213.380	102.401	-44.333	1.00	41.21	A16S
ATOM	33073	O2P	GUA	676	207.527	110.720	-44.224	1.00	40.24	A16S	ATOM	33126	N3	ADE	678	213.482	101.191	-43.755	1.00	41.21	A16S
ATOM	33074	O5'	GUA	676	208.599	110.053	-42.042	1.00	66.54	A16S	ATOM	33127	C2	ADE	678	212.332	100.532	-43.854	1.00	41.21	A16S
ATOM	33075	C5'	GUA	676	208.695	111.283	-41.324	1.00	66.54	A16S	ATOM	33128	N1	ADE	678	211.184	100.917	-44.425	1.00	41.21	A16S
ATOM	33076	C4'	GUA	676	209.999	111.351	-40.559	1.00	66.54	A16S	ATOM	33129	C6	ADE	678	211.123	102.138	-44.997	1.00	41.21	A16S
ATOM	33077	O4'	GUA	676	209.954	110.527	-39.371	1.00	66.54	A16S	ATOM	33130	N6	ADE	678	209.985	102.515	-45.574	1.00	41.21	A16S
ATOM	33078	C1'	GUA	676	211.224	109.949	-39.139	1.00	66.54	A16S	ATOM	33131	C5	ADE	678	212.265	102.935	-44.953	1.00	41.21	A16S
ATOM	33079	N9	GUA	676	211.047	108.502	-39.110	1.00	40.24	A16S	ATOM	33132	N7	ADE	678	212.526	104.211	-45.425	1.00	41.21	A16S
ATOM	33080	C4	GUA	676	211.919	107.565	-38.600	1.00	40.24	A16S	ATOM	33133	C8	ADE	678	213.780	104.413	-45.099	1.00	41.21	A16S
ATOM	33081	N3	GUA	676	213.134	107.814	-38.075	1.00	40.24	A16S	ATOM	33134	C2'	ADE	678	216.592	102.305	-44.810	1.00	47.56	A16S
ATOM	33082	C2	GUA	676	213.721	106.707	-37.651	1.00	40.24	A16S	ATOM	33135	O2'	ADE	678	217.596	101.704	-44.033	1.00	47.56	A16S
ATOM	33083	N2	GUA	676	214.942	106.761	-37.098	1.00	40.24	A16S	ATOM	33136	C3'	ADE	678	217.174	103.285	-45.813	1.00	47.56	A16S
ATOM	33084	N1	GUA	676	213.164	105.462	-37.736	1.00	40.24	A16S	ATOM	33137	O3'	ADE	678	218.439	102.841	-46.293	1.00	47.56	A16S
ATOM	33085	C6	GUA	676	211.923	105.179	-38.289	1.00	40.24	A16S	ATOM	33138	P	ADE	679	218.562	102.226	-47.772	1.00	46.50	A16S
ATOM	33086	O6	GUA	676	211.526	104.000	-38.348	1.00	40.24	A16S	ATOM	33139	O1P	ADE	679	219.997	101.943	-47.994	1.00	47.16	A16S
ATOM	33087	C5	GUA	676	211.276	106.355	-38.739	1.00	40.24	A16S	ATOM	33140	O2P	ADE	679	217.830	103.108	-48.731	1.00	47.16	A16S
ATOM	33088	N7	GUA	676	210.039	106.522	-39.341	1.00	40.24	A16S	ATOM	33141	O5'	ADE	679	217.832	100.815	-47.652	1.00	46.50	A16S
ATOM	33089	C8	GUA	676	209.951	107.806	-39.555	1.00	40.24	A16S	ATOM	33142	C5'	ADE	679	218.393	99.787	-46.847	1.00	46.50	A16S
ATOM	33090	C2'	GUA	676	212.175	110.467	-40.216	1.00	66.54	A16S	ATOM	33143	C4'	ADE	679	217.364	98.729	-46.557	1.00	46.50	A16S

ATOM	33144	O4'	ADE	679	216.239	99.348	-45.890	1.00	46.50	A16S	ATOM	33197	N7	GUA	681	214.552	97.636	-53.547	1.00	40.47	A16S
ATOM	33145	C1'	ADE	679	215.034	98.737	-46.316	1.00	46.50	A16S	ATOM	33198	C8	GUA	681	213.577	96.771	-53.511	1.00	40.47	A16S
ATOM	33146	N9	ADE	679	214.253	99.765	-46.990	1.00	47.16	A16S	ATOM	33199	C2'	GUA	681	211.051	95.762	-55.757	1.00	54.74	A16S
ATOM	33147	C4	ADE	679	212.897	99.784	-47.200	1.00	47.16	A16S	ATOM	33200	O2'	GUA	681	209.674	95.683	-56.061	1.00	54.74	A16S
ATOM	33148	N3	ADE	679	212.001	98.857	-46.831	1.00	47.16	A16S	ATOM	33201	C3'	GUA	681	211.652	94.391	-55.500	1.00	54.74	A16S
ATOM	33149	C2	ADE	679	210.782	99.216	-47.200	1.00	47.16	A16S	ATOM	33202	O3'	GUA	681	211.155	93.419	-56.397	1.00	54.74	A16S
ATOM	33150	N1	ADE	679	210.383	100.311	-47.838	1.00	47.16	A16S	ATOM	33203	P	CYT	682	212.061	92.966	-57.637	1.00	45.01	A16S
ATOM	33151	C6	ADE	679	211.310	101.230	-48.188	1.00	47.16	A16S	ATOM	33204	O1P	CYT	682	211.360	91.831	-58.315	1.00	39.45	A16S
ATOM	33152	N6	ADE	679	210.915	102.342	-48.818	1.00	47.16	A16S	ATOM	33205	O2P	CYT	682	213.432	92.770	-57.101	1.00	39.45	A16S
ATOM	33153	C5	ADE	679	212.638	100.965	-47.865	1.00	47.16	A16S	ATOM	33206	O5'	CYT	682	212.056	94.250	-58.589	1.00	45.01	A16S
ATOM	33154	N7	ADE	679	213.807	101.679	-48.077	1.00	47.16	A16S	ATOM	33207	C5'	CYT	682	210.903	94.569	-59.358	1.00	45.01	A16S
ATOM	33155	C8	ADE	679	214.734	100.927	-47.537	1.00	47.16	A16S	ATOM	33208	C4'	CYT	682	211.034	95.937	-59.974	1.00	45.01	A16S
ATOM	33156	C2'	ADE	679	215.425	97.566	-47.218	1.00	46.50	A16S	ATOM	33209	O4'	CYT	682	211.220	96.924	-58.933	1.00	45.01	A16S
ATOM	33157	O2'	ADE	679	215.632	96.406	-46.442	1.00	46.50	A16S	ATOM	33210	C1'	CYT	682	211.986	98.014	-59.436	1.00	45.01	A16S
ATOM	33158	C3'	ADE	679	216.748	98.060	-47.769	1.00	46.50	A16S	ATOM	33211	N1	CYT	682	213.256	98.071	-58.712	1.00	39.45	A16S
ATOM	33159	O3'	ADE	679	217.545	96.965	-48.163	1.00	46.50	A16S	ATOM	33212	C6	CYT	682	213.660	97.059	-57.882	1.00	39.45	A16S
ATOM	33160	P	URI	680	217.581	96.528	-49.702	1.00	55.03	A16S	ATOM	33213	C2	CYT	682	214.061	99.178	-58.913	1.00	39.45	A16S
ATOM	33161	O1P	URI	680	218.728	95.589	-49.793	1.00	42.84	A16S	ATOM	33214	O2	CYT	682	213.650	100.063	-59.670	1.00	39.45	A16S
ATOM	33162	O2P	URI	680	217.538	97.744	-50.557	1.00	42.84	A16S	ATOM	33215	N3	CYT	682	215.266	99.252	-58.293	1.00	39.45	A16S
ATOM	33163	O5'	URI	680	216.240	95.702	-49.927	1.00	55.03	A16S	ATOM	33216	C4	CYT	682	215.670	98.243	-57.512	1.00	39.45	A16S
ATOM	33164	C5'	URI	680	216.015	94.500	-49.221	1.00	55.03	A16S	ATOM	33217	N4	CYT	682	216.879	98.325	-56.958	1.00	39.45	A16S
ATOM	33165	C4'	URI	680	214.542	94.198	-49.155	1.00	55.03	A16S	ATOM	33218	C5	CYT	682	214.852	97.100	-57.274	1.00	39.45	A16S
ATOM	33166	O4'	URI	680	213.831	95.320	-48.569	1.00	55.03	A16S	ATOM	33219	C2'	CYT	682	212.273	97.698	-60.894	1.00	45.01	A16S
ATOM	33167	C1'	URI	680	212.487	95.314	-49.034	1.00	55.03	A16S	ATOM	33220	O2'	CYT	682	211.264	98.278	-61.697	1.00	45.01	A16S
ATOM	33168	N1	URI	680	212.195	96.601	-49.675	1.00	42.84	A16S	ATOM	33221	C3'	CYT	682	212.242	96.180	-60.843	1.00	45.01	A16S
ATOM	33169	C6	URI	680	213.192	97.432	-50.099	1.00	42.84	A16S	ATOM	33222	O3'	CYT	682	212.094	95.589	-62.106	1.00	45.01	A16S
ATOM	33170	C2	URI	680	210.862	96.948	-49.826	1.00	42.84	A16S	ATOM	33223	P	GUA	683	213.345	94.844	-62.761	1.00	50.96	A16S
ATOM	33171	O2	URI	680	209.952	96.227	-49.457	1.00	42.84	A16S	ATOM	33224	O1P	GUA	683	212.853	94.200	-64.013	1.00	46.52	A16S
ATOM	33172	N3	URI	680	210.641	98.166	-50.421	1.00	42.84	A16S	ATOM	33225	O2P	GUA	683	213.986	94.006	-61.709	1.00	46.52	A16S
ATOM	33173	C4	URI	680	211.600	99.048	-50.864	1.00	42.84	A16S	ATOM	33226	O5'	GUA	683	214.293	96.051	-63.175	1.00	50.96	A16S
ATOM	33174	O4	URI	680	211.256	100.073	-51.427	1.00	42.84	A16S	ATOM	33227	C5'	GUA	683	213.887	96.889	-64.235	1.00	50.96	A16S
ATOM	33175	C5	URI	680	212.947	98.619	-50.668	1.00	42.84	A16S	ATOM	33228	C4'	GUA	683	214.856	98.007	-64.432	1.00	50.96	A16S
ATOM	33176	C2'	URI	680	212.375	94.157	-50.020	1.00	55.03	A16S	ATOM	33229	O4'	GUA	683	214.913	98.810	-63.233	1.00	50.96	A16S
ATOM	33177	O2'	URI	680	211.942	92.995	-49.331	1.00	55.03	A16S	ATOM	33230	C1'	GUA	683	216.191	99.406	-63.131	1.00	50.96	A16S
ATOM	33178	C3'	URI	680	213.816	94.036	-50.471	1.00	55.03	A16S	ATOM	33231	N9	GUA	683	216.831	98.881	-61.941	1.00	46.52	A16S
ATOM	33179	O3'	URI	680	214.039	92.768	-51.039	1.00	55.03	A16S	ATOM	33232	C4	GUA	683	217.971	99.369	-61.381	1.00	46.52	A16S
ATOM	33180	P	GUA	681	214.502	92.677	-52.569	1.00	54.74	A16S	ATOM	33233	N3	GUA	683	218.656	100.441	-61.813	1.00	46.52	A16S
ATOM	33181	O1P	GUA	681	214.465	91.241	-52.970	1.00	40.47	A16S	ATOM	33234	C2	GUA	683	219.739	100.647	-61.104	1.00	46.52	A16S
ATOM	33182	O2P	GUA	681	215.776	93.442	-52.661	1.00	40.47	A16S	ATOM	33235	N2	GUA	683	220.538	101.692	-61.388	1.00	46.52	A16S
ATOM	33183	O5'	GUA	681	213.391	93.490	-53.380	1.00	54.74	A16S	ATOM	33236	N1	GUA	683	220.120	99.853	-60.065	1.00	46.52	A16S
ATOM	33184	C5'	GUA	681	212.026	93.093	-53.355	1.00	54.74	A16S	ATOM	33237	C6	GUA	683	219.424	98.744	-59.605	1.00	46.52	A16S
ATOM	33185	C4'	GUA	681	211.182	94.098	-54.096	1.00	54.74	A16S	ATOM	33238	O6	GUA	683	219.864	98.092	-58.657	1.00	46.52	A16S
ATOM	33186	O4'	GUA	681	211.254	95.385	-53.433	1.00	54.74	A16S	ATOM	33239	C5	GUA	683	218.262	98.523	-60.342	1.00	46.52	A16S
ATOM	33187	C1'	GUA	681	211.239	96.424	-54.395	1.00	54.74	A16S	ATOM	33240	N7	GUA	683	217.295	97.535	-60.222	1.00	46.52	A16S
ATOM	33188	N9	GUA	681	212.494	97.150	-54.266	1.00	40.47	A16S	ATOM	33241	C8	GUA	683	216.459	97.791	-61.191	1.00	46.52	A16S
ATOM	33189	C4	GUA	681	212.827	98.346	-54.846	1.00	40.47	A16S	ATOM	33242	C2'	GUA	683	216.977	98.954	-64.360	1.00	50.96	A16S
ATOM	33190	N3	GUA	681	212.055	99.066	-55.675	1.00	40.47	A16S	ATOM	33243	O2'	GUA	683	216.796	99.909	-65.391	1.00	50.96	A16S
ATOM	33191	C2	GUA	681	212.649	100.191	-56.042	1.00	40.47	A16S	ATOM	33244	C3'	GUA	683	216.299	97.622	-64.639	1.00	50.96	A16S
ATOM	33192	N2	GUA	681	212.036	101.039	-56.867	1.00	40.47	A16S	ATOM	33245	O3'	GUA	683	216.507	97.145	-65.953	1.00	50.96	A16S
ATOM	33193	N1	GUA	681	213.890	100.570	-55.628	1.00	40.47	A16S	ATOM	33246	P	CYT	684	217.288	95.762	-66.166	1.00	55.65	A16S
ATOM	33194	C6	GUA	681	214.701	99.837	-54.772	1.00	40.47	A16S	ATOM	33247	O1P	CYT	684	216.309	94.749	-66.618	1.00	75.82	A16S
ATOM	33195	O6	GUA	681	215.819	100.274	-54.448	1.00	40.47	A16S	ATOM	33248	O2P	CYT	684	218.074	95.517	-64.936	1.00	75.82	A16S
ATOM	33196	C5	GUA	681	214.088	98.638	-54.378	1.00	40.47	A16S	ATOM	33249	O5'	CYT	684	218.295	96.081	-67.362	1.00	55.65	A16S

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ATOM  33250  C5' CYT  684     218.964  97.338 -67.441  1.00 55.65      A16S
ATOM  33251  C4' CYT  684     220.315  97.184 -68.097  1.00 55.65      A16S
ATOM  33252  O4' CYT  684     220.973  98.460 -68.057  1.00 55.65      A16S
ATOM  33253  C1' CYT  684     222.368  98.276 -67.996  1.00 55.65      A16S
ATOM  33254  N1  CYT  684     222.944  99.378 -67.217  1.00 75.82      A16S
ATOM  33255  C6  CYT  684     222.406  99.751 -66.019  1.00 75.82      A16S
ATOM  33256  C2  CYT  684     224.047 100.063 -67.740  1.00 75.82      A16S
ATOM  33257  O2  CYT  684     224.533  99.686 -68.817  1.00 75.82      A16S
ATOM  33258  N3  CYT  684     224.552 101.117 -67.062  1.00 75.82      A16S
ATOM  33259  C4  CYT  684     224.005 101.485 -65.904  1.00 75.82      A16S
ATOM  33260  N4  CYT  684     224.526 102.537 -65.279  1.00 75.82      A16S
ATOM  33261  C5  CYT  684     222.898 100.791 -65.337  1.00 75.82      A16S
ATOM  33262  C2' CYT  684     222.666  96.843 -67.544  1.00 55.65      A16S
ATOM  33263  O2' CYT  684     223.564  96.207 -68.430  1.00 55.65      A16S
ATOM  33264  C3' CYT  684     221.264  96.231 -67.395  1.00 55.65      A16S
ATOM  33265  O3' CYT  684     221.062  94.894 -67.897  1.00 55.65      A16S
ATOM  33266  P   ADE  685     221.619  94.453 -69.355  1.00 74.82      A16S
ATOM  33267  O1P ADE  685     222.604  93.361 -69.146  1.00 81.46      A16S
ATOM  33268  O2P ADE  685     221.987  95.640 -70.171  1.00 81.46      A16S
ATOM  33269  O5' ADE  685     220.369  93.794 -70.079  1.00 74.82      A16S
ATOM  33270  C5' ADE  685     220.047  94.136 -71.426  1.00 74.82      A16S
ATOM  33271  C4' ADE  685     218.633  93.712 -71.745  1.00 74.82      A16S
ATOM  33272  O4' ADE  685     218.526  92.287 -71.620  1.00 74.82      A16S
ATOM  33273  C1' ADE  685     217.220  91.950 -71.252  1.00 74.82      A16S
ATOM  33274  N9  ADE  685     217.288  90.788 -70.380  1.00 81.46      A16S
ATOM  33275  C4  ADE  685     216.541  89.648 -70.527  1.00 81.46      A16S
ATOM  33276  N3  ADE  685     215.581  89.419 -71.438  1.00 81.46      A16S
ATOM  33277  C2  ADE  685     215.089  88.191 -71.298  1.00 81.46      A16S
ATOM  33278  N1  ADE  685     215.431  87.237 -70.427  1.00 81.46      A16S
ATOM  33279  C6  ADE  685     216.410  87.500 -69.533  1.00 81.46      A16S
ATOM  33280  N6  ADE  685     216.769  86.541 -68.675  1.00 81.46      A16S
ATOM  33281  C5  ADE  685     216.999  88.771 -69.566  1.00 81.46      A16S
ATOM  33282  N7  ADE  685     217.996  89.358 -68.804  1.00 81.46      A16S
ATOM  33283  C8  ADE  685     218.118  90.557 -69.319  1.00 81.46      A16S
ATOM  33284  C2' ADE  685     216.468  93.209 -70.806  1.00 74.82      A16S
ATOM  33285  O2' ADE  685     215.411  93.424 -71.720  1.00 74.82      A16S
ATOM  33286  C3' ADE  685     217.555  94.294 -70.847  1.00 74.82      A16S
ATOM  33287  O3' ADE  685     217.186  95.508 -71.515  1.00 74.82      A16S
ATOM  33288  P   GUA  686     215.765  96.204 -71.253  1.00 68.55      A16S
ATOM  33289  O1P GUA  686     214.871  95.273 -70.517  1.00 77.41      A16S
ATOM  33290  O2P GUA  686     215.322  96.766 -72.550  1.00 77.41      A16S
ATOM  33291  O5' GUA  686     216.115  97.417 -70.282  1.00 68.55      A16S
ATOM  33292  C5' GUA  686     215.209  98.502 -70.081  1.00 68.55      A16S
ATOM  33293  C4' GUA  686     215.997  99.701 -69.677  1.00 68.55      A16S
ATOM  33294  O4' GUA  686     217.314  99.165 -69.446  1.00 68.55      A16S
ATOM  33295  C1' GUA  686     218.265 100.139 -69.767  1.00 68.55      A16S
ATOM  33296  N9  GUA  686     219.385  99.542 -70.476  1.00 77.41      A16S
ATOM  33297  C4  GUA  686     220.636 100.088 -70.552  1.00 77.41      A16S
ATOM  33298  N3  GUA  686     221.010 101.268 -70.017  1.00 77.41      A16S
ATOM  33299  C2  GUA  686     222.285 101.523 -70.222  1.00 77.41      A16S
ATOM  33300  N2  GUA  686     222.815 102.662 -69.751  1.00 77.41      A16S
ATOM  33301  N1  GUA  686     223.135 100.681 -70.902  1.00 77.41      A16S
ATOM  33302  C6  GUA  686     222.772  99.457 -71.464  1.00 77.41      A16S
ATOM  33303  O6  GUA  686     223.621  98.770 -72.055  1.00 77.41      A16S
ATOM  33304  C5  GUA  686     221.393  99.177 -71.250  1.00 77.41      A16S
ATOM  33305  N7  GUA  686     220.622  98.087 -71.630  1.00 77.41      A16S
ATOM  33306  C8  GUA  686     219.434  98.354 -71.156  1.00 77.41      A16S
ATOM  33307  C2' GUA  686     217.580 101.302 -70.475  1.00 68.55      A16S
ATOM  33308  O2' GUA  686     217.530 102.399 -69.581  1.00 68.55      A16S
ATOM  33309  C3' GUA  686     216.186 100.761 -70.761  1.00 68.55      A16S
ATOM  33310  O3' GUA  686     215.394 101.939 -70.556  1.00 68.55      A16S
ATOM  33311  P   ADE  687     213.798 101.861 -70.391  1.00 54.00      A16S
ATOM  33312  O1P ADE  687     213.294 100.646 -71.077  1.00 57.65      A16S
ATOM  33313  O2P ADE  687     213.286 103.203 -70.784  1.00 57.65      A16S
ATOM  33314  O5' ADE  687     213.558 101.682 -68.828  1.00 54.00      A16S
ATOM  33315  C5' ADE  687     212.695 100.659 -68.338  1.00 54.00      A16S
ATOM  33316  C4' ADE  687     212.640 100.696 -66.831  1.00 54.00      A16S
ATOM  33317  O4' ADE  687     213.998 100.617 -66.320  1.00 54.00      A16S
ATOM  33318  C1' ADE  687     214.129 101.446 -65.181  1.00 54.00      A16S
ATOM  33319  N9  ADE  687     215.031 102.543 -65.513  1.00 57.65      A16S
ATOM  33320  C4  ADE  687     215.441 103.494 -64.619  1.00 57.65      A16S
ATOM  33321  N3  ADE  687     215.100 103.581 -63.324  1.00 57.65      A16S
ATOM  33322  C2  ADE  687     215.690 104.621 -62.757  1.00 57.65      A16S
ATOM  33323  N1  ADE  687     216.525 105.513 -63.292  1.00 57.65      A16S
ATOM  33324  C6  ADE  687     216.852 105.397 -64.595  1.00 57.65      A16S
ATOM  33325  N6  ADE  687     217.694 106.288 -65.114  1.00 57.65      A16S
ATOM  33326  C5  ADE  687     216.281 104.337 -65.318  1.00 57.65      A16S
ATOM  33327  N7  ADE  687     216.390 103.931 -66.642  1.00 57.65      A16S
ATOM  33328  C8  ADE  687     215.633 102.861 -66.704  1.00 57.65      A16S
ATOM  33329  C2' ADE  687     212.730 101.954 -64.844  1.00 54.00      A16S
ATOM  33330  O2' ADE  687     212.105 101.034 -63.973  1.00 54.00      A16S
ATOM  33331  C3' ADE  687     212.101 101.981 -66.227  1.00 54.00      A16S
ATOM  33332  O3' ADE  687     210.686 101.958 -66.162  1.00 54.00      A16S
ATOM  33333  P   URI  688     209.848 103.222 -66.693  1.00 55.84      A16S
ATOM  33334  O1P URI  688     208.411 102.904 -66.474  1.00 70.03      A16S
ATOM  33335  O2P URI  688     210.328 103.577 -68.056  1.00 70.03      A16S
ATOM  33336  O5' URI  688     210.251 104.402 -65.703  1.00 55.84      A16S
ATOM  33337  C5' URI  688     209.911 104.341 -64.327  1.00 55.84      A16S
ATOM  33338  C4' URI  688     210.582 105.458 -63.566  1.00 55.84      A16S
ATOM  33339  O4' URI  688     212.021 105.300 -63.628  1.00 55.84      A16S
ATOM  33340  C1' URI  688     212.637 106.574 -63.594  1.00 55.84      A16S
ATOM  33341  N1  URI  688     213.446 106.718 -64.807  1.00 70.03      A16S
ATOM  33342  C6  URI  688     213.271 105.892 -65.890  1.00 70.03      A16S
ATOM  33343  C2  URI  688     214.374 107.727 -64.825  1.00 70.03      A16S
ATOM  33344  O2  URI  688     214.579 108.443 -63.864  1.00 70.03      A16S
ATOM  33345  N3  URI  688     215.060 107.862 -66.006  1.00 70.03      A16S
ATOM  33346  C4  URI  688     214.919 107.089 -67.138  1.00 70.03      A16S
ATOM  33347  O4  URI  688     215.555 107.379 -68.149  1.00 70.03      A16S
ATOM  33348  C5  URI  688     213.960 106.036 -67.025  1.00 70.03      A16S
ATOM  33349  C2' URI  688     211.523 107.626 -63.510  1.00 55.84      A16S
ATOM  33350  O2' URI  688     211.324 108.028 -62.163  1.00 55.84      A16S
ATOM  33351  C3' URI  688     210.329 106.864 -64.079  1.00 55.84      A16S
ATOM  33352  O3' URI  688     209.119 107.348 -63.513  1.00 55.84      A16S
ATOM  33353  P   ADE  689     208.137 108.275 -64.378  1.00 55.38      A16S
ATOM  33354  O1P ADE  689     207.138 108.821 -63.430  1.00 54.89      A16S
ATOM  33355  O2P ADE  689     207.684 107.494 -65.556  1.00 54.89      A16S
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ATOM	33356	O5'	ADE	689	209.037	109.492	-64.871	1.00	55.38	A16S	ATOM	33409	N4	CYT	691	207.210	107.324	-74.343	1.00	54.85	A16S
ATOM	33357	C5'	ADE	689	209.317	110.591	-64.022	1.00	55.38	A16S	ATOM	33410	C5	CYT	691	207.135	109.689	-74.086	1.00	54.85	A16S
ATOM	33358	C4'	ADE	689	210.123	111.621	-64.773	1.00	55.38	A16S	ATOM	33411	C2'	CYT	691	205.878	112.516	-77.420	1.00	54.05	A16S
ATOM	33359	O4'	ADE	689	211.445	111.093	-65.080	1.00	55.38	A16S	ATOM	33412	O2'	CYT	691	206.101	113.184	-78.643	1.00	54.05	A16S
ATOM	33360	C1'	ADE	689	211.849	111.518	-66.380	1.00	55.38	A16S	ATOM	33413	C3'	CYT	691	205.190	113.379	-76.376	1.00	54.05	A16S
ATOM	33361	N9	ADE	689	211.921	110.339	-67.246	1.00	54.89	A16S	ATOM	33414	O3'	CYT	691	204.147	114.140	-76.952	1.00	54.05	A16S
ATOM	33362	C4	ADE	689	212.702	110.164	-68.362	1.00	54.89	A16S	ATOM	33415	P	GUA	692	202.694	113.477	-77.093	1.00	69.97	A16S
ATOM	33363	N3	ADE	689	213.561	111.035	-68.902	1.00	54.89	A16S	ATOM	33416	O1P	GUA	692	201.793	114.493	-77.695	1.00	58.21	A16S
ATOM	33364	C2	ADE	689	214.136	110.519	-69.980	1.00	54.89	A16S	ATOM	33417	O2P	GUA	692	202.372	112.909	-75.766	1.00	58.21	A16S
ATOM	33365	N1	ADE	689	213.966	109.320	-70.538	1.00	54.89	A16S	ATOM	33418	O5'	GUA	692	202.907	112.274	-78.124	1.00	69.97	A16S
ATOM	33366	C6	ADE	689	213.096	108.465	-69.970	1.00	54.89	A16S	ATOM	33419	C5'	GUA	692	203.182	112.538	-79.500	1.00	69.97	A16S
ATOM	33367	N6	ADE	689	212.928	107.259	-70.521	1.00	54.89	A16S	ATOM	33420	C4'	GUA	692	203.167	111.261	-80.310	1.00	69.97	A16S
ATOM	33368	C5	ADE	689	212.417	108.896	-68.824	1.00	54.89	A16S	ATOM	33421	O4'	GUA	692	204.309	110.427	-79.976	1.00	69.97	A16S
ATOM	33369	N7	ADE	689	211.469	108.284	-68.022	1.00	54.89	A16S	ATOM	33422	C1'	GUA	692	203.971	109.059	-80.175	1.00	69.97	A16S
ATOM	33370	C8	ADE	689	211.212	109.177	-67.103	1.00	54.89	A16S	ATOM	33423	N9	GUA	692	204.077	108.367	-78.901	1.00	58.21	A16S
ATOM	33371	C2'	ADE	689	210.796	112.513	-66.853	1.00	55.38	A16S	ATOM	33424	C4	GUA	692	204.167	107.014	-78.724	1.00	58.21	A16S
ATOM	33372	O2'	ADE	689	211.162	113.803	-66.419	1.00	55.38	A16S	ATOM	33425	N3	GUA	692	204.221	106.089	-79.706	1.00	58.21	A16S
ATOM	33373	C3'	ADE	689	209.562	111.988	-66.134	1.00	55.38	A16S	ATOM	33426	C2	GUA	692	204.284	104.854	-79.219	1.00	58.21	A16S
ATOM	33374	O3'	ADE	689	208.537	112.963	-66.040	1.00	55.38	A16S	ATOM	33427	N2	GUA	692	204.354	103.811	-80.050	1.00	58.21	A16S
ATOM	33375	P	CYT	690	207.299	112.885	-67.049	1.00	61.06	A16S	ATOM	33428	N1	GUA	692	204.287	104.556	-77.874	1.00	58.21	A16S
ATOM	33376	O1P	CYT	690	206.381	114.004	-66.721	1.00	53.52	A16S	ATOM	33429	C6	GUA	692	204.234	105.496	-76.846	1.00	58.21	A16S
ATOM	33377	O2P	CYT	690	206.808	111.484	-67.039	1.00	53.52	A16S	ATOM	33430	O6	GUA	692	204.241	105.121	-75.665	1.00	58.21	A16S
ATOM	33378	O5'	CYT	690	207.949	113.160	-68.468	1.00	61.06	A16S	ATOM	33431	C5	GUA	692	204.174	106.823	-77.355	1.00	58.21	A16S
ATOM	33379	C5'	CYT	690	208.503	114.424	-68.770	1.00	61.06	A16S	ATOM	33432	N7	GUA	692	204.118	108.038	-76.690	1.00	58.21	A16S
ATOM	33380	C4'	CYT	690	208.893	114.468	-70.217	1.00	61.06	A16S	ATOM	33433	C8	GUA	692	204.067	108.925	-77.646	1.00	58.21	A16S
ATOM	33381	O4'	CYT	690	210.017	113.583	-70.427	1.00	61.06	A16S	ATOM	33434	C2'	GUA	692	202.520	109.021	-80.651	1.00	69.97	A16S
ATOM	33382	C1'	CYT	690	209.982	113.101	-71.755	1.00	61.06	A16S	ATOM	33435	O2'	GUA	692	202.460	108.942	-82.059	1.00	69.97	A16S
ATOM	33383	N1	CYT	690	209.971	111.648	-71.720	1.00	53.52	A16S	ATOM	33436	C3'	GUA	692	201.990	110.333	-80.089	1.00	69.97	A16S
ATOM	33384	C6	CYT	690	209.898	110.961	-70.546	1.00	53.52	A16S	ATOM	33437	O3'	GUA	692	200.836	110.757	-80.784	1.00	69.97	A16S
ATOM	33385	C2	CYT	690	210.028	110.979	-72.927	1.00	53.52	A16S	ATOM	33438	P	GUA	693	199.395	110.254	-80.293	1.00	73.87	A16S
ATOM	33386	O2	CYT	690	210.072	111.648	-73.973	1.00	53.52	A16S	ATOM	33439	O1P	GUA	693	198.412	110.911	-81.188	1.00	66.50	A16S
ATOM	33387	N3	CYT	690	210.019	109.635	-72.939	1.00	53.52	A16S	ATOM	33440	O2P	GUA	693	199.287	110.444	-78.829	1.00	66.50	A16S
ATOM	33388	C4	CYT	690	209.939	108.966	-71.795	1.00	53.52	A16S	ATOM	33441	O5'	GUA	693	199.408	108.683	-80.557	1.00	73.87	A16S
ATOM	33389	N4	CYT	690	209.918	107.640	-71.859	1.00	53.52	A16S	ATOM	33442	C5'	GUA	693	199.409	108.177	-81.879	1.00	73.87	A16S
ATOM	33390	C5	CYT	690	209.875	109.629	-70.537	1.00	53.52	A16S	ATOM	33443	C4'	GUA	693	199.565	106.676	-81.873	1.00	73.87	A16S
ATOM	33391	C2'	CYT	690	208.703	113.621	-72.410	1.00	61.06	A16S	ATOM	33444	O4'	GUA	693	200.802	106.323	-81.201	1.00	73.87	A16S
ATOM	33392	O2'	CYT	690	208.986	114.763	-73.188	1.00	61.06	A16S	ATOM	33445	C1'	GUA	693	200.674	105.030	-80.624	1.00	73.87	A16S
ATOM	33393	C3'	CYT	690	207.852	113.929	-71.189	1.00	61.06	A16S	ATOM	33446	N9	GUA	693	200.877	105.136	-79.183	1.00	66.50	A16S
ATOM	33394	O3'	CYT	690	206.849	114.889	-71.494	1.00	61.06	A16S	ATOM	33447	C4	GUA	693	200.953	104.090	-78.309	1.00	66.50	A16S
ATOM	33395	P	CYT	691	205.427	114.400	-72.055	1.00	54.05	A16S	ATOM	33448	N3	GUA	693	200.879	102.789	-78.638	1.00	66.50	A16S
ATOM	33396	O1P	CYT	691	204.582	115.621	-72.048	1.00	54.85	A16S	ATOM	33449	C2	GUA	693	200.971	102.008	-77.577	1.00	66.50	A16S
ATOM	33397	O2P	CYT	691	204.986	113.190	-71.323	1.00	54.85	A16S	ATOM	33450	N2	GUA	693	200.917	100.680	-77.728	1.00	66.50	A16S
ATOM	33398	O5'	CYT	691	205.718	113.945	-73.554	1.00	54.05	A16S	ATOM	33451	N1	GUA	693	201.122	102.473	-76.289	1.00	66.50	A16S
ATOM	33399	C5'	CYT	691	206.132	114.896	-74.531	1.00	54.05	A16S	ATOM	33452	C6	GUA	693	201.198	103.816	-75.929	1.00	66.50	A16S
ATOM	33400	C4'	CYT	691	206.336	114.229	-75.870	1.00	54.05	A16S	ATOM	33453	O6	GUA	693	201.327	104.133	-74.738	1.00	66.50	A16S
ATOM	33401	O4'	CYT	691	207.413	113.265	-75.775	1.00	54.05	A16S	ATOM	33454	C5	GUA	693	201.104	104.661	-77.063	1.00	66.50	A16S
ATOM	33402	C1'	CYT	691	207.213	112.247	-76.738	1.00	54.05	A16S	ATOM	33455	N7	GUA	693	201.139	106.044	-77.156	1.00	66.50	A16S
ATOM	33403	N1	CYT	691	207.206	110.956	-76.060	1.00	54.85	A16S	ATOM	33456	C8	GUA	693	201.005	106.281	-78.432	1.00	66.50	A16S
ATOM	33404	C6	CYT	691	207.139	110.875	-74.702	1.00	54.85	A16S	ATOM	33457	C2'	GUA	693	199.263	104.537	-80.952	1.00	73.87	A16S
ATOM	33405	C2	CYT	691	207.267	109.798	-76.837	1.00	54.85	A16S	ATOM	33458	O2'	GUA	693	199.309	103.769	-82.137	1.00	73.87	A16S
ATOM	33406	O2	CYT	691	207.334	109.908	-78.077	1.00	54.85	A16S	ATOM	33459	C3'	GUA	693	198.523	105.858	-81.125	1.00	73.87	A16S
ATOM	33407	N3	CYT	691	207.257	108.594	-76.227	1.00	54.85	A16S	ATOM	33460	O3'	GUA	693	197.331	105.695	-81.888	1.00	73.87	A16S
ATOM	33408	C4	CYT	691	207.199	108.525	-74.900	1.00	54.85	A16S	ATOM	33461	P	GUA	694	195.914	105.489	-81.139	1.00	58.98	A16S

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ATOM  33462  O1P GUA  694     194.888 105.462 -82.217  1.00 50.47      A16S
ATOM  33463  O2P GUA  694     195.768 106.472 -80.025  1.00 50.47      A16S
ATOM  33464  O5' GUA  694     196.005 104.018 -80.530  1.00 58.98      A16S
ATOM  33465  C5' GUA  694     196.149 102.913 -81.392  1.00 58.98      A16S
ATOM  33466  C4' GUA  694     196.371 101.657 -80.604  1.00 58.98      A16S
ATOM  33467  O4' GUA  694     197.602 101.740 -79.840  1.00 58.98      A16S
ATOM  33468  C1' GUA  694     197.497 100.897 -78.702  1.00 58.98      A16S
ATOM  33469  N9  GUA  694     197.685 101.703 -77.504  1.00 50.47      A16S
ATOM  33470  C4  GUA  694     197.894 101.220 -76.234  1.00 50.47      A16S
ATOM  33471  N3  GUA  694     197.969  99.916 -75.882  1.00 50.47      A16S
ATOM  33472  C2  GUA  694     198.183  99.765 -74.586  1.00 50.47      A16S
ATOM  33473  N2  GUA  694     198.270  98.537 -74.064  1.00 50.47      A16S
ATOM  33474  N1  GUA  694     198.320 100.809 -73.712  1.00 50.47      A16S
ATOM  33475  C6  GUA  694     198.241 102.158 -74.056  1.00 50.47      A16S
ATOM  33476  O6  GUA  694     198.372 103.022 -73.187  1.00 50.47      A16S
ATOM  33477  C5  GUA  694     198.006 102.333 -75.435  1.00 50.47      A16S
ATOM  33478  N7  GUA  694     197.864 103.494 -76.183  1.00 50.47      A16S
ATOM  33479  C8  GUA  694     197.679 103.073 -77.404  1.00 50.47      A16S
ATOM  33480  C2' GUA  694     196.090 100.306 -78.721  1.00 58.98      A16S
ATOM  33481  O2' GUA  694     196.112  99.060 -79.376  1.00 58.98      A16S
ATOM  33482  C3' GUA  694     195.350 101.355 -79.533  1.00 58.98      A16S
ATOM  33483  O3' GUA  694     194.157 100.835 -80.088  1.00 58.98      A16S
ATOM  33484  P   ADE  695     192.781 100.983 -79.272  1.00 60.20      A16S
ATOM  33485  O1P ADE  695     191.689 100.545 -80.184  1.00 47.31      A16S
ATOM  33486  O2P ADE  695     192.748 102.357 -78.687  1.00 47.31      A16S
ATOM  33487  O5' ADE  695     192.918  99.901 -78.108  1.00 60.20      A16S
ATOM  33488  C5' ADE  695     193.179  98.543 -78.425  1.00 60.20      A16S
ATOM  33489  C4' ADE  695     193.540  97.773 -77.182  1.00 60.20      A16S
ATOM  33490  O4' ADE  695     194.733  98.344 -76.578  1.00 60.20      A16S
ATOM  33491  C1' ADE  695     194.677  98.191 -75.166  1.00 60.20      A16S
ATOM  33492  N9  ADE  695     194.748  99.523 -74.567  1.00 47.31      A16S
ATOM  33493  C4  ADE  695     195.086  99.833 -73.269  1.00 47.31      A16S
ATOM  33494  N3  ADE  695     195.381  98.979 -72.271  1.00 47.31      A16S
ATOM  33495  C2  ADE  695     195.714  99.645 -71.161  1.00 47.31      A16S
ATOM  33496  N1  ADE  695     195.781 100.963 -70.952  1.00 47.31      A16S
ATOM  33497  C6  ADE  695     195.469 101.793 -71.971  1.00 47.31      A16S
ATOM  33498  N6  ADE  695     195.537 103.107 -71.765  1.00 47.31      A16S
ATOM  33499  C5  ADE  695     195.093 101.214 -73.201  1.00 47.31      A16S
ATOM  33500  N7  ADE  695     194.724 101.766 -74.420  1.00 47.31      A16S
ATOM  33501  C8  ADE  695     194.526 100.724 -75.191  1.00 47.31      A16S
ATOM  33502  C2' ADE  695     193.386  97.432 -74.866  1.00 60.20      A16S
ATOM  33503  O2' ADE  695     193.648  96.047 -74.902  1.00 60.20      A16S
ATOM  33504  C3' ADE  695     192.537  97.845 -76.055  1.00 60.20      A16S
ATOM  33505  O3' ADE  695     191.442  96.978 -76.265  1.00 60.20      A16S
ATOM  33506  P   GUA  696     189.983  97.466 -75.822  1.00 61.22      A16S
ATOM  33507  O1P GUA  696     188.979  96.528 -76.374  1.00 43.63      A16S
ATOM  33508  O2P GUA  696     189.896  98.925 -76.133  1.00 43.63      A16S
ATOM  33509  O5' GUA  696     189.997  97.288 -74.245  1.00 61.22      A16S
ATOM  33510  C5' GUA  696     190.230  96.014 -73.671  1.00 61.22      A16S
ATOM  33511  C4' GUA  696     190.590  96.165 -72.220  1.00 61.22      A16S
ATOM  33512  O4' GUA  696     191.766  97.009 -72.115  1.00 61.22      A16S
ATOM  33513  C1' GUA  696     191.733  97.719 -70.893  1.00 61.22      A16S
ATOM  33514  N9  GUA  696     191.826  99.140 -71.196  1.00 43.63      A16S
ATOM  33515  C4  GUA  696     192.371 100.115 -70.392  1.00 43.63      A16S
ATOM  33516  N3  GUA  696     192.927  99.922 -69.176  1.00 43.63      A16S
ATOM  33517  C2  GUA  696     193.370 101.056 -68.656  1.00 43.63      A16S
ATOM  33518  N2  GUA  696     193.989 101.057 -67.463  1.00 43.63      A16S
ATOM  33519  N1  GUA  696     193.251 102.277 -69.271  1.00 43.63      A16S
ATOM  33520  C6  GUA  696     192.681 102.496 -70.517  1.00 43.63      A16S
ATOM  33521  O6  GUA  696     192.631 103.639 -70.975  1.00 43.63      A16S
ATOM  33522  C5  GUA  696     192.224 101.295 -71.095  1.00 43.63      A16S
ATOM  33523  N7  GUA  696     191.613 101.066 -72.318  1.00 43.63      A16S
ATOM  33524  C8  GUA  696     191.393  99.775 -72.334  1.00 43.63      A16S
ATOM  33525  C2' GUA  696     190.444  97.310 -70.182  1.00 61.22      A16S
ATOM  33526  O2' GUA  696     190.719  96.199 -69.354  1.00 61.22      A16S
ATOM  33527  C3' GUA  696     189.581  96.903 -71.365  1.00 61.22      A16S
ATOM  33528  O3' GUA  696     188.503  96.052 -70.994  1.00 61.22      A16S
ATOM  33529  P   GUA  697     187.059  96.693 -70.692  1.00 54.77      A16S
ATOM  33530  O1P GUA  697     186.037  95.653 -70.928  1.00 44.27      A16S
ATOM  33531  O2P GUA  697     186.965  97.992 -71.393  1.00 44.27      A16S
ATOM  33532  O5' GUA  697     187.079  96.986 -69.128  1.00 54.77      A16S
ATOM  33533  C5' GUA  697     187.257  95.934 -68.192  1.00 54.77      A16S
ATOM  33534  C4' GUA  697     187.876  96.480 -66.937  1.00 54.77      A16S
ATOM  33535  O4' GUA  697     189.096  97.172 -67.301  1.00 54.77      A16S
ATOM  33536  C1' GUA  697     189.276  98.296 -66.461  1.00 54.77      A16S
ATOM  33537  N9  GUA  697     189.278  99.481 -67.299  1.00 44.27      A16S
ATOM  33538  C4  GUA  697     189.962 100.647 -67.052  1.00 44.27      A16S
ATOM  33539  N3  GUA  697     190.746 100.896 -65.982  1.00 44.27      A16S
ATOM  33540  C2  GUA  697     191.263 102.113 -66.029  1.00 44.27      A16S
ATOM  33541  N2  GUA  697     192.034 102.559 -65.023  1.00 44.27      A16S
ATOM  33542  N1  GUA  697     191.053 102.989 -67.057  1.00 44.27      A16S
ATOM  33543  C6  GUA  697     190.258 102.743 -68.164  1.00 44.27      A16S
ATOM  33544  O6  GUA  697     190.145 103.599 -69.035  1.00 44.27      A16S
ATOM  33545  C5  GUA  697     189.675 101.470 -68.116  1.00 44.27      A16S
ATOM  33546  N7  GUA  697     188.815 100.842 -69.010  1.00 44.27      A16S
ATOM  33547  C8  GUA  697     188.609  99.663 -68.487  1.00 44.27      A16S
ATOM  33548  C2' GUA  697     188.124  98.305 -65.463  1.00 54.77      A16S
ATOM  33549  O2' GUA  697     188.504  97.588 -64.313  1.00 54.77      A16S
ATOM  33550  C3' GUA  697     187.061  97.554 -66.242  1.00 54.77      A16S
ATOM  33551  O3' GUA  697     186.125  96.961 -65.362  1.00 54.77      A16S
ATOM  33552  P   ADE  698     184.634  97.541 -65.290  1.00 46.36      A16S
ATOM  33553  O1P ADE  698     183.821  96.374 -64.866  1.00 40.52      A16S
ATOM  33554  O2P ADE  698     184.327  98.226 -66.559  1.00 40.52      A16S
ATOM  33555  O5' ADE  698     184.689  98.685 -64.173  1.00 46.36      A16S
ATOM  33556  C5' ADE  698     185.190  98.433 -62.859  1.00 46.36      A16S
ATOM  33557  C4' ADE  698     185.836  99.682 -62.292  1.00 46.36      A16S
ATOM  33558  O4' ADE  698     186.963 100.054 -63.118  1.00 46.36      A16S
ATOM  33559  C1' ADE  698     187.111 101.468 -63.120  1.00 46.36      A16S
ATOM  33560  N9  ADE  698     187.034 101.953 -64.497  1.00 40.52      A16S
ATOM  33561  C4  ADE  698     187.543 103.142 -64.959  1.00 40.52      A16S
ATOM  33562  N3  ADE  698     188.210 104.069 -64.255  1.00 40.52      A16S
ATOM  33563  C2  ADE  698     188.544 105.093 -65.035  1.00 40.52      A16S
ATOM  33564  N1  ADE  698     188.306 105.277 -66.337  1.00 40.52      A16S
ATOM  33565  C6  ADE  698     187.638 104.315 -67.008  1.00 40.52      A16S
ATOM  33566  N6  ADE  698     187.408 104.480 -68.307  1.00 40.52      A16S
ATOM  33567  C5  ADE  698     187.228 103.191 -66.300  1.00 40.52      A16S
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ATOM  33568  N7  ADE  698     186.536 102.055 -66.685  1.00 40.52      A16S
ATOM  33569  C8  ADE  698     186.448 101.349 -65.581  1.00 40.52      A16S
ATOM  33570  C2' ADE  698     186.001 102.055 -62.252  1.00 46.36      A16S
ATOM  33571  O2' ADE  698     186.518 102.334 -60.978  1.00 46.36      A16S
ATOM  33572  C3' ADE  698     184.971 100.932 -62.271  1.00 46.36      A16S
ATOM  33573  O3' ADE  698     184.178 100.961 -61.097  1.00 46.36      A16S
ATOM  33574  P   ADE  699     182.843 101.842 -61.055  1.00 45.87      A16S
ATOM  33575  O1P ADE  699     182.188 101.482 -59.777  1.00 49.96      A16S
ATOM  33576  O2P ADE  699     182.087 101.707 -62.325  1.00 49.96      A16S
ATOM  33577  O5' ADE  699     183.374 103.341 -60.948  1.00 45.87      A16S
ATOM  33578  C5' ADE  699     183.693 103.905 -59.684  1.00 45.87      A16S
ATOM  33579  C4' ADE  699     184.405 105.216 -59.859  1.00 45.87      A16S
ATOM  33580  O4' ADE  699     185.456 105.024 -60.843  1.00 45.87      A16S
ATOM  33581  C1' ADE  699     185.690 106.239 -61.537  1.00 45.87      A16S
ATOM  33582  N9  ADE  699     185.444 106.018 -62.960  1.00 49.96      A16S
ATOM  33583  C4  ADE  699     185.787 106.885 -63.968  1.00 49.96      A16S
ATOM  33584  N3  ADE  699     186.441 108.053 -63.852  1.00 49.96      A16S
ATOM  33585  C2  ADE  699     186.562 108.646 -65.040  1.00 49.96      A16S
ATOM  33586  N1  ADE  699     186.137 108.235 -66.235  1.00 49.96      A16S
ATOM  33587  C6  ADE  699     185.486 107.057 -66.317  1.00 49.96      A16S
ATOM  33588  N6  ADE  699     185.045 106.659 -67.509  1.00 49.96      A16S
ATOM  33589  C5  ADE  699     185.301 106.324 -65.129  1.00 49.96      A16S
ATOM  33590  N7  ADE  699     184.694 105.102 -64.864  1.00 49.96      A16S
ATOM  33591  C8  ADE  699     184.812 104.966 -63.567  1.00 49.96      A16S
ATOM  33592  C2' ADE  699     184.721 107.269 -60.961  1.00 45.87      A16S
ATOM  33593  O2' ADE  699     185.379 107.995 -59.945  1.00 45.87      A16S
ATOM  33594  C3' ADE  699     183.604 106.367 -60.440  1.00 45.87      A16S
ATOM  33595  O3' ADE  699     182.820 107.027 -59.448  1.00 45.87      A16S
ATOM  33596  P   CYT  700     181.556 107.922 -59.894  1.00 57.82      A16S
ATOM  33597  O1P CYT  700     180.972 108.508 -58.671  1.00 51.87      A16S
ATOM  33598  O2P CYT  700     180.710 107.082 -60.776  1.00 51.87      A16S
ATOM  33599  O5' CYT  700     182.151 109.098 -60.803  1.00 57.82      A16S
ATOM  33600  C5' CYT  700     182.456 110.414 -60.292  1.00 57.82      A16S
ATOM  33601  C4' CYT  700     183.251 111.167 -61.342  1.00 57.82      A16S
ATOM  33602  O4' CYT  700     183.676 110.163 -62.271  1.00 57.82      A16S
ATOM  33603  C1' CYT  700     183.559 110.645 -63.573  1.00 57.82      A16S
ATOM  33604  N1  CYT  700     183.092 109.563 -64.426  1.00 51.87      A16S
ATOM  33605  C6  CYT  700     182.560 108.421 -63.899  1.00 51.87      A16S
ATOM  33606  C2  CYT  700     183.227 109.715 -65.784  1.00 51.87      A16S
ATOM  33607  O2  CYT  700     183.711 110.776 -66.207  1.00 51.87      A16S
ATOM  33608  N3  CYT  700     182.841 108.712 -66.606  1.00 51.87      A16S
ATOM  33609  C4  CYT  700     182.348 107.588 -66.090  1.00 51.87      A16S
ATOM  33610  N4  CYT  700     182.015 106.612 -66.926  1.00 51.87      A16S
ATOM  33611  C5  CYT  700     182.186 107.414 -64.687  1.00 51.87      A16S
ATOM  33612  C2' CYT  700     182.775 111.956 -63.602  1.00 57.82      A16S
ATOM  33613  O2' CYT  700     183.559 112.916 -64.275  1.00 57.82      A16S
ATOM  33614  C3' CYT  700     182.514 112.258 -62.120  1.00 57.82      A16S
ATOM  33615  O3' CYT  700     183.221 113.484 -61.923  1.00 57.82      A16S
ATOM  33616  P   GUA  701     182.838 114.506 -60.744  1.00 53.75      A16S
ATOM  33617  O1P GUA  701     182.726 113.747 -59.465  1.00 73.69      A16S
ATOM  33618  O2P GUA  701     181.704 115.342 -61.210  1.00 73.69      A16S
ATOM  33619  O5' GUA  701     184.112 115.467 -60.649  1.00 53.75      A16S
ATOM  33620  C5' GUA  701     185.234 115.134 -59.827  1.00 53.75      A16S
ATOM  33621  C4' GUA  701     186.431 115.996 -60.175  1.00 53.75      A16S
ATOM  33622  O4' GUA  701     186.920 115.652 -61.490  1.00 53.75      A16S
ATOM  33623  C1' GUA  701     187.468 116.802 -62.109  1.00 53.75      A16S
ATOM  33624  N9  GUA  701     186.858 116.948 -63.425  1.00 73.69      A16S
ATOM  33625  C4  GUA  701     187.164 117.892 -64.369  1.00 73.69      A16S
ATOM  33626  N3  GUA  701     188.100 118.852 -64.254  1.00 73.69      A16S
ATOM  33627  C2  GUA  701     188.141 119.626 -65.319  1.00 73.69      A16S
ATOM  33628  N2  GUA  701     189.017 120.637 -65.377  1.00 73.69      A16S
ATOM  33629  N1  GUA  701     187.326 119.468 -66.406  1.00 73.69      A16S
ATOM  33630  C6  GUA  701     186.357 118.485 -66.541  1.00 73.69      A16S
ATOM  33631  O6  GUA  701     185.663 118.438 -67.557  1.00 73.69      A16S
ATOM  33632  C5  GUA  701     186.310 117.649 -65.418  1.00 73.69      A16S
ATOM  33633  N7  GUA  701     185.499 116.556 -65.151  1.00 73.69      A16S
ATOM  33634  C8  GUA  701     185.861 116.172 -63.960  1.00 73.69      A16S
ATOM  33635  C2' GUA  701     187.258 117.997 -61.175  1.00 53.75      A16S
ATOM  33636  O2' GUA  701     188.458 118.277 -60.497  1.00 53.75      A16S
ATOM  33637  C3' GUA  701     186.168 117.488 -60.239  1.00 53.75      A16S
ATOM  33638  O3' GUA  701     186.326 118.037 -58.943  1.00 53.75      A16S
ATOM  33639  P   CYT  702     185.170 118.964 -58.328  1.00 53.25      A16S
ATOM  33640  O1P CYT  702     185.612 119.368 -56.969  1.00 51.31      A16S
ATOM  33641  O2P CYT  702     183.857 118.279 -58.505  1.00 51.31      A16S
ATOM  33642  O5' CYT  702     185.226 120.272 -59.231  1.00 53.25      A16S
ATOM  33643  C5' CYT  702     186.338 121.152 -59.155  1.00 53.25      A16S
ATOM  33644  C4' CYT  702     186.275 122.150 -60.275  1.00 53.25      A16S
ATOM  33645  O4' CYT  702     186.366 121.450 -61.532  1.00 53.25      A16S
ATOM  33646  C1' CYT  702     185.680 122.179 -62.523  1.00 53.25      A16S
ATOM  33647  N1  CYT  702     184.892 121.234 -63.327  1.00 51.31      A16S
ATOM  33648  C6  CYT  702     184.456 120.061 -62.789  1.00 51.31      A16S
ATOM  33649  C2  CYT  702     184.600 121.554 -64.664  1.00 51.31      A16S
ATOM  33650  O2  CYT  702     185.019 122.621 -65.136  1.00 51.31      A16S
ATOM  33651  N3  CYT  702     183.878 120.690 -65.404  1.00 51.31      A16S
ATOM  33652  C4  CYT  702     183.464 119.542 -64.869  1.00 51.31      A16S
ATOM  33653  N4  CYT  702     182.769 118.704 -65.642  1.00 51.31      A16S
ATOM  33654  C5  CYT  702     183.750 119.193 -63.519  1.00 51.31      A16S
ATOM  33655  C2' CYT  702     184.895 123.301 -61.834  1.00 53.25      A16S
ATOM  33656  O2' CYT  702     185.527 124.537 -62.084  1.00 53.25      A16S
ATOM  33657  C3' CYT  702     184.960 122.889 -60.365  1.00 53.25      A16S
ATOM  33658  O3' CYT  702     185.014 124.012 -59.497  1.00 53.25      A16S
ATOM  33659  P   CYT  703     183.768 124.331 -58.548  1.00 58.67      A16S
ATOM  33660  O1P CYT  703     183.943 125.688 -57.978  1.00 46.44      A16S
ATOM  33661  O2P CYT  703     183.576 123.170 -57.645  1.00 46.44      A16S
ATOM  33662  O5' CYT  703     182.536 124.352 -59.549  1.00 58.67      A16S
ATOM  33663  C5' CYT  703     182.153 125.534 -60.225  1.00 58.67      A16S
ATOM  33664  C4' CYT  703     180.973 125.237 -61.113  1.00 58.67      A16S
ATOM  33665  O4' CYT  703     181.354 124.177 -62.032  1.00 58.67      A16S
ATOM  33666  C1' CYT  703     180.263 123.303 -62.241  1.00 58.67      A16S
ATOM  33667  N1  CYT  703     180.651 121.976 -61.743  1.00 46.44      A16S
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ATOM  33669  C2  CYT  703     180.105 120.827 -62.339  1.00 46.44      A16S
ATOM  33670  O2  CYT  703     179.317 120.953 -63.282  1.00 46.44      A16S
ATOM  33671  N3  CYT  703     180.459 119.610 -61.872  1.00 46.44      A16S
ATOM  33672  C4  CYT  703     181.324 119.513 -60.860  1.00 46.44      A16S
ATOM  33673  N4  CYT  703     181.643 118.299 -60.427  1.00 46.44      A16S
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ATOM  33674  C5  CYT  703     181.900 120.661 -60.243  1.00 46.44      A16S
ATOM  33675  C2' CYT  703     179.062 123.906 -61.513  1.00 58.67      A16S
ATOM  33676  O2' CYT  703     178.359 124.731 -62.421  1.00 58.67      A16S
ATOM  33677  C3' CYT  703     179.737 124.705 -60.401  1.00 58.67      A16S
ATOM  33678  O3' CYT  703     178.901 125.793 -60.008  1.00 58.67      A16S
ATOM  33679  P   GUA  704     178.554 126.052 -58.457  1.00 65.09      A16S
ATOM  33680  O1P GUA  704     177.079 125.950 -58.356  1.00 53.06      A16S
ATOM  33681  O2P GUA  704     179.226 127.312 -58.059  1.00 53.06      A16S
ATOM  33682  O5' GUA  704     179.217 124.847 -57.644  1.00 65.09      A16S
ATOM  33683  C5' GUA  704     179.340 124.891 -56.210  1.00 65.09      A16S
ATOM  33684  C4' GUA  704     179.601 123.505 -55.675  1.00 65.09      A16S
ATOM  33685  O4' GUA  704     178.620 122.657 -56.291  1.00 65.09      A16S
ATOM  33686  C1' GUA  704     179.191 121.414 -56.603  1.00 65.09      A16S
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ATOM  33690  C2  GUA  704     179.046 117.631 -58.731  1.00 53.06      A16S
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ATOM  33692  N1  GUA  704     178.423 117.678 -59.949  1.00 53.06      A16S
ATOM  33693  C6  GUA  704     177.919 118.831 -60.542  1.00 53.06      A16S
ATOM  33694  O6  GUA  704     177.350 118.769 -61.649  1.00 53.06      A16S
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ATOM  33697  C8  GUA  704     178.238 121.914 -58.870  1.00 53.06      A16S
ATOM  33698  C2' GUA  704     180.692 121.446 -56.327  1.00 65.09      A16S
ATOM  33699  O2' GUA  704     180.985 120.606 -55.224  1.00 65.09      A16S
ATOM  33700  C3' GUA  704     180.965 122.922 -56.038  1.00 65.09      A16S
ATOM  33701  O3' GUA  704     181.885 122.859 -54.936  1.00 65.09      A16S
ATOM  33702  P   ADE  705     181.851 123.936 -53.739  1.00 82.41      A16S
ATOM  33703  O1P ADE  705     182.387 125.233 -54.216  1.00 42.76      A16S
ATOM  33704  O2P ADE  705     182.471 123.265 -52.584  1.00 42.76      A16S
ATOM  33705  O5' ADE  705     180.328 124.114 -53.337  1.00 82.41      A16S
ATOM  33706  C5' ADE  705     179.865 123.722 -52.051  1.00 82.41      A16S
ATOM  33707  C4' ADE  705     178.662 124.542 -51.669  1.00 82.41      A16S
ATOM  33708  O4' ADE  705     177.957 124.948 -52.861  1.00 82.41      A16S
ATOM  33709  C1' ADE  705     176.571 124.803 -52.670  1.00 82.41      A16S
ATOM  33710  N9  ADE  705     176.073 123.954 -53.749  1.00 42.76      A16S
ATOM  33711  C4  ADE  705     176.316 122.618 -53.941  1.00 42.76      A16S
ATOM  33712  N3  ADE  705     177.020 121.794 -53.151  1.00 42.76      A16S
ATOM  33713  C2  ADE  705     177.062 120.574 -53.678  1.00 42.76      A16S
ATOM  33714  N1  ADE  705     176.526 120.123 -54.820  1.00 42.76      A16S
ATOM  33715  C6  ADE  705     175.828 120.989 -55.588  1.00 42.76      A16S
ATOM  33716  N6  ADE  705     175.302 120.562 -56.736  1.00 42.76      A16S
ATOM  33717  C5  ADE  705     175.701 122.294 -55.139  1.00 42.76      A16S
ATOM  33718  N7  ADE  705     175.057 123.392 -55.676  1.00 42.76      A16S
ATOM  33719  C8  ADE  705     175.297 124.348 -54.811  1.00 42.76      A16S
ATOM  33720  C2' ADE  705     176.311 124.374 -51.221  1.00 82.41      A16S
ATOM  33721  O2' ADE  705     175.903 125.506 -50.479  1.00 82.41      A16S
ATOM  33722  C3' ADE  705     177.669 123.807 -50.789  1.00 82.41      A16S
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ATOM  33729  C4' URI  706     175.467 124.342 -46.664  1.00115.87      A16S
ATOM  33730  O4' URI  706     176.454 125.396 -46.481  1.00115.87      A16S
ATOM  33731  C1' URI  706     175.852 126.662 -46.716  1.00115.87      A16S
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ATOM  33734  C2  URI  706     175.811 128.278 -48.572  1.00160.47      A16S
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ATOM  33739  C5  URI  706     178.219 127.194 -49.545  1.00160.47      A16S
ATOM  33740  C2' URI  706     174.343 126.419 -46.812  1.00115.87      A16S
ATOM  33741  O2' URI  706     173.760 126.495 -45.525  1.00115.87      A16S
ATOM  33742  C3' URI  706     174.309 125.011 -47.391  1.00115.87      A16S
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ATOM  33745  O1P GUA  707     171.112 123.097 -47.970  1.00 51.79      A16S
ATOM  33746  O2P GUA  707     173.409 121.962 -47.858  1.00 51.79      A16S
ATOM  33747  O5' GUA  707     172.835 123.711 -49.586  1.00 57.59      A16S
ATOM  33748  C5' GUA  707     172.083 124.800 -50.099  1.00 57.59      A16S
ATOM  33749  C4' GUA  707     171.620 124.518 -51.510  1.00 57.59      A16S
ATOM  33750  O4' GUA  707     172.770 124.175 -52.328  1.00 57.59      A16S
ATOM  33751  C1' GUA  707     172.380 123.269 -53.346  1.00 57.59      A16S
ATOM  33752  N9  GUA  707     173.042 121.996 -53.106  1.00 51.79      A16S
ATOM  33753  C4  GUA  707     172.945 120.872 -53.883  1.00 51.79      A16S
ATOM  33754  N3  GUA  707     172.261 120.765 -55.040  1.00 51.79      A16S
ATOM  33755  C2  GUA  707     172.334 119.539 -55.545  1.00 51.79      A16S
ATOM  33756  N2  GUA  707     171.722 119.251 -56.699  1.00 51.79      A16S
ATOM  33757  N1  GUA  707     173.015 118.501 -54.954  1.00 51.79      A16S
ATOM  33758  C6  GUA  707     173.722 118.590 -53.759  1.00 51.79      A16S
ATOM  33759  O6  GUA  707     174.287 117.595 -53.302  1.00 51.79      A16S
ATOM  33760  C5  GUA  707     173.666 119.903 -53.215  1.00 51.79      A16S
ATOM  33761  N7  GUA  707     174.236 120.422 -52.060  1.00 51.79      A16S
ATOM  33762  C8  GUA  707     173.846 121.666 -52.041  1.00 51.79      A16S
ATOM  33763  C2' GUA  707     170.871 123.105 -53.216  1.00 57.59      A16S
ATOM  33764  O2' GUA  707     170.244 124.093 -54.008  1.00 57.59      A16S
ATOM  33765  C3' GUA  707     170.686 123.343 -51.724  1.00 57.59      A16S
ATOM  33766  O3' GUA  707     169.326 123.647 -51.408  1.00 57.59      A16S
ATOM  33767  P   GUA  708     168.333 122.460 -50.945  1.00 48.82      A16S
ATOM  33768  O1P GUA  708     167.062 123.054 -50.492  1.00 37.96      A16S
ATOM  33769  O2P GUA  708     169.092 121.575 -50.022  1.00 37.96      A16S
ATOM  33770  O5' GUA  708     168.041 121.649 -52.284  1.00 48.82      A16S
ATOM  33771  C5' GUA  708     167.605 122.318 -53.462  1.00 48.82      A16S
ATOM  33772  C4' GUA  708     167.477 121.339 -54.601  1.00 48.82      A16S
ATOM  33773  O4' GUA  708     168.781 120.800 -54.937  1.00 48.82      A16S
ATOM  33774  C1' GUA  708     168.656 119.440 -55.315  1.00 48.82      A16S
ATOM  33775  N9  GUA  708     169.398 118.638 -54.353  1.00 37.96      A16S
ATOM  33776  C4  GUA  708     169.708 117.294 -54.451  1.00 37.96      A16S
ATOM  33777  N3  GUA  708     169.367 116.459 -55.464  1.00 37.96      A16S
ATOM  33778  C2  GUA  708     169.806 115.222 -55.255  1.00 37.96      A16S
ATOM  33779  N2  GUA  708     169.553 114.256 -56.141  1.00 37.96      A16S
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ATOM	33780	N1	GUA	708	170.521	114.845	-54.160	1.00	37.96	A16S	ATOM	33833	P	ADE	711	159.097	110.324	-51.834	1.00	50.33	A16S
ATOM	33781	C6	GUA	708	170.883	115.683	-53.115	1.00	37.96	A16S	ATOM	33834	O1P	ADE	711	157.793	109.626	-52.096	1.00	42.33	A16S
ATOM	33782	O6	GUA	708	171.533	115.232	-52.166	1.00	37.96	A16S	ATOM	33835	O2P	ADE	711	159.117	111.801	-51.605	1.00	42.33	A16S
ATOM	33783	C5	GUA	708	170.420	117.006	-53.315	1.00	37.96	A16S	ATOM	33836	O5'	ADE	711	159.681	109.640	-50.522	1.00	50.33	A16S
ATOM	33784	N7	GUA	708	170.557	118.136	-52.521	1.00	37.96	A16S	ATOM	33837	C5'	ADE	711	159.044	109.838	-49.273	1.00	50.33	A16S
ATOM	33785	C8	GUA	708	169.933	119.074	-53.173	1.00	37.96	A16S	ATOM	33838	C4'	ADE	711	159.425	108.739	-48.331	1.00	50.33	A16S
ATOM	33786	C2'	GUA	708	167.169	119.112	-55.310	1.00	48.82	A16S	ATOM	33839	O4'	ADE	711	158.845	107.502	-48.787	1.00	50.33	A16S
ATOM	33787	O2'	GUA	708	166.648	119.348	-56.598	1.00	48.82	A16S	ATOM	33840	C1'	ADE	711	159.745	106.436	-48.559	1.00	50.33	A16S
ATOM	33788	C3'	GUA	708	166.657	120.107	-54.284	1.00	48.82	A16S	ATOM	33841	N9	ADE	711	160.038	105.835	-49.852	1.00	42.33	A16S
ATOM	33789	O3'	GUA	708	165.270	120.351	-54.427	1.00	48.82	A16S	ATOM	33842	C4	ADE	711	160.398	104.537	-50.084	1.00	42.33	A16S
ATOM	33790	P	CYT	709	164.229	119.366	-53.714	1.00	43.87	A16S	ATOM	33843	N3	ADE	711	160.598	103.578	-49.173	1.00	42.33	A16S
ATOM	33791	O1P	CYT	709	162.854	119.811	-54.054	1.00	46.75	A16S	ATOM	33844	C2	ADE	711	160.915	102.438	-49.763	1.00	42.33	A16S
ATOM	33792	O2P	CYT	709	164.623	119.228	-52.288	1.00	46.75	A16S	ATOM	33845	N1	ADE	711	161.030	102.167	-51.064	1.00	42.33	A16S
ATOM	33793	O5'	CYT	709	164.476	117.977	-54.446	1.00	43.87	A16S	ATOM	33846	C6	ADE	711	160.804	103.158	-51.949	1.00	42.33	A16S
ATOM	33794	C5'	CYT	709	164.009	117.775	-55.767	1.00	43.87	A16S	ATOM	33847	N6	ADE	711	160.880	102.889	-53.245	1.00	42.33	A16S
ATOM	33795	C4'	CYT	709	164.238	116.351	-56.177	1.00	43.87	A16S	ATOM	33848	C5	ADE	711	160.486	104.411	-51.452	1.00	42.33	A16S
ATOM	33796	O4'	CYT	709	165.659	116.064	-56.090	1.00	43.87	A16S	ATOM	33849	N7	ADE	711	160.214	105.616	-52.078	1.00	42.33	A16S
ATOM	33797	C1'	CYT	709	165.852	114.704	-55.722	1.00	43.87	A16S	ATOM	33850	C8	ADE	711	159.966	106.433	-51.086	1.00	42.33	A16S
ATOM	33798	N1	CYT	709	166.575	114.663	-54.444	1.00	46.75	A16S	ATOM	33851	C2'	ADE	711	160.957	107.012	-47.842	1.00	50.33	A16S
ATOM	33799	C6	CYT	709	166.848	115.806	-53.751	1.00	46.75	A16S	ATOM	33852	O2'	ADE	711	160.747	106.860	-46.462	1.00	50.33	A16S
ATOM	33800	C2	CYT	709	166.966	113.423	-53.941	1.00	46.75	A16S	ATOM	33853	C3'	ADE	711	160.905	108.459	-48.305	1.00	50.33	A16S
ATOM	33801	O2	CYT	709	166.732	112.407	-54.607	1.00	46.75	A16S	ATOM	33854	O3'	ADE	711	161.550	109.369	-47.438	1.00	50.33	A16S
ATOM	33802	N3	CYT	709	167.592	113.361	-52.745	1.00	46.75	A16S	ATOM	33855	P	ADE	712	163.085	109.741	-47.706	1.00	35.09	A16S
ATOM	33803	C4	CYT	709	167.839	114.481	-52.066	1.00	46.75	A16S	ATOM	33856	O1P	ADE	712	163.449	110.833	-46.774	1.00	38.26	A16S
ATOM	33804	N4	CYT	709	168.438	114.372	-50.886	1.00	46.75	A16S	ATOM	33857	O2P	ADE	712	163.263	109.947	-49.167	1.00	38.26	A16S
ATOM	33805	C5	CYT	709	167.475	115.761	-52.567	1.00	46.75	A16S	ATOM	33858	O5'	ADE	712	163.836	108.409	-47.255	1.00	35.09	A16S
ATOM	33806	C2'	CYT	709	164.460	114.092	-55.595	1.00	43.87	A16S	ATOM	33859	C5'	ADE	712	163.753	108.001	-45.908	1.00	35.09	A16S
ATOM	33807	O2'	CYT	709	164.097	113.542	-56.838	1.00	43.87	A16S	ATOM	33860	C4'	ADE	712	164.278	106.609	-45.733	1.00	35.09	A16S
ATOM	33808	C3'	CYT	709	163.653	115.326	-55.236	1.00	43.87	A16S	ATOM	33861	O4'	ADE	712	163.429	105.662	-46.428	1.00	35.09	A16S
ATOM	33809	O3'	CYT	709	162.261	115.159	-55.398	1.00	43.87	A16S	ATOM	33862	C1'	ADE	712	164.194	104.523	-46.777	1.00	35.09	A16S
ATOM	33810	P	GUA	710	161.380	114.783	-54.116	1.00	44.83	A16S	ATOM	33863	N9	ADE	712	164.136	104.371	-48.228	1.00	38.26	A16S
ATOM	33811	O1P	GUA	710	159.947	114.840	-54.485	1.00	44.07	A16S	ATOM	33864	C4	ADE	712	164.184	103.188	-48.920	1.00	38.26	A16S
ATOM	33812	O2P	GUA	710	161.872	115.597	-52.976	1.00	44.07	A16S	ATOM	33865	N3	ADE	712	164.246	101.950	-48.407	1.00	38.26	A16S
ATOM	33813	O5'	GUA	710	161.776	113.269	-53.874	1.00	44.83	A16S	ATOM	33866	C2	ADE	712	164.302	101.043	-49.375	1.00	38.26	A16S
ATOM	33814	C5'	GUA	710	161.429	112.298	-54.833	1.00	44.83	A16S	ATOM	33867	N1	ADE	712	164.310	101.219	-50.697	1.00	38.26	A16S
ATOM	33815	C4'	GUA	710	161.892	110.944	-54.389	1.00	44.83	A16S	ATOM	33868	C6	ADE	712	164.247	102.474	-51.184	1.00	38.26	A16S
ATOM	33816	O4'	GUA	710	163.338	110.974	-54.287	1.00	44.83	A16S	ATOM	33869	N6	ADE	712	164.276	102.639	-52.508	1.00	38.26	A16S
ATOM	33817	C1'	GUA	710	163.756	110.056	-53.295	1.00	44.83	A16S	ATOM	33870	C5	ADE	712	164.165	103.529	-50.256	1.00	38.26	A16S
ATOM	33818	N9	GUA	710	164.468	110.806	-52.268	1.00	44.07	A16S	ATOM	33871	N7	ADE	712	164.063	104.904	-50.407	1.00	38.26	A16S
ATOM	33819	C4	GUA	710	165.339	110.299	-51.342	1.00	44.07	A16S	ATOM	33872	C8	ADE	712	164.048	105.355	-49.177	1.00	38.26	A16S
ATOM	33820	N3	GUA	710	165.761	109.023	-51.268	1.00	44.07	A16S	ATOM	33873	C2'	ADE	712	165.618	104.783	-46.275	1.00	35.09	A16S
ATOM	33821	C2	GUA	710	166.537	108.826	-50.219	1.00	44.07	A16S	ATOM	33874	O2'	ADE	712	165.773	104.286	-44.962	1.00	35.09	A16S
ATOM	33822	N2	GUA	710	167.048	107.608	-49.978	1.00	44.07	A16S	ATOM	33875	C3'	ADE	712	165.654	106.303	-46.281	1.00	35.09	A16S
ATOM	33823	N1	GUA	710	166.868	109.803	-49.322	1.00	44.07	A16S	ATOM	33876	O3'	ADE	712	166.711	106.824	-45.473	1.00	35.09	A16S
ATOM	33824	C6	GUA	710	166.447	111.121	-49.386	1.00	44.07	A16S	ATOM	33877	P	GUA	713	168.137	107.126	-46.151	1.00	39.38	A16S
ATOM	33825	O6	GUA	710	166.788	111.916	-48.511	1.00	44.07	A16S	ATOM	33878	O1P	GUA	713	169.117	107.528	-45.117	1.00	40.71	A16S
ATOM	33826	C5	GUA	710	165.632	111.349	-50.505	1.00	44.07	A16S	ATOM	33879	O2P	GUA	713	167.902	108.027	-47.309	1.00	40.71	A16S
ATOM	33827	N7	GUA	710	165.022	112.512	-50.943	1.00	44.07	A16S	ATOM	33880	O5'	GUA	713	168.590	105.678	-46.655	1.00	39.38	A16S
ATOM	33828	C8	GUA	710	164.353	112.145	-51.999	1.00	44.07	A16S	ATOM	33881	C5'	GUA	713	169.214	104.762	-45.753	1.00	39.38	A16S
ATOM	33829	C2'	GUA	710	162.481	109.389	-52.757	1.00	44.83	A16S	ATOM	33882	C4'	GUA	713	169.521	103.442	-46.437	1.00	39.38	A16S
ATOM	33830	O2'	GUA	710	162.153	108.264	-53.549	1.00	44.83	A16S	ATOM	33883	O4'	GUA	713	168.302	102.957	-47.042	1.00	39.38	A16S
ATOM	33831	C3'	GUA	710	161.456	110.475	-53.011	1.00	44.83	A16S	ATOM	33884	C1'	GUA	713	168.601	102.273	-48.250	1.00	39.38	A16S
ATOM	33832	O3'	GUA	710	160.136	109.934	-53.021	1.00	44.83	A16S	ATOM	33885	N9	GUA	713	168.125	103.083	-49.362	1.00	40.71	A16S

ATOM	33886	C4	GUA	713	168.192	102.749	-50.685	1.00	40.71	A16S	ATOM	33939	C2'	CYT	715	172.183	109.456	-57.175	1.00	49.67	A16S
ATOM	33887	N3	GUA	713	168.673	101.597	-51.178	1.00	40.71	A16S	ATOM	33940	O2'	CYT	715	171.398	109.315	-58.339	1.00	49.67	A16S
ATOM	33888	C2	GUA	713	168.657	101.582	-52.489	1.00	40.71	A16S	ATOM	33941	C3'	CYT	715	173.126	108.277	-56.959	1.00	49.67	A16S
ATOM	33889	N2	GUA	713	169.128	100.508	-53.152	1.00	40.71	A16S	ATOM	33942	O3'	CYT	715	173.710	107.791	-58.158	1.00	49.67	A16S
ATOM	33890	N1	GUA	713	168.185	102.619	-53.249	1.00	40.71	A16S	ATOM	33943	P	ADE	716	175.235	108.143	-58.514	1.00	77.23	A16S
ATOM	33891	C6	GUA	713	167.678	103.807	-52.749	1.00	40.71	A16S	ATOM	33944	O1P	ADE	716	175.634	107.100	-59.487	1.00	46.87	A16S
ATOM	33892	O6	GUA	713	167.280	104.671	-53.516	1.00	40.71	A16S	ATOM	33945	O2P	ADE	716	176.047	108.353	-57.294	1.00	46.87	A16S
ATOM	33893	C5	GUA	713	167.705	103.834	-51.361	1.00	40.71	A16S	ATOM	33946	O5'	ADE	716	175.095	109.539	-59.250	1.00	77.23	A16S
ATOM	33894	N7	GUA	713	167.306	104.824	-50.481	1.00	40.71	A16S	ATOM	33947	C5'	ADE	716	176.148	110.075	-60.029	1.00	77.23	A16S
ATOM	33895	C8	GUA	713	167.565	104.330	-49.304	1.00	40.71	A16S	ATOM	33948	C4'	ADE	716	175.808	111.485	-60.376	1.00	77.23	A16S
ATOM	33896	C2'	GUA	713	170.118	102.166	-48.324	1.00	39.38	A16S	ATOM	33949	O4'	ADE	716	175.544	112.174	-59.149	1.00	77.23	A16S
ATOM	33897	O2'	GUA	713	170.533	100.981	-47.675	1.00	39.38	A16S	ATOM	33950	C1'	ADE	716	175.704	113.546	-59.366	1.00	77.23	A16S
ATOM	33898	C3'	GUA	713	170.526	103.429	-47.585	1.00	39.38	A16S	ATOM	33951	N9	ADE	716	176.308	114.155	-58.192	1.00	46.87	A16S
ATOM	33899	O3'	GUA	713	171.862	103.264	-47.132	1.00	39.38	A16S	ATOM	33952	C4	ADE	716	176.159	115.476	-57.880	1.00	46.87	A16S
ATOM	33900	P	GUA	714	172.916	104.464	-47.284	1.00	50.39	A16S	ATOM	33953	N3	ADE	716	175.533	116.406	-58.613	1.00	46.87	A16S
ATOM	33901	O1P	GUA	714	174.179	103.865	-46.795	1.00	41.67	A16S	ATOM	33954	C2	ADE	716	175.521	117.564	-57.972	1.00	46.87	A16S
ATOM	33902	O2P	GUA	714	172.391	105.692	-46.638	1.00	41.67	A16S	ATOM	33955	N1	ADE	716	176.022	117.872	-56.772	1.00	46.87	A16S
ATOM	33903	O5'	GUA	714	173.020	104.802	-48.843	1.00	50.39	A16S	ATOM	33956	C6	ADE	716	176.649	116.910	-56.068	1.00	46.87	A16S
ATOM	33904	C5'	GUA	714	172.736	103.832	-49.837	1.00	50.39	A16S	ATOM	33957	N6	ADE	716	177.145	117.216	-54.866	1.00	46.87	A16S
ATOM	33905	C4'	GUA	714	171.960	104.452	-50.993	1.00	50.39	A16S	ATOM	33958	C5	ADE	716	176.737	115.638	-56.643	1.00	46.87	A16S
ATOM	33906	O4'	GUA	714	170.822	105.197	-50.474	1.00	50.39	A16S	ATOM	33959	N7	ADE	716	177.300	114.447	-56.204	1.00	46.87	A16S
ATOM	33907	C1'	GUA	714	170.420	106.170	-51.429	1.00	50.39	A16S	ATOM	33960	C8	ADE	716	177.031	113.601	-57.170	1.00	46.87	A16S
ATOM	33908	N9	GUA	714	170.380	107.476	-50.783	1.00	41.67	A16S	ATOM	33961	C2'	ADE	716	176.386	113.755	-60.713	1.00	77.23	A16S
ATOM	33909	C4	GUA	714	169.819	108.621	-51.289	1.00	41.67	A16S	ATOM	33962	O2'	ADE	716	175.364	114.266	-61.555	1.00	77.23	A16S
ATOM	33910	N3	GUA	714	169.173	108.734	-52.464	1.00	41.67	A16S	ATOM	33963	C3'	ADE	716	176.857	112.334	-61.060	1.00	77.23	A16S
ATOM	33911	C2	GUA	714	168.753	109.965	-52.679	1.00	41.67	A16S	ATOM	33964	O3'	ADE	716	176.715	112.127	-62.461	1.00	77.23	A16S
ATOM	33912	N2	GUA	714	168.092	110.256	-53.800	1.00	41.67	A16S	ATOM	33965	P	GUA	717	177.795	111.264	-63.272	1.00	51.81	A16S
ATOM	33913	N1	GUA	714	168.949	111.005	-51.809	1.00	41.67	A16S	ATOM	33966	O1P	GUA	717	177.061	110.151	-63.927	1.00	49.13	A16S
ATOM	33914	C6	GUA	714	169.608	110.911	-50.588	1.00	41.67	A16S	ATOM	33967	O2P	GUA	717	178.955	110.962	-62.407	1.00	49.13	A16S
ATOM	33915	O6	GUA	714	169.724	111.915	-49.863	1.00	41.67	A16S	ATOM	33968	O5'	GUA	717	178.272	112.273	-64.397	1.00	51.81	A16S
ATOM	33916	C5	GUA	714	170.065	109.593	-50.350	1.00	41.67	A16S	ATOM	33969	C5'	GUA	717	178.827	113.531	-64.055	1.00	51.81	A16S
ATOM	33917	N7	GUA	714	170.751	109.069	-49.269	1.00	41.67	A16S	ATOM	33970	C4'	GUA	717	179.388	114.183	-65.292	1.00	51.81	A16S
ATOM	33918	C8	GUA	714	170.910	107.810	-49.568	1.00	41.67	A16S	ATOM	33971	O4'	GUA	717	180.455	113.359	-65.824	1.00	51.81	A16S
ATOM	33919	C2'	GUA	714	171.432	106.115	-52.576	1.00	50.39	A16S	ATOM	33972	C1'	GUA	717	180.373	113.330	-67.231	1.00	51.81	A16S
ATOM	33920	O2'	GUA	714	170.880	105.319	-53.609	1.00	50.39	A16S	ATOM	33973	N9	GUA	717	180.107	111.958	-67.631	1.00	49.13	A16S
ATOM	33921	C3'	GUA	714	172.638	105.474	-51.893	1.00	50.39	A16S	ATOM	33974	C4	GUA	717	180.005	111.496	-68.917	1.00	49.13	A16S
ATOM	33922	O3'	GUA	714	173.460	104.833	-52.860	1.00	50.39	A16S	ATOM	33975	N3	GUA	717	180.155	112.235	-70.040	1.00	49.13	A16S
ATOM	33923	P	CYT	715	174.507	105.698	-53.727	1.00	49.67	A16S	ATOM	33976	C2	GUA	717	179.977	111.514	-71.129	1.00	49.13	A16S
ATOM	33924	O1P	CYT	715	175.187	104.760	-54.642	1.00	35.25	A16S	ATOM	33977	N2	GUA	717	180.096	112.089	-72.336	1.00	49.13	A16S
ATOM	33925	O2P	CYT	715	175.312	106.572	-52.843	1.00	35.25	A16S	ATOM	33978	N1	GUA	717	179.670	110.176	-71.119	1.00	49.13	A16S
ATOM	33926	O5'	CYT	715	173.615	106.649	-54.631	1.00	49.67	A16S	ATOM	33979	C6	GUA	717	179.516	109.396	-69.979	1.00	49.13	A16S
ATOM	33927	C5'	CYT	715	172.849	106.117	-55.688	1.00	49.67	A16S	ATOM	33980	O6	GUA	717	179.241	108.194	-70.085	1.00	49.13	A16S
ATOM	33928	C4'	CYT	715	172.180	107.225	-56.432	1.00	49.67	A16S	ATOM	33981	C5	GUA	717	179.710	110.155	-68.801	1.00	49.13	A16S
ATOM	33929	O4'	CYT	715	171.350	107.977	-55.521	1.00	49.67	A16S	ATOM	33982	N7	GUA	717	179.652	109.778	-67.467	1.00	49.13	A16S
ATOM	33930	C1'	CYT	715	171.260	109.318	-55.966	1.00	49.67	A16S	ATOM	33983	C8	GUA	717	179.897	110.879	-66.811	1.00	49.13	A16S
ATOM	33931	N1	CYT	715	171.583	110.211	-54.849	1.00	35.25	A16S	ATOM	33984	C2'	GUA	717	179.266	114.297	-67.648	1.00	51.81	A16S
ATOM	33932	C6	CYT	715	172.325	109.777	-53.793	1.00	35.25	A16S	ATOM	33985	O2'	GUA	717	179.801	115.585	-67.830	1.00	51.81	A16S
ATOM	33933	C2	CYT	715	171.110	111.530	-54.885	1.00	35.25	A16S	ATOM	33986	C3'	GUA	717	178.379	114.281	-66.423	1.00	51.81	A16S
ATOM	33934	O2	CYT	715	170.416	111.892	-55.834	1.00	35.25	A16S	ATOM	33987	O3'	GUA	717	177.670	115.509	-66.299	1.00	51.81	A16S
ATOM	33935	N3	CYT	715	171.414	112.373	-53.879	1.00	35.25	A16S	ATOM	33988	P	CYT	718	176.134	115.591	-66.756	1.00	53.44	A16S
ATOM	33936	C4	CYT	715	172.137	111.943	-52.857	1.00	35.25	A16S	ATOM	33989	O1P	CYT	718	175.693	116.981	-66.440	1.00	50.58	A16S
ATOM	33937	N4	CYT	715	172.399	112.807	-51.893	1.00	35.25	A16S	ATOM	33990	O2P	CYT	718	175.421	114.431	-66.157	1.00	50.58	A16S
ATOM	33938	C5	CYT	715	172.620	110.600	-52.783	1.00	35.25	A16S	ATOM	33991	O5'	CYT	718	176.191	115.366	-68.338	1.00	53.44	A16S

ATOM	33992	C5'	CYT	718	176.826	116.308	-69.210	1.00	53.44	A16S	ATOM	34045	C8	ADE	720	168.991	110.082	-73.917	1.00	53.55	A16S
ATOM	33993	C4'	CYT	718	176.815	115.782	-70.626	1.00	53.44	A16S	ATOM	34046	C2'	ADE	720	166.828	109.409	-76.493	1.00	50.48	A16S
ATOM	33994	O4'	CYT	718	177.687	114.625	-70.730	1.00	53.44	A16S	ATOM	34047	O2'	ADE	720	166.509	108.897	-77.775	1.00	50.48	A16S
ATOM	33995	C1'	CYT	718	177.122	113.666	-71.610	1.00	53.44	A16S	ATOM	34048	C3'	ADE	720	166.608	110.908	-76.361	1.00	50.48	A16S
ATOM	33996	N1	CYT	718	176.875	112.445	-70.840	1.00	50.58	A16S	ATOM	34049	O3'	ADE	720	165.394	111.317	-76.958	1.00	50.48	A16S
ATOM	33997	C6	CYT	718	176.811	112.489	-69.480	1.00	50.58	A16S	ATOM	34050	P	CYT	721	164.059	111.401	-76.062	1.00	55.93	A16S
ATOM	33998	C2	CYT	718	176.694	111.235	-71.517	1.00	50.58	A16S	ATOM	34051	O1P	CYT	721	163.009	111.984	-76.936	1.00	50.80	A16S
ATOM	33999	O2	CYT	718	176.763	111.218	-72.754	1.00	50.58	A16S	ATOM	34052	O2P	CYT	721	164.381	112.068	-74.775	1.00	50.80	A16S
ATOM	34000	N3	CYT	718	176.448	110.117	-70.810	1.00	50.58	A16S	ATOM	34053	O5'	CYT	721	163.702	109.872	-75.783	1.00	55.93	A16S
ATOM	34001	C4	CYT	718	176.377	110.175	-69.486	1.00	50.58	A16S	ATOM	34054	C5'	CYT	721	163.370	109.011	-76.862	1.00	55.93	A16S
ATOM	34002	N4	CYT	718	176.119	109.054	-68.833	1.00	50.58	A16S	ATOM	34055	C4'	CYT	721	163.280	107.586	-76.389	1.00	55.93	A16S
ATOM	34003	C5	CYT	718	176.566	111.389	-68.772	1.00	50.58	A16S	ATOM	34056	O4'	CYT	721	164.576	107.154	-75.904	1.00	55.93	A16S
ATOM	34004	C2'	CYT	718	175.827	114.261	-72.160	1.00	53.44	A16S	ATOM	34057	C1'	CYT	721	164.404	106.259	-74.818	1.00	55.93	A16S
ATOM	34005	O2'	CYT	718	176.051	114.875	-73.406	1.00	53.44	A16S	ATOM	34058	N1	CYT	721	165.031	106.852	-73.626	1.00	50.80	A16S
ATOM	34006	C3'	CYT	718	175.466	115.252	-71.065	1.00	53.44	A16S	ATOM	34059	C6	CYT	721	165.370	108.176	-73.597	1.00	50.80	A16S
ATOM	34007	O3'	CYT	718	174.634	116.290	-71.534	1.00	53.44	A16S	ATOM	34060	C2	CYT	721	165.258	106.039	-72.507	1.00	50.80	A16S
ATOM	34008	P	CYT	719	173.056	116.059	-71.574	1.00	56.86	A16S	ATOM	34061	O2	CYT	721	164.981	104.829	-72.581	1.00	50.80	A16S
ATOM	34009	O1P	CYT	719	172.458	117.344	-72.024	1.00	47.10	A16S	ATOM	34062	N3	CYT	721	165.779	106.589	-71.383	1.00	50.80	A16S
ATOM	34010	O2P	CYT	719	172.643	115.459	-70.284	1.00	47.10	A16S	ATOM	34063	C4	CYT	721	166.085	107.886	-71.362	1.00	50.80	A16S
ATOM	34011	O5'	CYT	719	172.870	114.956	-72.703	1.00	56.86	A16S	ATOM	34064	N4	CYT	721	166.582	108.390	-70.242	1.00	50.80	A16S
ATOM	34012	C5'	CYT	719	173.223	115.247	-74.045	1.00	56.86	A16S	ATOM	34065	C5	CYT	721	165.893	108.728	-72.498	1.00	50.80	A16S
ATOM	34013	C4'	CYT	719	172.816	114.119	-74.950	1.00	56.86	A16S	ATOM	34066	C2'	CYT	721	162.898	106.062	-74.638	1.00	55.93	A16S
ATOM	34014	O4'	CYT	719	173.637	112.950	-74.698	1.00	56.86	A16S	ATOM	34067	O2'	CYT	721	162.468	104.952	-75.384	1.00	55.93	A16S
ATOM	34015	C1'	CYT	719	172.887	111.784	-74.974	1.00	56.86	A16S	ATOM	34068	C3'	CYT	721	162.354	107.356	-75.215	1.00	55.93	A16S
ATOM	34016	N1	CYT	719	172.865	110.973	-73.762	1.00	47.10	A16S	ATOM	34069	O3'	CYT	721	161.021	107.198	-75.661	1.00	55.93	A16S
ATOM	34017	C6	CYT	719	173.159	111.524	-72.549	1.00	47.10	A16S	ATOM	34070	P	CYT	722	159.812	107.754	-74.759	1.00	59.18	A16S
ATOM	34018	C2	CYT	719	172.536	109.629	-73.862	1.00	47.10	A16S	ATOM	34071	O1P	CYT	722	158.571	107.593	-75.571	1.00	50.84	A16S
ATOM	34019	O2	CYT	719	172.259	109.169	-74.969	1.00	47.10	A16S	ATOM	34072	O2P	CYT	722	160.156	109.108	-74.218	1.00	50.84	A16S
ATOM	34020	N3	CYT	719	172.518	108.866	-72.750	1.00	47.10	A16S	ATOM	34073	O5'	CYT	722	159.733	106.677	-73.589	1.00	59.18	A16S
ATOM	34021	C4	CYT	719	172.803	109.413	-71.570	1.00	47.10	A16S	ATOM	34074	C5'	CYT	722	159.381	105.341	-73.903	1.00	59.18	A16S
ATOM	34022	N4	CYT	719	172.767	108.634	-70.497	1.00	47.10	A16S	ATOM	34075	C4'	CYT	722	159.697	104.422	-72.761	1.00	59.18	A16S
ATOM	34023	C5	CYT	719	173.135	110.788	-71.437	1.00	47.10	A16S	ATOM	34076	O4'	CYT	722	161.124	104.444	-72.496	1.00	59.18	A16S
ATOM	34024	C2'	CYT	719	171.489	112.235	-75.401	1.00	56.86	A16S	ATOM	34077	C1'	CYT	722	161.350	104.237	-71.111	1.00	59.18	A16S
ATOM	34025	O2'	CYT	719	171.446	112.306	-76.811	1.00	56.86	A16S	ATOM	34078	N1	CYT	722	161.978	105.447	-70.561	1.00	50.84	A16S
ATOM	34026	C3'	CYT	719	171.408	113.611	-74.754	1.00	56.86	A16S	ATOM	34079	C6	CYT	722	162.146	106.564	-71.330	1.00	50.84	A16S
ATOM	34027	O3'	CYT	719	170.485	114.474	-75.399	1.00	56.86	A16S	ATOM	34080	C2	CYT	722	162.401	105.439	-69.227	1.00	50.84	A16S
ATOM	34028	P	ADE	720	168.948	114.485	-74.926	1.00	50.48	A16S	ATOM	34081	O2	CYT	722	162.237	104.415	-68.556	1.00	50.84	A16S
ATOM	34029	O1P	ADE	720	168.264	115.589	-75.663	1.00	53.55	A16S	ATOM	34082	N3	CYT	722	162.971	106.546	-68.706	1.00	50.84	A16S
ATOM	34030	O2P	ADE	720	168.944	114.495	-73.443	1.00	53.55	A16S	ATOM	34083	C4	CYT	722	163.120	107.633	-69.462	1.00	50.84	A16S
ATOM	34031	O5'	ADE	720	168.400	113.079	-75.442	1.00	50.48	A16S	ATOM	34084	N4	CYT	722	163.666	108.705	-68.902	1.00	50.84	A16S
ATOM	34032	C5'	ADE	720	168.196	112.874	-76.826	1.00	50.48	A16S	ATOM	34085	C5	CYT	722	162.708	107.669	-70.826	1.00	50.84	A16S
ATOM	34033	C4'	ADE	720	167.814	111.450	-77.099	1.00	50.48	A16S	ATOM	34086	C2'	CYT	722	159.980	103.966	-70.492	1.00	59.18	A16S
ATOM	34034	O4'	ADE	720	168.882	110.581	-76.654	1.00	50.48	A16S	ATOM	34087	O2'	CYT	722	159.709	102.582	-70.583	1.00	59.18	A16S
ATOM	34035	C1'	ADE	720	168.338	109.327	-76.256	1.00	50.48	A16S	ATOM	34088	C3'	CYT	722	159.092	104.775	-71.421	1.00	59.18	A16S
ATOM	34036	N9	ADE	720	168.657	109.126	-74.841	1.00	53.55	A16S	ATOM	34089	O3'	CYT	722	157.733	104.380	-71.344	1.00	59.18	A16S
ATOM	34037	C4	ADE	720	168.684	107.931	-74.170	1.00	53.55	A16S	ATOM	34090	P	URI	723	156.650	105.404	-70.748	1.00	63.16	A16S
ATOM	34038	N3	ADE	720	168.411	106.716	-74.664	1.00	53.55	A16S	ATOM	34091	O1P	URI	723	155.318	104.792	-70.971	1.00	43.82	A16S
ATOM	34039	C2	ADE	720	168.549	105.783	-73.719	1.00	53.55	A16S	ATOM	34092	O2P	URI	723	156.931	106.762	-71.279	1.00	43.82	A16S
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ATOM	34041	C6	ADE	720	169.163	107.165	-71.977	1.00	53.55	A16S	ATOM	34094	C5'	URI	723	156.886	104.258	-68.396	1.00	63.16	A16S
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ATOM	34043	C5	ADE	720	169.051	108.234	-72.877	1.00	53.55	A16S	ATOM	34096	O4'	URI	723	158.919	104.673	-67.085	1.00	63.16	A16S
ATOM	34044	N7	ADE	720	169.236	109.599	-72.726	1.00	53.55	A16S	ATOM	34097	C1'	URI	723	159.346	105.451	-65.969	1.00	63.16	A16S

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ATOM  34137  C5' GUA   725     154.379 108.863 -57.578  1.00 55.56      A16S
ATOM  34138  C4' GUA   725     155.338 109.718 -56.798  1.00 55.56      A16S
ATOM  34139  O4' GUA   725     156.546 109.898 -57.578  1.00 55.56      A16S
ATOM  34140  C1' GUA   725     157.154 111.130 -57.230  1.00 55.56      A16S
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ATOM  34180  C5' CYT   727     154.243 120.147 -53.464  1.00 55.81      A16S
ATOM  34181  C4' CYT   727     154.718 121.363 -54.226  1.00 55.81      A16S
ATOM  34182  O4' CYT   727     155.404 120.943 -55.434  1.00 55.81      A16S
ATOM  34183  C1' CYT   727     155.146 121.869 -56.479  1.00 55.81      A16S
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ATOM  34187  O2  CYT   727     154.930 122.882 -58.951  1.00 40.50      A16S
ATOM  34188  N3  CYT   727     153.817 121.116 -59.838  1.00 40.50      A16S
ATOM  34189  C4  CYT   727     153.265 119.922 -59.633  1.00 40.50      A16S
ATOM  34190  N4  CYT   727     152.706 119.305 -60.668  1.00 40.50      A16S
ATOM  34191  C5  CYT   727     153.268 119.300 -58.357  1.00 40.50      A16S
ATOM  34192  C2' CYT   727     154.305 122.997 -55.895  1.00 55.81      A16S
ATOM  34193  O2' CYT   727     155.143 124.055 -55.484  1.00 55.81      A16S
ATOM  34194  C3' CYT   727     153.623 122.282 -54.738  1.00 55.81      A16S
ATOM  34195  O3' CYT   727     153.188 123.202 -53.751  1.00 55.81      A16S
ATOM  34196  P   CYT   728     151.699 123.792 -53.838  1.00 52.96      A16S
ATOM  34197  O1P CYT   728     151.466 124.550 -52.579  1.00 46.04      A16S
ATOM  34198  O2P CYT   728     150.796 122.664 -54.201  1.00 46.04      A16S
ATOM  34199  O5' CYT   728     151.757 124.801 -55.076  1.00 52.96      A16S
ATOM  34200  C5' CYT   728     152.504 126.014 -54.990  1.00 52.96      A16S
ATOM  34201  C4' CYT   728     152.458 126.757 -56.302  1.00 52.96      A16S
ATOM  34202  O4' CYT   728     153.010 125.907 -57.327  1.00 52.96      A16S
ATOM  34203  C1' CYT   728     152.334 126.133 -58.550  1.00 52.96      A16S
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ATOM	34204	N1	CYT	728	151.713	124.878	-58.950	1.00	46.04	A16S	ATOM	34257	O3'	CYT	730	140.740	131.155	-61.667	1.00	68.32	A16S
ATOM	34205	C6	CYT	728	151.604	123.839	-58.073	1.00	46.04	A16S	ATOM	34258	P	CYT	731	139.811	131.638	-60.456	1.00	109.20	A16S
ATOM	34206	C2	CYT	728	151.270	124.751	-60.249	1.00	46.04	A16S	ATOM	34259	O1P	CYT	731	139.771	133.120	-60.488	1.00	92.94	A16S
ATOM	34207	O2	CYT	728	151.326	125.740	-60.984	1.00	46.04	A16S	ATOM	34260	O2P	CYT	731	140.248	130.947	-59.225	1.00	92.94	A16S
ATOM	34208	N3	CYT	728	150.783	123.565	-60.672	1.00	46.04	A16S	ATOM	34261	O5'	CYT	731	138.372	131.097	-60.857	1.00	109.20	A16S
ATOM	34209	C4	CYT	728	150.711	122.542	-59.822	1.00	46.04	A16S	ATOM	34262	C5'	CYT	731	137.571	130.398	-59.919	1.00	109.20	A16S
ATOM	34210	N4	CYT	728	150.249	121.383	-60.275	1.00	46.04	A16S	ATOM	34263	C4'	CYT	731	137.590	128.926	-60.232	1.00	109.20	A16S
ATOM	34211	C5	CYT	728	151.116	122.662	-58.465	1.00	46.04	A16S	ATOM	34264	O4'	CYT	731	138.963	128.479	-60.266	1.00	109.20	A16S
ATOM	34212	C2'	CYT	728	151.333	127.251	-58.316	1.00	52.96	A16S	ATOM	34265	C1'	CYT	731	139.066	127.210	-59.660	1.00	109.20	A16S
ATOM	34213	O2'	CYT	728	151.962	128.482	-58.592	1.00	52.96	A16S	ATOM	34266	N1	CYT	731	140.017	127.328	-58.550	1.00	92.94	A16S
ATOM	34214	C3'	CYT	728	151.076	127.085	-56.833	1.00	52.96	A16S	ATOM	34267	C6	CYT	731	140.106	128.483	-57.831	1.00	92.94	A16S
ATOM	34215	O3'	CYT	728	150.608	128.294	-56.288	1.00	52.96	A16S	ATOM	34268	C2	CYT	731	140.868	126.259	-58.272	1.00	92.94	A16S
ATOM	34216	P	ADE	729	149.052	128.457	-55.998	1.00	61.94	A16S	ATOM	34269	O2	CYT	731	140.711	125.195	-58.882	1.00	92.94	A16S
ATOM	34217	O1P	ADE	729	148.927	129.501	-54.947	1.00	56.18	A16S	ATOM	34270	N3	CYT	731	141.835	126.407	-57.344	1.00	92.94	A16S
ATOM	34218	O2P	ADE	729	148.515	127.097	-55.759	1.00	56.18	A16S	ATOM	34271	C4	CYT	731	141.950	127.559	-56.686	1.00	92.94	A16S
ATOM	34219	O5'	ADE	729	148.463	128.981	-57.377	1.00	61.94	A16S	ATOM	34272	N4	CYT	731	142.947	127.681	-55.810	1.00	92.94	A16S
ATOM	34220	C5'	ADE	729	149.004	130.132	-58.004	1.00	61.94	A16S	ATOM	34273	C5	CYT	731	141.053	128.643	-56.902	1.00	92.94	A16S
ATOM	34221	C4'	ADE	729	148.577	130.160	-59.438	1.00	61.94	A16S	ATOM	34274	C2'	CYT	731	137.651	126.719	-59.342	1.00	109.20	A16S
ATOM	34222	O4'	ADE	729	149.096	128.981	-60.097	1.00	61.94	A16S	ATOM	34275	O2'	CYT	731	137.248	125.933	-60.436	1.00	109.20	A16S
ATOM	34223	C1'	ADE	729	148.182	128.548	-61.082	1.00	61.94	A16S	ATOM	34276	C3'	CYT	731	136.880	128.032	-59.230	1.00	109.20	A16S
ATOM	34224	N9	ADE	729	147.876	127.141	-60.844	1.00	56.18	A16S	ATOM	34277	O3'	CYT	731	135.487	128.016	-59.587	1.00	109.20	A16S
ATOM	34225	C4	ADE	729	147.264	126.293	-61.735	1.00	56.18	A16S	ATOM	34278	P	CYT	732	134.684	126.628	-59.777	1.00	61.73	A16S
ATOM	34226	N3	ADE	729	146.814	126.591	-62.962	1.00	56.18	A16S	ATOM	34279	O1P	CYT	732	133.288	127.027	-60.085	1.00	81.47	A16S
ATOM	34227	C2	ADE	729	146.287	125.519	-63.541	1.00	56.18	A16S	ATOM	34280	O2P	CYT	732	134.941	125.684	-58.646	1.00	81.47	A16S
ATOM	34228	N1	ADE	729	146.169	124.281	-63.069	1.00	56.18	A16S	ATOM	34281	O5'	CYT	732	135.272	126.005	-61.121	1.00	61.73	A16S
ATOM	34229	C6	ADE	729	146.633	124.017	-61.828	1.00	56.18	A16S	ATOM	34282	C5'	CYT	732	134.652	126.245	-62.366	1.00	61.73	A16S
ATOM	34230	N6	ADE	729	146.518	122.780	-61.349	1.00	56.18	A16S	ATOM	34283	C4'	CYT	732	134.859	125.065	-63.267	1.00	61.73	A16S
ATOM	34231	C5	ADE	729	147.211	125.066	-61.111	1.00	56.18	A16S	ATOM	34284	O4'	CYT	732	136.256	124.982	-63.634	1.00	61.73	A16S
ATOM	34232	N7	ADE	729	147.768	125.134	-59.843	1.00	56.18	A16S	ATOM	34285	C1'	CYT	732	136.621	123.619	-63.812	1.00	61.73	A16S
ATOM	34233	C8	ADE	729	148.143	126.386	-59.732	1.00	56.18	A16S	ATOM	34286	N1	CYT	732	137.740	123.300	-62.905	1.00	81.47	A16S
ATOM	34234	C2'	ADE	729	146.972	129.477	-61.031	1.00	61.94	A16S	ATOM	34287	C6	CYT	732	138.310	124.259	-62.119	1.00	81.47	A16S
ATOM	34235	O2'	ADE	729	147.132	130.466	-62.023	1.00	61.94	A16S	ATOM	34288	C2	CYT	732	138.198	121.982	-62.849	1.00	81.47	A16S
ATOM	34236	C3'	ADE	729	147.080	130.039	-59.620	1.00	61.94	A16S	ATOM	34289	O2	CYT	732	137.694	121.137	-63.607	1.00	81.47	A16S
ATOM	34237	O3'	ADE	729	146.486	131.328	-59.508	1.00	61.94	A16S	ATOM	34290	N3	CYT	732	139.173	121.660	-61.979	1.00	81.47	A16S
ATOM	34238	P	CYT	730	145.089	131.497	-58.734	1.00	68.32	A16S	ATOM	34291	C4	CYT	732	139.702	122.596	-61.198	1.00	81.47	A16S
ATOM	34239	O1P	CYT	730	144.902	132.956	-58.542	1.00	70.28	A16S	ATOM	34292	N4	CYT	732	140.647	122.221	-60.337	1.00	81.47	A16S
ATOM	34240	O2P	CYT	730	145.079	130.594	-57.552	1.00	70.28	A16S	ATOM	34293	C5	CYT	732	139.284	123.953	-61.259	1.00	81.47	A16S
ATOM	34241	O5'	CYT	730	144.014	130.949	-59.776	1.00	68.32	A16S	ATOM	34294	C2'	CYT	732	135.384	122.775	-63.499	1.00	61.73	A16S
ATOM	34242	C5'	CYT	730	143.873	131.544	-61.057	1.00	68.32	A16S	ATOM	34295	O2'	CYT	732	134.711	122.412	-64.684	1.00	61.73	A16S
ATOM	34243	C4'	CYT	730	143.069	130.648	-61.965	1.00	68.32	A16S	ATOM	34296	C3'	CYT	732	134.595	123.724	-62.614	1.00	61.73	A16S
ATOM	34244	O4'	CYT	730	143.792	129.419	-62.191	1.00	68.32	A16S	ATOM	34297	O3'	CYT	732	133.222	123.391	-62.616	1.00	61.73	A16S
ATOM	34245	C1'	CYT	730	142.876	128.388	-62.512	1.00	68.32	A16S	ATOM	34298	P	GUA	733	132.643	122.452	-61.455	1.00	59.03	A16S
ATOM	34246	N1	CYT	730	143.179	127.214	-61.681	1.00	70.28	A16S	ATOM	34299	O1P	GUA	733	131.158	122.450	-61.572	1.00	60.58	A16S
ATOM	34247	C6	CYT	730	143.762	127.353	-60.454	1.00	70.28	A16S	ATOM	34300	O2P	GUA	733	133.286	122.905	-60.182	1.00	60.58	A16S
ATOM	34248	C2	CYT	730	142.858	125.946	-62.169	1.00	70.28	A16S	ATOM	34301	O5'	GUA	733	133.163	120.999	-61.851	1.00	59.03	A16S
ATOM	34249	O2	CYT	730	142.340	125.848	-63.289	1.00	70.28	A16S	ATOM	34302	C5'	GUA	733	132.611	120.310	-62.962	1.00	59.03	A16S
ATOM	34250	N3	CYT	730	143.123	124.861	-61.413	1.00	70.28	A16S	ATOM	34303	C4'	GUA	733	133.094	118.887	-62.979	1.00	59.03	A16S
ATOM	34251	C4	CYT	730	143.687	125.008	-60.214	1.00	70.28	A16S	ATOM	34304	O4'	GUA	733	134.545	118.920	-62.928	1.00	59.03	A16S
ATOM	34252	N4	CYT	730	143.919	123.910	-59.497	1.00	70.28	A16S	ATOM	34305	C1'	GUA	733	135.023	117.869	-62.100	1.00	59.03	A16S
ATOM	34253	C5	CYT	730	144.033	126.286	-59.696	1.00	70.28	A16S	ATOM	34306	N9	GUA	733	135.676	118.467	-60.939	1.00	60.58	A16S
ATOM	34254	C2'	CYT	730	141.466	128.951	-62.322	1.00	68.32	A16S	ATOM	34307	C4	GUA	733	136.291	117.806	-59.897	1.00	60.58	A16S
ATOM	34255	O2'	CYT	730	140.938	129.312	-63.581	1.00	68.32	A16S	ATOM	34308	N3	GUA	733	136.378	116.469	-59.743	1.00	60.58	A16S
ATOM	34256	C3'	CYT	730	141.730	130.166	-61.442	1.00	68.32	A16S	ATOM	34309	C2	GUA	733	137.034	116.139	-58.642	1.00	60.58	A16S

ATOM	34310	N2	GUA	733	137.196	114.851	-58.329	1.00	60.58	A16S	ATOM	34363	O3'	GUA	735	130.361	111.284	-51.952	1.00	60.97	A16S
ATOM	34311	N1	GUA	733	137.574	117.048	-57.769	1.00	60.58	A16S	ATOM	34364	P	ADE	736	129.980	111.274	-50.376	1.00	42.55	A16S
ATOM	34312	C6	GUA	733	137.508	118.427	-57.914	1.00	60.58	A16S	ATOM	34365	O1P	ADE	736	129.437	109.915	-50.121	1.00	49.05	A16S
ATOM	34313	O6	GUA	733	138.046	119.160	-57.078	1.00	60.58	A16S	ATOM	34366	O2P	ADE	736	129.177	112.461	-50.003	1.00	49.05	A16S
ATOM	34314	C5	GUA	733	136.791	118.796	-59.081	1.00	60.58	A16S	ATOM	34367	O5'	ADE	736	131.380	111.375	-49.613	1.00	42.55	A16S
ATOM	34315	N7	GUA	733	136.482	120.051	-59.585	1.00	60.58	A16S	ATOM	34368	C5'	ADE	736	132.324	110.272	-49.560	1.00	42.55	A16S
ATOM	34316	C8	GUA	733	135.818	119.807	-60.681	1.00	60.58	A16S	ATOM	34369	C4'	ADE	736	133.279	110.484	-48.397	1.00	42.55	A16S
ATOM	34317	C2'	GUA	733	133.817	116.998	-61.758	1.00	59.03	A16S	ATOM	34370	O4'	ADE	736	133.709	111.852	-48.443	1.00	42.55	A16S
ATOM	34318	O2'	GUA	733	133.665	116.010	-62.763	1.00	59.03	A16S	ATOM	34371	C1'	ADE	736	133.792	112.340	-47.144	1.00	42.55	A16S
ATOM	34319	C3'	GUA	733	132.706	118.040	-61.775	1.00	59.03	A16S	ATOM	34372	N9	ADE	736	133.793	113.794	-47.160	1.00	49.05	A16S
ATOM	34320	O3'	GUA	733	131.426	117.433	-61.923	1.00	59.03	A16S	ATOM	34373	C4	ADE	736	134.567	114.570	-46.339	1.00	49.05	A16S
ATOM	34321	P	URI	734	130.526	117.156	-60.618	1.00	65.72	A16S	ATOM	34374	N3	ADE	736	135.380	114.150	-45.362	1.00	49.05	A16S
ATOM	34322	O1P	URI	734	129.205	116.661	-61.081	1.00	49.56	A16S	ATOM	34375	C2	ADE	736	136.001	115.179	-44.802	1.00	49.05	A16S
ATOM	34323	O2P	URI	734	130.602	118.355	-59.747	1.00	49.56	A16S	ATOM	34376	N1	ADE	736	135.912	116.478	-45.090	1.00	49.05	A16S
ATOM	34324	O5'	URI	734	131.244	115.954	-59.856	1.00	65.72	A16S	ATOM	34377	C6	ADE	736	135.086	116.858	-46.082	1.00	49.05	A16S
ATOM	34325	C5'	URI	734	131.064	114.606	-60.279	1.00	65.72	A16S	ATOM	34378	N6	ADE	736	135.008	118.148	-46.383	1.00	49.05	A16S
ATOM	34326	C4'	URI	734	131.855	113.656	-59.398	1.00	65.72	A16S	ATOM	34379	C5	ADE	736	134.363	115.868	-46.743	1.00	49.05	A16S
ATOM	34327	O4'	URI	734	133.221	114.132	-59.270	1.00	65.72	A16S	ATOM	34380	N7	ADE	736	133.440	115.918	-47.772	1.00	49.05	A16S
ATOM	34328	C1'	URI	734	133.750	113.715	-58.026	1.00	65.72	A16S	ATOM	34381	C8	ADE	736	133.125	114.661	-47.974	1.00	49.05	A16S
ATOM	34329	N1	URI	734	134.169	114.906	-57.280	1.00	49.56	A16S	ATOM	34382	C2'	ADE	736	132.806	111.581	-46.268	1.00	42.55	A16S
ATOM	34330	C6	URI	734	133.829	116.157	-57.701	1.00	49.56	A16S	ATOM	34383	O2'	ADE	736	133.341	111.440	-44.975	1.00	42.55	A16S
ATOM	34331	C2	URI	734	134.926	114.720	-56.138	1.00	49.56	A16S	ATOM	34384	C3'	ADE	736	132.618	110.269	-47.039	1.00	42.55	A16S
ATOM	34332	O2	URI	734	135.233	113.620	-55.715	1.00	49.56	A16S	ATOM	34385	O3'	ADE	736	133.370	109.301	-46.287	1.00	42.55	A16S
ATOM	34333	N3	URI	734	135.307	115.870	-55.503	1.00	49.56	A16S	ATOM	34386	P	CYT	737	133.333	107.729	-46.642	1.00	50.20	A16S
ATOM	34334	C4	URI	734	135.004	117.153	-55.875	1.00	49.56	A16S	ATOM	34387	O1P	CYT	737	131.917	107.268	-46.682	1.00	50.14	A16S
ATOM	34335	O4	URI	734	135.416	118.087	-55.195	1.00	49.56	A16S	ATOM	34388	O2P	CYT	737	134.287	107.109	-45.692	1.00	50.14	A16S
ATOM	34336	C5	URI	734	134.209	117.261	-57.054	1.00	49.56	A16S	ATOM	34389	O5'	CYT	737	133.993	107.589	-48.087	1.00	50.20	A16S
ATOM	34337	C2'	URI	734	132.661	112.914	-57.313	1.00	65.72	A16S	ATOM	34390	C5'	CYT	737	135.392	107.751	-48.246	1.00	50.20	A16S
ATOM	34338	O2'	URI	734	132.819	111.538	-57.611	1.00	65.72	A16S	ATOM	34391	C4'	CYT	737	135.815	107.406	-49.647	1.00	50.20	A16S
ATOM	34339	C3'	URI	734	131.404	113.478	-57.956	1.00	65.72	A16S	ATOM	34392	O4'	CYT	737	134.983	108.102	-50.593	1.00	50.20	A16S
ATOM	34340	O3'	URI	734	130.399	112.482	-57.884	1.00	65.72	A16S	ATOM	34393	C1'	CYT	737	135.763	108.510	-51.693	1.00	50.20	A16S
ATOM	34341	P	GUA	735	128.984	112.828	-57.226	1.00	60.97	A16S	ATOM	34394	N1	CYT	737	135.465	109.924	-51.958	1.00	50.14	A16S
ATOM	34342	O1P	GUA	735	127.989	111.936	-57.877	1.00	60.49	A16S	ATOM	34395	C6	CYT	737	134.776	110.297	-53.080	1.00	50.14	A16S
ATOM	34343	O2P	GUA	735	128.806	114.301	-57.276	1.00	60.49	A16S	ATOM	34396	C2	CYT	737	135.891	110.883	-51.044	1.00	50.14	A16S
ATOM	34344	O5'	GUA	735	129.121	112.408	-55.694	1.00	60.97	A16S	ATOM	34397	O2	CYT	737	136.517	110.513	-50.042	1.00	50.14	A16S
ATOM	34345	C5'	GUA	735	130.147	111.524	-55.240	1.00	60.97	A16S	ATOM	34398	N3	CYT	737	135.598	112.187	-51.267	1.00	50.14	A16S
ATOM	34346	C4'	GUA	735	130.853	112.143	-54.065	1.00	60.97	A16S	ATOM	34399	C4	CYT	737	134.908	112.538	-52.349	1.00	50.14	A16S
ATOM	34347	O4'	GUA	735	131.332	113.414	-54.494	1.00	60.97	A16S	ATOM	34400	N4	CYT	737	134.618	113.821	-52.504	1.00	50.14	A16S
ATOM	34348	C1'	GUA	735	131.384	114.270	-53.401	1.00	60.97	A16S	ATOM	34401	C5	CYT	737	134.479	111.581	-53.312	1.00	50.14	A16S
ATOM	34349	N9	GUA	735	131.301	115.630	-53.904	1.00	60.49	A16S	ATOM	34402	C2'	CYT	737	137.219	108.108	-51.453	1.00	50.20	A16S
ATOM	34350	C4	GUA	735	132.081	116.694	-53.525	1.00	60.49	A16S	ATOM	34403	O2'	CYT	737	137.532	106.956	-52.204	1.00	50.20	A16S
ATOM	34351	N3	GUA	735	133.036	116.682	-52.572	1.00	60.49	A16S	ATOM	34404	C3'	CYT	737	137.238	107.831	-49.956	1.00	50.20	A16S
ATOM	34352	C2	GUA	735	133.618	117.863	-52.443	1.00	60.49	A16S	ATOM	34405	O3'	CYT	737	138.115	106.755	-49.654	1.00	50.20	A16S
ATOM	34353	N2	GUA	735	134.599	118.035	-51.556	1.00	60.49	A16S	ATOM	34406	P	GUA	738	139.679	107.035	-49.447	1.00	51.55	A16S
ATOM	34354	N1	GUA	735	133.281	118.965	-53.180	1.00	60.49	A16S	ATOM	34407	O1P	GUA	738	140.184	107.615	-50.712	1.00	44.99	A16S
ATOM	34355	C6	GUA	735	132.302	118.994	-54.167	1.00	60.49	A16S	ATOM	34408	O2P	GUA	738	140.308	105.801	-48.914	1.00	44.99	A16S
ATOM	34356	O6	GUA	735	132.073	120.042	-54.780	1.00	60.49	A16S	ATOM	34409	O5'	GUA	738	139.719	108.156	-48.315	1.00	51.55	A16S
ATOM	34357	C5	GUA	735	131.683	117.738	-54.323	1.00	60.49	A16S	ATOM	34410	C5'	GUA	738	140.021	109.503	-48.638	1.00	51.55	A16S
ATOM	34358	N7	GUA	735	130.675	117.343	-55.184	1.00	60.49	A16S	ATOM	34411	C4'	GUA	738	140.268	110.290	-47.378	1.00	51.55	A16S
ATOM	34359	C8	GUA	735	130.474	116.089	-54.890	1.00	60.49	A16S	ATOM	34412	O4'	GUA	738	139.062	110.277	-46.573	1.00	51.55	A16S
ATOM	34360	C2'	GUA	735	130.459	113.752	-52.291	1.00	60.97	A16S	ATOM	34413	C1'	GUA	738	139.396	110.120	-45.208	1.00	51.55	A16S
ATOM	34361	O2'	GUA	735	131.193	113.631	-51.096	1.00	60.97	A16S	ATOM	34414	N9	GUA	738	138.973	108.783	-44.820	1.00	44.99	A16S
ATOM	34362	C3'	GUA	735	130.007	112.386	-52.821	1.00	60.97	A16S	ATOM	34415	C4	GUA	738	139.068	108.227	-43.572	1.00	44.99	A16S

ATOM	34416	N3	GUA	738	139.581	108.823	-42.484	1.00	44.99	A16S	ATOM	34469	P	GUA	741	151.046	104.076	-40.011	1.00	39.19	A16S
ATOM	34417	C2	GUA	738	139.557	108.033	-41.436	1.00	44.99	A16S	ATOM	34470	O1P	GUA	741	152.253	104.144	-39.144	1.00	42.20	A16S
ATOM	34418	N2	GUA	738	140.054	108.460	-40.268	1.00	44.99	A16S	ATOM	34471	O2P	GUA	741	151.177	104.338	-41.463	1.00	42.20	A16S
ATOM	34419	N1	GUA	738	139.054	106.768	-41.452	1.00	44.99	A16S	ATOM	34472	O5'	GUA	741	150.436	102.616	-39.863	1.00	39.19	A16S
ATOM	34420	C6	GUA	738	138.515	106.135	-42.562	1.00	44.99	A16S	ATOM	34473	C5'	GUA	741	150.374	101.980	-38.593	1.00	39.19	A16S
ATOM	34421	O6	GUA	738	138.086	104.979	-42.464	1.00	44.99	A16S	ATOM	34474	C4'	GUA	741	149.501	100.765	-38.684	1.00	39.19	A16S
ATOM	34422	C5	GUA	738	138.548	106.964	-43.695	1.00	44.99	A16S	ATOM	34475	O4'	GUA	741	148.249	101.174	-39.284	1.00	39.19	A16S
ATOM	34423	N7	GUA	738	138.131	106.725	-44.997	1.00	44.99	A16S	ATOM	34476	C1'	GUA	741	147.732	100.128	-40.070	1.00	39.19	A16S
ATOM	34424	C8	GUA	738	138.404	107.829	-45.630	1.00	44.99	A16S	ATOM	34477	N9	GUA	741	147.560	100.637	-41.418	1.00	42.20	A16S
ATOM	34425	C2'	GUA	738	140.908	110.280	-45.113	1.00	51.55	A16S	ATOM	34478	C4	GUA	741	146.637	100.214	-42.338	1.00	42.20	A16S
ATOM	34426	O2'	GUA	738	141.217	111.648	-44.999	1.00	51.55	A16S	ATOM	34479	N3	GUA	741	145.710	99.255	-42.146	1.00	42.20	A16S
ATOM	34427	C3'	GUA	738	141.332	109.725	-46.458	1.00	51.55	A16S	ATOM	34480	C2	GUA	741	144.960	99.081	-43.219	1.00	42.20	A16S
ATOM	34428	O3'	GUA	738	142.610	110.196	-46.827	1.00	51.55	A16S	ATOM	34481	N2	GUA	741	143.972	98.182	-43.199	1.00	42.20	A16S
ATOM	34429	P	CYT	739	143.886	109.261	-46.587	1.00	36.99	A16S	ATOM	34482	N1	GUA	741	145.121	99.776	-44.387	1.00	42.20	A16S
ATOM	34430	O1P	CYT	739	145.028	109.869	-47.302	1.00	32.09	A16S	ATOM	34483	C6	GUA	741	146.073	100.759	-44.603	1.00	42.20	A16S
ATOM	34431	O2P	CYT	739	143.506	107.866	-46.896	1.00	32.09	A16S	ATOM	34484	O6	GUA	741	146.139	101.319	-45.695	1.00	42.20	A16S
ATOM	34432	O5'	CYT	739	144.106	109.340	-45.011	1.00	36.99	A16S	ATOM	34485	C5	GUA	741	146.867	100.973	-43.463	1.00	42.20	A16S
ATOM	34433	C5'	CYT	739	144.708	110.474	-44.399	1.00	36.99	A16S	ATOM	34486	N7	GUA	741	147.904	101.867	-43.248	1.00	42.20	A16S
ATOM	34434	C4'	CYT	739	144.887	110.217	-42.926	1.00	36.99	A16S	ATOM	34487	C8	GUA	741	148.283	101.630	-42.020	1.00	42.20	A16S
ATOM	34435	O4'	CYT	739	143.591	109.850	-42.379	1.00	36.99	A16S	ATOM	34488	C2'	GUA	741	148.702	98.953	-39.961	1.00	39.19	A16S
ATOM	34436	C1'	CYT	739	143.753	108.889	-41.347	1.00	36.99	A16S	ATOM	34489	O2'	GUA	741	148.230	98.109	-38.924	1.00	39.19	A16S
ATOM	34437	N1	CYT	739	143.051	107.657	-41.745	1.00	32.09	A16S	ATOM	34490	C3'	GUA	741	150.001	99.659	-39.589	1.00	39.19	A16S
ATOM	34438	C6	CYT	739	142.599	107.485	-43.020	1.00	32.09	A16S	ATOM	34491	O3'	GUA	741	150.854	98.818	-38.816	1.00	39.19	A16S
ATOM	34439	C2	CYT	739	142.859	106.661	-40.795	1.00	32.09	A16S	ATOM	34492	P	ADE	742	151.455	97.467	-39.456	1.00	41.27	A16S
ATOM	34440	O2	CYT	739	143.268	106.848	-39.649	1.00	32.09	A16S	ATOM	34493	O1P	ADE	742	152.932	97.584	-39.346	1.00	39.00	A16S
ATOM	34441	N3	CYT	739	142.236	105.514	-41.143	1.00	32.09	A16S	ATOM	34494	O2P	ADE	742	150.840	97.240	-40.785	1.00	39.00	A16S
ATOM	34442	C4	CYT	739	141.822	105.341	-42.390	1.00	32.09	A16S	ATOM	34495	O5'	ADE	742	150.941	96.320	-38.476	1.00	41.27	A16S
ATOM	34443	N4	CYT	739	141.258	104.177	-42.697	1.00	32.09	A16S	ATOM	34496	C5'	ADE	742	150.991	96.499	-37.064	1.00	41.27	A16S
ATOM	34444	C5	CYT	739	141.983	106.353	-43.383	1.00	32.09	A16S	ATOM	34497	C4'	ADE	742	150.511	95.250	-36.360	1.00	41.27	A16S
ATOM	34445	C2'	CYT	739	145.255	108.695	-41.172	1.00	36.99	A16S	ATOM	34498	O4'	ADE	742	149.064	95.142	-36.415	1.00	41.27	A16S
ATOM	34446	O2'	CYT	739	145.738	109.638	-40.245	1.00	36.99	A16S	ATOM	34499	C1'	ADE	742	148.689	93.776	-36.394	1.00	41.27	A16S
ATOM	34447	C3'	CYT	739	145.748	109.020	-42.571	1.00	36.99	A16S	ATOM	34500	N9	ADE	742	147.911	93.486	-37.595	1.00	39.00	A16S
ATOM	34448	O3'	CYT	739	147.127	109.353	-42.567	1.00	36.99	A16S	ATOM	34501	C4	ADE	742	147.073	92.413	-37.758	1.00	39.00	A16S
ATOM	34449	P	URI	740	148.221	108.240	-42.970	1.00	36.93	A16S	ATOM	34502	N3	ADE	742	146.792	91.460	-36.858	1.00	39.00	A16S
ATOM	34450	O1P	URI	740	149.504	108.973	-42.875	1.00	37.72	A16S	ATOM	34503	C2	ADE	742	145.963	90.560	-37.372	1.00	39.00	A16S
ATOM	34451	O2P	URI	740	147.850	107.556	-44.235	1.00	37.72	A16S	ATOM	34504	N1	ADE	742	145.421	90.512	-38.587	1.00	39.00	A16S
ATOM	34452	O5'	URI	740	148.153	107.168	-41.790	1.00	36.93	A16S	ATOM	34505	C6	ADE	742	145.714	91.495	-39.462	1.00	39.00	A16S
ATOM	34453	C5'	URI	740	148.399	107.553	-40.440	1.00	36.93	A16S	ATOM	34506	N6	ADE	742	145.159	91.457	-40.670	1.00	39.00	A16S
ATOM	34454	C4'	URI	740	148.012	106.443	-39.497	1.00	36.93	A16S	ATOM	34507	C5	ADE	742	146.586	92.504	-39.044	1.00	39.00	A16S
ATOM	34455	O4'	URI	740	146.587	106.188	-39.601	1.00	36.93	A16S	ATOM	34508	N7	ADE	742	147.085	93.629	-39.680	1.00	39.00	A16S
ATOM	34456	C1'	URI	740	146.327	104.821	-39.302	1.00	36.93	A16S	ATOM	34509	C8	ADE	742	147.863	94.179	-38.777	1.00	39.00	A16S
ATOM	34457	N1	URI	740	145.644	104.204	-40.452	1.00	37.72	A16S	ATOM	34510	C2'	ADE	742	149.981	92.965	-36.334	1.00	41.27	A16S
ATOM	34458	C6	URI	740	145.728	104.738	-41.709	1.00	37.72	A16S	ATOM	34511	O2'	ADE	742	150.317	92.711	-34.986	1.00	41.27	A16S
ATOM	34459	C2	URI	740	144.918	103.047	-40.227	1.00	37.72	A16S	ATOM	34512	C3'	ADE	742	150.970	93.934	-36.955	1.00	41.27	A16S
ATOM	34460	O2	URI	740	144.784	102.553	-39.142	1.00	37.72	A16S	ATOM	34513	O3'	ADE	742	152.287	93.624	-36.547	1.00	41.27	A16S
ATOM	34461	N3	URI	740	144.344	102.494	-41.330	1.00	37.72	A16S	ATOM	34514	P	GUA	743	153.388	93.272	-37.650	1.00	42.81	A16S
ATOM	34462	C4	URI	740	144.395	102.966	-42.608	1.00	37.72	A16S	ATOM	34515	O1P	GUA	743	154.526	92.701	-36.896	1.00	58.45	A16S
ATOM	34463	O4	URI	740	143.802	102.353	-43.489	1.00	37.72	A16S	ATOM	34516	O2P	GUA	743	153.601	94.453	-38.514	1.00	58.45	A16S
ATOM	34464	C5	URI	740	145.141	104.173	-42.771	1.00	37.72	A16S	ATOM	34517	O5'	GUA	743	152.706	92.135	-38.528	1.00	42.81	A16S
ATOM	34465	C2'	URI	740	147.679	104.169	-39.008	1.00	36.93	A16S	ATOM	34518	C5'	GUA	743	152.424	90.882	-37.950	1.00	42.81	A16S
ATOM	34466	O2'	URI	740	147.903	104.202	-37.621	1.00	36.93	A16S	ATOM	34519	C4'	GUA	743	151.529	90.056	-38.843	1.00	42.81	A16S
ATOM	34467	C3'	URI	740	148.624	105.084	-39.777	1.00	36.93	A16S	ATOM	34520	O4'	GUA	743	150.256	90.727	-39.070	1.00	42.81	A16S
ATOM	34468	O3'	URI	740	149.958	105.026	-39.290	1.00	36.93	A16S	ATOM	34521	C1'	GUA	743	149.638	90.152	-40.214	1.00	42.81	A16S

ATOM	34522	N9	GUA	743	149.387	91.183	-41.205	1.00	58.45	A16S	ATOM	34575	C5	CYT	745	154.890	91.919	-46.334	1.00	35.97	A16S
ATOM	34523	C4	GUA	743	148.644	91.008	-42.335	1.00	58.45	A16S	ATOM	34576	C2'	CYT	745	154.906	91.591	-50.877	1.00	51.12	A16S
ATOM	34524	N3	GUA	743	147.956	89.895	-42.654	1.00	58.45	A16S	ATOM	34577	O2'	CYT	745	154.401	91.771	-52.182	1.00	51.12	A16S
ATOM	34525	C2	GUA	743	147.364	90.001	-43.823	1.00	58.45	A16S	ATOM	34578	C3'	CYT	745	155.265	90.148	-50.586	1.00	51.12	A16S
ATOM	34526	N2	GUA	743	146.611	88.987	-44.274	1.00	58.45	A16S	ATOM	34579	O3'	CYT	745	155.912	89.537	-51.683	1.00	51.12	A16S
ATOM	34527	N1	GUA	743	147.461	91.112	-44.631	1.00	58.45	A16S	ATOM	34580	P	GUA	746	157.505	89.363	-51.660	1.00	52.86	A16S
ATOM	34528	C6	GUA	743	148.171	92.270	-44.319	1.00	58.45	A16S	ATOM	34581	O1P	GUA	746	157.845	88.445	-52.778	1.00	37.14	A16S
ATOM	34529	O6	GUA	743	148.206	93.217	-45.123	1.00	58.45	A16S	ATOM	34582	O2P	GUA	746	157.929	89.018	-50.274	1.00	37.14	A16S
ATOM	34530	C5	GUA	743	148.786	92.172	-43.053	1.00	58.45	A16S	ATOM	34583	O5'	GUA	746	158.028	90.818	-52.023	1.00	52.86	A16S
ATOM	34531	N7	GUA	743	149.560	93.087	-42.355	1.00	58.45	A16S	ATOM	34584	C5'	GUA	746	157.637	91.418	-53.244	1.00	52.86	A16S
ATOM	34532	C8	GUA	743	149.882	92.459	-41.256	1.00	58.45	A16S	ATOM	34585	C4'	GUA	746	157.854	92.906	-53.191	1.00	52.86	A16S
ATOM	34533	C2'	GUA	743	150.658	89.182	-40.811	1.00	42.81	A16S	ATOM	34586	O4'	GUA	746	157.093	93.480	-52.100	1.00	52.86	A16S
ATOM	34534	O2'	GUA	743	150.409	87.872	-40.336	1.00	42.81	A16S	ATOM	34587	C1'	GUA	746	157.693	94.699	-51.706	1.00	52.86	A16S
ATOM	34535	C3'	GUA	743	151.956	89.760	-40.266	1.00	42.81	A16S	ATOM	34588	N9	GUA	746	157.955	94.637	-50.277	1.00	37.14	A16S
ATOM	34536	O3'	GUA	743	153.000	88.808	-40.363	1.00	42.81	A16S	ATOM	34589	C4	GUA	746	158.467	95.653	-49.510	1.00	37.14	A16S
ATOM	34537	P	GUA	744	153.950	88.814	-41.668	1.00	55.30	A16S	ATOM	34590	N3	GUA	746	158.807	96.877	-49.954	1.00	37.14	A16S
ATOM	34538	O1P	GUA	744	154.663	87.516	-41.708	1.00	43.03	A16S	ATOM	34591	C2	GUA	746	159.261	97.645	-48.984	1.00	37.14	A16S
ATOM	34539	O2P	GUA	744	154.729	90.075	-41.704	1.00	43.03	A16S	ATOM	34592	N2	GUA	746	159.628	98.899	-49.257	1.00	37.14	A16S
ATOM	34540	O5'	GUA	744	152.943	88.847	-42.900	1.00	55.30	A16S	ATOM	34593	N1	GUA	746	159.387	97.241	-47.677	1.00	37.14	A16S
ATOM	34541	C5'	GUA	744	152.344	87.659	-43.386	1.00	55.30	A16S	ATOM	34594	C6	GUA	746	159.055	95.977	-47.198	1.00	37.14	A16S
ATOM	34542	C4'	GUA	744	151.688	87.935	-44.706	1.00	55.30	A16S	ATOM	34595	O6	GUA	746	159.229	95.701	-45.993	1.00	37.14	A16S
ATOM	34543	O4'	GUA	744	150.785	89.059	-44.539	1.00	55.30	A16S	ATOM	34596	C5	GUA	746	158.548	95.146	-48.234	1.00	37.14	A16S
ATOM	34544	C1'	GUA	744	150.830	89.887	-45.689	1.00	55.30	A16S	ATOM	34597	N7	GUA	746	158.095	93.832	-48.198	1.00	37.14	A16S
ATOM	34545	N9	GUA	744	151.396	91.172	-45.297	1.00	43.03	A16S	ATOM	34598	C8	GUA	746	157.754	93.572	-49.432	1.00	37.14	A16S
ATOM	34546	C4	GUA	744	151.472	92.291	-46.082	1.00	43.03	A16S	ATOM	34599	C2'	GUA	746	158.988	94.829	-52.502	1.00	52.86	A16S
ATOM	34547	N3	GUA	744	151.035	92.391	-47.353	1.00	43.03	A16S	ATOM	34600	O2'	GUA	746	158.781	95.654	-53.630	1.00	52.86	A16S
ATOM	34548	C2	GUA	744	151.247	93.592	-47.851	1.00	43.03	A16S	ATOM	34601	C3'	GUA	746	159.249	93.377	-52.865	1.00	52.86	A16S
ATOM	34549	N2	GUA	744	150.868	93.864	-49.106	1.00	43.03	A16S	ATOM	34602	O3'	GUA	746	160.099	93.268	-53.984	1.00	52.86	A16S
ATOM	34550	N1	GUA	744	151.843	94.617	-47.157	1.00	43.03	A16S	ATOM	34603	P	CYT	747	161.675	93.077	-53.756	1.00	39.87	A16S
ATOM	34551	C6	GUA	744	152.299	94.538	-45.846	1.00	43.03	A16S	ATOM	34604	O1P	CYT	747	162.274	92.851	-55.104	1.00	34.28	A16S
ATOM	34552	O6	GUA	744	152.821	95.533	-45.306	1.00	43.03	A16S	ATOM	34605	O2P	CYT	747	161.849	92.049	-52.682	1.00	34.28	A16S
ATOM	34553	C5	GUA	744	152.077	93.248	-45.299	1.00	43.03	A16S	ATOM	34606	O5'	CYT	747	162.150	94.506	-53.230	1.00	39.87	A16S
ATOM	34554	N7	GUA	744	152.380	92.737	-44.045	1.00	43.03	A16S	ATOM	34607	C5'	CYT	747	162.053	95.631	-54.079	1.00	39.87	A16S
ATOM	34555	C8	GUA	744	151.958	91.504	-44.089	1.00	43.03	A16S	ATOM	34608	C4'	CYT	747	162.428	96.878	-53.344	1.00	39.87	A16S
ATOM	34556	C2'	GUA	744	151.708	89.176	-46.713	1.00	55.30	A16S	ATOM	34609	O4'	CYT	747	161.535	97.063	-52.229	1.00	39.87	A16S
ATOM	34557	O2'	GUA	744	150.909	88.342	-47.522	1.00	55.30	A16S	ATOM	34610	C1'	CYT	747	162.220	97.691	-51.169	1.00	39.87	A16S
ATOM	34558	C3'	GUA	744	152.634	88.394	-45.797	1.00	55.30	A16S	ATOM	34611	N1	CYT	747	162.183	96.780	-50.025	1.00	34.28	A16S
ATOM	34559	O3'	GUA	744	153.181	87.278	-46.464	1.00	55.30	A16S	ATOM	34612	C6	CYT	747	161.748	95.493	-50.170	1.00	34.28	A16S
ATOM	34560	P	CYT	745	154.610	87.406	-47.172	1.00	51.12	A16S	ATOM	34613	C2	CYT	747	162.617	97.244	-48.783	1.00	34.28	A16S
ATOM	34561	O1P	CYT	745	154.801	86.160	-47.980	1.00	35.97	A16S	ATOM	34614	O2	CYT	747	162.956	98.435	-48.675	1.00	34.28	A16S
ATOM	34562	O2P	CYT	745	155.607	87.787	-46.133	1.00	35.97	A16S	ATOM	34615	N3	CYT	747	162.651	96.387	-47.734	1.00	34.28	A16S
ATOM	34563	O5'	CYT	745	154.426	88.584	-48.226	1.00	51.12	A16S	ATOM	34616	C4	CYT	747	162.261	95.123	-47.895	1.00	34.28	A16S
ATOM	34564	C5'	CYT	745	153.905	88.296	-49.516	1.00	51.12	A16S	ATOM	34617	N4	CYT	747	162.362	94.307	-46.858	1.00	34.28	A16S
ATOM	34565	C4'	CYT	745	153.904	89.533	-50.359	1.00	51.12	A16S	ATOM	34618	C5	CYT	747	161.765	94.640	-49.139	1.00	34.28	A16S
ATOM	34566	O4'	CYT	745	153.181	90.558	-49.644	1.00	51.12	A16S	ATOM	34619	C2'	CYT	747	163.646	97.944	-51.654	1.00	39.87	A16S
ATOM	34567	C1'	CYT	745	153.789	91.812	-49.863	1.00	51.12	A16S	ATOM	34620	O2'	CYT	747	163.753	99.226	-52.235	1.00	39.87	A16S
ATOM	34568	N1	CYT	745	154.304	92.298	-48.579	1.00	35.97	A16S	ATOM	34621	C3'	CYT	747	163.791	96.863	-52.707	1.00	39.87	A16S
ATOM	34569	C6	CYT	745	154.405	91.471	-47.495	1.00	35.97	A16S	ATOM	34622	O3'	CYT	747	164.762	97.228	-53.668	1.00	39.87	A16S
ATOM	34570	C2	CYT	745	154.702	93.625	-48.490	1.00	35.97	A16S	ATOM	34623	P	GUA	748	166.235	96.618	-53.558	1.00	39.52	A16S
ATOM	34571	O2	CYT	745	154.593	94.349	-49.498	1.00	35.97	A16S	ATOM	34624	O1P	GUA	748	167.091	97.314	-54.547	1.00	29.88	A16S
ATOM	34572	N3	CYT	745	155.195	94.091	-47.326	1.00	35.97	A16S	ATOM	34625	O2P	GUA	748	166.068	95.153	-53.632	1.00	29.88	A16S
ATOM	34573	C4	CYT	745	155.288	93.286	-46.276	1.00	35.97	A16S	ATOM	34626	O5'	GUA	748	166.702	97.033	-52.093	1.00	39.52	A16S
ATOM	34574	N4	CYT	745	155.766	93.801	-45.143	1.00	35.97	A16S	ATOM	34627	C5'	GUA	748	167.154	98.352	-51.840	1.00	39.52	A16S

ATOM	34628	C4'	GUA	748	167.373	98.551	-50.367	1.00	39.52	A16S	ATOM	34681	C6	ADE	750	175.531	94.299	-45.324	1.00	37.96	A16S
ATOM	34629	O4'	GUA	748	166.166	98.166	-49.658	1.00	39.52	A16S	ATOM	34682	N6	ADE	750	174.378	93.686	-45.544	1.00	37.96	A16S
ATOM	34630	C1'	GUA	748	166.512	97.618	-48.397	1.00	39.52	A16S	ATOM	34683	C5	ADE	750	176.028	95.303	-46.142	1.00	37.96	A16S
ATOM	34631	N9	GUA	748	166.054	96.242	-48.400	1.00	29.88	A16S	ATOM	34684	N7	ADE	750	175.539	95.885	-47.299	1.00	37.96	A16S
ATOM	34632	C4	GUA	748	165.988	95.396	-47.326	1.00	29.88	A16S	ATOM	34685	C8	ADE	750	176.448	96.778	-47.613	1.00	37.96	A16S
ATOM	34633	N3	GUA	748	166.333	95.698	-46.060	1.00	29.88	A16S	ATOM	34686	C2'	ADE	750	179.843	96.932	-47.512	1.00	52.20	A16S
ATOM	34634	C2	GUA	748	166.148	94.677	-45.241	1.00	29.88	A16S	ATOM	34687	O2'	ADE	750	181.090	97.474	-47.113	1.00	52.20	A16S
ATOM	34635	N2	GUA	748	166.402	94.821	-43.933	1.00	29.88	A16S	ATOM	34688	C3'	ADE	750	179.559	97.214	-48.975	1.00	52.20	A16S
ATOM	34636	N1	GUA	748	165.682	93.449	-45.645	1.00	29.88	A16S	ATOM	34689	O3'	ADE	750	180.745	97.103	-49.736	1.00	52.20	A16S
ATOM	34637	C6	GUA	748	165.308	93.128	-46.948	1.00	29.88	A16S	ATOM	34690	P	ADE	751	181.030	95.771	-50.582	1.00	33.60	A16S
ATOM	34638	O6	GUA	748	164.855	92.003	-47.208	1.00	29.88	A16S	ATOM	34691	O1P	ADE	751	182.281	96.091	-51.304	1.00	37.72	A16S
ATOM	34639	C5	GUA	748	165.498	94.214	-47.824	1.00	29.88	A16S	ATOM	34692	O2P	ADE	751	179.789	95.371	-51.349	1.00	37.72	A16S
ATOM	34640	N7	GUA	748	165.264	94.314	-49.188	1.00	29.88	A16S	ATOM	34693	O5'	ADE	751	181.351	94.672	-49.480	1.00	33.60	A16S
ATOM	34641	C8	GUA	748	165.608	95.535	-49.486	1.00	29.88	A16S	ATOM	34694	C5'	ADE	751	182.481	94.833	-48.629	1.00	33.60	A16S
ATOM	34642	C2'	GUA	748	168.035	97.706	-48.263	1.00	39.52	A16S	ATOM	34695	C4'	ADE	751	182.373	93.924	-47.434	1.00	33.60	A16S
ATOM	34643	O2'	GUA	748	168.409	98.909	-47.619	1.00	39.52	A16S	ATOM	34696	O4'	ADE	751	181.183	94.273	-46.703	1.00	33.60	A16S
ATOM	34644	C3'	GUA	748	168.463	97.708	-49.724	1.00	39.52	A16S	ATOM	34697	C1'	ADE	751	180.591	93.105	-46.181	1.00	33.60	A16S
ATOM	34645	O3'	GUA	748	169.709	98.368	-49.834	1.00	39.52	A16S	ATOM	34698	N9	ADE	751	179.296	92.948	-46.825	1.00	37.72	A16S
ATOM	34646	P	ADE	749	170.883	97.700	-50.680	1.00	40.92	A16S	ATOM	34699	C4	ADE	751	178.310	92.082	-46.436	1.00	37.72	A16S
ATOM	34647	O1P	ADE	749	170.551	97.991	-52.085	1.00	31.92	A16S	ATOM	34700	N3	ADE	751	178.348	91.222	-45.407	1.00	37.72	A16S
ATOM	34648	O2P	ADE	749	171.068	96.272	-50.232	1.00	31.92	A16S	ATOM	34701	C2	ADE	751	177.212	90.536	-45.338	1.00	37.72	A16S
ATOM	34649	O5'	ADE	749	172.160	98.559	-50.259	1.00	40.92	A16S	ATOM	34702	N1	ADE	751	176.128	90.606	-46.127	1.00	37.72	A16S
ATOM	34650	C5'	ADE	749	172.169	99.967	-50.415	1.00	40.92	A16S	ATOM	34703	C6	ADE	751	176.138	91.482	-47.157	1.00	37.72	A16S
ATOM	34651	C4'	ADE	749	173.309	100.587	-49.629	1.00	40.92	A16S	ATOM	34704	N6	ADE	751	175.081	91.544	-47.963	1.00	37.72	A16S
ATOM	34652	O4'	ADE	749	173.010	100.659	-48.211	1.00	40.92	A16S	ATOM	34705	C5	ADE	751	177.272	92.270	-47.327	1.00	37.72	A16S
ATOM	34653	C1'	ADE	749	174.233	100.755	-47.490	1.00	40.92	A16S	ATOM	34706	N7	ADE	751	177.595	93.240	-48.261	1.00	37.72	A16S
ATOM	34654	N9	ADE	749	174.283	99.722	-46.464	1.00	31.92	A16S	ATOM	34707	C8	ADE	751	178.806	93.612	-47.921	1.00	37.72	A16S
ATOM	34655	C4	ADE	749	175.265	99.649	-45.508	1.00	31.92	A16S	ATOM	34708	C2'	ADE	751	181.520	91.937	-46.494	1.00	33.60	A16S
ATOM	34656	N3	ADE	749	176.296	100.496	-45.339	1.00	31.92	A16S	ATOM	34709	O2'	ADE	751	182.387	91.711	-45.401	1.00	33.60	A16S
ATOM	34657	C2	ADE	749	177.063	100.103	-44.327	1.00	31.92	A16S	ATOM	34710	C3'	ADE	751	182.212	92.448	-47.748	1.00	33.60	A16S
ATOM	34658	N1	ADE	749	176.926	99.044	-43.530	1.00	31.92	A16S	ATOM	34711	O3'	ADE	751	183.484	91.839	-47.948	1.00	33.60	A16S
ATOM	34659	C6	ADE	749	175.880	98.214	-43.728	1.00	31.92	A16S	ATOM	34712	P	GUA	752	183.658	90.710	-49.070	1.00	35.80	A16S
ATOM	34660	N6	ADE	749	175.760	97.147	-42.937	1.00	31.92	A16S	ATOM	34713	O1P	GUA	752	184.969	90.078	-48.846	1.00	31.49	A16S
ATOM	34661	C5	ADE	749	174.987	98.524	-44.763	1.00	31.92	A16S	ATOM	34714	O2P	GUA	752	183.352	91.307	-50.388	1.00	31.49	A16S
ATOM	34662	N7	ADE	749	173.834	97.907	-45.226	1.00	31.92	A16S	ATOM	34715	O5'	GUA	752	182.557	89.634	-48.688	1.00	35.80	A16S
ATOM	34663	C8	ADE	749	173.457	98.659	-46.236	1.00	31.92	A16S	ATOM	34716	C5'	GUA	752	182.722	88.870	-47.524	1.00	35.80	A16S
ATOM	34664	C2'	ADE	749	175.366	100.541	-48.486	1.00	40.92	A16S	ATOM	34717	C4'	GUA	752	181.483	88.080	-47.238	1.00	35.80	A16S
ATOM	34665	O2'	ADE	749	175.916	101.778	-48.868	1.00	40.92	A16S	ATOM	34718	O4'	GUA	752	180.344	88.974	-47.146	1.00	35.80	A16S
ATOM	34666	C3'	ADE	749	174.630	99.847	-49.617	1.00	40.92	A16S	ATOM	34719	C1'	GUA	752	179.159	88.256	-47.454	1.00	35.80	A16S
ATOM	34667	O3'	ADE	749	175.349	99.953	-50.824	1.00	40.92	A16S	ATOM	34720	N9	GUA	752	178.495	88.951	-48.546	1.00	31.49	A16S
ATOM	34668	P	ADE	750	176.070	98.647	-51.407	1.00	52.20	A16S	ATOM	34721	C4	GUA	752	177.337	88.576	-49.172	1.00	31.49	A16S
ATOM	34669	O1P	ADE	750	176.737	99.084	-52.661	1.00	37.96	A16S	ATOM	34722	N3	GUA	752	176.585	87.495	-48.872	1.00	31.49	A16S
ATOM	34670	O2P	ADE	750	175.054	97.564	-51.442	1.00	37.96	A16S	ATOM	34723	C2	GUA	752	175.513	87.408	-49.642	1.00	31.49	A16S
ATOM	34671	O5'	ADE	750	177.169	98.275	-50.307	1.00	52.20	A16S	ATOM	34724	N2	GUA	752	174.656	86.397	-49.468	1.00	31.49	A16S
ATOM	34672	C5'	ADE	750	178.287	99.133	-50.089	1.00	52.20	A16S	ATOM	34725	N1	GUA	752	175.210	88.305	-50.635	1.00	31.49	A16S
ATOM	34673	C4'	ADE	750	179.112	98.659	-48.922	1.00	52.20	A16S	ATOM	34726	C6	GUA	752	175.987	89.417	-50.965	1.00	31.49	A16S
ATOM	34674	O4'	ADE	750	178.343	98.754	-47.699	1.00	52.20	A16S	ATOM	34727	O6	GUA	752	175.649	90.161	-51.895	1.00	31.49	A16S
ATOM	34675	C1'	ADE	750	178.680	97.672	-46.846	1.00	52.20	A16S	ATOM	34728	C5	GUA	752	177.122	89.528	-50.137	1.00	31.49	A16S
ATOM	34676	N9	ADE	750	177.505	96.813	-46.747	1.00	37.96	A16S	ATOM	34729	N7	GUA	752	178.120	90.489	-50.113	1.00	31.49	A16S
ATOM	34677	C4	ADE	750	177.238	95.863	-45.788	1.00	37.96	A16S	ATOM	34730	C8	GUA	752	178.912	90.105	-49.155	1.00	31.49	A16S
ATOM	34678	N3	ADE	750	177.994	95.528	-44.732	1.00	37.96	A16S	ATOM	34731	C2'	GUA	752	179.610	86.845	-47.836	1.00	35.80	A16S
ATOM	34679	C2	ADE	750	177.417	94.557	-44.035	1.00	37.96	A16S	ATOM	34732	O2'	GUA	752	179.634	86.044	-46.673	1.00	35.80	A16S
ATOM	34680	N1	ADE	750	176.262	93.938	-44.254	1.00	37.96	A16S	ATOM	34733	C3'	GUA	752	181.026	87.122	-48.308	1.00	35.80	A16S

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ATOM  34734  O3' GUA  752     181.819  85.958 -48.288  1.00 35.80      A16S
ATOM  34735  P   CYT  753     182.355  85.352 -49.672  1.00 47.16      A16S
ATOM  34736  O1P CYT  753     183.556  84.542 -49.346  1.00 39.84      A16S
ATOM  34737  O2P CYT  753     182.450  86.435 -50.681  1.00 39.84      A16S
ATOM  34738  O5' CYT  753     181.169  84.395 -50.123  1.00 47.16      A16S
ATOM  34739  C5' CYT  753     180.654  83.427 -49.231  1.00 47.16      A16S
ATOM  34740  C4' CYT  753     179.310  82.944 -49.709  1.00 47.16      A16S
ATOM  34741  O4' CYT  753     178.384  84.054 -49.779  1.00 47.16      A16S
ATOM  34742  C1' CYT  753     177.336  83.707 -50.673  1.00 47.16      A16S
ATOM  34743  N1  CYT  753     177.105  84.809 -51.609  1.00 39.84      A16S
ATOM  34744  C6  CYT  753     177.958  85.868 -51.706  1.00 39.84      A16S
ATOM  34745  C2  CYT  753     175.969  84.755 -52.388  1.00 39.84      A16S
ATOM  34746  O2  CYT  753     175.237  83.756 -52.285  1.00 39.84      A16S
ATOM  34747  N3  CYT  753     175.689  85.778 -53.227  1.00 39.84      A16S
ATOM  34748  C4  CYT  753     176.505  86.821 -53.289  1.00 39.84      A16S
ATOM  34749  N4  CYT  753     176.169  87.817 -54.081  1.00 39.84      A16S
ATOM  34750  C5  CYT  753     177.694  86.889 -52.528  1.00 39.84      A16S
ATOM  34751  C2' CYT  753     177.738  82.413 -51.376  1.00 47.16      A16S
ATOM  34752  O2' CYT  753     177.102  81.313 -50.760  1.00 47.16      A16S
ATOM  34753  C3' CYT  753     179.236  82.413 -51.129  1.00 47.16      A16S
ATOM  34754  O3' CYT  753     179.756  81.108 -51.249  1.00 47.16      A16S
ATOM  34755  P   GUA  754     180.446  80.679 -52.619  1.00 47.57      A16S
ATOM  34756  O1P GUA  754     181.124  79.394 -52.342  1.00 43.74      A16S
ATOM  34757  O2P GUA  754     181.221  81.841 -53.116  1.00 43.74      A16S
ATOM  34758  O5' GUA  754     179.224  80.455 -53.612  1.00 47.57      A16S
ATOM  34759  C5' GUA  754     178.341  79.354 -53.440  1.00 47.57      A16S
ATOM  34760  C4' GUA  754     177.317  79.325 -54.551  1.00 47.57      A16S
ATOM  34761  O4' GUA  754     176.438  80.475 -54.428  1.00 47.57      A16S
ATOM  34762  C1' GUA  754     175.953  80.837 -55.711  1.00 47.57      A16S
ATOM  34763  N9  GUA  754     176.247  82.247 -55.932  1.00 43.74      A16S
ATOM  34764  C4  GUA  754     175.679  83.053 -56.880  1.00 43.74      A16S
ATOM  34765  N3  GUA  754     174.753  82.679 -57.781  1.00 43.74      A16S
ATOM  34766  C2  GUA  754     174.386  83.680 -58.554  1.00 43.74      A16S
ATOM  34767  N2  GUA  754     173.472  83.481 -59.501  1.00 43.74      A16S
ATOM  34768  N1  GUA  754     174.888  84.947 -58.455  1.00 43.74      A16S
ATOM  34769  C6  GUA  754     175.855  85.352 -57.542  1.00 43.74      A16S
ATOM  34770  O6  GUA  754     176.261  86.526 -57.545  1.00 43.74      A16S
ATOM  34771  C5  GUA  754     176.252  84.288 -56.702  1.00 43.74      A16S
ATOM  34772  N7  GUA  754     177.170  84.259 -55.665  1.00 43.74      A16S
ATOM  34773  C8  GUA  754     177.134  83.027 -55.239  1.00 43.74      A16S
ATOM  34774  C2' GUA  754     176.615  79.907 -56.729  1.00 47.57      A16S
ATOM  34775  O2' GUA  754     175.758  78.825 -57.012  1.00 47.57      A16S
ATOM  34776  C3' GUA  754     177.854  79.464 -55.965  1.00 47.57      A16S
ATOM  34777  O3' GUA  754     178.385  78.249 -56.474  1.00 47.57      A16S
ATOM  34778  P   URI  755     179.581  78.306 -57.549  1.00 55.90      A16S
ATOM  34779  O1P URI  755     180.106  76.921 -57.636  1.00 54.40      A16S
ATOM  34780  O2P URI  755     180.498  79.417 -57.197  1.00 54.40      A16S
ATOM  34781  O5' URI  755     178.865  78.719 -58.909  1.00 55.90      A16S
ATOM  34782  C5' URI  755     177.992  77.819 -59.568  1.00 55.90      A16S
ATOM  34783  C4' URI  755     177.410  78.468 -60.793  1.00 55.90      A16S
ATOM  34784  O4' URI  755     176.537  79.555 -60.387  1.00 55.90      A16S
ATOM  34785  C1' URI  755     176.575  80.584 -61.364  1.00 55.90      A16S
ATOM  34786  N1  URI  755     177.105  81.794 -60.732  1.00 54.40      A16S
ATOM  34787  C6  URI  755     177.872  81.727 -59.605  1.00 54.40      A16S
ATOM  34788  C2  URI  755     176.822  83.004 -61.327  1.00 54.40      A16S
ATOM  34789  O2  URI  755     176.121  83.106 -62.308  1.00 54.40      A16S
ATOM  34790  N3  URI  755     177.388  84.096 -60.728  1.00 54.40      A16S
ATOM  34791  C4  URI  755     178.182  84.099 -59.618  1.00 54.40      A16S
ATOM  34792  O4  URI  755     178.655  85.154 -59.230  1.00 54.40      A16S
ATOM  34793  C5  URI  755     178.411  82.812 -59.039  1.00 54.40      A16S
ATOM  34794  C2' URI  755     177.510  80.104 -62.475  1.00 55.90      A16S
ATOM  34795  O2' URI  755     176.766  79.443 -63.480  1.00 55.90      A16S
ATOM  34796  C3' URI  755     178.412  79.158 -61.698  1.00 55.90      A16S
ATOM  34797  O3' URI  755     179.128  78.258 -62.531  1.00 55.90      A16S
ATOM  34798  P   GUA  756     180.661  78.580 -62.894  1.00 70.88      A16S
ATOM  34799  O1P GUA  756     181.235  77.361 -63.511  1.00 62.79      A16S
ATOM  34800  O2P GUA  756     181.329  79.183 -61.721  1.00 62.79      A16S
ATOM  34801  O5' GUA  756     180.559  79.714 -64.004  1.00 70.88      A16S
ATOM  34802  C5' GUA  756     179.754  79.509 -65.151  1.00 70.88      A16S
ATOM  34803  C4' GUA  756     179.438  80.819 -65.818  1.00 70.88      A16S
ATOM  34804  O4' GUA  756     178.604  81.643 -64.955  1.00 70.88      A16S
ATOM  34805  C1' GUA  756     178.807  83.012 -65.291  1.00 70.88      A16S
ATOM  34806  N9  GUA  756     179.281  83.739 -64.115  1.00 62.79      A16S
ATOM  34807  C4  GUA  756     179.288  85.104 -63.970  1.00 62.79      A16S
ATOM  34808  N3  GUA  756     178.808  85.991 -64.860  1.00 62.79      A16S
ATOM  34809  C2  GUA  756     178.970  87.234 -64.454  1.00 62.79      A16S
ATOM  34810  N2  GUA  756     178.532  88.238 -65.221  1.00 62.79      A16S
ATOM  34811  N1  GUA  756     179.567  87.582 -63.271  1.00 62.79      A16S
ATOM  34812  C6  GUA  756     180.077  86.685 -62.342  1.00 62.79      A16S
ATOM  34813  O6  GUA  756     180.615  87.106 -61.313  1.00 62.79      A16S
ATOM  34814  C5  GUA  756     179.894  85.343 -62.759  1.00 62.79      A16S
ATOM  34815  N7  GUA  756     180.236  84.151 -62.136  1.00 62.79      A16S
ATOM  34816  C8  GUA  756     179.845  83.226 -62.972  1.00 62.79      A16S
ATOM  34817  C2' GUA  756     179.878  83.037 -66.388  1.00 70.88      A16S
ATOM  34818  O2' GUA  756     179.270  83.038 -67.665  1.00 70.88      A16S
ATOM  34819  C3' GUA  756     180.610  81.734 -66.107  1.00 70.88      A16S
ATOM  34820  O3' GUA  756     181.372  81.305 -67.225  1.00 70.88      A16S
ATOM  34821  P   GUA  757     182.957  81.617 -67.281  1.00 71.60      A16S
ATOM  34822  O1P GUA  757     183.391  80.992 -68.557  1.00 55.80      A16S
ATOM  34823  O2P GUA  757     183.628  81.217 -66.011  1.00 55.80      A16S
ATOM  34824  O5' GUA  757     183.043  83.204 -67.428  1.00 71.60      A16S
ATOM  34825  C5' GUA  757     182.513  83.825 -68.586  1.00 71.60      A16S
ATOM  34826  C4' GUA  757     182.472  85.328 -68.440  1.00 71.60      A16S
ATOM  34827  O4' GUA  757     181.703  85.717 -67.274  1.00 71.60      A16S
ATOM  34828  C1' GUA  757     182.029  87.062 -66.947  1.00 71.60      A16S
ATOM  34829  N9  GUA  757     182.417  87.146 -65.543  1.00 55.80      A16S
ATOM  34830  C4  GUA  757     182.519  88.305 -64.816  1.00 55.80      A16S
ATOM  34831  N3  GUA  757     182.248  89.548 -65.268  1.00 55.80      A16S
ATOM  34832  C2  GUA  757     182.458  90.469 -64.345  1.00 55.80      A16S
ATOM  34833  N2  GUA  757     182.240  91.756 -64.634  1.00 55.80      A16S
ATOM  34834  N1  GUA  757     182.898  90.193 -63.071  1.00 55.80      A16S
ATOM  34835  C6  GUA  757     183.177  88.918 -62.580  1.00 55.80      A16S
ATOM  34836  O6  GUA  757     183.559  88.776 -61.414  1.00 55.80      A16S
ATOM  34837  C5  GUA  757     182.960  87.918 -63.569  1.00 55.80      A16S
ATOM  34838  N7  GUA  757     183.121  86.539 -63.509  1.00 55.80      A16S
ATOM  34839  C8  GUA  757     182.780  86.123 -64.701  1.00 55.80      A16S
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ATOM  34840  C2' GUA  757     183.206  87.450 -67.840  1.00 71.60      A16S
ATOM  34841  O2' GUA  757     182.740  88.116 -68.990  1.00 71.60      A16S
ATOM  34842  C3' GUA  757     183.759  86.085 -68.200  1.00 71.60      A16S
ATOM  34843  O3' GUA  757     184.537  86.215 -69.366  1.00 71.60      A16S
ATOM  34844  P   GUA  758     186.083  86.625 -69.236  1.00 53.29      A16S
ATOM  34845  O1P GUA  758     186.552  86.820 -70.636  1.00 51.66      A16S
ATOM  34846  O2P GUA  758     186.803  85.678 -68.335  1.00 51.66      A16S
ATOM  34847  O5' GUA  758     186.065  88.044 -68.517  1.00 53.29      A16S
ATOM  34848  C5' GUA  758     185.620  89.196 -69.207  1.00 53.29      A16S
ATOM  34849  C4' GUA  758     185.713  90.396 -68.310  1.00 53.29      A16S
ATOM  34850  O4' GUA  758     184.915  90.150 -67.126  1.00 53.29      A16S
ATOM  34851  C1' GUA  758     185.507  90.795 -66.015  1.00 53.29      A16S
ATOM  34852  N9  GUA  758     185.848  89.784 -65.027  1.00 51.66      A16S
ATOM  34853  C4  GUA  758     186.189  90.025 -63.729  1.00 51.66      A16S
ATOM  34854  N3  GUA  758     186.254  91.236 -63.152  1.00 51.66      A16S
ATOM  34855  C2  GUA  758     186.603  91.161 -61.889  1.00 51.66      A16S
ATOM  34856  N2  GUA  758     186.701  92.291 -61.171  1.00 51.66      A16S
ATOM  34857  N1  GUA  758     186.878  89.981 -61.241  1.00 51.66      A16S
ATOM  34858  C6  GUA  758     186.820  88.718 -61.823  1.00 51.66      A16S
ATOM  34859  O6  GUA  758     187.096  87.712 -61.153  1.00 51.66      A16S
ATOM  34860  C5  GUA  758     186.434  88.793 -63.178  1.00 51.66      A16S
ATOM  34861  N7  GUA  758     186.244  87.791 -64.116  1.00 51.66      A16S
ATOM  34862  C8  GUA  758     185.899  88.427 -65.200  1.00 51.66      A16S
ATOM  34863  C2' GUA  758     186.743  91.525 -66.527  1.00 53.29      A16S
ATOM  34864  O2' GUA  758     186.369  92.830 -66.887  1.00 53.29      A16S
ATOM  34865  C3' GUA  758     187.089  90.684 -67.743  1.00 53.29      A16S
ATOM  34866  O3' GUA  758     187.888  91.406 -68.664  1.00 53.29      A16S
ATOM  34867  P   GUA  759     189.484  91.364 -68.525  1.00 59.58      A16S
ATOM  34868  O1P GUA  759     189.912  89.947 -68.425  1.00 47.66      A16S
ATOM  34869  O2P GUA  759     190.035  92.233 -69.587  1.00 47.66      A16S
ATOM  34870  O5' GUA  759     189.786  92.012 -67.105  1.00 59.58      A16S
ATOM  34871  C5' GUA  759     189.557  93.396 -66.853  1.00 59.58      A16S
ATOM  34872  C4' GUA  759     189.948  93.730 -65.430  1.00 59.58      A16S
ATOM  34873  O4' GUA  759     189.140  92.955 -64.511  1.00 59.58      A16S
ATOM  34874  C1' GUA  759     189.894  92.648 -63.353  1.00 59.58      A16S
ATOM  34875  N9  GUA  759     189.921  91.204 -63.210  1.00 47.66      A16S
ATOM  34876  C4  GUA  759     190.110  90.492 -62.054  1.00 47.66      A16S
ATOM  34877  N3  GUA  759     190.325  91.009 -60.827  1.00 47.66      A16S
ATOM  34878  C2  GUA  759     190.462  90.051 -59.913  1.00 47.66      A16S
ATOM  34879  N2  GUA  759     190.691  90.357 -58.622  1.00 47.66      A16S
ATOM  34880  N1  GUA  759     190.385  88.714 -60.194  1.00 47.66      A16S
ATOM  34881  C6  GUA  759     190.157  88.177 -61.449  1.00 47.66      A16S
ATOM  34882  O6  GUA  759     190.092  86.961 -61.590  1.00 47.66      A16S
ATOM  34883  C5  GUA  759     190.019  89.171 -62.424  1.00 47.66      A16S
ATOM  34884  N7  GUA  759     189.785  89.055 -63.782  1.00 47.66      A16S
ATOM  34885  C8  GUA  759     189.738  90.286 -64.207  1.00 47.66      A16S
ATOM  34886  C2' GUA  759     191.266  93.285 -63.527  1.00 59.58      A16S
ATOM  34887  O2' GUA  759     191.194  94.560 -62.935  1.00 59.58      A16S
ATOM  34888  C3' GUA  759     191.370  93.373 -65.041  1.00 59.58      A16S
ATOM  34889  O3' GUA  759     192.206  94.449 -65.419  1.00 59.58      A16S
ATOM  34890  P   ADE  760     193.769  94.204 -65.692  1.00 51.57      A16S
ATOM  34891  O1P ADE  760     194.199  92.911 -65.111  1.00 45.36      A16S
ATOM  34892  O2P ADE  760     193.980  94.459 -67.138  1.00 45.36      A16S
ATOM  34893  O5' ADE  760     194.431  95.387 -64.856  1.00 51.57      A16S
ATOM  34894  C5' ADE  760     195.320  96.296 -65.474  1.00 51.57      A16S
ATOM  34895  C4' ADE  760     194.961  97.723 -65.131  1.00 51.57      A16S
ATOM  34896  O4' ADE  760     193.542  97.930 -65.330  1.00 51.57      A16S
ATOM  34897  C1' ADE  760     193.125  99.039 -64.556  1.00 51.57      A16S
ATOM  34898  N9  ADE  760     192.111  98.592 -63.613  1.00 45.36      A16S
ATOM  34899  C4  ADE  760     191.407  99.415 -62.773  1.00 45.36      A16S
ATOM  34900  N3  ADE  760     191.511 100.752 -62.671  1.00 45.36      A16S
ATOM  34901  C2  ADE  760     190.680 101.212 -61.746  1.00 45.36      A16S
ATOM  34902  N1  ADE  760     189.824 100.536 -60.966  1.00 45.36      A16S
ATOM  34903  C6  ADE  760     189.753  99.193 -61.090  1.00 45.36      A16S
ATOM  34904  N6  ADE  760     188.917  98.523 -60.303  1.00 45.36      A16S
ATOM  34905  C5  ADE  760     190.578  98.585 -62.042  1.00 45.36      A16S
ATOM  34906  N7  ADE  760     190.753  97.261 -62.417  1.00 45.36      A16S
ATOM  34907  C8  ADE  760     191.669  97.320 -63.352  1.00 45.36      A16S
ATOM  34908  C2' ADE  760     194.356  99.519 -63.799  1.00 51.57      A16S
ATOM  34909  O2' ADE  760     195.002 100.471 -64.607  1.00 51.57      A16S
ATOM  34910  C3' ADE  760     195.161  98.235 -63.716  1.00 51.57      A16S
ATOM  34911  O3' ADE  760     196.531  98.545 -63.469  1.00 51.57      A16S
ATOM  34912  P   GUA  761     197.151  98.357 -61.991  1.00 48.47      A16S
ATOM  34913  O1P GUA  761     198.540  98.880 -62.022  1.00 41.40      A16S
ATOM  34914  O2P GUA  761     196.894  96.966 -61.519  1.00 41.40      A16S
ATOM  34915  O5' GUA  761     196.328  99.368 -61.084  1.00 48.47      A16S
ATOM  34916  C5' GUA  761     196.585 100.762 -61.125  1.00 48.47      A16S
ATOM  34917  C4' GUA  761     195.625 101.471 -60.212  1.00 48.47      A16S
ATOM  34918  O4' GUA  761     194.273 101.205 -60.681  1.00 48.47      A16S
ATOM  34919  C1' GUA  761     193.410 101.009 -59.579  1.00 48.47      A16S
ATOM  34920  N9  GUA  761     192.980  99.622 -59.606  1.00 41.40      A16S
ATOM  34921  C4  GUA  761     191.960  99.066 -58.884  1.00 41.40      A16S
ATOM  34922  N3  GUA  761     191.150  99.715 -58.034  1.00 41.40      A16S
ATOM  34923  C2  GUA  761     190.274  98.905 -57.475  1.00 41.40      A16S
ATOM  34924  N2  GUA  761     189.402  99.379 -56.598  1.00 41.40      A16S
ATOM  34925  N1  GUA  761     190.189  97.568 -57.729  1.00 41.40      A16S
ATOM  34926  C6  GUA  761     191.009  96.871 -58.599  1.00 41.40      A16S
ATOM  34927  O6  GUA  761     190.856  95.643 -58.745  1.00 41.40      A16S
ATOM  34928  C5  GUA  761     191.962  97.733 -59.214  1.00 41.40      A16S
ATOM  34929  N7  GUA  761     192.953  97.462 -60.146  1.00 41.40      A16S
ATOM  34930  C8  GUA  761     193.527  98.614 -60.346  1.00 41.40      A16S
ATOM  34931  C2' GUA  761     194.224 101.333 -58.327  1.00 48.47      A16S
ATOM  34932  O2' GUA  761     194.143 102.717 -58.040  1.00 48.47      A16S
ATOM  34933  C3' GUA  761     195.617 100.951 -58.787  1.00 48.47      A16S
ATOM  34934  O3' GUA  761     196.597 101.592 -57.997  1.00 48.47      A16S
ATOM  34935  P   CYT  762     197.336 100.758 -56.844  1.00 45.74      A16S
ATOM  34936  O1P CYT  762     198.487 101.547 -56.346  1.00 48.55      A16S
ATOM  34937  O2P CYT  762     197.549  99.381 -57.365  1.00 48.55      A16S
ATOM  34938  O5' CYT  762     196.270 100.647 -55.666  1.00 45.74      A16S
ATOM  34939  C5' CYT  762     195.590 101.798 -55.145  1.00 45.74      A16S
ATOM  34940  C4' CYT  762     194.396 101.356 -54.328  1.00 45.74      A16S
ATOM  34941  O4' CYT  762     193.430 100.724 -55.202  1.00 45.74      A16S
ATOM  34942  C1' CYT  762     192.801  99.660 -54.517  1.00 45.74      A16S
ATOM  34943  N1  CYT  762     192.999  98.426 -55.278  1.00 48.55      A16S
ATOM  34944  C6  CYT  762     193.950  98.331 -56.251  1.00 48.55      A16S
ATOM  34945  C2  CYT  762     192.202  97.339 -54.971  1.00 48.55      A16S
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ATOM	34946	O2	CYT	762	191.335	97.473	-54.108	1.00	48.55	A16S	ATOM	34999	P	ADE	765	194.900	91.515	-42.966	1.00	39.92	A16S
ATOM	34947	N3	CYT	762	192.389	96.171	-55.619	1.00	48.55	A16S	ATOM	35000	O1P	ADE	765	194.649	91.447	-41.508	1.00	45.29	A16S
ATOM	34948	C4	CYT	762	193.325	96.080	-56.555	1.00	48.55	A16S	ATOM	35001	O2P	ADE	765	196.234	91.954	-43.448	1.00	45.29	A16S
ATOM	34949	N4	CYT	762	193.472	94.916	-57.161	1.00	48.55	A16S	ATOM	35002	O5'	ADE	765	194.631	90.063	-43.543	1.00	39.92	A16S
ATOM	34950	C5	CYT	762	194.146	97.184	-56.908	1.00	48.55	A16S	ATOM	35003	C5'	ADE	765	193.900	89.113	-42.798	1.00	39.92	A16S
ATOM	34951	C2'	CYT	762	193.399	99.569	-53.109	1.00	45.74	A16S	ATOM	35004	C4'	ADE	765	193.882	87.794	-43.528	1.00	39.92	A16S
ATOM	34952	O2'	CYT	762	192.544	100.183	-52.162	1.00	45.74	A16S	ATOM	35005	O4'	ADE	765	193.402	87.995	-44.886	1.00	39.92	A16S
ATOM	34953	C3'	CYT	762	194.720	100.301	-53.279	1.00	45.74	A16S	ATOM	35006	C1'	ADE	765	194.055	87.099	-45.762	1.00	39.92	A16S
ATOM	34954	O3'	CYT	762	195.099	100.944	-52.068	1.00	45.74	A16S	ATOM	35007	N9	ADE	765	194.843	87.873	-46.720	1.00	45.29	A16S
ATOM	34955	P	ADE	763	195.987	100.166	-50.986	1.00	40.78	A16S	ATOM	35008	C4	ADE	765	195.356	87.395	-47.901	1.00	45.29	A16S
ATOM	34956	O1P	ADE	763	196.039	101.040	-49.790	1.00	60.91	A16S	ATOM	35009	N3	ADE	765	195.250	86.147	-48.389	1.00	45.29	A16S
ATOM	34957	O2P	ADE	763	197.249	99.724	-51.622	1.00	60.91	A16S	ATOM	35010	C2	ADE	765	195.841	86.056	-49.570	1.00	45.29	A16S
ATOM	34958	O5'	ADE	763	195.153	98.847	-50.653	1.00	40.78	A16S	ATOM	35011	N1	ADE	765	196.480	86.994	-50.269	1.00	45.29	A16S
ATOM	34959	C5'	ADE	763	194.173	98.834	-49.619	1.00	40.78	A16S	ATOM	35012	C6	ADE	765	196.580	88.234	-49.750	1.00	45.29	A16S
ATOM	34960	C4'	ADE	763	193.451	97.513	-49.615	1.00	40.78	A16S	ATOM	35013	N6	ADE	765	197.229	89.168	-50.453	1.00	45.29	A16S
ATOM	34961	O4'	ADE	763	193.135	97.196	-50.989	1.00	40.78	A16S	ATOM	35014	C5	ADE	765	195.990	88.465	-48.499	1.00	45.29	A16S
ATOM	34962	C1'	ADE	763	193.161	95.795	-51.173	1.00	40.78	A16S	ATOM	35015	N7	ADE	765	195.896	89.598	-47.702	1.00	45.29	A16S
ATOM	34963	N9	ADE	763	194.101	95.498	-52.241	1.00	60.91	A16S	ATOM	35016	C8	ADE	765	195.212	89.193	-46.660	1.00	45.29	A16S
ATOM	34964	C4	ADE	763	194.032	94.426	-53.087	1.00	60.91	A16S	ATOM	35017	C2'	ADE	765	194.909	86.205	-44.879	1.00	39.92	A16S
ATOM	34965	N3	ADE	763	193.101	93.462	-53.100	1.00	60.91	A16S	ATOM	35018	O2'	ADE	765	194.071	85.186	-44.411	1.00	39.92	A16S
ATOM	34966	C2	ADE	763	193.357	92.589	-54.058	1.00	60.91	A16S	ATOM	35019	C3'	ADE	765	195.229	87.149	-43.742	1.00	39.92	A16S
ATOM	34967	N1	ADE	763	194.366	92.567	-54.932	1.00	60.91	A16S	ATOM	35020	O3'	ADE	765	195.595	86.422	-42.587	1.00	39.92	A16S
ATOM	34968	C6	ADE	763	195.287	93.551	-54.880	1.00	60.91	A16S	ATOM	35021	P	CYT	766	197.099	86.511	-42.052	1.00	54.43	A16S
ATOM	34969	N6	ADE	763	196.306	93.529	-55.737	1.00	60.91	A16S	ATOM	35022	O1P	CYT	766	197.241	85.521	-40.952	1.00	39.15	A16S
ATOM	34970	C5	ADE	763	195.122	94.540	-53.922	1.00	60.91	A16S	ATOM	35023	O2P	CYT	766	197.408	87.935	-41.814	1.00	39.15	A16S
ATOM	34971	N7	ADE	763	195.865	95.665	-53.610	1.00	60.91	A16S	ATOM	35024	O5'	CYT	766	197.988	86.078	-43.295	1.00	54.43	A16S
ATOM	34972	C8	ADE	763	195.215	96.199	-52.608	1.00	60.91	A16S	ATOM	35025	C5'	CYT	766	197.775	84.845	-43.952	1.00	54.43	A16S
ATOM	34973	C2'	ADE	763	193.549	95.154	-49.844	1.00	40.78	A16S	ATOM	35026	C4'	CYT	766	198.390	84.889	-45.323	1.00	54.43	A16S
ATOM	34974	O2'	ADE	763	192.373	94.756	-49.193	1.00	40.78	A16S	ATOM	35027	O4'	CYT	766	197.762	85.942	-46.093	1.00	54.43	A16S
ATOM	34975	C3'	ADE	763	194.235	96.307	-49.128	1.00	40.78	A16S	ATOM	35028	C1'	CYT	766	198.681	86.425	-47.053	1.00	54.43	A16S
ATOM	34976	O3'	ADE	763	194.033	96.150	-47.737	1.00	40.78	A16S	ATOM	35029	N1	CYT	766	198.843	87.864	-46.875	1.00	39.15	A16S
ATOM	34977	P	ADE	764	195.208	95.560	-46.825	1.00	40.85	A16S	ATOM	35030	C6	CYT	766	198.372	88.513	-45.771	1.00	39.15	A16S
ATOM	34978	O1P	ADE	764	195.400	96.514	-45.696	1.00	54.03	A16S	ATOM	35031	C2	CYT	766	199.496	88.564	-47.876	1.00	39.15	A16S
ATOM	34979	O2P	ADE	764	196.347	95.220	-47.712	1.00	54.03	A16S	ATOM	35032	O2	CYT	766	199.925	87.926	-48.854	1.00	39.15	A16S
ATOM	34980	O5'	ADE	764	194.644	94.203	-46.218	1.00	40.85	A16S	ATOM	35033	N3	CYT	766	199.650	89.904	-47.763	1.00	39.15	A16S
ATOM	34981	C5'	ADE	764	193.518	93.581	-46.768	1.00	40.85	A16S	ATOM	35034	C4	CYT	766	199.173	90.533	-46.697	1.00	39.15	A16S
ATOM	34982	C4'	ADE	764	192.598	93.142	-45.667	1.00	40.85	A16S	ATOM	35035	N4	CYT	766	199.317	91.843	-46.643	1.00	39.15	A16S
ATOM	34983	O4'	ADE	764	191.365	92.690	-46.276	1.00	40.85	A16S	ATOM	35036	C5	CYT	766	198.518	89.839	-45.643	1.00	39.15	A16S
ATOM	34984	C1'	ADE	764	190.974	91.459	-45.705	1.00	40.85	A16S	ATOM	35037	C2'	CYT	766	199.997	85.692	-46.831	1.00	54.43	A16S
ATOM	34985	N9	ADE	764	191.244	90.417	-46.683	1.00	54.03	A16S	ATOM	35038	O2'	CYT	766	200.051	84.588	-47.713	1.00	54.43	A16S
ATOM	34986	C4	ADE	764	190.678	89.174	-46.701	1.00	54.03	A16S	ATOM	35039	C3'	CYT	766	199.851	85.285	-45.379	1.00	54.43	A16S
ATOM	34987	N3	ADE	764	189.773	88.684	-45.839	1.00	54.03	A16S	ATOM	35040	O3'	CYT	766	200.685	84.189	-45.073	1.00	54.43	A16S
ATOM	34988	C2	ADE	764	189.455	87.437	-46.162	1.00	54.03	A16S	ATOM	35041	P	CYT	767	202.162	84.460	-44.517	1.00	47.06	A16S
ATOM	34989	N1	ADE	764	189.912	86.684	-47.170	1.00	54.03	A16S	ATOM	35042	O1P	CYT	767	202.746	83.131	-44.204	1.00	48.01	A16S
ATOM	34990	C6	ADE	764	190.826	87.217	-48.013	1.00	54.03	A16S	ATOM	35043	O2P	CYT	767	202.118	85.512	-43.463	1.00	48.01	A16S
ATOM	34991	N6	ADE	764	191.295	86.470	-49.010	1.00	54.03	A16S	ATOM	35044	O5'	CYT	767	202.921	85.066	-45.772	1.00	47.06	A16S
ATOM	34992	C5	ADE	764	191.234	88.527	-47.785	1.00	54.03	A16S	ATOM	35045	C5'	CYT	767	203.254	84.246	-46.873	1.00	47.06	A16S
ATOM	34993	N7	ADE	764	192.128	89.355	-48.448	1.00	54.03	A16S	ATOM	35046	C4'	CYT	767	204.216	84.976	-47.755	1.00	47.06	A16S
ATOM	34994	C8	ADE	764	192.097	90.462	-47.755	1.00	54.03	A16S	ATOM	35047	O4'	CYT	767	203.536	86.080	-48.405	1.00	47.06	A16S
ATOM	34995	C2'	ADE	764	191.782	91.300	-44.424	1.00	40.85	A16S	ATOM	35048	C1'	CYT	767	204.427	87.168	-48.540	1.00	47.06	A16S
ATOM	34996	O2'	ADE	764	191.077	92.006	-43.440	1.00	40.85	A16S	ATOM	35049	N1	CYT	767	203.846	88.328	-47.858	1.00	48.01	A16S
ATOM	34997	C3'	ADE	764	193.089	91.982	-44.812	1.00	40.85	A16S	ATOM	35050	C6	CYT	767	202.976	88.179	-46.820	1.00	48.01	A16S
ATOM	34998	O3'	ADE	764	193.792	92.451	-43.667	1.00	40.85	A16S	ATOM	35051	C2	CYT	767	204.215	89.591	-48.286	1.00	48.01	A16S

ATOM	35052	O2	CYT	767	205.018	89.682	-49.214	1.00	48.01	A16S	ATOM	35105	C3'	GUA	769	212.936	94.491	-44.337	1.00	36.94	A16S
ATOM	35053	N3	CYT	767	203.705	90.682	-47.669	1.00	48.01	A16S	ATOM	35106	O3'	GUA	769	214.311	94.723	-44.058	1.00	36.94	A16S
ATOM	35054	C4	CYT	767	202.887	90.530	-46.632	1.00	48.01	A16S	ATOM	35107	P	ADE	770	214.840	94.650	-42.543	1.00	60.08	A16S
ATOM	35055	N4	CYT	767	202.474	91.622	-46.000	1.00	48.01	A16S	ATOM	35108	O1P	ADE	770	216.303	94.845	-42.636	1.00	53.28	A16S
ATOM	35056	C5	CYT	767	202.478	89.247	-46.182	1.00	48.01	A16S	ATOM	35109	O2P	ADE	770	214.307	93.438	-41.877	1.00	53.28	A16S
ATOM	35057	C2'	CYT	767	205.765	86.744	-47.926	1.00	47.06	A16S	ATOM	35110	O5'	ADE	770	214.197	95.922	-41.832	1.00	60.08	A16S
ATOM	35058	O2'	CYT	767	206.647	86.263	-48.919	1.00	47.06	A16S	ATOM	35111	C5'	ADE	770	214.584	97.229	-42.217	1.00	60.08	A16S
ATOM	35059	C3'	CYT	767	205.329	85.639	-46.978	1.00	47.06	A16S	ATOM	35112	C4'	ADE	770	213.576	98.253	-41.735	1.00	60.08	A16S
ATOM	35060	O3'	CYT	767	206.373	84.720	-46.714	1.00	47.06	A16S	ATOM	35113	O4'	ADE	770	212.239	97.845	-42.127	1.00	60.08	A16S
ATOM	35061	P	GUA	768	207.553	85.138	-45.711	1.00	48.98	A16S	ATOM	35114	C1'	ADE	770	211.302	98.441	-41.253	1.00	60.08	A16S
ATOM	35062	O1P	GUA	768	208.540	84.029	-45.709	1.00	53.29	A16S	ATOM	35115	N9	ADE	770	210.489	97.397	-40.653	1.00	53.28	A16S
ATOM	35063	O2P	GUA	768	206.970	85.593	-44.416	1.00	53.29	A16S	ATOM	35116	C4	ADE	770	209.358	97.617	-39.914	1.00	53.28	A16S
ATOM	35064	O5'	GUA	768	208.210	86.391	-46.435	1.00	48.98	A16S	ATOM	35117	N3	ADE	770	208.815	98.804	-39.602	1.00	53.28	A16S
ATOM	35065	C5'	GUA	768	208.867	87.396	-45.692	1.00	48.98	A16S	ATOM	35118	C2	ADE	770	207.698	98.625	-38.899	1.00	53.28	A16S
ATOM	35066	C4'	GUA	768	209.253	88.523	-46.600	1.00	48.98	A16S	ATOM	35119	N1	ADE	770	207.112	97.481	-38.511	1.00	53.28	A16S
ATOM	35067	O4'	GUA	768	208.067	89.069	-47.226	1.00	48.98	A16S	ATOM	35120	C6	ADE	770	207.693	96.313	-38.851	1.00	53.28	A16S
ATOM	35068	C1'	GUA	768	208.233	90.470	-47.424	1.00	48.98	A16S	ATOM	35121	N6	ADE	770	207.109	95.176	-38.489	1.00	53.28	A16S
ATOM	35069	N9	GUA	768	207.207	91.173	-46.663	1.00	53.29	A16S	ATOM	35122	C5	ADE	770	208.879	96.367	-39.580	1.00	53.28	A16S
ATOM	35070	C4	GUA	768	207.074	92.533	-46.545	1.00	53.29	A16S	ATOM	35123	N7	ADE	770	209.708	95.376	-40.077	1.00	53.28	A16S
ATOM	35071	N3	GUA	768	207.850	93.463	-47.140	1.00	53.29	A16S	ATOM	35124	C8	ADE	770	210.649	96.040	-40.703	1.00	53.28	A16S
ATOM	35072	C2	GUA	768	207.491	94.694	-46.807	1.00	53.29	A16S	ATOM	35125	C2'	ADE	770	212.088	99.216	-40.203	1.00	60.08	A16S
ATOM	35073	N2	GUA	768	208.160	95.742	-47.289	1.00	53.29	A16S	ATOM	35126	O2'	ADE	770	212.183	100.549	-40.652	1.00	60.08	A16S
ATOM	35074	N1	GUA	768	206.452	94.982	-45.969	1.00	53.29	A16S	ATOM	35127	C3'	ADE	770	213.428	98.497	-40.242	1.00	60.08	A16S
ATOM	35075	C6	GUA	768	205.652	94.035	-45.340	1.00	53.29	A16S	ATOM	35128	O3'	ADE	770	214.437	99.374	-39.766	1.00	60.08	A16S
ATOM	35076	O6	GUA	768	204.761	94.395	-44.575	1.00	53.29	A16S	ATOM	35129	P	URI	771	214.873	99.325	-38.221	1.00	63.59	A16S
ATOM	35077	C5	GUA	768	206.022	92.722	-45.688	1.00	53.29	A16S	ATOM	35130	O1P	URI	771	215.884	100.390	-37.992	1.00	47.43	A16S
ATOM	35078	N7	GUA	768	205.487	91.507	-45.290	1.00	53.29	A16S	ATOM	35131	O2P	URI	771	215.182	97.919	-37.880	1.00	47.43	A16S
ATOM	35079	C8	GUA	768	206.217	90.618	-45.899	1.00	53.29	A16S	ATOM	35132	O5'	URI	771	213.570	99.746	-37.413	1.00	63.59	A16S
ATOM	35080	C2'	GUA	768	209.625	90.829	-46.900	1.00	48.98	A16S	ATOM	35133	C5'	URI	771	213.152	101.105	-37.369	1.00	63.59	A16S
ATOM	35081	O2'	GUA	768	210.547	90.841	-47.964	1.00	48.98	A16S	ATOM	35134	C4'	URI	771	211.912	101.236	-36.523	1.00	63.59	A16S
ATOM	35082	C3'	GUA	768	209.861	89.710	-45.899	1.00	48.98	A16S	ATOM	35135	O4'	URI	771	210.861	100.423	-37.102	1.00	63.59	A16S
ATOM	35083	O3'	GUA	768	211.225	89.481	-45.686	1.00	48.98	A16S	ATOM	35136	C1'	URI	771	210.005	99.959	-36.074	1.00	63.59	A16S
ATOM	35084	P	GUA	769	211.917	90.042	-44.362	1.00	36.94	A16S	ATOM	35137	N1	URI	771	209.968	98.493	-36.128	1.00	47.43	A16S
ATOM	35085	O1P	GUA	769	213.305	89.514	-44.416	1.00	43.62	A16S	ATOM	35138	C6	URI	771	210.875	97.772	-36.877	1.00	47.43	A16S
ATOM	35086	O2P	GUA	769	211.056	89.704	-43.200	1.00	43.62	A16S	ATOM	35139	C2	URI	771	208.980	97.857	-35.401	1.00	47.43	A16S
ATOM	35087	O5'	GUA	769	211.954	91.624	-44.583	1.00	36.94	A16S	ATOM	35140	O2	URI	771	208.173	98.471	-34.729	1.00	47.43	A16S
ATOM	35088	C5'	GUA	769	212.872	92.178	-45.508	1.00	36.94	A16S	ATOM	35141	N3	URI	771	208.980	96.480	-35.495	1.00	47.43	A16S
ATOM	35089	C4'	GUA	769	212.723	93.669	-45.596	1.00	36.94	A16S	ATOM	35142	C4	URI	771	209.860	95.699	-36.230	1.00	47.43	A16S
ATOM	35090	O4'	GUA	769	211.358	93.982	-45.956	1.00	36.94	A16S	ATOM	35143	O4	URI	771	209.771	94.473	-36.182	1.00	47.43	A16S
ATOM	35091	C1'	GUA	769	211.016	95.263	-45.441	1.00	36.94	A16S	ATOM	35144	C5	URI	771	210.852	96.433	-36.950	1.00	47.43	A16S
ATOM	35092	N9	GUA	769	209.905	95.105	-44.509	1.00	43.62	A16S	ATOM	35145	C2'	URI	771	210.550	100.499	-34.752	1.00	63.59	A16S
ATOM	35093	C4	GUA	769	209.174	96.116	-43.936	1.00	43.62	A16S	ATOM	35146	O2'	URI	771	209.914	101.726	-34.444	1.00	63.59	A16S
ATOM	35094	N3	GUA	769	209.364	97.435	-44.131	1.00	43.62	A16S	ATOM	35147	C3'	URI	771	212.014	100.707	-35.103	1.00	63.59	A16S
ATOM	35095	C2	GUA	769	208.496	98.159	-43.466	1.00	43.62	A16S	ATOM	35148	O3'	URI	771	212.604	101.660	-34.230	1.00	63.59	A16S
ATOM	35096	N2	GUA	769	208.544	99.491	-43.560	1.00	43.62	A16S	ATOM	35149	P	URI	772	213.472	101.152	-32.978	1.00	59.72	A16S
ATOM	35097	N1	GUA	769	207.518	97.631	-42.668	1.00	43.62	A16S	ATOM	35150	O1P	URI	772	213.831	102.363	-32.200	1.00	50.57	A16S
ATOM	35098	C6	GUA	769	207.303	96.275	-42.460	1.00	43.62	A16S	ATOM	35151	O2P	URI	772	214.542	100.257	-33.476	1.00	50.57	A16S
ATOM	35099	O6	GUA	769	206.379	95.903	-41.746	1.00	43.62	A16S	ATOM	35152	O5'	URI	772	212.469	100.236	-32.139	1.00	59.72	A16S
ATOM	35100	C5	GUA	769	208.230	95.491	-43.158	1.00	43.62	A16S	ATOM	35153	C5'	URI	772	211.403	100.810	-31.389	1.00	59.72	A16S
ATOM	35101	N7	GUA	769	208.371	94.113	-43.224	1.00	43.62	A16S	ATOM	35154	C4'	URI	772	210.606	99.737	-30.688	1.00	59.72	A16S
ATOM	35102	C8	GUA	769	209.377	93.930	-44.035	1.00	43.62	A16S	ATOM	35155	O4'	URI	772	209.916	98.917	-31.660	1.00	59.72	A16S
ATOM	35103	C2'	GUA	769	212.262	95.792	-44.735	1.00	36.94	A16S	ATOM	35156	C1'	URI	772	209.810	97.593	-31.173	1.00	59.72	A16S
ATOM	35104	O2'	GUA	769	213.043	96.508	-45.665	1.00	36.94	A16S	ATOM	35157	N1	URI	772	210.487	96.703	-32.125	1.00	50.57	A16S

ATOM	35158	C6	URI	772	211.469	97.175	-32.962	1.00	50.57	A16S	ATOM	35211	O2'	GUA	774	207.190	90.124	-29.703	1.00	55.30	A16S
ATOM	35159	C2	URI	772	210.115	95.377	-32.141	1.00	50.57	A16S	ATOM	35212	C3'	GUA	774	209.116	91.452	-30.433	1.00	55.30	A16S
ATOM	35160	O2	URI	772	209.231	94.930	-31.444	1.00	50.57	A16S	ATOM	35213	O3'	GUA	774	209.268	90.484	-31.441	1.00	55.30	A16S
ATOM	35161	N3	URI	772	210.817	94.596	-33.012	1.00	50.57	A16S	ATOM	35214	P	ADE	775	209.246	90.943	-32.957	1.00	70.42	A16S
ATOM	35162	C4	URI	772	211.811	95.005	-33.869	1.00	50.57	A16S	ATOM	35215	O1P	ADE	775	209.170	89.692	-33.736	1.00	50.11	A16S
ATOM	35163	O4	URI	772	212.303	94.191	-34.647	1.00	50.57	A16S	ATOM	35216	O2P	ADE	775	210.312	91.937	-33.229	1.00	50.11	A16S
ATOM	35164	C5	URI	772	212.122	96.395	-33.809	1.00	50.57	A16S	ATOM	35217	O5'	ADE	775	207.853	91.673	-33.064	1.00	70.42	A16S
ATOM	35165	C2'	URI	772	210.448	97.561	-29.780	1.00	59.72	A16S	ATOM	35218	C5'	ADE	775	206.665	90.923	-33.046	1.00	70.42	A16S
ATOM	35166	O2'	URI	772	209.439	97.705	-28.811	1.00	59.72	A16S	ATOM	35219	C4'	ADE	775	205.526	91.812	-33.401	1.00	70.42	A16S
ATOM	35167	C3'	URI	772	211.393	98.758	-29.839	1.00	59.72	A16S	ATOM	35220	O4'	ADE	775	205.298	92.726	-32.322	1.00	70.42	A16S
ATOM	35168	O3'	URI	772	211.599	99.325	-28.548	1.00	59.72	A16S	ATOM	35221	C1'	ADE	775	204.615	93.828	-32.838	1.00	70.42	A16S
ATOM	35169	P	ADE	773	212.940	98.992	-27.719	1.00	58.62	A16S	ATOM	35222	N9	ADE	775	204.786	94.987	-31.961	1.00	50.11	A16S
ATOM	35170	O1P	ADE	773	212.852	99.759	-26.447	1.00	69.77	A16S	ATOM	35223	C4	ADE	775	203.718	95.698	-31.474	1.00	50.11	A16S
ATOM	35171	O2P	ADE	773	214.124	99.171	-28.597	1.00	69.77	A16S	ATOM	35224	N3	ADE	775	202.419	95.504	-31.763	1.00	50.11	A16S
ATOM	35172	O5'	ADE	773	212.794	97.447	-27.382	1.00	58.62	A16S	ATOM	35225	C2	ADE	775	201.665	96.350	-31.096	1.00	50.11	A16S
ATOM	35173	C5'	ADE	773	213.931	96.684	-27.037	1.00	58.62	A16S	ATOM	35226	N1	ADE	775	202.023	97.303	-30.232	1.00	50.11	A16S
ATOM	35174	C4'	ADE	773	213.499	95.392	-26.418	1.00	58.62	A16S	ATOM	35227	C6	ADE	775	203.335	97.480	-29.963	1.00	50.11	A16S
ATOM	35175	O4'	ADE	773	212.822	95.680	-25.172	1.00	58.62	A16S	ATOM	35228	N6	ADE	775	203.686	98.437	-29.096	1.00	50.11	A16S
ATOM	35176	C1'	ADE	773	211.689	94.841	-25.040	1.00	58.62	A16S	ATOM	35229	C5	ADE	775	204.249	96.638	-30.617	1.00	50.11	A16S
ATOM	35177	N9	ADE	773	210.500	95.694	-25.048	1.00	69.77	A16S	ATOM	35230	N7	ADE	775	205.632	96.550	-30.588	1.00	50.11	A16S
ATOM	35178	C4	ADE	773	209.295	95.428	-24.451	1.00	69.77	A16S	ATOM	35231	C8	ADE	775	205.900	95.563	-31.411	1.00	50.11	A16S
ATOM	35179	N3	ADE	773	208.961	94.342	-23.744	1.00	69.77	A16S	ATOM	35232	C2'	ADE	775	204.822	93.879	-34.356	1.00	70.42	A16S
ATOM	35180	C2	ADE	773	207.698	94.429	-23.326	1.00	69.77	A16S	ATOM	35233	O2'	ADE	775	203.562	93.610	-34.924	1.00	70.42	A16S
ATOM	35181	N1	ADE	773	206.806	95.402	-23.518	1.00	69.77	A16S	ATOM	35234	C3'	ADE	775	205.784	92.717	-34.592	1.00	70.42	A16S
ATOM	35182	C6	ADE	773	207.181	96.481	-24.229	1.00	69.77	A16S	ATOM	35235	O3'	ADE	775	205.563	91.899	-35.750	1.00	70.42	A16S
ATOM	35183	N6	ADE	773	206.298	97.457	-24.414	1.00	69.77	A16S	ATOM	35236	P	URI	776	204.613	92.380	-36.964	1.00	57.38	A16S
ATOM	35184	C5	ADE	773	208.487	96.511	-24.731	1.00	69.77	A16S	ATOM	35237	O1P	URI	776	205.042	91.546	-38.118	1.00	69.15	A16S
ATOM	35185	N7	ADE	773	209.171	97.449	-25.487	1.00	69.77	A16S	ATOM	35238	O2P	URI	776	204.594	93.861	-37.108	1.00	69.15	A16S
ATOM	35186	C8	ADE	773	210.357	96.918	-25.646	1.00	69.77	A16S	ATOM	35239	O5'	URI	776	203.166	91.841	-36.559	1.00	57.38	A16S
ATOM	35187	C2'	ADE	773	211.748	93.826	-26.185	1.00	58.62	A16S	ATOM	35240	C5'	URI	776	203.025	90.857	-35.540	1.00	57.38	A16S
ATOM	35188	O2'	ADE	773	212.473	92.693	-25.751	1.00	58.62	A16S	ATOM	35241	C4'	URI	776	202.007	89.798	-35.930	1.00	57.38	A16S
ATOM	35189	C3'	ADE	773	212.495	94.619	-27.251	1.00	58.62	A16S	ATOM	35242	O4'	URI	776	202.178	88.662	-35.072	1.00	57.38	A16S
ATOM	35190	O3'	ADE	773	213.205	93.776	-28.153	1.00	58.62	A16S	ATOM	35243	C1'	URI	776	200.970	87.967	-34.977	1.00	57.38	A16S
ATOM	35191	P	GUA	774	212.816	93.754	-29.714	1.00	55.30	A16S	ATOM	35244	N1	URI	776	200.925	87.324	-33.664	1.00	69.15	A16S
ATOM	35192	O1P	GUA	774	213.793	92.870	-30.397	1.00	51.19	A16S	ATOM	35245	C6	URI	776	201.139	88.015	-32.506	1.00	69.15	A16S
ATOM	35193	O2P	GUA	774	212.642	95.148	-30.184	1.00	51.19	A16S	ATOM	35246	C2	URI	776	200.694	85.976	-33.657	1.00	69.15	A16S
ATOM	35194	O5'	GUA	774	211.443	92.954	-29.739	1.00	55.30	A16S	ATOM	35247	O2	URI	776	200.454	85.352	-34.676	1.00	69.15	A16S
ATOM	35195	C5'	GUA	774	211.425	91.576	-29.393	1.00	55.30	A16S	ATOM	35248	N3	URI	776	200.750	85.381	-32.424	1.00	69.15	A16S
ATOM	35196	C4'	GUA	774	210.009	91.089	-29.269	1.00	55.30	A16S	ATOM	35249	C4	URI	776	200.988	86.004	-31.223	1.00	69.15	A16S
ATOM	35197	O4'	GUA	774	209.377	91.715	-28.132	1.00	55.30	A16S	ATOM	35250	O4	URI	776	201.002	85.337	-30.190	1.00	69.15	A16S
ATOM	35198	C1'	GUA	774	208.011	91.955	-28.418	1.00	55.30	A16S	ATOM	35251	C5	URI	776	201.180	87.418	-31.313	1.00	69.15	A16S
ATOM	35199	N9	GUA	774	207.783	93.384	-28.309	1.00	51.19	A16S	ATOM	35252	C2'	URI	776	199.820	88.887	-35.398	1.00	57.38	A16S
ATOM	35200	C4	GUA	774	206.668	93.981	-27.805	1.00	51.19	A16S	ATOM	35253	O2'	URI	776	199.061	88.290	-36.431	1.00	57.38	A16S
ATOM	35201	N3	GUA	774	205.585	93.342	-27.328	1.00	51.19	A16S	ATOM	35254	C3'	URI	776	200.533	90.170	-35.845	1.00	57.38	A16S
ATOM	35202	C2	GUA	774	204.664	94.178	-26.917	1.00	51.19	A16S	ATOM	35255	O3'	URI	776	200.095	90.450	-37.171	1.00	57.38	A16S
ATOM	35203	N2	GUA	774	203.525	93.693	-26.417	1.00	51.19	A16S	ATOM	35256	P	ADE	777	199.061	91.634	-37.441	1.00	48.23	A16S
ATOM	35204	N1	GUA	774	204.799	95.544	-26.970	1.00	51.19	A16S	ATOM	35257	O1P	ADE	777	198.022	91.483	-36.387	1.00	57.02	A16S
ATOM	35205	C6	GUA	774	205.914	96.218	-27.460	1.00	51.19	A16S	ATOM	35258	O2P	ADE	777	198.651	91.667	-38.878	1.00	57.02	A16S
ATOM	35206	O6	GUA	774	205.942	97.450	-27.470	1.00	51.19	A16S	ATOM	35259	O5'	ADE	777	199.915	92.922	-37.082	1.00	48.23	A16S
ATOM	35207	C5	GUA	774	206.901	95.328	-27.901	1.00	51.19	A16S	ATOM	35260	C5'	ADE	777	199.929	94.052	-37.923	1.00	48.23	A16S
ATOM	35208	N7	GUA	774	208.147	95.573	-28.458	1.00	51.19	A16S	ATOM	35261	C4'	ADE	777	199.423	95.244	-37.167	1.00	48.23	A16S
ATOM	35209	C8	GUA	774	208.633	94.388	-28.683	1.00	51.19	A16S	ATOM	35262	O4'	ADE	777	199.939	95.218	-35.817	1.00	48.23	A16S
ATOM	35210	C2'	GUA	774	207.726	91.420	-29.817	1.00	55.30	A16S	ATOM	35263	C1'	ADE	777	200.088	96.546	-35.352	1.00	48.23	A16S

ATOM	35264	N9	ADE	777	201.467	96.732	-34.926	1.00	57.02	A16S	ATOM	35317	O3'	CYT	779	203.238	104.611	-44.304	1.00	42.58	A16S
ATOM	35265	C4	ADE	777	201.935	97.727	-34.105	1.00	57.02	A16S	ATOM	35318	P	CYT	780	202.952	103.971	-45.751	1.00	49.14	A16S
ATOM	35266	N3	ADE	777	201.225	98.701	-33.521	1.00	57.02	A16S	ATOM	35319	O1P	CYT	780	202.766	105.085	-46.708	1.00	40.09	A16S
ATOM	35267	C2	ADE	777	202.019	99.501	-32.821	1.00	57.02	A16S	ATOM	35320	O2P	CYT	780	201.912	102.920	-45.631	1.00	40.09	A16S
ATOM	35268	N1	ADE	777	203.339	99.442	-32.650	1.00	57.02	A16S	ATOM	35321	O5'	CYT	780	204.313	103.231	-46.118	1.00	49.14	A16S
ATOM	35269	C6	ADE	777	204.019	98.447	-33.251	1.00	57.02	A16S	ATOM	35322	C5'	CYT	780	205.446	103.954	-46.582	1.00	49.14	A16S
ATOM	35270	N6	ADE	777	205.335	98.380	-33.081	1.00	57.02	A16S	ATOM	35323	C4'	CYT	780	206.473	102.993	-47.122	1.00	49.14	A16S
ATOM	35271	C5	ADE	777	203.293	97.536	-34.023	1.00	57.02	A16S	ATOM	35324	O4'	CYT	780	206.896	102.093	-46.058	1.00	49.14	A16S
ATOM	35272	N7	ADE	777	203.673	96.434	-34.767	1.00	57.02	A16S	ATOM	35325	C1'	CYT	780	207.201	100.821	-46.604	1.00	49.14	A16S
ATOM	35273	C8	ADE	777	202.549	95.994	-35.274	1.00	57.02	A16S	ATOM	35326	N1	CYT	780	206.341	99.831	-45.961	1.00	40.09	A16S
ATOM	35274	C2'	ADE	777	199.732	97.486	-36.507	1.00	48.23	A16S	ATOM	35327	C6	CYT	780	205.278	100.214	-45.202	1.00	40.09	A16S
ATOM	35275	O2'	ADE	777	198.413	97.958	-36.365	1.00	48.23	A16S	ATOM	35328	C2	CYT	780	206.635	98.483	-46.130	1.00	40.09	A16S
ATOM	35276	C3'	ADE	777	199.906	96.570	-37.704	1.00	48.23	A16S	ATOM	35329	O2	CYT	780	207.586	98.173	-46.845	1.00	40.09	A16S
ATOM	35277	O3'	ADE	777	199.118	96.967	-38.798	1.00	48.23	A16S	ATOM	35330	N3	CYT	780	205.873	97.547	-45.517	1.00	40.09	A16S
ATOM	35278	P	CYT	778	199.836	97.560	-40.100	1.00	46.83	A16S	ATOM	35331	C4	CYT	780	204.850	97.929	-44.761	1.00	40.09	A16S
ATOM	35279	O1P	CYT	778	198.921	97.263	-41.240	1.00	58.37	A16S	ATOM	35332	N4	CYT	780	204.145	96.988	-44.152	1.00	40.09	A16S
ATOM	35280	O2P	CYT	778	201.247	97.082	-40.130	1.00	58.37	A16S	ATOM	35333	C5	CYT	780	204.512	99.304	-44.589	1.00	40.09	A16S
ATOM	35281	O5'	CYT	778	199.867	99.136	-39.843	1.00	46.83	A16S	ATOM	35334	C2'	CYT	780	206.974	100.911	-48.110	1.00	49.14	A16S
ATOM	35282	C5'	CYT	778	198.682	99.834	-39.484	1.00	46.83	A16S	ATOM	35335	O2'	CYT	780	208.175	101.280	-48.747	1.00	49.14	A16S
ATOM	35283	C4'	CYT	778	199.007	100.958	-38.547	1.00	46.83	A16S	ATOM	35336	C3'	CYT	780	205.962	102.038	-48.185	1.00	49.14	A16S
ATOM	35284	O4'	CYT	778	199.600	100.416	-37.353	1.00	46.83	A16S	ATOM	35337	O3'	CYT	780	205.961	102.620	-49.473	1.00	49.14	A16S
ATOM	35285	C1'	CYT	778	200.513	101.349	-36.818	1.00	46.83	A16S	ATOM	35338	P	GUA	781	205.078	101.944	-50.624	1.00	42.82	A16S
ATOM	35286	N1	CYT	778	201.806	100.689	-36.652	1.00	58.37	A16S	ATOM	35339	O1P	GUA	781	205.148	102.802	-51.832	1.00	47.40	A16S
ATOM	35287	C6	CYT	778	202.124	99.575	-37.370	1.00	58.37	A16S	ATOM	35340	O2P	GUA	781	203.753	101.639	-50.022	1.00	47.40	A16S
ATOM	35288	C2	CYT	778	202.714	101.233	-35.753	1.00	58.37	A16S	ATOM	35341	O5'	GUA	781	205.812	100.555	-50.917	1.00	42.82	A16S
ATOM	35289	O2	CYT	778	202.379	102.235	-35.098	1.00	58.37	A16S	ATOM	35342	C5'	GUA	781	207.142	100.519	-51.440	1.00	42.82	A16S
ATOM	35290	N3	CYT	778	203.929	100.659	-35.613	1.00	58.37	A16S	ATOM	35343	C4'	GUA	781	207.557	99.096	-51.748	1.00	42.82	A16S
ATOM	35291	C4	CYT	778	204.238	99.579	-36.332	1.00	58.37	A16S	ATOM	35344	O4'	GUA	781	207.726	98.332	-50.525	1.00	42.82	A16S
ATOM	35292	N4	CYT	778	205.453	99.054	-36.179	1.00	58.37	A16S	ATOM	35345	C1'	GUA	781	207.351	96.980	-50.751	1.00	42.82	A16S
ATOM	35293	C5	CYT	778	203.317	98.993	-37.242	1.00	58.37	A16S	ATOM	35346	N9	GUA	781	206.260	96.651	-49.843	1.00	47.40	A16S
ATOM	35294	C2'	CYT	778	200.601	102.524	-37.789	1.00	46.83	A16S	ATOM	35347	C4	GUA	781	205.775	95.395	-49.553	1.00	47.40	A16S
ATOM	35295	O2'	CYT	778	199.852	103.633	-37.327	1.00	46.83	A16S	ATOM	35348	N3	GUA	781	206.232	94.231	-50.049	1.00	47.40	A16S
ATOM	35296	C3'	CYT	778	200.052	101.910	-39.064	1.00	46.83	A16S	ATOM	35349	C2	GUA	781	205.557	93.198	-49.571	1.00	47.40	A16S
ATOM	35297	O3'	CYT	778	199.441	102.893	-39.870	1.00	46.83	A16S	ATOM	35350	N2	GUA	781	205.878	91.965	-49.926	1.00	47.40	A16S
ATOM	35298	P	CYT	779	199.699	102.871	-41.437	1.00	42.58	A16S	ATOM	35351	N1	GUA	781	204.515	93.296	-48.696	1.00	47.40	A16S
ATOM	35299	O1P	CYT	779	199.056	104.042	-42.055	1.00	35.52	A16S	ATOM	35352	C6	GUA	781	204.022	94.483	-48.179	1.00	47.40	A16S
ATOM	35300	O2P	CYT	779	199.334	101.513	-41.873	1.00	35.52	A16S	ATOM	35353	O6	GUA	781	203.062	94.461	-47.397	1.00	47.40	A16S
ATOM	35301	O5'	CYT	779	201.264	103.092	-41.566	1.00	42.58	A16S	ATOM	35354	C5	GUA	781	204.741	95.600	-48.667	1.00	47.40	A16S
ATOM	35302	C5'	CYT	779	201.807	104.395	-41.402	1.00	42.58	A16S	ATOM	35355	N7	GUA	781	204.582	96.950	-48.403	1.00	47.40	A16S
ATOM	35303	C4'	CYT	779	203.237	104.429	-41.874	1.00	42.58	A16S	ATOM	35356	C8	GUA	781	205.504	97.534	-49.122	1.00	47.40	A16S
ATOM	35304	O4'	CYT	779	204.064	103.703	-40.932	1.00	42.58	A16S	ATOM	35357	C2'	GUA	781	206.920	96.863	-52.211	1.00	42.82	A16S
ATOM	35305	C1'	CYT	779	205.069	102.999	-41.634	1.00	42.58	A16S	ATOM	35358	O2'	GUA	781	207.975	96.333	-52.977	1.00	42.82	A16S
ATOM	35306	N1	CYT	779	204.814	101.567	-41.468	1.00	35.52	A16S	ATOM	35359	C3'	GUA	781	206.538	98.302	-52.531	1.00	42.82	A16S
ATOM	35307	C6	CYT	779	203.610	101.115	-41.010	1.00	35.52	A16S	ATOM	35360	O3'	GUA	781	206.599	98.611	-53.913	1.00	42.82	A16S
ATOM	35308	C2	CYT	779	205.831	100.678	-41.766	1.00	35.52	A16S	ATOM	35361	P	GUA	782	205.366	98.200	-54.866	1.00	43.84	A16S
ATOM	35309	O2	CYT	779	206.892	101.124	-42.232	1.00	35.52	A16S	ATOM	35362	O1P	GUA	782	205.821	98.381	-56.278	1.00	47.79	A16S
ATOM	35310	N3	CYT	779	205.636	99.358	-41.553	1.00	35.52	A16S	ATOM	35363	O2P	GUA	782	204.151	98.921	-54.398	1.00	47.79	A16S
ATOM	35311	C4	CYT	779	204.465	98.925	-41.092	1.00	35.52	A16S	ATOM	35364	O5'	GUA	782	205.229	96.638	-54.565	1.00	43.84	A16S
ATOM	35312	N4	CYT	779	204.315	97.619	-40.898	1.00	35.52	A16S	ATOM	35365	C5'	GUA	782	204.254	95.839	-55.195	1.00	43.84	A16S
ATOM	35313	C5	CYT	779	203.394	99.813	-40.811	1.00	35.52	A16S	ATOM	35366	C4'	GUA	782	204.507	94.386	-54.892	1.00	43.84	A16S
ATOM	35314	C2'	CYT	779	204.994	103.458	-43.082	1.00	42.58	A16S	ATOM	35367	O4'	GUA	782	204.824	94.224	-53.490	1.00	43.84	A16S
ATOM	35315	O2'	CYT	779	205.744	104.643	-43.174	1.00	42.58	A16S	ATOM	35368	C1'	GUA	782	204.211	93.048	-52.986	1.00	43.84	A16S
ATOM	35316	C3'	CYT	779	203.511	103.752	-43.205	1.00	42.58	A16S	ATOM	35369	N9	GUA	782	203.256	93.432	-51.949	1.00	47.79	A16S

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ATOM  35370  C4  GUA  782     202.492  92.584 -51.184  1.00 47.79      A16S
ATOM  35371  N3  GUA  782     202.502  91.241 -51.244  1.00 47.79      A16S
ATOM  35372  C2  GUA  782     201.669  90.704 -50.376  1.00 47.79      A16S
ATOM  35373  N2  GUA  782     201.552  89.376 -50.304  1.00 47.79      A16S
ATOM  35374  N1  GUA  782     200.887  91.431 -49.515  1.00 47.79      A16S
ATOM  35375  C6  GUA  782     200.858  92.820 -49.443  1.00 47.79      A16S
ATOM  35376  O6  GUA  782     200.117  93.380 -48.639  1.00 47.79      A16S
ATOM  35377  C5  GUA  782     201.744  93.404 -50.367  1.00 47.79      A16S
ATOM  35378  N7  GUA  782     202.027  94.737 -50.613  1.00 47.79      A16S
ATOM  35379  C8  GUA  782     202.931  94.707 -51.554  1.00 47.79      A16S
ATOM  35380  C2' GUA  782     203.518  92.364 -54.161  1.00 43.84      A16S
ATOM  35381  O2' GUA  782     204.344  91.378 -54.714  1.00 43.84      A16S
ATOM  35382  C3' GUA  782     203.276  93.538 -55.088  1.00 43.84      A16S
ATOM  35383  O3' GUA  782     203.145  93.161 -56.433  1.00 43.84      A16S
ATOM  35384  P   GUA  783     201.689  93.097 -57.088  1.00 45.84      A16S
ATOM  35385  O1P GUA  783     201.862  92.327 -58.344  1.00 42.54      A16S
ATOM  35386  O2P GUA  783     201.122  94.467 -57.135  1.00 42.54      A16S
ATOM  35387  O5' GUA  783     200.889  92.155 -56.091  1.00 45.84      A16S
ATOM  35388  C5' GUA  783     201.254  90.790 -55.983  1.00 45.84      A16S
ATOM  35389  C4' GUA  783     200.350  90.074 -55.018  1.00 45.84      A16S
ATOM  35390  O4' GUA  783     200.586  90.566 -53.675  1.00 45.84      A16S
ATOM  35391  C1' GUA  783     199.356  90.701 -53.001  1.00 45.84      A16S
ATOM  35392  N9  GUA  783     199.154  92.129 -52.784  1.00 42.54      A16S
ATOM  35393  C4  GUA  783     198.489  92.712 -51.740  1.00 42.54      A16S
ATOM  35394  N3  GUA  783     197.886  92.059 -50.729  1.00 42.54      A16S
ATOM  35395  C2  GUA  783     197.356  92.886 -49.858  1.00 42.54      A16S
ATOM  35396  N2  GUA  783     196.720  92.395 -48.784  1.00 42.54      A16S
ATOM  35397  N1  GUA  783     197.409  94.250 -49.973  1.00 42.54      A16S
ATOM  35398  C6  GUA  783     198.020  94.946 -51.010  1.00 42.54      A16S
ATOM  35399  O6  GUA  783     198.014  96.198 -51.017  1.00 42.54      A16S
ATOM  35400  C5  GUA  783     198.594  94.065 -51.950  1.00 42.54      A16S
ATOM  35401  N7  GUA  783     199.299  94.330 -53.115  1.00 42.54      A16S
ATOM  35402  C8  GUA  783     199.610  93.153 -53.576  1.00 42.54      A16S
ATOM  35403  C2' GUA  783     198.291  90.027 -53.875  1.00 45.84      A16S
ATOM  35404  O2' GUA  783     198.233  88.646 -53.584  1.00 45.84      A16S
ATOM  35405  C3' GUA  783     198.862  90.241 -55.267  1.00 45.84      A16S
ATOM  35406  O3' GUA  783     198.428  89.221 -56.159  1.00 45.84      A16S
ATOM  35407  P   URI  784     197.163  89.475 -57.122  1.00 47.99      A16S
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ATOM  35412  C4' URI  784     195.077  86.570 -55.633  1.00 47.99      A16S
ATOM  35413  O4' URI  784     195.607  86.801 -54.311  1.00 47.99      A16S
ATOM  35414  C1' URI  784     194.546  86.748 -53.369  1.00 47.99      A16S
ATOM  35415  N1  URI  784     194.471  88.033 -52.669  1.00 46.58      A16S
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ATOM  35418  O2  URI  784     193.474  86.994 -50.940  1.00 46.58      A16S
ATOM  35419  N3  URI  784     193.820  89.232 -50.807  1.00 46.58      A16S
ATOM  35420  C4  URI  784     194.274  90.434 -51.299  1.00 46.58      A16S
ATOM  35421  O4  URI  784     194.092  91.462 -50.646  1.00 46.58      A16S
ATOM  35422  C5  URI  784     194.878  90.361 -52.596  1.00 46.58      A16S
ATOM  35423  C2' URI  784     193.266  86.513 -54.162  1.00 47.99      A16S
ATOM  35424  O2' URI  784     193.004  85.132 -54.217  1.00 47.99      A16S
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ATOM  35426  O3' URI  784     192.840  86.605 -56.539  1.00 47.99      A16S
ATOM  35427  P   ADE  785     191.578  87.475 -56.991  1.00 49.37      A16S
ATOM  35428  O1P ADE  785     191.072  86.859 -58.248  1.00 38.47      A16S
ATOM  35429  O2P ADE  785     191.951  88.915 -56.980  1.00 38.47      A16S
ATOM  35430  O5' ADE  785     190.526  87.193 -55.830  1.00 49.37      A16S
ATOM  35431  C5' ADE  785     190.079  85.862 -55.564  1.00 49.37      A16S
ATOM  35432  C4' ADE  785     189.248  85.819 -54.297  1.00 49.37      A16S
ATOM  35433  O4' ADE  785     190.069  86.167 -53.148  1.00 49.37      A16S
ATOM  35434  C1' ADE  785     189.326  86.967 -52.251  1.00 49.37      A16S
ATOM  35435  N9  ADE  785     189.929  88.299 -52.241  1.00 38.47      A16S
ATOM  35436  C4  ADE  785     189.769  89.284 -51.293  1.00 38.47      A16S
ATOM  35437  N3  ADE  785     189.029  89.229 -50.171  1.00 38.47      A16S
ATOM  35438  C2  ADE  785     189.124  90.367 -49.499  1.00 38.47      A16S
ATOM  35439  N1  ADE  785     189.814  91.478 -49.800  1.00 38.47      A16S
ATOM  35440  C6  ADE  785     190.535  91.505 -50.939  1.00 38.47      A16S
ATOM  35441  N6  ADE  785     191.203  92.618 -51.249  1.00 38.47      A16S
ATOM  35442  C5  ADE  785     190.532  90.355 -51.734  1.00 38.47      A16S
ATOM  35443  N7  ADE  785     191.166  90.050 -52.927  1.00 38.47      A16S
ATOM  35444  C8  ADE  785     190.778  88.825 -53.185  1.00 38.47      A16S
ATOM  35445  C2' ADE  785     187.883  86.953 -52.750  1.00 49.37      A16S
ATOM  35446  O2' ADE  785     187.229  85.837 -52.198  1.00 49.37      A16S
ATOM  35447  C3' ADE  785     188.075  86.780 -54.249  1.00 49.37      A16S
ATOM  35448  O3' ADE  785     186.931  86.163 -54.835  1.00 49.37      A16S
ATOM  35449  P   GUA  786     186.001  86.993 -55.857  1.00 44.70      A16S
ATOM  35450  O1P GUA  786     184.758  86.198 -56.004  1.00 49.92      A16S
ATOM  35451  O2P GUA  786     186.788  87.370 -57.064  1.00 49.92      A16S
ATOM  35452  O5' GUA  786     185.641  88.339 -55.086  1.00 44.70      A16S
ATOM  35453  C5' GUA  786     184.926  88.309 -53.859  1.00 44.70      A16S
ATOM  35454  C4' GUA  786     185.129  89.601 -53.120  1.00 44.70      A16S
ATOM  35455  O4' GUA  786     186.548  89.761 -52.859  1.00 44.70      A16S
ATOM  35456  C1' GUA  786     186.898  91.126 -52.942  1.00 44.70      A16S
ATOM  35457  N9  GUA  786     187.843  91.282 -54.042  1.00 49.92      A16S
ATOM  35458  C4  GUA  786     188.709  92.330 -54.223  1.00 49.92      A16S
ATOM  35459  N3  GUA  786     188.864  93.379 -53.393  1.00 49.92      A16S
ATOM  35460  C2  GUA  786     189.761  94.234 -53.842  1.00 49.92      A16S
ATOM  35461  N2  GUA  786     190.068  95.315 -53.125  1.00 49.92      A16S
ATOM  35462  N1  GUA  786     190.431  94.087 -55.025  1.00 49.92      A16S
ATOM  35463  C6  GUA  786     190.277  93.023 -55.899  1.00 49.92      A16S
ATOM  35464  O6  GUA  786     190.911  93.006 -56.952  1.00 49.92      A16S
ATOM  35465  C5  GUA  786     189.343  92.078 -55.413  1.00 49.92      A16S
ATOM  35466  N7  GUA  786     188.906  90.881 -55.959  1.00 49.92      A16S
ATOM  35467  C8  GUA  786     188.022  90.440 -55.107  1.00 49.92      A16S
ATOM  35468  C2' GUA  786     185.598  91.901 -53.174  1.00 44.70      A16S
ATOM  35469  O2' GUA  786     185.047  92.264 -51.924  1.00 44.70      A16S
ATOM  35470  C3' GUA  786     184.755  90.856 -53.886  1.00 44.70      A16S
ATOM  35471  O3' GUA  786     183.368  91.123 -53.739  1.00 44.70      A16S
ATOM  35472  P   URI  787     182.545  91.804 -54.944  1.00 36.83      A16S
ATOM  35473  O1P URI  787     181.164  91.970 -54.430  1.00 52.54      A16S
ATOM  35474  O2P URI  787     182.768  91.070 -56.220  1.00 52.54      A16S
ATOM  35475  O5' URI  787     183.146  93.273 -55.041  1.00 36.83      A16S
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ATOM	35476	C5'	URI	787	182.840	94.230	-54.038	1.00	36.83	A16S	ATOM	35529	O2'	CYT	789	176.931	93.551	-65.987	1.00	46.30	A16S
ATOM	35477	C4'	URI	787	183.713	95.443	-54.187	1.00	36.83	A16S	ATOM	35530	C3'	CYT	789	177.116	94.864	-63.946	1.00	46.30	A16S
ATOM	35478	O4'	URI	787	185.092	95.026	-54.138	1.00	36.83	A16S	ATOM	35531	O3'	CYT	789	175.972	95.551	-64.407	1.00	46.30	A16S
ATOM	35479	C1'	URI	787	185.870	95.875	-54.956	1.00	36.83	A16S	ATOM	35532	P	ADE	790	174.540	95.199	-63.780	1.00	52.48	A16S
ATOM	35480	N1	URI	787	186.531	95.055	-55.972	1.00	52.54	A16S	ATOM	35533	O1P	ADE	790	173.571	96.123	-64.446	1.00	41.24	A16S
ATOM	35481	C6	URI	787	186.196	93.744	-56.163	1.00	52.54	A16S	ATOM	35534	O2P	ADE	790	174.623	95.151	-62.297	1.00	41.24	A16S
ATOM	35482	C2	URI	787	187.495	95.664	-56.738	1.00	52.54	A16S	ATOM	35535	O5'	ADE	790	174.282	93.717	-64.291	1.00	52.48	A16S
ATOM	35483	O2	URI	787	187.839	96.814	-56.571	1.00	52.54	A16S	ATOM	35536	C5'	ADE	790	174.043	93.470	-65.664	1.00	52.48	A16S
ATOM	35484	N3	URI	787	188.048	94.875	-57.707	1.00	52.54	A16S	ATOM	35537	C4'	ADE	790	173.749	92.021	-65.871	1.00	52.48	A16S
ATOM	35485	C4	URI	787	187.749	93.565	-57.970	1.00	52.54	A16S	ATOM	35538	O4'	ADE	790	174.954	91.254	-65.669	1.00	52.48	A16S
ATOM	35486	O4	URI	787	188.309	93.003	-58.902	1.00	52.54	A16S	ATOM	35539	C1'	ADE	790	174.612	89.980	-65.159	1.00	52.48	A16S
ATOM	35487	C5	URI	787	186.757	92.994	-57.111	1.00	52.54	A16S	ATOM	35540	N9	ADE	790	175.389	89.744	-63.943	1.00	41.24	A16S
ATOM	35488	C2'	URI	787	184.923	96.893	-55.579	1.00	36.83	A16S	ATOM	35541	C4	ADE	790	175.677	88.508	-63.429	1.00	41.24	A16S
ATOM	35489	O2'	URI	787	184.890	98.068	-54.805	1.00	36.83	A16S	ATOM	35542	N3	ADE	790	175.316	87.325	-63.936	1.00	41.24	A16S
ATOM	35490	C3'	URI	787	183.609	96.147	-55.518	1.00	36.83	A16S	ATOM	35543	C2	ADE	790	175.756	86.337	-63.171	1.00	41.24	A16S
ATOM	35491	O3'	URI	787	182.546	97.063	-55.487	1.00	36.83	A16S	ATOM	35544	N1	ADE	790	176.460	86.394	-62.041	1.00	41.24	A16S
ATOM	35492	P	CYT	788	181.218	96.746	-56.305	1.00	48.58	A16S	ATOM	35545	C6	ADE	790	176.811	87.605	-61.561	1.00	41.24	A16S
ATOM	35493	O1P	CYT	788	180.347	97.940	-56.192	1.00	42.89	A16S	ATOM	35546	N6	ADE	790	177.515	87.659	-60.434	1.00	41.24	A16S
ATOM	35494	O2P	CYT	788	180.736	95.419	-55.851	1.00	42.89	A16S	ATOM	35547	C5	ADE	790	176.409	88.734	-62.282	1.00	41.24	A16S
ATOM	35495	O5'	CYT	788	181.702	96.623	-57.810	1.00	48.58	A16S	ATOM	35548	N7	ADE	790	176.595	90.094	-62.074	1.00	41.24	A16S
ATOM	35496	C5'	CYT	788	182.188	97.760	-58.508	1.00	48.58	A16S	ATOM	35549	C8	ADE	790	175.972	90.651	-63.088	1.00	41.24	A16S
ATOM	35497	C4'	CYT	788	182.409	97.407	-59.949	1.00	48.58	A16S	ATOM	35550	C2'	ADE	790	173.095	89.956	-64.953	1.00	52.48	A16S
ATOM	35498	O4'	CYT	788	183.522	96.485	-60.066	1.00	48.58	A16S	ATOM	35551	O2'	ADE	790	172.475	89.361	-66.071	1.00	52.48	A16S
ATOM	35499	C1'	CYT	788	183.281	95.595	-61.139	1.00	48.58	A16S	ATOM	35552	C3'	ADE	790	172.781	91.440	-64.866	1.00	52.48	A16S
ATOM	35500	N1	CYT	788	183.351	94.231	-60.625	1.00	42.89	A16S	ATOM	35553	O3'	ADE	790	171.452	91.734	-65.255	1.00	52.48	A16S
ATOM	35501	C6	CYT	788	183.612	93.985	-59.309	1.00	42.89	A16S	ATOM	35554	P	CYT	791	170.300	91.827	-64.141	1.00	50.22	A16S
ATOM	35502	C2	CYT	788	183.153	93.192	-61.505	1.00	42.89	A16S	ATOM	35555	O1P	CYT	791	169.059	92.212	-64.868	1.00	49.95	A16S
ATOM	35503	O2	CYT	788	182.929	93.464	-62.691	1.00	42.89	A16S	ATOM	35556	O2P	CYT	791	170.777	92.676	-63.017	1.00	49.95	A16S
ATOM	35504	N3	CYT	788	183.212	91.919	-61.056	1.00	42.89	A16S	ATOM	35557	O5'	CYT	791	170.136	90.317	-63.645	1.00	50.22	A16S
ATOM	35505	C4	CYT	788	183.465	91.685	-59.774	1.00	42.89	A16S	ATOM	35558	C5'	CYT	791	169.483	89.367	-64.472	1.00	50.22	A16S
ATOM	35506	N4	CYT	788	183.512	90.426	-59.372	1.00	42.89	A16S	ATOM	35559	C4'	CYT	791	169.630	87.975	-63.919	1.00	50.22	A16S
ATOM	35507	C5	CYT	788	183.680	92.736	-58.846	1.00	42.89	A16S	ATOM	35560	O4'	CYT	791	171.026	87.594	-63.909	1.00	50.22	A16S
ATOM	35508	C2'	CYT	788	181.920	95.948	-61.733	1.00	48.58	A16S	ATOM	35561	C1'	CYT	791	171.257	86.664	-62.859	1.00	50.22	A16S
ATOM	35509	O2'	CYT	788	182.121	96.846	-62.800	1.00	48.58	A16S	ATOM	35562	N1	CYT	791	172.236	87.233	-61.925	1.00	49.95	A16S
ATOM	35510	C3'	CYT	788	181.256	96.643	-60.559	1.00	48.58	A16S	ATOM	35563	C6	CYT	791	172.401	88.584	-61.803	1.00	49.95	A16S
ATOM	35511	O3'	CYT	788	180.273	97.563	-60.977	1.00	48.58	A16S	ATOM	35564	C2	CYT	791	172.974	86.362	-61.141	1.00	49.95	A16S
ATOM	35512	P	CYT	789	178.731	97.194	-60.800	1.00	46.30	A16S	ATOM	35565	O2	CYT	791	172.825	85.146	-61.309	1.00	49.95	A16S
ATOM	35513	O1P	CYT	789	177.989	98.464	-60.938	1.00	34.37	A16S	ATOM	35566	N3	CYT	791	173.831	86.860	-60.225	1.00	49.95	A16S
ATOM	35514	O2P	CYT	789	178.569	96.373	-59.582	1.00	34.37	A16S	ATOM	35567	C4	CYT	791	173.959	88.177	-60.085	1.00	49.95	A16S
ATOM	35515	O5'	CYT	789	178.439	96.258	-62.041	1.00	46.30	A16S	ATOM	35568	N4	CYT	791	174.785	88.622	-59.145	1.00	49.95	A16S
ATOM	35516	C5'	CYT	789	178.674	96.719	-63.358	1.00	46.30	A16S	ATOM	35569	C5	CYT	791	173.240	89.094	-60.899	1.00	49.95	A16S
ATOM	35517	C4'	CYT	789	178.368	95.621	-64.325	1.00	46.30	A16S	ATOM	35570	C2'	CYT	791	169.926	86.465	-62.143	1.00	50.22	A16S
ATOM	35518	O4'	CYT	789	179.403	94.613	-64.258	1.00	46.30	A16S	ATOM	35571	O2'	CYT	791	169.257	85.328	-62.648	1.00	50.22	A16S
ATOM	35519	C1'	CYT	789	178.833	93.344	-64.517	1.00	46.30	A16S	ATOM	35572	C3'	CYT	791	169.233	87.777	-62.476	1.00	50.22	A16S
ATOM	35520	N1	CYT	789	179.238	92.420	-63.459	1.00	34.37	A16S	ATOM	35573	O3'	CYT	791	167.834	87.697	-62.300	1.00	50.22	A16S
ATOM	35521	C6	CYT	789	179.618	92.864	-62.228	1.00	34.37	A16S	ATOM	35574	P	GUA	792	167.184	88.335	-60.984	1.00	49.18	A16S
ATOM	35522	C2	CYT	789	179.228	91.074	-63.744	1.00	34.37	A16S	ATOM	35575	O1P	GUA	792	165.727	88.488	-61.253	1.00	42.83	A16S
ATOM	35523	O2	CYT	789	178.891	90.723	-64.880	1.00	34.37	A16S	ATOM	35576	O2P	GUA	792	168.001	89.533	-60.644	1.00	42.83	A16S
ATOM	35524	N3	CYT	789	179.592	90.185	-62.794	1.00	34.37	A16S	ATOM	35577	O5'	GUA	792	167.424	87.216	-59.880	1.00	49.18	A16S
ATOM	35525	C4	CYT	789	179.975	90.619	-61.599	1.00	34.37	A16S	ATOM	35578	C5'	GUA	792	167.086	85.878	-60.155	1.00	49.18	A16S
ATOM	35526	N4	CYT	789	180.352	89.714	-60.697	1.00	34.37	A16S	ATOM	35579	C4'	GUA	792	167.790	84.953	-59.201	1.00	49.18	A16S
ATOM	35527	C5	CYT	789	179.996	92.006	-61.275	1.00	34.37	A16S	ATOM	35580	O4'	GUA	792	169.231	85.057	-59.365	1.00	49.18	A16S
ATOM	35528	C2'	CYT	789	177.317	93.522	-64.631	1.00	46.30	A16S	ATOM	35581	C1'	GUA	792	169.865	84.650	-58.160	1.00	49.18	A16S

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ATOM  35582  N9  GUA  792     170.808  85.687 -57.755  1.00 42.83      A16S
ATOM  35583  C4  GUA  792     171.779  85.571 -56.792  1.00 42.83      A16S
ATOM  35584  N3  GUA  792     172.026  84.476 -56.051  1.00 42.83      A16S
ATOM  35585  C2  GUA  792     173.034  84.662 -55.219  1.00 42.83      A16S
ATOM  35586  N2  GUA  792     173.435  83.659 -54.440  1.00 42.83      A16S
ATOM  35587  N1  GUA  792     173.726  85.838 -55.098  1.00 42.83      A16S
ATOM  35588  C6  GUA  792     173.482  86.983 -55.839  1.00 42.83      A16S
ATOM  35589  O6  GUA  792     174.157  87.997 -55.642  1.00 42.83      A16S
ATOM  35590  C5  GUA  792     172.417  86.789 -56.762  1.00 42.83      A16S
ATOM  35591  N7  GUA  792     171.857  87.658 -57.687  1.00 42.83      A16S
ATOM  35592  C8  GUA  792     170.907  86.961 -58.251  1.00 42.83      A16S
ATOM  35593  C2' GUA  792     168.752  84.397 -57.143  1.00 49.18      A16S
ATOM  35594  O2' GUA  792     168.434  83.023 -57.154  1.00 49.18      A16S
ATOM  35595  C3' GUA  792     167.622  85.238 -57.726  1.00 49.18      A16S
ATOM  35596  O3' GUA  792     166.339  84.842 -57.260  1.00 49.18      A16S
ATOM  35597  P   CYT  793     165.818  85.367 -55.831  1.00 54.45      A16S
ATOM  35598  O1P CYT  793     164.505  84.723 -55.607  1.00 40.27      A16S
ATOM  35599  O2P CYT  793     165.943  86.842 -55.711  1.00 40.27      A16S
ATOM  35600  O5' CYT  793     166.858  84.705 -54.825  1.00 54.45      A16S
ATOM  35601  C5' CYT  793     167.090  85.246 -53.530  1.00 54.45      A16S
ATOM  35602  C4' CYT  793     168.229  84.511 -52.873  1.00 54.45      A16S
ATOM  35603  O4' CYT  793     169.448  84.796 -53.603  1.00 54.45      A16S
ATOM  35604  C1' CYT  793     170.548  84.761 -52.715  1.00 54.45      A16S
ATOM  35605  N1  CYT  793     171.193  86.070 -52.754  1.00 40.27      A16S
ATOM  35606  C6  CYT  793     170.749  87.030 -53.609  1.00 40.27      A16S
ATOM  35607  C2  CYT  793     172.286  86.313 -51.926  1.00 40.27      A16S
ATOM  35608  O2  CYT  793     172.625  85.440 -51.114  1.00 40.27      A16S
ATOM  35609  N3  CYT  793     172.935  87.493 -52.021  1.00 40.27      A16S
ATOM  35610  C4  CYT  793     172.506  88.413 -52.884  1.00 40.27      A16S
ATOM  35611  N4  CYT  793     173.172  89.550 -52.968  1.00 40.27      A16S
ATOM  35612  C5  CYT  793     171.370  88.204 -53.705  1.00 40.27      A16S
ATOM  35613  C2' CYT  793     169.998  84.387 -51.345  1.00 54.45      A16S
ATOM  35614  O2' CYT  793     170.011  82.979 -51.246  1.00 54.45      A16S
ATOM  35615  C3' CYT  793     168.581  84.919 -51.458  1.00 54.45      A16S
ATOM  35616  O3' CYT  793     167.720  84.291 -50.526  1.00 54.45      A16S
ATOM  35617  P   CYT  794     167.121  85.151 -49.312  1.00 43.49      A16S
ATOM  35618  O1P CYT  794     166.356  84.230 -48.440  1.00 29.74      A16S
ATOM  35619  O2P CYT  794     166.457  86.357 -49.877  1.00 29.74      A16S
ATOM  35620  O5' CYT  794     168.399  85.613 -48.486  1.00 43.49      A16S
ATOM  35621  C5' CYT  794     169.180  84.673 -47.761  1.00 43.49      A16S
ATOM  35622  C4' CYT  794     170.373  85.370 -47.160  1.00 43.49      A16S
ATOM  35623  O4' CYT  794     171.141  85.988 -48.217  1.00 43.49      A16S
ATOM  35624  C1' CYT  794     171.680  87.204 -47.755  1.00 43.49      A16S
ATOM  35625  N1  CYT  794     171.346  88.254 -48.707  1.00 29.74      A16S
ATOM  35626  C6  CYT  794     170.369  88.077 -49.640  1.00 29.74      A16S
ATOM  35627  C2  CYT  794     172.056  89.429 -48.650  1.00 29.74      A16S
ATOM  35628  O2  CYT  794     172.943  89.535 -47.804  1.00 29.74      A16S
ATOM  35629  N3  CYT  794     171.778  90.414 -49.522  1.00 29.74      A16S
ATOM  35630  C4  CYT  794     170.840  90.230 -50.447  1.00 29.74      A16S
ATOM  35631  N4  CYT  794     170.624  91.207 -51.313  1.00 29.74      A16S
ATOM  35632  C5  CYT  794     170.090  89.031 -50.528  1.00 29.74      A16S
ATOM  35633  C2' CYT  794     171.171  87.478 -46.344  1.00 43.49      A16S
ATOM  35634  O2' CYT  794     172.228  87.261 -45.442  1.00 43.49      A16S
ATOM  35635  C3' CYT  794     170.004  86.502 -46.222  1.00 43.49      A16S
ATOM  35636  O3' CYT  794     169.925  85.964 -44.915  1.00 43.49      A16S
ATOM  35637  P   CYT  795     168.765  86.438 -43.928  1.00 47.17      A16S
ATOM  35638  O1P CYT  795     169.150  85.917 -42.601  1.00 41.36      A16S
ATOM  35639  O2P CYT  795     167.473  86.040 -44.521  1.00 41.36      A16S
ATOM  35640  O5' CYT  795     168.854  88.027 -43.912  1.00 47.17      A16S
ATOM  35641  C5' CYT  795     169.263  88.704 -42.731  1.00 47.17      A16S
ATOM  35642  C4' CYT  795     168.992  90.181 -42.844  1.00 47.17      A16S
ATOM  35643  O4' CYT  795     169.474  90.589 -44.135  1.00 47.17      A16S
ATOM  35644  C1' CYT  795     168.725  91.689 -44.593  1.00 47.17      A16S
ATOM  35645  N1  CYT  795     168.336  91.453 -45.985  1.00 41.36      A16S
ATOM  35646  C6  CYT  795     167.764  90.280 -46.387  1.00 41.36      A16S
ATOM  35647  C2  CYT  795     168.602  92.453 -46.905  1.00 41.36      A16S
ATOM  35648  O2  CYT  795     169.112  93.510 -46.498  1.00 41.36      A16S
ATOM  35649  N3  CYT  795     168.320  92.247 -48.214  1.00 41.36      A16S
ATOM  35650  C4  CYT  795     167.818  91.082 -48.606  1.00 41.36      A16S
ATOM  35651  N4  CYT  795     167.636  90.899 -49.907  1.00 41.36      A16S
ATOM  35652  C5  CYT  795     167.502  90.050 -47.680  1.00 41.36      A16S
ATOM  35653  C2' CYT  795     167.614  91.968 -43.584  1.00 47.17      A16S
ATOM  35654  O2' CYT  795     168.085  93.014 -42.755  1.00 47.17      A16S
ATOM  35655  C3' CYT  795     167.543  90.650 -42.832  1.00 47.17      A16S
ATOM  35656  O3' CYT  795     167.064  90.762 -41.480  1.00 47.17      A16S
ATOM  35657  P   URI  796     167.066  92.185 -40.695  1.00 42.03      A16S
ATOM  35658  O1P URI  796     166.646  91.810 -39.319  1.00 43.34      A16S
ATOM  35659  O2P URI  796     166.337  93.271 -41.402  1.00 43.34      A16S
ATOM  35660  O5' URI  796     168.597  92.607 -40.619  1.00 42.03      A16S
ATOM  35661  C5' URI  796     169.514  91.847 -39.847  1.00 42.03      A16S
ATOM  35662  C4' URI  796     170.882  92.470 -39.905  1.00 42.03      A16S
ATOM  35663  O4' URI  796     171.293  92.572 -41.288  1.00 42.03      A16S
ATOM  35664  C1' URI  796     172.182  93.662 -41.435  1.00 42.03      A16S
ATOM  35665  N1  URI  796     171.730  94.482 -42.564  1.00 43.34      A16S
ATOM  35666  C6  URI  796     170.463  94.389 -43.059  1.00 43.34      A16S
ATOM  35667  C2  URI  796     172.636  95.341 -43.113  1.00 43.34      A16S
ATOM  35668  O2  URI  796     173.766  95.446 -42.693  1.00 43.34      A16S
ATOM  35669  N3  URI  796     172.179  96.076 -44.173  1.00 43.34      A16S
ATOM  35670  C4  URI  796     170.928  96.031 -44.720  1.00 43.34      A16S
ATOM  35671  O4  URI  796     170.661  96.760 -45.666  1.00 43.34      A16S
ATOM  35672  C5  URI  796     170.040  95.114 -44.095  1.00 43.34      A16S
ATOM  35673  C2' URI  796     172.247  94.383 -40.090  1.00 42.03      A16S
ATOM  35674  O2' URI  796     173.381  93.942 -39.363  1.00 42.03      A16S
ATOM  35675  C3' URI  796     170.959  93.904 -39.437  1.00 42.03      A16S
ATOM  35676  O3' URI  796     171.049  93.954 -38.022  1.00 42.03      A16S
ATOM  35677  P   ADE  797     170.520  95.254 -37.252  1.00 36.96      A16S
ATOM  35678  O1P ADE  797     169.154  95.510 -37.792  1.00 35.25      A16S
ATOM  35679  O2P ADE  797     170.708  95.004 -35.804  1.00 35.25      A16S
ATOM  35680  O5' ADE  797     171.491  96.417 -37.746  1.00 36.96      A16S
ATOM  35681  C5' ADE  797     172.738  96.596 -37.120  1.00 36.96      A16S
ATOM  35682  C4' ADE  797     173.407  97.841 -37.616  1.00 36.96      A16S
ATOM  35683  O4' ADE  797     173.740  97.656 -38.995  1.00 36.96      A16S
ATOM  35684  C1' ADE  797     173.828  98.909 -39.624  1.00 36.96      A16S
ATOM  35685  N9  ADE  797     173.005  98.864 -40.820  1.00 35.25      A16S
ATOM  35686  C4  ADE  797     173.108  99.725 -41.877  1.00 35.25      A16S
ATOM  35687  N3  ADE  797     173.995 100.721 -42.021  1.00 35.25      A16S
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ATOM	35688	C2	ADE	797	173.784	101.354	-43.159	1.00	35.25	A16S	ATOM	35741	C3'	ADE	799	169.142	103.355	-40.212	1.00	35.63	A16S
ATOM	35689	N1	ADE	797	172.852	101.126	-44.097	1.00	35.25	A16S	ATOM	35742	O3'	ADE	799	168.736	104.728	-40.191	1.00	35.63	A16S
ATOM	35690	C6	ADE	797	171.984	100.114	-43.910	1.00	35.25	A16S	ATOM	35743	P	CYT	800	167.710	105.250	-39.073	1.00	43.46	A16S
ATOM	35691	N6	ADE	797	171.054	99.887	-44.835	1.00	35.25	A16S	ATOM	35744	O1P	CYT	800	166.444	105.540	-39.771	1.00	34.39	A16S
ATOM	35692	C5	ADE	797	172.109	99.362	-42.754	1.00	35.25	A16S	ATOM	35745	O2P	CYT	800	167.722	104.290	-37.949	1.00	34.39	A16S
ATOM	35693	N7	ADE	797	171.408	98.267	-42.276	1.00	35.25	A16S	ATOM	35746	O5'	CYT	800	168.349	106.607	-38.547	1.00	43.46	A16S
ATOM	35694	C8	ADE	797	171.984	98.005	-41.129	1.00	35.25	A16S	ATOM	35747	C5'	CYT	800	167.894	107.880	-38.992	1.00	43.46	A16S
ATOM	35695	C2'	ADE	797	173.377	99.960	-38.616	1.00	36.96	A16S	ATOM	35748	C4'	CYT	800	168.942	108.906	-38.673	1.00	43.46	A16S
ATOM	35696	O2'	ADE	797	174.533	100.528	-38.045	1.00	36.96	A16S	ATOM	35749	O4'	CYT	800	169.277	108.731	-37.291	1.00	43.46	A16S
ATOM	35697	C3'	ADE	797	172.591	99.109	-37.631	1.00	36.96	A16S	ATOM	35750	C1'	CYT	800	170.666	108.811	-37.113	1.00	43.46	A16S
ATOM	35698	O3'	ADE	797	172.608	99.675	-36.335	1.00	36.96	A16S	ATOM	35751	N1	CYT	800	171.056	107.770	-36.171	1.00	34.39	A16S
ATOM	35699	P	ADE	798	171.444	100.677	-35.883	1.00	35.57	A16S	ATOM	35752	C6	CYT	800	170.355	106.606	-36.070	1.00	34.39	A16S
ATOM	35700	O1P	ADE	798	170.326	100.596	-36.844	1.00	35.80	A16S	ATOM	35753	C2	CYT	800	172.132	108.022	-35.331	1.00	34.39	A16S
ATOM	35701	O2P	ADE	798	171.198	100.386	-34.454	1.00	35.80	A16S	ATOM	35754	O2	CYT	800	172.774	109.074	-35.488	1.00	34.39	A16S
ATOM	35702	O5'	ADE	798	172.112	102.113	-36.039	1.00	35.57	A16S	ATOM	35755	N3	CYT	800	172.439	107.129	-34.365	1.00	34.39	A16S
ATOM	35703	C5'	ADE	798	173.134	102.520	-35.148	1.00	35.57	A16S	ATOM	35756	C4	CYT	800	171.704	106.028	-34.227	1.00	34.39	A16S
ATOM	35704	C4'	ADE	798	173.781	103.799	-35.618	1.00	35.57	A16S	ATOM	35757	N4	CYT	800	171.988	105.220	-33.213	1.00	34.39	A16S
ATOM	35705	O4'	ADE	798	174.671	104.289	-34.617	1.00	35.57	A16S	ATOM	35758	C5	CYT	800	170.634	105.721	-35.114	1.00	34.39	A16S
ATOM	35706	C1'	ADE	798	175.761	104.899	-35.229	1.00	35.57	A16S	ATOM	35759	C2'	CYT	800	171.378	108.890	-38.460	1.00	43.46	A16S
ATOM	35707	N9	ADE	798	176.894	104.824	-34.315	1.00	35.80	A16S	ATOM	35760	O2'	CYT	800	172.112	110.106	-38.584	1.00	43.46	A16S
ATOM	35708	C4	ADE	798	177.602	105.919	-33.905	1.00	35.80	A16S	ATOM	35761	C3'	CYT	800	170.228	108.683	-39.444	1.00	43.46	A16S
ATOM	35709	N3	ADE	798	177.443	107.179	-34.326	1.00	35.80	A16S	ATOM	35762	O3'	CYT	800	170.249	109.513	-40.617	1.00	43.46	A16S
ATOM	35710	C2	ADE	798	178.268	107.994	-33.672	1.00	35.80	A16S	ATOM	35763	P	GUA	801	169.751	111.071	-40.576	1.00	40.46	A16S
ATOM	35711	N1	ADE	798	179.157	107.707	-32.717	1.00	35.80	A16S	ATOM	35764	O1P	GUA	801	168.298	111.088	-40.895	1.00	50.15	A16S
ATOM	35712	C6	ADE	798	179.282	106.423	-32.323	1.00	35.80	A16S	ATOM	35765	O2P	GUA	801	170.692	111.894	-41.381	1.00	50.15	A16S
ATOM	35713	N6	ADE	798	180.153	106.141	-31.362	1.00	35.80	A16S	ATOM	35766	O5'	GUA	801	169.927	111.609	-39.109	1.00	40.46	A16S
ATOM	35714	C5	ADE	798	178.478	105.466	-32.946	1.00	35.80	A16S	ATOM	35767	C5'	GUA	801	170.375	112.933	-38.925	1.00	40.46	A16S
ATOM	35715	N7	ADE	798	178.367	104.093	-32.791	1.00	35.80	A16S	ATOM	35768	C4'	GUA	801	169.585	113.585	-37.836	1.00	40.46	A16S
ATOM	35716	C8	ADE	798	177.424	103.757	-33.635	1.00	35.80	A16S	ATOM	35769	O4'	GUA	801	168.308	113.956	-38.337	1.00	40.46	A16S
ATOM	35717	C2'	ADE	798	175.872	104.432	-36.683	1.00	35.57	A16S	ATOM	35770	C1'	GUA	801	167.419	113.995	-37.266	1.00	40.46	A16S
ATOM	35718	O2'	ADE	798	176.017	105.563	-37.501	1.00	35.57	A16S	ATOM	35771	N9	GUA	801	166.069	113.803	-37.764	1.00	50.15	A16S
ATOM	35719	C3'	ADE	798	174.543	103.699	-36.920	1.00	35.57	A16S	ATOM	35772	C4	GUA	801	164.950	114.441	-37.296	1.00	50.15	A16S
ATOM	35720	O3'	ADE	798	173.696	104.497	-37.734	1.00	35.57	A16S	ATOM	35773	N3	GUA	801	164.892	115.264	-36.220	1.00	50.15	A16S
ATOM	35721	P	ADE	799	173.911	104.600	-39.315	1.00	35.63	A16S	ATOM	35774	C2	GUA	801	163.679	115.752	-36.038	1.00	50.15	A16S
ATOM	35722	O1P	ADE	799	173.399	105.936	-39.718	1.00	33.91	A16S	ATOM	35775	N2	GUA	801	163.426	116.559	-34.996	1.00	50.15	A16S
ATOM	35723	O2P	ADE	799	175.292	104.209	-39.691	1.00	33.91	A16S	ATOM	35776	N1	GUA	801	162.622	115.476	-36.862	1.00	50.15	A16S
ATOM	35724	O5'	ADE	799	172.891	103.490	-39.817	1.00	35.63	A16S	ATOM	35777	C6	GUA	801	162.666	114.646	-37.976	1.00	50.15	A16S
ATOM	35725	C5'	ADE	799	171.562	103.459	-39.330	1.00	35.63	A16S	ATOM	35778	O6	GUA	801	161.661	114.492	-38.664	1.00	50.15	A16S
ATOM	35726	C4'	ADE	799	170.629	103.277	-40.482	1.00	35.63	A16S	ATOM	35779	C5	GUA	801	163.944	114.091	-38.163	1.00	50.15	A16S
ATOM	35727	O4'	ADE	799	170.809	101.944	-41.019	1.00	35.63	A16S	ATOM	35780	N7	GUA	801	164.409	113.201	-39.124	1.00	50.15	A16S
ATOM	35728	C1'	ADE	799	169.620	101.531	-41.650	1.00	35.63	A16S	ATOM	35781	C8	GUA	801	165.671	113.045	-38.833	1.00	50.15	A16S
ATOM	35729	N9	ADE	799	169.235	100.254	-41.073	1.00	33.91	A16S	ATOM	35782	C2'	GUA	801	167.995	113.235	-36.070	1.00	40.46	A16S
ATOM	35730	C4	ADE	799	168.666	99.203	-41.740	1.00	33.91	A16S	ATOM	35783	O2'	GUA	801	168.208	114.224	-35.114	1.00	40.46	A16S
ATOM	35731	N3	ADE	799	168.331	99.157	-43.037	1.00	33.91	A16S	ATOM	35784	C3'	GUA	801	169.317	112.708	-36.623	1.00	40.46	A16S
ATOM	35732	C2	ADE	799	167.819	97.973	-43.340	1.00	33.91	A16S	ATOM	35785	O3'	GUA	801	170.514	112.865	-35.832	1.00	40.46	A16S
ATOM	35733	N1	ADE	799	167.626	96.902	-42.555	1.00	33.91	A16S	ATOM	35786	P	ADE	802	170.488	112.956	-34.228	1.00	47.24	A16S
ATOM	35734	C6	ADE	799	167.986	96.974	-41.262	1.00	33.91	A16S	ATOM	35787	O1P	ADE	802	169.827	114.195	-33.802	1.00	36.13	A16S
ATOM	35735	N6	ADE	799	167.823	95.885	-40.496	1.00	33.91	A16S	ATOM	35788	O2P	ADE	802	171.919	112.798	-33.910	1.00	36.13	A16S
ATOM	35736	C5	ADE	799	168.525	98.191	-40.809	1.00	33.91	A16S	ATOM	35789	O5'	ADE	802	169.685	111.669	-33.715	1.00	47.24	A16S
ATOM	35737	N7	ADE	799	168.975	98.608	-39.565	1.00	33.91	A16S	ATOM	35790	C5'	ADE	802	169.162	110.706	-34.639	1.00	47.24	A16S
ATOM	35738	C8	ADE	799	169.382	99.839	-39.779	1.00	33.91	A16S	ATOM	35791	C4'	ADE	802	168.930	109.371	-33.965	1.00	47.24	A16S
ATOM	35739	C2'	ADE	799	168.601	102.654	-41.454	1.00	35.63	A16S	ATOM	35792	O4'	ADE	802	170.175	108.964	-33.385	1.00	47.24	A16S
ATOM	35740	O2'	ADE	799	168.711	103.511	-42.567	1.00	35.63	A16S	ATOM	35793	C1'	ADE	802	169.924	108.136	-32.287	1.00	47.24	A16S

ATOM	35794	N9	ADE	802	170.989	108.348	-31.318	1.00	36.13	A16S	ATOM	35847	C2'	GUA	804	156.355	107.473	-37.636	1.00	37.14	A16S
ATOM	35795	C4	ADE	802	171.451	107.456	-30.386	1.00	36.13	A16S	ATOM	35848	O2'	GUA	804	156.571	106.635	-38.741	1.00	37.14	A16S
ATOM	35796	N3	ADE	802	171.008	106.214	-30.162	1.00	36.13	A16S	ATOM	35849	C3'	GUA	804	157.484	108.467	-37.478	1.00	37.14	A16S
ATOM	35797	C2	ADE	802	171.698	105.649	-29.174	1.00	36.13	A16S	ATOM	35850	O3'	GUA	804	157.952	108.930	-38.720	1.00	37.14	A16S
ATOM	35798	N1	ADE	802	172.712	106.146	-28.453	1.00	36.13	A16S	ATOM	35851	P	CYT	805	157.644	110.433	-39.149	1.00	33.04	A16S
ATOM	35799	C6	ADE	802	173.138	107.393	-28.727	1.00	36.13	A16S	ATOM	35852	O1P	CYT	805	158.605	110.869	-40.198	1.00	52.13	A16S
ATOM	35800	N6	ADE	802	174.176	107.883	-28.049	1.00	36.13	A16S	ATOM	35853	O2P	CYT	805	157.531	111.214	-37.891	1.00	52.13	A16S
ATOM	35801	C5	ADE	802	172.475	108.101	-29.727	1.00	36.13	A16S	ATOM	35854	O5'	CYT	805	156.210	110.289	-39.806	1.00	33.04	A16S
ATOM	35802	N7	ADE	802	172.652	109.380	-30.228	1.00	36.13	A16S	ATOM	35855	C5'	CYT	805	155.968	109.258	-40.733	1.00	33.04	A16S
ATOM	35803	C8	ADE	802	171.749	109.475	-31.168	1.00	36.13	A16S	ATOM	35856	C4'	CYT	805	154.491	109.020	-40.863	1.00	33.04	A16S
ATOM	35804	C2'	ADE	802	168.483	108.359	-31.822	1.00	47.24	A16S	ATOM	35857	O4'	CYT	805	153.983	108.285	-39.721	1.00	33.04	A16S
ATOM	35805	O2'	ADE	802	167.823	107.125	-31.862	1.00	47.24	A16S	ATOM	35858	C1'	CYT	805	152.622	108.632	-39.522	1.00	33.04	A16S
ATOM	35806	C3'	ADE	802	167.935	109.389	-32.822	1.00	47.24	A16S	ATOM	35859	N1	CYT	805	152.483	109.194	-38.179	1.00	52.13	A16S
ATOM	35807	O3'	ADE	802	166.600	108.971	-33.208	1.00	47.24	A16S	ATOM	35860	C6	CYT	805	153.575	109.616	-37.480	1.00	52.13	A16S
ATOM	35808	P	URI	803	166.165	108.787	-34.769	1.00	37.00	A16S	ATOM	35861	C2	CYT	805	151.208	109.302	-37.633	1.00	52.13	A16S
ATOM	35809	O1P	URI	803	166.376	107.374	-35.129	1.00	39.41	A16S	ATOM	35862	O2	CYT	805	150.245	108.887	-38.280	1.00	52.13	A16S
ATOM	35810	O2P	URI	803	166.679	109.849	-35.655	1.00	39.41	A16S	ATOM	35863	N3	CYT	805	151.058	109.850	-36.418	1.00	52.13	A16S
ATOM	35811	O5'	URI	803	164.585	108.997	-34.747	1.00	37.00	A16S	ATOM	35864	C4	CYT	805	152.124	110.275	-35.748	1.00	52.13	A16S
ATOM	35812	C5'	URI	803	163.788	108.781	-33.560	1.00	37.00	A16S	ATOM	35865	N4	CYT	805	151.926	110.824	-34.564	1.00	52.13	A16S
ATOM	35813	C4'	URI	803	162.921	110.000	-33.276	1.00	37.00	A16S	ATOM	35866	C5	CYT	805	153.441	110.158	-36.271	1.00	52.13	A16S
ATOM	35814	O4'	URI	803	163.687	110.955	-32.538	1.00	37.00	A16S	ATOM	35867	C2'	CYT	805	152.259	109.653	-40.603	1.00	33.04	A16S
ATOM	35815	C1'	URI	803	163.206	112.238	-32.846	1.00	37.00	A16S	ATOM	35868	O2'	CYT	805	151.763	108.976	-41.738	1.00	33.04	A16S
ATOM	35816	N1	URI	803	164.277	113.222	-32.717	1.00	39.41	A16S	ATOM	35869	C3'	CYT	805	153.615	110.255	-40.901	1.00	33.04	A16S
ATOM	35817	C6	URI	803	165.518	113.045	-33.265	1.00	39.41	A16S	ATOM	35870	O3'	CYT	805	153.623	110.835	-42.185	1.00	33.04	A16S
ATOM	35818	C2	URI	803	163.974	114.324	-32.009	1.00	39.41	A16S	ATOM	35871	P	GUA	806	153.349	112.401	-42.336	1.00	53.80	A16S
ATOM	35819	O2	URI	803	162.882	114.498	-31.549	1.00	39.41	A16S	ATOM	35872	O1P	GUA	806	153.589	112.749	-43.768	1.00	33.68	A16S
ATOM	35820	N3	URI	803	164.995	115.220	-31.860	1.00	39.41	A16S	ATOM	35873	O2P	GUA	806	154.075	113.119	-41.269	1.00	33.68	A16S
ATOM	35821	C4	URI	803	166.262	115.114	-32.368	1.00	39.41	A16S	ATOM	35874	O5'	GUA	806	151.801	112.534	-42.025	1.00	53.80	A16S
ATOM	35822	O4	URI	803	167.050	116.044	-32.226	1.00	39.41	A16S	ATOM	35875	C5'	GUA	806	150.858	111.957	-42.906	1.00	53.80	A16S
ATOM	35823	C5	URI	803	166.496	113.930	-33.112	1.00	39.41	A16S	ATOM	35876	C4'	GUA	806	149.471	112.247	-42.427	1.00	53.80	A16S
ATOM	35824	C2'	URI	803	162.532	112.213	-34.213	1.00	37.00	A16S	ATOM	35877	O4'	GUA	806	149.195	111.484	-41.227	1.00	53.80	A16S
ATOM	35825	O2'	URI	803	161.292	112.889	-34.164	1.00	37.00	A16S	ATOM	35878	C1'	GUA	806	148.269	112.199	-40.431	1.00	53.80	A16S
ATOM	35826	C3'	URI	803	162.463	110.720	-34.540	1.00	37.00	A16S	ATOM	35879	N9	GUA	806	148.879	112.464	-39.139	1.00	33.68	A16S
ATOM	35827	O3'	URI	803	161.125	110.432	-34.980	1.00	37.00	A16S	ATOM	35880	C4	GUA	806	148.204	112.687	-37.974	1.00	33.68	A16S
ATOM	35828	P	GUA	804	160.011	109.775	-33.981	1.00	37.14	A16S	ATOM	35881	N3	GUA	806	146.868	112.627	-37.816	1.00	33.68	A16S
ATOM	35829	O1P	GUA	804	159.210	110.826	-33.289	1.00	37.59	A16S	ATOM	35882	C2	GUA	806	146.509	112.928	-36.586	1.00	33.68	A16S
ATOM	35830	O2P	GUA	804	160.596	108.664	-33.184	1.00	37.59	A16S	ATOM	35883	N2	GUA	806	145.217	112.904	-36.256	1.00	33.68	A16S
ATOM	35831	O5'	GUA	804	159.041	109.116	-35.053	1.00	37.14	A16S	ATOM	35884	N1	GUA	806	147.389	113.272	-35.593	1.00	33.68	A16S
ATOM	35832	C5'	GUA	804	159.608	108.408	-36.148	1.00	37.14	A16S	ATOM	35885	C6	GUA	806	148.762	113.342	-35.736	1.00	33.68	A16S
ATOM	35833	C4'	GUA	804	158.560	107.618	-36.864	1.00	37.14	A16S	ATOM	35886	O6	GUA	806	149.452	113.686	-34.786	1.00	33.68	A16S
ATOM	35834	O4'	GUA	804	157.836	106.782	-35.929	1.00	37.14	A16S	ATOM	35887	C5	GUA	806	149.166	112.999	-37.044	1.00	33.68	A16S
ATOM	35835	C1'	GUA	804	156.500	106.650	-36.361	1.00	37.14	A16S	ATOM	35888	N7	GUA	806	150.430	112.916	-37.604	1.00	33.68	A16S
ATOM	35836	N9	GUA	804	155.620	107.124	-35.306	1.00	37.59	A16S	ATOM	35889	C8	GUA	806	150.208	112.586	-38.848	1.00	33.68	A16S
ATOM	35837	C4	GUA	804	154.262	106.971	-35.275	1.00	37.59	A16S	ATOM	35890	C2'	GUA	806	147.964	113.505	-41.168	1.00	53.80	A16S
ATOM	35838	N3	GUA	804	153.518	106.359	-36.212	1.00	37.59	A16S	ATOM	35891	O2'	GUA	806	146.848	113.333	-42.021	1.00	53.80	A16S
ATOM	35839	C2	GUA	804	152.235	106.383	-35.919	1.00	37.59	A16S	ATOM	35892	C3'	GUA	806	149.229	113.673	-41.982	1.00	53.80	A16S
ATOM	35840	N2	GUA	804	151.345	105.834	-36.755	1.00	37.59	A16S	ATOM	35893	O3'	GUA	806	149.016	114.521	-43.089	1.00	53.80	A16S
ATOM	35841	N1	GUA	804	151.723	106.950	-34.790	1.00	37.59	A16S	ATOM	35894	P	CYT	807	149.290	116.091	-42.941	1.00	48.30	A16S
ATOM	35842	C6	GUA	804	152.465	107.584	-33.808	1.00	37.59	A16S	ATOM	35895	O1P	CYT	807	149.110	116.643	-44.303	1.00	47.42	A16S
ATOM	35843	O6	GUA	804	151.894	108.063	-32.829	1.00	37.59	A16S	ATOM	35896	O2P	CYT	807	150.542	116.335	-42.214	1.00	47.42	A16S
ATOM	35844	C5	GUA	804	153.851	107.577	-34.113	1.00	37.59	A16S	ATOM	35897	O5'	CYT	807	148.089	116.596	-42.039	1.00	48.30	A16S
ATOM	35845	N7	GUA	804	154.936	108.100	-33.418	1.00	37.59	A16S	ATOM	35898	C5'	CYT	807	146.764	116.499	-42.517	1.00	48.30	A16S
ATOM	35846	C8	GUA	804	155.964	107.806	-34.165	1.00	37.59	A16S	ATOM	35899	C4'	CYT	807	145.802	116.895	-41.443	1.00	48.30	A16S

ATOM	35900	O4'	CYT	807	145.883	115.969	-40.331	1.00	48.30	A16S	ATOM	35953	C2'	CYT	809	146.546	126.834	-33.159	1.00	38.38	A16S
ATOM	35901	C1'	CYT	807	145.552	116.649	-39.135	1.00	48.30	A16S	ATOM	35954	O2'	CYT	809	145.852	127.297	-32.018	1.00	38.38	A16S
ATOM	35902	N1	CYT	807	146.687	116.576	-38.215	1.00	47.42	A16S	ATOM	35955	C3'	CYT	809	145.950	127.357	-34.458	1.00	38.38	A16S
ATOM	35903	C6	CYT	807	147.954	116.328	-38.660	1.00	47.42	A16S	ATOM	35956	O3'	CYT	809	145.543	128.701	-34.322	1.00	38.38	A16S
ATOM	35904	C2	CYT	807	146.444	116.787	-36.870	1.00	47.42	A16S	ATOM	35957	P	URI	810	146.548	129.869	-34.729	1.00	35.86	A16S
ATOM	35905	O2	CYT	807	145.277	116.981	-36.505	1.00	47.42	A16S	ATOM	35958	O1P	URI	810	145.842	131.162	-34.523	1.00	48.76	A16S
ATOM	35906	N3	CYT	807	147.474	116.772	-35.996	1.00	47.42	A16S	ATOM	35959	O2P	URI	810	147.146	129.549	-36.050	1.00	48.76	A16S
ATOM	35907	C4	CYT	807	148.712	116.546	-36.435	1.00	47.42	A16S	ATOM	35960	O5'	URI	810	147.675	129.816	-33.618	1.00	35.86	A16S
ATOM	35908	N4	CYT	807	149.702	116.548	-35.538	1.00	47.42	A16S	ATOM	35961	C5'	URI	810	147.496	130.524	-32.407	1.00	35.86	A16S
ATOM	35909	C5	CYT	807	148.990	116.308	-37.814	1.00	47.42	A16S	ATOM	35962	C4'	URI	810	148.736	130.430	-31.562	1.00	35.86	A16S
ATOM	35910	C2'	CYT	807	145.257	118.093	-39.528	1.00	48.30	A16S	ATOM	35963	O4'	URI	810	149.105	129.038	-31.421	1.00	35.86	A16S
ATOM	35911	O2'	CYT	807	143.888	118.176	-39.851	1.00	48.30	A16S	ATOM	35964	C1'	URI	810	150.500	128.930	-31.282	1.00	35.86	A16S
ATOM	35912	C3'	CYT	807	146.092	118.219	-40.786	1.00	48.30	A16S	ATOM	35965	N1	URI	810	150.974	128.039	-32.348	1.00	48.76	A16S
ATOM	35913	O3'	CYT	807	145.609	119.252	-41.604	1.00	48.30	A16S	ATOM	35966	C6	URI	810	150.153	127.713	-33.396	1.00	48.76	A16S
ATOM	35914	P	GUA	808	146.235	120.713	-41.473	1.00	43.32	A16S	ATOM	35967	C2	URI	810	152.254	127.532	-32.260	1.00	48.76	A16S
ATOM	35915	O1P	GUA	808	145.700	121.507	-42.627	1.00	39.93	A16S	ATOM	35968	O2	URI	810	153.027	127.830	-31.369	1.00	48.76	A16S
ATOM	35916	O2P	GUA	808	147.701	120.541	-41.315	1.00	39.93	A16S	ATOM	35969	N3	URI	810	152.600	126.672	-33.267	1.00	48.76	A16S
ATOM	35917	O5'	GUA	808	145.619	121.267	-40.112	1.00	43.32	A16S	ATOM	35970	C4	URI	810	151.817	126.293	-34.339	1.00	48.76	A16S
ATOM	35918	C5'	GUA	808	144.239	121.576	-40.028	1.00	43.32	A16S	ATOM	35971	O4	URI	810	152.256	125.483	-35.153	1.00	48.76	A16S
ATOM	35919	C4'	GUA	808	143.868	121.898	-38.610	1.00	43.32	A16S	ATOM	35972	C5	URI	810	150.521	126.884	-34.371	1.00	48.76	A16S
ATOM	35920	O4'	GUA	808	144.228	120.774	-37.762	1.00	43.32	A16S	ATOM	35973	C2'	URI	810	151.058	130.354	-31.321	1.00	35.86	A16S
ATOM	35921	C1'	GUA	808	144.577	121.252	-36.474	1.00	43.32	A16S	ATOM	35974	O2'	URI	810	151.117	130.873	-30.007	1.00	35.86	A16S
ATOM	35922	N9	GUA	808	145.937	120.825	-36.165	1.00	39.93	A16S	ATOM	35975	C3'	URI	810	149.984	131.076	-32.113	1.00	35.86	A16S
ATOM	35923	C4	GUA	808	146.553	120.920	-34.942	1.00	39.93	A16S	ATOM	35976	O3'	URI	810	149.984	132.449	-31.756	1.00	35.86	A16S
ATOM	35924	N3	GUA	808	146.010	121.443	-33.825	1.00	39.93	A16S	ATOM	35977	P	ADE	811	150.307	133.563	-32.867	1.00	44.78	A16S
ATOM	35925	C2	GUA	808	146.841	121.401	-32.811	1.00	39.93	A16S	ATOM	35978	O1P	ADE	811	150.524	134.821	-32.105	1.00	43.76	A16S
ATOM	35926	N2	GUA	808	146.478	121.915	-31.642	1.00	39.93	A16S	ATOM	35979	O2P	ADE	811	149.282	133.506	-33.940	1.00	43.76	A16S
ATOM	35927	N1	GUA	808	148.095	120.863	-32.877	1.00	39.93	A16S	ATOM	35980	O5'	ADE	811	151.700	133.135	-33.501	1.00	44.78	A16S
ATOM	35928	C6	GUA	808	148.672	120.309	-34.014	1.00	39.93	A16S	ATOM	35981	C5'	ADE	811	152.901	133.356	-32.791	1.00	44.78	A16S
ATOM	35929	O6	GUA	808	149.815	119.836	-33.958	1.00	39.93	A16S	ATOM	35982	C4'	ADE	811	153.335	134.789	-32.946	1.00	44.78	A16S
ATOM	35930	C5	GUA	808	147.801	120.372	-35.117	1.00	39.93	A16S	ATOM	35983	O4'	ADE	811	154.327	135.053	-31.932	1.00	44.78	A16S
ATOM	35931	N7	GUA	808	147.975	119.951	-36.425	1.00	39.93	A16S	ATOM	35984	C1'	ADE	811	155.259	136.003	-32.412	1.00	44.78	A16S
ATOM	35932	C8	GUA	808	146.846	120.241	-37.012	1.00	39.93	A16S	ATOM	35985	N9	ADE	811	156.574	135.380	-32.442	1.00	43.76	A16S
ATOM	35933	C2'	GUA	808	144.428	122.770	-36.501	1.00	43.32	A16S	ATOM	35986	C4	ADE	811	157.710	135.983	-31.990	1.00	43.76	A16S
ATOM	35934	O2'	GUA	808	143.120	123.087	-36.100	1.00	43.32	A16S	ATOM	35987	N3	ADE	811	157.805	137.194	-31.425	1.00	43.76	A16S
ATOM	35935	C3'	GUA	808	144.616	123.058	-37.980	1.00	43.32	A16S	ATOM	35988	C2	ADE	811	159.070	137.462	-31.105	1.00	43.76	A16S
ATOM	35936	O3'	GUA	808	144.035	124.306	-38.328	1.00	43.32	A16S	ATOM	35989	N1	ADE	811	160.168	136.716	-31.283	1.00	43.76	A16S
ATOM	35937	P	CYT	809	144.973	125.606	-38.463	1.00	38.38	A16S	ATOM	35990	C6	ADE	811	160.038	135.502	-31.858	1.00	43.76	A16S
ATOM	35938	O1P	CYT	809	144.169	126.643	-39.165	1.00	40.64	A16S	ATOM	35991	N6	ADE	811	161.140	134.771	-32.039	1.00	43.76	A16S
ATOM	35939	O2P	CYT	809	146.271	125.181	-39.041	1.00	40.64	A16S	ATOM	35992	C5	ADE	811	158.735	135.091	-32.233	1.00	43.76	A16S
ATOM	35940	O5'	CYT	809	145.264	126.059	-36.961	1.00	38.38	A16S	ATOM	35993	N7	ADE	811	158.241	133.928	-32.812	1.00	43.76	A16S
ATOM	35941	C5'	CYT	809	144.208	126.349	-36.053	1.00	38.38	A16S	ATOM	35994	C8	ADE	811	156.956	134.151	-32.911	1.00	43.76	A16S
ATOM	35942	C4'	CYT	809	144.745	126.455	-34.644	1.00	38.38	A16S	ATOM	35995	C2'	ADE	811	154.786	136.429	-33.794	1.00	44.78	A16S
ATOM	35943	O4'	CYT	809	145.223	125.160	-34.196	1.00	38.38	A16S	ATOM	35996	O2'	ADE	811	153.952	137.554	-33.633	1.00	44.78	A16S
ATOM	35944	C1'	CYT	809	146.324	125.332	-33.314	1.00	38.38	A16S	ATOM	35997	C3'	ADE	811	154.034	135.185	-34.235	1.00	44.78	A16S
ATOM	35945	N1	CYT	809	147.488	124.658	-33.895	1.00	40.64	A16S	ATOM	35998	O3'	ADE	811	153.125	135.486	-35.277	1.00	44.78	A16S
ATOM	35946	C6	CYT	809	147.512	124.321	-35.217	1.00	40.64	A16S	ATOM	35999	P	GUA	812	153.684	135.859	-36.742	1.00	51.22	A16S
ATOM	35947	C2	CYT	809	148.575	124.368	-33.073	1.00	40.64	A16S	ATOM	36000	O1P	GUA	812	152.545	136.415	-37.513	1.00	45.54	A16S
ATOM	35948	O2	CYT	809	148.519	124.671	-31.877	1.00	40.64	A16S	ATOM	36001	O2P	GUA	812	154.426	134.699	-37.286	1.00	45.54	A16S
ATOM	35949	N3	CYT	809	149.657	123.760	-33.602	1.00	40.64	A16S	ATOM	36002	O5'	GUA	812	154.717	137.039	-36.464	1.00	51.22	A16S
ATOM	35950	C4	CYT	809	149.671	123.437	-34.893	1.00	40.64	A16S	ATOM	36003	C5'	GUA	812	155.756	137.336	-37.379	1.00	51.22	A16S
ATOM	35951	N4	CYT	809	150.754	122.839	-35.370	1.00	40.64	A16S	ATOM	36004	C4'	GUA	812	156.827	138.138	-36.690	1.00	51.22	A16S
ATOM	35952	C5	CYT	809	148.572	123.715	-35.751	1.00	40.64	A16S	ATOM	36005	O4'	GUA	812	157.188	137.488	-35.443	1.00	51.22	A16S

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ATOM  36006  C1' GUA  812     158.596 137.381 -35.347  1.00 51.22      A16S
ATOM  36007  N9  GUA  812     158.937 136.000 -35.650  1.00 45.54      A16S
ATOM  36008  C4  GUA  812     160.164 135.400 -35.527  1.00 45.54      A16S
ATOM  36009  N3  GUA  812     161.292 135.988 -35.091  1.00 45.54      A16S
ATOM  36010  C2  GUA  812     162.308 135.155 -35.089  1.00 45.54      A16S
ATOM  36011  N2  GUA  812     163.502 135.578 -34.688  1.00 45.54      A16S
ATOM  36012  N1  GUA  812     162.224 133.847 -35.478  1.00 45.54      A16S
ATOM  36013  C6  GUA  812     161.069 133.221 -35.925  1.00 45.54      A16S
ATOM  36014  O6  GUA  812     161.092 132.025 -36.241  1.00 45.54      A16S
ATOM  36015  C5  GUA  812     159.978 134.105 -35.940  1.00 45.54      A16S
ATOM  36016  N7  GUA  812     158.659 133.892 -36.317  1.00 45.54      A16S
ATOM  36017  C8  GUA  812     158.080 135.041 -36.127  1.00 45.54      A16S
ATOM  36018  C2' GUA  812     159.166 138.350 -36.379  1.00 51.22      A16S
ATOM  36019  O2' GUA  812     159.228 139.629 -35.797  1.00 51.22      A16S
ATOM  36020  C3' GUA  812     158.117 138.265 -37.477  1.00 51.22      A16S
ATOM  36021  O3' GUA  812     158.084 139.443 -38.268  1.00 51.22      A16S
ATOM  36022  P   GUA  813     158.797 139.448 -39.704  1.00 53.63      A16S
ATOM  36023  O1P GUA  813     158.599 140.782 -40.314  1.00 55.92      A16S
ATOM  36024  O2P GUA  813     158.362 138.228 -40.443  1.00 55.92      A16S
ATOM  36025  O5' GUA  813     160.337 139.311 -39.343  1.00 53.63      A16S
ATOM  36026  C5' GUA  813     160.986 140.311 -38.582  1.00 53.63      A16S
ATOM  36027  C4' GUA  813     162.424 139.935 -38.364  1.00 53.63      A16S
ATOM  36028  O4' GUA  813     162.499 138.756 -37.523  1.00 53.63      A16S
ATOM  36029  C1' GUA  813     163.669 138.026 -37.842  1.00 53.63      A16S
ATOM  36030  N9  GUA  813     163.269 136.679 -38.219  1.00 55.92      A16S
ATOM  36031  C4  GUA  813     164.071 135.566 -38.271  1.00 55.92      A16S
ATOM  36032  N3  GUA  813     165.377 135.513 -37.943  1.00 55.92      A16S
ATOM  36033  C2  GUA  813     165.870 134.293 -38.093  1.00 55.92      A16S
ATOM  36034  N2  GUA  813     167.144 134.038 -37.783  1.00 55.92      A16S
ATOM  36035  N1  GUA  813     165.147 133.228 -38.550  1.00 55.92      A16S
ATOM  36036  C6  GUA  813     163.809 133.266 -38.909  1.00 55.92      A16S
ATOM  36037  O6  GUA  813     163.260 132.250 -39.340  1.00 55.92      A16S
ATOM  36038  C5  GUA  813     163.259 134.551 -38.724  1.00 55.92      A16S
ATOM  36039  N7  GUA  813     161.967 135.009 -38.928  1.00 55.92      A16S
ATOM  36040  C8  GUA  813     162.020 136.275 -38.614  1.00 55.92      A16S
ATOM  36041  C2' GUA  813     164.347 138.769 -38.994  1.00 53.63      A16S
ATOM  36042  O2' GUA  813     165.273 139.704 -38.492  1.00 53.63      A16S
ATOM  36043  C3' GUA  813     163.171 139.498 -39.603  1.00 53.63      A16S
ATOM  36044  O3' GUA  813     163.609 140.609 -40.360  1.00 53.63      A16S
ATOM  36045  P   URI  814     163.859 140.438 -41.938  1.00 57.62      A16S
ATOM  36046  O1P URI  814     164.388 141.750 -42.379  1.00 53.09      A16S
ATOM  36047  O2P URI  814     162.669 139.868 -42.628  1.00 53.09      A16S
ATOM  36048  O5' URI  814     165.047 139.375 -41.988  1.00 57.62      A16S
ATOM  36049  C5' URI  814     166.348 139.729 -41.525  1.00 57.62      A16S
ATOM  36050  C4' URI  814     167.317 138.604 -41.772  1.00 57.62      A16S
ATOM  36051  O4' URI  814     167.025 137.507 -40.870  1.00 57.62      A16S
ATOM  36052  C1' URI  814     167.267 136.271 -41.524  1.00 57.62      A16S
ATOM  36053  N1  URI  814     165.986 135.562 -41.650  1.00 53.09      A16S
ATOM  36054  C6  URI  814     164.800 136.250 -41.722  1.00 53.09      A16S
ATOM  36055  C2  URI  814     166.015 134.189 -41.716  1.00 53.09      A16S
ATOM  36056  O2  URI  814     167.032 133.546 -41.624  1.00 53.09      A16S
ATOM  36057  N3  URI  814     164.800 133.598 -41.889  1.00 53.09      A16S
ATOM  36058  C4  URI  814     163.584 134.223 -41.992  1.00 53.09      A16S
ATOM  36059  O4  URI  814     162.581 133.549 -42.211  1.00 53.09      A16S
ATOM  36060  C5  URI  814     163.630 135.642 -41.887  1.00 53.09      A16S
ATOM  36061  C2' URI  814     167.860 136.609 -42.893  1.00 57.62      A16S
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ATOM  36068  O5' CYT  815     168.470 137.057 -45.938  1.00 64.85      A16S
ATOM  36069  C5' CYT  815     169.886 136.988 -45.794  1.00 64.85      A16S
ATOM  36070  C4' CYT  815     170.372 135.578 -46.022  1.00 64.85      A16S
ATOM  36071  O4' CYT  815     169.904 134.715 -44.949  1.00 64.85      A16S
ATOM  36072  C1' CYT  815     169.723 133.399 -45.449  1.00 64.85      A16S
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ATOM  36080  C5  CYT  815     166.054 133.646 -45.234  1.00 68.28      A16S
ATOM  36081  C2' CYT  815     170.082 133.422 -46.934  1.00 64.85      A16S
ATOM  36082  O2' CYT  815     171.411 132.990 -47.113  1.00 64.85      A16S
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ATOM  36090  C4' URI  816     170.215 131.229 -50.220  1.00 52.39      A16S
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ATOM  36107  O2P CYT  817     168.165 131.886 -53.804  1.00 54.42      A16S
ATOM  36108  O5' CYT  817     168.450 129.449 -54.192  1.00 51.72      A16S
ATOM  36109  C5' CYT  817     169.175 128.244 -54.377  1.00 51.72      A16S
ATOM  36110  C4' CYT  817     168.223 127.083 -54.485  1.00 51.72      A16S
ATOM  36111  O4' CYT  817     167.570 126.865 -53.209  1.00 51.72      A16S
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ATOM	36112	C1'	CYT	817	166.222	126.465	-53.422	1.00	51.72	A16S	ATOM	36165	O2'	GUA	819	154.951	128.027	-60.144	1.00	73.25	A16S
ATOM	36113	N1	CYT	817	165.335	127.466	-52.810	1.00	54.42	A16S	ATOM	36166	C3'	GUA	819	157.092	129.043	-60.641	1.00	73.25	A16S
ATOM	36114	C6	CYT	817	165.788	128.721	-52.521	1.00	54.42	A16S	ATOM	36167	O3'	GUA	819	156.547	129.176	-61.947	1.00	73.25	A16S
ATOM	36115	C2	CYT	817	164.016	127.116	-52.538	1.00	54.42	A16S	ATOM	36168	P	GUA	820	156.277	130.645	-62.559	1.00	67.86	A16S
ATOM	36116	O2	CYT	817	163.652	125.956	-52.753	1.00	54.42	A16S	ATOM	36169	O1P	GUA	820	155.862	130.400	-63.964	1.00	61.74	A16S
ATOM	36117	N3	CYT	817	163.173	128.041	-52.034	1.00	54.42	A16S	ATOM	36170	O2P	GUA	820	157.439	131.523	-62.276	1.00	61.74	A16S
ATOM	36118	C4	CYT	817	163.616	129.271	-51.781	1.00	54.42	A16S	ATOM	36171	O5'	GUA	820	155.040	131.230	-61.735	1.00	67.86	A16S
ATOM	36119	N4	CYT	817	162.744	130.168	-51.318	1.00	54.42	A16S	ATOM	36172	C5'	GUA	820	153.693	130.879	-62.066	1.00	67.86	A16S
ATOM	36120	C5	CYT	817	164.973	129.643	-52.005	1.00	54.42	A16S	ATOM	36173	C4'	GUA	820	152.711	131.645	-61.200	1.00	67.86	A16S
ATOM	36121	C2'	CYT	817	166.014	126.348	-54.932	1.00	51.72	A16S	ATOM	36174	O4'	GUA	820	153.011	131.398	-59.796	1.00	67.86	A16S
ATOM	36122	O2'	CYT	817	166.188	125.002	-55.324	1.00	51.72	A16S	ATOM	36175	C1'	GUA	820	152.702	132.551	-59.027	1.00	67.86	A16S
ATOM	36123	C3'	CYT	817	167.083	127.304	-55.455	1.00	51.72	A16S	ATOM	36176	N9	GUA	820	153.931	133.055	-58.424	1.00	61.74	A16S
ATOM	36124	O3'	CYT	817	167.488	127.017	-56.782	1.00	51.72	A16S	ATOM	36177	C4	GUA	820	154.022	133.980	-57.411	1.00	61.74	A16S
ATOM	36125	P	URI	818	166.763	127.753	-58.005	1.00	51.15	A16S	ATOM	36178	N3	GUA	820	152.986	134.570	-56.775	1.00	61.74	A16S
ATOM	36126	O1P	URI	818	167.303	127.161	-59.251	1.00	59.60	A16S	ATOM	36179	C2	GUA	820	153.397	135.437	-55.858	1.00	61.74	A16S
ATOM	36127	O2P	URI	818	166.832	129.221	-57.802	1.00	59.60	A16S	ATOM	36180	N2	GUA	820	152.509	136.122	-55.141	1.00	61.74	A16S
ATOM	36128	O5'	URI	818	165.247	127.287	-57.878	1.00	51.15	A16S	ATOM	36181	N1	GUA	820	154.711	135.698	-55.581	1.00	61.74	A16S
ATOM	36129	C5'	URI	818	164.849	126.027	-58.399	1.00	51.15	A16S	ATOM	36182	C6	GUA	820	155.794	135.102	-56.216	1.00	61.74	A16S
ATOM	36130	C4'	URI	818	163.364	125.813	-58.222	1.00	51.15	A16S	ATOM	36183	O6	GUA	820	156.943	135.414	-55.885	1.00	61.74	A16S
ATOM	36131	O4'	URI	818	163.049	125.791	-56.805	1.00	51.15	A16S	ATOM	36184	C5	GUA	820	155.373	134.171	-57.210	1.00	61.74	A16S
ATOM	36132	C1'	URI	818	161.721	126.251	-56.612	1.00	51.15	A16S	ATOM	36185	N7	GUA	820	156.115	133.372	-58.068	1.00	61.74	A16S
ATOM	36133	N1	URI	818	161.787	127.499	-55.859	1.00	59.60	A16S	ATOM	36186	C8	GUA	820	155.219	132.726	-58.765	1.00	61.74	A16S
ATOM	36134	C6	URI	818	162.961	128.180	-55.699	1.00	59.60	A16S	ATOM	36187	C2'	GUA	820	152.090	133.567	-59.988	1.00	67.86	A16S
ATOM	36135	C2	URI	818	160.613	127.969	-55.351	1.00	59.60	A16S	ATOM	36188	O2'	GUA	820	150.688	133.400	-59.999	1.00	67.86	A16S
ATOM	36136	O2	URI	818	159.573	127.345	-55.446	1.00	59.60	A16S	ATOM	36189	C3'	GUA	820	152.735	133.161	-61.305	1.00	67.86	A16S
ATOM	36137	N3	URI	818	160.696	129.186	-54.727	1.00	59.60	A16S	ATOM	36190	O3'	GUA	820	151.966	133.627	-62.408	1.00	67.86	A16S
ATOM	36138	C4	URI	818	161.832	129.943	-54.554	1.00	59.60	A16S	ATOM	36191	P	GUA	821	152.213	135.111	-62.985	1.00	85.49	A16S
ATOM	36139	O4	URI	818	161.753	131.035	-53.997	1.00	59.60	A16S	ATOM	36192	O1P	GUA	821	151.349	135.255	-64.183	1.00	82.30	A16S
ATOM	36140	C5	URI	818	163.025	129.357	-55.080	1.00	59.60	A16S	ATOM	36193	O2P	GUA	821	153.672	135.329	-63.103	1.00	82.30	A16S
ATOM	36141	C2'	URI	818	161.151	126.562	-57.995	1.00	51.15	A16S	ATOM	36194	O5'	GUA	821	151.664	136.085	-61.851	1.00	85.49	A16S
ATOM	36142	O2'	URI	818	160.457	125.451	-58.532	1.00	51.15	A16S	ATOM	36195	C5'	GUA	821	150.266	136.177	-61.577	1.00	85.49	A16S
ATOM	36143	C3'	URI	818	162.424	126.879	-58.758	1.00	51.15	A16S	ATOM	36196	C4'	GUA	821	150.015	137.164	-60.460	1.00	85.49	A16S
ATOM	36144	O3'	URI	818	162.200	126.789	-60.154	1.00	51.15	A16S	ATOM	36197	O4'	GUA	821	150.614	136.667	-59.236	1.00	85.49	A16S
ATOM	36145	P	GUA	819	161.674	128.085	-60.939	1.00	73.25	A16S	ATOM	36198	C1'	GUA	821	151.293	137.719	-58.570	1.00	85.49	A16S
ATOM	36146	O1P	GUA	819	161.711	127.740	-62.381	1.00	57.02	A16S	ATOM	36199	N9	GUA	821	152.718	137.483	-58.744	1.00	82.30	A16S
ATOM	36147	O2P	GUA	819	162.450	129.246	-60.438	1.00	57.02	A16S	ATOM	36200	C4	GUA	821	153.748	138.056	-58.042	1.00	82.30	A16S
ATOM	36148	O5'	GUA	819	160.152	128.256	-60.468	1.00	73.25	A16S	ATOM	36201	N3	GUA	821	153.627	138.951	-57.043	1.00	82.30	A16S
ATOM	36149	C5'	GUA	819	159.144	127.385	-60.969	1.00	73.25	A16S	ATOM	36202	C2	GUA	821	154.805	139.325	-56.575	1.00	82.30	A16S
ATOM	36150	C4'	GUA	819	157.774	127.705	-60.391	1.00	73.25	A16S	ATOM	36203	N2	GUA	821	154.876	140.215	-55.580	1.00	82.30	A16S
ATOM	36151	O4'	GUA	819	157.802	127.679	-58.940	1.00	73.25	A16S	ATOM	36204	N1	GUA	821	156.005	138.856	-57.049	1.00	82.30	A16S
ATOM	36152	C1'	GUA	819	156.625	128.314	-58.454	1.00	73.25	A16S	ATOM	36205	C6	GUA	821	156.152	137.931	-58.078	1.00	82.30	A16S
ATOM	36153	N9	GUA	819	156.970	129.360	-57.499	1.00	57.02	A16S	ATOM	36206	O6	GUA	821	157.286	137.566	-58.437	1.00	82.30	A16S
ATOM	36154	C4	GUA	819	156.074	130.008	-56.695	1.00	57.02	A16S	ATOM	36207	C5	GUA	821	154.898	137.525	-58.588	1.00	82.30	A16S
ATOM	36155	N3	GUA	819	154.753	129.756	-56.632	1.00	57.02	A16S	ATOM	36208	N7	GUA	821	154.595	136.632	-59.605	1.00	82.30	A16S
ATOM	36156	C2	GUA	819	154.144	130.532	-55.761	1.00	57.02	A16S	ATOM	36209	C8	GUA	821	153.293	136.640	-59.661	1.00	82.30	A16S
ATOM	36157	N2	GUA	819	152.830	130.382	-55.555	1.00	57.02	A16S	ATOM	36210	C2'	GUA	821	150.849	139.018	-59.240	1.00	85.49	A16S
ATOM	36158	N1	GUA	819	154.780	131.501	-55.026	1.00	57.02	A16S	ATOM	36211	O2'	GUA	821	149.670	139.510	-58.634	1.00	85.49	A16S
ATOM	36159	C6	GUA	819	156.140	131.782	-55.083	1.00	57.02	A16S	ATOM	36212	C3'	GUA	821	150.627	138.541	-60.667	1.00	85.49	A16S
ATOM	36160	O6	GUA	819	156.613	132.680	-54.378	1.00	57.02	A16S	ATOM	36213	O3'	GUA	821	149.728	139.388	-61.366	1.00	85.49	A16S
ATOM	36161	C5	GUA	819	156.807	130.938	-55.999	1.00	57.02	A16S	ATOM	36214	P	URI	822	150.295	140.395	-62.473	1.00133.18		A16S
ATOM	36162	N7	GUA	819	158.148	130.866	-56.345	1.00	57.02	A16S	ATOM	36215	O1P	URI	822	149.257	140.511	-63.528	1.00135.49		A16S
ATOM	36163	C8	GUA	819	158.199	129.913	-57.236	1.00	57.02	A16S	ATOM	36216	O2P	URI	822	151.669	139.964	-62.832	1.00135.49		A16S
ATOM	36164	C2'	GUA	819	155.930	128.928	-59.666	1.00	73.25	A16S	ATOM	36217	O5'	URI	822	150.387	141.787	-61.715	1.00133.18		A16S

ATOM	36218	C5'	URI	822	151.310	141.978	-60.658	1.00133.18	A16S	ATOM	36271	O2'	URI	824	163.129	144.995	-53.762	1.00200.05	A16S
ATOM	36219	C4'	URI	822	151.135	143.353	-60.083	1.00133.18	A16S	ATOM	36272	C3'	URI	824	161.066	145.773	-52.724	1.00200.05	A16S
ATOM	36220	O4'	URI	822	149.737	143.552	-59.772	1.00133.18	A16S	ATOM	36273	O3'	URI	824	161.085	144.530	-52.044	1.00200.05	A16S
ATOM	36221	C1'	URI	822	149.624	144.341	-58.606	1.00133.18	A16S	ATOM	36274	P	CYT	825	161.462	144.489	-50.488	1.00164.74	A16S
ATOM	36222	N1	URI	822	148.759	143.630	-57.652	1.00135.49	A16S	ATOM	36275	O1P	CYT	825	161.661	145.898	-50.061	1.00121.14	A16S
ATOM	36223	C6	URI	822	147.843	142.701	-58.098	1.00135.49	A16S	ATOM	36276	O2P	CYT	825	162.556	143.501	-50.299	1.00121.14	A16S
ATOM	36224	C2	URI	822	148.868	143.932	-56.302	1.00135.49	A16S	ATOM	36277	O5'	CYT	825	160.132	143.946	-49.796	1.00164.74	A16S
ATOM	36225	O2	URI	822	149.678	144.730	-55.858	1.00135.49	A16S	ATOM	36278	C5'	CYT	825	159.136	144.852	-49.330	1.00164.74	A16S
ATOM	36226	N3	URI	822	147.990	143.259	-55.487	1.00135.49	A16S	ATOM	36279	C4'	CYT	825	157.789	144.513	-49.928	1.00164.74	A16S
ATOM	36227	C4	URI	822	147.039	142.334	-55.871	1.00135.49	A16S	ATOM	36280	O4'	CYT	825	157.894	144.529	-51.377	1.00164.74	A16S
ATOM	36228	O4	URI	822	146.295	141.841	-55.018	1.00135.49	A16S	ATOM	36281	C1'	CYT	825	156.967	143.607	-51.929	1.00164.74	A16S
ATOM	36229	C5	URI	822	147.002	142.063	-57.279	1.00135.49	A16S	ATOM	36282	N1	CYT	825	157.700	142.631	-52.752	1.00121.14	A16S
ATOM	36230	C2'	URI	822	151.036	144.714	-58.136	1.00133.18	A16S	ATOM	36283	C6	CYT	825	159.042	142.432	-52.588	1.00121.14	A16S
ATOM	36231	O2'	URI	822	151.362	146.015	-58.583	1.00133.18	A16S	ATOM	36284	C2	CYT	825	156.990	141.897	-53.709	1.00121.14	A16S
ATOM	36232	C3'	URI	822	151.889	143.633	-58.792	1.00133.18	A16S	ATOM	36285	O2	CYT	825	155.772	142.102	-53.838	1.00121.14	A16S
ATOM	36233	O3'	URI	822	153.199	144.098	-59.123	1.00133.18	A16S	ATOM	36286	N3	CYT	825	157.644	140.988	-54.468	1.00121.14	A16S
ATOM	36234	P	CYT	823	154.137	144.769	-58.000	1.00200.66	A16S	ATOM	36287	C4	CYT	825	158.953	140.798	-54.297	1.00121.14	A16S
ATOM	36235	O1P	CYT	823	153.294	145.537	-57.050	1.00114.32	A16S	ATOM	36288	N4	CYT	825	159.554	139.887	-55.063	1.00121.14	A16S
ATOM	36236	O2P	CYT	823	155.222	145.457	-58.739	1.00114.32	A16S	ATOM	36289	C5	CYT	825	159.703	141.534	-53.332	1.00121.14	A16S
ATOM	36237	O5'	CYT	823	154.782	143.541	-57.217	1.00200.66	A16S	ATOM	36290	C2'	CYT	825	156.225	142.956	-50.761	1.00164.74	A16S
ATOM	36238	C5'	CYT	823	155.756	143.751	-56.190	1.00200.66	A16S	ATOM	36291	O2'	CYT	825	155.016	143.650	-50.523	1.00164.74	A16S
ATOM	36239	C4'	CYT	823	157.123	143.312	-56.669	1.00200.66	A16S	ATOM	36292	C3'	CYT	825	157.231	143.131	-49.631	1.00164.74	A16S
ATOM	36240	O4'	CYT	823	157.038	141.923	-57.071	1.00200.66	A16S	ATOM	36293	O3'	CYT	825	156.580	143.100	-48.367	1.00164.74	A16S
ATOM	36241	C1'	CYT	823	157.750	141.723	-58.275	1.00200.66	A16S	ATOM	36294	P	CYT	826	156.270	141.686	-47.664	1.00119.52	A16S
ATOM	36242	N1	CYT	823	156.789	141.255	-59.285	1.00114.32	A16S	ATOM	36295	O1P	CYT	826	155.740	142.005	-46.315	1.00 97.71	A16S
ATOM	36243	C6	CYT	823	155.519	141.757	-59.326	1.00114.32	A16S	ATOM	36296	O2P	CYT	826	157.465	140.808	-47.793	1.00 97.71	A16S
ATOM	36244	C2	CYT	823	157.188	140.271	-60.195	1.00114.32	A16S	ATOM	36297	O5'	CYT	826	155.084	141.059	-48.531	1.00119.52	A16S
ATOM	36245	O2	CYT	823	158.357	139.853	-60.157	1.00114.32	A16S	ATOM	36298	C5'	CYT	826	153.773	141.621	-48.482	1.00119.52	A16S
ATOM	36246	N3	CYT	823	156.291	139.799	-61.092	1.00114.32	A16S	ATOM	36299	C4'	CYT	826	152.834	140.892	-49.421	1.00119.52	A16S
ATOM	36247	C4	CYT	823	155.046	140.281	-61.107	1.00114.32	A16S	ATOM	36300	O4'	CYT	826	153.275	141.060	-50.793	1.00119.52	A16S
ATOM	36248	N4	CYT	823	154.187	139.771	-61.994	1.00114.32	A16S	ATOM	36301	C1'	CYT	826	152.912	139.918	-51.550	1.00119.52	A16S
ATOM	36249	C5	CYT	823	154.623	141.303	-60.210	1.00114.32	A16S	ATOM	36302	N1	CYT	826	154.135	139.313	-52.091	1.00 97.71	A16S
ATOM	36250	C2'	CYT	823	158.482	143.026	-58.612	1.00200.66	A16S	ATOM	36303	C6	CYT	826	155.341	139.471	-51.466	1.00 97.71	A16S
ATOM	36251	O2'	CYT	823	159.809	142.972	-58.126	1.00200.66	A16S	ATOM	36304	C2	CYT	826	154.040	138.561	-53.252	1.00 97.71	A16S
ATOM	36252	C3'	CYT	823	157.635	144.070	-57.887	1.00200.66	A16S	ATOM	36305	O2	CYT	826	152.936	138.451	-53.796	1.00 97.71	A16S
ATOM	36253	O3'	CYT	823	158.466	145.167	-57.492	1.00200.66	A16S	ATOM	36306	N3	CYT	826	155.149	137.975	-53.757	1.00 97.71	A16S
ATOM	36254	P	URI	824	157.966	146.202	-56.362	1.00200.05	A16S	ATOM	36307	C4	CYT	826	156.323	138.128	-53.140	1.00 97.71	A16S
ATOM	36255	O1P	URI	824	156.525	146.479	-56.591	1.00200.66	A16S	ATOM	36308	N4	CYT	826	157.393	137.530	-53.672	1.00 97.71	A16S
ATOM	36256	O2P	URI	824	158.928	147.331	-56.307	1.00200.66	A16S	ATOM	36309	C5	CYT	826	156.451	138.900	-51.951	1.00 97.71	A16S
ATOM	36257	O5'	URI	824	158.101	145.372	-55.009	1.00200.05	A16S	ATOM	36310	C2'	CYT	826	152.169	138.964	-50.612	1.00119.52	A16S
ATOM	36258	C5'	URI	824	158.786	145.901	-53.877	1.00200.05	A16S	ATOM	36311	O2'	CYT	826	150.775	139.161	-50.727	1.00119.52	A16S
ATOM	36259	C4'	URI	824	160.273	145.671	-54.015	1.00200.05	A16S	ATOM	36312	C3'	CYT	826	152.720	139.386	-49.256	1.00119.52	A16S
ATOM	36260	O4'	URI	824	160.836	146.724	-54.847	1.00200.05	A16S	ATOM	36313	O3'	CYT	826	151.818	139.050	-48.210	1.00119.52	A16S
ATOM	36261	C1'	URI	824	162.112	147.100	-54.349	1.00200.05	A16S	ATOM	36314	P	URI	827	151.920	137.608	-47.506	1.00 83.26	A16S
ATOM	36262	N1	URI	824	162.029	148.485	-53.864	1.00200.66	A16S	ATOM	36315	O1P	URI	827	150.799	137.506	-46.536	1.00 93.82	A16S
ATOM	36263	C6	URI	824	160.858	149.204	-53.947	1.00200.66	A16S	ATOM	36316	O2P	URI	827	153.317	137.415	-47.029	1.00 93.82	A16S
ATOM	36264	C2	URI	824	163.172	149.047	-53.317	1.00200.66	A16S	ATOM	36317	O5'	URI	827	151.630	136.592	-48.703	1.00 83.26	A16S
ATOM	36265	O2	URI	824	164.227	148.442	-53.220	1.00200.66	A16S	ATOM	36318	C5'	URI	827	150.313	136.440	-49.233	1.00 83.26	A16S
ATOM	36266	N3	URI	824	163.032	150.344	-52.887	1.00200.66	A16S	ATOM	36319	C4'	URI	827	150.266	135.281	-50.207	1.00 83.26	A16S
ATOM	36267	C4	URI	824	161.891	151.121	-52.944	1.00200.66	A16S	ATOM	36320	O4'	URI	827	151.009	135.608	-51.411	1.00 83.26	A16S
ATOM	36268	O4	URI	824	161.924	152.279	-52.519	1.00200.66	A16S	ATOM	36321	C1'	URI	827	151.588	134.429	-51.944	1.00 83.26	A16S
ATOM	36269	C5	URI	824	160.752	150.468	-53.518	1.00200.66	A16S	ATOM	36322	N1	URI	827	153.045	134.590	-51.956	1.00 93.82	A16S
ATOM	36270	C2'	URI	824	162.454	146.119	-53.231	1.00200.05	A16S	ATOM	36323	C6	URI	827	153.679	135.482	-51.125	1.00 93.82	A16S

ATOM	36324	C2	URI	827	153.759	133.794	-52.828	1.00	93.82	A16S	ATOM	36377	O2'	GUA	829	156.419	121.991	-51.426	1.00	58.44	A16S
ATOM	36325	O2	URI	827	153.225	133.000	-53.583	1.00	93.82	A16S	ATOM	36378	C3'	GUA	829	155.510	123.395	-49.664	1.00	58.44	A16S
ATOM	36326	N3	URI	827	155.119	133.961	-52.783	1.00	93.82	A16S	ATOM	36379	O3'	GUA	829	155.364	122.209	-48.903	1.00	58.44	A16S
ATOM	36327	C4	URI	827	155.822	134.825	-51.971	1.00	93.82	A16S	ATOM	36380	P	GUA	830	156.123	122.077	-47.493	1.00	50.54	A16S
ATOM	36328	O4	URI	827	157.052	134.844	-52.033	1.00	93.82	A16S	ATOM	36381	O1P	GUA	830	155.721	120.763	-46.921	1.00	51.31	A16S
ATOM	36329	C5	URI	827	155.008	135.623	-51.101	1.00	93.82	A16S	ATOM	36382	O2P	GUA	830	155.911	123.324	-46.713	1.00	51.31	A16S
ATOM	36330	C2'	URI	827	151.178	133.269	-51.041	1.00	83.26	A16S	ATOM	36383	O5'	GUA	830	157.680	122.071	-47.846	1.00	50.54	A16S
ATOM	36331	O2'	URI	827	150.029	132.629	-51.550	1.00	83.26	A16S	ATOM	36384	C5'	GUA	830	158.254	121.037	-48.627	1.00	50.54	A16S
ATOM	36332	C3'	URI	827	150.908	133.991	-49.733	1.00	83.26	A16S	ATOM	36385	C4'	GUA	830	159.712	121.333	-48.928	1.00	50.54	A16S
ATOM	36333	O3'	URI	827	150.041	133.228	-48.920	1.00	83.26	A16S	ATOM	36386	O4'	GUA	830	159.857	122.494	-49.790	1.00	50.54	A16S
ATOM	36334	P	GUA	828	150.664	132.150	-47.913	1.00	76.64	A16S	ATOM	36387	C1'	GUA	830	161.179	122.993	-49.662	1.00	50.54	A16S
ATOM	36335	O1P	GUA	828	149.529	131.569	-47.144	1.00	58.12	A16S	ATOM	36388	N9	GUA	830	161.139	124.406	-49.329	1.00	51.31	A16S
ATOM	36336	O2P	GUA	828	151.795	132.781	-47.191	1.00	58.12	A16S	ATOM	36389	C4	GUA	830	162.218	125.250	-49.313	1.00	51.31	A16S
ATOM	36337	O5'	GUA	828	151.276	131.020	-48.861	1.00	76.64	A16S	ATOM	36390	N3	GUA	830	163.488	124.916	-49.626	1.00	51.31	A16S
ATOM	36338	C5'	GUA	828	150.418	130.073	-49.470	1.00	76.64	A16S	ATOM	36391	C2	GUA	830	164.309	125.949	-49.528	1.00	51.31	A16S
ATOM	36339	C4'	GUA	828	151.185	129.094	-50.332	1.00	76.64	A16S	ATOM	36392	N2	GUA	830	165.605	125.797	-49.823	1.00	51.31	A16S
ATOM	36340	O4'	GUA	828	151.892	129.767	-51.403	1.00	76.64	A16S	ATOM	36393	N1	GUA	830	163.918	127.208	-49.141	1.00	51.31	A16S
ATOM	36341	C1'	GUA	828	152.809	128.850	-51.972	1.00	76.64	A16S	ATOM	36394	C6	GUA	830	162.617	127.571	-48.807	1.00	51.31	A16S
ATOM	36342	N9	GUA	828	154.121	129.472	-52.099	1.00	58.12	A16S	ATOM	36395	O6	GUA	830	162.368	128.738	-48.462	1.00	51.31	A16S
ATOM	36343	C4	GUA	828	155.172	128.979	-52.838	1.00	58.12	A16S	ATOM	36396	C5	GUA	830	161.722	126.470	-48.921	1.00	51.31	A16S
ATOM	36344	N3	GUA	828	155.144	127.881	-53.619	1.00	58.12	A16S	ATOM	36397	N7	GUA	830	160.354	126.396	-48.701	1.00	51.31	A16S
ATOM	36345	C2	GUA	828	156.313	127.638	-54.168	1.00	58.12	A16S	ATOM	36398	C8	GUA	830	160.054	125.151	-48.956	1.00	51.31	A16S
ATOM	36346	N2	GUA	828	156.464	126.581	-54.980	1.00	58.12	A16S	ATOM	36399	C2'	GUA	830	161.847	122.219	-48.528	1.00	50.54	A16S
ATOM	36347	N1	GUA	828	157.423	128.410	-53.967	1.00	58.12	A16S	ATOM	36400	O2'	GUA	830	162.650	121.201	-49.081	1.00	50.54	A16S
ATOM	36348	C6	GUA	828	157.475	129.544	-53.170	1.00	58.12	A16S	ATOM	36401	C3'	GUA	830	160.638	121.679	-47.775	1.00	50.54	A16S
ATOM	36349	O6	GUA	828	158.534	130.171	-53.056	1.00	58.12	A16S	ATOM	36402	O3'	GUA	830	161.014	120.532	-47.030	1.00	50.54	A16S
ATOM	36350	C5	GUA	828	156.227	129.819	-52.577	1.00	58.12	A16S	ATOM	36403	P	GUA	831	161.884	120.708	-45.689	1.00	45.25	A16S
ATOM	36351	N7	GUA	828	155.842	130.847	-51.727	1.00	58.12	A16S	ATOM	36404	O1P	GUA	831	162.249	119.333	-45.244	1.00	46.41	A16S
ATOM	36352	C8	GUA	828	154.582	130.608	-51.481	1.00	58.12	A16S	ATOM	36405	O2P	GUA	831	161.178	121.620	-44.760	1.00	46.41	A16S
ATOM	36353	C2'	GUA	828	152.863	127.645	-51.026	1.00	76.64	A16S	ATOM	36406	O5'	GUA	831	163.208	121.438	-46.173	1.00	45.25	A16S
ATOM	36354	O2'	GUA	828	152.035	126.630	-51.547	1.00	76.64	A16S	ATOM	36407	C5'	GUA	831	164.228	120.684	-46.794	1.00	45.25	A16S
ATOM	36355	C3'	GUA	828	152.280	128.228	-49.746	1.00	76.64	A16S	ATOM	36408	C4'	GUA	831	165.523	121.432	-46.762	1.00	45.25	A16S
ATOM	36356	O3'	GUA	828	151.745	127.170	-48.962	1.00	76.64	A16S	ATOM	36409	O4'	GUA	831	165.405	122.638	-47.561	1.00	45.25	A16S
ATOM	36357	P	GUA	829	152.710	126.321	-47.992	1.00	58.44	A16S	ATOM	36410	C1'	GUA	831	166.261	123.632	-47.030	1.00	45.25	A16S
ATOM	36358	O1P	GUA	829	151.861	125.347	-47.272	1.00	52.00	A16S	ATOM	36411	N9	GUA	831	165.444	124.777	-46.651	1.00	46.41	A16S
ATOM	36359	O2P	GUA	829	153.573	127.251	-47.226	1.00	52.00	A16S	ATOM	36412	C4	GUA	831	165.901	126.036	-46.373	1.00	46.41	A16S
ATOM	36360	O5'	GUA	829	153.650	125.493	-48.979	1.00	58.44	A16S	ATOM	36413	N3	GUA	831	167.184	126.432	-46.404	1.00	46.41	A16S
ATOM	36361	C5'	GUA	829	153.149	124.372	-49.710	1.00	58.44	A16S	ATOM	36414	C2	GUA	831	167.310	127.711	-46.111	1.00	46.41	A16S
ATOM	36362	C4'	GUA	829	154.265	123.697	-50.473	1.00	58.44	A16S	ATOM	36415	N2	GUA	831	168.512	128.280	-46.104	1.00	46.41	A16S
ATOM	36363	O4'	GUA	829	154.756	124.560	-51.541	1.00	58.44	A16S	ATOM	36416	N1	GUA	831	166.270	128.535	-45.800	1.00	46.41	A16S
ATOM	36364	C1'	GUA	829	156.158	124.376	-51.698	1.00	58.44	A16S	ATOM	36417	C6	GUA	831	164.940	128.155	-45.748	1.00	46.41	A16S
ATOM	36365	N9	GUA	829	156.821	125.614	-51.303	1.00	52.00	A16S	ATOM	36418	O6	GUA	831	164.078	128.986	-45.438	1.00	46.41	A16S
ATOM	36366	C4	GUA	829	158.128	125.985	-51.565	1.00	52.00	A16S	ATOM	36419	C5	GUA	831	164.780	126.777	-46.076	1.00	46.41	A16S
ATOM	36367	N3	GUA	829	159.036	125.273	-52.268	1.00	52.00	A16S	ATOM	36420	N7	GUA	831	163.636	125.994	-46.165	1.00	46.41	A16S
ATOM	36368	C2	GUA	829	160.204	125.902	-52.346	1.00	52.00	A16S	ATOM	36421	C8	GUA	831	164.081	124.815	-46.507	1.00	46.41	A16S
ATOM	36369	N2	GUA	829	161.219	125.350	-53.027	1.00	52.00	A16S	ATOM	36422	C2'	GUA	831	166.998	122.989	-45.851	1.00	45.25	A16S
ATOM	36370	N1	GUA	829	160.463	127.118	-51.766	1.00	52.00	A16S	ATOM	36423	O2'	GUA	831	168.169	122.417	-46.388	1.00	45.25	A16S
ATOM	36371	C6	GUA	829	159.551	127.857	-51.027	1.00	52.00	A16S	ATOM	36424	C3'	GUA	831	165.971	121.951	-45.411	1.00	45.25	A16S
ATOM	36372	O6	GUA	829	159.898	128.926	-50.516	1.00	52.00	A16S	ATOM	36425	O3'	GUA	831	166.388	120.851	-44.592	1.00	45.25	A16S
ATOM	36373	C5	GUA	829	158.288	127.212	-50.957	1.00	52.00	A16S	ATOM	36426	P	GUA	832	167.612	120.994	-43.556	1.00	46.89	A16S
ATOM	36374	N7	GUA	829	157.109	127.614	-50.345	1.00	52.00	A16S	ATOM	36427	O1P	GUA	832	168.732	121.683	-44.225	1.00	49.95	A16S
ATOM	36375	C8	GUA	829	156.271	126.638	-50.576	1.00	52.00	A16S	ATOM	36428	O2P	GUA	832	167.820	119.657	-42.968	1.00	49.95	A16S
ATOM	36376	C2'	GUA	829	156.548	123.233	-50.762	1.00	58.44	A16S	ATOM	36429	O5'	GUA	832	167.175	121.989	-42.403	1.00	46.89	A16S

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ATOM  36430  C5' GUA  832     167.142 123.389 -42.641  1.00 46.89      A16S
ATOM  36431  C4' GUA  832     168.492 124.039 -42.402  1.00 46.89      A16S
ATOM  36432  O4' GUA  832     168.614 125.044 -43.438  1.00 46.89      A16S
ATOM  36433  C1' GUA  832     169.055 126.266 -42.888  1.00 46.89      A16S
ATOM  36434  N9  GUA  832     167.922 127.172 -42.871  1.00 49.95      A16S
ATOM  36435  C4  GUA  832     167.974 128.505 -42.606  1.00 49.95      A16S
ATOM  36436  N3  GUA  832     169.095 129.213 -42.374  1.00 49.95      A16S
ATOM  36437  C2  GUA  832     168.833 130.474 -42.108  1.00 49.95      A16S
ATOM  36438  N2  GUA  832     169.840 131.322 -41.860  1.00 49.95      A16S
ATOM  36439  N1  GUA  832     167.565 130.994 -42.067  1.00 49.95      A16S
ATOM  36440  C6  GUA  832     166.396 130.279 -42.305  1.00 49.95      A16S
ATOM  36441  O6  GUA  832     165.301 130.845 -42.235  1.00 49.95      A16S
ATOM  36442  C5  GUA  832     166.667 128.930 -42.603  1.00 49.95      A16S
ATOM  36443  N7  GUA  832     165.809 127.885 -42.905  1.00 49.95      A16S
ATOM  36444  C8  GUA  832     166.601 126.863 -43.067  1.00 49.95      A16S
ATOM  36445  C2' GUA  832     169.546 125.969 -41.476  1.00 46.89      A16S
ATOM  36446  O2' GUA  832     170.905 125.614 -41.490  1.00 46.89      A16S
ATOM  36447  C3' GUA  832     168.653 124.805 -41.088  1.00 46.89      A16S
ATOM  36448  O3' GUA  832     169.281 124.059 -40.056  1.00 46.89      A16S
ATOM  36449  P   CYT  833     169.093 124.515 -38.517  1.00 42.42      A16S
ATOM  36450  O1P CYT  833     170.028 123.713 -37.680  1.00 45.00      A16S
ATOM  36451  O2P CYT  833     167.629 124.503 -38.215  1.00 45.00      A16S
ATOM  36452  O5' CYT  833     169.578 126.036 -38.463  1.00 42.42      A16S
ATOM  36453  C5' CYT  833     170.952 126.363 -38.362  1.00 42.42      A16S
ATOM  36454  C4' CYT  833     171.123 127.855 -38.201  1.00 42.42      A16S
ATOM  36455  O4' CYT  833     170.471 128.540 -39.303  1.00 42.42      A16S
ATOM  36456  C1' CYT  833     169.958 129.789 -38.861  1.00 42.42      A16S
ATOM  36457  N1  CYT  833     168.498 129.754 -38.983  1.00 45.00      A16S
ATOM  36458  C6  CYT  833     167.838 128.578 -39.184  1.00 45.00      A16S
ATOM  36459  C2  CYT  833     167.797 130.934 -38.864  1.00 45.00      A16S
ATOM  36460  O2  CYT  833     168.424 131.980 -38.717  1.00 45.00      A16S
ATOM  36461  N3  CYT  833     166.456 130.916 -38.907  1.00 45.00      A16S
ATOM  36462  C4  CYT  833     165.815 129.764 -39.058  1.00 45.00      A16S
ATOM  36463  N4  CYT  833     164.488 129.785 -39.033  1.00 45.00      A16S
ATOM  36464  C5  CYT  833     166.506 128.539 -39.224  1.00 45.00      A16S
ATOM  36465  C2' CYT  833     170.351 129.932 -37.396  1.00 42.42      A16S
ATOM  36466  O2' CYT  833     171.569 130.626 -37.276  1.00 42.42      A16S
ATOM  36467  C3' CYT  833     170.472 128.474 -36.984  1.00 42.42      A16S
ATOM  36468  O3' CYT  833     171.288 128.358 -35.839  1.00 42.42      A16S
ATOM  36469  P   CYT  834     170.611 128.456 -34.392  1.00 47.77      A16S
ATOM  36470  O1P CYT  834     171.684 128.261 -33.390  1.00 55.20      A16S
ATOM  36471  O2P CYT  834     169.425 127.564 -34.399  1.00 55.20      A16S
ATOM  36472  O5' CYT  834     170.102 129.958 -34.291  1.00 47.77      A16S
ATOM  36473  C5' CYT  834     171.018 131.015 -34.112  1.00 47.77      A16S
ATOM  36474  C4' CYT  834     170.282 132.298 -33.817  1.00 47.77      A16S
ATOM  36475  O4' CYT  834     169.464 132.650 -34.961  1.00 47.77      A16S
ATOM  36476  C1' CYT  834     168.288 133.301 -34.519  1.00 47.77      A16S
ATOM  36477  N1  CYT  834     167.136 132.503 -34.955  1.00 55.20      A16S
ATOM  36478  C6  CYT  834     167.288 131.210 -35.368  1.00 55.20      A16S
ATOM  36479  C2  CYT  834     165.884 133.094 -34.944  1.00 55.20      A16S
ATOM  36480  O2  CYT  834     165.785 134.262 -34.534  1.00 55.20      A16S
ATOM  36481  N3  CYT  834     164.813 132.387 -35.370  1.00 55.20      A16S
ATOM  36482  C4  CYT  834     164.969 131.130 -35.781  1.00 55.20      A16S
ATOM  36483  N4  CYT  834     163.891 130.472 -36.205  1.00 55.20      A16S
ATOM  36484  C5  CYT  834     166.241 130.493 -35.781  1.00 55.20      A16S
ATOM  36485  C2' CYT  834     168.389 133.436 -33.000  1.00 47.77      A16S
ATOM  36486  O2' CYT  834     168.996 134.665 -32.688  1.00 47.77      A16S
ATOM  36487  C3' CYT  834     169.301 132.272 -32.656  1.00 47.77      A16S
ATOM  36488  O3' CYT  834     169.951 132.493 -31.412  1.00 47.77      A16S
ATOM  36489  P   GUA  835     169.169 132.178 -30.051  1.00 53.69      A16S
ATOM  36490  O1P GUA  835     169.954 132.708 -28.911  1.00 48.31      A16S
ATOM  36491  O2P GUA  835     168.767 130.752 -30.060  1.00 48.31      A16S
ATOM  36492  O5' GUA  835     167.870 133.079 -30.192  1.00 53.69      A16S
ATOM  36493  C5' GUA  835     166.778 132.963 -29.294  1.00 53.69      A16S
ATOM  36494  C4' GUA  835     165.654 133.849 -29.760  1.00 53.69      A16S
ATOM  36495  O4' GUA  835     165.545 133.737 -31.204  1.00 53.69      A16S
ATOM  36496  C1' GUA  835     164.203 133.517 -31.564  1.00 53.69      A16S
ATOM  36497  N9  GUA  835     164.101 132.114 -31.953  1.00 48.31      A16S
ATOM  36498  C4  GUA  835     163.019 131.492 -32.516  1.00 48.31      A16S
ATOM  36499  N3  GUA  835     161.838 132.067 -32.791  1.00 48.31      A16S
ATOM  36500  C2  GUA  835     160.996 131.222 -33.329  1.00 48.31      A16S
ATOM  36501  N2  GUA  835     159.768 131.628 -33.641  1.00 48.31      A16S
ATOM  36502  N1  GUA  835     161.290 129.915 -33.594  1.00 48.31      A16S
ATOM  36503  C6  GUA  835     162.501 129.296 -33.320  1.00 48.31      A16S
ATOM  36504  O6  GUA  835     162.663 128.100 -33.605  1.00 48.31      A16S
ATOM  36505  C5  GUA  835     163.412 130.190 -32.726  1.00 48.31      A16S
ATOM  36506  N7  GUA  835     164.712 129.990 -32.288  1.00 48.31      A16S
ATOM  36507  C8  GUA  835     165.080 131.158 -31.835  1.00 48.31      A16S
ATOM  36508  C2' GUA  835     163.371 133.918 -30.343  1.00 53.69      A16S
ATOM  36509  O2' GUA  835     163.200 135.311 -30.368  1.00 53.69      A16S
ATOM  36510  C3' GUA  835     164.289 133.498 -29.205  1.00 53.69      A16S
ATOM  36511  O3' GUA  835     164.064 134.231 -28.007  1.00 53.69      A16S
ATOM  36512  P   ADE  836     162.918 133.759 -26.980  1.00 46.58      A16S
ATOM  36513  O1P ADE  836     162.943 134.702 -25.836  1.00 54.13      A16S
ATOM  36514  O2P ADE  836     163.030 132.301 -26.726  1.00 54.13      A16S
ATOM  36515  O5' ADE  836     161.571 134.016 -27.786  1.00 46.58      A16S
ATOM  36516  C5' ADE  836     161.198 135.338 -28.136  1.00 46.58      A16S
ATOM  36517  C4' ADE  836     159.713 135.524 -27.986  1.00 46.58      A16S
ATOM  36518  O4' ADE  836     159.006 135.099 -29.173  1.00 46.58      A16S
ATOM  36519  C1' ADE  836     157.669 134.798 -28.822  1.00 46.58      A16S
ATOM  36520  N9  ADE  836     157.316 133.494 -29.371  1.00 54.13      A16S
ATOM  36521  C4  ADE  836     156.036 133.019 -29.499  1.00 54.13      A16S
ATOM  36522  N3  ADE  836     154.899 133.657 -29.178  1.00 54.13      A16S
ATOM  36523  C2  ADE  836     153.839 132.879 -29.410  1.00 54.13      A16S
ATOM  36524  N1  ADE  836     153.794 131.630 -29.886  1.00 54.13      A16S
ATOM  36525  C6  ADE  836     154.961 131.013 -30.195  1.00 54.13      A16S
ATOM  36526  N6  ADE  836     154.917 129.757 -30.656  1.00 54.13      A16S
ATOM  36527  C5  ADE  836     156.156 131.739 -30.002  1.00 54.13      A16S
ATOM  36528  N7  ADE  836     157.489 131.421 -30.209  1.00 54.13      A16S
ATOM  36529  C8  ADE  836     158.134 132.498 -29.825  1.00 54.13      A16S
ATOM  36530  C2' ADE  836     157.589 134.824 -27.291  1.00 46.58      A16S
ATOM  36531  O2' ADE  836     157.022 136.040 -26.864  1.00 46.58      A16S
ATOM  36532  C3' ADE  836     159.054 134.712 -26.900  1.00 46.58      A16S
ATOM  36533  O3' ADE  836     159.299 135.270 -25.627  1.00 46.58      A16S
ATOM  36534  P   ADE  837     159.163 134.344 -24.327  1.00 41.07      A16S
ATOM  36535  O1P ADE  837     159.148 135.274 -23.171  1.00 55.19      A16S
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ATOM	36536	O2P	ADE	837	160.155	133.219	-24.341	1.00	55.19	A16S	ATOM	36589	C2	CYT	839	160.399	123.636	-23.621	1.00	43.80	A16S
ATOM	36537	O5'	ADE	837	157.705	133.716	-24.488	1.00	41.07	A16S	ATOM	36590	O2	CYT	839	160.641	122.638	-24.306	1.00	43.80	A16S
ATOM	36538	C5'	ADE	837	156.544	134.424	-24.068	1.00	41.07	A16S	ATOM	36591	N3	CYT	839	161.306	124.618	-23.459	1.00	43.80	A16S
ATOM	36539	C4'	ADE	837	155.320	133.578	-24.283	1.00	41.07	A16S	ATOM	36592	C4	CYT	839	161.001	125.690	-22.728	1.00	43.80	A16S
ATOM	36540	O4'	ADE	837	155.262	133.231	-25.688	1.00	41.07	A16S	ATOM	36593	N4	CYT	839	161.912	126.655	-22.620	1.00	43.80	A16S
ATOM	36541	C1'	ADE	837	154.752	131.910	-25.837	1.00	41.07	A16S	ATOM	36594	C5	CYT	839	159.741	125.826	-22.082	1.00	43.80	A16S
ATOM	36542	N9	ADE	837	155.762	131.087	-26.508	1.00	55.19	A16S	ATOM	36595	C2'	CYT	839	158.330	121.532	-22.205	1.00	45.52	A16S
ATOM	36543	C4	ADE	837	155.555	129.873	-27.115	1.00	55.19	A16S	ATOM	36596	O2'	CYT	839	157.895	120.342	-22.818	1.00	45.52	A16S
ATOM	36544	N3	ADE	837	154.393	129.228	-27.272	1.00	55.19	A16S	ATOM	36597	C3'	CYT	839	157.393	121.972	-21.093	1.00	45.52	A16S
ATOM	36545	C2	ADE	837	154.580	128.069	-27.882	1.00	55.19	A16S	ATOM	36598	O3'	CYT	839	156.970	120.874	-20.297	1.00	45.52	A16S
ATOM	36546	N1	ADE	837	155.709	127.514	-28.309	1.00	55.19	A16S	ATOM	36599	P	URI	840	157.738	120.554	-18.927	1.00	35.68	A16S
ATOM	36547	C6	ADE	837	156.862	128.182	-28.124	1.00	55.19	A16S	ATOM	36600	O1P	URI	840	157.174	119.318	-18.336	1.00	51.50	A16S
ATOM	36548	N6	ADE	837	157.998	127.608	-28.515	1.00	55.19	A16S	ATOM	36601	O2P	URI	840	157.795	121.796	-18.127	1.00	51.50	A16S
ATOM	36549	C5	ADE	837	156.795	129.438	-27.514	1.00	55.19	A16S	ATOM	36602	O5'	URI	840	159.213	120.224	-19.411	1.00	35.68	A16S
ATOM	36550	N7	ADE	837	157.765	130.377	-27.209	1.00	55.19	A16S	ATOM	36603	C5'	URI	840	159.472	119.078	-20.205	1.00	35.68	A16S
ATOM	36551	C8	ADE	837	157.100	131.336	-26.622	1.00	55.19	A16S	ATOM	36604	C4'	URI	840	160.937	118.980	-20.500	1.00	35.68	A16S
ATOM	36552	C2'	ADE	837	154.427	131.387	-24.433	1.00	41.07	A16S	ATOM	36605	O4'	URI	840	161.344	120.080	-21.345	1.00	35.68	A16S
ATOM	36553	O2'	ADE	837	153.074	131.620	-24.127	1.00	41.07	A16S	ATOM	36606	C1'	URI	840	162.702	120.374	-21.100	1.00	35.68	A16S
ATOM	36554	C3'	ADE	837	155.337	132.238	-23.570	1.00	41.07	A16S	ATOM	36607	N1	URI	840	162.810	121.811	-20.836	1.00	51.50	A16S
ATOM	36555	O3'	ADE	837	154.790	132.354	-22.275	1.00	41.07	A16S	ATOM	36608	C6	URI	840	161.783	122.499	-20.258	1.00	51.50	A16S
ATOM	36556	P	GUA	838	155.456	131.534	-21.065	1.00	38.86	A16S	ATOM	36609	C2	URI	840	163.982	122.437	-21.178	1.00	51.50	A16S
ATOM	36557	O1P	GUA	838	154.632	131.761	-19.841	1.00	46.02	A16S	ATOM	36610	O2	URI	840	164.901	121.858	-21.723	1.00	51.50	A16S
ATOM	36558	O2P	GUA	838	156.915	131.874	-21.047	1.00	46.02	A16S	ATOM	36611	N3	URI	840	164.034	123.769	-20.867	1.00	51.50	A16S
ATOM	36559	O5'	GUA	838	155.302	130.014	-21.528	1.00	38.86	A16S	ATOM	36612	C4	URI	840	163.045	124.512	-20.271	1.00	51.50	A16S
ATOM	36560	C5'	GUA	838	154.027	129.448	-21.769	1.00	38.86	A16S	ATOM	36613	O4	URI	840	163.247	125.693	-20.021	1.00	51.50	A16S
ATOM	36561	C4'	GUA	838	154.164	128.115	-22.465	1.00	38.86	A16S	ATOM	36614	C5	URI	840	161.858	123.793	-19.972	1.00	51.50	A16S
ATOM	36562	O4'	GUA	838	154.608	128.304	-23.835	1.00	38.86	A16S	ATOM	36615	C2'	URI	840	163.156	119.486	-19.934	1.00	35.68	A16S
ATOM	36563	C1'	GUA	838	155.459	127.235	-24.209	1.00	38.86	A16S	ATOM	36616	O2'	URI	840	163.800	118.337	-20.435	1.00	35.68	A16S
ATOM	36564	N9	GUA	838	156.802	127.770	-24.409	1.00	46.02	A16S	ATOM	36617	C3'	URI	840	161.832	119.109	-19.296	1.00	35.68	A16S
ATOM	36565	C4	GUA	838	157.836	127.173	-25.088	1.00	46.02	A16S	ATOM	36618	O3'	URI	840	161.904	117.846	-18.676	1.00	35.68	A16S
ATOM	36566	N3	GUA	838	157.792	125.982	-25.711	1.00	46.02	A16S	ATOM	36619	P	ADE	841	161.827	117.736	-17.076	1.00	37.11	A16S
ATOM	36567	C2	GUA	838	158.934	125.688	-26.292	1.00	46.02	A16S	ATOM	36620	O1P	ADE	841	161.710	116.282	-16.773	1.00	42.77	A16S
ATOM	36568	N2	GUA	838	159.054	124.543	-26.957	1.00	46.02	A16S	ATOM	36621	O2P	ADE	841	160.798	118.683	-16.561	1.00	42.77	A16S
ATOM	36569	N1	GUA	838	160.038	126.495	-26.266	1.00	46.02	A16S	ATOM	36622	O5'	ADE	841	163.240	118.265	-16.583	1.00	37.11	A16S
ATOM	36570	C6	GUA	838	160.108	127.724	-25.631	1.00	46.02	A16S	ATOM	36623	C5'	ADE	841	163.481	118.462	-15.205	1.00	37.11	A16S
ATOM	36571	O6	GUA	838	161.149	128.384	-25.678	1.00	46.02	A16S	ATOM	36624	C4'	ADE	841	164.953	118.370	-14.925	1.00	37.11	A16S
ATOM	36572	C5	GUA	838	158.885	128.049	-24.996	1.00	46.02	A16S	ATOM	36625	O4'	ADE	841	165.384	116.986	-15.020	1.00	37.11	A16S
ATOM	36573	N7	GUA	838	158.526	129.171	-24.265	1.00	46.02	A16S	ATOM	36626	C1'	ADE	841	166.633	116.923	-15.683	1.00	37.11	A16S
ATOM	36574	C8	GUA	838	157.283	128.963	-23.943	1.00	46.02	A16S	ATOM	36627	N9	ADE	841	166.437	116.213	-16.954	1.00	42.77	A16S
ATOM	36575	C2'	GUA	838	155.451	126.239	-23.051	1.00	38.86	A16S	ATOM	36628	C4	ADE	841	167.373	115.497	-17.655	1.00	42.77	A16S
ATOM	36576	O2'	GUA	838	154.422	125.305	-23.252	1.00	38.86	A16S	ATOM	36629	N3	ADE	841	168.664	115.322	-17.343	1.00	42.77	A16S
ATOM	36577	C3'	GUA	838	155.177	127.152	-21.873	1.00	38.86	A16S	ATOM	36630	C2	ADE	841	169.261	114.549	-18.240	1.00	42.77	A16S
ATOM	36578	O3'	GUA	838	154.629	126.413	-20.800	1.00	38.86	A16S	ATOM	36631	N1	ADE	841	168.752	113.967	-19.327	1.00	42.77	A16S
ATOM	36579	P	CYT	839	155.607	125.751	-19.724	1.00	45.52	A16S	ATOM	36632	C6	ADE	841	167.454	114.153	-19.607	1.00	42.77	A16S
ATOM	36580	O1P	CYT	839	154.830	125.206	-18.587	1.00	43.80	A16S	ATOM	36633	N6	ADE	841	166.950	113.542	-20.668	1.00	42.77	A16S
ATOM	36581	O2P	CYT	839	156.674	126.744	-19.470	1.00	43.80	A16S	ATOM	36634	C5	ADE	841	166.711	114.971	-18.747	1.00	42.77	A16S
ATOM	36582	O5'	CYT	839	156.228	124.517	-20.511	1.00	45.52	A16S	ATOM	36635	N7	ADE	841	165.385	115.371	-18.756	1.00	42.77	A16S
ATOM	36583	C5'	CYT	839	155.394	123.538	-21.113	1.00	45.52	A16S	ATOM	36636	C8	ADE	841	165.275	116.105	-17.676	1.00	42.77	A16S
ATOM	36584	C4'	CYT	839	156.233	122.550	-21.879	1.00	45.52	A16S	ATOM	36637	C2'	ADE	841	167.119	118.374	-15.802	1.00	37.11	A16S
ATOM	36585	O4'	CYT	839	156.866	123.212	-23.004	1.00	45.52	A16S	ATOM	36638	O2'	ADE	841	167.734	118.766	-14.593	1.00	37.11	A16S
ATOM	36586	C1'	CYT	839	158.163	122.676	-23.201	1.00	45.52	A16S	ATOM	36639	C3'	ADE	841	165.807	119.115	-15.929	1.00	37.11	A16S
ATOM	36587	N1	CYT	839	159.150	123.749	-23.007	1.00	43.80	A16S	ATOM	36640	O3'	ADE	841	165.959	120.458	-15.512	1.00	37.11	A16S
ATOM	36588	C6	CYT	839	158.854	124.840	-22.245	1.00	43.80	A16S	ATOM	36641	P	ADE	842	165.646	121.652	-16.535	1.00	38.95	A16S

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ATOM  36642  O1P ADE  842     165.354 122.832 -15.696  1.00 42.87      A16S
ATOM  36643  O2P ADE  842     164.679 121.217 -17.575  1.00 42.87      A16S
ATOM  36644  O5' ADE  842     167.039 121.938 -17.233  1.00 38.95      A16S
ATOM  36645  C5' ADE  842     168.189 122.197 -16.450  1.00 38.95      A16S
ATOM  36646  C4' ADE  842     169.381 121.566 -17.094  1.00 38.95      A16S
ATOM  36647  O4' ADE  842     169.110 120.147 -17.215  1.00 38.95      A16S
ATOM  36648  C1' ADE  842     169.654 119.668 -18.426  1.00 38.95      A16S
ATOM  36649  N9  ADE  842     168.562 119.191 -19.270  1.00 42.87      A16S
ATOM  36650  C4  ADE  842     168.641 118.145 -20.153  1.00 42.87      A16S
ATOM  36651  N3  ADE  842     169.715 117.378 -20.407  1.00 42.87      A16S
ATOM  36652  C2  ADE  842     169.411 116.439 -21.307  1.00 42.87      A16S
ATOM  36653  N1  ADE  842     168.244 116.207 -21.937  1.00 42.87      A16S
ATOM  36654  C6  ADE  842     167.195 117.010 -21.662  1.00 42.87      A16S
ATOM  36655  N6  ADE  842     166.051 116.794 -22.296  1.00 42.87      A16S
ATOM  36656  C5  ADE  842     167.385 118.034 -20.720  1.00 42.87      A16S
ATOM  36657  N7  ADE  842     166.536 119.002 -20.214  1.00 42.87      A16S
ATOM  36658  C8  ADE  842     167.281 119.659 -19.359  1.00 42.87      A16S
ATOM  36659  C2' ADE  842     170.434 120.827 -19.044  1.00 38.95      A16S
ATOM  36660  O2' ADE  842     171.730 120.810 -18.491  1.00 38.95      A16S
ATOM  36661  C3' ADE  842     169.646 122.011 -18.522  1.00 38.95      A16S
ATOM  36662  O3' ADE  842     170.427 123.203 -18.550  1.00 38.95      A16S
ATOM  36663  P   CYT  843     170.469 124.098 -19.889  1.00 40.42      A16S
ATOM  36664  O1P CYT  843     171.417 125.220 -19.661  1.00 38.78      A16S
ATOM  36665  O2P CYT  843     169.068 124.394 -20.301  1.00 38.78      A16S
ATOM  36666  O5' CYT  843     171.087 123.128 -20.993  1.00 40.42      A16S
ATOM  36667  C5' CYT  843     172.459 122.762 -20.968  1.00 40.42      A16S
ATOM  36668  C4' CYT  843     172.764 121.827 -22.108  1.00 40.42      A16S
ATOM  36669  O4' CYT  843     172.048 120.579 -21.921  1.00 40.42      A16S
ATOM  36670  C1' CYT  843     171.657 120.064 -23.182  1.00 40.42      A16S
ATOM  36671  N1  CYT  843     170.191 119.958 -23.220  1.00 38.78      A16S
ATOM  36672  C6  CYT  843     169.404 120.907 -22.640  1.00 38.78      A16S
ATOM  36673  C2  CYT  843     169.609 118.874 -23.880  1.00 38.78      A16S
ATOM  36674  O2  CYT  843     170.338 118.006 -24.372  1.00 38.78      A16S
ATOM  36675  N3  CYT  843     168.267 118.792 -23.961  1.00 38.78      A16S
ATOM  36676  C4  CYT  843     167.510 119.726 -23.401  1.00 38.78      A16S
ATOM  36677  N4  CYT  843     166.201 119.592 -23.500  1.00 38.78      A16S
ATOM  36678  C5  CYT  843     168.070 120.832 -22.710  1.00 38.78      A16S
ATOM  36679  C2' CYT  843     172.197 121.020 -24.246  1.00 40.42      A16S
ATOM  36680  O2' CYT  843     173.460 120.559 -24.650  1.00 40.42      A16S
ATOM  36681  C3' CYT  843     172.302 122.320 -23.466  1.00 40.42      A16S
ATOM  36682  O3' CYT  843     173.269 123.199 -24.026  1.00 40.42      A16S
ATOM  36683  P   GUA  844     172.853 124.188 -25.225  1.00 36.89      A16S
ATOM  36684  O1P GUA  844     174.079 124.831 -25.747  1.00 44.19      A16S
ATOM  36685  O2P GUA  844     171.708 125.038 -24.810  1.00 44.19      A16S
ATOM  36686  O5' GUA  844     172.340 123.199 -26.356  1.00 36.89      A16S
ATOM  36687  C5' GUA  844     171.263 123.565 -27.202  1.00 36.89      A16S
ATOM  36688  C4' GUA  844     170.211 122.502 -27.153  1.00 36.89      A16S
ATOM  36689  O4' GUA  844     169.776 122.327 -25.777  1.00 36.89      A16S
ATOM  36690  C1' GUA  844     168.386 122.062 -25.747  1.00 36.89      A16S
ATOM  36691  N9  GUA  844     167.725 123.179 -25.077  1.00 44.19      A16S
ATOM  36692  C4  GUA  844     166.375 123.327 -24.848  1.00 44.19      A16S
ATOM  36693  N3  GUA  844     165.415 122.452 -25.187  1.00 44.19      A16S
ATOM  36694  C2  GUA  844     164.221 122.877 -24.842  1.00 44.19      A16S
ATOM  36695  N2  GUA  844     163.154 122.128 -25.122  1.00 44.19      A16S
ATOM  36696  N1  GUA  844     163.988 124.063 -24.207  1.00 44.19      A16S
ATOM  36697  C6  GUA  844     164.962 124.977 -23.849  1.00 44.19      A16S
ATOM  36698  O6  GUA  844     164.647 126.021 -23.285  1.00 44.19      A16S
ATOM  36699  C5  GUA  844     166.242 124.538 -24.214  1.00 44.19      A16S
ATOM  36700  N7  GUA  844     167.476 125.139 -24.035  1.00 44.19      A16S
ATOM  36701  C8  GUA  844     168.326 124.295 -24.557  1.00 44.19      A16S
ATOM  36702  C2' GUA  844     167.957 121.886 -27.202  1.00 36.89      A16S
ATOM  36703  O2' GUA  844     168.175 120.534 -27.533  1.00 36.89      A16S
ATOM  36704  C3' GUA  844     168.943 122.804 -27.916  1.00 36.89      A16S
ATOM  36705  O3' GUA  844     169.108 122.479 -29.294  1.00 36.89      A16S
ATOM  36706  P   CYT  845     168.573 123.493 -30.419  1.00 41.30      A16S
ATOM  36707  O1P CYT  845     169.206 123.185 -31.739  1.00 46.72      A16S
ATOM  36708  O2P CYT  845     168.678 124.861 -29.864  1.00 46.72      A16S
ATOM  36709  O5' CYT  845     167.040 123.108 -30.551  1.00 41.30      A16S
ATOM  36710  C5' CYT  845     166.669 121.763 -30.805  1.00 41.30      A16S
ATOM  36711  C4' CYT  845     165.208 121.552 -30.515  1.00 41.30      A16S
ATOM  36712  O4' CYT  845     164.960 121.706 -29.092  1.00 41.30      A16S
ATOM  36713  C1' CYT  845     163.628 122.163 -28.900  1.00 41.30      A16S
ATOM  36714  N1  CYT  845     163.662 123.475 -28.237  1.00 46.72      A16S
ATOM  36715  C6  CYT  845     164.834 124.138 -28.035  1.00 46.72      A16S
ATOM  36716  C2  CYT  845     162.456 124.046 -27.842  1.00 46.72      A16S
ATOM  36717  O2  CYT  845     161.417 123.388 -27.975  1.00 46.72      A16S
ATOM  36718  N3  CYT  845     162.445 125.289 -27.320  1.00 46.72      A16S
ATOM  36719  C4  CYT  845     163.584 125.951 -27.171  1.00 46.72      A16S
ATOM  36720  N4  CYT  845     163.523 127.198 -26.713  1.00 46.72      A16S
ATOM  36721  C5  CYT  845     164.842 125.369 -27.507  1.00 46.72      A16S
ATOM  36722  C2' CYT  845     163.004 122.278 -30.295  1.00 41.30      A16S
ATOM  36723  O2' CYT  845     162.381 121.055 -30.641  1.00 41.30      A16S
ATOM  36724  C3' CYT  845     164.241 122.542 -31.133  1.00 41.30      A16S
ATOM  36725  O3' CYT  845     164.012 122.303 -32.508  1.00 41.30      A16S
ATOM  36726  P   GUA  846     164.103 123.526 -33.546  1.00 38.58      A16S
ATOM  36727  O1P GUA  846     163.926 122.999 -34.917  1.00 51.52      A16S
ATOM  36728  O2P GUA  846     165.295 124.344 -33.224  1.00 51.52      A16S
ATOM  36729  O5' GUA  846     162.806 124.393 -33.241  1.00 38.58      A16S
ATOM  36730  C5' GUA  846     161.513 123.796 -33.165  1.00 38.58      A16S
ATOM  36731  C4' GUA  846     160.560 124.731 -32.465  1.00 38.58      A16S
ATOM  36732  O4' GUA  846     161.045 124.972 -31.119  1.00 38.58      A16S
ATOM  36733  C1' GUA  846     160.736 126.295 -30.736  1.00 38.58      A16S
ATOM  36734  N9  GUA  846     161.973 126.955 -30.373  1.00 51.52      A16S
ATOM  36735  C4  GUA  846     162.084 128.086 -29.630  1.00 51.52      A16S
ATOM  36736  N3  GUA  846     161.063 128.771 -29.087  1.00 51.52      A16S
ATOM  36737  C2  GUA  846     161.482 129.837 -28.433  1.00 51.52      A16S
ATOM  36738  N2  GUA  846     160.599 130.636 -27.816  1.00 51.52      A16S
ATOM  36739  N1  GUA  846     162.802 130.203 -28.331  1.00 51.52      A16S
ATOM  36740  C6  GUA  846     163.867 129.509 -28.886  1.00 51.52      A16S
ATOM  36741  O6  GUA  846     165.020 129.929 -28.742  1.00 51.52      A16S
ATOM  36742  C5  GUA  846     163.429 128.358 -29.580  1.00 51.52      A16S
ATOM  36743  N7  GUA  846     164.150 127.397 -30.270  1.00 51.52      A16S
ATOM  36744  C8  GUA  846     163.241 126.582 -30.718  1.00 51.52      A16S
ATOM  36745  C2' GUA  846     160.038 126.988 -31.904  1.00 38.58      A16S
ATOM  36746  O2' GUA  846     158.645 127.030 -31.680  1.00 38.58      A16S
ATOM  36747  C3' GUA  846     160.456 126.116 -33.084  1.00 38.58      A16S
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ATOM	36748	O3'	GUA	846	159.456	126.109	-34.092	1.00	38.58	A16S	ATOM	36801	N1	ADE	849	154.949	125.318	-32.851	1.00	36.78	A16S
ATOM	36749	P	URI	847	159.711	126.872	-35.474	1.00	45.15	A16S	ATOM	36802	C6	ADE	849	155.629	125.496	-31.699	1.00	36.78	A16S
ATOM	36750	O1P	URI	847	160.796	126.141	-36.162	1.00	49.04	A16S	ATOM	36803	N6	ADE	849	155.301	126.514	-30.902	1.00	36.78	A16S
ATOM	36751	O2P	URI	847	159.875	128.314	-35.188	1.00	49.04	A16S	ATOM	36804	C5	ADE	849	156.640	124.584	-31.392	1.00	36.78	A16S
ATOM	36752	O5'	URI	847	158.351	126.649	-36.278	1.00	45.15	A16S	ATOM	36805	N7	ADE	849	157.521	124.502	-30.323	1.00	36.78	A16S
ATOM	36753	C5'	URI	847	158.142	125.536	-37.154	1.00	45.15	A16S	ATOM	36806	C8	ADE	849	158.206	123.418	-30.570	1.00	36.78	A16S
ATOM	36754	C4'	URI	847	156.880	125.773	-37.954	1.00	45.15	A16S	ATOM	36807	C2'	ADE	849	157.316	120.328	-32.314	1.00	51.07	A16S
ATOM	36755	O4'	URI	847	155.877	126.132	-36.997	1.00	45.15	A16S	ATOM	36808	O2'	ADE	849	157.013	119.693	-31.098	1.00	51.07	A16S
ATOM	36756	C1'	URI	847	155.008	127.069	-37.563	1.00	45.15	A16S	ATOM	36809	C3'	ADE	849	158.000	119.445	-33.365	1.00	51.07	A16S
ATOM	36757	N1	URI	847	154.471	127.922	-36.502	1.00	49.04	A16S	ATOM	36810	O3'	ADE	849	158.140	118.119	-32.802	1.00	51.07	A16S
ATOM	36758	C6	URI	847	155.192	128.205	-35.379	1.00	49.04	A16S	ATOM	36811	P	ADE	850	159.553	117.332	-32.806	1.00	39.39	A16S
ATOM	36759	C2	URI	847	153.202	128.412	-36.677	1.00	49.04	A16S	ATOM	36812	O1P	ADE	850	160.664	118.208	-33.200	1.00	45.85	A16S
ATOM	36760	O2	URI	847	152.548	128.182	-37.669	1.00	49.04	A16S	ATOM	36813	O2P	ADE	850	159.327	116.083	-33.549	1.00	45.85	A16S
ATOM	36761	N3	URI	847	152.726	129.178	-35.648	1.00	49.04	A16S	ATOM	36814	O5'	ADE	850	159.824	116.971	-31.271	1.00	39.39	A16S
ATOM	36762	C4	URI	847	153.390	129.498	-34.488	1.00	49.04	A16S	ATOM	36815	C5'	ADE	850	158.760	116.783	-30.325	1.00	39.39	A16S
ATOM	36763	O4	URI	847	152.841	130.213	-33.651	1.00	49.04	A16S	ATOM	36816	C4'	ADE	850	159.070	117.539	-29.056	1.00	39.39	A16S
ATOM	36764	C5	URI	847	154.709	128.953	-34.389	1.00	49.04	A16S	ATOM	36817	O4'	ADE	850	160.391	117.163	-28.662	1.00	39.39	A16S
ATOM	36765	C2'	URI	847	155.699	127.763	-38.736	1.00	45.15	A16S	ATOM	36818	C1'	ADE	850	161.163	118.309	-28.416	1.00	39.39	A16S
ATOM	36766	O2'	URI	847	154.844	127.774	-39.863	1.00	45.15	A16S	ATOM	36819	N9	ADE	850	162.478	118.102	-29.005	1.00	45.85	A16S
ATOM	36767	C3'	URI	847	156.975	126.938	-38.943	1.00	45.15	A16S	ATOM	36820	C4	ADE	850	163.654	118.539	-28.465	1.00	45.85	A16S
ATOM	36768	O3'	URI	847	156.886	126.491	-40.314	1.00	45.15	A16S	ATOM	36821	N3	ADE	850	163.803	119.315	-27.382	1.00	45.85	A16S
ATOM	36769	P	URI	848	157.937	125.439	-40.927	1.00	44.83	A16S	ATOM	36822	C2	ADE	850	165.084	119.484	-27.110	1.00	45.85	A16S
ATOM	36770	O1P	URI	848	159.274	126.065	-40.860	1.00	49.87	A16S	ATOM	36823	N1	ADE	850	166.159	118.992	-27.745	1.00	45.85	A16S
ATOM	36771	O2P	URI	848	157.391	125.011	-42.231	1.00	49.87	A16S	ATOM	36824	C6	ADE	850	165.972	118.208	-28.826	1.00	45.85	A16S
ATOM	36772	O5'	URI	848	157.950	124.221	-39.894	1.00	44.83	A16S	ATOM	36825	N6	ADE	850	167.042	117.691	-29.430	1.00	45.85	A16S
ATOM	36773	C5'	URI	848	157.595	122.880	-40.252	1.00	44.83	A16S	ATOM	36826	C5	ADE	850	164.652	117.973	-29.233	1.00	45.85	A16S
ATOM	36774	C4'	URI	848	158.778	121.972	-40.035	1.00	44.83	A16S	ATOM	36827	N7	ADE	850	164.110	117.250	-30.286	1.00	45.85	A16S
ATOM	36775	O4'	URI	848	159.654	122.172	-41.150	1.00	44.83	A16S	ATOM	36828	C8	ADE	850	162.820	117.377	-30.118	1.00	45.85	A16S
ATOM	36776	C1'	URI	848	160.954	121.827	-40.759	1.00	44.83	A16S	ATOM	36829	C2'	ADE	850	160.380	119.580	-28.746	1.00	39.39	A16S
ATOM	36777	N1	URI	848	161.933	122.575	-41.546	1.00	49.87	A16S	ATOM	36830	O2'	ADE	850	160.222	120.408	-27.600	1.00	39.39	A16S
ATOM	36778	C6	URI	848	161.831	123.916	-41.747	1.00	49.87	A16S	ATOM	36831	C3'	ADE	850	159.060	119.040	-29.293	1.00	39.39	A16S
ATOM	36779	C2	URI	848	162.974	121.851	-42.066	1.00	49.87	A16S	ATOM	36832	O3'	ADE	850	157.982	119.706	-28.589	1.00	39.39	A16S
ATOM	36780	O2	URI	848	163.090	120.649	-41.900	1.00	49.87	A16S	ATOM	36833	P	GUA	851	157.018	118.913	-27.531	1.00	40.66	A16S
ATOM	36781	N3	URI	848	163.876	122.576	-42.786	1.00	49.87	A16S	ATOM	36834	O1P	GUA	851	157.804	118.293	-26.426	1.00	32.23	A16S
ATOM	36782	C4	URI	848	163.842	123.920	-43.025	1.00	49.87	A16S	ATOM	36835	O2P	GUA	851	156.053	118.095	-28.293	1.00	32.23	A16S
ATOM	36783	O4	URI	848	164.724	124.429	-43.714	1.00	49.87	A16S	ATOM	36836	O5'	GUA	851	156.182	120.101	-26.883	1.00	40.66	A16S
ATOM	36784	C5	URI	848	162.728	124.600	-42.446	1.00	49.87	A16S	ATOM	36837	C5'	GUA	851	156.823	121.150	-26.162	1.00	40.66	A16S
ATOM	36785	C2'	URI	848	161.065	122.009	-39.248	1.00	44.83	A16S	ATOM	36838	C4'	GUA	851	155.966	122.393	-26.197	1.00	40.66	A16S
ATOM	36786	O2'	URI	848	161.560	120.825	-38.658	1.00	44.83	A16S	ATOM	36839	O4'	GUA	851	156.092	123.052	-27.482	1.00	40.66	A16S
ATOM	36787	C3'	URI	848	159.635	122.358	-38.836	1.00	44.83	A16S	ATOM	36840	C1'	GUA	851	154.844	123.618	-27.859	1.00	40.66	A16S
ATOM	36788	O3'	URI	848	159.433	121.617	-37.628	1.00	44.83	A16S	ATOM	36841	N9	GUA	851	154.465	123.032	-29.139	1.00	32.23	A16S
ATOM	36789	P	ADE	849	158.193	120.601	-37.443	1.00	51.07	A16S	ATOM	36842	C4	GUA	851	153.390	123.368	-29.933	1.00	32.23	A16S
ATOM	36790	O1P	ADE	849	158.482	119.296	-38.070	1.00	36.78	A16S	ATOM	36843	N3	GUA	851	152.434	124.279	-29.646	1.00	32.23	A16S
ATOM	36791	O2P	ADE	849	156.901	121.274	-37.729	1.00	36.78	A16S	ATOM	36844	C2	GUA	851	151.534	124.366	-30.621	1.00	32.23	A16S
ATOM	36792	O5'	ADE	849	158.270	120.347	-35.876	1.00	51.07	A16S	ATOM	36845	N2	GUA	851	150.490	125.189	-30.513	1.00	32.23	A16S
ATOM	36793	C5'	ADE	849	159.519	120.161	-35.210	1.00	51.07	A16S	ATOM	36846	N1	GUA	851	151.591	123.644	-31.774	1.00	32.23	A16S
ATOM	36794	C4'	ADE	849	159.293	120.174	-33.724	1.00	51.07	A16S	ATOM	36847	C6	GUA	851	152.569	122.715	-32.085	1.00	32.23	A16S
ATOM	36795	O4'	ADE	849	159.123	121.527	-33.260	1.00	51.07	A16S	ATOM	36848	O6	GUA	851	152.534	122.140	-33.162	1.00	32.23	A16S
ATOM	36796	C1'	ADE	849	158.323	121.458	-32.118	1.00	51.07	A16S	ATOM	36849	C5	GUA	851	153.510	122.582	-31.056	1.00	32.23	A16S
ATOM	36797	N9	ADE	849	157.818	122.764	-31.714	1.00	36.78	A16S	ATOM	36850	N7	GUA	851	154.609	121.745	-30.957	1.00	32.23	A16S
ATOM	36798	C4	ADE	849	156.842	123.542	-32.278	1.00	36.78	A16S	ATOM	36851	C8	GUA	851	155.143	122.042	-29.805	1.00	32.23	A16S
ATOM	36799	N3	ADE	849	156.183	123.326	-33.424	1.00	36.78	A16S	ATOM	36852	C2'	GUA	851	153.857	123.339	-26.728	1.00	40.66	A16S
ATOM	36800	C2	ADE	849	155.265	124.272	-33.619	1.00	36.78	A16S	ATOM	36853	O2'	GUA	851	153.818	124.449	-25.855	1.00	40.66	A16S

ATOM	36854	C3'	GUA	851	154.482	122.108	-26.086	1.00	40.66	A16S	ATOM	36907	N1	CYT	854	144.230	114.424	-31.616	1.00	41.27	A16S
ATOM	36855	O3'	GUA	851	154.101	121.931	-24.737	1.00	40.66	A16S	ATOM	36908	C6	CYT	854	145.017	114.716	-30.538	1.00	41.27	A16S
ATOM	36856	P	CYT	852	152.958	120.875	-24.392	1.00	40.61	A16S	ATOM	36909	C2	CYT	854	144.802	114.127	-32.848	1.00	41.27	A16S
ATOM	36857	O1P	CYT	852	152.795	120.760	-22.925	1.00	35.54	A16S	ATOM	36910	O2	CYT	854	144.062	113.923	-33.813	1.00	41.27	A16S
ATOM	36858	O2P	CYT	852	153.168	119.673	-25.215	1.00	35.54	A16S	ATOM	36911	N3	CYT	854	146.142	114.070	-32.955	1.00	41.27	A16S
ATOM	36859	O5'	CYT	852	151.651	121.540	-24.983	1.00	40.61	A16S	ATOM	36912	C4	CYT	854	146.904	114.309	-31.889	1.00	41.27	A16S
ATOM	36860	C5'	CYT	852	151.055	122.662	-24.370	1.00	40.61	A16S	ATOM	36913	N4	CYT	854	148.225	114.193	-32.025	1.00	41.27	A16S
ATOM	36861	C4'	CYT	852	149.862	123.055	-25.171	1.00	40.61	A16S	ATOM	36914	C5	CYT	854	146.345	114.669	-30.628	1.00	41.27	A16S
ATOM	36862	O4'	CYT	852	150.315	123.289	-26.524	1.00	40.61	A16S	ATOM	36915	C2'	CYT	854	142.321	112.934	-31.234	1.00	37.75	A16S
ATOM	36863	C1'	CYT	852	149.271	123.002	-27.425	1.00	40.61	A16S	ATOM	36916	O2'	CYT	854	141.023	112.748	-31.726	1.00	37.75	A16S
ATOM	36864	N1	CYT	852	149.780	122.129	-28.479	1.00	35.54	A16S	ATOM	36917	C3'	CYT	854	142.334	112.889	-29.721	1.00	37.75	A16S
ATOM	36865	C6	CYT	852	150.954	121.444	-28.344	1.00	35.54	A16S	ATOM	36918	O3'	CYT	854	141.513	111.837	-29.270	1.00	37.75	A16S
ATOM	36866	C2	CYT	852	149.030	122.012	-29.630	1.00	35.54	A16S	ATOM	36919	P	GUA	855	142.141	110.382	-29.119	1.00	36.58	A16S
ATOM	36867	O2	CYT	852	147.969	122.648	-29.703	1.00	35.54	A16S	ATOM	36920	O1P	GUA	855	141.123	109.482	-28.514	1.00	44.07	A16S
ATOM	36868	N3	CYT	852	149.464	121.210	-30.631	1.00	35.54	A16S	ATOM	36921	O2P	GUA	855	143.466	110.550	-28.459	1.00	44.07	A16S
ATOM	36869	C4	CYT	852	150.605	120.536	-30.494	1.00	35.54	A16S	ATOM	36922	O5'	GUA	855	142.359	109.950	-30.624	1.00	36.58	A16S
ATOM	36870	N4	CYT	852	150.987	119.743	-31.496	1.00	35.54	A16S	ATOM	36923	C5'	GUA	855	141.253	109.798	-31.468	1.00	36.58	A16S
ATOM	36871	C5	CYT	852	151.400	120.642	-29.322	1.00	35.54	A16S	ATOM	36924	C4'	GUA	855	141.693	109.177	-32.750	1.00	36.58	A16S
ATOM	36872	C2'	CYT	852	148.130	122.393	-26.619	1.00	40.61	A16S	ATOM	36925	O4'	GUA	855	142.551	110.119	-33.447	1.00	36.58	A16S
ATOM	36873	O2'	CYT	852	147.176	123.406	-26.389	1.00	40.61	A16S	ATOM	36926	C1'	GUA	855	143.517	109.404	-34.196	1.00	36.58	A16S
ATOM	36874	C3'	CYT	852	148.867	121.937	-25.368	1.00	40.61	A16S	ATOM	36927	N9	GUA	855	144.848	109.833	-33.764	1.00	44.07	A16S
ATOM	36875	O3'	CYT	852	148.029	121.792	-24.233	1.00	40.61	A16S	ATOM	36928	C4	GUA	855	145.993	109.850	-34.532	1.00	44.07	A16S
ATOM	36876	P	GUA	853	147.440	120.341	-23.872	1.00	36.50	A16S	ATOM	36929	N3	GUA	855	146.087	109.487	-35.826	1.00	44.07	A16S
ATOM	36877	O1P	GUA	853	146.608	120.495	-22.652	1.00	45.16	A16S	ATOM	36930	C2	GUA	855	147.315	109.600	-36.283	1.00	44.07	A16S
ATOM	36878	O2P	GUA	853	148.549	119.353	-23.877	1.00	45.16	A16S	ATOM	36931	N2	GUA	855	147.589	109.267	-37.547	1.00	44.07	A16S
ATOM	36879	O5'	GUA	853	146.492	120.032	-25.108	1.00	36.50	A16S	ATOM	36932	N1	GUA	855	148.367	110.038	-35.540	1.00	44.07	A16S
ATOM	36880	C5'	GUA	853	146.270	118.712	-25.547	1.00	36.50	A16S	ATOM	36933	C6	GUA	855	148.302	110.408	-34.211	1.00	44.07	A16S
ATOM	36881	C4'	GUA	853	145.358	118.734	-26.729	1.00	36.50	A16S	ATOM	36934	O6	GUA	855	149.323	110.767	-33.634	1.00	44.07	A16S
ATOM	36882	O4'	GUA	853	145.992	119.462	-27.799	1.00	36.50	A16S	ATOM	36935	C5	GUA	855	146.986	110.297	-33.699	1.00	44.07	A16S
ATOM	36883	C1'	GUA	853	145.593	118.929	-29.046	1.00	36.50	A16S	ATOM	36936	N7	GUA	855	146.481	110.574	-32.435	1.00	44.07	A16S
ATOM	36884	N9	GUA	853	146.787	118.483	-29.750	1.00	45.16	A16S	ATOM	36937	C8	GUA	855	145.212	110.284	-32.522	1.00	44.07	A16S
ATOM	36885	C4	GUA	853	146.865	118.136	-31.072	1.00	45.16	A16S	ATOM	36938	C2'	GUA	855	143.241	107.912	-33.954	1.00	36.58	A16S
ATOM	36886	N3	GUA	853	145.860	118.191	-31.962	1.00	45.16	A16S	ATOM	36939	O2'	GUA	855	142.329	107.408	-34.909	1.00	36.58	A16S
ATOM	36887	C2	GUA	853	146.240	117.791	-33.156	1.00	45.16	A16S	ATOM	36940	C3'	GUA	855	142.575	107.955	-32.596	1.00	36.58	A16S
ATOM	36888	N2	GUA	853	145.385	117.826	-34.172	1.00	45.16	A16S	ATOM	36941	O3'	GUA	855	141.829	106.772	-32.382	1.00	36.58	A16S
ATOM	36889	N1	GUA	853	147.491	117.338	-33.447	1.00	45.16	A16S	ATOM	36942	P	CYT	856	142.432	105.628	-31.433	1.00	35.91	A16S
ATOM	36890	C6	GUA	853	148.541	117.260	-32.544	1.00	45.16	A16S	ATOM	36943	O1P	CYT	856	141.327	104.685	-31.096	1.00	32.72	A16S
ATOM	36891	O6	GUA	853	149.629	116.816	-32.908	1.00	45.16	A16S	ATOM	36944	O2P	CYT	856	143.171	106.309	-30.346	1.00	32.72	A16S
ATOM	36892	C5	GUA	853	148.162	117.723	-31.267	1.00	45.16	A16S	ATOM	36945	O5'	CYT	856	143.503	104.879	-32.345	1.00	35.91	A16S
ATOM	36893	N7	GUA	853	148.897	117.842	-30.098	1.00	45.16	A16S	ATOM	36946	C5'	CYT	856	143.073	104.120	-33.469	1.00	35.91	A16S
ATOM	36894	C8	GUA	853	148.041	118.299	-29.226	1.00	45.16	A16S	ATOM	36947	C4'	CYT	856	144.230	103.822	-34.399	1.00	35.91	A16S
ATOM	36895	C2'	GUA	853	144.649	117.767	-28.752	1.00	36.50	A16S	ATOM	36948	O4'	CYT	856	144.730	105.045	-35.000	1.00	35.91	A16S
ATOM	36896	O2'	GUA	853	143.310	118.197	-28.868	1.00	36.50	A16S	ATOM	36949	C1'	CYT	856	146.100	104.887	-35.315	1.00	35.91	A16S
ATOM	36897	C3'	GUA	853	145.067	117.393	-27.336	1.00	36.50	A16S	ATOM	36950	N1	CYT	856	146.857	105.813	-34.476	1.00	32.72	A16S
ATOM	36898	O3'	GUA	853	144.032	116.768	-26.609	1.00	36.50	A16S	ATOM	36951	C6	CYT	856	146.339	106.244	-33.291	1.00	32.72	A16S
ATOM	36899	P	CYT	854	144.093	115.190	-26.381	1.00	37.75	A16S	ATOM	36952	C2	CYT	856	148.141	106.203	-34.871	1.00	32.72	A16S
ATOM	36900	O1P	CYT	854	143.239	114.864	-25.206	1.00	41.27	A16S	ATOM	36953	O2	CYT	856	148.550	105.881	-35.997	1.00	32.72	A16S
ATOM	36901	O2P	CYT	854	145.533	114.812	-26.372	1.00	41.27	A16S	ATOM	36954	N3	CYT	856	148.895	106.926	-34.014	1.00	32.72	A16S
ATOM	36902	O5'	CYT	854	143.452	114.602	-27.715	1.00	37.75	A16S	ATOM	36955	C4	CYT	856	148.403	107.274	-32.826	1.00	32.72	A16S
ATOM	36903	C5'	CYT	854	142.076	114.754	-27.984	1.00	37.75	A16S	ATOM	36956	N4	CYT	856	149.197	107.902	-31.985	1.00	32.72	A16S
ATOM	36904	C4'	CYT	854	141.767	114.253	-29.369	1.00	37.75	A16S	ATOM	36957	C5	CYT	856	147.075	106.967	-32.441	1.00	32.72	A16S
ATOM	36905	O4'	CYT	854	142.387	115.131	-30.346	1.00	37.75	A16S	ATOM	36958	C2'	CYT	856	146.464	103.451	-34.931	1.00	35.91	A16S
ATOM	36906	C1'	CYT	854	142.768	114.373	-31.491	1.00	37.75	A16S	ATOM	36959	O2'	CYT	856	146.225	102.599	-36.025	1.00	35.91	A16S

ATOM	36960	C3'	CYT	856	145.478	103.197	-33.807	1.00	35.91	A16S	ATOM	37013	N1	CYT	859	156.969	100.207	-28.100	1.00	32.48	A16S
ATOM	36961	O3'	CYT	856	145.295	101.808	-33.599	1.00	35.91	A16S	ATOM	37014	C6	CYT	859	155.884	99.510	-28.543	1.00	32.48	A16S
ATOM	36962	P	CYT	857	146.217	101.033	-32.542	1.00	39.20	A16S	ATOM	37015	C2	CYT	859	156.824	101.194	-27.149	1.00	32.48	A16S
ATOM	36963	O1P	CYT	857	145.674	99.658	-32.436	1.00	41.32	A16S	ATOM	37016	O2	CYT	859	157.819	101.819	-26.792	1.00	32.48	A16S
ATOM	36964	O2P	CYT	857	146.408	101.855	-31.319	1.00	41.32	A16S	ATOM	37017	N3	CYT	859	155.612	101.448	-26.645	1.00	32.48	A16S
ATOM	36965	O5'	CYT	857	147.607	100.894	-33.300	1.00	39.20	A16S	ATOM	37018	C4	CYT	859	154.559	100.759	-27.073	1.00	32.48	A16S
ATOM	36966	C5'	CYT	857	147.670	100.221	-34.546	1.00	39.20	A16S	ATOM	37019	N4	CYT	859	153.370	101.036	-26.542	1.00	32.48	A16S
ATOM	36967	C4'	CYT	857	149.068	100.270	-35.100	1.00	39.20	A16S	ATOM	37020	C5	CYT	859	154.673	99.754	-28.060	1.00	32.48	A16S
ATOM	36968	O4'	CYT	857	149.426	101.637	-35.410	1.00	39.20	A16S	ATOM	37021	C2'	CYT	859	159.151	99.126	-27.617	1.00	37.54	A16S
ATOM	36969	C1'	CYT	857	150.815	101.812	-35.220	1.00	39.20	A16S	ATOM	37022	O2'	CYT	859	160.505	99.413	-27.878	1.00	37.54	A16S
ATOM	36970	N1	CYT	857	151.010	102.780	-34.142	1.00	41.32	A16S	ATOM	37023	C3'	CYT	859	158.799	97.707	-28.012	1.00	37.54	A16S
ATOM	36971	C6	CYT	857	150.072	102.954	-33.167	1.00	41.32	A16S	ATOM	37024	O3'	CYT	859	159.808	96.811	-27.616	1.00	37.54	A16S
ATOM	36972	C2	CYT	857	152.188	103.501	-34.118	1.00	41.32	A16S	ATOM	37025	P	CYT	860	159.737	96.132	-26.172	1.00	41.42	A16S
ATOM	36973	O2	CYT	857	152.999	103.336	-35.040	1.00	41.32	A16S	ATOM	37026	O1P	CYT	860	160.766	95.059	-26.145	1.00	47.40	A16S
ATOM	36974	N3	CYT	857	152.426	104.354	-33.102	1.00	41.32	A16S	ATOM	37027	O2P	CYT	860	158.319	95.785	-25.913	1.00	47.40	A16S
ATOM	36975	C4	CYT	857	151.531	104.485	-32.131	1.00	41.32	A16S	ATOM	37028	O5'	CYT	860	160.156	97.318	-25.186	1.00	41.42	A16S
ATOM	36976	N4	CYT	857	151.833	105.286	-31.115	1.00	41.32	A16S	ATOM	37029	C5'	CYT	860	161.412	97.970	-25.325	1.00	41.42	A16S
ATOM	36977	C5	CYT	857	150.292	103.785	-32.150	1.00	41.32	A16S	ATOM	37030	C4'	CYT	860	161.655	98.889	-24.157	1.00	41.42	A16S
ATOM	36978	C2'	CYT	857	151.389	100.449	-34.835	1.00	39.20	A16S	ATOM	37031	O4'	CYT	860	160.808	100.054	-24.251	1.00	41.42	A16S
ATOM	36979	O2'	CYT	857	151.751	99.748	-36.003	1.00	39.20	A16S	ATOM	37032	C1'	CYT	860	160.383	100.431	-22.955	1.00	41.42	A16S
ATOM	36980	C3'	CYT	857	150.183	99.800	-34.185	1.00	39.20	A16S	ATOM	37033	N1	CYT	860	158.919	100.378	-22.911	1.00	47.40	A16S
ATOM	36981	O3'	CYT	857	150.303	98.392	-34.242	1.00	39.20	A16S	ATOM	37034	C6	CYT	860	158.206	99.660	-23.822	1.00	47.40	A16S
ATOM	36982	P	GUA	858	150.753	97.590	-32.936	1.00	35.98	A16S	ATOM	37035	C2	CYT	860	158.277	101.094	-21.934	1.00	47.40	A16S
ATOM	36983	O1P	GUA	858	150.481	96.157	-33.231	1.00	34.69	A16S	ATOM	37036	O2	CYT	860	158.964	101.702	-21.113	1.00	47.40	A16S
ATOM	36984	O2P	GUA	858	150.139	98.211	-31.743	1.00	34.69	A16S	ATOM	37037	N3	CYT	860	156.935	101.115	-21.898	1.00	47.40	A16S
ATOM	36985	O5'	GUA	858	152.314	97.905	-32.842	1.00	35.98	A16S	ATOM	37038	C4	CYT	860	156.242	100.441	-22.797	1.00	47.40	A16S
ATOM	36986	C5'	GUA	858	153.176	97.700	-33.956	1.00	35.98	A16S	ATOM	37039	N4	CYT	860	154.921	100.510	-22.738	1.00	47.40	A16S
ATOM	36987	C4'	GUA	858	154.528	98.314	-33.698	1.00	35.98	A16S	ATOM	37040	C5	CYT	860	156.874	99.667	-23.802	1.00	47.40	A16S
ATOM	36988	O4'	GUA	858	154.423	99.761	-33.747	1.00	35.98	A16S	ATOM	37041	C2'	CYT	860	161.048	99.497	-21.948	1.00	41.42	A16S
ATOM	36989	C1'	GUA	858	155.430	100.332	-32.926	1.00	35.98	A16S	ATOM	37042	O2'	CYT	860	162.220	100.108	-21.473	1.00	41.42	A16S
ATOM	36990	N9	GUA	858	154.795	101.140	-31.899	1.00	34.69	A16S	ATOM	37043	C3'	CYT	860	161.354	98.281	-22.804	1.00	41.42	A16S
ATOM	36991	C4	GUA	858	155.445	101.934	-30.998	1.00	34.69	A16S	ATOM	37044	O3'	CYT	860	162.535	97.683	-22.338	1.00	41.42	A16S
ATOM	36992	N3	GUA	858	156.780	102.108	-30.918	1.00	34.69	A16S	ATOM	37045	P	URI	861	162.453	96.413	-21.380	1.00	37.53	A16S
ATOM	36993	C2	GUA	858	157.106	102.941	-29.952	1.00	34.69	A16S	ATOM	37046	O1P	URI	861	163.850	95.983	-21.159	1.00	50.27	A16S
ATOM	36994	N2	GUA	858	158.390	103.252	-29.733	1.00	34.69	A16S	ATOM	37047	O2P	URI	861	161.474	95.467	-21.952	1.00	50.27	A16S
ATOM	36995	N1	GUA	858	156.193	103.542	-29.126	1.00	34.69	A16S	ATOM	37048	O5'	URI	861	161.891	96.972	-20.006	1.00	37.53	A16S
ATOM	36996	C6	GUA	858	154.818	103.371	-29.195	1.00	34.69	A16S	ATOM	37049	C5'	URI	861	162.615	97.924	-19.234	1.00	37.53	A16S
ATOM	36997	O6	GUA	858	154.087	103.961	-28.408	1.00	34.69	A16S	ATOM	37050	C4'	URI	861	161.773	98.318	-18.067	1.00	37.53	A16S
ATOM	36998	C5	GUA	858	154.457	102.489	-30.223	1.00	34.69	A16S	ATOM	37051	O4'	URI	861	160.535	98.826	-18.566	1.00	37.53	A16S
ATOM	36999	N7	GUA	858	153.207	102.041	-30.623	1.00	34.69	A16S	ATOM	37052	C1'	URI	861	159.518	98.459	-17.686	1.00	37.53	A16S
ATOM	37000	C8	GUA	858	153.457	101.248	-31.625	1.00	34.69	A16S	ATOM	37053	N1	URI	861	158.221	98.616	-18.356	1.00	50.27	A16S
ATOM	37001	C2'	GUA	858	156.189	99.180	-32.274	1.00	35.98	A16S	ATOM	37054	C6	URI	861	157.819	97.824	-19.390	1.00	50.27	A16S
ATOM	37002	O2'	GUA	858	157.360	98.958	-33.026	1.00	35.98	A16S	ATOM	37055	C2	URI	861	157.418	99.626	-17.889	1.00	50.27	A16S
ATOM	37003	C3'	GUA	858	155.149	98.065	-32.337	1.00	35.98	A16S	ATOM	37056	O2	URI	861	157.752	100.354	-16.976	1.00	50.27	A16S
ATOM	37004	O3'	GUA	858	155.729	96.773	-32.254	1.00	35.98	A16S	ATOM	37057	N3	URI	861	156.219	99.761	-18.530	1.00	50.27	A16S
ATOM	37005	P	CYT	859	155.689	95.957	-30.857	1.00	37.54	A16S	ATOM	37058	C4	URI	861	155.755	99.004	-19.568	1.00	50.27	A16S
ATOM	37006	O1P	CYT	859	156.341	94.640	-31.106	1.00	32.48	A16S	ATOM	37059	O4	URI	861	154.628	99.210	-20.005	1.00	50.27	A16S
ATOM	37007	O2P	CYT	859	154.335	95.988	-30.240	1.00	32.48	A16S	ATOM	37060	C5	URI	861	156.644	97.982	-20.000	1.00	50.27	A16S
ATOM	37008	O5'	CYT	859	156.709	96.766	-29.946	1.00	37.54	A16S	ATOM	37061	C2'	URI	861	159.920	97.146	-16.999	1.00	37.53	A16S
ATOM	37009	C5'	CYT	859	158.088	96.743	-30.260	1.00	37.54	A16S	ATOM	37062	O2'	URI	861	159.519	97.119	-15.645	1.00	37.53	A16S
ATOM	37010	C4'	CYT	859	158.814	97.819	-29.513	1.00	37.54	A16S	ATOM	37063	C3'	URI	861	161.446	97.131	-17.175	1.00	37.53	A16S
ATOM	37011	O4'	CYT	859	158.177	99.091	-29.760	1.00	37.54	A16S	ATOM	37064	O3'	URI	861	162.047	97.503	-15.936	1.00	37.53	A16S
ATOM	37012	C1'	CYT	859	158.311	99.915	-28.616	1.00	37.54	A16S	ATOM	37065	P	GUA	862	162.949	96.481	-15.097	1.00	38.37	A16S

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ATOM  37066  O1P GUA  862     162.840  95.111 -15.672  1.00 37.65      A16S
ATOM  37067  O2P GUA  862     162.580  96.716 -13.670  1.00 37.65      A16S
ATOM  37068  O5' GUA  862     164.424  97.049 -15.284  1.00 38.37      A16S
ATOM  37069  C5' GUA  862     164.626  98.421 -15.581  1.00 38.37      A16S
ATOM  37070  C4' GUA  862     165.939  98.895 -15.025  1.00 38.37      A16S
ATOM  37071  O4' GUA  862     165.930  98.764 -13.579  1.00 38.37      A16S
ATOM  37072  C1' GUA  862     167.248  98.467 -13.122  1.00 38.37      A16S
ATOM  37073  N9  GUA  862     167.232  97.133 -12.528  1.00 37.65      A16S
ATOM  37074  C4  GUA  862     168.274  96.498 -11.879  1.00 37.65      A16S
ATOM  37075  N3  GUA  862     169.493  97.012 -11.638  1.00 37.65      A16S
ATOM  37076  C2  GUA  862     170.272  96.155 -11.009  1.00 37.65      A16S
ATOM  37077  N2  GUA  862     171.525  96.500 -10.682  1.00 37.65      A16S
ATOM  37078  N1  GUA  862     169.888  94.901 -10.657  1.00 37.65      A16S
ATOM  37079  C6  GUA  862     168.650  94.346 -10.910  1.00 37.65      A16S
ATOM  37080  O6  GUA  862     168.428  93.182 -10.588  1.00 37.65      A16S
ATOM  37081  C5  GUA  862     167.797  95.252 -11.559  1.00 37.65      A16S
ATOM  37082  N7  GUA  862     166.477  95.109 -11.966  1.00 37.65      A16S
ATOM  37083  C8  GUA  862     166.183  96.249 -12.531  1.00 37.65      A16S
ATOM  37084  C2' GUA  862     168.148  98.504 -14.358  1.00 38.37      A16S
ATOM  37085  O2' GUA  862     168.622  99.815 -14.585  1.00 38.37      A16S
ATOM  37086  C3' GUA  862     167.158  98.092 -15.431  1.00 38.37      A16S
ATOM  37087  O3' GUA  862     167.614  98.432 -16.728  1.00 38.37      A16S
ATOM  37088  P   GUA  863     168.272  97.295 -17.652  1.00 37.27      A16S
ATOM  37089  O1P GUA  863     168.453  97.928 -18.985  1.00 43.52      A16S
ATOM  37090  O2P GUA  863     167.479  96.051 -17.532  1.00 43.52      A16S
ATOM  37091  O5' GUA  863     169.702  97.037 -17.000  1.00 37.27      A16S
ATOM  37092  C5' GUA  863     170.669  98.077 -16.962  1.00 37.27      A16S
ATOM  37093  C4' GUA  863     171.948  97.600 -16.311  1.00 37.27      A16S
ATOM  37094  O4' GUA  863     171.734  97.323 -14.898  1.00 37.27      A16S
ATOM  37095  C1' GUA  863     172.660  96.343 -14.467  1.00 37.27      A16S
ATOM  37096  N9  GUA  863     171.927  95.169 -14.006  1.00 43.52      A16S
ATOM  37097  C4  GUA  863     172.451  94.115 -13.310  1.00 43.52      A16S
ATOM  37098  N3  GUA  863     173.729  93.992 -12.917  1.00 43.52      A16S
ATOM  37099  C2  GUA  863     173.935  92.871 -12.258  1.00 43.52      A16S
ATOM  37100  N2  GUA  863     175.153  92.598 -11.770  1.00 43.52      A16S
ATOM  37101  N1  GUA  863     172.968  91.933 -12.017  1.00 43.52      A16S
ATOM  37102  C6  GUA  863     171.648  92.027 -12.416  1.00 43.52      A16S
ATOM  37103  O6  GUA  863     170.861  91.109 -12.147  1.00 43.52      A16S
ATOM  37104  C5  GUA  863     171.404  93.241 -13.115  1.00 43.52      A16S
ATOM  37105  N7  GUA  863     170.238  93.740 -13.674  1.00 43.52      A16S
ATOM  37106  C8  GUA  863     170.597  94.887 -14.189  1.00 43.52      A16S
ATOM  37107  C2' GUA  863     173.522  96.021 -15.685  1.00 37.27      A16S
ATOM  37108  O2' GUA  863     174.580  96.952 -15.798  1.00 37.27      A16S
ATOM  37109  C3' GUA  863     172.539  96.293 -16.799  1.00 37.27      A16S
ATOM  37110  O3' GUA  863     173.229  96.402 -18.033  1.00 37.27      A16S
ATOM  37111  P   GUA  864     173.228  95.148 -19.047  1.00 55.63      A16S
ATOM  37112  O1P GUA  864     174.010  95.580 -20.236  1.00 40.38      A16S
ATOM  37113  O2P GUA  864     171.820  94.687 -19.213  1.00 40.38      A16S
ATOM  37114  O5' GUA  864     174.040  94.012 -18.270  1.00 55.63      A16S
ATOM  37115  C5' GUA  864     175.404  94.227 -17.918  1.00 55.63      A16S
ATOM  37116  C4' GUA  864     175.969  93.062 -17.135  1.00 55.63      A16S
ATOM  37117  O4' GUA  864     175.325  92.945 -15.839  1.00 55.63      A16S
ATOM  37118  C1' GUA  864     175.350  91.585 -15.426  1.00 55.63      A16S
ATOM  37119  N9  GUA  864     173.981  91.089 -15.334  1.00 40.38      A16S
ATOM  37120  C4  GUA  864     173.595  89.926 -14.730  1.00 40.38      A16S
ATOM  37121  N3  GUA  864     174.411  89.056 -14.103  1.00 40.38      A16S
ATOM  37122  C2  GUA  864     173.744  88.024 -13.619  1.00 40.38      A16S
ATOM  37123  N2  GUA  864     174.385  87.070 -12.935  1.00 40.38      A16S
ATOM  37124  N1  GUA  864     172.398  87.852 -13.759  1.00 40.38      A16S
ATOM  37125  C6  GUA  864     171.542  88.728 -14.406  1.00 40.38      A16S
ATOM  37126  O6  GUA  864     170.337  88.464 -14.480  1.00 40.38      A16S
ATOM  37127  C5  GUA  864     172.234  89.850 -14.914  1.00 40.38      A16S
ATOM  37128  N7  GUA  864     171.771  90.950 -15.619  1.00 40.38      A16S
ATOM  37129  C8  GUA  864     172.840  91.661 -15.842  1.00 40.38      A16S
ATOM  37130  C2' GUA  864     176.111  90.820 -16.505  1.00 55.63      A16S
ATOM  37131  O2' GUA  864     177.491  90.833 -16.195  1.00 55.63      A16S
ATOM  37132  C3' GUA  864     175.809  91.675 -17.722  1.00 55.63      A16S
ATOM  37133  O3' GUA  864     176.757  91.432 -18.740  1.00 55.63      A16S
ATOM  37134  P   GUA  865     176.338  90.548 -20.007  1.00 42.72      A16S
ATOM  37135  O1P GUA  865     177.587  90.380 -20.803  1.00 46.35      A16S
ATOM  37136  O2P GUA  865     175.150  91.175 -20.640  1.00 46.35      A16S
ATOM  37137  O5' GUA  865     175.860  89.150 -19.387  1.00 42.72      A16S
ATOM  37138  C5' GUA  865     176.800  88.239 -18.828  1.00 42.72      A16S
ATOM  37139  C4' GUA  865     176.106  87.009 -18.291  1.00 42.72      A16S
ATOM  37140  O4' GUA  865     175.211  87.392 -17.218  1.00 42.72      A16S
ATOM  37141  C1' GUA  865     174.034  86.608 -17.275  1.00 42.72      A16S
ATOM  37142  N9  GUA  865     172.935  87.474 -17.682  1.00 46.35      A16S
ATOM  37143  C4  GUA  865     171.602  87.247 -17.470  1.00 46.35      A16S
ATOM  37144  N3  GUA  865     171.073  86.197 -16.809  1.00 46.35      A16S
ATOM  37145  C2  GUA  865     169.754  86.237 -16.786  1.00 46.35      A16S
ATOM  37146  N2  GUA  865     169.072  85.271 -16.156  1.00 46.35      A16S
ATOM  37147  N1  GUA  865     169.010  87.228 -17.380  1.00 46.35      A16S
ATOM  37148  C6  GUA  865     169.538  88.319 -18.073  1.00 46.35      A16S
ATOM  37149  O6  GUA  865     168.783  89.149 -18.593  1.00 46.35      A16S
ATOM  37150  C5  GUA  865     170.952  88.293 -18.084  1.00 46.35      A16S
ATOM  37151  N7  GUA  865     171.861  89.177 -18.647  1.00 46.35      A16S
ATOM  37152  C8  GUA  865     173.024  88.652 -18.380  1.00 46.35      A16S
ATOM  37153  C2' GUA  865     174.275  85.525 -18.324  1.00 42.72      A16S
ATOM  37154  O2' GUA  865     174.854  84.388 -17.726  1.00 42.72      A16S
ATOM  37155  C3' GUA  865     175.236  86.231 -19.267  1.00 42.72      A16S
ATOM  37156  O3' GUA  865     176.008  85.257 -19.952  1.00 42.72      A16S
ATOM  37157  P   ADE  866     175.858  85.081 -21.538  1.00 59.01      A16S
ATOM  37158  O1P ADE  866     174.762  84.109 -21.733  1.00 39.50      A16S
ATOM  37159  O2P ADE  866     177.208  84.798 -22.086  1.00 39.50      A16S
ATOM  37160  O5' ADE  866     175.403  86.506 -22.079  1.00 59.01      A16S
ATOM  37161  C5' ADE  866     175.579  86.873 -23.449  1.00 59.01      A16S
ATOM  37162  C4' ADE  866     174.468  87.794 -23.852  1.00 59.01      A16S
ATOM  37163  O4' ADE  866     173.264  87.041 -23.664  1.00 59.01      A16S
ATOM  37164  C1' ADE  866     172.258  87.884 -23.179  1.00 59.01      A16S
ATOM  37165  N9  ADE  866     171.465  87.154 -22.196  1.00 39.50      A16S
ATOM  37166  C4  ADE  866     170.136  87.372 -21.952  1.00 39.50      A16S
ATOM  37167  N3  ADE  866     169.348  88.286 -22.534  1.00 39.50      A16S
ATOM  37168  C2  ADE  866     168.114  88.193 -22.072  1.00 39.50      A16S
ATOM  37169  N1  ADE  866     167.611  87.354 -21.165  1.00 39.50      A16S
ATOM  37170  C6  ADE  866     168.431  86.448 -20.598  1.00 39.50      A16S
ATOM  37171  N6  ADE  866     167.924  85.606 -19.697  1.00 39.50      A16S
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ATOM	37172	C5	ADE	866	169.769	86.445	-20.999	1.00	39.50	A16S	ATOM	37225	O5'	ADE	869	172.697	79.858	-26.903	1.00	46.52	A16S
ATOM	37173	N7	ADE	866	170.854	85.662	-20.634	1.00	39.50	A16S	ATOM	37226	C5'	ADE	869	173.382	79.013	-26.013	1.00	46.52	A16S
ATOM	37174	C8	ADE	866	171.835	86.127	-21.369	1.00	39.50	A16S	ATOM	37227	C4'	ADE	869	172.395	78.328	-25.122	1.00	46.52	A16S
ATOM	37175	C2'	ADE	866	172.870	89.218	-22.740	1.00	59.01	A16S	ATOM	37228	O4'	ADE	869	171.730	79.325	-24.312	1.00	46.52	A16S
ATOM	37176	O2'	ADE	866	172.389	90.282	-23.534	1.00	59.01	A16S	ATOM	37229	C1'	ADE	869	170.374	78.965	-24.128	1.00	46.52	A16S
ATOM	37177	C3'	ADE	866	174.365	88.993	-22.922	1.00	59.01	A16S	ATOM	37230	N9	ADE	869	169.558	80.005	-24.747	1.00	44.24	A16S
ATOM	37178	O3'	ADE	866	174.895	90.206	-23.479	1.00	59.01	A16S	ATOM	37231	C4	ADE	869	168.222	80.218	-24.547	1.00	44.24	A16S
ATOM	37179	P	GUA	867	175.354	90.287	-25.033	1.00	65.49	A16S	ATOM	37232	N3	ADE	869	167.402	79.514	-23.758	1.00	44.24	A16S
ATOM	37180	O1P	GUA	867	176.269	89.167	-25.346	1.00	59.34	A16S	ATOM	37233	C2	ADE	869	166.174	79.999	-23.817	1.00	44.24	A16S
ATOM	37181	O2P	GUA	867	175.774	91.677	-25.316	1.00	59.34	A16S	ATOM	37234	N1	ADE	869	165.705	81.037	-24.516	1.00	44.24	A16S
ATOM	37182	O5'	GUA	867	174.024	90.087	-25.861	1.00	65.49	A16S	ATOM	37235	C6	ADE	869	166.562	81.725	-25.298	1.00	44.24	A16S
ATOM	37183	C5'	GUA	867	174.056	89.854	-27.258	1.00	65.49	A16S	ATOM	37236	N6	ADE	869	166.101	82.764	-25.997	1.00	44.24	A16S
ATOM	37184	C4'	GUA	867	172.881	89.002	-27.610	1.00	65.49	A16S	ATOM	37237	C5	ADE	869	167.893	81.303	-25.329	1.00	44.24	A16S
ATOM	37185	O4'	GUA	867	171.711	89.675	-27.134	1.00	65.49	A16S	ATOM	37238	N7	ADE	869	169.001	81.765	-26.022	1.00	44.24	A16S
ATOM	37186	C1'	GUA	867	170.605	89.078	-27.735	1.00	65.49	A16S	ATOM	37239	C8	ADE	869	169.961	80.965	-25.641	1.00	44.24	A16S
ATOM	37187	N9	GUA	867	169.532	90.048	-27.864	1.00	59.34	A16S	ATOM	37240	C2'	ADE	869	170.193	77.590	-24.772	1.00	46.52	A16S
ATOM	37188	C4	GUA	867	168.325	89.919	-27.252	1.00	59.34	A16S	ATOM	37241	O2'	ADE	869	170.466	76.570	-23.832	1.00	46.52	A16S
ATOM	37189	N3	GUA	867	167.946	88.870	-26.500	1.00	59.34	A16S	ATOM	37242	C3'	ADE	869	171.262	77.636	-25.847	1.00	46.52	A16S
ATOM	37190	C2	GUA	867	166.742	89.029	-26.005	1.00	59.34	A16S	ATOM	37243	O3'	ADE	869	171.661	76.333	-26.207	1.00	46.52	A16S
ATOM	37191	N2	GUA	867	166.210	88.066	-25.243	1.00	59.34	A16S	ATOM	37244	P	CYT	870	171.290	75.768	-27.653	1.00	46.43	A16S
ATOM	37192	N1	GUA	867	165.968	90.138	-26.227	1.00	59.34	A16S	ATOM	37245	O1P	CYT	870	172.162	74.585	-27.841	1.00	53.62	A16S
ATOM	37193	C6	GUA	867	166.334	91.226	-27.017	1.00	59.34	A16S	ATOM	37246	O2P	CYT	870	171.345	76.899	-28.617	1.00	53.62	A16S
ATOM	37194	O6	GUA	867	165.539	92.170	-27.182	1.00	59.34	A16S	ATOM	37247	O5'	CYT	870	169.785	75.283	-27.501	1.00	46.43	A16S
ATOM	37195	C5	GUA	867	167.635	91.062	-27.551	1.00	59.34	A16S	ATOM	37248	C5'	CYT	870	169.413	74.458	-26.408	1.00	46.43	A16S
ATOM	37196	N7	GUA	867	168.389	91.889	-28.372	1.00	59.34	A16S	ATOM	37249	C4'	CYT	870	167.949	74.625	-26.106	1.00	46.43	A16S
ATOM	37197	C8	GUA	867	169.508	91.239	-28.538	1.00	59.34	A16S	ATOM	37250	O4'	CYT	870	167.674	75.946	-25.564	1.00	46.43	A16S
ATOM	37198	C2'	GUA	867	171.077	88.245	-28.930	1.00	65.49	A16S	ATOM	37251	C1'	CYT	870	166.344	76.319	-25.893	1.00	46.43	A16S
ATOM	37199	O2'	GUA	867	170.969	86.905	-28.493	1.00	65.49	A16S	ATOM	37252	N1	CYT	870	166.379	77.602	-26.605	1.00	53.62	A16S
ATOM	37200	C3'	GUA	867	172.539	88.663	-29.050	1.00	65.49	A16S	ATOM	37253	C6	CYT	870	167.508	78.025	-27.249	1.00	53.62	A16S
ATOM	37201	O3'	GUA	867	173.433	87.615	-29.458	1.00	65.49	A16S	ATOM	37254	C2	CYT	870	165.226	78.388	-26.616	1.00	53.62	A16S
ATOM	37202	P	URI	868	172.892	86.174	-29.970	1.00	52.37	A16S	ATOM	37255	O2	CYT	870	164.215	77.972	-26.024	1.00	53.62	A16S
ATOM	37203	O1P	URI	868	173.931	85.748	-30.948	1.00	58.74	A16S	ATOM	37256	N3	CYT	870	165.237	79.577	-27.268	1.00	53.62	A16S
ATOM	37204	O2P	URI	868	171.463	86.178	-30.404	1.00	58.74	A16S	ATOM	37257	C4	CYT	870	166.343	79.985	-27.889	1.00	53.62	A16S
ATOM	37205	O5'	URI	868	173.075	85.233	-28.692	1.00	52.37	A16S	ATOM	37258	N4	CYT	870	166.313	81.171	-28.502	1.00	53.62	A16S
ATOM	37206	C5'	URI	868	174.390	84.867	-28.273	1.00	52.37	A16S	ATOM	37259	C5	CYT	870	167.533	79.198	-27.901	1.00	53.62	A16S
ATOM	37207	C4'	URI	868	174.359	84.049	-27.002	1.00	52.37	A16S	ATOM	37260	C2'	CYT	870	165.766	75.191	-26.748	1.00	46.43	A16S
ATOM	37208	O4'	URI	868	173.902	84.850	-25.886	1.00	52.37	A16S	ATOM	37261	O2'	CYT	870	165.063	74.308	-25.904	1.00	46.43	A16S
ATOM	37209	C1'	URI	868	173.165	84.045	-24.993	1.00	52.37	A16S	ATOM	37262	C3'	CYT	870	167.037	74.567	-27.311	1.00	46.43	A16S
ATOM	37210	N1	URI	868	171.806	84.594	-24.905	1.00	58.74	A16S	ATOM	37263	O3'	CYT	870	166.873	73.222	-27.729	1.00	46.43	A16S
ATOM	37211	C6	URI	868	171.381	85.591	-25.745	1.00	58.74	A16S	ATOM	37264	P	GUA	871	166.561	72.895	-29.272	1.00	54.86	A16S
ATOM	37212	C2	URI	868	170.969	84.066	-23.949	1.00	58.74	A16S	ATOM	37265	O1P	GUA	871	166.469	71.412	-29.328	1.00	51.99	A16S
ATOM	37213	O2	URI	868	171.321	83.190	-23.177	1.00	58.74	A16S	ATOM	37266	O2P	GUA	871	167.495	73.605	-30.186	1.00	51.99	A16S
ATOM	37214	N3	URI	868	169.709	84.599	-23.928	1.00	58.74	A16S	ATOM	37267	O5'	GUA	871	165.113	73.517	-29.482	1.00	54.86	A16S
ATOM	37215	C4	URI	868	169.218	85.589	-24.740	1.00	58.74	A16S	ATOM	37268	C5'	GUA	871	163.980	72.975	-28.819	1.00	54.86	A16S
ATOM	37216	O4	URI	868	168.056	85.972	-24.592	1.00	58.74	A16S	ATOM	37269	C4'	GUA	871	162.751	73.739	-29.220	1.00	54.86	A16S
ATOM	37217	C5	URI	868	170.151	86.093	-25.696	1.00	58.74	A16S	ATOM	37270	O4'	GUA	871	162.806	75.069	-28.646	1.00	54.86	A16S
ATOM	37218	C2'	URI	868	173.201	82.607	-25.523	1.00	52.37	A16S	ATOM	37271	C1'	GUA	871	162.164	75.987	-29.522	1.00	54.86	A16S
ATOM	37219	O2'	URI	868	174.216	81.906	-24.850	1.00	52.37	A16S	ATOM	37272	N9	GUA	871	163.108	77.044	-29.869	1.00	51.99	A16S
ATOM	37220	C3'	URI	868	173.474	82.820	-27.013	1.00	52.37	A16S	ATOM	37273	C4	GUA	871	162.789	78.287	-30.348	1.00	51.99	A16S
ATOM	37221	O3'	URI	868	174.206	81.743	-27.597	1.00	52.37	A16S	ATOM	37274	N3	GUA	871	161.545	78.759	-30.557	1.00	51.99	A16S
ATOM	37222	P	ADE	869	173.432	80.455	-28.179	1.00	46.52	A16S	ATOM	37275	C2	GUA	871	161.563	79.984	-31.044	1.00	51.99	A16S
ATOM	37223	O1P	ADE	869	174.469	79.478	-28.590	1.00	44.24	A16S	ATOM	37276	N2	GUA	871	160.421	80.610	-31.316	1.00	51.99	A16S
ATOM	37224	O2P	ADE	869	172.402	80.882	-29.166	1.00	44.24	A16S	ATOM	37277	N1	GUA	871	162.702	80.688	-31.305	1.00	51.99	A16S

ATOM	37278	C6	GUA	871	163.989	80.224	-31.099	1.00	51.99	A16S	ATOM	37331	O1P	CYT	874	159.515	77.456	-44.019	1.00	42.30	A16S
ATOM	37279	O6	GUA	871	164.953	80.944	-31.380	1.00	51.99	A16S	ATOM	37332	O2P	CYT	874	161.168	76.490	-42.306	1.00	42.30	A16S
ATOM	37280	C5	GUA	871	163.991	78.912	-30.572	1.00	51.99	A16S	ATOM	37333	O5'	CYT	874	161.466	78.788	-43.232	1.00	51.46	A16S
ATOM	37281	N7	GUA	871	165.048	78.087	-30.218	1.00	51.99	A16S	ATOM	37334	C5'	CYT	874	161.011	79.997	-43.792	1.00	51.46	A16S
ATOM	37282	C8	GUA	871	164.476	76.992	-29.803	1.00	51.99	A16S	ATOM	37335	C4'	CYT	874	162.143	80.979	-43.905	1.00	51.46	A16S
ATOM	37283	C2'	GUA	871	161.716	75.202	-30.753	1.00	54.86	A16S	ATOM	37336	O4'	CYT	874	162.639	81.306	-42.582	1.00	51.46	A16S
ATOM	37284	O2'	GUA	871	160.380	74.790	-30.607	1.00	54.86	A16S	ATOM	37337	C1'	CYT	874	163.987	81.740	-42.685	1.00	51.46	A16S
ATOM	37285	C3'	GUA	871	162.662	74.019	-30.706	1.00	54.86	A16S	ATOM	37338	N1	CYT	874	164.821	80.877	-41.847	1.00	42.30	A16S
ATOM	37286	O3'	GUA	871	162.148	72.924	-31.431	1.00	54.86	A16S	ATOM	37339	C6	CYT	874	164.362	79.679	-41.390	1.00	42.30	A16S
ATOM	37287	P	GUA	872	162.433	72.835	-33.005	1.00	43.24	A16S	ATOM	37340	C2	CYT	874	166.107	81.291	-41.554	1.00	42.30	A16S
ATOM	37288	O1P	GUA	872	161.881	71.542	-33.511	1.00	47.67	A16S	ATOM	37341	O2	CYT	874	166.475	82.396	-41.953	1.00	42.30	A16S
ATOM	37289	O2P	GUA	872	163.873	73.146	-33.198	1.00	47.67	A16S	ATOM	37342	N3	CYT	874	166.920	80.481	-40.848	1.00	42.30	A16S
ATOM	37290	O5'	GUA	872	161.583	74.043	-33.612	1.00	43.24	A16S	ATOM	37343	C4	CYT	874	166.479	79.294	-40.440	1.00	42.30	A16S
ATOM	37291	C5'	GUA	872	160.165	74.072	-33.491	1.00	43.24	A16S	ATOM	37344	N4	CYT	874	167.325	78.506	-39.788	1.00	42.30	A16S
ATOM	37292	C4'	GUA	872	159.618	75.365	-34.044	1.00	43.24	A16S	ATOM	37345	C5	CYT	874	165.153	78.860	-40.694	1.00	42.30	A16S
ATOM	37293	O4'	GUA	872	160.109	76.480	-33.257	1.00	43.24	A16S	ATOM	37346	C2'	CYT	874	164.376	81.600	-44.160	1.00	51.46	A16S
ATOM	37294	C1'	GUA	872	160.289	77.614	-34.091	1.00	43.24	A16S	ATOM	37347	O2'	CYT	874	164.155	82.815	-44.858	1.00	51.46	A16S
ATOM	37295	N9	GUA	872	161.697	77.994	-34.043	1.00	47.67	A16S	ATOM	37348	C3'	CYT	874	163.404	80.526	-44.611	1.00	51.46	A16S
ATOM	37296	C4	GUA	872	162.230	79.217	-34.367	1.00	47.67	A16S	ATOM	37349	O3'	CYT	874	163.281	80.528	-46.021	1.00	51.46	A16S
ATOM	37297	N3	GUA	872	161.542	80.300	-34.776	1.00	47.67	A16S	ATOM	37350	P	GUA	875	164.018	79.381	-46.873	1.00	50.03	A16S
ATOM	37298	C2	GUA	872	162.343	81.324	-35.024	1.00	47.67	A16S	ATOM	37351	O1P	GUA	875	163.544	79.489	-48.275	1.00	51.20	A16S
ATOM	37299	N2	GUA	872	161.835	82.483	-35.435	1.00	47.67	A16S	ATOM	37352	O2P	GUA	875	163.875	78.103	-46.134	1.00	51.20	A16S
ATOM	37300	N1	GUA	872	163.701	81.289	-34.886	1.00	47.67	A16S	ATOM	37353	O5'	GUA	875	165.562	79.758	-46.829	1.00	50.03	A16S
ATOM	37301	C6	GUA	872	164.427	80.189	-34.465	1.00	47.67	A16S	ATOM	37354	C5'	GUA	875	166.019	80.966	-47.402	1.00	50.03	A16S
ATOM	37302	O6	GUA	872	165.652	80.266	-34.375	1.00	47.67	A16S	ATOM	37355	C4'	GUA	875	167.474	81.158	-47.100	1.00	50.03	A16S
ATOM	37303	C5	GUA	872	163.588	79.082	-34.190	1.00	47.67	A16S	ATOM	37356	O4'	GUA	875	167.661	81.362	-45.675	1.00	50.03	A16S
ATOM	37304	N7	GUA	872	163.903	77.806	-33.752	1.00	47.67	A16S	ATOM	37357	C1'	GUA	875	168.944	80.894	-45.296	1.00	50.03	A16S
ATOM	37305	C8	GUA	872	162.752	77.197	-33.676	1.00	47.67	A16S	ATOM	37358	N9	GUA	875	168.767	79.862	-44.290	1.00	51.20	A16S
ATOM	37306	C2'	GUA	872	159.834	77.215	-35.497	1.00	43.24	A16S	ATOM	37359	C4	GUA	875	169.747	79.338	-43.496	1.00	51.20	A16S
ATOM	37307	O2'	GUA	872	158.475	77.556	-35.695	1.00	43.24	A16S	ATOM	37360	N3	GUA	875	171.026	79.757	-43.442	1.00	51.20	A16S
ATOM	37308	C3'	GUA	872	160.036	75.708	-35.461	1.00	43.24	A16S	ATOM	37361	C2	GUA	875	171.750	79.022	-42.630	1.00	51.20	A16S
ATOM	37309	O3'	GUA	872	159.195	75.069	-36.410	1.00	43.24	A16S	ATOM	37362	N2	GUA	875	173.037	79.321	-42.430	1.00	51.20	A16S
ATOM	37310	P	CYT	873	159.719	74.853	-37.912	1.00	46.35	A16S	ATOM	37363	N1	GUA	875	171.267	77.946	-41.945	1.00	51.20	A16S
ATOM	37311	O1P	CYT	873	158.632	74.149	-38.636	1.00	48.62	A16S	ATOM	37364	C6	GUA	875	169.951	77.493	-41.986	1.00	51.20	A16S
ATOM	37312	O2P	CYT	873	161.079	74.240	-37.859	1.00	48.62	A16S	ATOM	37365	O6	GUA	875	169.616	76.487	-41.330	1.00	51.20	A16S
ATOM	37313	O5'	CYT	873	159.864	76.327	-38.507	1.00	46.35	A16S	ATOM	37366	C5	GUA	875	169.157	78.294	-42.830	1.00	51.20	A16S
ATOM	37314	C5'	CYT	873	158.724	77.112	-38.799	1.00	46.35	A16S	ATOM	37367	N7	GUA	875	167.811	78.209	-43.143	1.00	51.20	A16S
ATOM	37315	C4'	CYT	873	159.135	78.481	-39.295	1.00	46.35	A16S	ATOM	37368	C8	GUA	875	167.622	79.171	-44.002	1.00	51.20	A16S
ATOM	37316	O4'	CYT	873	159.798	79.217	-38.237	1.00	46.35	A16S	ATOM	37369	C2'	GUA	875	169.583	80.296	-46.556	1.00	50.03	A16S
ATOM	37317	C1'	CYT	873	160.736	80.121	-38.796	1.00	46.35	A16S	ATOM	37370	O2'	GUA	875	170.397	81.257	-47.195	1.00	50.03	A16S
ATOM	37318	N1	CYT	873	162.066	79.773	-38.287	1.00	48.62	A16S	ATOM	37371	C3'	GUA	875	168.344	79.953	-47.373	1.00	50.03	A16S
ATOM	37319	C6	CYT	873	162.319	78.518	-37.826	1.00	48.62	A16S	ATOM	37372	O3'	GUA	875	168.595	79.807	-48.765	1.00	50.03	A16S
ATOM	37320	C2	CYT	873	163.083	80.744	-38.296	1.00	48.62	A16S	ATOM	37373	P	CYT	876	168.532	78.346	-49.429	1.00	47.97	A16S
ATOM	37321	O2	CYT	873	162.820	81.901	-38.688	1.00	48.62	A16S	ATOM	37374	O1P	CYT	876	167.353	77.631	-48.877	1.00	49.51	A16S
ATOM	37322	N3	CYT	873	164.319	80.398	-37.872	1.00	48.62	A16S	ATOM	37375	O2P	CYT	876	168.671	78.530	-50.892	1.00	49.51	A16S
ATOM	37323	C4	CYT	873	164.551	79.160	-37.447	1.00	48.62	A16S	ATOM	37376	O5'	CYT	876	169.826	77.611	-48.866	1.00	47.97	A16S
ATOM	37324	N4	CYT	873	165.770	78.858	-37.062	1.00	48.62	A16S	ATOM	37377	C5'	CYT	876	170.096	76.246	-49.169	1.00	47.97	A16S
ATOM	37325	C5	CYT	873	163.534	78.174	-37.402	1.00	48.62	A16S	ATOM	37378	C4'	CYT	876	171.589	76.022	-49.222	1.00	47.97	A16S
ATOM	37326	C2'	CYT	873	160.665	79.946	-40.310	1.00	46.35	A16S	ATOM	37379	O4'	CYT	876	172.128	76.777	-50.334	1.00	47.97	A16S
ATOM	37327	O2'	CYT	873	159.771	80.887	-40.845	1.00	46.35	A16S	ATOM	37380	C1'	CYT	876	173.387	77.309	-49.986	1.00	47.97	A16S
ATOM	37328	C3'	CYT	873	160.148	78.522	-40.418	1.00	46.35	A16S	ATOM	37381	N1	CYT	876	173.329	78.756	-50.173	1.00	49.51	A16S
ATOM	37329	O3'	CYT	873	159.552	78.299	-41.681	1.00	46.35	A16S	ATOM	37382	C6	CYT	876	172.148	79.429	-50.094	1.00	49.51	A16S
ATOM	37330	P	CYT	874	160.426	77.647	-42.859	1.00	51.46	A16S	ATOM	37383	C2	CYT	876	174.504	79.432	-50.470	1.00	49.51	A16S

ATOM	37384	O2	CYT	876	175.574	78.798	-50.460	1.00	49.51	A16S	ATOM	37437	P	GUA	879	178.341	81.987	-38.379	1.00	52.59	A16S
ATOM	37385	N3	CYT	876	174.457	80.755	-50.749	1.00	49.51	A16S	ATOM	37438	O1P	GUA	879	179.395	82.372	-37.409	1.00	37.20	A16S
ATOM	37386	C4	CYT	876	173.296	81.395	-50.709	1.00	49.51	A16S	ATOM	37439	O2P	GUA	879	177.953	80.551	-38.505	1.00	37.20	A16S
ATOM	37387	N4	CYT	876	173.287	82.684	-51.027	1.00	49.51	A16S	ATOM	37440	O5'	GUA	879	177.005	82.816	-38.101	1.00	52.59	A16S
ATOM	37388	C5	CYT	876	172.087	80.737	-50.350	1.00	49.51	A16S	ATOM	37441	C5'	GUA	879	176.980	84.225	-38.235	1.00	52.59	A16S
ATOM	37389	C2'	CYT	876	173.721	76.862	-48.566	1.00	47.97	A16S	ATOM	37442	C4'	GUA	879	175.792	84.660	-39.073	1.00	52.59	A16S
ATOM	37390	O2'	CYT	876	174.572	75.743	-48.618	1.00	47.97	A16S	ATOM	37443	O4'	GUA	879	175.436	83.594	-39.991	1.00	52.59	A16S
ATOM	37391	C3'	CYT	876	172.342	76.539	-48.010	1.00	47.97	A16S	ATOM	37444	C1'	GUA	879	174.084	83.751	-40.378	1.00	52.59	A16S
ATOM	37392	O3'	CYT	876	172.406	75.549	-47.001	1.00	47.97	A16S	ATOM	37445	N9	GUA	879	173.332	82.556	-40.037	1.00	37.20	A16S
ATOM	37393	P	ADE	877	172.381	75.990	-45.460	1.00	49.86	A16S	ATOM	37446	C4	GUA	879	172.012	82.363	-40.329	1.00	37.20	A16S
ATOM	37394	O1P	ADE	877	172.362	74.747	-44.644	1.00	42.79	A16S	ATOM	37447	N3	GUA	879	171.223	83.229	-40.994	1.00	37.20	A16S
ATOM	37395	O2P	ADE	877	171.299	76.976	-45.292	1.00	42.79	A16S	ATOM	37448	C2	GUA	879	169.992	82.772	-41.122	1.00	37.20	A16S
ATOM	37396	O5'	ADE	877	173.763	76.756	-45.255	1.00	49.86	A16S	ATOM	37449	N2	GUA	879	169.080	83.491	-41.787	1.00	37.20	A16S
ATOM	37397	C5'	ADE	877	174.994	76.045	-45.204	1.00	49.86	A16S	ATOM	37450	N1	GUA	879	169.568	81.573	-40.616	1.00	37.20	A16S
ATOM	37398	C4'	ADE	877	176.148	77.009	-45.267	1.00	49.86	A16S	ATOM	37451	C6	GUA	879	170.367	80.674	-39.918	1.00	37.20	A16S
ATOM	37399	O4'	ADE	877	176.007	77.809	-46.464	1.00	49.86	A16S	ATOM	37452	O6	GUA	879	169.881	79.633	-39.491	1.00	37.20	A16S
ATOM	37400	C1'	ADE	877	176.365	79.145	-46.197	1.00	49.86	A16S	ATOM	37453	C5	GUA	879	171.691	81.137	-39.795	1.00	37.20	A16S
ATOM	37401	N9	ADE	877	175.198	79.984	-46.473	1.00	42.79	A16S	ATOM	37454	N7	GUA	879	172.796	80.558	-39.191	1.00	37.20	A16S
ATOM	37402	C4	ADE	877	175.207	81.293	-46.896	1.00	42.79	A16S	ATOM	37455	C8	GUA	879	173.751	81.435	-39.363	1.00	37.20	A16S
ATOM	37403	N3	ADE	877	176.278	82.083	-47.086	1.00	42.79	A16S	ATOM	37456	C2'	GUA	879	173.531	84.935	-39.599	1.00	52.59	A16S
ATOM	37404	C2	ADE	877	175.901	83.267	-47.546	1.00	42.79	A16S	ATOM	37457	O2'	GUA	879	173.688	86.071	-40.417	1.00	52.59	A16S
ATOM	37405	N1	ADE	877	174.671	83.713	-47.829	1.00	42.79	A16S	ATOM	37458	C3'	GUA	879	174.457	84.945	-38.395	1.00	52.59	A16S
ATOM	37406	C6	ADE	877	173.627	82.886	-47.638	1.00	42.79	A16S	ATOM	37459	O3'	GUA	879	174.431	86.227	-37.766	1.00	52.59	A16S
ATOM	37407	N6	ADE	877	172.415	83.310	-47.963	1.00	42.79	A16S	ATOM	37460	P	GUA	880	173.288	86.558	-36.687	1.00	43.42	A16S
ATOM	37408	C5	ADE	877	173.886	81.621	-47.129	1.00	42.79	A16S	ATOM	37461	O1P	GUA	880	173.600	87.854	-36.013	1.00	38.77	A16S
ATOM	37409	N7	ADE	877	173.054	80.563	-46.809	1.00	42.79	A16S	ATOM	37462	O2P	GUA	880	173.065	85.341	-35.865	1.00	38.77	A16S
ATOM	37410	C8	ADE	877	173.879	79.620	-46.418	1.00	42.79	A16S	ATOM	37463	O5'	GUA	880	171.999	86.795	-37.581	1.00	43.42	A16S
ATOM	37411	C2'	ADE	877	176.907	79.198	-44.771	1.00	49.86	A16S	ATOM	37464	C5'	GUA	880	171.939	87.891	-38.485	1.00	43.42	A16S
ATOM	37412	O2'	ADE	877	178.304	79.014	-44.811	1.00	49.86	A16S	ATOM	37465	C4'	GUA	880	170.573	87.960	-39.124	1.00	43.42	A16S
ATOM	37413	C3'	ADE	877	176.206	78.010	-44.132	1.00	49.86	A16S	ATOM	37466	O4'	GUA	880	170.310	86.716	-39.824	1.00	43.42	A16S
ATOM	37414	O3'	ADE	877	176.992	77.489	-43.069	1.00	49.86	A16S	ATOM	37467	C1'	GUA	880	168.938	86.383	-39.705	1.00	43.42	A16S
ATOM	37415	P	ADE	878	176.823	78.094	-41.595	1.00	47.89	A16S	ATOM	37468	N9	GUA	880	168.857	85.130	-38.978	1.00	38.77	A16S
ATOM	37416	O1P	ADE	878	177.815	77.491	-40.678	1.00	39.33	A16S	ATOM	37469	C4	GUA	880	167.762	84.316	-38.877	1.00	38.77	A16S
ATOM	37417	O2P	ADE	878	175.375	77.979	-41.281	1.00	39.33	A16S	ATOM	37470	N3	GUA	880	166.548	84.549	-39.418	1.00	38.77	A16S
ATOM	37418	O5'	ADE	878	177.255	79.617	-41.749	1.00	47.89	A16S	ATOM	37471	C2	GUA	880	165.700	83.565	-39.156	1.00	38.77	A16S
ATOM	37419	C5'	ADE	878	178.630	79.962	-41.760	1.00	47.89	A16S	ATOM	37472	N2	GUA	880	164.432	83.623	-39.600	1.00	38.77	A16S
ATOM	37420	C4'	ADE	878	178.804	81.449	-41.938	1.00	47.89	A16S	ATOM	37473	N1	GUA	880	166.029	82.452	-38.433	1.00	38.77	A16S
ATOM	37421	O4'	ADE	878	178.280	81.841	-43.227	1.00	47.89	A16S	ATOM	37474	C6	GUA	880	167.269	82.206	-37.868	1.00	38.77	A16S
ATOM	37422	C1'	ADE	878	177.693	83.127	-43.129	1.00	47.89	A16S	ATOM	37475	O6	GUA	880	167.450	81.182	-37.230	1.00	38.77	A16S
ATOM	37423	N9	ADE	878	176.260	82.994	-43.351	1.00	39.33	A16S	ATOM	37476	C5	GUA	880	168.178	83.241	-38.132	1.00	38.77	A16S
ATOM	37424	C4	ADE	878	175.455	83.881	-44.015	1.00	39.33	A16S	ATOM	37477	N7	GUA	880	169.503	83.385	-37.758	1.00	38.77	A16S
ATOM	37425	N3	ADE	878	175.821	85.036	-44.594	1.00	39.33	A16S	ATOM	37478	C8	GUA	880	169.863	84.523	-38.279	1.00	38.77	A16S
ATOM	37426	C2	ADE	878	174.769	85.630	-45.150	1.00	39.33	A16S	ATOM	37479	C2'	GUA	880	168.256	87.529	-38.970	1.00	43.42	A16S
ATOM	37427	N1	ADE	878	173.492	85.230	-45.184	1.00	39.33	A16S	ATOM	37480	O2'	GUA	880	167.779	88.466	-39.910	1.00	43.42	A16S
ATOM	37428	C6	ADE	878	173.162	84.067	-44.584	1.00	39.33	A16S	ATOM	37481	C3'	GUA	880	169.414	88.075	-38.154	1.00	43.42	A16S
ATOM	37429	N6	ADE	878	171.887	83.675	-44.594	1.00	39.33	A16S	ATOM	37482	O3'	GUA	880	169.200	89.425	-37.806	1.00	43.42	A16S
ATOM	37430	C5	ADE	878	174.186	83.340	-43.971	1.00	39.33	A16S	ATOM	37483	P	CYT	881	168.662	89.779	-36.343	1.00	45.49	A16S
ATOM	37431	N7	ADE	878	174.191	82.128	-43.295	1.00	39.33	A16S	ATOM	37484	O1P	CYT	881	168.633	91.261	-36.307	1.00	41.87	A16S
ATOM	37432	C8	ADE	878	175.442	81.970	-42.948	1.00	39.33	A16S	ATOM	37485	O2P	CYT	881	169.442	89.034	-35.326	1.00	41.87	A16S
ATOM	37433	C2'	ADE	878	177.992	83.641	-41.729	1.00	47.89	A16S	ATOM	37486	O5'	CYT	881	167.169	89.226	-36.351	1.00	45.49	A16S
ATOM	37434	O2'	ADE	878	179.232	84.313	-41.790	1.00	47.89	A16S	ATOM	37487	C5'	CYT	881	166.176	89.843	-37.162	1.00	45.49	A16S
ATOM	37435	C3'	ADE	878	178.075	82.339	-40.951	1.00	47.89	A16S	ATOM	37488	C4'	CYT	881	164.891	89.065	-37.089	1.00	45.49	A16S
ATOM	37436	O3'	ADE	878	178.865	82.523	-39.794	1.00	47.89	A16S	ATOM	37489	O4'	CYT	881	165.131	87.727	-37.575	1.00	45.49	A16S

ATOM	37490	C1'	CYT	881	164.274	86.824	-36.910	1.00	45.49	A16S	ATOM	37543	O2'	GUA	883	163.604	84.658	-25.007	1.00	48.23	A16S
ATOM	37491	N1	CYT	881	165.094	85.816	-36.243	1.00	41.87	A16S	ATOM	37544	C3'	GUA	883	162.850	86.755	-25.952	1.00	48.23	A16S
ATOM	37492	C6	CYT	881	166.425	86.015	-36.043	1.00	41.87	A16S	ATOM	37545	O3'	GUA	883	162.293	87.017	-24.686	1.00	48.23	A16S
ATOM	37493	C2	CYT	881	164.484	84.643	-35.814	1.00	41.87	A16S	ATOM	37546	P	ADE	884	163.020	88.057	-23.720	1.00	50.56	A16S
ATOM	37494	O2	CYT	881	163.271	84.503	-35.995	1.00	41.87	A16S	ATOM	37547	O1P	ADE	884	162.158	88.255	-22.534	1.00	45.14	A16S
ATOM	37495	N3	CYT	881	165.223	83.695	-35.214	1.00	41.87	A16S	ATOM	37548	O2P	ADE	884	163.440	89.229	-24.529	1.00	45.14	A16S
ATOM	37496	C4	CYT	881	166.522	83.886	-35.038	1.00	41.87	A16S	ATOM	37549	O5'	ADE	884	164.334	87.280	-23.275	1.00	50.56	A16S
ATOM	37497	N4	CYT	881	167.218	82.910	-34.470	1.00	41.87	A16S	ATOM	37550	C5'	ADE	884	164.546	86.915	-21.924	1.00	50.56	A16S
ATOM	37498	C5	CYT	881	167.170	85.083	-35.447	1.00	41.87	A16S	ATOM	37551	C4'	ADE	884	163.831	85.628	-21.630	1.00	50.56	A16S
ATOM	37499	C2'	CYT	881	163.449	87.626	-35.906	1.00	45.49	A16S	ATOM	37552	O4'	ADE	884	164.192	84.632	-22.620	1.00	50.56	A16S
ATOM	37500	O2'	CYT	881	162.189	87.934	-36.465	1.00	45.49	A16S	ATOM	37553	C1'	ADE	884	164.415	83.384	-21.982	1.00	50.56	A16S
ATOM	37501	C3'	CYT	881	164.337	88.840	-35.696	1.00	45.49	A16S	ATOM	37554	N9	ADE	884	165.847	83.111	-22.016	1.00	45.14	A16S
ATOM	37502	O3'	CYT	881	163.571	89.952	-35.269	1.00	45.49	A16S	ATOM	37555	C4	ADE	884	166.476	82.049	-21.419	1.00	45.14	A16S
ATOM	37503	P	URI	882	163.646	90.420	-33.738	1.00	41.92	A16S	ATOM	37556	N3	ADE	884	165.911	81.076	-20.691	1.00	45.14	A16S
ATOM	37504	O1P	URI	882	162.914	91.708	-33.647	1.00	53.77	A16S	ATOM	37557	C2	ADE	884	166.824	80.210	-20.279	1.00	45.14	A16S
ATOM	37505	O2P	URI	882	165.061	90.358	-33.300	1.00	53.77	A16S	ATOM	37558	N1	ADE	884	168.135	80.201	-20.496	1.00	45.14	A16S
ATOM	37506	O5'	URI	882	162.834	89.297	-32.954	1.00	41.92	A16S	ATOM	37559	C6	ADE	884	168.675	81.191	-21.233	1.00	45.14	A16S
ATOM	37507	C5'	URI	882	161.446	89.151	-33.158	1.00	41.92	A16S	ATOM	37560	N6	ADE	884	169.989	81.176	-21.451	1.00	45.14	A16S
ATOM	37508	C4'	URI	882	160.988	87.812	-32.662	1.00	41.92	A16S	ATOM	37561	C5	ADE	884	167.813	82.179	-21.728	1.00	45.14	A16S
ATOM	37509	O4'	URI	882	161.697	86.761	-33.368	1.00	41.92	A16S	ATOM	37562	N7	ADE	884	168.030	83.315	-22.498	1.00	45.14	A16S
ATOM	37510	C1'	URI	882	161.802	85.626	-32.526	1.00	41.92	A16S	ATOM	37563	C8	ADE	884	166.835	83.834	-22.637	1.00	45.14	A16S
ATOM	37511	N1	URI	882	163.219	85.310	-32.337	1.00	53.77	A16S	ATOM	37564	C2'	ADE	884	163.924	83.536	-20.548	1.00	50.56	A16S
ATOM	37512	C6	URI	882	164.194	86.268	-32.433	1.00	53.77	A16S	ATOM	37565	O2'	ADE	884	162.553	83.242	-20.512	1.00	50.56	A16S
ATOM	37513	C2	URI	882	163.528	84.010	-32.035	1.00	53.77	A16S	ATOM	37566	C3'	ADE	884	164.213	85.008	-20.303	1.00	50.56	A16S
ATOM	37514	O2	URI	882	162.692	83.133	-31.988	1.00	53.77	A16S	ATOM	37567	O3'	ADE	884	163.425	85.557	-19.264	1.00	50.56	A16S
ATOM	37515	N3	URI	882	164.852	83.768	-31.798	1.00	53.77	A16S	ATOM	37568	P	ADE	885	164.093	85.832	-17.838	1.00	53.52	A16S
ATOM	37516	C4	URI	882	165.880	84.675	-31.851	1.00	53.77	A16S	ATOM	37569	O1P	ADE	885	163.035	86.290	-16.907	1.00	53.51	A16S
ATOM	37517	O4	URI	882	167.007	84.317	-31.526	1.00	53.77	A16S	ATOM	37570	O2P	ADE	885	165.304	86.672	-18.048	1.00	53.51	A16S
ATOM	37518	C5	URI	882	165.485	86.003	-32.211	1.00	53.77	A16S	ATOM	37571	O5'	ADE	885	164.499	84.379	-17.335	1.00	53.52	A16S
ATOM	37519	C2'	URI	882	161.153	85.998	-31.190	1.00	41.92	A16S	ATOM	37572	C5'	ADE	885	163.504	83.482	-16.879	1.00	53.52	A16S
ATOM	37520	O2'	URI	882	159.799	85.590	-31.185	1.00	41.92	A16S	ATOM	37573	C4'	ADE	885	164.135	82.206	-16.397	1.00	53.52	A16S
ATOM	37521	C3'	URI	882	161.292	87.510	-31.211	1.00	41.92	A16S	ATOM	37574	O4'	ADE	885	164.910	81.635	-17.479	1.00	53.52	A16S
ATOM	37522	O3'	URI	882	160.332	88.119	-30.373	1.00	41.92	A16S	ATOM	37575	C1'	ADE	885	166.070	81.001	-16.957	1.00	53.52	A16S
ATOM	37523	P	GUA	883	160.817	89.055	-29.164	1.00	48.23	A16S	ATOM	37576	N9	ADE	885	167.239	81.723	-17.452	1.00	53.51	A16S
ATOM	37524	O1P	GUA	883	159.612	89.503	-28.426	1.00	46.66	A16S	ATOM	37577	C4	ADE	885	168.550	81.313	-17.410	1.00	53.51	A16S
ATOM	37525	O2P	GUA	883	161.746	90.070	-29.736	1.00	46.66	A16S	ATOM	37578	N3	ADE	885	169.040	80.183	-16.872	1.00	53.51	A16S
ATOM	37526	O5'	GUA	883	161.593	88.041	-28.213	1.00	48.23	A16S	ATOM	37579	C2	ADE	885	170.356	80.107	-17.055	1.00	53.51	A16S
ATOM	37527	C5'	GUA	883	160.897	86.960	-27.596	1.00	48.23	A16S	ATOM	37580	N1	ADE	885	171.171	80.963	-17.670	1.00	53.51	A16S
ATOM	37528	C4'	GUA	883	161.862	86.054	-26.865	1.00	48.23	A16S	ATOM	37581	C6	ADE	885	170.644	82.088	-18.197	1.00	53.51	A16S
ATOM	37529	O4'	GUA	883	162.704	85.353	-27.820	1.00	48.23	A16S	ATOM	37582	N6	ADE	885	171.450	82.938	-18.829	1.00	53.51	A16S
ATOM	37530	C1'	GUA	883	164.019	85.240	-27.298	1.00	48.23	A16S	ATOM	37583	C5	ADE	885	169.269	82.293	-18.057	1.00	53.51	A16S
ATOM	37531	N9	GUA	883	164.896	86.087	-28.093	1.00	46.66	A16S	ATOM	37584	N7	ADE	885	168.437	83.324	-18.463	1.00	53.51	A16S
ATOM	37532	C4	GUA	883	166.214	85.859	-28.361	1.00	46.66	A16S	ATOM	37585	C8	ADE	885	167.248	82.940	-18.077	1.00	53.51	A16S
ATOM	37533	N3	GUA	883	166.923	84.788	-27.965	1.00	46.66	A16S	ATOM	37586	C2'	ADE	885	165.936	81.055	-15.439	1.00	53.52	A16S
ATOM	37534	C2	GUA	883	168.181	84.868	-28.350	1.00	46.66	A16S	ATOM	37587	O2'	ADE	885	165.164	79.954	-15.013	1.00	53.52	A16S
ATOM	37535	N2	GUA	883	169.042	83.890	-28.029	1.00	46.66	A16S	ATOM	37588	C3'	ADE	885	165.147	82.337	-15.274	1.00	53.52	A16S
ATOM	37536	N1	GUA	883	168.695	85.910	-29.072	1.00	46.66	A16S	ATOM	37589	O3'	ADE	885	164.513	82.328	-14.018	1.00	53.52	A16S
ATOM	37537	C6	GUA	883	167.981	87.020	-29.488	1.00	46.66	A16S	ATOM	37590	P	ADE	886	165.235	83.015	-12.768	1.00	50.79	A16S
ATOM	37538	O6	GUA	883	168.548	87.914	-30.126	1.00	46.66	A16S	ATOM	37591	O1P	ADE	886	164.207	83.005	-11.695	1.00	41.21	A16S
ATOM	37539	C5	GUA	883	166.635	86.950	-29.084	1.00	46.66	A16S	ATOM	37592	O2P	ADE	886	165.867	84.307	-13.188	1.00	41.21	A16S
ATOM	37540	N7	GUA	883	165.589	87.834	-29.292	1.00	46.66	A16S	ATOM	37593	O5'	ADE	886	166.367	81.982	-12.341	1.00	50.79	A16S
ATOM	37541	C8	GUA	883	164.578	87.278	-28.691	1.00	46.66	A16S	ATOM	37594	C5'	ADE	886	166.031	80.789	-11.648	1.00	50.79	A16S
ATOM	37542	C2'	GUA	883	163.959	85.728	-25.853	1.00	48.23	A16S	ATOM	37595	C4'	ADE	886	167.238	79.895	-11.547	1.00	50.79	A16S

ATOM	37596	O4'	ADE	886	167.787	79.763	-12.879	1.00	50.79	A16S	ATOM	37649	O2'	URI	888	176.330	89.001	-8.506	1.00	44.19	A16S
ATOM	37597	C1'	ADE	886	169.200	79.748	-12.815	1.00	50.79	A16S	ATOM	37650	C3'	URI	888	174.980	87.614	-7.032	1.00	44.19	A16S
ATOM	37598	N9	ADE	886	169.695	80.921	-13.527	1.00	41.21	A16S	ATOM	37651	O3'	URI	888	175.818	88.084	-6.013	1.00	44.19	A16S
ATOM	37599	C4	ADE	886	170.994	81.128	-13.894	1.00	41.21	A16S	ATOM	37652	P	CYT	889	175.205	89.058	-4.911	1.00	44.91	A16S
ATOM	37600	N3	ADE	886	172.033	80.312	-13.672	1.00	41.21	A16S	ATOM	37653	O1P	CYT	889	176.034	88.932	-3.692	1.00	44.77	A16S
ATOM	37601	C2	ADE	886	173.142	80.828	-14.183	1.00	41.21	A16S	ATOM	37654	O2P	CYT	889	173.743	88.790	-4.832	1.00	44.77	A16S
ATOM	37602	N1	ADE	886	173.315	81.984	-14.837	1.00	41.21	A16S	ATOM	37655	O5'	CYT	889	175.422	90.507	-5.526	1.00	44.91	A16S
ATOM	37603	C6	ADE	886	172.250	82.781	-15.034	1.00	41.21	A16S	ATOM	37656	C5'	CYT	889	176.727	91.001	-5.752	1.00	44.91	A16S
ATOM	37604	N6	ADE	886	172.429	83.928	-15.673	1.00	41.21	A16S	ATOM	37657	C4'	CYT	889	176.664	92.303	-6.509	1.00	44.91	A16S
ATOM	37605	C5	ADE	886	171.013	82.345	-14.546	1.00	41.21	A16S	ATOM	37658	O4'	CYT	889	176.056	92.060	-7.801	1.00	44.91	A16S
ATOM	37606	N7	ADE	886	169.742	82.901	-14.586	1.00	41.21	A16S	ATOM	37659	C1'	CYT	889	175.263	93.176	-8.175	1.00	44.91	A16S
ATOM	37607	C8	ADE	886	168.999	82.019	-13.967	1.00	41.21	A16S	ATOM	37660	N1	CYT	889	173.866	92.739	-8.297	1.00	44.77	A16S
ATOM	37608	C2'	ADE	886	169.589	79.736	-11.336	1.00	50.79	A16S	ATOM	37661	C6	CYT	889	173.436	91.591	-7.697	1.00	44.77	A16S
ATOM	37609	O2'	ADE	886	169.731	78.402	-10.892	1.00	50.79	A16S	ATOM	37662	C2	CYT	889	172.982	93.517	-9.048	1.00	44.77	A16S
ATOM	37610	C3'	ADE	886	168.391	80.433	-10.713	1.00	50.79	A16S	ATOM	37663	O2	CYT	889	173.398	94.566	-9.556	1.00	44.77	A16S
ATOM	37611	O3'	ADE	886	168.250	80.050	-9.354	1.00	50.79	A16S	ATOM	37664	N3	CYT	889	171.702	93.112	-9.199	1.00	44.77	A16S
ATOM	37612	P	CYT	887	168.417	81.151	-8.198	1.00	42.44	A16S	ATOM	37665	C4	CYT	889	171.292	91.985	-8.618	1.00	44.77	A16S
ATOM	37613	O1P	CYT	887	168.242	80.431	-6.909	1.00	47.34	A16S	ATOM	37666	N4	CYT	889	170.024	91.614	-8.796	1.00	44.77	A16S
ATOM	37614	O2P	CYT	887	167.568	82.327	-8.512	1.00	47.34	A16S	ATOM	37667	C5	CYT	889	172.171	91.180	-7.827	1.00	44.77	A16S
ATOM	37615	O5'	CYT	887	169.920	81.654	-8.319	1.00	42.44	A16S	ATOM	37668	C2'	CYT	889	175.464	94.240	-7.104	1.00	44.91	A16S
ATOM	37616	C5'	CYT	887	171.013	80.765	-8.183	1.00	42.44	A16S	ATOM	37669	O2'	CYT	889	176.545	95.036	-7.494	1.00	44.91	A16S
ATOM	37617	C4'	CYT	887	172.228	81.374	-8.820	1.00	42.44	A16S	ATOM	37670	C3'	CYT	889	175.794	93.385	-5.895	1.00	44.91	A16S
ATOM	37618	O4'	CYT	887	171.948	81.588	-10.225	1.00	42.44	A16S	ATOM	37671	O3'	CYT	889	176.503	94.126	-4.917	1.00	44.91	A16S
ATOM	37619	C1'	CYT	887	172.684	82.704	-10.686	1.00	42.44	A16S	ATOM	37672	P	ADE	890	175.745	94.626	-3.598	1.00	48.80	A16S
ATOM	37620	N1	CYT	887	171.753	83.632	-11.303	1.00	47.34	A16S	ATOM	37673	O1P	ADE	890	176.756	94.824	-2.562	1.00	36.71	A16S
ATOM	37621	C6	CYT	887	170.402	83.469	-11.170	1.00	47.34	A16S	ATOM	37674	O2P	ADE	890	174.623	93.713	-3.331	1.00	36.71	A16S
ATOM	37622	C2	CYT	887	172.268	84.709	-12.006	1.00	47.34	A16S	ATOM	37675	O5'	ADE	890	175.207	96.073	-3.990	1.00	48.80	A16S
ATOM	37623	O2	CYT	887	173.490	84.785	-12.152	1.00	47.34	A16S	ATOM	37676	C5'	ADE	890	176.115	97.171	-4.165	1.00	48.80	A16S
ATOM	37624	N3	CYT	887	171.424	85.636	-12.510	1.00	47.34	A16S	ATOM	37677	C4'	ADE	890	175.410	98.357	-4.794	1.00	48.80	A16S
ATOM	37625	C4	CYT	887	170.108	85.496	-12.343	1.00	47.34	A16S	ATOM	37678	O4'	ADE	890	174.710	97.864	-5.945	1.00	48.80	A16S
ATOM	37626	N4	CYT	887	169.318	86.444	-12.816	1.00	47.34	A16S	ATOM	37679	C1'	ADE	890	173.424	98.413	-5.990	1.00	48.80	A16S
ATOM	37627	C5	CYT	887	169.549	84.373	-11.670	1.00	47.34	A16S	ATOM	37680	N9	ADE	890	172.459	97.328	-6.068	1.00	36.71	A16S
ATOM	37628	C2'	CYT	887	173.371	83.341	-9.477	1.00	42.44	A16S	ATOM	37681	C4	ADE	890	171.371	97.339	-6.896	1.00	36.71	A16S
ATOM	37629	O2'	CYT	887	174.729	82.973	-9.414	1.00	42.44	A16S	ATOM	37682	N3	ADE	890	170.987	98.339	-7.705	1.00	36.71	A16S
ATOM	37630	C3'	CYT	887	172.564	82.766	-8.329	1.00	42.44	A16S	ATOM	37683	C2	ADE	890	169.911	97.991	-8.382	1.00	36.71	A16S
ATOM	37631	O3'	CYT	887	173.335	82.722	-7.151	1.00	42.44	A16S	ATOM	37684	N1	ADE	890	169.223	96.843	-8.342	1.00	36.71	A16S
ATOM	37632	P	URI	888	173.042	83.786	-5.993	1.00	44.19	A16S	ATOM	37685	C6	ADE	890	169.640	95.866	-7.507	1.00	36.71	A16S
ATOM	37633	O1P	URI	888	173.684	83.305	-4.736	1.00	56.36	A16S	ATOM	37686	N6	ADE	890	168.948	94.730	-7.450	1.00	36.71	A16S
ATOM	37634	O2P	URI	888	171.577	84.070	-6.021	1.00	56.36	A16S	ATOM	37687	C5	ADE	890	170.773	96.107	-6.746	1.00	36.71	A16S
ATOM	37635	O5'	URI	888	173.771	85.109	-6.486	1.00	44.19	A16S	ATOM	37688	N7	ADE	890	171.460	95.333	-5.823	1.00	36.71	A16S
ATOM	37636	C5'	URI	888	175.138	85.094	-6.820	1.00	44.19	A16S	ATOM	37689	C8	ADE	890	172.441	96.113	-5.432	1.00	36.71	A16S
ATOM	37637	C4'	URI	888	175.476	86.316	-7.620	1.00	44.19	A16S	ATOM	37690	C2'	ADE	890	173.249	99.428	-4.868	1.00	48.80	A16S
ATOM	37638	O4'	URI	888	174.775	86.274	-8.886	1.00	44.19	A16S	ATOM	37691	O2'	ADE	890	173.352	100.705	-5.444	1.00	48.80	A16S
ATOM	37639	C1'	URI	888	174.560	87.599	-9.343	1.00	44.19	A16S	ATOM	37692	C3'	ADE	890	174.380	99.067	-3.923	1.00	48.80	A16S
ATOM	37640	N1	URI	888	173.132	87.774	-9.609	1.00	56.36	A16S	ATOM	37693	O3'	ADE	890	174.974	100.199	-3.260	1.00	48.80	A16S
ATOM	37641	C6	URI	888	172.196	86.956	-9.047	1.00	56.36	A16S	ATOM	37694	P	ADE	891	175.254	101.594	-4.059	1.00	35.44	A16S
ATOM	37642	C2	URI	888	172.775	88.798	-10.441	1.00	56.36	A16S	ATOM	37695	O1P	ADE	891	176.397	102.206	-3.328	1.00	45.31	A16S
ATOM	37643	O2	URI	888	173.591	89.533	-10.962	1.00	56.36	A16S	ATOM	37696	O2P	ADE	891	174.038	102.414	-4.288	1.00	45.31	A16S
ATOM	37644	N3	URI	888	171.430	88.934	-10.642	1.00	56.36	A16S	ATOM	37697	O5'	ADE	891	175.786	101.126	-5.475	1.00	35.44	A16S
ATOM	37645	C4	URI	888	170.434	88.156	-10.102	1.00	56.36	A16S	ATOM	37698	C5'	ADE	891	175.582	101.883	-6.659	1.00	35.44	A16S
ATOM	37646	O4	URI	888	169.261	88.434	-10.329	1.00	56.36	A16S	ATOM	37699	C4'	ADE	891	175.524	100.926	-7.825	1.00	35.44	A16S
ATOM	37647	C5	URI	888	170.892	87.106	-9.261	1.00	56.36	A16S	ATOM	37700	O4'	ADE	891	174.247	100.251	-7.807	1.00	35.44	A16S
ATOM	37648	C2'	URI	888	175.028	88.537	-8.233	1.00	44.19	A16S	ATOM	37701	C1'	ADE	891	173.856	99.941	-9.128	1.00	35.44	A16S

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ATOM  37702  N9  ADE  891     172.594 100.625  -9.407  1.00 45.31      A16S
ATOM  37703  C4  ADE  891     171.772 100.333 -10.462  1.00 45.31      A16S
ATOM  37704  N3  ADE  891     171.960  99.390 -11.398  1.00 45.31      A16S
ATOM  37705  C2  ADE  891     170.965  99.398 -12.272  1.00 45.31      A16S
ATOM  37706  N1  ADE  891     169.887 100.177 -12.316  1.00 45.31      A16S
ATOM  37707  C6  ADE  891     169.730 101.117 -11.364  1.00 45.31      A16S
ATOM  37708  N6  ADE  891     168.654 101.899 -11.420  1.00 45.31      A16S
ATOM  37709  C5  ADE  891     170.716 101.213 -10.372  1.00 45.31      A16S
ATOM  37710  N7  ADE  891     170.863 102.046  -9.273  1.00 45.31      A16S
ATOM  37711  C8  ADE  891     171.988 101.655  -8.733  1.00 45.31      A16S
ATOM  37712  C2' ADE  891     174.998 100.371 -10.054  1.00 35.44      A16S
ATOM  37713  O2' ADE  891     175.882  99.282 -10.252  1.00 35.44      A16S
ATOM  37714  C3' ADE  891     175.651 101.474  -9.233  1.00 35.44      A16S
ATOM  37715  O3' ADE  891     177.026 101.554  -9.575  1.00 35.44      A16S
ATOM  37716  P   ADE  892     177.467 102.318 -10.909  1.00 38.25      A16S
ATOM  37717  O1P ADE  892     178.895 101.969 -11.127  1.00 45.85      A16S
ATOM  37718  O2P ADE  892     177.068 103.746 -10.780  1.00 45.85      A16S
ATOM  37719  O5' ADE  892     176.595 101.643 -12.064  1.00 38.25      A16S
ATOM  37720  C5' ADE  892     177.095 100.535 -12.808  1.00 38.25      A16S
ATOM  37721  C4' ADE  892     176.211 100.246 -14.005  1.00 38.25      A16S
ATOM  37722  O4' ADE  892     174.869  99.934 -13.541  1.00 38.25      A16S
ATOM  37723  C1' ADE  892     173.922 100.324 -14.525  1.00 38.25      A16S
ATOM  37724  N9  ADE  892     173.065 101.362 -13.964  1.00 45.85      A16S
ATOM  37725  C4  ADE  892     171.897 101.828 -14.516  1.00 45.85      A16S
ATOM  37726  N3  ADE  892     171.287 101.387 -15.628  1.00 45.85      A16S
ATOM  37727  C2  ADE  892     170.198 102.094 -15.871  1.00 45.85      A16S
ATOM  37728  N1  ADE  892     169.688 103.122 -15.192  1.00 45.85      A16S
ATOM  37729  C6  ADE  892     170.328 103.547 -14.088  1.00 45.85      A16S
ATOM  37730  N6  ADE  892     169.836 104.594 -13.426  1.00 45.85      A16S
ATOM  37731  C5  ADE  892     171.488 102.865 -13.707  1.00 45.85      A16S
ATOM  37732  N7  ADE  892     172.358 103.024 -12.636  1.00 45.85      A16S
ATOM  37733  C8  ADE  892     173.267 102.103 -12.832  1.00 45.85      A16S
ATOM  37734  C2' ADE  892     174.718 100.904 -15.692  1.00 38.25      A16S
ATOM  37735  O2' ADE  892     174.986  99.899 -16.639  1.00 38.25      A16S
ATOM  37736  C3' ADE  892     175.963 101.382 -14.977  1.00 38.25      A16S
ATOM  37737  O3' ADE  892     177.018 101.597 -15.885  1.00 38.25      A16S
ATOM  37738  P   GUA  893     177.591 103.086 -16.071  1.00 44.21      A16S
ATOM  37739  O1P GUA  893     178.590 103.047 -17.162  1.00 43.80      A16S
ATOM  37740  O2P GUA  893     177.983 103.595 -14.728  1.00 43.80      A16S
ATOM  37741  O5' GUA  893     176.331 103.932 -16.562  1.00 44.21      A16S
ATOM  37742  C5' GUA  893     175.541 103.472 -17.642  1.00 44.21      A16S
ATOM  37743  C4' GUA  893     174.329 104.352 -17.845  1.00 44.21      A16S
ATOM  37744  O4' GUA  893     173.411 104.248 -16.724  1.00 44.21      A16S
ATOM  37745  C1' GUA  893     172.589 105.403 -16.692  1.00 44.21      A16S
ATOM  37746  N9  GUA  893     172.664 105.998 -15.360  1.00 43.80      A16S
ATOM  37747  C4  GUA  893     171.980 107.111 -14.918  1.00 43.80      A16S
ATOM  37748  N3  GUA  893     171.092 107.832 -15.632  1.00 43.80      A16S
ATOM  37749  C2  GUA  893     170.619 108.860 -14.943  1.00 43.80      A16S
ATOM  37750  N2  GUA  893     169.713 109.671 -15.499  1.00 43.80      A16S
ATOM  37751  N1  GUA  893     170.996 109.167 -13.665  1.00 43.80      A16S
ATOM  37752  C6  GUA  893     171.912 108.449 -12.914  1.00 43.80      A16S
ATOM  37753  O6  GUA  893     172.203 108.834 -11.778  1.00 43.80      A16S
ATOM  37754  C5  GUA  893     172.413 107.321 -13.632  1.00 43.80      A16S
ATOM  37755  N7  GUA  893     173.324 106.344 -13.256  1.00 43.80      A16S
ATOM  37756  C8  GUA  893     173.438 105.581 -14.310  1.00 43.80      A16S
ATOM  37757  C2' GUA  893     173.097 106.331 -17.801  1.00 44.21      A16S
ATOM  37758  O2' GUA  893     172.351 106.065 -18.965  1.00 44.21      A16S
ATOM  37759  C3' GUA  893     174.531 105.846 -17.978  1.00 44.21      A16S
ATOM  37760  O3' GUA  893     175.017 106.178 -19.271  1.00 44.21      A16S
ATOM  37761  P   GUA  894     175.548 107.671 -19.568  1.00 36.88      A16S
ATOM  37762  O1P GUA  894     176.075 107.720 -20.961  1.00 36.53      A16S
ATOM  37763  O2P GUA  894     176.403 108.128 -18.448  1.00 36.53      A16S
ATOM  37764  O5' GUA  894     174.230 108.573 -19.539  1.00 36.88      A16S
ATOM  37765  C5' GUA  894     173.252 108.504 -20.589  1.00 36.88      A16S
ATOM  37766  C4' GUA  894     172.319 109.691 -20.506  1.00 36.88      A16S
ATOM  37767  O4' GUA  894     171.533 109.591 -19.295  1.00 36.88      A16S
ATOM  37768  C1' GUA  894     171.393 110.869 -18.710  1.00 36.88      A16S
ATOM  37769  N9  GUA  894     172.099 110.845 -17.441  1.00 36.53      A16S
ATOM  37770  C4  GUA  894     171.971 111.745 -16.414  1.00 36.53      A16S
ATOM  37771  N3  GUA  894     171.160 112.827 -16.399  1.00 36.53      A16S
ATOM  37772  C2  GUA  894     171.259 113.496 -15.267  1.00 36.53      A16S
ATOM  37773  N2  GUA  894     170.552 114.603 -15.087  1.00 36.53      A16S
ATOM  37774  N1  GUA  894     172.072 113.130 -14.229  1.00 36.53      A16S
ATOM  37775  C6  GUA  894     172.918 112.023 -14.228  1.00 36.53      A16S
ATOM  37776  O6  GUA  894     173.639 111.784 -13.238  1.00 36.53      A16S
ATOM  37777  C5  GUA  894     172.826 111.300 -15.438  1.00 36.53      A16S
ATOM  37778  N7  GUA  894     173.475 110.145 -15.842  1.00 36.53      A16S
ATOM  37779  C8  GUA  894     173.014 109.916 -17.035  1.00 36.53      A16S
ATOM  37780  C2' GUA  894     171.985 111.884 -19.678  1.00 36.88      A16S
ATOM  37781  O2' GUA  894     170.978 112.314 -20.551  1.00 36.88      A16S
ATOM  37782  C3' GUA  894     173.012 111.036 -20.400  1.00 36.88      A16S
ATOM  37783  O3' GUA  894     173.260 111.573 -21.679  1.00 36.88      A16S
ATOM  37784  P   ADE  895     174.524 112.513 -21.887  1.00 35.43      A16S
ATOM  37785  O1P ADE  895     174.668 112.823 -23.327  1.00 32.45      A16S
ATOM  37786  O2P ADE  895     175.625 111.871 -21.151  1.00 32.45      A16S
ATOM  37787  O5' ADE  895     174.129 113.849 -21.131  1.00 35.43      A16S
ATOM  37788  C5' ADE  895     173.109 114.689 -21.658  1.00 35.43      A16S
ATOM  37789  C4' ADE  895     172.781 115.779 -20.680  1.00 35.43      A16S
ATOM  37790  O4' ADE  895     172.337 115.176 -19.446  1.00 35.43      A16S
ATOM  37791  C1' ADE  895     172.688 116.011 -18.363  1.00 35.43      A16S
ATOM  37792  N9  ADE  895     173.500 115.235 -17.435  1.00 32.45      A16S
ATOM  37793  C4  ADE  895     173.743 115.550 -16.123  1.00 32.45      A16S
ATOM  37794  N3  ADE  895     173.295 116.615 -15.449  1.00 32.45      A16S
ATOM  37795  C2  ADE  895     173.728 116.589 -14.193  1.00 32.45      A16S
ATOM  37796  N1  ADE  895     174.494 115.690 -13.582  1.00 32.45      A16S
ATOM  37797  C6  ADE  895     174.926 114.628 -14.288  1.00 32.45      A16S
ATOM  37798  N6  ADE  895     175.688 113.726 -13.674  1.00 32.45      A16S
ATOM  37799  C5  ADE  895     174.539 114.537 -15.632  1.00 32.45      A16S
ATOM  37800  N7  ADE  895     174.798 113.598 -16.618  1.00 32.45      A16S
ATOM  37801  C8  ADE  895     174.159 114.059 -17.666  1.00 32.45      A16S
ATOM  37802  C2' ADE  895     173.392 117.229 -18.950  1.00 35.43      A16S
ATOM  37803  O2' ADE  895     172.385 118.168 -19.238  1.00 35.43      A16S
ATOM  37804  C3' ADE  895     173.938 116.656 -20.244  1.00 35.43      A16S
ATOM  37805  O3' ADE  895     174.109 117.686 -21.207  1.00 35.43      A16S
ATOM  37806  P   ADE  896     175.491 118.502 -21.283  1.00 40.97      A16S
ATOM  37807  O1P ADE  896     175.313 119.527 -22.345  1.00 37.85      A16S
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ATOM	37808	O2P	ADE	896	176.592	117.516	-21.371	1.00	37.85	A16S	ATOM	37861	C4	URI	898	183.671	119.700	-12.736	1.00	36.69	A16S
ATOM	37809	O5'	ADE	896	175.621	119.235	-19.875	1.00	40.97	A16S	ATOM	37862	O4	URI	898	183.835	118.867	-13.625	1.00	36.69	A16S
ATOM	37810	C5'	ADE	896	175.068	120.528	-19.676	1.00	40.97	A16S	ATOM	37863	C5	URI	898	183.230	121.050	-12.927	1.00	36.69	A16S
ATOM	37811	C4'	ADE	896	175.028	120.850	-18.207	1.00	40.97	A16S	ATOM	37864	C2'	URI	898	185.214	123.256	-9.651	1.00	37.61	A16S
ATOM	37812	O4'	ADE	896	174.517	119.684	-17.520	1.00	40.97	A16S	ATOM	37865	O2'	URI	898	185.681	123.541	-8.346	1.00	37.61	A16S
ATOM	37813	C1'	ADE	896	175.173	119.541	-16.276	1.00	40.97	A16S	ATOM	37866	C3'	URI	898	184.878	124.479	-10.489	1.00	37.61	A16S
ATOM	37814	N9	ADE	896	175.974	118.331	-16.352	1.00	37.85	A16S	ATOM	37867	O3'	URI	898	185.788	125.530	-10.255	1.00	37.61	A16S
ATOM	37815	C4	ADE	896	176.585	117.696	-15.306	1.00	37.85	A16S	ATOM	37868	P	GUA	899	186.949	125.792	-11.326	1.00	44.50	A16S
ATOM	37816	N3	ADE	896	176.553	118.046	-14.018	1.00	37.85	A16S	ATOM	37869	O1P	GUA	899	187.624	127.070	-10.961	1.00	39.59	A16S
ATOM	37817	C2	ADE	896	177.262	117.197	-13.288	1.00	37.85	A16S	ATOM	37870	O2P	GUA	899	186.298	125.672	-12.662	1.00	39.59	A16S
ATOM	37818	N1	ADE	896	177.943	116.126	-13.673	1.00	37.85	A16S	ATOM	37871	O5'	GUA	899	187.936	124.544	-11.095	1.00	44.50	A16S
ATOM	37819	C6	ADE	896	177.947	115.804	-14.977	1.00	37.85	A16S	ATOM	37872	C5'	GUA	899	188.724	124.460	-9.908	1.00	44.50	A16S
ATOM	37820	N6	ADE	896	178.618	114.728	-15.366	1.00	37.85	A16S	ATOM	37873	C4'	GUA	899	189.170	123.037	-9.621	1.00	44.50	A16S
ATOM	37821	C5	ADE	896	177.238	116.620	-15.851	1.00	37.85	A16S	ATOM	37874	O4'	GUA	899	188.072	122.113	-9.800	1.00	44.50	A16S
ATOM	37822	N7	ADE	896	177.039	116.568	-17.223	1.00	37.85	A16S	ATOM	37875	C1'	GUA	899	188.585	120.819	-10.093	1.00	44.50	A16S
ATOM	37823	C8	ADE	896	176.280	117.604	-17.467	1.00	37.85	A16S	ATOM	37876	N9	GUA	899	188.025	120.373	-11.369	1.00	39.59	A16S
ATOM	37824	C2'	ADE	896	176.055	120.771	-16.090	1.00	40.97	A16S	ATOM	37877	C4	GUA	899	188.098	119.111	-11.894	1.00	39.59	A16S
ATOM	37825	O2'	ADE	896	175.325	121.799	-15.452	1.00	40.97	A16S	ATOM	37878	N3	GUA	899	188.698	118.061	-11.321	1.00	39.59	A16S
ATOM	37826	C3'	ADE	896	176.361	121.114	-17.533	1.00	40.97	A16S	ATOM	37879	C2	GUA	899	188.609	116.979	-12.063	1.00	39.59	A16S
ATOM	37827	O3'	ADE	896	176.711	122.482	-17.628	1.00	40.97	A16S	ATOM	37880	N2	GUA	899	189.169	115.844	-11.642	1.00	39.59	A16S
ATOM	37828	P	URI	897	178.226	122.922	-17.340	1.00	41.96	A16S	ATOM	37881	N1	GUA	899	187.968	116.929	-13.273	1.00	39.59	A16S
ATOM	37829	O1P	URI	897	178.376	124.345	-17.729	1.00	37.36	A16S	ATOM	37882	C6	GUA	899	187.342	118.008	-13.885	1.00	39.59	A16S
ATOM	37830	O2P	URI	897	179.070	121.887	-17.983	1.00	37.36	A16S	ATOM	37883	O6	GUA	899	186.792	117.865	-14.992	1.00	39.59	A16S
ATOM	37831	O5'	URI	897	178.395	122.764	-15.763	1.00	41.96	A16S	ATOM	37884	C5	GUA	899	187.441	119.175	-13.099	1.00	39.59	A16S
ATOM	37832	C5'	URI	897	177.712	123.629	-14.870	1.00	41.96	A16S	ATOM	37885	N7	GUA	899	186.965	120.456	-13.336	1.00	39.59	A16S
ATOM	37833	C4'	URI	897	178.284	123.494	-13.488	1.00	41.96	A16S	ATOM	37886	C8	GUA	899	187.330	121.132	-12.284	1.00	39.59	A16S
ATOM	37834	O4'	URI	897	178.025	122.160	-12.986	1.00	41.96	A16S	ATOM	37887	C2'	GUA	899	190.109	120.949	-10.121	1.00	44.50	A16S
ATOM	37835	C1'	URI	897	179.108	121.736	-12.180	1.00	41.96	A16S	ATOM	37888	O2'	GUA	899	190.608	120.663	-8.841	1.00	44.50	A16S
ATOM	37836	N1	URI	897	179.627	120.474	-12.730	1.00	37.36	A16S	ATOM	37889	C3'	GUA	899	190.288	122.425	-10.444	1.00	44.50	A16S
ATOM	37837	C6	URI	897	179.420	120.135	-14.042	1.00	37.36	A16S	ATOM	37890	O3'	GUA	899	191.535	122.852	-9.916	1.00	44.50	A16S
ATOM	37838	C2	URI	897	180.333	119.634	-11.880	1.00	37.36	A16S	ATOM	37891	P	ADE	900	192.805	123.074	-10.886	1.00	44.85	A16S
ATOM	37839	O2	URI	897	180.582	119.909	-10.717	1.00	37.36	A16S	ATOM	37892	O1P	ADE	900	193.839	123.718	-10.061	1.00	41.26	A16S
ATOM	37840	N3	URI	897	180.754	118.463	-12.443	1.00	37.36	A16S	ATOM	37893	O2P	ADE	900	192.402	123.720	-12.152	1.00	41.26	A16S
ATOM	37841	C4	URI	897	180.568	118.058	-13.738	1.00	37.36	A16S	ATOM	37894	O5'	ADE	900	193.302	121.590	-11.130	1.00	44.85	A16S
ATOM	37842	O4	URI	897	180.934	116.927	-14.069	1.00	37.36	A16S	ATOM	37895	C5'	ADE	900	193.771	120.816	-10.036	1.00	44.85	A16S
ATOM	37843	C5	URI	897	179.862	118.992	-14.562	1.00	37.36	A16S	ATOM	37896	C4'	ADE	900	193.907	119.380	-10.452	1.00	44.85	A16S
ATOM	37844	C2'	URI	897	180.129	122.878	-12.152	1.00	41.96	A16S	ATOM	37897	O4'	ADE	900	192.587	118.813	-10.652	1.00	44.85	A16S
ATOM	37845	O2'	URI	897	179.922	123.728	-11.047	1.00	41.96	A16S	ATOM	37898	C1'	ADE	900	192.590	117.991	-11.803	1.00	44.85	A16S
ATOM	37846	C3'	URI	897	179.789	123.621	-13.428	1.00	41.96	A16S	ATOM	37899	N9	ADE	900	191.829	118.696	-12.832	1.00	41.26	A16S
ATOM	37847	O3'	URI	897	180.163	124.977	-13.291	1.00	41.96	A16S	ATOM	37900	C4	ADE	900	191.135	118.145	-13.884	1.00	41.26	A16S
ATOM	37848	P	URI	898	181.697	125.391	-13.506	1.00	37.61	A16S	ATOM	37901	N3	ADE	900	191.000	116.841	-14.181	1.00	41.26	A16S
ATOM	37849	O1P	URI	898	181.750	126.866	-13.500	1.00	36.69	A16S	ATOM	37902	C2	ADE	900	190.242	116.685	-15.265	1.00	41.26	A16S
ATOM	37850	O2P	URI	898	182.162	124.653	-14.710	1.00	36.69	A16S	ATOM	37903	N1	ADE	900	189.650	117.620	-16.032	1.00	41.26	A16S
ATOM	37851	O5'	URI	898	182.451	124.809	-12.220	1.00	37.61	A16S	ATOM	37904	C6	ADE	900	189.816	118.917	-15.705	1.00	41.26	A16S
ATOM	37852	C5'	URI	898	182.636	125.593	-11.040	1.00	37.61	A16S	ATOM	37905	N6	ADE	900	189.240	119.840	-16.464	1.00	41.26	A16S
ATOM	37853	C4'	URI	898	183.481	124.833	-10.036	1.00	37.61	A16S	ATOM	37906	C5	ADE	900	190.591	119.213	-14.575	1.00	41.26	A16S
ATOM	37854	O4'	URI	898	182.875	123.535	-9.815	1.00	37.61	A16S	ATOM	37907	N7	ADE	900	190.931	120.415	-13.969	1.00	41.26	A16S
ATOM	37855	C1'	URI	898	183.867	122.551	-9.601	1.00	37.61	A16S	ATOM	37908	C8	ADE	900	191.664	120.054	-12.945	1.00	41.26	A16S
ATOM	37856	N1	URI	898	183.757	121.563	-10.678	1.00	36.69	A16S	ATOM	37909	C2'	ADE	900	194.061	117.810	-12.182	1.00	44.85	A16S
ATOM	37857	C6	URI	898	183.287	121.913	-11.920	1.00	36.69	A16S	ATOM	37910	O2'	ADE	900	194.647	116.795	-11.388	1.00	44.85	A16S
ATOM	37858	C2	URI	898	184.161	120.275	-10.404	1.00	36.69	A16S	ATOM	37911	C3'	ADE	900	194.610	119.163	-11.782	1.00	44.85	A16S
ATOM	37859	O2	URI	898	184.546	119.933	-9.307	1.00	36.69	A16S	ATOM	37912	O3'	ADE	900	196.018	119.133	-11.618	1.00	44.85	A16S
ATOM	37860	N3	URI	898	184.093	119.409	-11.461	1.00	36.69	A16S	ATOM	37913	P	CYT	901	196.962	119.663	-12.800	1.00	53.80	A16S

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ATOM  37914  O1P CYT  901     198.345 119.610 -12.262  1.00 40.98      A16S
ATOM  37915  O2P CYT  901     196.423 120.948 -13.327  1.00 40.98      A16S
ATOM  37916  O5' CYT  901     196.784 118.546 -13.918  1.00 53.80      A16S
ATOM  37917  C5' CYT  901     197.182 117.206 -13.664  1.00 53.80      A16S
ATOM  37918  C4' CYT  901     196.693 116.300 -14.761  1.00 53.80      A16S
ATOM  37919  O4' CYT  901     195.241 116.302 -14.772  1.00 53.80      A16S
ATOM  37920  C1' CYT  901     194.779 116.105 -16.100  1.00 53.80      A16S
ATOM  37921  N1  CYT  901     194.028 117.297 -16.517  1.00 40.98      A16S
ATOM  37922  C6  CYT  901     194.288 118.518 -15.969  1.00 40.98      A16S
ATOM  37923  C2  CYT  901     193.056 117.162 -17.493  1.00 40.98      A16S
ATOM  37924  O2  CYT  901     192.822 116.037 -17.942  1.00 40.98      A16S
ATOM  37925  N3  CYT  901     192.390 118.254 -17.920  1.00 40.98      A16S
ATOM  37926  C4  CYT  901     192.661 119.441 -17.393  1.00 40.98      A16S
ATOM  37927  N4  CYT  901     191.995 120.493 -17.851  1.00 40.98      A16S
ATOM  37928  C5  CYT  901     193.632 119.605 -16.376  1.00 40.98      A16S
ATOM  37929  C2' CYT  901     196.023 115.892 -16.959  1.00 53.80      A16S
ATOM  37930  O2' CYT  901     196.353 114.518 -16.939  1.00 53.80      A16S
ATOM  37931  C3' CYT  901     197.043 116.698 -16.183  1.00 53.80      A16S
ATOM  37932  O3' CYT  901     198.355 116.283 -16.507  1.00 53.80      A16S
ATOM  37933  P   GUA  902     199.143 116.990 -17.715  1.00 52.05      A16S
ATOM  37934  O1P GUA  902     200.495 116.390 -17.657  1.00 52.85      A16S
ATOM  37935  O2P GUA  902     198.994 118.462 -17.690  1.00 52.85      A16S
ATOM  37936  O5' GUA  902     198.394 116.449 -19.008  1.00 52.05      A16S
ATOM  37937  C5' GUA  902     198.372 115.054 -19.315  1.00 52.05      A16S
ATOM  37938  C4' GUA  902     197.777 114.852 -20.678  1.00 52.05      A16S
ATOM  37939  O4' GUA  902     196.342 115.052 -20.630  1.00 52.05      A16S
ATOM  37940  C1' GUA  902     195.927 115.773 -21.777  1.00 52.05      A16S
ATOM  37941  N9  GUA  902     195.284 117.009 -21.335  1.00 52.85      A16S
ATOM  37942  C4  GUA  902     194.267 117.672 -21.978  1.00 52.85      A16S
ATOM  37943  N3  GUA  902     193.701 117.310 -23.145  1.00 52.85      A16S
ATOM  37944  C2  GUA  902     192.737 118.139 -23.501  1.00 52.85      A16S
ATOM  37945  N2  GUA  902     192.061 117.929 -24.639  1.00 52.85      A16S
ATOM  37946  N1  GUA  902     192.359 119.233 -22.771  1.00 52.85      A16S
ATOM  37947  C6  GUA  902     192.919 119.621 -21.568  1.00 52.85      A16S
ATOM  37948  O6  GUA  902     192.484 120.615 -20.988  1.00 52.85      A16S
ATOM  37949  C5  GUA  902     193.963 118.745 -21.172  1.00 52.85      A16S
ATOM  37950  N7  GUA  902     194.783 118.768 -20.052  1.00 52.85      A16S
ATOM  37951  C8  GUA  902     195.551 117.723 -20.194  1.00 52.85      A16S
ATOM  37952  C2' GUA  902     197.148 115.962 -22.684  1.00 52.05      A16S
ATOM  37953  O2' GUA  902     197.185 114.938 -23.656  1.00 52.05      A16S
ATOM  37954  C3' GUA  902     198.292 115.863 -21.683  1.00 52.05      A16S
ATOM  37955  O3' GUA  902     199.474 115.345 -22.265  1.00 52.05      A16S
ATOM  37956  P   GUA  903     200.570 116.339 -22.881  1.00 70.62      A16S
ATOM  37957  O1P GUA  903     201.697 116.363 -21.920  1.00 33.98      A16S
ATOM  37958  O2P GUA  903     199.930 117.616 -23.287  1.00 33.98      A16S
ATOM  37959  O5' GUA  903     201.067 115.535 -24.163  1.00 70.62      A16S
ATOM  37960  C5' GUA  903     201.166 116.139 -25.447  1.00 70.62      A16S
ATOM  37961  C4' GUA  903     201.377 115.064 -26.487  1.00 70.62      A16S
ATOM  37962  O4' GUA  903     202.298 114.088 -25.929  1.00 70.62      A16S
ATOM  37963  C1' GUA  903     201.942 112.787 -26.357  1.00 70.62      A16S
ATOM  37964  N9  GUA  903     201.648 111.986 -25.177  1.00 33.98      A16S
ATOM  37965  C4  GUA  903     201.905 110.643 -25.012  1.00 33.98      A16S
ATOM  37966  N3  GUA  903     202.447 109.821 -25.928  1.00 33.98      A16S
ATOM  37967  C2  GUA  903     202.614 108.593 -25.454  1.00 33.98      A16S
ATOM  37968  N2  GUA  903     203.160 107.639 -26.225  1.00 33.98      A16S
ATOM  37969  N1  GUA  903     202.266 108.204 -24.191  1.00 33.98      A16S
ATOM  37970  C6  GUA  903     201.694 109.028 -23.239  1.00 33.98      A16S
ATOM  37971  O6  GUA  903     201.406 108.567 -22.128  1.00 33.98      A16S
ATOM  37972  C5  GUA  903     201.517 110.352 -23.727  1.00 33.98      A16S
ATOM  37973  N7  GUA  903     200.995 111.477 -23.104  1.00 33.98      A16S
ATOM  37974  C8  GUA  903     201.091 112.421 -24.004  1.00 33.98      A16S
ATOM  37975  C2' GUA  903     200.762 112.934 -27.311  1.00 70.62      A16S
ATOM  37976  O2' GUA  903     201.238 113.057 -28.635  1.00 70.62      A16S
ATOM  37977  C3' GUA  903     200.151 114.235 -26.829  1.00 70.62      A16S
ATOM  37978  O3' GUA  903     199.448 114.832 -27.899  1.00 70.62      A16S
ATOM  37979  P   GUA  904     197.990 115.417 -27.645  1.00 55.00      A16S
ATOM  37980  O1P GUA  904     197.333 114.469 -26.714  1.00 57.30      A16S
ATOM  37981  O2P GUA  904     197.354 115.722 -28.950  1.00 57.30      A16S
ATOM  37982  O5' GUA  904     198.304 116.795 -26.910  1.00 55.00      A16S
ATOM  37983  C5' GUA  904     197.288 117.495 -26.222  1.00 55.00      A16S
ATOM  37984  C4' GUA  904     196.439 118.284 -27.188  1.00 55.00      A16S
ATOM  37985  O4' GUA  904     195.106 118.330 -26.627  1.00 55.00      A16S
ATOM  37986  C1' GUA  904     194.538 119.606 -26.848  1.00 55.00      A16S
ATOM  37987  N9  GUA  904     194.448 120.286 -25.569  1.00 57.30      A16S
ATOM  37988  C4  GUA  904     193.701 121.387 -25.326  1.00 57.30      A16S
ATOM  37989  N3  GUA  904     192.897 121.994 -26.216  1.00 57.30      A16S
ATOM  37990  C2  GUA  904     192.326 123.064 -25.713  1.00 57.30      A16S
ATOM  37991  N2  GUA  904     191.498 123.785 -26.476  1.00 57.30      A16S
ATOM  37992  N1  GUA  904     192.524 123.510 -24.426  1.00 57.30      A16S
ATOM  37993  C6  GUA  904     193.346 122.899 -23.488  1.00 57.30      A16S
ATOM  37994  O6  GUA  904     193.455 123.385 -22.355  1.00 57.30      A16S
ATOM  37995  C5  GUA  904     193.971 121.736 -24.025  1.00 57.30      A16S
ATOM  37996  N7  GUA  904     194.859 120.837 -23.450  1.00 57.30      A16S
ATOM  37997  C8  GUA  904     195.109 119.989 -24.405  1.00 57.30      A16S
ATOM  37998  C2' GUA  904     195.476 120.371 -27.775  1.00 55.00      A16S
ATOM  37999  O2' GUA  904     195.068 120.194 -29.110  1.00 55.00      A16S
ATOM  38000  C3' GUA  904     196.815 119.741 -27.418  1.00 55.00      A16S
ATOM  38001  O3' GUA  904     197.745 119.930 -28.467  1.00 55.00      A16S
ATOM  38002  P   GUA  905     198.593 121.300 -28.541  1.00 48.49      A16S
ATOM  38003  O1P GUA  905     199.391 121.240 -29.776  1.00 55.77      A16S
ATOM  38004  O2P GUA  905     199.278 121.499 -27.228  1.00 55.77      A16S
ATOM  38005  O5' GUA  905     197.519 122.453 -28.764  1.00 48.49      A16S
ATOM  38006  C5' GUA  905     196.981 122.702 -30.052  1.00 48.49      A16S
ATOM  38007  C4' GUA  905     196.107 123.939 -30.033  1.00 48.49      A16S
ATOM  38008  O4' GUA  905     195.038 123.756 -29.068  1.00 48.49      A16S
ATOM  38009  C1' GUA  905     194.720 124.999 -28.458  1.00 48.49      A16S
ATOM  38010  N9  GUA  905     195.031 124.901 -27.038  1.00 55.77      A16S
ATOM  38011  C4  GUA  905     194.732 125.828 -26.071  1.00 55.77      A16S
ATOM  38012  N3  GUA  905     194.070 126.988 -26.262  1.00 55.77      A16S
ATOM  38013  C2  GUA  905     193.954 127.685 -25.141  1.00 55.77      A16S
ATOM  38014  N2  GUA  905     193.314 128.863 -25.151  1.00 55.77      A16S
ATOM  38015  N1  GUA  905     194.454 127.277 -23.928  1.00 55.77      A16S
ATOM  38016  C6  GUA  905     195.135 126.086 -23.705  1.00 55.77      A16S
ATOM  38017  O6  GUA  905     195.548 125.818 -22.571  1.00 55.77      A16S
ATOM  38018  C5  GUA  905     195.259 125.322 -24.905  1.00 55.77      A16S
ATOM  38019  N7  GUA  905     195.858 124.090 -25.131  1.00 55.77      A16S
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ATOM	38020	C8	GUA	905	195.696	123.881	-26.407	1.00	55.77	A16S	ATOM	38073	C4'	CYT	908	202.648	136.386	-22.455	1.00	63.81	A16S
ATOM	38021	C2'	GUA	905	195.572	126.058	-29.149	1.00	48.49	A16S	ATOM	38074	O4'	CYT	908	201.998	135.161	-22.038	1.00	63.81	A16S
ATOM	38022	O2'	GUA	905	194.878	126.607	-30.249	1.00	48.49	A16S	ATOM	38075	C1'	CYT	908	202.699	134.656	-20.921	1.00	63.81	A16S
ATOM	38023	C3'	GUA	905	196.766	125.228	-29.580	1.00	48.49	A16S	ATOM	38076	N1	CYT	908	202.927	133.219	-21.058	1.00	34.92	A16S
ATOM	38024	O3'	GUA	905	197.464	125.872	-30.625	1.00	48.49	A16S	ATOM	38077	C6	CYT	908	202.974	132.590	-22.270	1.00	34.92	A16S
ATOM	38025	P	GUA	906	198.673	126.853	-30.258	1.00	53.72	A16S	ATOM	38078	C2	CYT	908	203.134	132.507	-19.899	1.00	34.92	A16S
ATOM	38026	O1P	GUA	906	199.296	127.255	-31.537	1.00	49.53	A16S	ATOM	38079	O2	CYT	908	203.025	133.094	-18.833	1.00	34.92	A16S
ATOM	38027	O2P	GUA	906	199.498	126.227	-29.197	1.00	49.53	A16S	ATOM	38080	N3	CYT	908	203.434	131.197	-19.957	1.00	34.92	A16S
ATOM	38028	O5'	GUA	906	197.955	128.128	-29.653	1.00	53.72	A16S	ATOM	38081	C4	CYT	908	203.489	130.591	-21.128	1.00	34.92	A16S
ATOM	38029	C5'	GUA	906	197.038	128.854	-30.442	1.00	53.72	A16S	ATOM	38082	N4	CYT	908	203.770	129.306	-21.124	1.00	34.92	A16S
ATOM	38030	C4'	GUA	906	196.481	129.997	-29.652	1.00	53.72	A16S	ATOM	38083	C5	CYT	908	203.250	131.283	-22.350	1.00	34.92	A16S
ATOM	38031	O4'	GUA	906	195.688	129.489	-28.550	1.00	53.72	A16S	ATOM	38084	C2'	CYT	908	204.026	135.408	-20.854	1.00	63.81	A16S
ATOM	38032	C1'	GUA	906	195.757	130.402	-27.467	1.00	53.72	A16S	ATOM	38085	O2'	CYT	908	203.933	136.381	-19.837	1.00	63.81	A16S
ATOM	38033	N9	GUA	906	196.344	129.713	-26.330	1.00	49.53	A16S	ATOM	38086	C3'	CYT	908	204.099	136.019	-22.248	1.00	63.81	A16S
ATOM	38034	C4	GUA	906	196.320	130.147	-25.027	1.00	49.53	A16S	ATOM	38087	O3'	CYT	908	204.943	137.161	-22.263	1.00	63.81	A16S
ATOM	38035	N3	GUA	906	195.750	131.288	-24.584	1.00	49.53	A16S	ATOM	38088	P	CYT	909	206.498	137.008	-21.874	1.00	44.69	A16S
ATOM	38036	C2	GUA	906	195.874	131.422	-23.280	1.00	49.53	A16S	ATOM	38089	O1P	CYT	909	207.226	138.181	-22.408	1.00	40.20	A16S
ATOM	38037	N2	GUA	906	195.345	132.481	-22.667	1.00	49.53	A16S	ATOM	38090	O2P	CYT	909	206.952	135.630	-22.230	1.00	40.20	A16S
ATOM	38038	N1	GUA	906	196.517	130.524	-22.477	1.00	49.53	A16S	ATOM	38091	O5'	CYT	909	206.485	137.151	-20.288	1.00	44.69	A16S
ATOM	38039	C6	GUA	906	197.114	129.349	-22.905	1.00	49.53	A16S	ATOM	38092	C5'	CYT	909	207.624	136.820	-19.530	1.00	44.69	A16S
ATOM	38040	O6	GUA	906	197.665	128.607	-22.086	1.00	49.53	A16S	ATOM	38093	C4'	CYT	909	207.228	136.429	-18.134	1.00	44.69	A16S
ATOM	38041	C5	GUA	906	196.983	129.180	-24.306	1.00	49.53	A16S	ATOM	38094	O4'	CYT	909	206.218	135.386	-18.149	1.00	44.69	A16S
ATOM	38042	N7	GUA	906	197.430	128.161	-25.141	1.00	49.53	A16S	ATOM	38095	C1'	CYT	909	206.528	134.406	-17.174	1.00	44.69	A16S
ATOM	38043	C8	GUA	906	197.026	128.521	-26.332	1.00	49.53	A16S	ATOM	38096	N1	CYT	909	206.731	133.141	-17.878	1.00	40.20	A16S
ATOM	38044	C2'	GUA	906	196.656	131.550	-27.918	1.00	53.72	A16S	ATOM	38097	C6	CYT	909	206.622	133.084	-19.236	1.00	40.20	A16S
ATOM	38045	O2'	GUA	906	195.882	132.575	-28.509	1.00	53.72	A16S	ATOM	38098	C2	CYT	909	207.042	131.982	-17.140	1.00	40.20	A16S
ATOM	38046	C3'	GUA	906	197.514	130.834	-28.939	1.00	53.72	A16S	ATOM	38099	O2	CYT	909	207.150	132.066	-15.917	1.00	40.20	A16S
ATOM	38047	O3'	GUA	906	198.148	131.737	-29.802	1.00	53.72	A16S	ATOM	38100	N3	CYT	909	207.221	130.808	-17.793	1.00	40.20	A16S
ATOM	38048	P	CYT	907	199.649	132.166	-29.490	1.00	60.89	A16S	ATOM	38101	C4	CYT	909	207.104	130.769	-19.122	1.00	40.20	A16S
ATOM	38049	O1P	CYT	907	200.075	133.024	-30.626	1.00	50.14	A16S	ATOM	38102	N4	CYT	909	207.272	129.606	-19.725	1.00	40.20	A16S
ATOM	38050	O2P	CYT	907	200.441	130.954	-29.127	1.00	50.14	A16S	ATOM	38103	C5	CYT	909	206.803	131.933	-19.893	1.00	40.20	A16S
ATOM	38051	O5'	CYT	907	199.519	133.046	-28.177	1.00	60.89	A16S	ATOM	38104	C2'	CYT	909	207.764	134.882	-16.398	1.00	44.69	A16S
ATOM	38052	C5'	CYT	907	198.752	134.227	-28.188	1.00	60.89	A16S	ATOM	38105	O2'	CYT	909	207.386	135.512	-15.194	1.00	44.69	A16S
ATOM	38053	C4'	CYT	907	198.648	134.786	-26.799	1.00	60.89	A16S	ATOM	38106	C3'	CYT	909	208.408	135.835	-17.398	1.00	44.69	A16S
ATOM	38054	O4'	CYT	907	197.976	133.832	-25.933	1.00	60.89	A16S	ATOM	38107	O3'	CYT	909	209.164	136.893	-16.828	1.00	44.69	A16S
ATOM	38055	C1'	CYT	907	198.386	134.057	-24.595	1.00	60.89	A16S	ATOM	38108	P	GUA	910	210.725	137.018	-17.172	1.00	49.74	A16S
ATOM	38056	N1	CYT	907	198.952	132.829	-24.049	1.00	50.14	A16S	ATOM	38109	O1P	GUA	910	211.187	138.349	-16.718	1.00	34.62	A16S
ATOM	38057	C6	CYT	907	199.260	131.764	-24.845	1.00	50.14	A16S	ATOM	38110	O2P	GUA	910	210.957	136.619	-18.591	1.00	34.62	A16S
ATOM	38058	C2	CYT	907	199.182	132.776	-22.684	1.00	50.14	A16S	ATOM	38111	O5'	GUA	910	211.356	135.926	-16.203	1.00	49.74	A16S
ATOM	38059	O2	CYT	907	198.903	133.770	-21.999	1.00	50.14	A16S	ATOM	38112	C5'	GUA	910	211.176	136.034	-14.807	1.00	49.74	A16S
ATOM	38060	N3	CYT	907	199.709	131.656	-22.142	1.00	50.14	A16S	ATOM	38113	C4'	GUA	910	211.527	134.737	-14.130	1.00	49.74	A16S
ATOM	38061	C4	CYT	907	200.019	130.626	-22.923	1.00	50.14	A16S	ATOM	38114	O4'	GUA	910	210.613	133.708	-14.564	1.00	49.74	A16S
ATOM	38062	N4	CYT	907	200.554	129.563	-22.353	1.00	50.14	A16S	ATOM	38115	C1'	GUA	910	211.247	132.447	-14.476	1.00	49.74	A16S
ATOM	38063	C5	CYT	907	199.796	130.651	-24.327	1.00	50.14	A16S	ATOM	38116	N9	GUA	910	211.046	131.731	-15.734	1.00	34.62	A16S
ATOM	38064	C2'	CYT	907	199.457	135.140	-24.638	1.00	60.89	A16S	ATOM	38117	C4	GUA	910	211.010	130.376	-15.889	1.00	34.62	A16S
ATOM	38065	O2'	CYT	907	198.846	136.392	-24.422	1.00	60.89	A16S	ATOM	38118	N3	GUA	910	211.155	129.471	-14.906	1.00	34.62	A16S
ATOM	38066	C3'	CYT	907	199.953	134.999	-26.064	1.00	60.89	A16S	ATOM	38119	C2	GUA	910	211.093	128.230	-15.364	1.00	34.62	A16S
ATOM	38067	O3'	CYT	907	200.614	136.174	-26.477	1.00	60.89	A16S	ATOM	38120	N2	GUA	910	211.246	127.196	-14.522	1.00	34.62	A16S
ATOM	38068	P	CYT	908	202.214	136.259	-26.352	1.00	63.81	A16S	ATOM	38121	N1	GUA	910	210.883	127.907	-16.683	1.00	34.62	A16S
ATOM	38069	O1P	CYT	908	202.567	137.682	-26.635	1.00	34.92	A16S	ATOM	38122	C6	GUA	910	210.718	128.827	-17.714	1.00	34.62	A16S
ATOM	38070	O2P	CYT	908	202.830	135.177	-27.164	1.00	34.92	A16S	ATOM	38123	O6	GUA	910	210.523	128.430	-18.870	1.00	34.62	A16S
ATOM	38071	O5'	CYT	908	202.515	135.918	-24.822	1.00	63.81	A16S	ATOM	38124	C5	GUA	910	210.803	130.163	-17.238	1.00	34.62	A16S
ATOM	38072	C5'	CYT	908	202.170	136.844	-23.812	1.00	63.81	A16S	ATOM	38125	N7	GUA	910	210.706	131.366	-17.920	1.00	34.62	A16S

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ATOM  38126  C8  GUA  910     210.855 132.270 -16.989  1.00 34.62      A16S
ATOM  38127  C2' GUA  910     212.707 132.698 -14.083  1.00 49.74      A16S
ATOM  38128  O2' GUA  910     212.854 132.480 -12.697  1.00 49.74      A16S
ATOM  38129  C3' GUA  910     212.888 134.164 -14.462  1.00 49.74      A16S
ATOM  38130  O3' GUA  910     213.907 134.814 -13.699  1.00 49.74      A16S
ATOM  38131  P   CYT  911     215.124 135.552 -14.453  1.00 49.16      A16S
ATOM  38132  O1P CYT  911     215.921 136.339 -13.472  1.00 60.43      A16S
ATOM  38133  O2P CYT  911     214.633 136.208 -15.683  1.00 60.43      A16S
ATOM  38134  O5' CYT  911     216.032 134.332 -14.859  1.00 49.16      A16S
ATOM  38135  C5' CYT  911     216.359 133.361 -13.894  1.00 49.16      A16S
ATOM  38136  C4' CYT  911     217.219 132.315 -14.520  1.00 49.16      A16S
ATOM  38137  O4' CYT  911     218.449 132.852 -15.014  1.00 49.16      A16S
ATOM  38138  C1' CYT  911     219.251 131.753 -15.290  1.00 49.16      A16S
ATOM  38139  N1  CYT  911     220.570 132.189 -15.733  1.00 60.43      A16S
ATOM  38140  C6  CYT  911     221.417 132.896 -14.932  1.00 60.43      A16S
ATOM  38141  C2  CYT  911     220.919 131.889 -17.038  1.00 60.43      A16S
ATOM  38142  O2  CYT  911     220.140 131.193 -17.712  1.00 60.43      A16S
ATOM  38143  N3  CYT  911     222.085 132.357 -17.536  1.00 60.43      A16S
ATOM  38144  C4  CYT  911     222.892 133.086 -16.764  1.00 60.43      A16S
ATOM  38145  N4  CYT  911     224.016 133.568 -17.309  1.00 60.43      A16S
ATOM  38146  C5  CYT  911     222.579 133.363 -15.404  1.00 60.43      A16S
ATOM  38147  C2' CYT  911     218.983 130.686 -14.220  1.00 49.16      A16S
ATOM  38148  O2' CYT  911     218.999 129.433 -14.858  1.00 49.16      A16S
ATOM  38149  C3' CYT  911     217.604 131.126 -13.665  1.00 49.16      A16S
ATOM  38150  O3' CYT  911     216.506 130.263 -13.981  1.00 49.16      A16S
ATOM  38151  P   ADE  912     216.430 128.770 -13.418  1.00 54.12      A16S
ATOM  38152  O1P ADE  912     215.953 128.853 -12.018  1.00 37.37      A16S
ATOM  38153  O2P ADE  912     217.680 128.013 -13.728  1.00 37.37      A16S
ATOM  38154  O5' ADE  912     215.303 128.117 -14.326  1.00 54.12      A16S
ATOM  38155  C5' ADE  912     215.117 126.710 -14.345  1.00 54.12      A16S
ATOM  38156  C4' ADE  912     214.747 126.255 -15.732  1.00 54.12      A16S
ATOM  38157  O4' ADE  912     213.673 127.090 -16.242  1.00 54.12      A16S
ATOM  38158  C1' ADE  912     213.740 127.131 -17.655  1.00 54.12      A16S
ATOM  38159  N9  ADE  912     213.852 128.520 -18.078  1.00 37.37      A16S
ATOM  38160  C4  ADE  912     213.706 128.974 -19.366  1.00 37.37      A16S
ATOM  38161  N3  ADE  912     213.441 128.241 -20.462  1.00 37.37      A16S
ATOM  38162  C2  ADE  912     213.336 129.025 -21.534  1.00 37.37      A16S
ATOM  38163  N1  ADE  912     213.457 130.359 -21.628  1.00 37.37      A16S
ATOM  38164  C6  ADE  912     213.725 131.063 -20.506  1.00 37.37      A16S
ATOM  38165  N6  ADE  912     213.840 132.387 -20.601  1.00 37.37      A16S
ATOM  38166  C5  ADE  912     213.863 130.346 -19.303  1.00 37.37      A16S
ATOM  38167  N7  ADE  912     214.118 130.745 -18.002  1.00 37.37      A16S
ATOM  38168  C8  ADE  912     214.103 129.623 -17.318  1.00 37.37      A16S
ATOM  38169  C2' ADE  912     214.961 126.319 -18.056  1.00 54.12      A16S
ATOM  38170  O2' ADE  912     214.557 124.987 -18.266  1.00 54.12      A16S
ATOM  38171  C3' ADE  912     215.803 126.438 -16.801  1.00 54.12      A16S
ATOM  38172  O3' ADE  912     216.781 125.414 -16.751  1.00 54.12      A16S
ATOM  38173  P   CYT  913     218.224 125.671 -17.402  1.00 48.55      A16S
ATOM  38174  O1P CYT  913     219.036 124.488 -17.016  1.00 33.91      A16S
ATOM  38175  O2P CYT  913     218.686 127.040 -17.035  1.00 33.91      A16S
ATOM  38176  O5' CYT  913     217.930 125.667 -18.965  1.00 48.55      A16S
ATOM  38177  C5' CYT  913     217.476 124.486 -19.593  1.00 48.55      A16S
ATOM  38178  C4' CYT  913     217.107 124.762 -21.020  1.00 48.55      A16S
ATOM  38179  O4' CYT  913     216.065 125.770 -21.066  1.00 48.55      A16S
ATOM  38180  C1' CYT  913     216.169 126.503 -22.272  1.00 48.55      A16S
ATOM  38181  N1  CYT  913     216.386 127.909 -21.948  1.00 33.91      A16S
ATOM  38182  C6  CYT  913     216.703 128.310 -20.680  1.00 33.91      A16S
ATOM  38183  C2  CYT  913     216.283 128.837 -22.982  1.00 33.91      A16S
ATOM  38184  O2  CYT  913     215.902 128.444 -24.094  1.00 33.91      A16S
ATOM  38185  N3  CYT  913     216.578 130.132 -22.739  1.00 33.91      A16S
ATOM  38186  C4  CYT  913     216.914 130.511 -21.504  1.00 33.91      A16S
ATOM  38187  N4  CYT  913     217.217 131.784 -21.315  1.00 33.91      A16S
ATOM  38188  C5  CYT  913     216.961 129.591 -20.414  1.00 33.91      A16S
ATOM  38189  C2' CYT  913     217.365 125.936 -23.029  1.00 48.55      A16S
ATOM  38190  O2' CYT  913     216.878 124.946 -23.901  1.00 48.55      A16S
ATOM  38191  C3' CYT  913     218.192 125.365 -21.883  1.00 48.55      A16S
ATOM  38192  O3' CYT  913     219.102 124.364 -22.310  1.00 48.55      A16S
ATOM  38193  P   ADE  914     220.572 124.785 -22.783  1.00 44.98      A16S
ATOM  38194  O1P ADE  914     221.155 123.574 -23.407  1.00 52.52      A16S
ATOM  38195  O2P ADE  914     221.304 125.464 -21.661  1.00 52.52      A16S
ATOM  38196  O5' ADE  914     220.320 125.872 -23.922  1.00 44.98      A16S
ATOM  38197  C5' ADE  914     220.220 125.495 -25.281  1.00 44.98      A16S
ATOM  38198  C4' ADE  914     219.973 126.709 -26.133  1.00 44.98      A16S
ATOM  38199  O4' ADE  914     218.943 127.499 -25.480  1.00 44.98      A16S
ATOM  38200  C1' ADE  914     219.194 128.887 -25.671  1.00 44.98      A16S
ATOM  38201  N9  ADE  914     219.529 129.459 -24.369  1.00 52.52      A16S
ATOM  38202  C4  ADE  914     219.650 130.791 -24.038  1.00 52.52      A16S
ATOM  38203  N3  ADE  914     219.477 131.861 -24.838  1.00 52.52      A16S
ATOM  38204  C2  ADE  914     219.677 132.994 -24.163  1.00 52.52      A16S
ATOM  38205  N1  ADE  914     219.999 133.163 -22.881  1.00 52.52      A16S
ATOM  38206  C6  ADE  914     220.169 132.068 -22.108  1.00 52.52      A16S
ATOM  38207  N6  ADE  914     220.497 132.230 -20.832  1.00 52.52      A16S
ATOM  38208  C5  ADE  914     219.992 130.814 -22.699  1.00 52.52      A16S
ATOM  38209  N7  ADE  914     220.089 129.524 -22.195  1.00 52.52      A16S
ATOM  38210  C8  ADE  914     219.802 128.761 -23.221  1.00 52.52      A16S
ATOM  38211  C2' ADE  914     220.367 128.968 -26.643  1.00 44.98      A16S
ATOM  38212  O2' ADE  914     219.856 128.925 -27.960  1.00 44.98      A16S
ATOM  38213  C3' ADE  914     221.120 127.696 -26.276  1.00 44.98      A16S
ATOM  38214  O3' ADE  914     222.037 127.311 -27.295  1.00 44.98      A16S
ATOM  38215  P   ADE  915     223.620 127.445 -27.032  1.00 48.54      A16S
ATOM  38216  O1P ADE  915     224.318 126.961 -28.256  1.00 49.19      A16S
ATOM  38217  O2P ADE  915     223.951 126.843 -25.710  1.00 49.19      A16S
ATOM  38218  O5' ADE  915     223.853 129.012 -26.916  1.00 48.54      A16S
ATOM  38219  C5' ADE  915     223.931 129.819 -28.074  1.00 48.54      A16S
ATOM  38220  C4' ADE  915     224.323 131.211 -27.687  1.00 48.54      A16S
ATOM  38221  O4' ADE  915     223.329 131.702 -26.761  1.00 48.54      A16S
ATOM  38222  C1' ADE  915     223.950 132.473 -25.752  1.00 48.54      A16S
ATOM  38223  N9  ADE  915     223.751 131.781 -24.486  1.00 49.19      A16S
ATOM  38224  C4  ADE  915     223.911 132.305 -23.229  1.00 49.19      A16S
ATOM  38225  N3  ADE  915     224.298 133.549 -22.909  1.00 49.19      A16S
ATOM  38226  C2  ADE  915     224.336 133.702 -21.586  1.00 49.19      A16S
ATOM  38227  N1  ADE  915     224.043 132.822 -20.622  1.00 49.19      A16S
ATOM  38228  C6  ADE  915     223.649 131.584 -20.980  1.00 49.19      A16S
ATOM  38229  N6  ADE  915     223.341 130.715 -20.021  1.00 49.19      A16S
ATOM  38230  C5  ADE  915     223.582 131.289 -22.352  1.00 49.19      A16S
ATOM  38231  N7  ADE  915     223.238 130.137 -23.046  1.00 49.19      A16S
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ATOM	38232	C8	ADE	915	223.355	130.482	-24.304	1.00	49.19	A16S	ATOM	38285	C4'	GUA	918	235.508	129.986	-14.824	1.00	39.06	A16S
ATOM	38233	C2'	ADE	915	225.417	132.605	-26.143	1.00	48.54	A16S	ATOM	38286	O4'	GUA	918	234.091	130.238	-14.987	1.00	39.06	A16S
ATOM	38234	O2'	ADE	915	225.556	133.716	-27.005	1.00	48.54	A16S	ATOM	38287	C1'	GUA	918	233.354	129.275	-14.242	1.00	39.06	A16S
ATOM	38235	C3'	ADE	915	225.621	131.313	-26.909	1.00	48.54	A16S	ATOM	38288	N9	GUA	918	232.516	128.518	-15.158	1.00	54.00	A16S
ATOM	38236	O3'	ADE	915	226.734	131.415	-27.783	1.00	48.54	A16S	ATOM	38289	C4	GUA	918	231.495	127.683	-14.800	1.00	54.00	A16S
ATOM	38237	P	GUA	916	228.067	130.586	-27.459	1.00	64.52	A16S	ATOM	38290	N3	GUA	918	231.051	127.478	-13.546	1.00	54.00	A16S
ATOM	38238	O1P	GUA	916	228.986	130.934	-28.562	1.00	54.65	A16S	ATOM	38291	C2	GUA	918	230.075	126.598	-13.508	1.00	54.00	A16S
ATOM	38239	O2P	GUA	916	227.712	129.169	-27.226	1.00	54.65	A16S	ATOM	38292	N2	GUA	918	229.492	126.312	-12.346	1.00	54.00	A16S
ATOM	38240	O5'	GUA	916	228.591	131.171	-26.063	1.00	64.52	A16S	ATOM	38293	N1	GUA	918	229.591	125.947	-14.610	1.00	54.00	A16S
ATOM	38241	C5'	GUA	916	229.022	132.524	-25.958	1.00	64.52	A16S	ATOM	38294	C6	GUA	918	230.032	126.146	-15.914	1.00	54.00	A16S
ATOM	38242	C4'	GUA	916	229.122	132.979	-24.505	1.00	64.52	A16S	ATOM	38295	O6	GUA	918	229.524	125.504	-16.842	1.00	54.00	A16S
ATOM	38243	O4'	GUA	916	227.857	132.806	-23.812	1.00	64.52	A16S	ATOM	38296	C5	GUA	918	231.062	127.112	-15.969	1.00	54.00	A16S
ATOM	38244	C1'	GUA	916	228.096	132.833	-22.414	1.00	64.52	A16S	ATOM	38297	N7	GUA	918	231.768	127.615	-17.050	1.00	54.00	A16S
ATOM	38245	N9	GUA	916	227.434	131.701	-21.774	1.00	54.65	A16S	ATOM	38298	C8	GUA	918	232.615	128.453	-16.521	1.00	54.00	A16S
ATOM	38246	C4	GUA	916	227.191	131.575	-20.434	1.00	54.65	A16S	ATOM	38299	C2'	GUA	918	234.370	128.334	-13.599	1.00	39.06	A16S
ATOM	38247	N3	GUA	916	227.517	132.474	-19.486	1.00	54.65	A16S	ATOM	38300	O2'	GUA	918	234.668	128.746	-12.286	1.00	39.06	A16S
ATOM	38248	C2	GUA	916	227.179	132.063	-18.279	1.00	54.65	A16S	ATOM	38301	C3'	GUA	918	235.549	128.497	-14.542	1.00	39.06	A16S
ATOM	38249	N2	GUA	916	227.472	132.816	-17.212	1.00	54.65	A16S	ATOM	38302	O3'	GUA	918	236.741	128.094	-13.890	1.00	39.06	A16S
ATOM	38250	N1	GUA	916	226.540	130.880	-18.029	1.00	54.65	A16S	ATOM	38303	P	GUA	919	237.297	126.601	-14.120	1.00	44.45	A16S
ATOM	38251	C6	GUA	916	226.174	129.951	-18.994	1.00	54.65	A16S	ATOM	38304	O1P	GUA	919	238.549	126.460	-13.330	1.00	60.98	A16S
ATOM	38252	O6	GUA	916	225.568	128.931	-18.664	1.00	54.65	A16S	ATOM	38305	O2P	GUA	919	237.320	126.388	-15.590	1.00	60.98	A16S
ATOM	38253	C5	GUA	916	226.567	130.360	-20.287	1.00	54.65	A16S	ATOM	38306	O5'	GUA	919	236.182	125.654	-13.480	1.00	44.45	A16S
ATOM	38254	N7	GUA	916	226.420	129.731	-21.511	1.00	54.65	A16S	ATOM	38307	C5'	GUA	919	235.903	125.742	-12.095	1.00	44.45	A16S
ATOM	38255	C8	GUA	916	226.943	130.566	-22.364	1.00	54.65	A16S	ATOM	38308	C4'	GUA	919	234.653	124.970	-11.716	1.00	44.45	A16S
ATOM	38256	C2'	GUA	916	229.611	132.830	-22.208	1.00	64.52	A16S	ATOM	38309	O4'	GUA	919	233.554	125.214	-12.630	1.00	44.45	A16S
ATOM	38257	O2'	GUA	916	230.040	134.154	-21.972	1.00	64.52	A16S	ATOM	38310	C1'	GUA	919	232.520	124.310	-12.298	1.00	44.45	A16S
ATOM	38258	C3'	GUA	916	230.115	132.324	-23.555	1.00	64.52	A16S	ATOM	38311	N9	GUA	919	231.923	123.713	-13.485	1.00	60.98	A16S
ATOM	38259	O3'	GUA	916	231.430	132.844	-23.729	1.00	64.52	A16S	ATOM	38312	C4	GUA	919	230.910	122.787	-13.450	1.00	60.98	A16S
ATOM	38260	P	CYT	917	232.700	131.894	-23.492	1.00	44.83	A16S	ATOM	38313	N3	GUA	919	230.295	122.334	-12.335	1.00	60.98	A16S
ATOM	38261	O1P	CYT	917	233.825	132.520	-24.225	1.00	51.29	A16S	ATOM	38314	C2	GUA	919	229.384	121.424	-12.608	1.00	60.98	A16S
ATOM	38262	O2P	CYT	917	232.298	130.499	-23.799	1.00	51.29	A16S	ATOM	38315	N2	GUA	919	228.679	120.869	-11.611	1.00	60.98	A16S
ATOM	38263	O5'	CYT	917	233.008	131.954	-21.933	1.00	44.83	A16S	ATOM	38316	N1	GUA	919	229.100	120.990	-13.876	1.00	60.98	A16S
ATOM	38264	C5'	CYT	917	233.728	133.040	-21.383	1.00	44.83	A16S	ATOM	38317	C6	GUA	919	229.722	121.440	-15.034	1.00	60.98	A16S
ATOM	38265	C4'	CYT	917	233.525	133.097	-19.890	1.00	44.83	A16S	ATOM	38318	O6	GUA	919	229.399	120.967	-16.119	1.00	60.98	A16S
ATOM	38266	O4'	CYT	917	232.097	133.149	-19.604	1.00	44.83	A16S	ATOM	38319	C5	GUA	919	230.696	122.426	-14.755	1.00	60.98	A16S
ATOM	38267	C1'	CYT	917	231.848	132.553	-18.342	1.00	44.83	A16S	ATOM	38320	N7	GUA	919	231.533	123.136	-15.603	1.00	60.98	A16S
ATOM	38268	N1	CYT	917	230.965	131.398	-18.515	1.00	51.29	A16S	ATOM	38321	C8	GUA	919	232.238	123.894	-14.804	1.00	60.98	A16S
ATOM	38269	C6	CYT	917	230.781	130.814	-19.731	1.00	51.29	A16S	ATOM	38322	C2'	GUA	919	233.155	123.212	-11.446	1.00	44.45	A16S
ATOM	38270	C2	CYT	917	230.339	130.884	-17.386	1.00	51.29	A16S	ATOM	38323	O2'	GUA	919	232.769	123.422	-10.107	1.00	44.45	A16S
ATOM	38271	O2	CYT	917	230.480	131.478	-16.307	1.00	51.29	A16S	ATOM	38324	C3'	GUA	919	234.643	123.453	-11.666	1.00	44.45	A16S
ATOM	38272	N3	CYT	917	229.593	129.763	-17.487	1.00	51.29	A16S	ATOM	38325	O3'	GUA	919	235.351	122.930	-10.540	1.00	44.45	A16S
ATOM	38273	C4	CYT	917	229.450	129.172	-18.667	1.00	51.29	A16S	ATOM	38326	P	URI	920	235.604	121.340	-10.419	1.00	43.48	A16S
ATOM	38274	N4	CYT	917	228.741	128.047	-18.711	1.00	51.29	A16S	ATOM	38327	O1P	URI	920	236.420	121.027	-9.216	1.00	52.52	A16S
ATOM	38275	C5	CYT	917	230.040	129.706	-19.853	1.00	51.29	A16S	ATOM	38328	O2P	URI	920	236.072	120.885	-11.744	1.00	52.52	A16S
ATOM	38276	C2'	CYT	917	233.196	132.080	-17.810	1.00	44.83	A16S	ATOM	38329	O5'	URI	920	234.150	120.739	-10.164	1.00	43.48	A16S
ATOM	38277	O2'	CYT	917	233.780	133.093	-17.027	1.00	44.83	A16S	ATOM	38330	C5'	URI	920	233.550	120.780	-8.866	1.00	43.48	A16S
ATOM	38278	C3'	CYT	917	233.952	131.875	-19.108	1.00	44.83	A16S	ATOM	38331	C4'	URI	920	232.447	119.753	-8.765	1.00	43.48	A16S
ATOM	38279	O3'	CYT	917	235.335	131.830	-18.862	1.00	44.83	A16S	ATOM	38332	O4'	URI	920	231.388	120.097	-9.698	1.00	43.48	A16S
ATOM	38280	P	GUA	918	236.042	130.402	-18.669	1.00	39.06	A16S	ATOM	38333	C1'	URI	920	230.868	118.917	-10.284	1.00	43.48	A16S
ATOM	38281	O1P	GUA	918	237.514	130.655	-18.621	1.00	54.00	A16S	ATOM	38334	N1	URI	920	231.218	118.896	-11.705	1.00	52.52	A16S
ATOM	38282	O2P	GUA	918	235.483	129.484	-19.701	1.00	54.00	A16S	ATOM	38335	C6	URI	920	232.136	119.754	-12.245	1.00	52.52	A16S
ATOM	38283	O5'	GUA	918	235.579	129.922	-17.220	1.00	39.06	A16S	ATOM	38336	C2	URI	920	230.588	117.952	-12.471	1.00	52.52	A16S
ATOM	38284	C5'	GUA	918	236.202	130.454	-16.066	1.00	39.06	A16S	ATOM	38337	O2	URI	920	229.768	117.182	-12.015	1.00	52.52	A16S

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ATOM  38338  N3  URI  920     230.954 117.934 -13.786  1.00 52.52      A16S
ATOM  38339  C4  URI  920     231.863 118.750 -14.393  1.00 52.52      A16S
ATOM  38340  O4  URI  920     232.065 118.621 -15.594  1.00 52.52      A16S
ATOM  38341  C5  URI  920     232.476 119.715 -13.529  1.00 52.52      A16S
ATOM  38342  C2' URI  920     231.530 117.735  -9.589  1.00 43.48      A16S
ATOM  38343  O2' URI  920     230.711 117.339  -8.518  1.00 43.48      A16S
ATOM  38344  C3' URI  920     232.853 118.349  -9.166  1.00 43.48      A16S
ATOM  38345  O3' URI  920     233.452 117.633  -8.103  1.00 43.48      A16S
ATOM  38346  P   GUA  921     234.321 116.335  -8.447  1.00 45.44      A16S
ATOM  38347  O1P GUA  921     234.598 115.522  -7.221  1.00 47.90      A16S
ATOM  38348  O2P GUA  921     235.462 116.810  -9.277  1.00 47.90      A16S
ATOM  38349  O5' GUA  921     233.344 115.522  -9.408  1.00 45.44      A16S
ATOM  38350  C5' GUA  921     232.308 114.708  -8.887  1.00 45.44      A16S
ATOM  38351  C4' GUA  921     231.862 113.715  -9.929  1.00 45.44      A16S
ATOM  38352  O4' GUA  921     231.227 114.393 -11.049  1.00 45.44      A16S
ATOM  38353  C1' GUA  921     231.566 113.746 -12.257  1.00 45.44      A16S
ATOM  38354  N9  GUA  921     232.379 114.674 -13.031  1.00 47.90      A16S
ATOM  38355  C4  GUA  921     232.588 114.675 -14.388  1.00 47.90      A16S
ATOM  38356  N3  GUA  921     232.045 113.821 -15.281  1.00 47.90      A16S
ATOM  38357  C2  GUA  921     232.459 114.068 -16.508  1.00 47.90      A16S
ATOM  38358  N2  GUA  921     232.021 113.330 -17.528  1.00 47.90      A16S
ATOM  38359  N1  GUA  921     233.335 115.058 -16.825  1.00 47.90      A16S
ATOM  38360  C6  GUA  921     233.909 115.939 -15.919  1.00 47.90      A16S
ATOM  38361  O6  GUA  921     234.712 116.788 -16.309  1.00 47.90      A16S
ATOM  38362  C5  GUA  921     233.466 115.702 -14.617  1.00 47.90      A16S
ATOM  38363  N7  GUA  921     233.784 116.352 -13.440  1.00 47.90      A16S
ATOM  38364  C8  GUA  921     233.113 115.713 -12.528  1.00 47.90      A16S
ATOM  38365  C2' GUA  921     232.333 112.483 -11.861  1.00 45.44      A16S
ATOM  38366  O2' GUA  921     231.407 111.439 -11.648  1.00 45.44      A16S
ATOM  38367  C3' GUA  921     232.981 112.921 -10.555  1.00 45.44      A16S
ATOM  38368  O3' GUA  921     233.239 111.815  -9.713  1.00 45.44      A16S
ATOM  38369  P   GUA  922     234.648 111.686  -8.963  1.00 45.33      A16S
ATOM  38370  O1P GUA  922     234.640 110.382  -8.234  1.00 61.30      A16S
ATOM  38371  O2P GUA  922     234.921 112.950  -8.203  1.00 61.30      A16S
ATOM  38372  O5' GUA  922     235.685 111.563 -10.163  1.00 45.33      A16S
ATOM  38373  C5' GUA  922     235.638 110.470 -11.077  1.00 45.33      A16S
ATOM  38374  C4' GUA  922     236.939 110.379 -11.838  1.00 45.33      A16S
ATOM  38375  O4' GUA  922     237.019 111.406 -12.866  1.00 45.33      A16S
ATOM  38376  C1' GUA  922     238.318 111.980 -12.863  1.00 45.33      A16S
ATOM  38377  N9  GUA  922     238.187 113.374 -12.446  1.00 61.30      A16S
ATOM  38378  C4  GUA  922     239.180 114.206 -11.974  1.00 61.30      A16S
ATOM  38379  N3  GUA  922     240.476 113.879 -11.785  1.00 61.30      A16S
ATOM  38380  C2  GUA  922     241.187 114.905 -11.333  1.00 61.30      A16S
ATOM  38381  N2  GUA  922     242.492 114.758 -11.080  1.00 61.30      A16S
ATOM  38382  N1  GUA  922     240.669 116.148 -11.094  1.00 61.30      A16S
ATOM  38383  C6  GUA  922     239.342 116.506 -11.285  1.00 61.30      A16S
ATOM  38384  O6  GUA  922     238.980 117.660 -11.052  1.00 61.30      A16S
ATOM  38385  C5  GUA  922     238.565 115.416 -11.756  1.00 61.30      A16S
ATOM  38386  N7  GUA  922     237.216 115.345 -12.062  1.00 61.30      A16S
ATOM  38387  C8  GUA  922     237.039 114.118 -12.464  1.00 61.30      A16S
ATOM  38388  C2' GUA  922     239.178 111.129 -11.923  1.00 45.33      A16S
ATOM  38389  O2' GUA  922     239.791 110.063 -12.618  1.00 45.33      A16S
ATOM  38390  C3' GUA  922     238.135 110.628 -10.949  1.00 45.33      A16S
ATOM  38391  O3' GUA  922     238.530 109.438 -10.325  1.00 45.33      A16S
ATOM  38392  P   ADE  923     238.992 109.492  -8.805  1.00 49.67      A16S
ATOM  38393  O1P ADE  923     239.353 108.126  -8.336  1.00 47.05      A16S
ATOM  38394  O2P ADE  923     237.954 110.273  -8.080  1.00 47.05      A16S
ATOM  38395  O5' ADE  923     240.305 110.382  -8.872  1.00 49.67      A16S
ATOM  38396  C5' ADE  923     241.552 109.813  -9.218  1.00 49.67      A16S
ATOM  38397  C4' ADE  923     242.664 110.636  -8.629  1.00 49.67      A16S
ATOM  38398  O4' ADE  923     242.581 111.996  -9.128  1.00 49.67      A16S
ATOM  38399  C1' ADE  923     243.029 112.888  -8.130  1.00 49.67      A16S
ATOM  38400  N9  ADE  923     241.986 113.895  -7.918  1.00 47.05      A16S
ATOM  38401  C4  ADE  923     242.117 115.122  -7.309  1.00 47.05      A16S
ATOM  38402  N3  ADE  923     243.206 115.627  -6.709  1.00 47.05      A16S
ATOM  38403  C2  ADE  923     242.971 116.867  -6.268  1.00 47.05      A16S
ATOM  38404  N1  ADE  923     241.859 117.601  -6.359  1.00 47.05      A16S
ATOM  38405  C6  ADE  923     240.785 117.060  -6.971  1.00 47.05      A16S
ATOM  38406  N6  ADE  923     239.680 117.795  -7.082  1.00 47.05      A16S
ATOM  38407  C5  ADE  923     240.900 115.752  -7.465  1.00 47.05      A16S
ATOM  38408  N7  ADE  923     240.001 114.924  -8.113  1.00 47.05      A16S
ATOM  38409  C8  ADE  923     240.688 113.833  -8.346  1.00 47.05      A16S
ATOM  38410  C2' ADE  923     243.444 112.049  -6.916  1.00 49.67      A16S
ATOM  38411  O2' ADE  923     244.827 111.771  -7.012  1.00 49.67      A16S
ATOM  38412  C3' ADE  923     242.630 110.781  -7.120  1.00 49.67      A16S
ATOM  38413  O3' ADE  923     243.290 109.668  -6.537  1.00 49.67      A16S
ATOM  38414  P   GUA  924     242.832 109.132  -5.099  1.00 48.80      A16S
ATOM  38415  O1P GUA  924     243.493 107.833  -4.844  1.00 50.54      A16S
ATOM  38416  O2P GUA  924     241.354 109.210  -5.063  1.00 50.54      A16S
ATOM  38417  O5' GUA  924     243.439 110.198  -4.074  1.00 48.80      A16S
ATOM  38418  C5' GUA  924     244.841 110.223  -3.773  1.00 48.80      A16S
ATOM  38419  C4' GUA  924     245.205 111.484  -3.014  1.00 48.80      A16S
ATOM  38420  O4' GUA  924     244.965 112.647  -3.848  1.00 48.80      A16S
ATOM  38421  C1' GUA  924     244.516 113.725  -3.046  1.00 48.80      A16S
ATOM  38422  N9  GUA  924     243.163 114.056  -3.460  1.00 50.54      A16S
ATOM  38423  C4  GUA  924     242.529 115.254  -3.287  1.00 50.54      A16S
ATOM  38424  N3  GUA  924     243.044 116.341  -2.687  1.00 50.54      A16S
ATOM  38425  C2  GUA  924     242.195 117.355  -2.694  1.00 50.54      A16S
ATOM  38426  N2  GUA  924     242.545 118.532  -2.147  1.00 50.54      A16S
ATOM  38427  N1  GUA  924     240.942 117.295  -3.239  1.00 50.54      A16S
ATOM  38428  C6  GUA  924     240.396 116.182  -3.861  1.00 50.54      A16S
ATOM  38429  O6  GUA  924     239.256 116.238  -4.334  1.00 50.54      A16S
ATOM  38430  C5  GUA  924     241.291 115.096  -3.860  1.00 50.54      A16S
ATOM  38431  N7  GUA  924     241.144 113.815  -4.367  1.00 50.54      A16S
ATOM  38432  C8  GUA  924     242.279 113.235  -4.104  1.00 50.54      A16S
ATOM  38433  C2' GUA  924     244.564 113.266  -1.593  1.00 48.80      A16S
ATOM  38434  O2' GUA  924     245.806 113.629  -1.028  1.00 48.80      A16S
ATOM  38435  C3' GUA  924     244.405 111.763  -1.752  1.00 48.80      A16S
ATOM  38436  O3' GUA  924     244.964 111.082  -0.642  1.00 48.80      A16S
ATOM  38437  P   CYT  925     243.996 110.489   0.489  1.00 47.60      A16S
ATOM  38438  O1P CYT  925     244.871 109.769   1.458  1.00 57.41      A16S
ATOM  38439  O2P CYT  925     242.896 109.746  -0.191  1.00 57.41      A16S
ATOM  38440  O5' CYT  925     243.427 111.807   1.193  1.00 47.60      A16S
ATOM  38441  C5' CYT  925     244.274 112.597   2.028  1.00 47.60      A16S
ATOM  38442  C4' CYT  925     243.716 113.996   2.208  1.00 47.60      A16S
ATOM  38443  O4' CYT  925     243.464 114.591   0.908  1.00 47.60      A16S
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ATOM	38444	C1'	CYT	925	242.402	115.522	1.015	1.00	47.60	A16S	ATOM	38497	C3'	URI	927	232.930	116.199	7.823	1.00	52.32	A16S
ATOM	38445	N1	CYT	925	241.298	115.072	0.175	1.00	57.41	A16S	ATOM	38498	O3'	URI	927	232.122	116.267	8.984	1.00	52.32	A16S
ATOM	38446	C6	CYT	925	241.272	113.821	-0.373	1.00	57.41	A16S	ATOM	38499	P	GUA	928	231.648	114.905	9.690	1.00	53.43	A16S
ATOM	38447	C2	CYT	925	240.259	115.952	-0.036	1.00	57.41	A16S	ATOM	38500	O1P	GUA	928	231.376	115.265	11.101	1.00	49.36	A16S
ATOM	38448	O2	CYT	925	240.318	117.073	0.496	1.00	57.41	A16S	ATOM	38501	O2P	GUA	928	232.617	113.816	9.389	1.00	49.36	A16S
ATOM	38449	N3	CYT	925	239.214	115.570	-0.795	1.00	57.41	A16S	ATOM	38502	O5'	GUA	928	230.270	114.582	8.959	1.00	53.43	A16S
ATOM	38450	C4	CYT	925	239.184	114.349	-1.320	1.00	57.41	A16S	ATOM	38503	C5'	GUA	928	229.168	115.465	9.100	1.00	53.43	A16S
ATOM	38451	N4	CYT	925	238.123	114.017	-2.051	1.00	57.41	A16S	ATOM	38504	C4'	GUA	928	228.159	115.244	8.001	1.00	53.43	A16S
ATOM	38452	C5	CYT	925	240.238	113.419	-1.116	1.00	57.41	A16S	ATOM	38505	O4'	GUA	928	228.765	115.543	6.717	1.00	53.43	A16S
ATOM	38453	C2'	CYT	925	241.958	115.536	2.472	1.00	47.60	A16S	ATOM	38506	C1'	GUA	928	228.143	114.758	5.710	1.00	53.43	A16S
ATOM	38454	O2'	CYT	925	242.637	116.566	3.141	1.00	47.60	A16S	ATOM	38507	N9	GUA	928	229.128	113.840	5.155	1.00	49.36	A16S
ATOM	38455	C3'	CYT	925	242.387	114.152	2.923	1.00	47.60	A16S	ATOM	38508	C4	GUA	928	228.979	113.088	4.019	1.00	49.36	A16S
ATOM	38456	O3'	CYT	925	242.563	114.148	4.323	1.00	47.60	A16S	ATOM	38509	N3	GUA	928	227.912	113.098	3.199	1.00	49.36	A16S
ATOM	38457	P	ADE	926	241.346	113.693	5.272	1.00	46.18	A16S	ATOM	38510	C2	GUA	928	228.041	112.230	2.214	1.00	49.36	A16S
ATOM	38458	O1P	ADE	926	241.904	113.507	6.639	1.00	55.54	A16S	ATOM	38511	N2	GUA	928	227.067	112.090	1.325	1.00	49.36	A16S
ATOM	38459	O2P	ADE	926	240.653	112.556	4.602	1.00	55.54	A16S	ATOM	38512	N1	GUA	928	229.134	111.434	2.033	1.00	49.36	A16S
ATOM	38460	O5'	ADE	926	240.385	114.969	5.323	1.00	46.18	A16S	ATOM	38513	C6	GUA	928	230.251	111.417	2.858	1.00	49.36	A16S
ATOM	38461	C5'	ADE	926	240.777	116.125	6.050	1.00	46.18	A16S	ATOM	38514	O6	GUA	928	231.192	110.670	2.600	1.00	49.36	A16S
ATOM	38462	C4'	ADE	926	239.705	117.184	6.000	1.00	46.18	A16S	ATOM	38515	C5	GUA	928	230.121	112.326	3.931	1.00	49.36	A16S
ATOM	38463	O4'	ADE	926	239.521	117.678	4.644	1.00	46.18	A16S	ATOM	38516	N7	GUA	928	230.984	112.607	4.980	1.00	49.36	A16S
ATOM	38464	C1'	ADE	926	238.152	117.990	4.440	1.00	46.18	A16S	ATOM	38517	C8	GUA	928	230.358	113.520	5.673	1.00	49.36	A16S
ATOM	38465	N9	ADE	926	237.603	117.002	3.512	1.00	55.54	A16S	ATOM	38518	C2'	GUA	928	227.034	113.979	6.409	1.00	53.43	A16S
ATOM	38466	C4	ADE	926	236.431	117.105	2.801	1.00	55.54	A16S	ATOM	38519	O2'	GUA	928	225.881	114.792	6.415	1.00	53.43	A16S
ATOM	38467	N3	ADE	926	235.541	118.112	2.830	1.00	55.54	A16S	ATOM	38520	C3'	GUA	928	227.624	113.840	7.799	1.00	53.43	A16S
ATOM	38468	C2	ADE	926	234.538	117.874	1.992	1.00	55.54	A16S	ATOM	38521	O3'	GUA	928	226.618	113.518	8.743	1.00	53.43	A16S
ATOM	38469	N1	ADE	926	234.341	116.831	1.183	1.00	55.54	A16S	ATOM	38522	P	URI	929	226.441	111.995	9.236	1.00	49.34	A16S
ATOM	38470	C6	ADE	926	235.255	115.838	1.180	1.00	55.54	A16S	ATOM	38523	O1P	URI	929	225.334	112.022	10.225	1.00	48.52	A16S
ATOM	38471	N6	ADE	926	235.074	114.803	0.369	1.00	55.54	A16S	ATOM	38524	O2P	URI	929	227.742	111.404	9.617	1.00	48.52	A16S
ATOM	38472	C5	ADE	926	236.356	115.958	2.033	1.00	55.54	A16S	ATOM	38525	O5'	URI	929	225.909	111.228	7.947	1.00	49.34	A16S
ATOM	38473	N7	ADE	926	237.442	115.127	2.276	1.00	55.54	A16S	ATOM	38526	C5'	URI	929	224.686	111.619	7.333	1.00	49.34	A16S
ATOM	38474	C8	ADE	926	238.150	115.787	3.158	1.00	55.54	A16S	ATOM	38527	C4'	URI	929	224.480	110.877	6.035	1.00	49.34	A16S
ATOM	38475	C2'	ADE	926	237.479	117.870	5.806	1.00	46.18	A16S	ATOM	38528	O4'	URI	929	225.533	111.208	5.089	1.00	49.34	A16S
ATOM	38476	O2'	ADE	926	237.600	119.090	6.510	1.00	46.18	A16S	ATOM	38529	C1'	URI	929	225.715	110.118	4.195	1.00	49.34	A16S
ATOM	38477	C3'	ADE	926	238.313	116.768	6.432	1.00	46.18	A16S	ATOM	38530	N1	URI	929	227.088	109.613	4.308	1.00	48.52	A16S
ATOM	38478	O3'	ADE	926	238.185	116.767	7.843	1.00	46.18	A16S	ATOM	38531	C6	URI	929	227.832	109.760	5.454	1.00	48.52	A16S
ATOM	38479	P	URI	927	237.432	115.550	8.568	1.00	52.32	A16S	ATOM	38532	C2	URI	929	227.595	108.959	3.219	1.00	48.52	A16S
ATOM	38480	O1P	URI	927	237.674	115.686	10.029	1.00	49.70	A16S	ATOM	38533	O2	URI	929	226.973	108.835	2.197	1.00	48.52	A16S
ATOM	38481	O2P	URI	927	237.824	114.292	7.885	1.00	49.70	A16S	ATOM	38534	N3	URI	929	228.857	108.456	3.371	1.00	48.52	A16S
ATOM	38482	O5'	URI	927	235.894	115.819	8.237	1.00	52.32	A16S	ATOM	38535	C4	URI	929	229.651	108.547	4.485	1.00	48.52	A16S
ATOM	38483	C5'	URI	927	235.275	117.049	8.597	1.00	52.32	A16S	ATOM	38536	O4	URI	929	230.763	108.029	4.473	1.00	48.52	A16S
ATOM	38484	C4'	URI	927	234.006	117.274	7.794	1.00	52.32	A16S	ATOM	38537	C5	URI	929	229.064	109.260	5.579	1.00	48.52	A16S
ATOM	38485	O4'	URI	927	234.326	117.378	6.383	1.00	52.32	A16S	ATOM	38538	C2'	URI	929	224.723	109.037	4.616	1.00	49.34	A16S
ATOM	38486	C1'	URI	927	233.228	116.905	5.614	1.00	52.32	A16S	ATOM	38539	O2'	URI	929	223.519	109.218	3.895	1.00	49.34	A16S
ATOM	38487	N1	URI	927	233.645	115.698	4.885	1.00	49.70	A16S	ATOM	38540	C3'	URI	929	224.554	109.363	6.089	1.00	49.34	A16S
ATOM	38488	C6	URI	927	234.768	115.000	5.229	1.00	49.70	A16S	ATOM	38541	O3'	URI	929	223.359	108.799	6.589	1.00	49.34	A16S
ATOM	38489	C2	URI	927	232.844	115.284	3.846	1.00	49.70	A16S	ATOM	38542	P	GUA	930	223.302	107.230	6.909	1.00	54.64	A16S
ATOM	38490	O2	URI	927	231.849	115.886	3.507	1.00	49.70	A16S	ATOM	38543	O1P	GUA	930	221.962	106.938	7.473	1.00	61.72	A16S
ATOM	38491	N3	URI	927	233.246	114.138	3.223	1.00	49.70	A16S	ATOM	38544	O2P	GUA	930	224.521	106.832	7.662	1.00	61.72	A16S
ATOM	38492	C4	URI	927	234.341	113.382	3.525	1.00	49.70	A16S	ATOM	38545	O5'	GUA	930	223.373	106.544	5.475	1.00	54.64	A16S
ATOM	38493	O4	URI	927	234.535	112.340	2.910	1.00	49.70	A16S	ATOM	38546	C5'	GUA	930	222.244	106.503	4.607	1.00	54.64	A16S
ATOM	38494	C5	URI	927	235.134	113.883	4.602	1.00	49.70	A16S	ATOM	38547	C4'	GUA	930	222.526	105.556	3.471	1.00	54.64	A16S
ATOM	38495	C2'	URI	927	232.114	116.573	6.603	1.00	52.32	A16S	ATOM	38548	O4'	GUA	930	223.708	106.024	2.766	1.00	54.64	A16S
ATOM	38496	O2'	URI	927	231.328	117.723	6.836	1.00	52.32	A16S	ATOM	38549	C1'	GUA	930	224.506	104.922	2.381	1.00	54.64	A16S

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ATOM  38551  C4  GUA  930     226.924 104.292   2.784  1.00 61.72      A16S
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ATOM  38559  N7  GUA  930     227.346 105.706   4.514  1.00 61.72      A16S
ATOM  38560  C8  GUA  930     226.112 105.849   4.110  1.00 61.72      A16S
ATOM  38561  C2' GUA  930     223.741 103.658   2.764  1.00 54.64      A16S
ATOM  38562  O2' GUA  930     222.955 103.246   1.674  1.00 54.64      A16S
ATOM  38563  C3' GUA  930     222.901 104.159   3.923  1.00 54.64      A16S
ATOM  38564  O3' GUA  930     221.750 103.360   4.111  1.00 54.64      A16S
ATOM  38565  P   GUA  931     221.786 102.161   5.177  1.00 63.92      A16S
ATOM  38566  O1P GUA  931     220.545 101.357   4.964  1.00 62.16      A16S
ATOM  38567  O2P GUA  931     222.083 102.713   6.527  1.00 62.16      A16S
ATOM  38568  O5' GUA  931     223.016 101.269   4.703  1.00 63.92      A16S
ATOM  38569  C5' GUA  931     222.860 100.356   3.629  1.00 63.92      A16S
ATOM  38570  C4' GUA  931     224.184  99.740   3.270  1.00 63.92      A16S
ATOM  38571  O4' GUA  931     225.151 100.811   3.141  1.00 63.92      A16S
ATOM  38572  C1' GUA  931     226.433 100.335   3.500  1.00 63.92      A16S
ATOM  38573  N9  GUA  931     226.916 101.143   4.609  1.00 62.16      A16S
ATOM  38574  C4  GUA  931     228.209 101.206   5.059  1.00 62.16      A16S
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ATOM  38577  N2  GUA  931     231.510 100.203   4.823  1.00 62.16      A16S
ATOM  38578  N1  GUA  931     230.449 101.645   6.269  1.00 62.16      A16S
ATOM  38579  C6  GUA  931     229.380 102.346   6.810  1.00 62.16      A16S
ATOM  38580  O6  GUA  931     229.556 103.083   7.775  1.00 62.16      A16S
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ATOM  38582  N7  GUA  931     226.901 102.563   6.330  1.00 62.16      A16S
ATOM  38583  C8  GUA  931     226.183 101.982   5.408  1.00 62.16      A16S
ATOM  38584  C2' GUA  931     226.280  98.861   3.868  1.00 63.92      A16S
ATOM  38585  O2' GUA  931     226.526  98.085   2.713  1.00 63.92      A16S
ATOM  38586  C3' GUA  931     224.820  98.820   4.298  1.00 63.92      A16S
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ATOM  38590  O2P URI  932     223.735  97.172   6.631  1.00 60.29      A16S
ATOM  38591  O5' URI  932     225.954  96.396   5.745  1.00 59.54      A16S
ATOM  38592  C5' URI  932     226.776  95.609   4.884  1.00 59.54      A16S
ATOM  38593  C4' URI  932     228.216  95.637   5.339  1.00 59.54      A16S
ATOM  38594  O4' URI  932     228.733  96.986   5.240  1.00 59.54      A16S
ATOM  38595  C1' URI  932     229.616  97.240   6.315  1.00 59.54      A16S
ATOM  38596  N1  URI  932     228.991  98.245   7.183  1.00 60.29      A16S
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ATOM  38598  C2  URI  932     229.782  98.842   8.144  1.00 60.29      A16S
ATOM  38599  O2  URI  932     230.952  98.551   8.307  1.00 60.29      A16S
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ATOM  38603  C5  URI  932     227.084  99.515   7.809  1.00 60.29      A16S
ATOM  38604  C2' URI  932     229.817  95.909   7.026  1.00 59.54      A16S
ATOM  38605  O2' URI  932     230.843  95.197   6.375  1.00 59.54      A16S
ATOM  38606  C3' URI  932     228.471  95.257   6.783  1.00 59.54      A16S
ATOM  38607  O3' URI  932     228.562  93.851   6.929  1.00 59.54      A16S
ATOM  38608  P   URI  933     228.323  93.188   8.373  1.00 67.21      A16S
ATOM  38609  O1P URI  933     228.587  91.730   8.208  1.00 64.59      A16S
ATOM  38610  O2P URI  933     227.023  93.656   8.929  1.00 64.59      A16S
ATOM  38611  O5' URI  933     229.478  93.795   9.278  1.00 67.21      A16S
ATOM  38612  C5' URI  933     230.834  93.468   9.029  1.00 67.21      A16S
ATOM  38613  C4' URI  933     231.718  94.241   9.959  1.00 67.21      A16S
ATOM  38614  O4' URI  933     231.495  95.656   9.736  1.00 67.21      A16S
ATOM  38615  C1' URI  933     231.683  96.352  10.954  1.00 67.21      A16S
ATOM  38616  N1  URI  933     230.454  97.075  11.290  1.00 64.59      A16S
ATOM  38617  C6  URI  933     229.248  96.749  10.731  1.00 64.59      A16S
ATOM  38618  C2  URI  933     230.561  98.095  12.203  1.00 64.59      A16S
ATOM  38619  O2  URI  933     231.610  98.402  12.720  1.00 64.59      A16S
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ATOM  38621  C4  URI  933     228.151  98.463  11.983  1.00 64.59      A16S
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ATOM  38623  C5  URI  933     228.120  97.389  11.039  1.00 64.59      A16S
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ATOM  38625  O2' URI  933     233.433  95.152  12.110  1.00 67.21      A16S
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ATOM  38631  O5' URI  934     231.633  93.567  14.407  1.00 60.69      A16S
ATOM  38632  C5' URI  934     232.945  93.953  14.831  1.00 60.69      A16S
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ATOM  38634  O4' URI  934     232.282  96.270  15.219  1.00 60.69      A16S
ATOM  38635  C1' URI  934     231.505  96.969  16.181  1.00 60.69      A16S
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ATOM  38639  O2  URI  934     229.636  98.815  16.933  1.00 69.54      A16S
ATOM  38640  N3  URI  934     227.966  97.822  15.771  1.00 69.54      A16S
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ATOM  38642  O4  URI  934     226.256  96.916  14.603  1.00 69.54      A16S
ATOM  38643  C5  URI  934     228.384  95.866  14.502  1.00 69.54      A16S
ATOM  38644  C2' URI  934     231.703  96.268  17.524  1.00 60.69      A16S
ATOM  38645  O2' URI  934     232.747  96.907  18.223  1.00 60.69      A16S
ATOM  38646  C3' URI  934     232.044  94.850  17.077  1.00 60.69      A16S
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ATOM  38649  O1P ADE  935     233.195  91.985  19.262  1.00 82.23      A16S
ATOM  38650  O2P ADE  935     230.973  92.424  18.037  1.00 82.23      A16S
ATOM  38651  O5' ADE  935     231.515  93.615  20.160  1.00 70.92      A16S
ATOM  38652  C5' ADE  935     230.408  93.051  20.855  1.00 70.92      A16S
ATOM  38653  C4' ADE  935     229.821  94.074  21.797  1.00 70.92      A16S
ATOM  38654  O4' ADE  935     230.810  94.431  22.786  1.00 70.92      A16S
ATOM  38655  C1' ADE  935     230.723  95.807  23.073  1.00 70.92      A16S
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ATOM	38656	N9	ADE	935	232.048	96.381	22.868	1.00	82.23	A16S	ATOM	38709	O2'	URI	937	229.600	105.077	16.084	1.00	77.30	A16S
ATOM	38657	C4	ADE	935	232.600	97.423	23.567	1.00	82.23	A16S	ATOM	38710	C3'	URI	937	227.940	103.278	15.970	1.00	77.30	A16S
ATOM	38658	N3	ADE	935	232.025	98.139	24.545	1.00	82.23	A16S	ATOM	38711	O3'	URI	937	226.959	104.303	16.230	1.00	77.30	A16S
ATOM	38659	C2	ADE	935	232.866	99.056	25.009	1.00	82.23	A16S	ATOM	38712	P	URI	938	227.289	105.558	17.220	1.00	63.55	A16S
ATOM	38660	N1	ADE	935	234.122	99.319	24.636	1.00	82.23	A16S	ATOM	38713	O1P	URI	938	227.520	106.763	16.385	1.00	61.19	A16S
ATOM	38661	C6	ADE	935	234.670	98.582	23.651	1.00	82.23	A16S	ATOM	38714	O2P	URI	938	228.284	105.183	18.259	1.00	61.19	A16S
ATOM	38662	N6	ADE	935	235.926	98.848	23.281	1.00	82.23	A16S	ATOM	38715	O5'	URI	938	225.917	105.787	17.995	1.00	63.55	A16S
ATOM	38663	C5	ADE	935	233.878	97.575	23.072	1.00	82.23	A16S	ATOM	38716	C5'	URI	938	225.356	104.734	18.778	1.00	63.55	A16S
ATOM	38664	N7	ADE	935	234.122	96.656	22.062	1.00	82.23	A16S	ATOM	38717	C4'	URI	938	224.110	105.202	19.480	1.00	63.55	A16S
ATOM	38665	C8	ADE	935	233.005	95.978	21.978	1.00	82.23	A16S	ATOM	38718	O4'	URI	938	224.426	106.383	20.263	1.00	63.55	A16S
ATOM	38666	C2'	ADE	935	229.592	96.412	22.238	1.00	70.92	A16S	ATOM	38719	C1'	URI	938	223.269	107.194	20.375	1.00	63.55	A16S
ATOM	38667	O2'	ADE	935	228.452	96.574	23.051	1.00	70.92	A16S	ATOM	38720	N1	URI	938	223.556	108.519	19.824	1.00	61.19	A16S
ATOM	38668	C3'	ADE	935	229.415	95.374	21.131	1.00	70.92	A16S	ATOM	38721	C6	URI	938	224.690	108.775	19.109	1.00	61.19	A16S
ATOM	38669	O3'	ADE	935	228.054	95.249	20.727	1.00	70.92	A16S	ATOM	38722	C2	URI	938	222.614	109.497	20.040	1.00	61.19	A16S
ATOM	38670	P	ADE	936	227.599	95.754	19.271	1.00	63.17	A16S	ATOM	38723	O2	URI	938	221.601	109.305	20.685	1.00	61.19	A16S
ATOM	38671	O1P	ADE	936	226.289	95.139	18.929	1.00	66.86	A16S	ATOM	38724	N3	URI	938	222.892	110.707	19.471	1.00	61.19	A16S
ATOM	38672	O2P	ADE	936	228.757	95.564	18.360	1.00	66.86	A16S	ATOM	38725	C4	URI	938	223.992	111.026	18.725	1.00	61.19	A16S
ATOM	38673	O5'	ADE	936	227.359	97.312	19.486	1.00	63.17	A16S	ATOM	38726	O4	URI	938	224.057	112.134	18.205	1.00	61.19	A16S
ATOM	38674	C5'	ADE	936	226.471	97.782	20.495	1.00	63.17	A16S	ATOM	38727	C5	URI	938	224.936	109.966	18.563	1.00	61.19	A16S
ATOM	38675	C4'	ADE	936	226.801	99.207	20.839	1.00	63.17	A16S	ATOM	38728	C2'	URI	938	222.167	106.521	19.560	1.00	63.55	A16S
ATOM	38676	O4'	ADE	936	228.093	99.243	21.487	1.00	63.17	A16S	ATOM	38729	O2'	URI	938	221.328	105.747	20.400	1.00	63.55	A16S
ATOM	38677	C1'	ADE	936	228.763	100.442	21.140	1.00	63.17	A16S	ATOM	38730	C3'	URI	938	222.992	105.698	18.586	1.00	63.55	A16S
ATOM	38678	N9	ADE	936	230.134	100.109	20.727	1.00	66.86	A16S	ATOM	38731	O3'	URI	938	222.228	104.644	18.035	1.00	63.55	A16S
ATOM	38679	C4	ADE	936	231.285	100.564	21.329	1.00	66.86	A16S	ATOM	38732	P	CYT	939	221.517	104.854	16.614	1.00	63.40	A16S
ATOM	38680	N3	ADE	936	231.384	101.389	22.387	1.00	66.86	A16S	ATOM	38733	O1P	CYT	939	220.632	103.685	16.376	1.00	57.91	A16S
ATOM	38681	C2	ADE	936	232.661	101.594	22.707	1.00	66.86	A16S	ATOM	38734	O2P	CYT	939	222.583	105.179	15.630	1.00	57.91	A16S
ATOM	38682	N1	ADE	936	233.770	101.115	22.130	1.00	66.86	A16S	ATOM	38735	O5'	CYT	939	220.616	106.153	16.817	1.00	63.40	A16S
ATOM	38683	C6	ADE	936	233.639	100.295	21.065	1.00	66.86	A16S	ATOM	38736	C5'	CYT	939	219.549	106.134	17.743	1.00	63.40	A16S
ATOM	38684	N6	ADE	936	234.746	99.826	20.485	1.00	66.86	A16S	ATOM	38737	C4'	CYT	939	218.859	107.471	17.796	1.00	63.40	A16S
ATOM	38685	C5	ADE	936	232.330	99.986	20.631	1.00	66.86	A16S	ATOM	38738	O4'	CYT	939	219.784	108.504	18.228	1.00	63.40	A16S
ATOM	38686	N7	ADE	936	231.849	99.183	19.605	1.00	66.86	A16S	ATOM	38739	C1'	CYT	939	219.311	109.765	17.770	1.00	63.40	A16S
ATOM	38687	C8	ADE	936	230.548	99.293	19.701	1.00	66.86	A16S	ATOM	38740	N1	CYT	939	220.329	110.405	16.928	1.00	57.91	A16S
ATOM	38688	C2'	ADE	936	227.904	101.196	20.117	1.00	63.17	A16S	ATOM	38741	C6	CYT	939	221.505	109.788	16.610	1.00	57.91	A16S
ATOM	38689	O2'	ADE	936	227.253	102.273	20.751	1.00	63.17	A16S	ATOM	38742	C2	CYT	939	220.045	111.672	16.435	1.00	57.91	A16S
ATOM	38690	C3'	ADE	936	226.949	100.105	19.625	1.00	63.17	A16S	ATOM	38743	O2	CYT	939	218.980	112.211	16.770	1.00	57.91	A16S
ATOM	38691	O3'	ADE	936	225.665	100.619	19.240	1.00	63.17	A16S	ATOM	38744	N3	CYT	939	220.923	112.278	15.610	1.00	57.91	A16S
ATOM	38692	P	URI	937	225.043	100.267	17.787	1.00	77.30	A16S	ATOM	38745	C4	CYT	939	222.056	111.664	15.284	1.00	57.91	A16S
ATOM	38693	O1P	URI	937	223.673	100.830	17.763	1.00	65.36	A16S	ATOM	38746	N4	CYT	939	222.876	112.293	14.453	1.00	57.91	A16S
ATOM	38694	O2P	URI	937	225.252	98.833	17.469	1.00	65.36	A16S	ATOM	38747	C5	CYT	939	222.390	110.377	15.795	1.00	57.91	A16S
ATOM	38695	O5'	URI	937	225.935	101.113	16.786	1.00	77.30	A16S	ATOM	38748	C2'	CYT	939	218.069	109.484	16.928	1.00	63.40	A16S
ATOM	38696	C5'	URI	937	227.338	100.993	16.837	1.00	77.30	A16S	ATOM	38749	O2'	CYT	939	216.923	109.622	17.742	1.00	63.40	A16S
ATOM	38697	C4'	URI	937	227.972	102.321	17.146	1.00	77.30	A16S	ATOM	38750	C3'	CYT	939	218.337	108.050	16.499	1.00	63.40	A16S
ATOM	38698	O4'	URI	937	229.336	102.095	17.518	1.00	77.30	A16S	ATOM	38751	O3'	CYT	939	217.156	107.410	16.054	1.00	63.40	A16S
ATOM	38699	C1'	URI	937	230.184	102.811	16.664	1.00	77.30	A16S	ATOM	38752	P	GUA	940	216.921	107.184	14.475	1.00	56.16	A16S
ATOM	38700	N1	URI	937	231.188	101.870	16.154	1.00	65.36	A16S	ATOM	38753	O1P	GUA	940	215.745	106.280	14.394	1.00	50.36	A16S
ATOM	38701	C6	URI	937	232.395	101.761	16.798	1.00	65.36	A16S	ATOM	38754	O2P	GUA	940	218.185	106.792	13.801	1.00	50.36	A16S
ATOM	38702	C2	URI	937	230.893	101.100	15.054	1.00	65.36	A16S	ATOM	38755	O5'	GUA	940	216.517	108.624	13.933	1.00	56.16	A16S
ATOM	38703	O2	URI	937	229.846	101.187	14.441	1.00	65.36	A16S	ATOM	38756	C5'	GUA	940	215.308	109.210	14.339	1.00	56.16	A16S
ATOM	38704	N3	URI	937	231.879	100.215	14.702	1.00	65.36	A16S	ATOM	38757	C4'	GUA	940	215.382	110.698	14.203	1.00	56.16	A16S
ATOM	38705	C4	URI	937	233.103	100.042	15.326	1.00	65.36	A16S	ATOM	38758	O4'	GUA	940	216.662	111.154	14.716	1.00	56.16	A16S
ATOM	38706	O4	URI	937	233.859	99.156	14.944	1.00	65.36	A16S	ATOM	38759	C1'	GUA	940	217.053	112.334	14.032	1.00	56.16	A16S
ATOM	38707	C5	URI	937	233.332	100.899	16.431	1.00	65.36	A16S	ATOM	38760	N9	GUA	940	218.284	112.047	13.309	1.00	50.36	A16S
ATOM	38708	C2'	URI	937	229.380	103.738	15.749	1.00	77.30	A16S	ATOM	38761	C4	GUA	940	218.973	112.908	12.498	1.00	50.36	A16S

ATOM	38762	N3	GUA	940	218.640	114.185	12.234	1.00	50.36	A16S	ATOM	38815	C2'	ADE	942	214.245	110.527	2.087	1.00	54.65	A16S
ATOM	38763	C2	GUA	940	219.510	114.760	11.425	1.00	50.36	A16S	ATOM	38816	O2'	ADE	942	214.293	110.083	0.746	1.00	54.65	A16S
ATOM	38764	N2	GUA	940	219.356	116.038	11.093	1.00	50.36	A16S	ATOM	38817	C3'	ADE	942	213.271	111.664	2.394	1.00	54.65	A16S
ATOM	38765	N1	GUA	940	220.600	114.123	10.893	1.00	50.36	A16S	ATOM	38818	O3'	ADE	942	212.163	111.918	1.520	1.00	54.65	A16S
ATOM	38766	C6	GUA	940	220.949	112.801	11.146	1.00	50.36	A16S	ATOM	38819	P	GUA	943	212.341	111.915	-0.089	1.00	45.60	A16S
ATOM	38767	O6	GUA	940	221.940	112.309	10.610	1.00	50.36	A16S	ATOM	38820	O1P	GUA	943	212.648	110.536	-0.547	1.00	50.88	A16S
ATOM	38768	C5	GUA	940	220.047	112.186	12.030	1.00	50.36	A16S	ATOM	38821	O2P	GUA	943	211.163	112.611	-0.650	1.00	50.88	A16S
ATOM	38769	N7	GUA	940	220.039	110.900	12.543	1.00	50.36	A16S	ATOM	38822	O5'	GUA	943	213.579	112.863	-0.411	1.00	45.60	A16S
ATOM	38770	C8	GUA	940	218.974	110.862	13.295	1.00	50.36	A16S	ATOM	38823	C5'	GUA	943	214.712	112.354	-1.110	1.00	45.60	A16S
ATOM	38771	C2'	GUA	940	215.909	112.658	13.075	1.00	56.16	A16S	ATOM	38824	C4'	GUA	943	214.872	113.032	-2.454	1.00	45.60	A16S
ATOM	38772	O2'	GUA	940	214.973	113.453	13.775	1.00	56.16	A16S	ATOM	38825	O4'	GUA	943	213.904	112.560	-3.430	1.00	45.60	A16S
ATOM	38773	C3'	GUA	940	215.375	111.261	12.800	1.00	56.16	A16S	ATOM	38826	C1'	GUA	943	213.739	113.553	-4.436	1.00	45.60	A16S
ATOM	38774	O3'	GUA	940	214.057	111.291	12.283	1.00	56.16	A16S	ATOM	38827	N9	GUA	943	212.318	113.817	-4.624	1.00	50.88	A16S
ATOM	38775	P	ADE	941	213.804	111.010	10.719	1.00	55.84	A16S	ATOM	38828	C4	GUA	943	211.745	114.605	-5.604	1.00	50.88	A16S
ATOM	38776	O1P	ADE	941	212.326	111.145	10.472	1.00	49.64	A16S	ATOM	38829	N3	GUA	943	212.397	115.273	-6.579	1.00	50.88	A16S
ATOM	38777	O2P	ADE	941	214.498	109.753	10.339	1.00	49.64	A16S	ATOM	38830	C2	GUA	943	211.562	115.931	-7.373	1.00	50.88	A16S
ATOM	38778	O5'	ADE	941	214.529	112.223	9.996	1.00	55.84	A16S	ATOM	38831	N2	GUA	943	212.025	116.645	-8.413	1.00	50.88	A16S
ATOM	38779	C5'	ADE	941	213.934	113.507	9.976	1.00	55.84	A16S	ATOM	38832	N1	GUA	943	210.212	115.933	-7.211	1.00	50.88	A16S
ATOM	38780	C4'	ADE	941	214.717	114.410	9.066	1.00	55.84	A16S	ATOM	38833	C6	GUA	943	209.528	115.252	-6.213	1.00	50.88	A16S
ATOM	38781	O4'	ADE	941	216.070	114.519	9.581	1.00	55.84	A16S	ATOM	38834	O6	GUA	943	208.301	115.315	-6.157	1.00	50.88	A16S
ATOM	38782	C1'	ADE	941	216.988	114.498	8.515	1.00	55.84	A16S	ATOM	38835	C5	GUA	943	210.396	114.549	-5.367	1.00	50.88	A16S
ATOM	38783	N9	ADE	941	217.758	113.265	8.653	1.00	49.64	A16S	ATOM	38836	N7	GUA	943	210.119	113.753	-4.266	1.00	50.88	A16S
ATOM	38784	C4	ADE	941	218.892	112.924	7.962	1.00	49.64	A16S	ATOM	38837	C8	GUA	943	211.287	113.339	-3.860	1.00	50.88	A16S
ATOM	38785	N3	ADE	941	219.520	113.651	7.024	1.00	49.64	A16S	ATOM	38838	C2'	GUA	943	214.492	114.797	-3.965	1.00	45.60	A16S
ATOM	38786	C2	ADE	941	220.585	113.002	6.571	1.00	49.64	A16S	ATOM	38839	O2'	GUA	943	215.727	114.880	-4.640	1.00	45.60	A16S
ATOM	38787	N1	ADE	941	221.056	111.797	6.918	1.00	49.64	A16S	ATOM	38840	C3'	GUA	943	214.643	114.520	-2.474	1.00	45.60	A16S
ATOM	38788	C6	ADE	941	220.395	111.092	7.856	1.00	49.64	A16S	ATOM	38841	O3'	GUA	943	215.747	115.210	-1.950	1.00	45.60	A16S
ATOM	38789	N6	ADE	941	220.854	109.885	8.181	1.00	49.64	A16S	ATOM	38842	P	CYT	944	215.564	116.729	-1.517	1.00	41.07	A16S
ATOM	38790	C5	ADE	941	219.255	111.673	8.426	1.00	49.64	A16S	ATOM	38843	O1P	CYT	944	216.893	117.183	-1.035	1.00	59.65	A16S
ATOM	38791	N7	ADE	941	218.370	111.234	9.398	1.00	49.64	A16S	ATOM	38844	O2P	CYT	944	214.382	116.794	-0.617	1.00	59.65	A16S
ATOM	38792	C8	ADE	941	217.504	112.212	9.496	1.00	49.64	A16S	ATOM	38845	O5'	CYT	944	215.207	117.503	-2.865	1.00	41.07	A16S
ATOM	38793	C2'	ADE	941	216.172	114.610	7.222	1.00	55.84	A16S	ATOM	38846	C5'	CYT	944	216.234	118.103	-3.633	1.00	41.07	A16S
ATOM	38794	O2'	ADE	941	215.960	115.971	6.915	1.00	55.84	A16S	ATOM	38847	C4'	CYT	944	215.645	119.033	-4.649	1.00	41.07	A16S
ATOM	38795	C3'	ADE	941	214.866	113.939	7.630	1.00	55.84	A16S	ATOM	38848	O4'	CYT	944	214.619	118.304	-5.357	1.00	41.07	A16S
ATOM	38796	O3'	ADE	941	213.761	114.420	6.854	1.00	55.84	A16S	ATOM	38849	C1'	CYT	944	213.562	119.176	-5.704	1.00	41.07	A16S
ATOM	38797	P	ADE	942	212.798	113.379	6.086	1.00	54.65	A16S	ATOM	38850	N1	CYT	944	212.333	118.661	-5.096	1.00	59.65	A16S
ATOM	38798	O1P	ADE	942	211.595	114.122	5.623	1.00	63.15	A16S	ATOM	38851	C6	CYT	944	212.375	117.880	-3.973	1.00	59.65	A16S
ATOM	38799	O2P	ADE	942	212.641	112.171	6.933	1.00	63.15	A16S	ATOM	38852	C2	CYT	944	211.122	118.991	-5.676	1.00	59.65	A16S
ATOM	38800	O5'	ADE	942	213.643	112.962	4.806	1.00	54.65	A16S	ATOM	38853	O2	CYT	944	211.128	119.689	-6.706	1.00	59.65	A16S
ATOM	38801	C5'	ADE	942	213.668	113.769	3.626	1.00	54.65	A16S	ATOM	38854	N3	CYT	944	209.975	118.549	-5.108	1.00	59.65	A16S
ATOM	38802	C4'	ADE	942	214.110	112.919	2.474	1.00	54.65	A16S	ATOM	38855	C4	CYT	944	210.023	117.808	-3.998	1.00	59.65	A16S
ATOM	38803	O4'	ADE	942	215.471	112.501	2.705	1.00	54.65	A16S	ATOM	38856	N4	CYT	944	208.871	117.424	-3.451	1.00	59.65	A16S
ATOM	38804	C1'	ADE	942	215.596	111.111	2.529	1.00	54.65	A16S	ATOM	38857	C5	CYT	944	211.254	117.437	-3.396	1.00	59.65	A16S
ATOM	38805	N9	ADE	942	216.178	110.588	3.754	1.00	63.15	A16S	ATOM	38858	C2'	CYT	944	213.938	120.577	-5.223	1.00	41.07	A16S
ATOM	38806	C4	ADE	942	217.299	109.805	3.887	1.00	63.15	A16S	ATOM	38859	O2'	CYT	944	214.479	121.287	-6.313	1.00	41.07	A16S
ATOM	38807	N3	ADE	942	218.085	109.322	2.912	1.00	63.15	A16S	ATOM	38860	C3'	CYT	944	214.944	120.272	-4.111	1.00	41.07	A16S
ATOM	38808	C2	ADE	942	219.083	108.611	3.430	1.00	63.15	A16S	ATOM	38861	O3'	CYT	944	215.906	121.320	-3.975	1.00	41.07	A16S
ATOM	38809	N1	ADE	942	219.359	108.349	4.706	1.00	63.15	A16S	ATOM	38862	P	ADE	945	215.845	122.320	-2.724	1.00	66.67	A16S
ATOM	38810	C6	ADE	942	218.542	108.848	5.655	1.00	63.15	A16S	ATOM	38863	O1P	ADE	945	214.754	123.261	-3.037	1.00	62.55	A16S
ATOM	38811	N6	ADE	942	218.797	108.585	6.933	1.00	63.15	A16S	ATOM	38864	O2P	ADE	945	217.210	122.837	-2.525	1.00	62.55	A16S
ATOM	38812	C5	ADE	942	217.462	109.617	5.243	1.00	63.15	A16S	ATOM	38865	O5'	ADE	945	215.474	121.381	-1.482	1.00	66.67	A16S
ATOM	38813	N7	ADE	942	216.465	110.261	5.952	1.00	63.15	A16S	ATOM	38866	C5'	ADE	945	215.471	121.855	-0.118	1.00	66.67	A16S
ATOM	38814	C8	ADE	942	215.728	110.814	5.023	1.00	63.15	A16S	ATOM	38867	C4'	ADE	945	214.208	121.388	0.570	1.00	66.67	A16S

ATOM	38868	O4'	ADE	945	213.131	121.905	-0.222	1.00	66.67	A16S	ATOM	38921	C5	CYT	947	221.220	115.683	0.177	1.00	76.01	A16S
ATOM	38869	C1'	ADE	945	212.102	120.964	-0.275	1.00	66.67	A16S	ATOM	38922	C2'	CYT	947	224.472	114.805	3.084	1.00	38.64	A16S
ATOM	38870	N9	ADE	945	211.427	121.068	-1.558	1.00	62.55	A16S	ATOM	38923	O2'	CYT	947	225.153	114.178	4.149	1.00	38.64	A16S
ATOM	38871	C4	ADE	945	210.108	120.763	-1.765	1.00	62.55	A16S	ATOM	38924	C3'	CYT	947	224.065	116.223	3.444	1.00	38.64	A16S
ATOM	38872	N3	ADE	945	209.237	120.283	-0.864	1.00	62.55	A16S	ATOM	38925	O3'	CYT	947	225.112	116.932	4.080	1.00	38.64	A16S
ATOM	38873	C2	ADE	945	208.036	120.145	-1.406	1.00	62.55	A16S	ATOM	38926	P	GUA	948	225.517	118.378	3.533	1.00	57.17	A16S
ATOM	38874	N1	ADE	945	207.636	120.408	-2.654	1.00	62.55	A16S	ATOM	38927	O1P	GUA	948	224.474	119.347	3.960	1.00	75.64	A16S
ATOM	38875	C6	ADE	945	208.539	120.882	-3.535	1.00	62.55	A16S	ATOM	38928	O2P	GUA	948	225.841	118.239	2.091	1.00	75.64	A16S
ATOM	38876	N6	ADE	945	208.140	121.139	-4.778	1.00	62.55	A16S	ATOM	38929	O5'	GUA	948	226.871	118.680	4.302	1.00	57.17	A16S
ATOM	38877	C5	ADE	945	209.852	121.075	-3.081	1.00	62.55	A16S	ATOM	38930	C5'	GUA	948	226.911	118.752	5.709	1.00	57.17	A16S
ATOM	38878	N7	ADE	945	211.003	121.544	-3.704	1.00	62.55	A16S	ATOM	38931	C4'	GUA	948	227.793	119.894	6.123	1.00	57.17	A16S
ATOM	38879	C8	ADE	945	211.908	121.508	-2.759	1.00	62.55	A16S	ATOM	38932	O4'	GUA	948	229.166	119.636	5.775	1.00	57.17	A16S
ATOM	38880	C2'	ADE	945	212.619	119.590	0.140	1.00	66.67	A16S	ATOM	38933	C1'	GUA	948	229.832	120.866	5.830	1.00	57.17	A16S
ATOM	38881	O2'	ADE	945	211.809	119.070	1.172	1.00	66.67	A16S	ATOM	38934	N9	GUA	948	231.037	120.867	5.026	1.00	75.64	A16S
ATOM	38882	C3'	ADE	945	214.051	119.866	0.602	1.00	66.67	A16S	ATOM	38935	C4	GUA	948	232.278	120.747	5.546	1.00	75.64	A16S
ATOM	38883	O3'	ADE	945	214.009	119.326	1.931	1.00	66.67	A16S	ATOM	38936	N3	GUA	948	232.553	120.560	6.844	1.00	75.64	A16S
ATOM	38884	P	ADE	946	215.107	119.708	3.041	1.00	52.69	A16S	ATOM	38937	C2	GUA	948	233.840	120.508	7.071	1.00	75.64	A16S
ATOM	38885	O1P	ADE	946	214.602	119.104	4.292	1.00	42.79	A16S	ATOM	38938	N2	GUA	948	234.262	120.311	8.307	1.00	75.64	A16S
ATOM	38886	O2P	ADE	946	215.432	121.162	3.024	1.00	42.79	A16S	ATOM	38939	N1	GUA	948	234.802	120.640	6.098	1.00	75.64	A16S
ATOM	38887	O5'	ADE	946	216.361	118.821	2.627	1.00	52.69	A16S	ATOM	38940	C6	GUA	948	234.543	120.841	4.743	1.00	75.64	A16S
ATOM	38888	C5'	ADE	946	216.212	117.417	2.434	1.00	52.69	A16S	ATOM	38941	O6	GUA	948	235.486	120.962	3.938	1.00	75.64	A16S
ATOM	38889	C4'	ADE	946	217.002	116.660	3.470	1.00	52.69	A16S	ATOM	38942	C5	GUA	948	233.140	120.887	4.489	1.00	75.64	A16S
ATOM	38890	O4'	ADE	946	216.682	115.251	3.358	1.00	52.69	A16S	ATOM	38943	N7	GUA	948	232.437	121.069	3.307	1.00	75.64	A16S
ATOM	38891	C1'	ADE	946	217.853	114.475	3.569	1.00	52.69	A16S	ATOM	38944	C8	GUA	948	231.186	121.039	3.676	1.00	75.64	A16S
ATOM	38892	N9	ADE	946	218.199	113.825	2.308	1.00	42.79	A16S	ATOM	38945	C2'	GUA	948	228.833	121.994	5.582	1.00	57.17	A16S
ATOM	38893	C4	ADE	946	219.097	112.802	2.156	1.00	42.79	A16S	ATOM	38946	O2'	GUA	948	228.891	122.832	6.722	1.00	57.17	A16S
ATOM	38894	N3	ADE	946	219.827	112.215	3.116	1.00	42.79	A16S	ATOM	38947	C3'	GUA	948	227.502	121.249	5.481	1.00	57.17	A16S
ATOM	38895	C2	ADE	946	220.587	111.246	2.601	1.00	42.79	A16S	ATOM	38948	O3'	GUA	948	226.614	121.916	6.357	1.00	57.17	A16S
ATOM	38896	N1	ADE	946	220.691	110.836	1.335	1.00	42.79	A16S	ATOM	38949	P	CYT	949	225.693	123.113	5.842	1.00	46.98	A16S
ATOM	38897	C6	ADE	946	219.947	111.460	0.395	1.00	42.79	A16S	ATOM	38950	O1P	CYT	949	225.623	123.116	4.361	1.00	43.28	A16S
ATOM	38898	N6	ADE	946	220.061	111.068	-0.876	1.00	42.79	A16S	ATOM	38951	O2P	CYT	949	226.025	124.365	6.541	1.00	43.28	A16S
ATOM	38899	C5	ADE	946	219.096	112.497	0.813	1.00	42.79	A16S	ATOM	38952	O5'	CYT	949	224.307	122.628	6.430	1.00	46.98	A16S
ATOM	38900	N7	ADE	946	218.215	113.319	0.121	1.00	42.79	A16S	ATOM	38953	C5'	CYT	949	224.078	121.238	6.629	1.00	46.98	A16S
ATOM	38901	C8	ADE	946	217.711	114.087	1.052	1.00	42.79	A16S	ATOM	38954	C4'	CYT	949	222.726	121.024	7.236	1.00	46.98	A16S
ATOM	38902	C2'	ADE	946	218.945	115.433	4.035	1.00	52.69	A16S	ATOM	38955	O4'	CYT	949	222.128	119.824	6.690	1.00	46.98	A16S
ATOM	38903	O2'	ADE	946	218.903	115.516	5.445	1.00	52.69	A16S	ATOM	38956	C1'	CYT	949	221.321	119.223	7.676	1.00	46.98	A16S
ATOM	38904	C3'	ADE	946	218.517	116.709	3.324	1.00	52.69	A16S	ATOM	38957	N1	CYT	949	221.928	117.943	8.028	1.00	43.28	A16S
ATOM	38905	O3'	ADE	946	219.070	117.884	3.902	1.00	52.69	A16S	ATOM	38958	C6	CYT	949	223.222	117.653	7.700	1.00	43.28	A16S
ATOM	38906	P	CYT	947	220.310	118.611	3.183	1.00	38.64	A16S	ATOM	38959	C2	CYT	949	221.156	117.026	8.715	1.00	43.28	A16S
ATOM	38907	O1P	CYT	947	220.725	119.765	4.025	1.00	76.01	A16S	ATOM	38960	O2	CYT	949	219.985	117.330	8.961	1.00	43.28	A16S
ATOM	38908	O2P	CYT	947	219.977	118.836	1.745	1.00	76.01	A16S	ATOM	38961	N3	CYT	949	221.692	115.837	9.084	1.00	43.28	A16S
ATOM	38909	O5'	CYT	947	221.471	117.528	3.296	1.00	38.64	A16S	ATOM	38962	C4	CYT	949	222.953	115.560	8.761	1.00	43.28	A16S
ATOM	38910	C5'	CYT	947	221.937	117.101	4.567	1.00	38.64	A16S	ATOM	38963	N4	CYT	949	223.450	114.383	9.130	1.00	43.28	A16S
ATOM	38911	C4'	CYT	947	222.926	115.971	4.413	1.00	38.64	A16S	ATOM	38964	C5	CYT	949	223.768	116.484	8.042	1.00	43.28	A16S
ATOM	38912	O4'	CYT	947	222.260	114.798	3.884	1.00	38.64	A16S	ATOM	38965	C2'	CYT	949	221.299	120.184	8.864	1.00	46.98	A16S
ATOM	38913	C1'	CYT	947	223.104	114.150	2.948	1.00	38.64	A16S	ATOM	38966	O2'	CYT	949	220.308	121.150	8.616	1.00	46.98	A16S
ATOM	38914	N1	CYT	947	222.509	114.354	1.627	1.00	76.01	A16S	ATOM	38967	C3'	CYT	949	222.669	120.825	8.737	1.00	46.98	A16S
ATOM	38915	C6	CYT	947	221.826	115.504	1.350	1.00	76.01	A16S	ATOM	38968	O3'	CYT	949	222.744	122.065	9.434	1.00	46.98	A16S
ATOM	38916	C2	CYT	947	222.623	113.360	0.675	1.00	76.01	A16S	ATOM	38969	P	GUA	950	223.420	122.117	10.895	1.00	48.44	A16S
ATOM	38917	O2	CYT	947	223.306	112.356	0.928	1.00	76.01	A16S	ATOM	38970	O1P	GUA	950	223.697	123.543	11.215	1.00	44.36	A16S
ATOM	38918	N3	CYT	947	221.998	113.518	-0.511	1.00	76.01	A16S	ATOM	38971	O2P	GUA	950	224.525	121.137	10.936	1.00	44.36	A16S
ATOM	38919	C4	CYT	947	221.311	114.632	-0.765	1.00	76.01	A16S	ATOM	38972	O5'	GUA	950	222.275	121.580	11.858	1.00	48.44	A16S
ATOM	38920	N4	CYT	947	220.693	114.738	-1.944	1.00	76.01	A16S	ATOM	38973	C5'	GUA	950	221.060	122.305	12.009	1.00	48.44	A16S

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ATOM  38974 C4' GUA   950     220.284 121.786  13.198  1.00 48.44      A16S
ATOM  38975 O4' GUA   950     219.670 120.500  12.909  1.00 48.44      A16S
ATOM  38976 C1' GUA   950     219.736 119.669  14.057  1.00 48.44      A16S
ATOM  38977 N9  GUA   950     220.665 118.590  13.755  1.00 44.36      A16S
ATOM  38978 C4  GUA   950     220.612 117.274  14.179  1.00 44.36      A16S
ATOM  38979 N3  GUA   950     219.668 116.720  14.969  1.00 44.36      A16S
ATOM  38980 C2  GUA   950     219.905 115.427  15.193  1.00 44.36      A16S
ATOM  38981 N2  GUA   950     219.082 114.715  15.960  1.00 44.36      A16S
ATOM  38982 N1  GUA   950     220.968 114.738  14.681  1.00 44.36      A16S
ATOM  38983 C6  GUA   950     221.945 115.280  13.863  1.00 44.36      A16S
ATOM  38984 O6  GUA   950     222.855 114.563  13.444  1.00 44.36      A16S
ATOM  38985 C5  GUA   950     221.717 116.667  13.619  1.00 44.36      A16S
ATOM  38986 N7  GUA   950     222.445 117.576  12.867  1.00 44.36      A16S
ATOM  38987 C8  GUA   950     221.784 118.698  12.975  1.00 44.36      A16S
ATOM  38988 C2' GUA   950     220.234 120.561  15.196  1.00 48.44      A16S
ATOM  38989 O2' GUA   950     219.127 121.229  15.763  1.00 48.44      A16S
ATOM  38990 C3' GUA   950     221.120 121.536  14.436  1.00 48.44      A16S
ATOM  38991 O3' GUA   950     221.340 122.772  15.109  1.00 48.44      A16S
ATOM  38992 P   ADE   951     222.017 122.785  16.561  1.00 63.28      A16S
ATOM  38993 O1P ADE   951     222.158 121.373  17.028  1.00 41.07      A16S
ATOM  38994 O2P ADE   951     221.205 123.748  17.342  1.00 41.07      A16S
ATOM  38995 O5' ADE   951     223.459 123.436  16.372  1.00 63.28      A16S
ATOM  38996 C5' ADE   951     224.127 123.370  15.129  1.00 63.28      A16S
ATOM  38997 C4' ADE   951     225.472 122.712  15.288  1.00 63.28      A16S
ATOM  38998 O4' ADE   951     225.379 121.614  16.223  1.00 63.28      A16S
ATOM  38999 C1' ADE   951     226.092 120.501  15.734  1.00 63.28      A16S
ATOM  39000 N9  ADE   951     225.224 119.325  15.850  1.00 41.07      A16S
ATOM  39001 C4  ADE   951     225.559 117.993  15.755  1.00 41.07      A16S
ATOM  39002 N3  ADE   951     226.750 117.466  15.430  1.00 41.07      A16S
ATOM  39003 C2  ADE   951     226.717 116.139  15.513  1.00 41.07      A16S
ATOM  39004 N1  ADE   951     225.707 115.338  15.862  1.00 41.07      A16S
ATOM  39005 C6  ADE   951     224.521 115.903  16.176  1.00 41.07      A16S
ATOM  39006 N6  ADE   951     223.510 115.110  16.537  1.00 41.07      A16S
ATOM  39007 C5  ADE   951     224.424 117.295  16.115  1.00 41.07      A16S
ATOM  39008 N7  ADE   951     223.374 118.158  16.364  1.00 41.07      A16S
ATOM  39009 C8  ADE   951     223.894 119.345  16.177  1.00 41.07      A16S
ATOM  39010 C2' ADE   951     226.739 120.869  14.393  1.00 63.28      A16S
ATOM  39011 O2' ADE   951     228.108 121.098  14.622  1.00 63.28      A16S
ATOM  39012 C3' ADE   951     225.955 122.116  13.985  1.00 63.28      A16S
ATOM  39013 O3' ADE   951     226.546 123.143  13.166  1.00 63.28      A16S
ATOM  39014 P   ADE   952     228.071 123.645  13.388  1.00 49.60      A16S
ATOM  39015 O1P ADE   952     228.243 124.680  12.339  1.00 47.44      A16S
ATOM  39016 O2P ADE   952     229.069 122.571  13.503  1.00 47.44      A16S
ATOM  39017 O5' ADE   952     228.085 124.469  14.739  1.00 49.60      A16S
ATOM  39018 C5' ADE   952     228.707 125.748  14.750  1.00 49.60      A16S
ATOM  39019 C4' ADE   952     228.290 126.536  15.956  1.00 49.60      A16S
ATOM  39020 O4' ADE   952     228.500 127.939  15.705  1.00 49.60      A16S
ATOM  39021 C1' ADE   952     227.296 128.638  15.835  1.00 49.60      A16S
ATOM  39022 N9  ADE   952     226.921 129.033  14.490  1.00 47.44      A16S
ATOM  39023 C4  ADE   952     226.654 130.310  14.112  1.00 47.44      A16S
ATOM  39024 N3  ADE   952     226.593 131.376  14.913  1.00 47.44      A16S
ATOM  39025 C2  ADE   952     226.363 132.467  14.198  1.00 47.44      A16S
ATOM  39026 N1  ADE   952     226.204 132.597  12.860  1.00 47.44      A16S
ATOM  39027 C6  ADE   952     226.275 131.489  12.089  1.00 47.44      A16S
ATOM  39028 N6  ADE   952     226.134 131.616  10.771  1.00 47.44      A16S
ATOM  39029 C5  ADE   952     226.503 130.274  12.731  1.00 47.44      A16S
ATOM  39030 N7  ADE   952     226.620 128.981  12.254  1.00 47.44      A16S
ATOM  39031 C8  ADE   952     226.851 128.275  13.338  1.00 47.44      A16S
ATOM  39032 C2' ADE   952     226.343 127.769  16.645  1.00 49.60      A16S
ATOM  39033 O2' ADE   952     226.515 128.084  18.000  1.00 49.60      A16S
ATOM  39034 C3' ADE   952     226.834 126.364  16.319  1.00 49.60      A16S
ATOM  39035 O3' ADE   952     226.806 125.436  17.416  1.00 49.60      A16S
ATOM  39036 P   GUA   953     227.728 125.699  18.720  1.00 44.29      A16S
ATOM  39037 O1P GUA   953     226.834 125.767  19.888  1.00 72.92      A16S
ATOM  39038 O2P GUA   953     228.639 126.822  18.446  1.00 72.92      A16S
ATOM  39039 O5' GUA   953     228.617 124.383  18.859  1.00 44.29      A16S
ATOM  39040 C5' GUA   953     229.145 123.727  17.711  1.00 44.29      A16S
ATOM  39041 C4' GUA   953     230.620 123.459  17.884  1.00 44.29      A16S
ATOM  39042 O4' GUA   953     231.431 124.615  17.649  1.00 44.29      A16S
ATOM  39043 C1' GUA   953     232.683 124.327  18.210  1.00 44.29      A16S
ATOM  39044 N9  GUA   953     233.555 125.486  18.192  1.00 72.92      A16S
ATOM  39045 C4  GUA   953     234.671 125.614  17.409  1.00 72.92      A16S
ATOM  39046 N3  GUA   953     235.131 124.697  16.537  1.00 72.92      A16S
ATOM  39047 C2  GUA   953     236.227 125.103  15.929  1.00 72.92      A16S
ATOM  39048 N2  GUA   953     236.816 124.308  15.032  1.00 72.92      A16S
ATOM  39049 N1  GUA   953     236.824 126.318  16.160  1.00 72.92      A16S
ATOM  39050 C6  GUA   953     236.361 127.278  17.060  1.00 72.92      A16S
ATOM  39051 O6  GUA   953     236.973 128.350  17.206  1.00 72.92      A16S
ATOM  39052 C5  GUA   953     235.188 126.849  17.712  1.00 72.92      A16S
ATOM  39053 N7  GUA   953     234.409 127.486  18.664  1.00 72.92      A16S
ATOM  39054 C8  GUA   953     233.454 126.636  18.922  1.00 72.92      A16S
ATOM  39055 C2' GUA   953     232.407 123.612  19.529  1.00 44.29      A16S
ATOM  39056 O2' GUA   953     233.490 122.765  19.860  1.00 44.29      A16S
ATOM  39057 C3' GUA   953     231.074 122.907  19.226  1.00 44.29      A16S
ATOM  39058 O3' GUA   953     231.399 121.555  18.979  1.00 44.29      A16S
ATOM  39059 P   ADE   954     230.631 120.395  19.733  1.00 48.11      A16S
ATOM  39060 O1P ADE   954     229.225 120.498  19.263  1.00 78.90      A16S
ATOM  39061 O2P ADE   954     230.926 120.437  21.191  1.00 78.90      A16S
ATOM  39062 O5' ADE   954     231.282 119.077  19.129  1.00 48.11      A16S
ATOM  39063 C5' ADE   954     232.600 118.694  19.463  1.00 48.11      A16S
ATOM  39064 C4' ADE   954     232.559 117.447  20.293  1.00 48.11      A16S
ATOM  39065 O4' ADE   954     231.711 116.473  19.651  1.00 48.11      A16S
ATOM  39066 C1' ADE   954     232.107 115.182  20.065  1.00 48.11      A16S
ATOM  39067 N9  ADE   954     232.163 114.293  18.905  1.00 78.90      A16S
ATOM  39068 C4  ADE   954     233.199 114.118  18.020  1.00 78.90      A16S
ATOM  39069 N3  ADE   954     234.382 114.751  18.012  1.00 78.90      A16S
ATOM  39070 C2  ADE   954     235.140 114.311  17.012  1.00 78.90      A16S
ATOM  39071 N1  ADE   954     234.871 113.382  16.090  1.00 78.90      A16S
ATOM  39072 C6  ADE   954     233.672 112.767  16.125  1.00 78.90      A16S
ATOM  39073 N6  ADE   954     233.402 111.840  15.207  1.00 78.90      A16S
ATOM  39074 C5  ADE   954     232.776 113.143  17.133  1.00 78.90      A16S
ATOM  39075 N7  ADE   954     231.491 112.720  17.442  1.00 78.90      A16S
ATOM  39076 C8  ADE   954     231.172 113.433  18.493  1.00 78.90      A16S
ATOM  39077 C2' ADE   954     233.392 115.320  20.882  1.00 48.11      A16S
ATOM  39078 O2' ADE   954     233.047 115.288  22.252  1.00 48.11      A16S
ATOM  39079 C3' ADE   954     233.869 116.709  20.485  1.00 48.11      A16S
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ATOM	39080	O3'	ADE	954	234.592	117.293	21.557	1.00	48.11	A16S	ATOM	39133	C2	CYT	957	232.867	119.000	27.543	1.00	71.08	A16S
ATOM	39081	P	ADE	955	236.182	117.406	21.472	1.00	63.00	A16S	ATOM	39134	O2	CYT	957	232.621	119.952	28.301	1.00	71.08	A16S
ATOM	39082	O1P	ADE	955	236.584	118.621	22.215	1.00	59.65	A16S	ATOM	39135	N3	CYT	957	233.098	119.182	26.226	1.00	71.08	A16S
ATOM	39083	O2P	ADE	955	236.557	117.264	20.048	1.00	59.65	A16S	ATOM	39136	C4	CYT	957	233.354	118.134	25.443	1.00	71.08	A16S
ATOM	39084	O5'	ADE	955	236.691	116.115	22.240	1.00	63.00	A16S	ATOM	39137	N4	CYT	957	233.559	118.365	24.145	1.00	71.08	A16S
ATOM	39085	C5'	ADE	955	236.876	114.895	21.540	1.00	63.00	A16S	ATOM	39138	C5	CYT	957	233.406	116.804	25.955	1.00	71.08	A16S
ATOM	39086	C4'	ADE	955	237.803	113.998	22.316	1.00	63.00	A16S	ATOM	39139	C2'	CYT	957	231.137	117.536	29.832	1.00	66.45	A16S
ATOM	39087	O4'	ADE	955	239.106	114.622	22.398	1.00	63.00	A16S	ATOM	39140	O2'	CYT	957	230.956	118.200	31.062	1.00	66.45	A16S
ATOM	39088	C1'	ADE	955	239.692	114.343	23.654	1.00	63.00	A16S	ATOM	39141	C3'	CYT	957	230.828	116.045	29.905	1.00	66.45	A16S
ATOM	39089	N9	ADE	955	240.116	115.605	24.255	1.00	59.65	A16S	ATOM	39142	O3'	CYT	957	229.693	115.785	30.726	1.00	66.45	A16S
ATOM	39090	C4	ADE	955	241.289	115.798	24.944	1.00	59.65	A16S	ATOM	39143	P	URI	958	228.437	114.990	30.115	1.00	60.77	A16S
ATOM	39091	N3	ADE	955	242.230	114.880	25.224	1.00	59.65	A16S	ATOM	39144	O1P	URI	958	227.273	115.082	31.040	1.00	55.71	A16S
ATOM	39092	C2	ADE	955	243.235	115.426	25.900	1.00	59.65	A16S	ATOM	39145	O2P	URI	958	228.939	113.652	29.708	1.00	55.71	A16S
ATOM	39093	N1	ADE	955	243.406	116.692	26.290	1.00	59.65	A16S	ATOM	39146	O5'	URI	958	228.071	115.845	28.823	1.00	60.77	A16S
ATOM	39094	C6	ADE	955	242.453	117.598	25.984	1.00	59.65	A16S	ATOM	39147	C5'	URI	958	227.698	117.209	28.946	1.00	60.77	A16S
ATOM	39095	N6	ADE	955	242.642	118.866	26.354	1.00	59.65	A16S	ATOM	39148	C4'	URI	958	227.821	117.907	27.620	1.00	60.77	A16S
ATOM	39096	C5	ADE	955	241.315	117.140	25.280	1.00	59.65	A16S	ATOM	39149	O4'	URI	958	229.204	117.864	27.180	1.00	60.77	A16S
ATOM	39097	N7	ADE	955	240.163	117.779	24.830	1.00	59.65	A16S	ATOM	39150	C1'	URI	958	229.259	117.694	25.774	1.00	60.77	A16S
ATOM	39098	C8	ADE	955	239.485	116.826	24.236	1.00	59.65	A16S	ATOM	39151	N1	URI	958	229.870	116.384	25.507	1.00	55.71	A16S
ATOM	39099	C2'	ADE	955	238.701	113.514	24.470	1.00	63.00	A16S	ATOM	39152	C6	URI	958	229.835	115.385	26.445	1.00	55.71	A16S
ATOM	39100	O2'	ADE	955	239.093	112.164	24.404	1.00	63.00	A16S	ATOM	39153	C2	URI	958	230.492	116.191	24.293	1.00	55.71	A16S
ATOM	39101	C3'	ADE	955	237.382	113.803	23.757	1.00	63.00	A16S	ATOM	39154	O2	URI	958	230.528	117.049	23.437	1.00	55.71	A16S
ATOM	39102	O3'	ADE	955	236.445	112.732	23.840	1.00	63.00	A16S	ATOM	39155	N3	URI	958	231.070	114.954	24.119	1.00	55.71	A16S
ATOM	39103	P	CYT	956	235.096	112.936	24.678	1.00	85.78	A16S	ATOM	39156	C4	URI	958	231.080	113.906	25.025	1.00	55.71	A16S
ATOM	39104	O1P	CYT	956	234.292	111.687	24.634	1.00	58.12	A16S	ATOM	39157	O4	URI	958	231.639	112.838	24.735	1.00	55.71	A16S
ATOM	39105	O2P	CYT	956	234.487	114.215	24.255	1.00	58.12	A16S	ATOM	39158	C5	URI	958	230.405	114.187	26.254	1.00	55.71	A16S
ATOM	39106	O5'	CYT	956	235.645	113.124	26.154	1.00	85.78	A16S	ATOM	39159	C2'	URI	958	227.823	117.820	25.276	1.00	60.77	A16S
ATOM	39107	C5'	CYT	956	236.331	112.066	26.804	1.00	85.78	A16S	ATOM	39160	O2'	URI	958	227.540	119.193	25.070	1.00	60.77	A16S
ATOM	39108	C4'	CYT	956	236.418	112.347	28.276	1.00	85.78	A16S	ATOM	39161	C3'	URI	958	227.059	117.273	26.472	1.00	60.77	A16S
ATOM	39109	O4'	CYT	956	237.397	113.390	28.508	1.00	85.78	A16S	ATOM	39162	O3'	URI	958	225.692	117.674	26.477	1.00	60.77	A16S
ATOM	39110	C1'	CYT	956	236.978	114.202	29.590	1.00	85.78	A16S	ATOM	39163	P	URI	959	224.556	116.611	26.073	1.00	79.71	A16S
ATOM	39111	N1	CYT	956	236.776	115.562	29.081	1.00	58.12	A16S	ATOM	39164	O1P	URI	959	224.848	116.207	24.682	1.00	49.35	A16S
ATOM	39112	C6	CYT	956	236.719	115.806	27.742	1.00	58.12	A16S	ATOM	39165	O2P	URI	959	223.242	117.205	26.410	1.00	49.35	A16S
ATOM	39113	C2	CYT	956	236.633	116.604	29.992	1.00	58.12	A16S	ATOM	39166	O5'	URI	959	224.823	115.339	26.999	1.00	79.71	A16S
ATOM	39114	O2	CYT	956	236.702	116.345	31.206	1.00	58.12	A16S	ATOM	39167	C5'	URI	959	223.952	114.203	26.977	1.00	79.71	A16S
ATOM	39115	N3	CYT	956	236.426	117.863	29.535	1.00	58.12	A16S	ATOM	39168	C4'	URI	959	224.701	112.981	26.496	1.00	79.71	A16S
ATOM	39116	C4	CYT	956	236.365	118.089	28.223	1.00	58.12	A16S	ATOM	39169	O4'	URI	959	225.144	113.248	25.154	1.00	79.71	A16S
ATOM	39117	N4	CYT	956	236.157	119.335	27.809	1.00	58.12	A16S	ATOM	39170	C1'	URI	959	226.279	112.466	24.893	1.00	79.71	A16S
ATOM	39118	C5	CYT	956	236.517	117.043	27.274	1.00	58.12	A16S	ATOM	39171	N1	URI	959	227.167	113.164	23.958	1.00	49.35	A16S
ATOM	39119	C2'	CYT	956	235.690	113.585	30.137	1.00	85.78	A16S	ATOM	39172	C6	URI	959	226.990	114.485	23.641	1.00	49.35	A16S
ATOM	39120	O2'	CYT	956	236.014	112.682	31.179	1.00	85.78	A16S	ATOM	39173	C2	URI	959	228.179	112.419	23.389	1.00	49.35	A16S
ATOM	39121	C3'	CYT	956	235.146	112.906	28.886	1.00	85.78	A16S	ATOM	39174	O2	URI	959	228.382	111.255	23.682	1.00	49.35	A16S
ATOM	39122	O3'	CYT	956	234.183	111.881	29.142	1.00	85.78	A16S	ATOM	39175	N3	URI	959	228.940	113.084	22.467	1.00	49.35	A16S
ATOM	39123	P	CYT	957	232.650	112.087	28.675	1.00	66.45	A16S	ATOM	39176	C4	URI	959	228.795	114.395	22.069	1.00	49.35	A16S
ATOM	39124	O1P	CYT	957	231.836	111.207	29.571	1.00	71.08	A16S	ATOM	39177	O4	URI	959	229.460	114.812	21.123	1.00	49.35	A16S
ATOM	39125	O2P	CYT	957	232.562	111.902	27.194	1.00	71.08	A16S	ATOM	39178	C5	URI	959	227.747	115.112	22.740	1.00	49.35	A16S
ATOM	39126	O5'	CYT	957	232.354	113.614	29.038	1.00	66.45	A16S	ATOM	39179	C2'	URI	959	226.895	112.018	26.216	1.00	79.71	A16S
ATOM	39127	C5'	CYT	957	232.364	114.025	30.403	1.00	66.45	A16S	ATOM	39180	O2'	URI	959	226.890	110.607	26.250	1.00	79.71	A16S
ATOM	39128	C4'	CYT	957	232.092	115.504	30.544	1.00	66.45	A16S	ATOM	39181	C3'	URI	959	225.971	112.636	27.268	1.00	79.71	A16S
ATOM	39129	O4'	CYT	957	233.151	116.273	29.925	1.00	66.45	A16S	ATOM	39182	O3'	URI	959	225.814	111.565	28.210	1.00	79.71	A16S
ATOM	39130	C1'	CYT	957	232.633	117.527	29.507	1.00	66.45	A16S	ATOM	39183	P	ADE	960	224.392	111.247	28.907	1.00	69.32	A16S
ATOM	39131	N1	CYT	957	232.904	117.705	28.071	1.00	71.08	A16S	ATOM	39184	O1P	ADE	960	223.990	112.411	29.738	1.00	55.29	A16S
ATOM	39132	C6	CYT	957	233.178	116.637	27.263	1.00	71.08	A16S	ATOM	39185	O2P	ADE	960	224.558	109.908	29.539	1.00	55.29	A16S

ATOM	39186	O5'	ADE	960	223.334	111.045	27.731	1.00	69.32	A16S	ATOM	39239	N4	CYT	962	228.802	104.796	28.315	1.00	58.97	A16S
ATOM	39187	C5'	ADE	960	222.981	109.730	27.291	1.00	69.32	A16S	ATOM	39240	C5	CYT	962	227.587	103.453	26.764	1.00	58.97	A16S
ATOM	39188	C4'	ADE	960	221.739	109.768	26.428	1.00	69.32	A16S	ATOM	39241	C2'	CYT	962	228.679	99.145	25.710	1.00	68.01	A16S
ATOM	39189	O4'	ADE	960	221.672	111.030	25.731	1.00	69.32	A16S	ATOM	39242	O2'	CYT	962	229.351	98.136	24.980	1.00	68.01	A16S
ATOM	39190	C1'	ADE	960	221.284	110.813	24.398	1.00	69.32	A16S	ATOM	39243	C3'	CYT	962	227.175	98.942	25.739	1.00	68.01	A16S
ATOM	39191	N9	ADE	960	222.338	111.332	23.534	1.00	55.29	A16S	ATOM	39244	O3'	CYT	962	226.822	97.596	25.981	1.00	68.01	A16S
ATOM	39192	C4	ADE	960	223.491	110.703	23.141	1.00	55.29	A16S	ATOM	39245	P	ADE	963	226.684	97.087	27.494	1.00	93.01	A16S
ATOM	39193	N3	ADE	960	223.902	109.473	23.475	1.00	55.29	A16S	ATOM	39246	O1P	ADE	963	226.232	95.674	27.421	1.00	49.98	A16S
ATOM	39194	C2	ADE	960	225.068	109.201	22.902	1.00	55.29	A16S	ATOM	39247	O2P	ADE	963	225.880	98.094	28.239	1.00	49.98	A16S
ATOM	39195	N1	ADE	960	225.815	109.964	22.092	1.00	55.29	A16S	ATOM	39248	O5'	ADE	963	228.172	97.123	28.059	1.00	93.01	A16S
ATOM	39196	C6	ADE	960	225.369	111.196	21.780	1.00	55.29	A16S	ATOM	39249	C5'	ADE	963	229.124	96.158	27.637	1.00	93.01	A16S
ATOM	39197	N6	ADE	960	226.105	111.959	20.976	1.00	55.29	A16S	ATOM	39250	C4'	ADE	963	230.414	96.326	28.397	1.00	93.01	A16S
ATOM	39198	C5	ADE	960	224.148	111.602	22.324	1.00	55.29	A16S	ATOM	39251	O4'	ADE	963	230.985	97.624	28.093	1.00	93.01	A16S
ATOM	39199	N7	ADE	960	223.426	112.779	22.207	1.00	55.29	A16S	ATOM	39252	C1'	ADE	963	231.683	98.111	29.226	1.00	93.01	A16S
ATOM	39200	C8	ADE	960	222.366	112.569	22.942	1.00	55.29	A16S	ATOM	39253	N9	ADE	963	231.051	99.358	29.642	1.00	49.98	A16S
ATOM	39201	C2'	ADE	960	220.955	109.332	24.214	1.00	69.32	A16S	ATOM	39254	C4	ADE	963	231.642	100.372	30.360	1.00	49.98	A16S
ATOM	39202	O2'	ADE	960	219.569	109.123	24.320	1.00	69.32	A16S	ATOM	39255	N3	ADE	963	232.891	100.402	30.855	1.00	49.98	A16S
ATOM	39203	C3'	ADE	960	221.702	108.680	25.366	1.00	69.32	A16S	ATOM	39256	C2	ADE	963	233.124	101.557	31.465	1.00	49.98	A16S
ATOM	39204	O3'	ADE	960	220.925	107.582	25.817	1.00	69.32	A16S	ATOM	39257	N1	ADE	963	232.315	102.607	31.621	1.00	49.98	A16S
ATOM	39205	P	CYT	961	221.633	106.203	26.219	1.00	72.24	A16S	ATOM	39258	C6	ADE	963	231.067	102.541	31.116	1.00	49.98	A16S
ATOM	39206	O1P	CYT	961	220.561	105.178	26.301	1.00	65.33	A16S	ATOM	39259	N6	ADE	963	230.262	103.588	31.270	1.00	49.98	A16S
ATOM	39207	O2P	CYT	961	222.498	106.474	27.400	1.00	65.33	A16S	ATOM	39260	C5	ADE	963	230.692	101.371	30.453	1.00	49.98	A16S
ATOM	39208	O5'	CYT	961	222.566	105.830	24.982	1.00	72.24	A16S	ATOM	39261	N7	ADE	963	229.511	100.985	29.837	1.00	49.98	A16S
ATOM	39209	C5'	CYT	961	222.055	105.101	23.868	1.00	72.24	A16S	ATOM	39262	C8	ADE	963	229.772	99.781	29.379	1.00	49.98	A16S
ATOM	39210	C4'	CYT	961	223.164	104.327	23.196	1.00	72.24	A16S	ATOM	39263	C2'	ADE	963	231.614	97.022	30.290	1.00	93.01	A16S
ATOM	39211	O4'	CYT	961	224.193	105.240	22.741	1.00	72.24	A16S	ATOM	39264	O2'	ADE	963	232.727	96.170	30.117	1.00	93.01	A16S
ATOM	39212	C1'	CYT	961	225.464	104.632	22.872	1.00	72.24	A16S	ATOM	39265	C3'	ADE	963	230.311	96.337	29.911	1.00	93.01	A16S
ATOM	39213	N1	CYT	961	226.271	105.450	23.786	1.00	65.33	A16S	ATOM	39266	O3'	ADE	963	230.248	95.017	30.435	1.00	93.01	A16S
ATOM	39214	C6	CYT	961	225.688	106.406	24.566	1.00	65.33	A16S	ATOM	39267	P	GUA	964	229.473	94.746	31.819	1.00	84.50	A16S
ATOM	39215	C2	CYT	961	227.654	105.246	23.836	1.00	65.33	A16S	ATOM	39268	O1P	GUA	964	229.502	93.272	32.020	1.00	70.70	A16S
ATOM	39216	O2	CYT	961	228.157	104.372	23.122	1.00	65.33	A16S	ATOM	39269	O2P	GUA	964	228.176	95.462	31.800	1.00	70.70	A16S
ATOM	39217	N3	CYT	961	228.407	106.009	24.657	1.00	65.33	A16S	ATOM	39270	O5'	GUA	964	230.386	95.425	32.934	1.00	84.50	A16S
ATOM	39218	C4	CYT	961	227.831	106.950	25.404	1.00	65.33	A16S	ATOM	39271	C5'	GUA	964	231.612	94.820	33.320	1.00	84.50	A16S
ATOM	39219	N4	CYT	961	228.614	107.690	26.185	1.00	65.33	A16S	ATOM	39272	C4'	GUA	964	232.485	95.814	34.037	1.00	84.50	A16S
ATOM	39220	C5	CYT	961	226.425	107.174	25.380	1.00	65.33	A16S	ATOM	39273	O4'	GUA	964	232.590	97.016	33.229	1.00	84.50	A16S
ATOM	39221	C2'	CYT	961	225.236	103.210	23.372	1.00	72.24	A16S	ATOM	39274	C1'	GUA	964	232.721	98.146	34.076	1.00	84.50	A16S
ATOM	39222	O2'	CYT	961	225.150	102.331	22.268	1.00	72.24	A16S	ATOM	39275	N9	GUA	964	231.571	99.017	33.870	1.00	70.70	A16S
ATOM	39223	C3'	CYT	961	223.911	103.367	24.097	1.00	72.24	A16S	ATOM	39276	C4	GUA	964	231.446	100.298	34.334	1.00	70.70	A16S
ATOM	39224	O3'	CYT	961	223.224	102.135	24.174	1.00	72.24	A16S	ATOM	39277	N3	GUA	964	232.368	100.972	35.051	1.00	70.70	A16S
ATOM	39225	P	CYT	962	223.495	101.162	25.412	1.00	68.01	A16S	ATOM	39278	C2	GUA	964	231.958	102.191	35.358	1.00	70.70	A16S
ATOM	39226	O1P	CYT	962	222.620	99.975	25.229	1.00	58.97	A16S	ATOM	39279	N2	GUA	964	232.747	103.000	36.072	1.00	70.70	A16S
ATOM	39227	O2P	CYT	962	223.397	101.981	26.652	1.00	58.97	A16S	ATOM	39280	N1	GUA	964	230.740	102.705	34.989	1.00	70.70	A16S
ATOM	39228	O5'	CYT	962	225.000	100.694	25.224	1.00	68.01	A16S	ATOM	39281	C6	GUA	964	229.775	102.024	34.255	1.00	70.70	A16S
ATOM	39229	C5'	CYT	962	225.342	99.774	24.206	1.00	68.01	A16S	ATOM	39282	O6	GUA	964	228.704	102.574	33.985	1.00	70.70	A16S
ATOM	39230	C4'	CYT	962	226.781	99.375	24.345	1.00	68.01	A16S	ATOM	39283	C5	GUA	964	230.203	100.718	33.917	1.00	70.70	A16S
ATOM	39231	O4'	CYT	962	227.629	100.529	24.106	1.00	68.01	A16S	ATOM	39284	N7	GUA	964	229.561	99.719	33.198	1.00	70.70	A16S
ATOM	39232	C1'	CYT	962	228.766	100.463	24.949	1.00	68.01	A16S	ATOM	39285	C8	GUA	964	230.410	98.729	33.196	1.00	70.70	A16S
ATOM	39233	N1	CYT	962	228.731	101.616	25.849	1.00	58.97	A16S	ATOM	39286	C2'	GUA	964	232.769	97.618	35.505	1.00	84.50	A16S
ATOM	39234	C6	CYT	962	227.611	102.387	25.960	1.00	58.97	A16S	ATOM	39287	O2'	GUA	964	234.123	97.385	35.829	1.00	84.50	A16S
ATOM	39235	C2	CYT	962	229.872	101.920	26.587	1.00	58.97	A16S	ATOM	39288	C3'	GUA	964	231.960	96.338	35.358	1.00	84.50	A16S
ATOM	39236	O2	CYT	962	230.873	101.195	26.462	1.00	58.97	A16S	ATOM	39289	O3'	GUA	964	232.206	95.413	36.408	1.00	84.50	A16S
ATOM	39237	N3	CYT	962	229.863	102.993	27.409	1.00	58.97	A16S	ATOM	39290	P	GUA	965	231.223	95.375	37.683	1.00	94.78	A16S
ATOM	39238	C4	CYT	962	228.768	103.745	27.502	1.00	58.97	A16S	ATOM	39291	O1P	GUA	965	231.668	94.228	38.518	1.00	74.27	A16S

ATOM	39292	O2P	GUA	965	229.812	95.429	37.209	1.00	74.27	A16S	ATOM	39345	N3	CYT	967	221.521	103.700	41.219	1.00 85.64	A16S
ATOM	39293	O5'	GUA	965	231.546	96.729	38.471	1.00	94.78	A16S	ATOM	39346	C4	CYT	967	222.187	102.544	41.162	1.00 85.64	A16S
ATOM	39294	C5'	GUA	965	232.734	96.847	39.251	1.00	94.78	A16S	ATOM	39347	N4	CYT	967	221.826	101.653	40.237	1.00 85.64	A16S
ATOM	39295	C4'	GUA	965	232.810	98.204	39.914	1.00	94.78	A16S	ATOM	39348	C5	CYT	967	223.253	102.246	42.054	1.00 85.64	A16S
ATOM	39296	O4'	GUA	965	232.861	99.236	38.897	1.00	94.78	A16S	ATOM	39349	C2'	CYT	967	222.310	105.235	45.292	1.00 96.45	A16S
ATOM	39297	C1'	GUA	965	232.210	100.405	39.371	1.00	94.78	A16S	ATOM	39350	O2'	CYT	967	222.150	106.518	45.864	1.00 96.45	A16S
ATOM	39298	N9	GUA	965	231.029	100.624	38.550	1.00	74.27	A16S	ATOM	39351	C3'	CYT	967	223.105	104.275	46.171	1.00 96.45	A16S
ATOM	39299	C4	GUA	965	230.308	101.785	38.462	1.00	74.27	A16S	ATOM	39352	O3'	CYT	967	222.728	104.355	47.545	1.00 96.45	A16S
ATOM	39300	N3	GUA	965	230.587	102.936	39.103	1.00	74.27	A16S	ATOM	39353	P	URI	968	222.170	103.046	48.294	1.00125.31	A16S
ATOM	39301	C2	GUA	965	229.694	103.867	38.846	1.00	74.27	A16S	ATOM	39354	O1P	URI	968	223.148	102.682	49.347	1.00104.78	A16S
ATOM	39302	N2	GUA	965	229.808	105.066	39.421	1.00	74.27	A16S	ATOM	39355	O2P	URI	968	221.779	102.037	47.280	1.00104.78	A16S
ATOM	39303	N1	GUA	965	228.620	103.687	38.011	1.00	74.27	A16S	ATOM	39356	O5'	URI	968	220.854	103.565	49.017	1.00125.31	A16S
ATOM	39304	C6	GUA	965	228.316	102.508	37.339	1.00	74.27	A16S	ATOM	39357	C5'	URI	968	219.563	103.202	48.544	1.00125.31	A16S
ATOM	39305	O6	GUA	965	227.316	102.445	36.611	1.00	74.27	A16S	ATOM	39358	C4'	URI	968	218.991	104.314	47.702	1.00125.31	A16S
ATOM	39306	C5	GUA	965	229.259	101.501	37.615	1.00	74.27	A16S	ATOM	39359	O4'	URI	968	219.712	104.378	46.448	1.00125.31	A16S
ATOM	39307	N7	GUA	965	229.329	100.190	37.166	1.00	74.27	A16S	ATOM	39360	C1'	URI	968	218.824	104.730	45.404	1.00125.31	A16S
ATOM	39308	C8	GUA	965	230.399	99.710	37.740	1.00	74.27	A16S	ATOM	39361	N1	URI	968	218.908	103.699	44.358	1.00104.78	A16S
ATOM	39309	C2'	GUA	965	231.783	100.127	40.811	1.00	94.78	A16S	ATOM	39362	C6	URI	968	219.757	102.629	44.499	1.00104.78	A16S
ATOM	39310	O2'	GUA	965	232.768	100.570	41.726	1.00	94.78	A16S	ATOM	39363	C2	URI	968	218.132	103.847	43.219	1.00104.78	A16S
ATOM	39311	C3'	GUA	965	231.629	98.616	40.776	1.00	94.78	A16S	ATOM	39364	O2	URI	968	217.348	104.764	43.060	1.00104.78	A16S
ATOM	39312	O3'	GUA	965	231.711	98.079	42.083	1.00	94.78	A16S	ATOM	39365	N3	URI	968	218.310	102.873	42.269	1.00104.78	A16S
ATOM	39313	P	CYT	966	230.363	97.765	42.888	1.00	99.19	A16S	ATOM	39366	C4	URI	968	219.160	101.788	42.340	1.00104.78	A16S
ATOM	39314	O1P	CYT	966	230.780	97.381	44.260	1.00	88.84	A16S	ATOM	39367	O4	URI	968	219.235	101.012	41.385	1.00104.78	A16S
ATOM	39315	O2P	CYT	966	229.536	96.833	42.075	1.00	88.84	A16S	ATOM	39368	C5	URI	968	219.908	101.697	43.555	1.00104.78	A16S
ATOM	39316	O5'	CYT	966	229.631	99.177	42.983	1.00	99.19	A16S	ATOM	39369	C2'	URI	968	217.444	104.966	46.023	1.00125.31	A16S
ATOM	39317	C5'	CYT	966	230.152	100.189	43.829	1.00	99.19	A16S	ATOM	39370	O2'	URI	968	217.304	106.346	46.279	1.00125.31	A16S
ATOM	39318	C4'	CYT	966	229.380	101.476	43.671	1.00	99.19	A16S	ATOM	39371	C3'	URI	968	217.532	104.152	47.310	1.00125.31	A16S
ATOM	39319	O4'	CYT	966	229.335	101.845	42.267	1.00	99.19	A16S	ATOM	39372	O3'	URI	968	216.751	104.728	48.355	1.00125.31	A16S
ATOM	39320	C1'	CYT	966	228.208	102.677	42.039	1.00	99.19	A16S	ATOM	39373	P	URI	969	215.155	104.842	48.210	1.00106.41	A16S
ATOM	39321	N1	CYT	966	227.359	102.073	41.002	1.00	88.84	A16S	ATOM	39374	O1P	URI	969	214.565	103.837	49.128	1.00110.47	A16S
ATOM	39322	C6	CYT	966	227.391	100.730	40.746	1.00	88.84	A16S	ATOM	39375	O2P	URI	969	214.791	104.823	46.772	1.00110.47	A16S
ATOM	39323	C2	CYT	966	226.491	102.905	40.291	1.00	88.84	A16S	ATOM	39376	O5'	URI	969	214.844	106.296	48.783	1.00106.41	A16S
ATOM	39324	O2	CYT	966	226.507	104.118	40.526	1.00	88.84	A16S	ATOM	39377	C5'	URI	969	215.743	107.364	48.525	1.00106.41	A16S
ATOM	39325	N3	CYT	966	225.663	102.369	39.367	1.00	88.84	A16S	ATOM	39378	C4'	URI	969	214.989	108.646	48.293	1.00106.41	A16S
ATOM	39326	C4	CYT	966	225.686	101.057	39.136	1.00	88.84	A16S	ATOM	39379	O4'	URI	969	213.855	108.388	47.433	1.00106.41	A16S
ATOM	39327	N4	CYT	966	224.841	100.571	38.228	1.00	88.84	A16S	ATOM	39380	C1'	URI	969	212.858	109.363	47.673	1.00106.41	A16S
ATOM	39328	C5	CYT	966	226.577	100.184	39.831	1.00	88.84	A16S	ATOM	39381	N1	URI	969	211.534	108.723	47.632	1.00110.47	A16S
ATOM	39329	C2'	CYT	966	227.467	102.782	43.372	1.00	99.19	A16S	ATOM	39382	C6	URI	969	211.404	107.357	47.536	1.00110.47	A16S
ATOM	39330	O2'	CYT	966	227.925	103.931	44.057	1.00	99.19	A16S	ATOM	39383	C2	URI	969	210.420	109.543	47.660	1.00110.47	A16S
ATOM	39331	C3'	CYT	966	227.910	101.495	44.054	1.00	99.19	A16S	ATOM	39384	O2	URI	969	210.490	110.752	47.779	1.00110.47	A16S
ATOM	39332	O3'	CYT	966	227.722	101.581	45.464	1.00	99.19	A16S	ATOM	39385	N3	URI	969	209.219	108.892	47.546	1.00110.47	A16S
ATOM	39333	P	CYT	967	226.274	101.261	46.103	1.00	96.45	A16S	ATOM	39386	C4	URI	969	209.020	107.533	47.420	1.00110.47	A16S
ATOM	39334	O1P	CYT	967	226.436	101.307	47.578	1.00	85.64	A16S	ATOM	39387	O4	URI	969	207.876	107.100	47.275	1.00110.47	A16S
ATOM	39335	O2P	CYT	967	225.724	100.039	45.461	1.00	85.64	A16S	ATOM	39388	C5	URI	969	210.218	106.751	47.430	1.00110.47	A16S
ATOM	39336	O5'	CYT	967	225.382	102.520	45.700	1.00	96.45	A16S	ATOM	39389	C2'	URI	969	213.229	110.141	48.939	1.00106.41	A16S
ATOM	39337	C5'	CYT	967	225.637	103.798	46.276	1.00	96.45	A16S	ATOM	39390	O2'	URI	969	213.580	111.455	48.574	1.00106.41	A16S
ATOM	39338	C4'	CYT	967	224.524	104.767	45.942	1.00	96.45	A16S	ATOM	39391	C3'	URI	969	214.374	109.300	49.513	1.00106.41	A16S
ATOM	39339	O4'	CYT	967	224.547	105.094	44.526	1.00	96.45	A16S	ATOM	39392	O3'	URI	969	215.376	110.015	50.250	1.00106.41	A16S
ATOM	39340	C1'	CYT	967	223.224	105.347	44.072	1.00	96.45	A16S	ATOM	39393	P	GUA	970	216.215	111.215	49.558	1.00127.86	A16S
ATOM	39341	N1	CYT	967	222.888	104.349	43.047	1.00	85.64	A16S	ATOM	39394	O1P	GUA	970	217.461	111.326	50.354	1.00 86.57	A16S
ATOM	39342	C6	CYT	967	223.569	103.168	42.971	1.00	85.64	A16S	ATOM	39395	O2P	GUA	970	215.377	112.421	49.361	1.00 86.57	A16S
ATOM	39343	C2	CYT	967	221.849	104.623	42.155	1.00	85.64	A16S	ATOM	39396	O5'	GUA	970	216.647	110.634	48.138	1.00127.86	A16S
ATOM	39344	O2	CYT	967	221.255	105.709	42.245	1.00	85.64	A16S	ATOM	39397	C5'	GUA	970	216.911	111.491	47.025	1.00127.86	A16S

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ATOM  39398  C4' GUA  970     217.717 110.747  45.982  1.00127.86      A16S
ATOM  39399  O4' GUA  970     217.175 109.414  45.829  1.00127.86      A16S
ATOM  39400  C1' GUA  970     217.326 108.992  44.490  1.00127.86      A16S
ATOM  39401  N9  GUA  970     216.079 108.375  44.040  1.00 86.57      A16S
ATOM  39402  C4  GUA  970     214.807 108.917  44.012  1.00 86.57      A16S
ATOM  39403  N3  GUA  970     214.463 110.180  44.353  1.00 86.57      A16S
ATOM  39404  C2  GUA  970     213.148 110.375  44.270  1.00 86.57      A16S
ATOM  39405  N2  GUA  970     212.622 111.577  44.575  1.00 86.57      A16S
ATOM  39406  N1  GUA  970     212.251 109.407  43.882  1.00 86.57      A16S
ATOM  39407  C6  GUA  970     212.586 108.102  43.526  1.00 86.57      A16S
ATOM  39408  O6  GUA  970     211.700 107.297  43.207  1.00 86.57      A16S
ATOM  39409  C5  GUA  970     213.983 107.884  43.603  1.00 86.57      A16S
ATOM  39410  N7  GUA  970     214.721 106.741  43.336  1.00 86.57      A16S
ATOM  39411  C8  GUA  970     215.952 107.081  43.598  1.00 86.57      A16S
ATOM  39412  C2' GUA  970     217.959 110.121  43.673  1.00127.86      A16S
ATOM  39413  O2' GUA  970     219.315 109.787  43.461  1.00127.86      A16S
ATOM  39414  C3' GUA  970     217.727 111.334  44.577  1.00127.86      A16S
ATOM  39415  O3' GUA  970     218.660 112.417  44.463  1.00127.86      A16S
ATOM  39416  P   ADE  971     220.258 112.149  44.458  1.00 87.27      A16S
ATOM  39417  O1P ADE  971     220.666 111.510  43.185  1.00 80.47      A16S
ATOM  39418  O2P ADE  971     220.658 111.519  45.740  1.00 80.47      A16S
ATOM  39419  O5' ADE  971     220.844 113.630  44.444  1.00 87.27      A16S
ATOM  39420  C5' ADE  971     222.190 113.897  44.066  1.00 87.27      A16S
ATOM  39421  C4' ADE  971     222.213 114.865  42.905  1.00 87.27      A16S
ATOM  39422  O4' ADE  971     222.122 114.139  41.655  1.00 87.27      A16S
ATOM  39423  C1' ADE  971     221.290 114.847  40.754  1.00 87.27      A16S
ATOM  39424  N9  ADE  971     220.136 114.000  40.443  1.00 80.47      A16S
ATOM  39425  C4  ADE  971     219.001 114.369  39.764  1.00 80.47      A16S
ATOM  39426  N3  ADE  971     218.710 115.578  39.257  1.00 80.47      A16S
ATOM  39427  C2  ADE  971     217.531 115.554  38.645  1.00 80.47      A16S
ATOM  39428  N1  ADE  971     216.672 114.535  38.496  1.00 80.47      A16S
ATOM  39429  C6  ADE  971     216.997 113.336  39.020  1.00 80.47      A16S
ATOM  39430  N6  ADE  971     216.146 112.321  38.870  1.00 80.47      A16S
ATOM  39431  C5  ADE  971     218.220 113.229  39.692  1.00 80.47      A16S
ATOM  39432  N7  ADE  971     218.845 112.164  40.322  1.00 80.47      A16S
ATOM  39433  C8  ADE  971     219.972 112.672  40.750  1.00 80.47      A16S
ATOM  39434  C2' ADE  971     220.942 116.190  41.401  1.00 87.27      A16S
ATOM  39435  O2' ADE  971     221.878 117.168  41.002  1.00 87.27      A16S
ATOM  39436  C3' ADE  971     221.056 115.852  42.879  1.00 87.27      A16S
ATOM  39437  O3' ADE  971     221.351 117.004  43.656  1.00 87.27      A16S
ATOM  39438  P   CYT  972     220.186 117.704  44.514  1.00105.64      A16S
ATOM  39439  O1P CYT  972     220.794 118.720  45.413  1.00 82.53      A16S
ATOM  39440  O2P CYT  972     219.324 116.631  45.088  1.00 82.53      A16S
ATOM  39441  O5' CYT  972     219.345 118.512  43.433  1.00105.64      A16S
ATOM  39442  C5' CYT  972     218.115 119.104  43.800  1.00105.64      A16S
ATOM  39443  C4' CYT  972     217.357 119.558  42.583  1.00105.64      A16S
ATOM  39444  O4' CYT  972     217.505 118.606  41.502  1.00105.64      A16S
ATOM  39445  C1' CYT  972     216.233 118.293  40.972  1.00105.64      A16S
ATOM  39446  N1  CYT  972     215.956 116.911  41.373  1.00 82.53      A16S
ATOM  39447  C6  CYT  972     216.936 116.169  41.967  1.00 82.53      A16S
ATOM  39448  C2  CYT  972     214.704 116.359  41.131  1.00 82.53      A16S
ATOM  39449  O2  CYT  972     213.830 117.061  40.611  1.00 82.53      A16S
ATOM  39450  N3  CYT  972     214.475 115.070  41.474  1.00 82.53      A16S
ATOM  39451  C4  CYT  972     215.446 114.350  42.046  1.00 82.53      A16S
ATOM  39452  N4  CYT  972     215.188 113.078  42.369  1.00 82.53      A16S
ATOM  39453  C5  CYT  972     216.728 114.898  42.314  1.00 82.53      A16S
ATOM  39454  C2' CYT  972     215.250 119.333  41.515  1.00105.64      A16S
ATOM  39455  O2' CYT  972     215.202 120.476  40.686  1.00105.64      A16S
ATOM  39456  C3' CYT  972     215.872 119.635  42.864  1.00105.64      A16S
ATOM  39457  O3' CYT  972     215.558 120.915  43.372  1.00105.64      A16S
ATOM  39458  P   ADE  973     215.021 121.040  44.872  1.00109.85      A16S
ATOM  39459  O1P ADE  973     215.565 122.290  45.445  1.00 65.27      A16S
ATOM  39460  O2P ADE  973     215.311 119.741  45.530  1.00 65.27      A16S
ATOM  39461  O5' ADE  973     213.449 121.184  44.686  1.00109.85      A16S
ATOM  39462  C5' ADE  973     212.915 122.183  43.833  1.00109.85      A16S
ATOM  39463  C4' ADE  973     211.431 121.998  43.696  1.00109.85      A16S
ATOM  39464  O4' ADE  973     211.156 120.811  42.915  1.00109.85      A16S
ATOM  39465  C1' ADE  973     209.974 120.196  43.397  1.00109.85      A16S
ATOM  39466  N9  ADE  973     210.309 118.844  43.825  1.00 65.27      A16S
ATOM  39467  C4  ADE  973     209.404 117.845  44.070  1.00 65.27      A16S
ATOM  39468  N3  ADE  973     208.068 117.929  43.990  1.00 65.27      A16S
ATOM  39469  C2  ADE  973     207.512 116.752  44.267  1.00 65.27      A16S
ATOM  39470  N1  ADE  973     208.099 115.589  44.593  1.00 65.27      A16S
ATOM  39471  C6  ADE  973     209.447 115.547  44.671  1.00 65.27      A16S
ATOM  39472  N6  ADE  973     210.031 114.393  45.000  1.00 65.27      A16S
ATOM  39473  C5  ADE  973     210.153 116.729  44.399  1.00 65.27      A16S
ATOM  39474  N7  ADE  973     211.507 117.028  44.389  1.00 65.27      A16S
ATOM  39475  C8  ADE  973     211.546 118.294  44.048  1.00 65.27      A16S
ATOM  39476  C2' ADE  973     209.443 121.052  44.546  1.00109.85      A16S
ATOM  39477  O2' ADE  973     208.472 121.960  44.067  1.00109.85      A16S
ATOM  39478  C3' ADE  973     210.717 121.738  45.007  1.00109.85      A16S
ATOM  39479  O3' ADE  973     210.456 122.951  45.685  1.00109.85      A16S
ATOM  39480  P   URI  974     210.510 122.985  47.287  1.00125.13      A16S
ATOM  39481  O1P URI  974     210.644 124.419  47.636  1.00 79.81      A16S
ATOM  39482  O2P URI  974     211.528 122.016  47.770  1.00 79.81      A16S
ATOM  39483  O5' URI  974     209.071 122.458  47.724  1.00125.13      A16S
ATOM  39484  C5' URI  974     207.898 123.176  47.364  1.00125.13      A16S
ATOM  39485  C4' URI  974     206.680 122.307  47.532  1.00125.13      A16S
ATOM  39486  O4' URI  974     206.760 121.181  46.620  1.00125.13      A16S
ATOM  39487  C1' URI  974     206.095 120.065  47.191  1.00125.13      A16S
ATOM  39488  N1  URI  974     207.063 118.976  47.358  1.00 79.81      A16S
ATOM  39489  C6  URI  974     208.416 119.216  47.403  1.00 79.81      A16S
ATOM  39490  C2  URI  974     206.558 117.694  47.489  1.00 79.81      A16S
ATOM  39491  O2  URI  974     205.365 117.438  47.431  1.00 79.81      A16S
ATOM  39492  N3  URI  974     207.500 116.719  47.686  1.00 79.81      A16S
ATOM  39493  C4  URI  974     208.865 116.889  47.757  1.00 79.81      A16S
ATOM  39494  O4  URI  974     209.579 115.910  47.985  1.00 79.81      A16S
ATOM  39495  C5  URI  974     209.313 118.245  47.592  1.00 79.81      A16S
ATOM  39496  C2' URI  974     205.562 120.510  48.551  1.00125.13      A16S
ATOM  39497  O2' URI  974     204.226 120.954  48.435  1.00125.13      A16S
ATOM  39498  C3' URI  974     206.525 121.636  48.884  1.00125.13      A16S
ATOM  39499  O3' URI  974     205.976 122.500  49.864  1.00125.13      A16S
ATOM  39500  P   GUA  975     206.203 122.166  51.418  1.00141.82      A16S
ATOM  39501  O1P GUA  975     205.399 123.157  52.173  1.00 92.98      A16S
ATOM  39502  O2P GUA  975     207.663 122.050  51.674  1.00 92.98      A16S
ATOM  39503  O5' GUA  975     205.533 120.733  51.617  1.00141.82      A16S
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ATOM	39504	C5'	GUA	975	204.117	120.608	51.673	1.00141.82	A16S	ATOM	39557	O4	URI	977	208.300	110.123	57.214	1.00147.84	A16S
ATOM	39505	C4'	GUA	975	203.707	119.182	51.967	1.00141.82	A16S	ATOM	39558	C5	URI	977	206.223	110.854	58.100	1.00147.84	A16S
ATOM	39506	O4'	GUA	975	204.174	118.303	50.909	1.00141.82	A16S	ATOM	39559	C2'	URI	977	203.695	108.707	61.107	1.00200.66	A16S
ATOM	39507	C1'	GUA	975	204.315	116.987	51.425	1.00141.82	A16S	ATOM	39560	O2'	URI	977	202.846	107.722	61.663	1.00200.66	A16S
ATOM	39508	N9	GUA	975	205.697	116.558	51.264	1.00 92.98	A16S	ATOM	39561	C3'	URI	977	203.279	110.125	61.472	1.00200.66	A16S
ATOM	39509	C4	GUA	975	206.148	115.261	51.325	1.00 92.98	A16S	ATOM	39562	O3'	URI	977	202.899	110.233	62.837	1.00200.66	A16S
ATOM	39510	N3	GUA	975	205.383	114.165	51.520	1.00 92.98	A16S	ATOM	39563	P	ADE	978	203.950	110.814	63.906	1.00200.66	A16S
ATOM	39511	C2	GUA	975	206.103	113.055	51.535	1.00 92.98	A16S	ATOM	39564	O1P	ADE	978	203.238	110.938	65.201	1.00200.66	A16S
ATOM	39512	N2	GUA	975	205.500	111.874	51.716	1.00 92.98	A16S	ATOM	39565	O2P	ADE	978	204.612	112.009	63.316	1.00200.66	A16S
ATOM	39513	N1	GUA	975	207.468	113.024	51.371	1.00 92.98	A16S	ATOM	39566	O5'	ADE	978	205.042	109.660	64.043	1.00200.66	A16S
ATOM	39514	C6	GUA	975	208.275	114.140	51.168	1.00 92.98	A16S	ATOM	39567	C5'	ADE	978	204.680	108.352	64.485	1.00200.66	A16S
ATOM	39515	O6	GUA	975	209.498	114.000	51.028	1.00 92.98	A16S	ATOM	39568	C4'	ADE	978	205.737	107.353	64.070	1.00200.66	A16S
ATOM	39516	C5	GUA	975	207.512	115.340	51.152	1.00 92.98	A16S	ATOM	39569	O4'	ADE	978	205.842	107.367	62.619	1.00200.66	A16S
ATOM	39517	N7	GUA	975	207.911	116.661	50.981	1.00 92.98	A16S	ATOM	39570	C1'	ADE	978	207.206	107.300	62.234	1.00200.66	A16S
ATOM	39518	C8	GUA	975	206.800	117.346	51.050	1.00 92.98	A16S	ATOM	39571	N9	ADE	978	207.566	108.586	61.628	1.00200.66	A16S
ATOM	39519	C2'	GUA	975	203.970	117.052	52.912	1.00141.82	A16S	ATOM	39572	C4	ADE	978	208.764	108.919	61.037	1.00200.66	A16S
ATOM	39520	O2'	GUA	975	202.612	116.710	53.102	1.00141.82	A16S	ATOM	39573	N3	ADE	978	209.852	108.144	60.898	1.00200.66	A16S
ATOM	39521	C3'	GUA	975	204.263	118.514	53.213	1.00141.82	A16S	ATOM	39574	C2	ADE	978	210.824	108.806	60.273	1.00200.66	A16S
ATOM	39522	O3'	GUA	975	203.608	118.912	54.410	1.00141.82	A16S	ATOM	39575	N1	ADE	978	210.834	110.060	59.803	1.00200.66	A16S
ATOM	39523	P	CYT	976	204.236	118.492	55.833	1.00190.71	A16S	ATOM	39576	C6	ADE	978	209.725	110.813	59.956	1.00200.66	A16S
ATOM	39524	O1P	CYT	976	203.531	119.295	56.867	1.00109.20	A16S	ATOM	39577	N6	ADE	978	209.732	112.061	59.482	1.00200.66	A16S
ATOM	39525	O2P	CYT	976	205.719	118.562	55.738	1.00109.20	A16S	ATOM	39578	C5	ADE	978	208.622	110.229	60.609	1.00200.66	A16S
ATOM	39526	O5'	CYT	976	203.832	116.957	56.005	1.00190.71	A16S	ATOM	39579	N7	ADE	978	207.361	110.715	60.926	1.00200.66	A16S
ATOM	39527	C5'	CYT	976	202.465	116.561	55.993	1.00190.71	A16S	ATOM	39580	C8	ADE	978	206.777	109.706	61.527	1.00200.66	A16S
ATOM	39528	C4'	CYT	976	202.334	115.059	56.130	1.00190.71	A16S	ATOM	39581	C2'	ADE	978	208.002	106.974	63.498	1.00200.66	A16S
ATOM	39529	O4'	CYT	976	202.999	114.393	55.025	1.00190.71	A16S	ATOM	39582	O2'	ADE	978	208.070	105.570	63.662	1.00200.66	A16S
ATOM	39530	C1'	CYT	976	203.341	113.070	55.419	1.00190.71	A16S	ATOM	39583	C3'	ADE	978	207.148	107.647	64.565	1.00200.66	A16S
ATOM	39531	N1	CYT	976	204.772	112.837	55.172	1.00109.20	A16S	ATOM	39584	O3'	ADE	978	207.376	107.094	65.862	1.00200.66	A16S
ATOM	39532	C6	CYT	976	205.664	113.872	55.112	1.00109.20	A16S	ATOM	39585	P	GUA	979	208.449	107.781	66.850	1.00200.49	A16S
ATOM	39533	C2	CYT	976	205.211	111.516	55.016	1.00109.20	A16S	ATOM	39586	O1P	GUA	979	207.918	107.651	68.231	1.00200.66	A16S
ATOM	39534	O2	CYT	976	204.377	110.597	55.062	1.00109.20	A16S	ATOM	39587	O2P	GUA	979	208.802	109.124	66.325	1.00200.66	A16S
ATOM	39535	N3	CYT	976	206.526	111.273	54.819	1.00109.20	A16S	ATOM	39588	O5'	GUA	979	209.739	106.852	66.739	1.00200.49	A16S
ATOM	39536	C4	CYT	976	207.391	112.287	54.774	1.00109.20	A16S	ATOM	39589	C5'	GUA	979	209.837	105.643	67.488	1.00200.49	A16S
ATOM	39537	N4	CYT	976	208.682	111.995	54.590	1.00109.20	A16S	ATOM	39590	C4'	GUA	979	211.106	104.905	67.128	1.00200.49	A16S
ATOM	39538	C5	CYT	976	206.972	113.645	54.917	1.00109.20	A16S	ATOM	39591	O4'	GUA	979	211.067	104.557	65.716	1.00200.49	A16S
ATOM	39539	C2'	CYT	976	202.999	112.938	56.903	1.00190.71	A16S	ATOM	39592	C1'	GUA	979	212.357	104.720	65.147	1.00200.49	A16S
ATOM	39540	O2'	CYT	976	201.742	112.307	57.046	1.00190.71	A16S	ATOM	39593	N9	GUA	979	212.317	105.881	64.264	1.00200.66	A16S
ATOM	39541	C3'	CYT	976	202.974	114.397	57.339	1.00190.71	A16S	ATOM	39594	C4	GUA	979	213.297	106.269	63.383	1.00200.66	A16S
ATOM	39542	O3'	CYT	976	202.192	114.547	58.515	1.00190.71	A16S	ATOM	39595	N3	GUA	979	214.463	105.624	63.159	1.00200.66	A16S
ATOM	39543	P	URI	977	202.827	114.160	59.942	1.00200.66	A16S	ATOM	39596	C2	GUA	979	215.210	106.250	62.263	1.00200.66	A16S
ATOM	39544	O1P	URI	977	201.850	114.584	60.975	1.00147.84	A16S	ATOM	39597	N2	GUA	979	216.404	105.744	61.919	1.00200.66	A16S
ATOM	39545	O2P	URI	977	204.221	114.670	59.999	1.00147.84	A16S	ATOM	39598	N1	GUA	979	214.843	107.417	61.638	1.00200.66	A16S
ATOM	39546	O5'	URI	977	202.883	112.567	59.927	1.00200.66	A16S	ATOM	39599	C6	GUA	979	213.649	108.100	61.852	1.00200.66	A16S
ATOM	39547	C5'	URI	977	201.731	111.793	60.256	1.00200.66	A16S	ATOM	39600	O6	GUA	979	213.421	109.152	61.238	1.00200.66	A16S
ATOM	39548	C4'	URI	977	202.114	110.352	60.524	1.00200.66	A16S	ATOM	39601	C5	GUA	979	212.834	107.436	62.810	1.00200.66	A16S
ATOM	39549	O4'	URI	977	202.552	109.716	59.291	1.00200.66	A16S	ATOM	39602	N7	GUA	979	211.581	107.766	63.310	1.00200.66	A16S
ATOM	39550	C1'	URI	977	203.542	108.738	59.585	1.00200.66	A16S	ATOM	39603	C8	GUA	979	211.314	106.815	64.164	1.00200.66	A16S
ATOM	39551	N1	URI	977	204.795	109.133	58.926	1.00147.84	A16S	ATOM	39604	C2'	GUA	979	213.315	104.963	66.312	1.00200.49	A16S
ATOM	39552	C6	URI	977	205.081	110.457	58.671	1.00147.84	A16S	ATOM	39605	O2'	GUA	979	213.776	103.729	66.824	1.00200.49	A16S
ATOM	39553	C2	URI	977	205.686	108.132	58.582	1.00147.84	A16S	ATOM	39606	C3'	GUA	979	212.398	105.695	67.278	1.00200.49	A16S
ATOM	39554	O2	URI	977	205.462	106.947	58.781	1.00147.84	A16S	ATOM	39607	O3'	GUA	979	212.899	105.665	68.609	1.00200.49	A16S
ATOM	39555	N3	URI	977	206.850	108.572	57.997	1.00147.84	A16S	ATOM	39608	P	GUA	980	213.547	106.995	69.243	1.00200.51	A16S
ATOM	39556	C4	URI	977	207.203	109.882	57.723	1.00147.84	A16S	ATOM	39609	O1P	GUA	980	213.977	106.665	70.626	1.00200.41	A16S

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ATOM  39610  O2P GUA   980     212.607 108.124  69.014  1.00200.41      A16S
ATOM  39611  O5' GUA   980     214.853 107.258  68.369  1.00200.51      A16S
ATOM  39612  C5' GUA   980     216.009 106.433  68.500  1.00200.51      A16S
ATOM  39613  C4' GUA   980     217.092 106.905  67.557  1.00200.51      A16S
ATOM  39614  O4' GUA   980     216.560 106.881  66.204  1.00200.51      A16S
ATOM  39615  C1' GUA   980     217.017 108.017  65.487  1.00200.51      A16S
ATOM  39616  N9  GUA   980     215.861 108.860  65.187  1.00200.41      A16S
ATOM  39617  C4  GUA   980     215.777 109.829  64.210  1.00200.41      A16S
ATOM  39618  N3  GUA   980     216.763 110.188  63.358  1.00200.41      A16S
ATOM  39619  C2  GUA   980     216.376 111.144  62.527  1.00200.41      A16S
ATOM  39620  N2  GUA   980     217.235 111.629  61.619  1.00200.41      A16S
ATOM  39621  N1  GUA   980     215.118 111.699  62.526  1.00200.41      A16S
ATOM  39622  C6  GUA   980     214.086 111.345  63.390  1.00200.41      A16S
ATOM  39623  O6  GUA   980     212.985 111.904  63.298  1.00200.41      A16S
ATOM  39624  C5  GUA   980     214.491 110.325  64.297  1.00200.41      A16S
ATOM  39625  N7  GUA   980     213.787 109.695  65.315  1.00200.41      A16S
ATOM  39626  C8  GUA   980     214.638 108.838  65.815  1.00200.41      A16S
ATOM  39627  C2' GUA   980     218.061 108.704  66.367  1.00200.51      A16S
ATOM  39628  O2' GUA   980     219.343 108.169  66.099  1.00200.51      A16S
ATOM  39629  C3' GUA   980     217.557 108.342  67.756  1.00200.51      A16S
ATOM  39630  O3' GUA   980     218.597 108.432  68.730  1.00200.51      A16S
ATOM  39631  P   GUA   981     218.598 109.643  69.792  1.00200.54      A16S
ATOM  39632  O1P GUA   981     219.164 109.116  71.060  1.00188.10      A16S
ATOM  39633  O2P GUA   981     217.244 110.258  69.793  1.00188.10      A16S
ATOM  39634  O5' GUA   981     219.621 110.711  69.195  1.00200.54      A16S
ATOM  39635  C5' GUA   981     221.017 110.426  69.088  1.00200.54      A16S
ATOM  39636  C4' GUA   981     221.600 111.142  67.891  1.00200.54      A16S
ATOM  39637  O4' GUA   981     220.839 110.745  66.719  1.00200.54      A16S
ATOM  39638  C1' GUA   981     220.587 111.873  65.901  1.00200.54      A16S
ATOM  39639  N9  GUA   981     219.160 112.163  65.972  1.00188.10      A16S
ATOM  39640  C4  GUA   981     218.431 112.902  65.076  1.00188.10      A16S
ATOM  39641  N3  GUA   981     218.913 113.504  63.974  1.00188.10      A16S
ATOM  39642  C2  GUA   981     217.969 114.146  63.314  1.00188.10      A16S
ATOM  39643  N2  GUA   981     218.283 114.823  62.212  1.00188.10      A16S
ATOM  39644  N1  GUA   981     216.653 114.181  63.693  1.00188.10      A16S
ATOM  39645  C6  GUA   981     216.133 113.566  64.826  1.00188.10      A16S
ATOM  39646  O6  GUA   981     214.926 113.664  65.081  1.00188.10      A16S
ATOM  39647  C5  GUA   981     217.138 112.884  65.553  1.00188.10      A16S
ATOM  39648  N7  GUA   981     217.057 112.154  66.730  1.00188.10      A16S
ATOM  39649  C8  GUA   981     218.279 111.750  66.941  1.00188.10      A16S
ATOM  39650  C2' GUA   981     221.447 113.014  66.439  1.00200.54      A16S
ATOM  39651  O2' GUA   981     222.716 113.008  65.817  1.00200.54      A16S
ATOM  39652  C3' GUA   981     221.510 112.664  67.919  1.00200.54      A16S
ATOM  39653  O3' GUA   981     222.661 113.241  68.531  1.00200.54      A16S
ATOM  39654  P   ADE   982     222.734 114.834  68.752  1.00200.66      A16S
ATOM  39655  O1P ADE   982     224.121 115.265  68.440  1.00200.60      A16S
ATOM  39656  O2P ADE   982     222.148 115.156  70.077  1.00200.60      A16S
ATOM  39657  O5' ADE   982     221.774 115.426  67.628  1.00200.66      A16S
ATOM  39658  C5' ADE   982     222.246 116.383  66.685  1.00200.66      A16S
ATOM  39659  C4' ADE   982     221.612 116.138  65.338  1.00200.66      A16S
ATOM  39660  O4' ADE   982     220.169 116.097  65.477  1.00200.66      A16S
ATOM  39661  C1' ADE   982     219.567 116.554  64.277  1.00200.66      A16S
ATOM  39662  N9  ADE   982     218.664 117.662  64.591  1.00200.60      A16S
ATOM  39663  C4  ADE   982     217.338 117.561  64.941  1.00200.60      A16S
ATOM  39664  N3  ADE   982     216.616 116.437  65.088  1.00200.60      A16S
ATOM  39665  C2  ADE   982     215.362 116.725  65.431  1.00200.60      A16S
ATOM  39666  N1  ADE   982     214.789 117.918  65.628  1.00200.60      A16S
ATOM  39667  C6  ADE   982     215.540 119.029  65.472  1.00200.60      A16S
ATOM  39668  N6  ADE   982     214.963 120.218  65.664  1.00200.60      A16S
ATOM  39669  C5  ADE   982     216.892 118.859  65.111  1.00200.60      A16S
ATOM  39670  N7  ADE   982     217.919 119.763  64.880  1.00200.60      A16S
ATOM  39671  C8  ADE   982     218.946 119.006  64.581  1.00200.60      A16S
ATOM  39672  C2' ADE   982     220.694 116.934  63.314  1.00200.66      A16S
ATOM  39673  O2' ADE   982     220.957 115.849  62.449  1.00200.66      A16S
ATOM  39674  C3' ADE   982     221.840 117.206  64.281  1.00200.66      A16S
ATOM  39675  O3' ADE   982     223.110 117.038  63.664  1.00200.66      A16S
ATOM  39676  P   ADE   983     223.554 118.011  62.462  1.00200.66      A16S
ATOM  39677  O1P ADE   983     222.863 117.538  61.234  1.00197.39      A16S
ATOM  39678  O2P ADE   983     225.034 118.105  62.478  1.00197.39      A16S
ATOM  39679  O5' ADE   983     222.965 119.442  62.844  1.00200.66      A16S
ATOM  39680  C5' ADE   983     221.951 120.045  62.043  1.00200.66      A16S
ATOM  39681  C4' ADE   983     222.301 121.483  61.733  1.00200.66      A16S
ATOM  39682  O4' ADE   983     222.401 122.223  62.976  1.00200.66      A16S
ATOM  39683  C1' ADE   983     223.312 123.294  62.813  1.00200.66      A16S
ATOM  39684  N9  ADE   983     224.323 123.216  63.866  1.00197.39      A16S
ATOM  39685  C4  ADE   983     224.707 124.249  64.687  1.00197.39      A16S
ATOM  39686  N3  ADE   983     224.230 125.506  64.692  1.00197.39      A16S
ATOM  39687  C2  ADE   983     224.839 126.233  65.623  1.00197.39      A16S
ATOM  39688  N1  ADE   983     225.799 125.875  66.483  1.00197.39      A16S
ATOM  39689  C6  ADE   983     226.258 124.605  66.449  1.00197.39      A16S
ATOM  39690  N6  ADE   983     227.220 124.249  67.303  1.00197.39      A16S
ATOM  39691  C5  ADE   983     225.690 123.732  65.509  1.00197.39      A16S
ATOM  39692  N7  ADE   983     225.919 122.394  65.218  1.00197.39      A16S
ATOM  39693  C8  ADE   983     225.084 122.137  64.240  1.00197.39      A16S
ATOM  39694  C2' ADE   983     223.897 123.204  61.400  1.00200.66      A16S
ATOM  39695  O2' ADE   983     223.224 124.111  60.550  1.00200.66      A16S
ATOM  39696  C3' ADE   983     223.633 121.743  61.040  1.00200.66      A16S
ATOM  39697  O3' ADE   983     223.515 121.600  59.621  1.00200.66      A16S
ATOM  39698  P   CYT   984     224.741 120.999  58.758  1.00200.66      A16S
ATOM  39699  O1P CYT   984     224.567 121.478  57.363  1.00188.96      A16S
ATOM  39700  O2P CYT   984     224.839 119.540  59.022  1.00188.96      A16S
ATOM  39701  O5' CYT   984     226.043 121.704  59.348  1.00200.66      A16S
ATOM  39702  C5' CYT   984     226.248 123.109  59.216  1.00200.66      A16S
ATOM  39703  C4' CYT   984     227.500 123.523  59.953  1.00200.66      A16S
ATOM  39704  O4' CYT   984     227.406 123.059  61.327  1.00200.66      A16S
ATOM  39705  C1' CYT   984     228.684 122.646  61.784  1.00200.66      A16S
ATOM  39706  N1  CYT   984     228.617 121.213  62.116  1.00188.96      A16S
ATOM  39707  C6  CYT   984     227.650 120.413  61.575  1.00188.96      A16S
ATOM  39708  C2  CYT   984     229.563 120.679  62.996  1.00188.96      A16S
ATOM  39709  O2  CYT   984     230.432 121.425  63.468  1.00188.96      A16S
ATOM  39710  N3  CYT   984     229.506 119.364  63.310  1.00188.96      A16S
ATOM  39711  C4  CYT   984     228.556 118.593  62.777  1.00188.96      A16S
ATOM  39712  N4  CYT   984     228.536 117.301  63.115  1.00188.96      A16S
ATOM  39713  C5  CYT   984     227.585 119.110  61.874  1.00188.96      A16S
ATOM  39714  C2' CYT   984     229.688 122.959  60.673  1.00200.66      A16S
ATOM  39715  O2' CYT   984     230.255 124.235  60.889  1.00200.66      A16S
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ATOM	39716	C3'	CYT	984	228.796	122.913	59.439	1.00200.66	A16S	ATOM	39769	C2	GUA	987	237.615	109.605	58.973	1.00195.40	A16S
ATOM	39717	O3'	CYT	984	229.340	123.700	58.383	1.00200.66	A16S	ATOM	39770	N2	GUA	987	237.899	108.464	59.619	1.00195.40	A16S
ATOM	39718	P	CYT	985	230.408	123.051	57.373	1.00179.73	A16S	ATOM	39771	N1	GUA	987	236.434	109.624	58.270	1.00195.40	A16S
ATOM	39719	O1P	CYT	985	230.827	124.115	56.424	1.00143.50	A16S	ATOM	39772	C6	GUA	987	235.956	110.705	57.536	1.00195.40	A16S
ATOM	39720	O2P	CYT	985	229.844	121.780	56.848	1.00143.50	A16S	ATOM	39773	O6	GUA	987	234.874	110.617	56.939	1.00195.40	A16S
ATOM	39721	O5'	CYT	985	231.657	122.698	58.296	1.00179.73	A16S	ATOM	39774	C5	GUA	987	236.848	111.811	57.598	1.00195.40	A16S
ATOM	39722	C5'	CYT	985	232.596	123.699	58.679	1.00179.73	A16S	ATOM	39775	N7	GUA	987	236.761	113.071	57.020	1.00195.40	A16S
ATOM	39723	C4'	CYT	985	233.785	123.060	59.353	1.00179.73	A16S	ATOM	39776	C8	GUA	987	237.851	113.680	57.404	1.00195.40	A16S
ATOM	39724	O4'	CYT	985	233.335	122.378	60.552	1.00179.73	A16S	ATOM	39777	C2'	GUA	987	241.087	112.336	58.409	1.00153.74	A16S
ATOM	39725	C1'	CYT	985	234.051	121.167	60.713	1.00179.73	A16S	ATOM	39778	O2'	GUA	987	241.944	112.146	59.517	1.00153.74	A16S
ATOM	39726	N1	CYT	985	233.092	120.058	60.646	1.00143.50	A16S	ATOM	39779	C3'	GUA	987	241.739	113.101	57.261	1.00153.74	A16S
ATOM	39727	C6	CYT	985	231.796	120.275	60.272	1.00143.50	A16S	ATOM	39780	O3'	GUA	987	243.120	112.802	57.112	1.00153.74	A16S
ATOM	39728	C2	CYT	985	233.526	118.776	60.975	1.00143.50	A16S	ATOM	39781	P	GUA	988	243.605	111.886	55.890	1.00131.84	A16S
ATOM	39729	O2	CYT	985	234.710	118.612	61.308	1.00143.50	A16S	ATOM	39782	O1P	GUA	988	245.078	112.026	55.774	1.00147.93	A16S
ATOM	39730	N3	CYT	985	232.649	117.748	60.922	1.00143.50	A16S	ATOM	39783	O2P	GUA	988	242.748	112.197	54.720	1.00147.93	A16S
ATOM	39731	C4	CYT	985	231.384	117.970	60.558	1.00143.50	A16S	ATOM	39784	O5'	GUA	988	243.274	110.414	56.393	1.00131.84	A16S
ATOM	39732	N4	CYT	985	230.551	116.925	60.523	1.00143.50	A16S	ATOM	39785	C5'	GUA	988	243.849	109.919	57.596	1.00131.84	A16S
ATOM	39733	C5	CYT	985	230.917	119.270	60.215	1.00143.50	A16S	ATOM	39786	C4'	GUA	988	243.258	108.578	57.941	1.00131.84	A16S
ATOM	39734	C2'	CYT	985	235.114	121.111	59.615	1.00179.73	A16S	ATOM	39787	O4'	GUA	988	241.884	108.740	58.382	1.00131.84	A16S
ATOM	39735	O2'	CYT	985	236.329	121.631	60.112	1.00179.73	A16S	ATOM	39788	C1'	GUA	988	241.125	107.605	57.991	1.00131.84	A16S
ATOM	39736	C3'	CYT	985	234.481	121.982	58.538	1.00179.73	A16S	ATOM	39789	N9	GUA	988	240.035	108.051	57.126	1.00147.93	A16S
ATOM	39737	O3'	CYT	985	235.456	122.556	57.675	1.00179.73	A16S	ATOM	39790	C4	GUA	988	238.889	107.351	56.831	1.00147.93	A16S
ATOM	39738	P	CYT	986	236.088	121.676	56.489	1.00174.65	A16S	ATOM	39791	N3	GUA	988	238.566	106.127	57.299	1.00147.93	A16S
ATOM	39739	O1P	CYT	986	236.942	122.578	55.676	1.00196.79	A16S	ATOM	39792	C2	GUA	988	237.398	105.714	56.836	1.00147.93	A16S
ATOM	39740	O2P	CYT	986	234.994	120.915	55.838	1.00196.79	A16S	ATOM	39793	N2	GUA	988	236.923	104.517	57.204	1.00147.93	A16S
ATOM	39741	O5'	CYT	986	237.040	120.647	57.243	1.00174.65	A16S	ATOM	39794	N1	GUA	988	236.610	106.445	55.980	1.00147.93	A16S
ATOM	39742	C5'	CYT	986	238.146	121.114	58.001	1.00174.65	A16S	ATOM	39795	C6	GUA	988	236.921	107.707	55.485	1.00147.93	A16S
ATOM	39743	C4'	CYT	986	238.841	119.962	58.677	1.00174.65	A16S	ATOM	39796	O6	GUA	988	236.138	108.278	54.716	1.00147.93	A16S
ATOM	39744	O4'	CYT	986	237.932	119.311	59.601	1.00174.65	A16S	ATOM	39797	C5	GUA	988	238.174	108.163	55.975	1.00147.93	A16S
ATOM	39745	C1'	CYT	986	238.299	117.947	59.736	1.00174.65	A16S	ATOM	39798	N7	GUA	988	238.854	109.351	55.740	1.00147.93	A16S
ATOM	39746	N1	CYT	986	237.113	117.108	59.511	1.00196.79	A16S	ATOM	39799	C8	GUA	988	239.949	109.241	56.443	1.00147.93	A16S
ATOM	39747	C6	CYT	986	236.092	117.534	58.708	1.00196.79	A16S	ATOM	39800	C2'	GUA	988	242.083	106.645	57.281	1.00131.84	A16S
ATOM	39748	C2	CYT	986	237.047	115.854	60.133	1.00196.79	A16S	ATOM	39801	O2'	GUA	988	242.587	105.702	58.205	1.00131.84	A16S
ATOM	39749	O2	CYT	986	237.985	115.493	60.860	1.00196.79	A16S	ATOM	39802	C3'	GUA	988	243.148	107.611	56.780	1.00131.84	A16S
ATOM	39750	N3	CYT	986	235.967	115.070	59.927	1.00196.79	A16S	ATOM	39803	O3'	GUA	988	244.387	106.977	56.496	1.00131.84	A16S
ATOM	39751	C4	CYT	986	234.977	115.494	59.139	1.00196.79	A16S	ATOM	39804	P	GUA	989	244.655	106.401	55.021	1.00133.47	A16S
ATOM	39752	N4	CYT	986	233.929	114.685	58.962	1.00196.79	A16S	ATOM	39805	O1P	GUA	989	246.041	105.880	54.954	1.00 99.85	A16S
ATOM	39753	C5	CYT	986	235.016	116.767	58.495	1.00196.79	A16S	ATOM	39806	O2P	GUA	989	244.208	107.426	54.047	1.00 99.85	A16S
ATOM	39754	C2'	CYT	986	239.430	117.670	58.741	1.00174.65	A16S	ATOM	39807	O5'	GUA	989	243.678	105.151	54.942	1.00133.47	A16S
ATOM	39755	O2'	CYT	986	240.671	117.670	59.416	1.00174.65	A16S	ATOM	39808	C5'	GUA	989	243.800	104.091	55.882	1.00133.47	A16S
ATOM	39756	C3'	CYT	986	239.279	118.834	57.764	1.00174.65	A16S	ATOM	39809	C4'	GUA	989	242.646	103.138	55.739	1.00133.47	A16S
ATOM	39757	O3'	CYT	986	240.509	119.157	57.125	1.00174.65	A16S	ATOM	39810	O4'	GUA	989	241.416	103.797	56.136	1.00133.47	A16S
ATOM	39758	P	GUA	987	241.190	118.094	56.131	1.00153.74	A16S	ATOM	39811	C1'	GUA	989	240.351	103.352	55.311	1.00133.47	A16S
ATOM	39759	O1P	GUA	987	242.470	118.680	55.654	1.00195.40	A16S	ATOM	39812	N9	GUA	989	239.849	104.498	54.563	1.00 99.85	A16S
ATOM	39760	O2P	GUA	987	240.168	117.660	55.145	1.00195.40	A16S	ATOM	39813	C4	GUA	989	238.682	104.546	53.844	1.00 99.85	A16S
ATOM	39761	O5'	GUA	987	241.522	116.862	57.084	1.00153.74	A16S	ATOM	39814	N3	GUA	989	237.803	103.533	53.697	1.00 99.85	A16S
ATOM	39762	C5'	GUA	987	241.631	115.544	56.570	1.00153.74	A16S	ATOM	39815	C2	GUA	989	236.768	103.880	52.954	1.00 99.85	A16S
ATOM	39763	C4'	GUA	987	241.582	114.544	57.698	1.00153.74	A16S	ATOM	39816	N2	GUA	989	235.799	102.982	52.707	1.00 99.85	A16S
ATOM	39764	O4'	GUA	987	240.278	114.578	58.336	1.00153.74	A16S	ATOM	39817	N1	GUA	989	236.604	105.129	52.398	1.00 99.85	A16S
ATOM	39765	C1'	GUA	987	239.937	113.275	58.790	1.00153.74	A16S	ATOM	39818	C6	GUA	989	237.497	106.190	52.535	1.00 99.85	A16S
ATOM	39766	N9	GUA	987	238.655	112.900	58.200	1.00195.40	A16S	ATOM	39819	O6	GUA	989	237.253	107.279	51.992	1.00 99.85	A16S
ATOM	39767	C4	GUA	987	238.012	111.689	58.332	1.00195.40	A16S	ATOM	39820	C5	GUA	989	238.619	105.825	53.331	1.00 99.85	A16S
ATOM	39768	N3	GUA	987	238.455	110.626	59.037	1.00195.40	A16S	ATOM	39821	N7	GUA	989	239.732	106.562	53.711	1.00 99.85	A16S

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ATOM  39822  C8  GUA   989     240.434 105.735  54.437  1.00 99.85      A16S
ATOM  39823  C2' GUA   989     240.918 102.264  54.399  1.00133.47      A16S
ATOM  39824  O2' GUA   989     240.751 100.997  55.002  1.00133.47      A16S
ATOM  39825  C3' GUA   989     242.374 102.697  54.315  1.00133.47      A16S
ATOM  39826  O3' GUA   989     243.252 101.657  53.916  1.00133.47      A16S
ATOM  39827  P   URI   990     243.838 101.657  52.421  1.00166.66      A16S
ATOM  39828  O1P URI   990     244.814 100.540  52.322  1.00 79.60      A16S
ATOM  39829  O2P URI   990     244.269 103.043  52.092  1.00 79.60      A16S
ATOM  39830  O5' URI   990     242.565 101.305  51.532  1.00166.66      A16S
ATOM  39831  C5' URI   990     241.895 100.059  51.689  1.00166.66      A16S
ATOM  39832  C4' URI   990     240.715  99.978  50.753  1.00166.66      A16S
ATOM  39833  O4' URI   990     239.638 100.831  51.225  1.00166.66      A16S
ATOM  39834  C1' URI   990     238.943 101.375  50.112  1.00166.66      A16S
ATOM  39835  N1  URI   990     239.131 102.831  50.114  1.00 79.60      A16S
ATOM  39836  C6  URI   990     240.234 103.419  50.693  1.00 79.60      A16S
ATOM  39837  C2  URI   990     238.157 103.595  49.502  1.00 79.60      A16S
ATOM  39838  O2  URI   990     237.171 103.104  48.976  1.00 79.60      A16S
ATOM  39839  N3  URI   990     238.381 104.951  49.525  1.00 79.60      A16S
ATOM  39840  C4  URI   990     239.459 105.605  50.084  1.00 79.60      A16S
ATOM  39841  O4  URI   990     239.500 106.837  50.055  1.00 79.60      A16S
ATOM  39842  C5  URI   990     240.428 104.744  50.696  1.00 79.60      A16S
ATOM  39843  C2' URI   990     239.558 100.750  48.862  1.00166.66      A16S
ATOM  39844  O2' URI   990     238.866  99.564  48.527  1.00166.66      A16S
ATOM  39845  C3' URI   990     240.972 100.491  49.350  1.00166.66      A16S
ATOM  39846  O3' URI   990     241.678  99.564  48.549  1.00166.66      A16S
ATOM  39847  P   GUA   991     242.709 100.112  47.450  1.00116.06      A16S
ATOM  39848  O1P GUA   991     243.392  98.934  46.859  1.00 92.17      A16S
ATOM  39849  O2P GUA   991     243.514 101.200  48.063  1.00 92.17      A16S
ATOM  39850  O5' GUA   991     241.759 100.764  46.350  1.00116.06      A16S
ATOM  39851  C5' GUA   991     240.813  99.966  45.646  1.00116.06      A16S
ATOM  39852  C4' GUA   991     239.852 100.838  44.872  1.00116.06      A16S
ATOM  39853  O4' GUA   991     239.034 101.622  45.789  1.00116.06      A16S
ATOM  39854  C1' GUA   991     238.707 102.869  45.187  1.00116.06      A16S
ATOM  39855  N9  GUA   991     239.406 103.925  45.906  1.00 92.17      A16S
ATOM  39856  C4  GUA   991     239.047 105.248  45.976  1.00 92.17      A16S
ATOM  39857  N3  GUA   991     237.933 105.795  45.452  1.00 92.17      A16S
ATOM  39858  C2  GUA   991     237.890 107.105  45.643  1.00 92.17      A16S
ATOM  39859  N2  GUA   991     236.843 107.817  45.191  1.00 92.17      A16S
ATOM  39860  N1  GUA   991     238.867 107.817  46.290  1.00 92.17      A16S
ATOM  39861  C6  GUA   991     240.023 107.273  46.836  1.00 92.17      A16S
ATOM  39862  O6  GUA   991     240.852 108.009  47.386  1.00 92.17      A16S
ATOM  39863  C5  GUA   991     240.073 105.869  46.651  1.00 92.17      A16S
ATOM  39864  N7  GUA   991     241.032 104.948  47.042  1.00 92.17      A16S
ATOM  39865  C8  GUA   991     240.588 103.808  46.590  1.00 92.17      A16S
ATOM  39866  C2' GUA   991     239.269 102.810  43.767  1.00116.06      A16S
ATOM  39867  O2' GUA   991     238.318 102.231  42.895  1.00116.06      A16S
ATOM  39868  C3' GUA   991     240.468 101.906  43.991  1.00116.06      A16S
ATOM  39869  O3' GUA   991     241.012 101.402  42.785  1.00116.06      A16S
ATOM  39870  P   ADE   992     242.283 102.139  42.138  1.00 90.22      A16S
ATOM  39871  O1P ADE   992     242.831 101.244  41.087  1.00 95.41      A16S
ATOM  39872  O2P ADE   992     243.160 102.593  43.243  1.00 95.41      A16S
ATOM  39873  O5' ADE   992     241.665 103.443  41.458  1.00 90.22      A16S
ATOM  39874  C5' ADE   992     242.481 104.341  40.704  1.00 90.22      A16S
ATOM  39875  C4' ADE   992     241.646 105.056  39.664  1.00 90.22      A16S
ATOM  39876  O4' ADE   992     241.142 104.095  38.704  1.00 90.22      A16S
ATOM  39877  C1' ADE   992     239.830 104.448  38.313  1.00 90.22      A16S
ATOM  39878  N9  ADE   992     238.956 103.321  38.628  1.00 95.41      A16S
ATOM  39879  C4  ADE   992     237.882 102.873  37.899  1.00 95.41      A16S
ATOM  39880  N3  ADE   992     237.398 103.386  36.755  1.00 95.41      A16S
ATOM  39881  C2  ADE   992     236.349 102.682  36.333  1.00 95.41      A16S
ATOM  39882  N1  ADE   992     235.773 101.605  36.883  1.00 95.41      A16S
ATOM  39883  C6  ADE   992     236.285 101.119  38.033  1.00 95.41      A16S
ATOM  39884  N6  ADE   992     235.715 100.048  38.585  1.00 95.41      A16S
ATOM  39885  C5  ADE   992     237.396 101.775  38.582  1.00 95.41      A16S
ATOM  39886  N7  ADE   992     238.144 101.538  39.723  1.00 95.41      A16S
ATOM  39887  C8  ADE   992     239.051 102.481  39.705  1.00 95.41      A16S
ATOM  39888  C2' ADE   992     239.470 105.766  39.005  1.00 90.22      A16S
ATOM  39889  O2' ADE   992     239.703 106.853  38.134  1.00 90.22      A16S
ATOM  39890  C3' ADE   992     240.417 105.767  40.201  1.00 90.22      A16S
ATOM  39891  O3' ADE   992     240.773 107.098  40.557  1.00 90.22      A16S
ATOM  39892  P   ADE   993     240.585 107.599  42.070  1.00 89.07      A16S
ATOM  39893  O1P ADE   993     241.685 108.551  42.361  1.00 81.27      A16S
ATOM  39894  O2P ADE   993     240.405 106.392  42.918  1.00 81.27      A16S
ATOM  39895  O5' ADE   993     239.228 108.432  42.035  1.00 89.07      A16S
ATOM  39896  C5' ADE   993     239.083 109.543  41.155  1.00 89.07      A16S
ATOM  39897  C4' ADE   993     237.737 109.491  40.479  1.00 89.07      A16S
ATOM  39898  O4' ADE   993     237.635 108.245  39.742  1.00 89.07      A16S
ATOM  39899  C1' ADE   993     236.323 107.725  39.859  1.00 89.07      A16S
ATOM  39900  N9  ADE   993     236.425 106.429  40.522  1.00 81.27      A16S
ATOM  39901  C4  ADE   993     235.572 105.359  40.404  1.00 81.27      A16S
ATOM  39902  N3  ADE   993     234.422 105.302  39.711  1.00 81.27      A16S
ATOM  39903  C2  ADE   993     233.893 104.083  39.782  1.00 81.27      A16S
ATOM  39904  N1  ADE   993     234.355 102.993  40.412  1.00 81.27      A16S
ATOM  39905  C6  ADE   993     235.514 103.085  41.095  1.00 81.27      A16S
ATOM  39906  N6  ADE   993     235.989 101.995  41.700  1.00 81.27      A16S
ATOM  39907  C5  ADE   993     236.161 104.330  41.115  1.00 81.27      A16S
ATOM  39908  N7  ADE   993     237.330 104.761  41.719  1.00 81.27      A16S
ATOM  39909  C8  ADE   993     237.432 106.012  41.349  1.00 81.27      A16S
ATOM  39910  C2' ADE   993     235.486 108.768  40.597  1.00 89.07      A16S
ATOM  39911  O2' ADE   993     234.886 109.641  39.661  1.00 89.07      A16S
ATOM  39912  C3' ADE   993     236.550 109.471  41.424  1.00 89.07      A16S
ATOM  39913  O3' ADE   993     236.153 110.793  41.744  1.00 89.07      A16S
ATOM  39914  P   ADE   994     235.431 111.083  43.145  1.00 94.00      A16S
ATOM  39915  O1P ADE   994     235.327 112.558  43.269  1.00 75.70      A16S
ATOM  39916  O2P ADE   994     236.138 110.303  44.194  1.00 75.70      A16S
ATOM  39917  O5' ADE   994     233.972 110.457  42.982  1.00 94.00      A16S
ATOM  39918  C5' ADE   994     232.934 111.151  42.290  1.00 94.00      A16S
ATOM  39919  C4' ADE   994     231.757 110.227  42.055  1.00 94.00      A16S
ATOM  39920  O4' ADE   994     232.229 109.067  41.319  1.00 94.00      A16S
ATOM  39921  C1' ADE   994     231.625 107.893  41.827  1.00 94.00      A16S
ATOM  39922  N9  ADE   994     232.662 107.134  42.512  1.00 75.70      A16S
ATOM  39923  C4  ADE   994     232.663 105.785  42.757  1.00 75.70      A16S
ATOM  39924  N3  ADE   994     231.719 104.895  42.414  1.00 75.70      A16S
ATOM  39925  C2  ADE   994     232.060 103.676  42.818  1.00 75.70      A16S
ATOM  39926  N1  ADE   994     233.152 103.280  43.479  1.00 75.70      A16S
ATOM  39927  C6  ADE   994     234.078 104.209  43.811  1.00 75.70      A16S
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ATOM	39928	N6	ADE	994	235.168	103.825	44.478	1.00	75.70	A16S	ATOM	39981	O2P	CYT	997	228.396	104.552	53.814	1.00	98.86	A16S
ATOM	39929	C5	ADE	994	233.839	105.529	43.435	1.00	75.70	A16S	ATOM	39982	O5'	CYT	997	229.454	102.529	54.794	1.00175.18		A16S
ATOM	39930	N7	ADE	994	234.572	106.694	43.610	1.00	75.70	A16S	ATOM	39983	C5'	CYT	997	229.601	101.136	55.039	1.00175.18		A16S
ATOM	39931	C8	ADE	994	233.831	107.615	43.049	1.00	75.70	A16S	ATOM	39984	C4'	CYT	997	230.943	100.862	55.669	1.00175.18		A16S
ATOM	39932	C2'	ADE	994	230.526	108.337	42.785	1.00	94.00	A16S	ATOM	39985	O4'	CYT	997	231.985	101.292	54.751	1.00175.18		A16S
ATOM	39933	O2'	ADE	994	229.311	108.493	42.081	1.00	94.00	A16S	ATOM	39986	C1'	CYT	997	233.080	101.818	55.485	1.00175.18		A16S
ATOM	39934	C3'	ADE	994	231.103	109.647	43.303	1.00	94.00	A16S	ATOM	39987	N1	CYT	997	233.220	103.247	55.157	1.00	98.86	A16S
ATOM	39935	O3'	ADE	994	230.079	110.508	43.791	1.00	94.00	A16S	ATOM	39988	C6	CYT	997	232.141	103.997	54.776	1.00	98.86	A16S
ATOM	39936	P	GUA	995	229.752	110.553	45.363	1.00	94.04	A16S	ATOM	39989	C2	CYT	997	234.483	103.832	55.261	1.00	98.86	A16S
ATOM	39937	O1P	GUA	995	228.415	111.181	45.488	1.00	82.73	A16S	ATOM	39990	O2	CYT	997	235.445	103.120	55.588	1.00	98.86	A16S
ATOM	39938	O2P	GUA	995	230.909	111.141	46.082	1.00	82.73	A16S	ATOM	39991	N3	CYT	997	234.627	105.153	55.004	1.00	98.86	A16S
ATOM	39939	O5'	GUA	995	229.624	109.024	45.782	1.00	94.04	A16S	ATOM	39992	C4	CYT	997	233.565	105.883	54.655	1.00	98.86	A16S
ATOM	39940	C5'	GUA	995	228.540	108.243	45.307	1.00	94.04	A16S	ATOM	39993	N4	CYT	997	233.750	107.190	54.439	1.00	98.86	A16S
ATOM	39941	C4'	GUA	995	228.805	106.785	45.557	1.00	94.04	A16S	ATOM	39994	C5	CYT	997	232.266	105.307	54.521	1.00	98.86	A16S
ATOM	39942	O4'	GUA	995	230.105	106.458	45.004	1.00	94.04	A16S	ATOM	39995	C2'	CYT	997	232.761	101.611	56.965	1.00175.18		A16S
ATOM	39943	C1'	GUA	995	230.744	105.501	45.828	1.00	94.04	A16S	ATOM	39996	O2'	CYT	997	233.270	100.366	57.400	1.00175.18		A16S
ATOM	39944	N9	GUA	995	231.939	106.113	46.394	1.00	82.73	A16S	ATOM	39997	C3'	CYT	997	231.242	101.643	56.938	1.00175.18		A16S
ATOM	39945	C4	GUA	995	232.987	105.436	46.950	1.00	82.73	A16S	ATOM	39998	O3'	CYT	997	230.675	101.033	58.089	1.00175.18		A16S
ATOM	39946	N3	GUA	995	233.075	104.098	47.079	1.00	82.73	A16S	ATOM	39999	P	URI	998	230.251	101.949	59.341	1.00181.56		A16S
ATOM	39947	C2	GUA	995	234.207	103.733	47.636	1.00	82.73	A16S	ATOM	40000	O1P	URI	998	229.858	101.035	60.445	1.00167.75		A16S
ATOM	39948	N2	GUA	995	234.453	102.434	47.842	1.00	82.73	A16S	ATOM	40001	O2P	URI	998	229.302	102.995	58.881	1.00167.75		A16S
ATOM	39949	N1	GUA	995	235.183	104.613	48.036	1.00	82.73	A16S	ATOM	40002	O5'	URI	998	231.605	102.670	59.760	1.00181.56		A16S
ATOM	39950	C6	GUA	995	235.114	105.998	47.916	1.00	82.73	A16S	ATOM	40003	C5'	URI	998	232.686	101.926	60.302	1.00181.56		A16S
ATOM	39951	O6	GUA	995	236.057	106.701	48.307	1.00	82.73	A16S	ATOM	40004	C4'	URI	998	233.844	102.842	60.597	1.00181.56		A16S
ATOM	39952	C5	GUA	995	233.895	106.404	47.322	1.00	82.73	A16S	ATOM	40005	O4'	URI	998	234.294	103.445	59.354	1.00181.56		A16S
ATOM	39953	N7	GUA	995	233.416	107.673	47.023	1.00	82.73	A16S	ATOM	40006	C1'	URI	998	234.699	104.785	59.591	1.00181.56		A16S
ATOM	39954	C8	GUA	995	232.250	107.452	46.474	1.00	82.73	A16S	ATOM	40007	N1	URI	998	233.800	105.676	58.845	1.00167.75		A16S
ATOM	39955	C2'	GUA	995	229.749	105.104	46.916	1.00	94.04	A16S	ATOM	40008	C6	URI	998	232.546	105.264	58.449	1.00167.75		A16S
ATOM	39956	O2'	GUA	995	229.007	103.969	46.509	1.00	94.04	A16S	ATOM	40009	C2	URI	998	234.254	106.951	58.557	1.00167.75		A16S
ATOM	39957	C3'	GUA	995	228.920	106.375	47.015	1.00	94.04	A16S	ATOM	40010	O2	URI	998	235.358	107.350	58.887	1.00167.75		A16S
ATOM	39958	O3'	GUA	995	227.643	106.122	47.582	1.00	94.04	A16S	ATOM	40011	N3	URI	998	233.367	107.742	57.869	1.00167.75		A16S
ATOM	39959	P	CYT	996	227.457	106.177	49.176	1.00120.73		A16S	ATOM	40012	C4	URI	998	232.099	107.395	57.449	1.00167.75		A16S
ATOM	39960	O1P	CYT	996	226.044	105.805	49.431	1.00	66.77	A16S	ATOM	40013	O4	URI	998	231.412	108.226	56.853	1.00167.75		A16S
ATOM	39961	O2P	CYT	996	227.985	107.474	49.680	1.00	66.77	A16S	ATOM	40014	C5	URI	998	231.703	106.058	57.781	1.00167.75		A16S
ATOM	39962	O5'	CYT	996	228.381	104.998	49.720	1.00120.73		A16S	ATOM	40015	C2'	URI	998	234.619	105.010	61.101	1.00181.56		A16S
ATOM	39963	C5'	CYT	996	228.021	103.634	49.514	1.00120.73		A16S	ATOM	40016	O2'	URI	998	235.862	104.690	61.693	1.00181.56		A16S
ATOM	39964	C4'	CYT	996	229.051	102.723	50.137	1.00120.73		A16S	ATOM	40017	C3'	URI	998	233.515	104.034	61.480	1.00181.56		A16S
ATOM	39965	O4'	CYT	996	230.323	102.892	49.452	1.00120.73		A16S	ATOM	40018	O3'	URI	998	233.534	103.688	62.860	1.00181.56		A16S
ATOM	39966	C1'	CYT	996	231.388	102.822	50.391	1.00120.73		A16S	ATOM	40019	P	GUA	999	232.959	104.723	63.949	1.00189.10		A16S
ATOM	39967	N1	CYT	996	231.976	104.164	50.519	1.00	66.77	A16S	ATOM	40020	O1P	GUA	999	232.674	103.953	65.187	1.00199.92		A16S
ATOM	39968	C6	CYT	996	231.212	105.284	50.337	1.00	66.77	A16S	ATOM	40021	O2P	GUA	999	231.883	105.536	63.327	1.00199.92		A16S
ATOM	39969	C2	CYT	996	233.327	104.278	50.839	1.00	66.77	A16S	ATOM	40022	O5'	GUA	999	234.198	105.679	64.235	1.00189.10		A16S
ATOM	39970	O2	CYT	996	233.992	103.243	50.994	1.00	66.77	A16S	ATOM	40023	C5'	GUA	999	235.417	105.148	64.742	1.00189.10		A16S
ATOM	39971	N3	CYT	996	233.874	105.509	50.971	1.00	66.77	A16S	ATOM	40024	C4'	GUA	999	236.443	106.243	64.884	1.00189.10		A16S
ATOM	39972	C4	CYT	996	233.118	106.597	50.790	1.00	66.77	A16S	ATOM	40025	O4'	GUA	999	236.897	106.677	63.575	1.00189.10		A16S
ATOM	39973	N4	CYT	996	233.697	107.797	50.921	1.00	66.77	A16S	ATOM	40026	C1'	GUA	999	237.212	108.061	63.619	1.00189.10		A16S
ATOM	39974	C5	CYT	996	231.736	106.506	50.464	1.00	66.77	A16S	ATOM	40027	N9	GUA	999	236.381	108.755	62.640	1.00199.92		A16S
ATOM	39975	C2'	CYT	996	230.765	102.378	51.711	1.00120.73		A16S	ATOM	40028	C4	GUA	999	236.495	110.073	62.255	1.00199.92		A16S
ATOM	39976	O2'	CYT	996	230.712	100.968	51.758	1.00120.73		A16S	ATOM	40029	N3	GUA	999	237.406	110.961	62.714	1.00199.92		A16S
ATOM	39977	C3'	CYT	996	229.388	103.007	51.591	1.00120.73		A16S	ATOM	40030	C2	GUA	999	237.262	112.153	62.155	1.00199.92		A16S
ATOM	39978	O3'	CYT	996	228.457	102.423	52.486	1.00120.73		A16S	ATOM	40031	N2	GUA	999	238.085	113.157	62.494	1.00199.92		A16S
ATOM	39979	P	CYT	997	228.237	103.081	53.931	1.00175.18		A16S	ATOM	40032	N1	GUA	999	236.301	112.449	61.221	1.00199.92		A16S
ATOM	39980	O1P	CYT	997	226.979	102.519	54.475	1.00	98.86	A16S	ATOM	40033	C6	GUA	999	235.355	111.553	60.734	1.00199.92		A16S

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ATOM  40034  O6  GUA   999     234.532 111.925  59.888  1.00199.92      A16S
ATOM  40035  C5  GUA   999     235.497 110.270  61.325  1.00199.92      A16S
ATOM  40036  N7  GUA   999     234.773 109.102  61.125  1.00199.92      A16S
ATOM  40037  C8  GUA   999     235.332 108.233  61.923  1.00199.92      A16S
ATOM  40038  C2' GUA   999     236.958 108.538  65.051  1.00189.10      A16S
ATOM  40039  O2' GUA   999     238.160 108.509  65.795  1.00189.10      A16S
ATOM  40040  C3' GUA   999     235.935 107.518  65.530  1.00189.10      A16S
ATOM  40041  O3' GUA   999     235.900 107.406  66.947  1.00189.10      A16S
ATOM  40042  P   GUA  1000     234.765 108.186  67.776  1.00149.75      A16S
ATOM  40043  O1P GUA  1000     234.711 107.582  69.130  1.00200.66      A16S
ATOM  40044  O2P GUA  1000     233.533 108.240  66.946  1.00200.66      A16S
ATOM  40045  O5' GUA  1000     235.345 109.662  67.910  1.00149.75      A16S
ATOM  40046  C5' GUA  1000     236.722 109.878  68.195  1.00149.75      A16S
ATOM  40047  C4' GUA  1000     237.197 111.144  67.527  1.00149.75      A16S
ATOM  40048  O4' GUA  1000     237.030 111.012  66.088  1.00149.75      A16S
ATOM  40049  C1' GUA  1000     236.587 112.245  65.540  1.00149.75      A16S
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ATOM  40051  C4  GUA  1000     234.497 112.915  64.290  1.00200.66      A16S
ATOM  40052  N3  GUA  1000     234.994 113.995  63.651  1.00200.66      A16S
ATOM  40053  C2  GUA  1000     234.077 114.602  62.919  1.00200.66      A16S
ATOM  40054  N2  GUA  1000     234.405 115.692  62.211  1.00200.66      A16S
ATOM  40055  N1  GUA  1000     232.770 114.184  62.827  1.00200.66      A16S
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ATOM  40058  C5  GUA  1000     233.213 112.410  64.260  1.00200.66      A16S
ATOM  40059  N7  GUA  1000     233.112 111.274  65.052  1.00200.66      A16S
ATOM  40060  C8  GUA  1000     234.310 111.117  65.545  1.00200.66      A16S
ATOM  40061  C2' GUA  1000     236.693 113.273  66.663  1.00149.75      A16S
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ATOM  40063  C3' GUA  1000     236.400 112.391  67.864  1.00149.75      A16S
ATOM  40064  O3' GUA  1000     236.808 112.981  69.087  1.00149.75      A16S
ATOM  40065  P   GUA  1001     235.794 113.951  69.869  1.00180.54      A16S
ATOM  40066  O1P GUA  1001     235.817 113.570  71.305  1.00200.66      A16S
ATOM  40067  O2P GUA  1001     234.502 113.963  69.135  1.00200.66      A16S
ATOM  40068  O5' GUA  1001     236.462 115.388  69.719  1.00180.54      A16S
ATOM  40069  C5' GUA  1001     235.667 116.562  69.753  1.00180.54      A16S
ATOM  40070  C4' GUA  1001     236.302 117.647  68.920  1.00180.54      A16S
ATOM  40071  O4' GUA  1001     236.601 117.131  67.593  1.00180.54      A16S
ATOM  40072  C1' GUA  1001     236.215 118.081  66.612  1.00180.54      A16S
ATOM  40073  N9  GUA  1001     235.017 117.565  65.954  1.00200.66      A16S
ATOM  40074  C4  GUA  1001     234.103 118.282  65.212  1.00200.66      A16S
ATOM  40075  N3  GUA  1001     234.158 119.605  64.943  1.00200.66      A16S
ATOM  40076  C2  GUA  1001     233.127 120.006  64.217  1.00200.66      A16S
ATOM  40077  N2  GUA  1001     233.025 121.293  63.855  1.00200.66      A16S
ATOM  40078  N1  GUA  1001     232.120 119.176  63.792  1.00200.66      A16S
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ATOM  40080  O6  GUA  1001     231.085 117.156  63.631  1.00200.66      A16S
ATOM  40081  C5  GUA  1001     233.144 117.367  64.831  1.00200.66      A16S
ATOM  40082  N7  GUA  1001     233.450 116.102  65.314  1.00200.66      A16S
ATOM  40083  C8  GUA  1001     234.568 116.265  65.968  1.00200.66      A16S
ATOM  40084  C2' GUA  1001     235.944 119.384  67.366  1.00180.54      A16S
ATOM  40085  O2' GUA  1001     237.145 120.112  67.535  1.00180.54      A16S
ATOM  40086  C3' GUA  1001     235.391 118.834  68.671  1.00180.54      A16S
ATOM  40087  O3' GUA  1001     235.425 119.758  69.750  1.00180.54      A16S
ATOM  40088  P   GUA  1002     234.130 119.916  70.691  1.00200.66      A16S
ATOM  40089  O1P GUA  1002     234.180 121.273  71.295  1.00200.66      A16S
ATOM  40090  O2P GUA  1002     234.043 118.721  71.573  1.00200.66      A16S
ATOM  40091  O5' GUA  1002     232.905 119.873  69.671  1.00200.66      A16S
ATOM  40092  C5' GUA  1002     232.519 121.037  68.942  1.00200.66      A16S
ATOM  40093  C4' GUA  1002     231.161 120.836  68.306  1.00200.66      A16S
ATOM  40094  O4' GUA  1002     231.255 119.905  67.195  1.00200.66      A16S
ATOM  40095  C1' GUA  1002     230.030 119.196  67.071  1.00200.66      A16S
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ATOM  40107  C2' GUA  1002     229.095 119.700  68.172  1.00200.66      A16S
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ATOM  40110  O3' GUA  1002     229.518 121.186  70.070  1.00200.66      A16S
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ATOM  40113  O2P URI  1003     229.980 119.756  72.087  1.00192.61      A16S
ATOM  40114  O5' URI  1003     227.640 119.966  71.228  1.00200.66      A16S
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ATOM  40116  C4' URI  1003     226.081 121.675  70.582  1.00200.66      A16S
ATOM  40117  O4' URI  1003     225.862 121.115  69.260  1.00200.66      A16S
ATOM  40118  C1' URI  1003     224.918 121.911  68.558  1.00200.66      A16S
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ATOM  40120  C6  URI  1003     223.507 119.890  68.838  1.00192.61      A16S
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ATOM  40123  N3  URI  1003     221.958 120.646  66.798  1.00192.61      A16S
ATOM  40124  C4  URI  1003     221.626 119.465  67.422  1.00192.61      A16S
ATOM  40125  O4  URI  1003     220.659 118.822  67.019  1.00192.61      A16S
ATOM  40126  C5  URI  1003     222.482 119.100  68.510  1.00192.61      A16S
ATOM  40127  C2' URI  1003     224.513 123.057  69.488  1.00200.66      A16S
ATOM  40128  O2' URI  1003     225.305 124.195  69.212  1.00200.66      A16S
ATOM  40129  C3' URI  1003     224.808 122.455  70.857  1.00200.66      A16S
ATOM  40130  O3' URI  1003     225.043 123.468  71.830  1.00200.66      A16S
ATOM  40131  P   GUA  1004     224.241 123.438  73.222  1.00200.48      A16S
ATOM  40132  O1P GUA  1004     225.119 122.783  74.225  1.00200.66      A16S
ATOM  40133  O2P GUA  1004     222.881 122.896  72.974  1.00200.66      A16S
ATOM  40134  O5' GUA  1004     224.102 124.977  73.612  1.00200.48      A16S
ATOM  40135  C5' GUA  1004     222.938 125.717  73.259  1.00200.48      A16S
ATOM  40136  C4' GUA  1004     223.199 126.533  72.016  1.00200.48      A16S
ATOM  40137  O4' GUA  1004     223.550 125.636  70.925  1.00200.48      A16S
ATOM  40138  C1' GUA  1004     222.985 126.111  69.711  1.00200.48      A16S
ATOM  40139  N9  GUA  1004     221.983 125.146  69.265  1.00200.66      A16S
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ATOM	40140	C4	GUA	1004	221.370	125.115	68.035	1.00200.66	A16S	ATOM	40193	O3'	CYT	1006	211.165	131.601	73.596	1.00200.66	A16S
ATOM	40141	N3	GUA	1004	221.594	125.970	67.015	1.00200.66	A16S	ATOM	40194	P	CYT	1007	211.379	131.766	75.181	1.00200.66	A16S
ATOM	40142	C2	GUA	1004	220.843	125.691	65.962	1.00200.66	A16S	ATOM	40195	O1P	CYT	1007	210.794	133.075	75.570	1.00192.29	A16S
ATOM	40143	N2	GUA	1004	220.934	126.447	64.858	1.00200.66	A16S	ATOM	40196	O2P	CYT	1007	212.801	131.478	75.496	1.00192.29	A16S
ATOM	40144	N1	GUA	1004	219.946	124.652	65.913	1.00200.66	A16S	ATOM	40197	O5'	CYT	1007	210.482	130.609	75.811	1.00200.66	A16S
ATOM	40145	C6	GUA	1004	219.701	123.757	66.950	1.00200.66	A16S	ATOM	40198	C5'	CYT	1007	209.061	130.699	75.797	1.00200.66	A16S
ATOM	40146	O6	GUA	1004	218.869	122.854	66.801	1.00200.66	A16S	ATOM	40199	C4'	CYT	1007	208.444	129.387	76.223	1.00200.66	A16S
ATOM	40147	C5	GUA	1004	220.498	124.047	68.088	1.00200.66	A16S	ATOM	40200	O4'	CYT	1007	208.793	128.353	75.262	1.00200.66	A16S
ATOM	40148	N7	GUA	1004	220.565	123.416	69.323	1.00200.66	A16S	ATOM	40201	C1'	CYT	1007	208.944	127.109	75.933	1.00200.66	A16S
ATOM	40149	C8	GUA	1004	221.458	124.099	69.986	1.00200.66	A16S	ATOM	40202	N1	CYT	1007	210.344	126.680	75.803	1.00192.29	A16S
ATOM	40150	C2'	GUA	1004	222.371	127.477	70.019	1.00200.48	A16S	ATOM	40203	C6	CYT	1007	211.320	127.568	75.448	1.00192.29	A16S
ATOM	40151	O2'	GUA	1004	223.332	128.497	69.822	1.00200.48	A16S	ATOM	40204	C2	CYT	1007	210.664	125.345	76.065	1.00192.29	A16S
ATOM	40152	C3'	GUA	1004	222.000	127.297	71.483	1.00200.48	A16S	ATOM	40205	O2	CYT	1007	209.754	124.559	76.374	1.00192.29	A16S
ATOM	40153	O3'	GUA	1004	221.830	128.540	72.146	1.00200.48	A16S	ATOM	40206	N3	CYT	1007	211.954	124.946	75.975	1.00192.29	A16S
ATOM	40154	P	CYT	1005	220.387	128.929	72.733	1.00199.79	A16S	ATOM	40207	C4	CYT	1007	212.902	125.824	75.637	1.00192.29	A16S
ATOM	40155	O1P	CYT	1005	220.366	130.407	72.884	1.00195.38	A16S	ATOM	40208	N4	CYT	1007	214.163	125.390	75.568	1.00192.29	A16S
ATOM	40156	O2P	CYT	1005	220.127	128.066	73.916	1.00195.38	A16S	ATOM	40209	C5	CYT	1007	212.600	127.187	75.355	1.00192.29	A16S
ATOM	40157	O5'	CYT	1005	219.367	128.522	71.573	1.00199.79	A16S	ATOM	40210	C2'	CYT	1007	208.571	127.347	77.396	1.00200.66	A16S
ATOM	40158	C5'	CYT	1005	219.371	129.201	70.315	1.00199.79	A16S	ATOM	40211	O2'	CYT	1007	207.195	127.084	77.593	1.00200.66	A16S
ATOM	40159	C4'	CYT	1005	218.163	128.805	69.488	1.00199.79	A16S	ATOM	40212	C3'	CYT	1007	208.927	128.819	77.547	1.00200.66	A16S
ATOM	40160	O4'	CYT	1005	218.262	127.415	69.087	1.00199.79	A16S	ATOM	40213	O3'	CYT	1007	208.280	129.412	78.664	1.00200.66	A16S
ATOM	40161	C1'	CYT	1005	216.960	126.874	68.946	1.00199.79	A16S	ATOM	40214	P	CYT	1008	208.889	129.193	80.136	1.00200.66	A16S
ATOM	40162	N1	CYT	1005	216.888	125.608	69.699	1.00195.38	A16S	ATOM	40215	O1P	CYT	1008	208.164	130.093	81.068	1.00200.66	A16S
ATOM	40163	C6	CYT	1005	217.976	125.136	70.380	1.00195.38	A16S	ATOM	40216	O2P	CYT	1008	210.368	129.273	80.044	1.00200.66	A16S
ATOM	40164	C2	CYT	1005	215.689	124.881	69.694	1.00195.38	A16S	ATOM	40217	O5'	CYT	1008	208.495	127.691	80.486	1.00200.66	A16S
ATOM	40165	O2	CYT	1005	214.710	125.339	69.083	1.00195.38	A16S	ATOM	40218	C5'	CYT	1008	207.130	127.309	80.618	1.00200.66	A16S
ATOM	40166	N3	CYT	1005	215.628	123.701	70.354	1.00195.38	A16S	ATOM	40219	C4'	CYT	1008	207.031	125.893	81.127	1.00200.66	A16S
ATOM	40167	C4	CYT	1005	216.701	123.244	71.005	1.00195.38	A16S	ATOM	40220	O4'	CYT	1008	207.505	124.973	80.109	1.00200.66	A16S
ATOM	40168	N4	CYT	1005	216.599	122.070	71.635	1.00195.38	A16S	ATOM	40221	C1'	CYT	1008	208.151	123.871	80.728	1.00200.66	A16S
ATOM	40169	C5	CYT	1005	217.928	123.969	71.039	1.00195.38	A16S	ATOM	40222	N1	CYT	1008	209.545	123.827	80.260	1.00200.66	A16S
ATOM	40170	C2'	CYT	1005	215.950	127.951	69.356	1.00199.79	A16S	ATOM	40223	C6	CYT	1008	210.167	124.954	79.797	1.00200.66	A16S
ATOM	40171	O2'	CYT	1005	215.426	128.565	68.196	1.00199.79	A16S	ATOM	40224	C2	CYT	1008	210.230	122.609	80.297	1.00200.66	A16S
ATOM	40172	C3'	CYT	1005	216.813	128.902	70.180	1.00199.79	A16S	ATOM	40225	O2	CYT	1008	209.641	121.602	80.724	1.00200.66	A16S
ATOM	40173	O3'	CYT	1005	216.315	130.235	70.102	1.00199.79	A16S	ATOM	40226	N3	CYT	1008	211.513	122.557	79.867	1.00200.66	A16S
ATOM	40174	P	CYT	1006	215.833	130.988	71.437	1.00200.66	A16S	ATOM	40227	C4	CYT	1008	212.110	123.662	79.414	1.00200.66	A16S
ATOM	40175	O1P	CYT	1006	215.866	132.448	71.166	1.00189.31	A16S	ATOM	40228	N4	CYT	1008	213.376	123.563	78.995	1.00200.66	A16S
ATOM	40176	O2P	CYT	1006	216.602	130.437	72.581	1.00189.31	A16S	ATOM	40229	C5	CYT	1008	211.437	124.918	79.369	1.00200.66	A16S
ATOM	40177	O5'	CYT	1006	214.313	130.549	71.609	1.00200.66	A16S	ATOM	40230	C2'	CYT	1008	208.032	124.067	82.241	1.00200.66	A16S
ATOM	40178	C5'	CYT	1006	213.255	131.371	71.123	1.00200.66	A16S	ATOM	40231	O2'	CYT	1008	206.893	123.379	82.718	1.00200.66	A16S
ATOM	40179	C4'	CYT	1006	211.920	130.749	71.454	1.00200.66	A16S	ATOM	40232	C3'	CYT	1008	207.897	125.582	82.335	1.00200.66	A16S
ATOM	40180	O4'	CYT	1006	211.832	129.453	70.806	1.00200.66	A16S	ATOM	40233	O3'	CYT	1008	207.270	126.005	83.541	1.00200.66	A16S
ATOM	40181	C1'	CYT	1006	211.141	128.543	71.643	1.00200.66	A16S	ATOM	40234	P	GUA	1009	208.144	126.734	84.677	1.00200.66	A16S
ATOM	40182	N1	CYT	1006	212.054	127.434	71.964	1.00189.31	A16S	ATOM	40235	O1P	GUA	1009	207.258	126.958	85.848	1.00200.21	A16S
ATOM	40183	C6	CYT	1006	213.401	127.643	72.077	1.00189.31	A16S	ATOM	40236	O2P	GUA	1009	208.854	127.885	84.061	1.00200.21	A16S
ATOM	40184	C2	CYT	1006	211.521	126.155	72.149	1.00189.31	A16S	ATOM	40237	O5'	GUA	1009	209.224	125.636	85.083	1.00200.66	A16S
ATOM	40185	O2	CYT	1006	210.295	125.994	72.041	1.00189.31	A16S	ATOM	40238	C5'	GUA	1009	208.818	124.383	85.625	1.00200.66	A16S
ATOM	40186	N3	CYT	1006	212.352	125.127	72.437	1.00189.31	A16S	ATOM	40239	C4'	GUA	1009	209.996	123.441	85.714	1.00200.66	A16S
ATOM	40187	C4	CYT	1006	213.666	125.341	72.542	1.00189.31	A16S	ATOM	40240	O4'	GUA	1009	210.470	123.117	84.377	1.00200.66	A16S
ATOM	40188	N4	CYT	1006	214.448	124.297	72.826	1.00189.31	A16S	ATOM	40241	C1'	GUA	1009	211.881	122.957	84.398	1.00200.66	A16S
ATOM	40189	C5	CYT	1006	214.236	126.635	72.362	1.00189.31	A16S	ATOM	40242	N9	GUA	1009	212.473	123.999	83.564	1.00200.21	A16S
ATOM	40190	C2'	CYT	1006	210.663	129.325	72.870	1.00200.66	A16S	ATOM	40243	C4	GUA	1009	213.740	123.997	83.031	1.00200.21	A16S
ATOM	40191	O2'	CYT	1006	209.346	129.793	72.661	1.00200.66	A16S	ATOM	40244	N3	GUA	1009	214.658	123.016	83.173	1.00200.21	A16S
ATOM	40192	C3'	CYT	1006	211.684	130.454	72.927	1.00200.66	A16S	ATOM	40245	C2	GUA	1009	215.788	123.304	82.549	1.00200.21	A16S

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ATOM  40246  N2  GUA  1009     216.809 122.434  82.583  1.00200.21      A16S
ATOM  40247  N1  GUA  1009     215.999 124.464  81.844  1.00200.21      A16S
ATOM  40248  C6  GUA  1009     215.070 125.487  81.686  1.00200.21      A16S
ATOM  40249  O6  GUA  1009     215.366 126.494  81.032  1.00200.21      A16S
ATOM  40250  C5  GUA  1009     213.851 125.190  82.347  1.00200.21      A16S
ATOM  40251  N7  GUA  1009     212.676 125.923  82.440  1.00200.21      A16S
ATOM  40252  C8  GUA  1009     211.888 125.179  83.167  1.00200.21      A16S
ATOM  40253  C2' GUA  1009     212.317 123.080  85.859  1.00200.66      A16S
ATOM  40254  O2' GUA  1009     212.311 121.801  86.461  1.00200.66      A16S
ATOM  40255  C3' GUA  1009     211.230 123.994  86.405  1.00200.66      A16S
ATOM  40256  O3' GUA  1009     211.113 123.927  87.820  1.00200.66      A16S
ATOM  40257  P   CYT  1010     211.527 125.201  88.710  1.00200.66      A16S
ATOM  40258  O1P CYT  1010     210.750 125.120  89.973  1.00200.66      A16S
ATOM  40259  O2P CYT  1010     211.428 126.421  87.864  1.00200.66      A16S
ATOM  40260  O5' CYT  1010     213.066 124.954  89.048  1.00200.66      A16S
ATOM  40261  C5' CYT  1010     213.934 126.046  89.343  1.00200.66      A16S
ATOM  40262  C4' CYT  1010     215.288 125.538  89.788  1.00200.66      A16S
ATOM  40263  O4' CYT  1010     215.150 124.810  91.034  1.00200.66      A16S
ATOM  40264  C1' CYT  1010     216.166 123.826  91.118  1.00200.66      A16S
ATOM  40265  N1  CYT  1010     215.548 122.527  91.430  1.00200.66      A16S
ATOM  40266  C6  CYT  1010     214.235 122.279  91.138  1.00200.66      A16S
ATOM  40267  C2  CYT  1010     216.334 121.542  92.040  1.00200.66      A16S
ATOM  40268  O2  CYT  1010     217.524 121.793  92.287  1.00200.66      A16S
ATOM  40269  N3  CYT  1010     215.779 120.346  92.346  1.00200.66      A16S
ATOM  40270  C4  CYT  1010     214.495 120.115  92.064  1.00200.66      A16S
ATOM  40271  N4  CYT  1010     213.987 118.923  92.391  1.00200.66      A16S
ATOM  40272  C5  CYT  1010     213.673 121.098  91.435  1.00200.66      A16S
ATOM  40273  C2' CYT  1010     216.952 123.849  89.803  1.00200.66      A16S
ATOM  40274  O2' CYT  1010     218.146 124.583  89.984  1.00200.66      A16S
ATOM  40275  C3' CYT  1010     215.975 124.546  88.861  1.00200.66      A16S
ATOM  40276  O3' CYT  1010     216.680 125.229  87.828  1.00200.66      A16S
ATOM  40277  P   GUA  1011     216.639 124.665  86.322  1.00200.66      A16S
ATOM  40278  O1P GUA  1011     217.541 125.526  85.515  1.00197.06      A16S
ATOM  40279  O2P GUA  1011     215.218 124.512  85.920  1.00197.06      A16S
ATOM  40280  O5' GUA  1011     217.287 123.212  86.421  1.00200.66      A16S
ATOM  40281  C5' GUA  1011     218.669 123.044  86.722  1.00200.66      A16S
ATOM  40282  C4' GUA  1011     218.919 121.650  87.246  1.00200.66      A16S
ATOM  40283  O4' GUA  1011     218.055 121.432  88.393  1.00200.66      A16S
ATOM  40284  C1' GUA  1011     217.615 120.085  88.414  1.00200.66      A16S
ATOM  40285  N9  GUA  1011     216.162 120.078  88.287  1.00197.06      A16S
ATOM  40286  C4  GUA  1011     215.304 119.137  88.800  1.00197.06      A16S
ATOM  40287  N3  GUA  1011     215.658 118.053  89.526  1.00197.06      A16S
ATOM  40288  C2  GUA  1011     214.608 117.329  89.877  1.00197.06      A16S
ATOM  40289  N2  GUA  1011     214.780 116.214  90.605  1.00197.06      A16S
ATOM  40290  N1  GUA  1011     213.313 117.645  89.541  1.00197.06      A16S
ATOM  40291  C6  GUA  1011     212.927 118.756  88.793  1.00197.06      A16S
ATOM  40292  O6  GUA  1011     211.729 118.946  88.543  1.00197.06      A16S
ATOM  40293  C5  GUA  1011     214.045 119.541  88.413  1.00197.06      A16S
ATOM  40294  N7  GUA  1011     214.109 120.716  87.676  1.00197.06      A16S
ATOM  40295  C8  GUA  1011     215.382 120.998  87.628  1.00197.06      A16S
ATOM  40296  C2' GUA  1011     218.309 119.360  87.260  1.00200.66      A16S
ATOM  40297  O2' GUA  1011     219.496 118.744  87.714  1.00200.66      A16S
ATOM  40298  C3' GUA  1011     218.573 120.511  86.299  1.00200.66      A16S
ATOM  40299  O3' GUA  1011     219.664 120.208  85.436  1.00200.66      A16S
ATOM  40300  P   ADE  1012     219.453 119.184  84.214  1.00200.66      A16S
ATOM  40301  O1P ADE  1012     220.746 119.091  83.490  1.00200.66      A16S
ATOM  40302  O2P ADE  1012     218.223 119.572  83.475  1.00200.66      A16S
ATOM  40303  O5' ADE  1012     219.187 117.780  84.921  1.00200.66      A16S
ATOM  40304  C5' ADE  1012     220.270 116.953  85.336  1.00200.66      A16S
ATOM  40305  C4' ADE  1012     219.801 115.529  85.523  1.00200.66      A16S
ATOM  40306  O4' ADE  1012     218.835 115.477  86.608  1.00200.66      A16S
ATOM  40307  C1' ADE  1012     217.881 114.458  86.347  1.00200.66      A16S
ATOM  40308  N9  ADE  1012     216.546 115.060  86.329  1.00200.66      A16S
ATOM  40309  C4  ADE  1012     215.353 114.380  86.240  1.00200.66      A16S
ATOM  40310  N3  ADE  1012     215.175 113.049  86.157  1.00200.66      A16S
ATOM  40311  C2  ADE  1012     213.878 112.752  86.082  1.00200.66      A16S
ATOM  40312  N1  ADE  1012     212.818 113.572  86.079  1.00200.66      A16S
ATOM  40313  C6  ADE  1012     213.032 114.905  86.162  1.00200.66      A16S
ATOM  40314  N6  ADE  1012     211.977 115.723  86.155  1.00200.66      A16S
ATOM  40315  C5  ADE  1012     214.365 115.350  86.249  1.00200.66      A16S
ATOM  40316  N7  ADE  1012     214.923 116.618  86.345  1.00200.66      A16S
ATOM  40317  C8  ADE  1012     216.214 116.392  86.391  1.00200.66      A16S
ATOM  40318  C2' ADE  1012     218.264 113.802  85.017  1.00200.66      A16S
ATOM  40319  O2' ADE  1012     219.033 112.641  85.259  1.00200.66      A16S
ATOM  40320  C3' ADE  1012     219.060 114.916  84.344  1.00200.66      A16S
ATOM  40321  O3' ADE  1012     219.962 114.391  83.372  1.00200.66      A16S
ATOM  40322  P   GUA  1013     219.790 114.786  81.820  1.00200.66      A16S
ATOM  40323  O1P GUA  1013     220.541 113.781  81.025  1.00188.26      A16S
ATOM  40324  O2P GUA  1013     220.110 116.227  81.670  1.00188.26      A16S
ATOM  40325  O5' GUA  1013     218.236 114.592  81.521  1.00200.66      A16S
ATOM  40326  C5' GUA  1013     217.586 113.349  81.779  1.00200.66      A16S
ATOM  40327  C4' GUA  1013     216.087 113.539  81.817  1.00200.66      A16S
ATOM  40328  O4' GUA  1013     215.781 114.608  82.754  1.00200.66      A16S
ATOM  40329  C1' GUA  1013     214.675 115.361  82.279  1.00200.66      A16S
ATOM  40330  N9  GUA  1013     215.138 116.705  81.962  1.00188.26      A16S
ATOM  40331  C4  GUA  1013     214.344 117.803  81.760  1.00188.26      A16S
ATOM  40332  N3  GUA  1013     212.996 117.829  81.842  1.00188.26      A16S
ATOM  40333  C2  GUA  1013     212.508 119.030  81.586  1.00188.26      A16S
ATOM  40334  N2  GUA  1013     211.181 119.236  81.626  1.00188.26      A16S
ATOM  40335  N1  GUA  1013     213.286 120.119  81.270  1.00188.26      A16S
ATOM  40336  C6  GUA  1013     214.676 120.112  81.175  1.00188.26      A16S
ATOM  40337  O6  GUA  1013     215.279 121.147  80.870  1.00188.26      A16S
ATOM  40338  C5  GUA  1013     215.210 118.831  81.456  1.00188.26      A16S
ATOM  40339  N7  GUA  1013     216.526 118.389  81.479  1.00188.26      A16S
ATOM  40340  C8  GUA  1013     216.435 117.125  81.787  1.00188.26      A16S
ATOM  40341  C2' GUA  1013     214.158 114.655  81.028  1.00200.66      A16S
ATOM  40342  O2' GUA  1013     213.150 113.728  81.380  1.00200.66      A16S
ATOM  40343  C3' GUA  1013     215.433 113.998  80.521  1.00200.66      A16S
ATOM  40344  O3' GUA  1013     215.146 112.906  79.656  1.00200.66      A16S
ATOM  40345  P   GUA  1014     214.703 113.195  78.138  1.00200.66      A16S
ATOM  40346  O1P GUA  1014     214.595 111.886  77.438  1.00197.52      A16S
ATOM  40347  O2P GUA  1014     215.593 114.253  77.590  1.00197.52      A16S
ATOM  40348  O5' GUA  1014     213.238 113.803  78.277  1.00200.66      A16S
ATOM  40349  C5' GUA  1014     212.159 113.010  78.761  1.00200.66      A16S
ATOM  40350  C4' GUA  1014     210.875 113.797  78.700  1.00200.66      A16S
ATOM  40351  O4' GUA  1014     210.981 114.944  79.585  1.00200.66      A16S
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ATOM	40352	C1'	GUA	1014	210.355	116.067	78.988	1.00200.66	A16S	ATOM	40405	C6	GUA	1016	212.745	121.872	70.843	1.00158.36	A16S
ATOM	40353	N9	GUA	1014	211.379	117.074	78.735	1.00197.52	A16S	ATOM	40406	O6	GUA	1016	213.811	121.516	71.359	1.00158.36	A16S
ATOM	40354	C4	GUA	1014	211.168	118.378	78.355	1.00197.52	A16S	ATOM	40407	C5	GUA	1016	211.565	121.107	70.622	1.00158.36	A16S
ATOM	40355	N3	GUA	1014	209.966	118.958	78.147	1.00197.52	A16S	ATOM	40408	N7	GUA	1016	211.281	119.778	70.912	1.00158.36	A16S
ATOM	40356	C2	GUA	1014	210.084	120.227	77.789	1.00197.52	A16S	ATOM	40409	C8	GUA	1016	210.057	119.609	70.489	1.00158.36	A16S
ATOM	40357	N2	GUA	1014	208.986	120.958	77.541	1.00197.52	A16S	ATOM	40410	C2'	GUA	1016	208.241	120.959	67.812	1.00200.66	A16S
ATOM	40358	N1	GUA	1014	211.287	120.875	77.649	1.00197.52	A16S	ATOM	40411	O2'	GUA	1016	207.305	121.900	67.327	1.00200.66	A16S
ATOM	40359	C6	GUA	1014	212.537	120.301	77.860	1.00197.52	A16S	ATOM	40412	C3'	GUA	1016	207.882	119.523	67.449	1.00200.66	A16S
ATOM	40360	O6	GUA	1014	213.562	120.981	77.709	1.00197.52	A16S	ATOM	40413	O3'	GUA	1016	207.320	119.470	66.140	1.00200.66	A16S
ATOM	40361	C5	GUA	1014	212.425	118.934	78.242	1.00197.52	A16S	ATOM	40414	P	ADE	1017	208.279	119.607	64.854	1.00200.44	A16S
ATOM	40362	N7	GUA	1014	213.406	117.999	78.543	1.00197.52	A16S	ATOM	40415	O1P	ADE	1017	207.457	119.334	63.645	1.00200.66	A16S
ATOM	40363	C8	GUA	1014	212.741	116.913	78.829	1.00197.52	A16S	ATOM	40416	O2P	ADE	1017	209.503	118.805	65.104	1.00200.66	A16S
ATOM	40364	C2'	GUA	1014	209.678	115.577	77.706	1.00200.66	A16S	ATOM	40417	O5'	ADE	1017	208.692	121.147	64.826	1.00200.44	A16S
ATOM	40365	O2'	GUA	1014	208.346	115.199	77.987	1.00200.66	A16S	ATOM	40418	C5'	ADE	1017	207.851	122.118	64.206	1.00200.44	A16S
ATOM	40366	C3'	GUA	1014	210.567	114.397	77.338	1.00200.66	A16S	ATOM	40419	C4'	ADE	1017	208.636	123.371	63.884	1.00200.44	A16S
ATOM	40367	O3'	GUA	1014	209.905	113.454	76.501	1.00200.66	A16S	ATOM	40420	O4'	ADE	1017	209.125	123.965	65.119	1.00200.44	A16S
ATOM	40368	P	GUA	1015	210.343	113.310	74.960	1.00200.66	A16S	ATOM	40421	C1'	ADE	1017	210.403	124.544	64.897	1.00200.44	A16S
ATOM	40369	O1P	GUA	1015	209.799	112.021	74.456	1.00183.76	A16S	ATOM	40422	N9	ADE	1017	211.385	123.780	65.661	1.00200.66	A16S
ATOM	40370	O2P	GUA	1015	211.803	113.576	74.871	1.00183.76	A16S	ATOM	40423	C4	ADE	1017	212.686	124.147	65.906	1.00200.66	A16S
ATOM	40371	O5'	GUA	1015	209.574	114.498	74.226	1.00200.66	A16S	ATOM	40424	N3	ADE	1017	213.300	125.280	65.523	1.00200.66	A16S
ATOM	40372	C5'	GUA	1015	208.151	114.594	74.280	1.00200.66	A16S	ATOM	40425	C2	ADE	1017	214.569	125.284	65.925	1.00200.66	A16S
ATOM	40373	C4'	GUA	1015	207.708	115.995	73.925	1.00200.66	A16S	ATOM	40426	N1	ADE	1017	215.243	124.354	66.613	1.00200.66	A16S
ATOM	40374	O4'	GUA	1015	208.294	116.928	74.871	1.00200.66	A16S	ATOM	40427	C6	ADE	1017	214.595	123.227	66.983	1.00200.66	A16S
ATOM	40375	C1'	GUA	1015	208.609	118.142	74.211	1.00200.66	A16S	ATOM	40428	N6	ADE	1017	215.266	122.299	67.667	1.00200.66	A16S
ATOM	40376	N9	GUA	1015	210.046	118.368	74.328	1.00183.76	A16S	ATOM	40429	C5	ADE	1017	213.244	123.102	66.620	1.00200.66	A16S
ATOM	40377	C4	GUA	1015	210.682	119.586	74.306	1.00183.76	A16S	ATOM	40430	N7	ADE	1017	212.308	122.100	66.836	1.00200.66	A16S
ATOM	40378	N3	GUA	1015	210.086	120.790	74.176	1.00183.76	A16S	ATOM	40431	C8	ADE	1017	211.224	122.553	66.254	1.00200.66	A16S
ATOM	40379	C2	GUA	1015	210.962	121.781	74.186	1.00183.76	A16S	ATOM	40432	C2'	ADE	1017	210.683	124.437	63.398	1.00200.44	A16S
ATOM	40380	N2	GUA	1015	210.540	123.046	74.064	1.00183.76	A16S	ATOM	40433	O2'	ADE	1017	210.218	125.596	62.736	1.00200.44	A16S
ATOM	40381	N1	GUA	1015	212.316	121.605	74.315	1.00183.76	A16S	ATOM	40434	C3'	ADE	1017	209.892	123.183	63.047	1.00200.44	A16S
ATOM	40382	C6	GUA	1015	212.955	120.377	74.450	1.00183.76	A16S	ATOM	40435	O3'	ADE	1017	209.608	123.099	61.653	1.00200.44	A16S
ATOM	40383	O6	GUA	1015	214.186	120.333	74.558	1.00183.76	A16S	ATOM	40436	P	GUA	1018	210.571	122.232	60.696	1.00199.85	A16S
ATOM	40384	C5	GUA	1015	212.024	119.300	74.441	1.00183.76	A16S	ATOM	40437	O1P	GUA	1018	209.849	122.023	59.413	1.00199.17	A16S
ATOM	40385	N7	GUA	1015	212.228	117.930	74.549	1.00183.76	A16S	ATOM	40438	O2P	GUA	1018	211.049	121.054	61.465	1.00199.17	A16S
ATOM	40386	C8	GUA	1015	211.029	117.418	74.478	1.00183.76	A16S	ATOM	40439	O5'	GUA	1018	211.821	123.188	60.425	1.00199.85	A16S
ATOM	40387	C2'	GUA	1015	208.133	118.015	72.762	1.00200.66	A16S	ATOM	40440	C5'	GUA	1018	211.701	124.341	59.586	1.00199.85	A16S
ATOM	40388	O2'	GUA	1015	206.837	118.564	72.637	1.00200.66	A16S	ATOM	40441	C4'	GUA	1018	213.011	125.105	59.534	1.00199.85	A16S
ATOM	40389	C3'	GUA	1015	208.159	116.505	72.565	1.00200.66	A16S	ATOM	40442	O4'	GUA	1018	213.340	125.586	60.864	1.00199.85	A16S
ATOM	40390	O3'	GUA	1015	207.250	116.096	71.546	1.00200.66	A16S	ATOM	40443	C1'	GUA	1018	214.736	125.483	61.079	1.00199.85	A16S
ATOM	40391	P	GUA	1016	207.806	115.713	70.086	1.00200.66	A16S	ATOM	40444	N9	GUA	1018	214.951	124.512	62.147	1.00199.17	A16S
ATOM	40392	O1P	GUA	1016	206.788	114.833	69.449	1.00158.36	A16S	ATOM	40445	C4	GUA	1018	216.160	124.090	62.649	1.00199.17	A16S
ATOM	40393	O2P	GUA	1016	209.204	115.228	70.240	1.00158.36	A16S	ATOM	40446	N3	GUA	1018	217.380	124.489	62.229	1.00199.17	A16S
ATOM	40394	O5'	GUA	1016	207.842	117.102	69.299	1.00200.66	A16S	ATOM	40447	C2	GUA	1018	218.351	123.905	62.912	1.00199.17	A16S
ATOM	40395	C5'	GUA	1016	206.640	117.700	68.811	1.00200.66	A16S	ATOM	40448	N2	GUA	1018	219.631	124.176	62.621	1.00199.17	A16S
ATOM	40396	C4'	GUA	1016	206.858	119.170	68.519	1.00200.66	A16S	ATOM	40449	N1	GUA	1018	218.140	123.012	63.931	1.00199.17	A16S
ATOM	40397	O4'	GUA	1016	207.380	119.811	69.713	1.00200.66	A16S	ATOM	40450	C6	GUA	1018	216.894	122.595	64.384	1.00199.17	A16S
ATOM	40398	C1'	GUA	1016	208.195	120.911	69.341	1.00200.66	A16S	ATOM	40451	O6	GUA	1018	216.814	121.803	65.323	1.00199.17	A16S
ATOM	40399	N9	GUA	1016	209.518	120.744	69.932	1.00158.36	A16S	ATOM	40452	C5	GUA	1018	215.846	123.197	63.652	1.00199.17	A16S
ATOM	40400	C4	GUA	1016	210.484	121.717	70.022	1.00158.36	A16S	ATOM	40453	N7	GUA	1018	214.471	123.049	63.768	1.00199.17	A16S
ATOM	40401	N3	GUA	1016	210.365	122.992	69.592	1.00158.36	A16S	ATOM	40454	C8	GUA	1018	213.983	123.845	62.857	1.00199.17	A16S
ATOM	40402	C2	GUA	1016	211.467	123.691	69.802	1.00158.36	A16S	ATOM	40455	C2'	GUA	1018	215.375	125.080	59.749	1.00199.85	A16S
ATOM	40403	N2	GUA	1016	211.520	124.979	69.429	1.00158.36	A16S	ATOM	40456	O2'	GUA	1018	215.755	126.239	59.033	1.00199.85	A16S
ATOM	40404	N1	GUA	1016	212.598	123.181	70.392	1.00158.36	A16S	ATOM	40457	C3'	GUA	1018	214.235	124.314	59.087	1.00199.85	A16S

ATOM	40458	O3'	GUA	1018	214.365	124.328	57.666	1.00199.85	A16S	ATOM	40511	N3	CYT	1021	216.030	109.977	59.497	1.00170.82	A16S
ATOM	40459	P	CYT	1019	214.827	122.996	56.888	1.00200.66	A16S	ATOM	40512	C4	CYT	1021	215.726	111.161	58.960	1.00170.82	A16S
ATOM	40460	O1P	CYT	1019	215.255	123.406	55.525	1.00181.80	A16S	ATOM	40513	N4	CYT	1021	214.483	111.623	59.128	1.00170.82	A16S
ATOM	40461	O2P	CYT	1019	213.767	121.964	57.045	1.00181.80	A16S	ATOM	40514	C5	CYT	1021	216.683	111.922	58.225	1.00170.82	A16S
ATOM	40462	O5'	CYT	1019	216.120	122.509	57.683	1.00200.66	A16S	ATOM	40515	C2'	CYT	1021	219.676	108.579	57.409	1.00185.26	A16S
ATOM	40463	C5'	CYT	1019	217.392	123.120	57.471	1.00200.66	A16S	ATOM	40516	O2'	CYT	1021	220.530	107.536	57.830	1.00185.26	A16S
ATOM	40464	C4'	CYT	1019	218.464	122.351	58.211	1.00200.66	A16S	ATOM	40517	C3'	CYT	1021	220.257	109.390	56.255	1.00185.26	A16S
ATOM	40465	O4'	CYT	1019	218.191	122.414	59.636	1.00200.66	A16S	ATOM	40518	O3'	CYT	1021	220.942	108.537	55.345	1.00185.26	A16S
ATOM	40466	C1'	CYT	1019	218.490	121.167	60.238	1.00200.66	A16S	ATOM	40519	P	URI	1022	220.105	107.700	54.255	1.00169.75	A16S
ATOM	40467	N1	CYT	1019	217.250	120.638	60.831	1.00181.80	A16S	ATOM	40520	O1P	URI	1022	221.079	106.881	53.488	1.00200.66	A16S
ATOM	40468	C6	CYT	1019	216.057	121.279	60.644	1.00181.80	A16S	ATOM	40521	O2P	URI	1022	219.203	108.635	53.535	1.00200.66	A16S
ATOM	40469	C2	CYT	1019	217.310	119.471	61.599	1.00181.80	A16S	ATOM	40522	O5'	URI	1022	219.202	106.711	55.118	1.00169.75	A16S
ATOM	40470	O2	CYT	1019	218.402	118.903	61.741	1.00181.80	A16S	ATOM	40523	C5'	URI	1022	219.784	105.610	55.804	1.00169.75	A16S
ATOM	40471	N3	CYT	1019	216.176	118.993	62.162	1.00181.80	A16S	ATOM	40524	C4'	URI	1022	218.767	104.961	56.710	1.00169.75	A16S
ATOM	40472	C4	CYT	1019	215.018	119.631	61.979	1.00181.80	A16S	ATOM	40525	O4'	URI	1022	218.276	105.940	57.663	1.00169.75	A16S
ATOM	40473	N4	CYT	1019	213.926	119.128	62.557	1.00181.80	A16S	ATOM	40526	C1'	URI	1022	216.934	105.631	58.010	1.00169.75	A16S
ATOM	40474	C5	CYT	1019	214.928	120.816	61.195	1.00181.80	A16S	ATOM	40527	N1	URI	1022	216.085	106.785	57.690	1.00200.66	A16S
ATOM	40475	C2'	CYT	1019	219.117	120.273	59.164	1.00200.66	A16S	ATOM	40528	C6	URI	1022	216.421	107.677	56.700	1.00200.66	A16S
ATOM	40476	O2'	CYT	1019	220.525	120.378	59.219	1.00200.66	A16S	ATOM	40529	C2	URI	1022	214.923	106.937	58.419	1.00200.66	A16S
ATOM	40477	C3'	CYT	1019	218.530	120.865	57.887	1.00200.66	A16S	ATOM	40530	O2	URI	1022	214.593	106.166	59.300	1.00200.66	A16S
ATOM	40478	O3'	CYT	1019	219.374	120.634	56.758	1.00200.66	A16S	ATOM	40531	N3	URI	1022	214.157	108.023	58.074	1.00200.66	A16S
ATOM	40479	P	CYT	1020	219.127	119.350	55.818	1.00200.66	A16S	ATOM	40532	C4	URI	1022	214.429	108.950	57.093	1.00200.66	A16S
ATOM	40480	O1P	CYT	1020	220.036	119.469	54.648	1.00153.30	A16S	ATOM	40533	O4	URI	1022	213.642	109.881	56.906	1.00200.66	A16S
ATOM	40481	O2P	CYT	1020	217.664	119.203	55.596	1.00153.30	A16S	ATOM	40534	C5	URI	1022	215.652	108.725	56.383	1.00200.66	A16S
ATOM	40482	O5'	CYT	1020	219.624	118.119	56.700	1.00200.66	A16S	ATOM	40535	C2'	URI	1022	216.535	104.391	57.211	1.00169.75	A16S
ATOM	40483	C5'	CYT	1020	221.011	117.907	56.952	1.00200.66	A16S	ATOM	40536	O2'	URI	1022	216.722	103.229	57.992	1.00169.75	A16S
ATOM	40484	C4'	CYT	1020	221.203	116.645	57.756	1.00200.66	A16S	ATOM	40537	C3'	URI	1022	217.498	104.470	56.038	1.00169.75	A16S
ATOM	40485	O4'	CYT	1020	220.545	116.799	59.045	1.00200.66	A16S	ATOM	40538	O3'	URI	1022	217.678	103.196	55.447	1.00169.75	A16S
ATOM	40486	C1'	CYT	1020	219.947	115.569	59.427	1.00200.66	A16S	ATOM	40539	P	ADE	1023	216.613	102.675	54.367	1.00200.66	A16S
ATOM	40487	N1	CYT	1020	218.488	115.752	59.454	1.00153.30	A16S	ATOM	40540	O1P	ADE	1023	217.152	101.427	53.771	1.00189.98	A16S
ATOM	40488	C6	CYT	1020	217.929	116.979	59.230	1.00153.30	A16S	ATOM	40541	O2P	ADE	1023	216.268	103.821	53.489	1.00189.98	A16S
ATOM	40489	C2	CYT	1020	217.676	114.644	59.713	1.00153.30	A16S	ATOM	40542	O5'	ADE	1023	215.329	102.308	55.235	1.00200.66	A16S
ATOM	40490	O2	CYT	1020	218.211	113.548	59.925	1.00153.30	A16S	ATOM	40543	C5'	ADE	1023	215.259	101.078	55.953	1.00200.66	A16S
ATOM	40491	N3	CYT	1020	216.333	114.795	59.731	1.00153.30	A16S	ATOM	40544	C4'	ADE	1023	213.947	100.979	56.694	1.00200.66	A16S
ATOM	40492	C4	CYT	1020	215.796	115.997	59.509	1.00153.30	A16S	ATOM	40545	O4'	ADE	1023	213.878	102.042	57.680	1.00200.66	A16S
ATOM	40493	N4	CYT	1020	214.466	116.101	59.536	1.00153.30	A16S	ATOM	40546	C1'	ADE	1023	212.547	102.519	57.774	1.00200.66	A16S
ATOM	40494	C5	CYT	1020	216.600	117.145	59.248	1.00153.30	A16S	ATOM	40547	N9	ADE	1023	212.539	103.920	57.363	1.00189.98	A16S
ATOM	40495	C2'	CYT	1020	220.375	114.528	58.394	1.00200.66	A16S	ATOM	40548	C4	ADE	1023	211.612	104.865	57.724	1.00189.98	A16S
ATOM	40496	O2'	CYT	1020	221.576	113.906	58.800	1.00200.66	A16S	ATOM	40549	N3	ADE	1023	210.532	104.690	58.504	1.00189.98	A16S
ATOM	40497	C3'	CYT	1020	220.558	115.402	57.166	1.00200.66	A16S	ATOM	40550	C2	ADE	1023	209.862	105.830	58.639	1.00189.98	A16S
ATOM	40498	O3'	CYT	1020	221.382	114.765	56.203	1.00200.66	A16S	ATOM	40551	N1	ADE	1023	210.131	107.037	58.126	1.00189.98	A16S
ATOM	40499	P	CYT	1021	220.716	113.768	55.135	1.00185.26	A16S	ATOM	40552	C6	ADE	1023	211.227	107.180	57.352	1.00189.98	A16S
ATOM	40500	O1P	CYT	1021	221.711	113.554	54.055	1.00170.82	A16S	ATOM	40553	N6	ADE	1023	211.501	108.387	56.853	1.00189.98	A16S
ATOM	40501	O2P	CYT	1021	219.373	114.305	54.801	1.00170.82	A16S	ATOM	40554	C5	ADE	1023	212.018	106.041	57.122	1.00189.98	A16S
ATOM	40502	O5'	CYT	1021	220.526	112.395	55.927	1.00185.26	A16S	ATOM	40555	N7	ADE	1023	213.174	105.838	56.383	1.00189.98	A16S
ATOM	40503	C5'	CYT	1021	221.651	111.580	56.254	1.00185.26	A16S	ATOM	40556	C8	ADE	1023	213.440	104.567	56.557	1.00189.98	A16S
ATOM	40504	C4'	CYT	1021	221.216	110.322	56.978	1.00185.26	A16S	ATOM	40557	C2'	ADE	1023	211.682	101.634	56.877	1.00200.66	A16S
ATOM	40505	O4'	CYT	1021	220.490	110.677	58.184	1.00185.26	A16S	ATOM	40558	O2'	ADE	1023	211.153	100.566	57.636	1.00200.66	A16S
ATOM	40506	C1'	CYT	1021	219.584	109.635	58.511	1.00185.26	A16S	ATOM	40559	C3'	ADE	1023	212.702	101.177	55.844	1.00200.66	A16S
ATOM	40507	N1	CYT	1021	218.234	110.199	58.646	1.00170.82	A16S	ATOM	40560	O3'	ADE	1023	212.307	99.961	55.222	1.00200.66	A16S
ATOM	40508	C6	CYT	1021	217.914	111.409	58.096	1.00170.82	A16S	ATOM	40561	P	GUA	1024	211.927	99.955	53.661	1.00200.66	A16S
ATOM	40509	C2	CYT	1021	217.276	109.470	59.353	1.00170.82	A16S	ATOM	40562	O1P	GUA	1024	211.748	98.531	53.264	1.00126.31	A16S
ATOM	40510	O2	CYT	1021	217.594	108.369	59.828	1.00170.82	A16S	ATOM	40563	O2P	GUA	1024	212.933	100.793	52.960	1.00126.31	A16S

ATOM	40564	O5'	GUA	1024	210.513	100.696	53.592	1.00200.66	A16S	ATOM	40617	C6	ADE	1026	207.047	112.821	48.105	1.00 93.14	A16S
ATOM	40565	C5'	GUA	1024	209.303	99.974	53.816	1.00200.66	A16S	ATOM	40618	N6	ADE	1026	208.354	112.560	48.009	1.00 93.14	A16S
ATOM	40566	C4'	GUA	1024	208.152	100.919	54.098	1.00200.66	A16S	ATOM	40619	C5	ADE	1026	206.059	111.827	48.275	1.00 93.14	A16S
ATOM	40567	O4'	GUA	1024	208.509	101.801	55.198	1.00200.66	A16S	ATOM	40620	N7	ADE	1026	206.131	110.444	48.380	1.00 93.14	A16S
ATOM	40568	C1'	GUA	1024	207.793	103.022	55.072	1.00200.66	A16S	ATOM	40621	C8	ADE	1026	204.879	110.071	48.509	1.00 93.14	A16S
ATOM	40569	N9	GUA	1024	208.739	104.118	54.912	1.00126.31	A16S	ATOM	40622	C2'	ADE	1026	201.975	111.155	47.104	1.00138.09	A16S
ATOM	40570	C4	GUA	1024	208.420	105.449	54.939	1.00126.31	A16S	ATOM	40623	O2'	ADE	1026	200.701	111.768	47.117	1.00138.09	A16S
ATOM	40571	N3	GUA	1024	207.188	105.962	55.142	1.00126.31	A16S	ATOM	40624	C3'	ADE	1026	201.913	109.680	46.733	1.00138.09	A16S
ATOM	40572	C2	GUA	1024	207.189	107.283	55.106	1.00126.31	A16S	ATOM	40625	O3'	ADE	1026	201.092	109.459	45.594	1.00138.09	A16S
ATOM	40573	N2	GUA	1024	206.043	107.957	55.285	1.00126.31	A16S	ATOM	40626	P	CYT	1027	201.776	109.110	44.173	1.00117.75	A16S
ATOM	40574	N1	GUA	1024	208.313	108.042	54.890	1.00126.31	A16S	ATOM	40627	O1P	CYT	1027	200.801	109.509	43.125	1.00 85.54	A16S
ATOM	40575	C6	GUA	1024	209.592	107.535	54.679	1.00126.31	A16S	ATOM	40628	O2P	CYT	1027	202.300	107.716	44.203	1.00 85.54	A16S
ATOM	40576	O6	GUA	1024	210.539	108.310	54.498	1.00126.31	A16S	ATOM	40629	O5'	CYT	1027	203.016	110.105	44.052	1.00117.75	A16S
ATOM	40577	C5	GUA	1024	209.603	106.114	54.713	1.00126.31	A16S	ATOM	40630	C5'	CYT	1027	202.829	111.507	44.193	1.00117.75	A16S
ATOM	40578	N7	GUA	1024	210.650	105.215	54.554	1.00126.31	A16S	ATOM	40631	C4'	CYT	1027	204.159	112.216	44.284	1.00117.75	A16S
ATOM	40579	C8	GUA	1024	210.090	104.043	54.684	1.00126.31	A16S	ATOM	40632	O4'	CYT	1027	205.078	111.429	45.087	1.00117.75	A16S
ATOM	40580	C2'	GUA	1024	206.943	102.911	53.811	1.00200.66	A16S	ATOM	40633	C1'	CYT	1027	206.411	111.702	44.686	1.00117.75	A16S
ATOM	40581	O2'	GUA	1024	205.650	102.445	54.136	1.00200.66	A16S	ATOM	40634	N1	CYT	1027	207.060	110.437	44.329	1.00 85.54	A16S
ATOM	40582	C3'	GUA	1024	207.752	101.904	53.012	1.00200.66	A16S	ATOM	40635	C6	CYT	1027	206.318	109.319	44.074	1.00 85.54	A16S
ATOM	40583	O3'	GUA	1024	206.933	101.337	52.007	1.00200.66	A16S	ATOM	40636	C2	CYT	1027	208.460	110.390	44.263	1.00 85.54	A16S
ATOM	40584	P	CYT	1025	206.654	102.171	50.663	1.00155.79	A16S	ATOM	40637	O2	CYT	1027	209.109	111.426	44.470	1.00 85.54	A16S
ATOM	40585	O1P	CYT	1025	205.792	101.331	49.793	1.00155.37	A16S	ATOM	40638	N3	CYT	1027	209.067	109.218	43.970	1.00 85.54	A16S
ATOM	40586	O2P	CYT	1025	207.965	102.652	50.158	1.00155.37	A16S	ATOM	40639	C4	CYT	1027	208.331	108.126	43.737	1.00 85.54	A16S
ATOM	40587	O5'	CYT	1025	205.804	103.435	51.140	1.00155.79	A16S	ATOM	40640	N4	CYT	1027	208.971	106.985	43.463	1.00 85.54	A16S
ATOM	40588	C5'	CYT	1025	204.455	103.280	51.574	1.00155.79	A16S	ATOM	40641	C5	CYT	1027	206.905	108.154	43.777	1.00 85.54	A16S
ATOM	40589	C4'	CYT	1025	203.754	104.620	51.660	1.00155.79	A16S	ATOM	40642	C2'	CYT	1027	206.327	112.676	43.516	1.00117.75	A16S
ATOM	40590	O4'	CYT	1025	204.424	105.475	52.626	1.00155.79	A16S	ATOM	40643	O2'	CYT	1027	206.436	113.991	44.016	1.00117.75	A16S
ATOM	40591	C1'	CYT	1025	204.176	106.835	52.299	1.00155.79	A16S	ATOM	40644	C3'	CYT	1027	204.929	112.384	42.993	1.00117.75	A16S
ATOM	40592	N1	CYT	1025	205.457	107.533	52.122	1.00155.37	A16S	ATOM	40645	O3'	CYT	1027	204.426	113.486	42.253	1.00117.75	A16S
ATOM	40593	C6	CYT	1025	206.611	106.848	51.857	1.00155.37	A16S	ATOM	40646	P	ADE	1028	205.099	113.857	40.847	1.00106.05	A16S
ATOM	40594	C2	CYT	1025	205.468	108.927	52.212	1.00155.37	A16S	ATOM	40647	O1P	ADE	1028	204.458	115.110	40.368	1.00 64.77	A16S
ATOM	40595	O2	CYT	1025	204.406	109.518	52.466	1.00155.37	A16S	ATOM	40648	O2P	ADE	1028	205.098	112.630	39.985	1.00 64.77	A16S
ATOM	40596	N3	CYT	1025	206.628	109.596	52.020	1.00155.37	A16S	ATOM	40649	O5'	ADE	1028	206.596	114.218	41.249	1.00106.05	A16S
ATOM	40597	C4	CYT	1025	207.747	108.923	51.750	1.00155.37	A16S	ATOM	40650	C5'	ADE	1028	207.621	114.302	40.276	1.00106.05	A16S
ATOM	40598	N4	CYT	1025	208.865	109.628	51.556	1.00155.37	A16S	ATOM	40651	C4'	ADE	1028	208.943	114.532	40.952	1.00106.05	A16S
ATOM	40599	C5	CYT	1025	207.769	107.498	51.663	1.00155.37	A16S	ATOM	40652	O4'	ADE	1028	209.202	113.440	41.869	1.00106.05	A16S
ATOM	40600	C2'	CYT	1025	203.372	106.846	50.999	1.00155.79	A16S	ATOM	40653	C1'	ADE	1028	210.568	113.074	41.801	1.00106.05	A16S
ATOM	40601	O2'	CYT	1025	201.995	106.974	51.285	1.00155.79	A16S	ATOM	40654	N9	ADE	1028	210.634	111.761	41.169	1.00 64.77	A16S
ATOM	40602	C3'	CYT	1025	203.739	105.489	50.416	1.00155.79	A16S	ATOM	40655	C4	ADE	1028	211.770	111.034	40.937	1.00 64.77	A16S
ATOM	40603	O3'	CYT	1025	202.776	105.077	49.459	1.00155.79	A16S	ATOM	40656	N3	ADE	1028	213.028	111.390	41.227	1.00 64.77	A16S
ATOM	40604	P	ADE	1026	202.949	105.531	47.928	1.00138.09	A16S	ATOM	40657	C2	ADE	1028	213.875	110.431	40.877	1.00 64.77	A16S
ATOM	40605	O1P	ADE	1026	201.858	104.898	47.138	1.00 93.14	A16S	ATOM	40658	N1	ADE	1028	213.625	109.245	40.312	1.00 64.77	A16S
ATOM	40606	O2P	ADE	1026	204.364	105.289	47.550	1.00 93.14	A16S	ATOM	40659	C6	ADE	1028	212.343	108.920	40.030	1.00 64.77	A16S
ATOM	40607	O5'	ADE	1026	202.696	107.106	47.957	1.00138.09	A16S	ATOM	40660	N6	ADE	1028	212.089	107.729	39.468	1.00 64.77	A16S
ATOM	40608	C5'	ADE	1026	201.396	107.614	48.225	1.00138.09	A16S	ATOM	40661	C5	ADE	1028	211.352	109.855	40.350	1.00 64.77	A16S
ATOM	40609	C4'	ADE	1026	201.340	109.110	48.016	1.00138.09	A16S	ATOM	40662	N7	ADE	1028	209.975	109.842	40.197	1.00 64.77	A16S
ATOM	40610	O4'	ADE	1026	202.116	109.803	49.034	1.00138.09	A16S	ATOM	40663	C8	ADE	1028	209.596	110.996	40.695	1.00 64.77	A16S
ATOM	40611	C1'	ADE	1026	202.525	111.069	48.527	1.00138.09	A16S	ATOM	40664	C2'	ADE	1028	211.261	114.145	40.967	1.00106.05	A16S
ATOM	40612	N9	ADE	1026	203.986	111.115	48.481	1.00 93.14	A16S	ATOM	40665	O2'	ADE	1028	211.627	115.221	41.801	1.00106.05	A16S
ATOM	40613	C4	ADE	1026	204.745	112.255	48.351	1.00 93.14	A16S	ATOM	40666	C3'	ADE	1028	210.136	114.521	40.023	1.00106.05	A16S
ATOM	40614	N3	ADE	1026	204.305	113.525	48.286	1.00 93.14	A16S	ATOM	40667	O3'	ADE	1028	210.306	115.791	39.425	1.00106.05	A16S
ATOM	40615	C2	ADE	1026	205.326	114.369	48.127	1.00 93.14	A16S	ATOM	40668	P	GUA	1029	210.252	115.909	37.829	1.00 82.94	A16S
ATOM	40616	N1	ADE	1026	206.638	114.108	48.034	1.00 93.14	A16S	ATOM	40669	O1P	GUA	1029	210.642	117.292	37.458	1.00 66.81	A16S

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ATOM  40670  O2P GUA  1029     208.942 115.368  37.389  1.00 66.81      A16S
ATOM  40671  O5' GUA  1029     211.376 114.886  37.356  1.00 82.94      A16S
ATOM  40672  C5' GUA  1029     212.727 115.063  37.745  1.00 82.94      A16S
ATOM  40673  C4' GUA  1029     213.530 113.849  37.371  1.00 82.94      A16S
ATOM  40674  O4' GUA  1029     213.057 112.702  38.130  1.00 82.94      A16S
ATOM  40675  C1' GUA  1029     213.163 111.527  37.336  1.00 82.94      A16S
ATOM  40676  N9  GUA  1029     211.819 111.024  37.075  1.00 66.81      A16S
ATOM  40677  C4  GUA  1029     211.505 109.816  36.507  1.00 66.81      A16S
ATOM  40678  N3  GUA  1029     212.385 108.867  36.133  1.00 66.81      A16S
ATOM  40679  C2  GUA  1029     211.782 107.812  35.620  1.00 66.81      A16S
ATOM  40680  N2  GUA  1029     212.506 106.758  35.231  1.00 66.81      A16S
ATOM  40681  N1  GUA  1029     210.424 107.709  35.459  1.00 66.81      A16S
ATOM  40682  C6  GUA  1029     209.503 108.681  35.830  1.00 66.81      A16S
ATOM  40683  O6  GUA  1029     208.298 108.496  35.633  1.00 66.81      A16S
ATOM  40684  C5  GUA  1029     210.135 109.805  36.407  1.00 66.81      A16S
ATOM  40685  N7  GUA  1029     209.593 110.973  36.921  1.00 66.81      A16S
ATOM  40686  C8  GUA  1029     210.628 111.665  37.310  1.00 66.81      A16S
ATOM  40687  C2' GUA  1029     213.818 111.947  36.023  1.00 82.94      A16S
ATOM  40688  O2' GUA  1029     215.219 111.800  36.116  1.00 82.94      A16S
ATOM  40689  C3' GUA  1029     213.360 113.395  35.937  1.00 82.94      A16S
ATOM  40690  O3' GUA  1029     214.103 114.179  35.015  1.00 82.94      A16S
ATOM  40691  P   GUA  1030     213.505 114.435  33.545  1.00 72.42      A16S
ATOM  40692  O1P GUA  1030     214.516 115.209  32.787  1.00 70.60      A16S
ATOM  40693  O2P GUA  1030     212.134 114.988  33.690  1.00 70.60      A16S
ATOM  40694  O5' GUA  1030     213.425 112.961  32.927  1.00 72.42      A16S
ATOM  40695  C5' GUA  1030     214.618 112.199  32.747  1.00 72.42      A16S
ATOM  40696  C4' GUA  1030     214.361 110.943  31.931  1.00 72.42      A16S
ATOM  40697  O4' GUA  1030     213.684 109.929  32.729  1.00 72.42      A16S
ATOM  40698  C1' GUA  1030     212.927 109.083  31.869  1.00 72.42      A16S
ATOM  40699  N9  GUA  1030     211.512 109.262  32.170  1.00 70.60      A16S
ATOM  40700  C4  GUA  1030     210.503 108.396  31.848  1.00 70.60      A16S
ATOM  40701  N3  GUA  1030     210.654 107.185  31.281  1.00 70.60      A16S
ATOM  40702  C2  GUA  1030     209.490 106.605  31.041  1.00 70.60      A16S
ATOM  40703  N2  GUA  1030     209.451 105.382  30.489  1.00 70.60      A16S
ATOM  40704  N1  GUA  1030     208.277 107.177  31.325  1.00 70.60      A16S
ATOM  40705  C6  GUA  1030     208.101 108.426  31.907  1.00 70.60      A16S
ATOM  40706  O6  GUA  1030     206.959 108.858  32.101  1.00 70.60      A16S
ATOM  40707  C5  GUA  1030     209.340 109.048  32.188  1.00 70.60      A16S
ATOM  40708  N7  GUA  1030     209.616 110.273  32.774  1.00 70.60      A16S
ATOM  40709  C8  GUA  1030     210.916 110.351  32.756  1.00 70.60      A16S
ATOM  40710  C2' GUA  1030     213.188 109.570  30.438  1.00 72.42      A16S
ATOM  40711  O2' GUA  1030     214.267 108.851  29.869  1.00 72.42      A16S
ATOM  40712  C3' GUA  1030     213.497 111.042  30.685  1.00 72.42      A16S
ATOM  40713  O3' GUA  1030     214.138 111.679  29.581  1.00 72.42      A16S
ATOM  40714  P   URI  1031     213.465 112.996  28.933  1.00 83.60      A16S
ATOM  40715  O1P URI  1031     214.141 114.197  29.491  1.00 66.87      A16S
ATOM  40716  O2P URI  1031     211.996 112.866  29.051  1.00 66.87      A16S
ATOM  40717  O5' URI  1031     213.843 112.940  27.388  1.00 83.60      A16S
ATOM  40718  C5' URI  1031     213.653 111.755  26.620  1.00 83.60      A16S
ATOM  40719  C4' URI  1031     214.925 111.418  25.883  1.00 83.60      A16S
ATOM  40720  O4' URI  1031     215.256 112.504  24.998  1.00 83.60      A16S
ATOM  40721  C1' URI  1031     216.656 112.627  24.904  1.00 83.60      A16S
ATOM  40722  N1  URI  1031     216.987 114.057  24.844  1.00 66.87      A16S
ATOM  40723  C6  URI  1031     216.062 115.006  25.206  1.00 66.87      A16S
ATOM  40724  C2  URI  1031     218.234 114.421  24.367  1.00 66.87      A16S
ATOM  40725  O2  URI  1031     219.104 113.608  24.101  1.00 66.87      A16S
ATOM  40726  N3  URI  1031     218.421 115.775  24.221  1.00 66.87      A16S
ATOM  40727  C4  URI  1031     217.513 116.776  24.520  1.00 66.87      A16S
ATOM  40728  O4  URI  1031     217.780 117.942  24.240  1.00 66.87      A16S
ATOM  40729  C5  URI  1031     216.277 116.316  25.064  1.00 66.87      A16S
ATOM  40730  C2' URI  1031     217.323 111.755  25.971  1.00 83.60      A16S
ATOM  40731  O2' URI  1031     218.082 110.746  25.354  1.00 83.60      A16S
ATOM  40732  C3' URI  1031     216.132 111.245  26.786  1.00 83.60      A16S
ATOM  40733  O3' URI  1031     216.211 109.872  27.177  1.00 83.60      A16S
ATOM  40734  P   GUA  1032     216.327 108.717  26.056  1.00 81.23      A16S
ATOM  40735  O1P GUA  1032     217.442 107.821  26.419  1.00 73.29      A16S
ATOM  40736  O2P GUA  1032     216.289 109.315  24.703  1.00 73.29      A16S
ATOM  40737  O5' GUA  1032     215.004 107.850  26.220  1.00 81.23      A16S
ATOM  40738  C5' GUA  1032     215.075 106.450  26.019  1.00 81.23      A16S
ATOM  40739  C4' GUA  1032     213.715 105.847  25.750  1.00 81.23      A16S
ATOM  40740  O4' GUA  1032     212.891 105.849  26.943  1.00 81.23      A16S
ATOM  40741  C1' GUA  1032     211.552 105.568  26.556  1.00 81.23      A16S
ATOM  40742  N9  GUA  1032     210.641 106.570  27.095  1.00 73.29      A16S
ATOM  40743  C4  GUA  1032     209.280 106.518  26.976  1.00 73.29      A16S
ATOM  40744  N3  GUA  1032     208.585 105.531  26.381  1.00 73.29      A16S
ATOM  40745  C2  GUA  1032     207.290 105.757  26.405  1.00 73.29      A16S
ATOM  40746  N2  GUA  1032     206.459 104.863  25.860  1.00 73.29      A16S
ATOM  40747  N1  GUA  1032     206.713 106.871  26.963  1.00 73.29      A16S
ATOM  40748  C6  GUA  1032     207.406 107.904  27.580  1.00 73.29      A16S
ATOM  40749  O6  GUA  1032     206.786 108.868  28.043  1.00 73.29      A16S
ATOM  40750  C5  GUA  1032     208.812 107.666  27.570  1.00 73.29      A16S
ATOM  40751  N7  GUA  1032     209.863 108.421  28.075  1.00 73.29      A16S
ATOM  40752  C8  GUA  1032     210.930 107.728  27.773  1.00 73.29      A16S
ATOM  40753  C2' GUA  1032     211.526 105.611  25.029  1.00 81.23      A16S
ATOM  40754  O2' GUA  1032     211.665 104.286  24.549  1.00 81.23      A16S
ATOM  40755  C3' GUA  1032     212.761 106.452  24.739  1.00 81.23      A16S
ATOM  40756  O3' GUA  1032     213.145 106.265  23.386  1.00 81.23      A16S
ATOM  40757  P   CYT  1033     212.405 107.109  22.229  1.00 63.67      A16S
ATOM  40758  O1P CYT  1033     213.186 106.919  20.974  1.00 71.75      A16S
ATOM  40759  O2P CYT  1033     212.159 108.482  22.735  1.00 71.75      A16S
ATOM  40760  O5' CYT  1033     210.979 106.412  22.062  1.00 63.67      A16S
ATOM  40761  C5' CYT  1033     210.834 105.160  21.389  1.00 63.67      A16S
ATOM  40762  C4' CYT  1033     209.368 104.858  21.134  1.00 63.67      A16S
ATOM  40763  O4' CYT  1033     208.654 104.847  22.403  1.00 63.67      A16S
ATOM  40764  C1' CYT  1033     207.339 105.340  22.216  1.00 63.67      A16S
ATOM  40765  N1  CYT  1033     207.175 106.575  23.002  1.00 71.75      A16S
ATOM  40766  C6  CYT  1033     208.234 107.174  23.623  1.00 71.75      A16S
ATOM  40767  C2  CYT  1033     205.908 107.134  23.084  1.00 71.75      A16S
ATOM  40768  O2  CYT  1033     204.968 106.544  22.542  1.00 71.75      A16S
ATOM  40769  N3  CYT  1033     205.732 108.296  23.754  1.00 71.75      A16S
ATOM  40770  C4  CYT  1033     206.768 108.886  24.342  1.00 71.75      A16S
ATOM  40771  N4  CYT  1033     206.548 110.035  24.977  1.00 71.75      A16S
ATOM  40772  C5  CYT  1033     208.077 108.323  24.299  1.00 71.75      A16S
ATOM  40773  C2' CYT  1033     207.163 105.597  20.719  1.00 63.67      A16S
ATOM  40774  O2' CYT  1033     206.643 104.450  20.075  1.00 63.67      A16S
ATOM  40775  C3' CYT  1033     208.596 105.869  20.296  1.00 63.67      A16S
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ATOM	40776	O3'	CYT	1033	208.731	105.638	18.900	1.00	63.67	A16S	ATOM	40829	C6	CYT	1036	200.532	107.627	12.095	1.00119.96	A16S
ATOM	40777	P	URI	1034	208.439	106.835	17.869	1.00	71.07	A16S	ATOM	40830	C2	CYT	1036	198.867	107.611	10.370	1.00119.96	A16S
ATOM	40778	O1P	URI	1034	208.710	106.324	16.499	1.00	73.07	A16S	ATOM	40831	O2	CYT	1036	198.006	108.231	9.733	1.00119.96	A16S
ATOM	40779	O2P	URI	1034	209.150	108.042	18.361	1.00	73.07	A16S	ATOM	40832	N3	CYT	1036	199.186	106.331	10.077	1.00119.96	A16S
ATOM	40780	O5'	URI	1034	206.878	107.129	17.996	1.00	71.07	A16S	ATOM	40833	C4	CYT	1036	200.138	105.706	10.774	1.00119.96	A16S
ATOM	40781	C5'	URI	1034	205.919	106.325	17.322	1.00	71.07	A16S	ATOM	40834	N4	CYT	1036	200.396	104.430	10.475	1.00119.96	A16S
ATOM	40782	C4'	URI	1034	204.533	106.871	17.554	1.00	71.07	A16S	ATOM	40835	C5	CYT	1036	200.863	106.360	11.815	1.00119.96	A16S
ATOM	40783	O4'	URI	1034	204.315	106.984	18.988	1.00	71.07	A16S	ATOM	40836	C2'	CYT	1036	199.067	109.827	13.300	1.00 66.61	A16S
ATOM	40784	C1'	URI	1034	203.504	108.115	19.261	1.00	71.07	A16S	ATOM	40837	O2'	CYT	1036	197.980	110.680	13.597	1.00 66.61	A16S
ATOM	40785	N1	URI	1034	204.265	109.036	20.120	1.00	73.07	A16S	ATOM	40838	C3'	CYT	1036	200.396	110.528	13.530	1.00 66.61	A16S
ATOM	40786	C6	URI	1034	205.630	108.937	20.229	1.00	73.07	A16S	ATOM	40839	O3'	CYT	1036	200.372	111.338	14.706	1.00 66.61	A16S
ATOM	40787	C2	URI	1034	203.572	110.018	20.803	1.00	73.07	A16S	ATOM	40840	P	ADE	1037	200.387	110.649	16.162	1.00 61.57	A16S
ATOM	40788	O2	URI	1034	202.364	110.125	20.771	1.00	73.07	A16S	ATOM	40841	O1P	ADE	1037	201.515	111.200	16.942	1.00 63.98	A16S
ATOM	40789	N3	URI	1034	204.352	110.872	21.535	1.00	73.07	A16S	ATOM	40842	O2P	ADE	1037	200.251	109.179	16.010	1.00 63.98	A16S
ATOM	40790	C4	URI	1034	205.718	110.845	21.661	1.00	73.07	A16S	ATOM	40843	O5'	ADE	1037	199.059	111.191	16.845	1.00 61.57	A16S
ATOM	40791	O4	URI	1034	206.283	111.747	22.275	1.00	73.07	A16S	ATOM	40844	C5'	ADE	1037	197.775	110.876	16.320	1.00 61.57	A16S
ATOM	40792	C5	URI	1034	206.358	109.784	20.957	1.00	73.07	A16S	ATOM	40845	C4'	ADE	1037	196.734	111.744	16.969	1.00 61.57	A16S
ATOM	40793	C2'	URI	1034	203.115	108.720	17.909	1.00	71.07	A16S	ATOM	40846	O4'	ADE	1037	196.772	111.523	18.409	1.00 61.57	A16S
ATOM	40794	O2'	URI	1034	201.887	108.157	17.497	1.00	71.07	A16S	ATOM	40847	C1'	ADE	1037	196.672	112.760	19.091	1.00 61.57	A16S
ATOM	40795	C3'	URI	1034	204.273	108.272	17.023	1.00	71.07	A16S	ATOM	40848	N9	ADE	1037	197.970	113.047	19.701	1.00 63.98	A16S
ATOM	40796	O3'	URI	1034	203.847	108.205	15.662	1.00	71.07	A16S	ATOM	40849	C4	ADE	1037	198.298	114.142	20.467	1.00 63.98	A16S
ATOM	40797	P	GUA	1035	204.686	108.952	14.503	1.00	64.38	A16S	ATOM	40850	N3	ADE	1037	197.491	115.149	20.845	1.00 63.98	A16S
ATOM	40798	O1P	GUA	1035	204.022	108.613	13.220	1.00	57.33	A16S	ATOM	40851	C2	ADE	1037	198.158	116.044	21.578	1.00 63.98	A16S
ATOM	40799	O2P	GUA	1035	206.127	108.638	14.682	1.00	57.33	A16S	ATOM	40852	N1	ADE	1037	199.443	116.056	21.935	1.00 63.98	A16S
ATOM	40800	O5'	GUA	1035	204.473	110.510	14.761	1.00	64.38	A16S	ATOM	40853	C6	ADE	1037	200.232	115.039	21.526	1.00 63.98	A16S
ATOM	40801	C5'	GUA	1035	204.650	111.449	13.698	1.00	64.38	A16S	ATOM	40854	N6	ADE	1037	201.527	115.072	21.851	1.00 63.98	A16S
ATOM	40802	C4'	GUA	1035	204.290	112.828	14.167	1.00	64.38	A16S	ATOM	40855	C5	ADE	1037	199.636	114.007	20.764	1.00 63.98	A16S
ATOM	40803	O4'	GUA	1035	205.225	113.248	15.174	1.00	64.38	A16S	ATOM	40856	N7	ADE	1037	200.139	112.832	20.223	1.00 63.98	A16S
ATOM	40804	C1'	GUA	1035	205.030	114.625	15.359	1.00	64.38	A16S	ATOM	40857	C8	ADE	1037	199.111	112.300	19.610	1.00 63.98	A16S
ATOM	40805	N9	GUA	1035	206.217	115.299	15.857	1.00	57.33	A16S	ATOM	40858	C2'	ADE	1037	196.290	113.791	18.033	1.00 61.57	A16S
ATOM	40806	C4	GUA	1035	206.177	116.556	16.369	1.00	57.33	A16S	ATOM	40859	O2'	ADE	1037	194.889	113.774	17.861	1.00 61.57	A16S
ATOM	40807	N3	GUA	1035	205.077	117.330	16.432	1.00	57.33	A16S	ATOM	40860	C3'	ADE	1037	197.002	113.225	16.820	1.00 61.57	A16S
ATOM	40808	C2	GUA	1035	205.325	118.491	16.980	1.00	57.33	A16S	ATOM	40861	O3'	ADE	1037	196.460	113.721	15.611	1.00 61.57	A16S
ATOM	40809	N2	GUA	1035	204.340	119.381	17.106	1.00	57.33	A16S	ATOM	40862	P	URI	1038	197.073	115.053	14.970	1.00 51.29	A16S
ATOM	40810	N1	GUA	1035	206.557	118.864	17.441	1.00	57.33	A16S	ATOM	40863	O1P	URI	1038	196.108	115.621	13.990	1.00 63.02	A16S
ATOM	40811	C6	GUA	1035	207.705	118.078	17.390	1.00	57.33	A16S	ATOM	40864	O2P	URI	1038	198.470	114.747	14.553	1.00 63.02	A16S
ATOM	40812	O6	GUA	1035	208.766	118.513	17.842	1.00	57.33	A16S	ATOM	40865	O5'	URI	1038	197.149	116.067	16.187	1.00 51.29	A16S
ATOM	40813	C5	GUA	1035	207.451	116.825	16.791	1.00	57.33	A16S	ATOM	40866	C5'	URI	1038	197.794	117.316	16.034	1.00 51.29	A16S
ATOM	40814	N7	GUA	1035	208.296	115.753	16.524	1.00	57.33	A16S	ATOM	40867	C4'	URI	1038	197.809	118.059	17.340	1.00 51.29	A16S
ATOM	40815	C8	GUA	1035	207.518	114.868	15.960	1.00	57.33	A16S	ATOM	40868	O4'	URI	1038	198.450	117.258	18.369	1.00 51.29	A16S
ATOM	40816	C2'	GUA	1035	204.432	115.213	14.087	1.00	64.38	A16S	ATOM	40869	C1'	URI	1038	199.160	118.107	19.249	1.00 51.29	A16S
ATOM	40817	O2'	GUA	1035	203.187	115.796	14.461	1.00	64.38	A16S	ATOM	40870	N1	URI	1038	200.552	117.650	19.283	1.00 63.02	A16S
ATOM	40818	C3'	GUA	1035	204.337	113.982	13.170	1.00	64.38	A16S	ATOM	40871	C6	URI	1038	200.932	116.516	18.615	1.00 63.02	A16S
ATOM	40819	O3'	GUA	1035	203.068	114.091	12.551	1.00	64.38	A16S	ATOM	40872	C2	URI	1038	201.460	118.390	20.006	1.00 63.02	A16S
ATOM	40820	P	CYT	1036	202.907	113.980	10.972	1.00	66.61	A16S	ATOM	40873	O2	URI	1038	201.152	119.391	20.625	1.00 63.02	A16S
ATOM	40821	O1P	CYT	1036	204.128	113.389	10.376	1.00	119.96	A16S	ATOM	40874	N3	URI	1038	202.746	117.912	19.979	1.00 63.02	A16S
ATOM	40822	O2P	CYT	1036	202.379	115.271	10.453	1.00	119.96	A16S	ATOM	40875	C4	URI	1038	203.198	116.786	19.320	1.00 63.02	A16S
ATOM	40823	O5'	CYT	1036	201.802	112.860	10.943	1.00	66.61	A16S	ATOM	40876	O4	URI	1038	204.396	116.510	19.342	1.00 63.02	A16S
ATOM	40824	C5'	CYT	1036	201.839	111.883	11.966	1.00	66.61	A16S	ATOM	40877	C5	URI	1038	202.190	116.067	18.612	1.00 63.02	A16S
ATOM	40825	C4'	CYT	1036	200.461	111.422	12.311	1.00	66.61	A16S	ATOM	40878	C2'	URI	1038	198.974	119.546	18.761	1.00 51.29	A16S
ATOM	40826	O4'	CYT	1036	199.989	110.554	11.252	1.00	66.61	A16S	ATOM	40879	O2'	URI	1038	197.909	120.141	19.461	1.00 51.29	A16S
ATOM	40827	C1'	CYT	1036	199.092	109.608	11.785	1.00	66.61	A16S	ATOM	40880	C3'	URI	1038	198.628	119.328	17.296	1.00 51.29	A16S
ATOM	40828	N1	CYT	1036	199.529	108.259	11.413	1.00	119.96	A16S	ATOM	40881	O3'	URI	1038	197.831	120.368	16.764	1.00 51.29	A16S

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ATOM  40882  P   GUA  1039     198.543 121.623  16.075  1.00 52.68      A16S
ATOM  40883  O1P GUA  1039     197.506 122.450  15.398  1.00 71.38      A16S
ATOM  40884  O2P GUA  1039     199.687 121.095  15.297  1.00 71.38      A16S
ATOM  40885  O5' GUA  1039     199.115 122.448  17.309  1.00 52.68      A16S
ATOM  40886  C5' GUA  1039     198.248 122.946  18.321  1.00 52.68      A16S
ATOM  40887  C4' GUA  1039     199.025 123.795  19.298  1.00 52.68      A16S
ATOM  40888  O4' GUA  1039     199.916 122.961  20.083  1.00 52.68      A16S
ATOM  40889  C1' GUA  1039     201.098 123.680  20.374  1.00 52.68      A16S
ATOM  40890  N9  GUA  1039     202.223 122.924  19.850  1.00 71.38      A16S
ATOM  40891  C4  GUA  1039     203.529 123.005  20.266  1.00 71.38      A16S
ATOM  40892  N3  GUA  1039     204.000 123.794  21.251  1.00 71.38      A16S
ATOM  40893  C2  GUA  1039     205.297 123.626  21.431  1.00 71.38      A16S
ATOM  40894  N2  GUA  1039     205.937 124.307  22.387  1.00 71.38      A16S
ATOM  40895  N1  GUA  1039     206.068 122.773  20.694  1.00 71.38      A16S
ATOM  40896  C6  GUA  1039     205.606 121.960  19.673  1.00 71.38      A16S
ATOM  40897  O6  GUA  1039     206.394 121.233  19.068  1.00 71.38      A16S
ATOM  40898  C5  GUA  1039     204.217 122.112  19.478  1.00 71.38      A16S
ATOM  40899  N7  GUA  1039     203.362 121.484  18.584  1.00 71.38      A16S
ATOM  40900  C8  GUA  1039     202.191 121.996  18.843  1.00 71.38      A16S
ATOM  40901  C2' GUA  1039     200.969 125.069  19.747  1.00 52.68      A16S
ATOM  40902  O2' GUA  1039     200.522 125.977  20.727  1.00 52.68      A16S
ATOM  40903  C3' GUA  1039     199.932 124.827  18.660  1.00 52.68      A16S
ATOM  40904  O3' GUA  1039     199.191 126.002  18.413  1.00 52.68      A16S
ATOM  40905  P   GUA  1040     199.647 126.996  17.241  1.00 54.79      A16S
ATOM  40906  O1P GUA  1040     198.927 128.289  17.374  1.00 57.56      A16S
ATOM  40907  O2P GUA  1040     199.561 126.244  15.962  1.00 57.56      A16S
ATOM  40908  O5' GUA  1040     201.185 127.268  17.555  1.00 54.79      A16S
ATOM  40909  C5' GUA  1040     201.582 128.060  18.671  1.00 54.79      A16S
ATOM  40910  C4' GUA  1040     203.083 127.978  18.864  1.00 54.79      A16S
ATOM  40911  O4' GUA  1040     203.490 126.635  19.242  1.00 54.79      A16S
ATOM  40912  C1' GUA  1040     204.788 126.380  18.741  1.00 54.79      A16S
ATOM  40913  N9  GUA  1040     204.718 125.227  17.853  1.00 57.56      A16S
ATOM  40914  C4  GUA  1040     205.757 124.407  17.482  1.00 57.56      A16S
ATOM  40915  N3  GUA  1040     207.036 124.506  17.896  1.00 57.56      A16S
ATOM  40916  C2  GUA  1040     207.798 123.567  17.363  1.00 57.56      A16S
ATOM  40917  N2  GUA  1040     209.093 123.491  17.683  1.00 57.56      A16S
ATOM  40918  N1  GUA  1040     207.347 122.623  16.482  1.00 57.56      A16S
ATOM  40919  C6  GUA  1040     206.038 122.509  16.038  1.00 57.56      A16S
ATOM  40920  O6  GUA  1040     205.735 121.619  15.236  1.00 57.56      A16S
ATOM  40921  C5  GUA  1040     205.207 123.496  16.614  1.00 57.56      A16S
ATOM  40922  N7  GUA  1040     203.852 123.729  16.450  1.00 57.56      A16S
ATOM  40923  C8  GUA  1040     203.607 124.761  17.206  1.00 57.56      A16S
ATOM  40924  C2' GUA  1040     205.236 127.637  17.993  1.00 54.79      A16S
ATOM  40925  O2' GUA  1040     205.985 128.450  18.865  1.00 54.79      A16S
ATOM  40926  C3' GUA  1040     203.905 128.269  17.628  1.00 54.79      A16S
ATOM  40927  O3' GUA  1040     204.030 129.670  17.478  1.00 54.79      A16S
ATOM  40928  P   CYT  1041     204.162 130.305  16.015  1.00 53.67      A16S
ATOM  40929  O1P CYT  1041     204.208 131.778  16.173  1.00 58.89      A16S
ATOM  40930  O2P CYT  1041     203.119 129.696  15.148  1.00 58.89      A16S
ATOM  40931  O5' CYT  1041     205.590 129.797  15.523  1.00 53.67      A16S
ATOM  40932  C5' CYT  1041     206.792 130.342  16.062  1.00 53.67      A16S
ATOM  40933  C4' CYT  1041     207.994 129.535  15.608  1.00 53.67      A16S
ATOM  40934  O4' CYT  1041     207.901 128.185  16.139  1.00 53.67      A16S
ATOM  40935  C1' CYT  1041     208.461 127.269  15.216  1.00 53.67      A16S
ATOM  40936  N1  CYT  1041     207.387 126.423  14.715  1.00 58.89      A16S
ATOM  40937  C6  CYT  1041     206.096 126.862  14.692  1.00 58.89      A16S
ATOM  40938  C2  CYT  1041     207.713 125.177  14.235  1.00 58.89      A16S
ATOM  40939  O2  CYT  1041     208.899 124.812  14.297  1.00 58.89      A16S
ATOM  40940  N3  CYT  1041     206.742 124.400  13.708  1.00 58.89      A16S
ATOM  40941  C4  CYT  1041     205.490 124.850  13.651  1.00 58.89      A16S
ATOM  40942  N4  CYT  1041     204.574 124.077  13.079  1.00 58.89      A16S
ATOM  40943  C5  CYT  1041     205.127 126.117  14.167  1.00 58.89      A16S
ATOM  40944  C2' CYT  1041     209.027 128.087  14.061  1.00 53.67      A16S
ATOM  40945  O2' CYT  1041     210.372 128.392  14.320  1.00 53.67      A16S
ATOM  40946  C3' CYT  1041     208.136 129.315  14.112  1.00 53.67      A16S
ATOM  40947  O3' CYT  1041     208.733 130.419  13.460  1.00 53.67      A16S
ATOM  40948  P   CYT  1042     208.338 130.737  11.938  1.00 60.55      A16S
ATOM  40949  O1P CYT  1042     209.007 132.010  11.572  1.00 62.19      A16S
ATOM  40950  O2P CYT  1042     206.863 130.632  11.814  1.00 62.19      A16S
ATOM  40951  O5' CYT  1042     209.027 129.540  11.137  1.00 60.55      A16S
ATOM  40952  C5' CYT  1042     210.436 129.318  11.241  1.00 60.55      A16S
ATOM  40953  C4' CYT  1042     210.863 128.089  10.459  1.00 60.55      A16S
ATOM  40954  O4' CYT  1042     210.375 126.874  11.085  1.00 60.55      A16S
ATOM  40955  C1' CYT  1042     210.161 125.882  10.092  1.00 60.55      A16S
ATOM  40956  N1  CYT  1042     208.733 125.554  10.071  1.00 62.19      A16S
ATOM  40957  C6  CYT  1042     207.813 126.423  10.580  1.00 62.19      A16S
ATOM  40958  C2  CYT  1042     208.324 124.345   9.506  1.00 62.19      A16S
ATOM  40959  O2  CYT  1042     209.176 123.567   9.059  1.00 62.19      A16S
ATOM  40960  N3  CYT  1042     207.010 124.054   9.461  1.00 62.19      A16S
ATOM  40961  C4  CYT  1042     206.122 124.911   9.956  1.00 62.19      A16S
ATOM  40962  N4  CYT  1042     204.843 124.577   9.896  1.00 62.19      A16S
ATOM  40963  C5  CYT  1042     206.510 126.145  10.540  1.00 62.19      A16S
ATOM  40964  C2' CYT  1042     210.603 126.481   8.756  1.00 60.55      A16S
ATOM  40965  O2' CYT  1042     211.949 126.136   8.534  1.00 60.55      A16S
ATOM  40966  C3' CYT  1042     210.418 127.971   9.010  1.00 60.55      A16S
ATOM  40967  O3' CYT  1042     211.285 128.737   8.189  1.00 60.55      A16S
ATOM  40968  P   GUA  1043     210.915 129.007   6.650  1.00 44.84      A16S
ATOM  40969  O1P GUA  1043     212.033 129.846   6.148  1.00 58.38      A16S
ATOM  40970  O2P GUA  1043     209.525 129.500   6.524  1.00 58.38      A16S
ATOM  40971  O5' GUA  1043     211.027 127.569   5.959  1.00 44.84      A16S
ATOM  40972  C5' GUA  1043     212.293 126.909   5.848  1.00 44.84      A16S
ATOM  40973  C4' GUA  1043     212.153 125.575   5.151  1.00 44.84      A16S
ATOM  40974  O4' GUA  1043     211.327 124.685   5.937  1.00 44.84      A16S
ATOM  40975  C1' GUA  1043     210.552 123.862   5.069  1.00 44.84      A16S
ATOM  40976  N9  GUA  1043     209.143 124.183   5.276  1.00 58.38      A16S
ATOM  40977  C4  GUA  1043     208.054 123.495   4.788  1.00 58.38      A16S
ATOM  40978  N3  GUA  1043     208.088 122.367   4.050  1.00 58.38      A16S
ATOM  40979  C2  GUA  1043     206.873 121.955   3.727  1.00 58.38      A16S
ATOM  40980  N2  GUA  1043     206.716 120.838   3.010  1.00 58.38      A16S
ATOM  40981  N1  GUA  1043     205.721 122.605   4.089  1.00 58.38      A16S
ATOM  40982  C6  GUA  1043     205.665 123.762   4.853  1.00 58.38      A16S
ATOM  40983  O6  GUA  1043     204.571 124.263   5.140  1.00 58.38      A16S
ATOM  40984  C5  GUA  1043     206.957 124.210   5.210  1.00 58.38      A16S
ATOM  40985  N7  GUA  1043     207.345 125.311   5.960  1.00 58.38      A16S
ATOM  40986  C8  GUA  1043     208.645 125.250   5.977  1.00 58.38      A16S
ATOM  40987  C2' GUA  1043     210.999 124.177   3.639  1.00 44.84      A16S
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ATOM  40988  O2' GUA  1043     212.036 123.302   3.243  1.00 44.84      A16S
ATOM  40989  C3' GUA  1043     211.488 125.605   3.790  1.00 44.84      A16S
ATOM  40990  O3' GUA  1043     212.446 125.884   2.794  1.00 44.84      A16S
ATOM  40991  P   URI  1044     212.054 126.841   1.577  1.00 52.58      A16S
ATOM  40992  O1P URI  1044     213.255 126.932   0.707  1.00 66.41      A16S
ATOM  40993  O2P URI  1044     211.451 128.079   2.121  1.00 66.41      A16S
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ATOM  41059  C4' URI  1047     208.298 135.256  -5.084  1.00 57.73      A16S
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ATOM  41077  O5' CYT  1048     207.540 135.436  -7.987  1.00 43.94      A16S
ATOM  41078  C5' CYT  1048     207.419 134.876  -9.284  1.00 43.94      A16S
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ATOM  41081  C1' CYT  1048     204.454 133.246  -8.077  1.00 43.94      A16S
ATOM  41082  N1  CYT  1048     204.222 133.449  -6.639  1.00 69.66      A16S
ATOM  41083  C6  CYT  1048     205.119 134.136  -5.868  1.00 69.66      A16S
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ATOM  41090  C2' CYT  1048     203.724 134.207  -9.028  1.00 43.94      A16S
ATOM  41091  O2' CYT  1048     203.165 133.475 -10.098  1.00 43.94      A16S
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ATOM  41093  O3' CYT  1048     204.670 135.483 -10.868  1.00 43.94      A16S
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ATOM  41096  O2P  ADE  1049     203.772 137.806 -10.669  1.00 57.26      A16S
ATOM  41097  O5'  ADE  1049     202.192 135.884 -10.685  1.00 67.43      A16S
ATOM  41098  C5'  ADE  1049     201.069 135.551 -11.495  1.00 67.43      A16S
ATOM  41099  C4'  ADE  1049     199.807 135.799 -10.718  1.00 67.43      A16S
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ATOM  41104  N3   ADE  1049     199.333 136.401  -5.496  1.00 57.26      A16S
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ATOM  41110  N7   ADE  1049     202.521 137.486  -6.705  1.00 57.26      A16S
ATOM  41111  C8   ADE  1049     201.821 137.279  -7.794  1.00 57.26      A16S
ATOM  41112  C2'  ADE  1049     198.771 137.433  -9.291  1.00 67.43      A16S
ATOM  41113  O2'  ADE  1049     197.406 137.111  -9.313  1.00 67.43      A16S
ATOM  41114  C3'  ADE  1049     199.338 137.246 -10.679  1.00 67.43      A16S
ATOM  41115  O3'  ADE  1049     198.341 137.478 -11.688  1.00 67.43      A16S
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ATOM  41119  O5'  GUA  1050     197.170 135.281 -10.842  1.00 38.83      A16S
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ATOM  41122  O4'  GUA  1050     197.160 134.996  -8.151  1.00 38.83      A16S
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ATOM  41131  O6   GUA  1050     194.321 139.982  -4.558  1.00 42.02      A16S
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ATOM  41133  N7   GUA  1050     195.342 138.360  -6.945  1.00 42.02      A16S
ATOM  41134  C8   GUA  1050     195.857 137.288  -7.469  1.00 42.02      A16S
ATOM  41135  C2'  GUA  1050     195.787 133.841  -6.602  1.00 38.83      A16S
ATOM  41136  O2'  GUA  1050     196.499 132.706  -6.167  1.00 38.83      A16S
ATOM  41137  C3'  GUA  1050     195.196 133.692  -8.002  1.00 38.83      A16S
ATOM  41138  O3'  GUA  1050     194.772 132.353  -8.201  1.00 38.83      A16S
ATOM  41139  P    CYT  1051     193.242 131.942  -7.930  1.00 48.13      A16S
ATOM  41140  O1P  CYT  1051     193.184 130.473  -8.101  1.00 46.48      A16S
ATOM  41141  O2P  CYT  1051     192.388 132.826  -8.781  1.00 46.48      A16S
ATOM  41142  O5'  CYT  1051     193.020 132.197  -6.371  1.00 48.13      A16S
ATOM  41143  C5'  CYT  1051     193.401 131.206  -5.418  1.00 48.13      A16S
ATOM  41144  C4'  CYT  1051     192.976 131.598  -4.014  1.00 48.13      A16S
ATOM  41145  O4'  CYT  1051     193.594 132.854  -3.635  1.00 48.13      A16S
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ATOM  41147  N1   CYT  1051     192.358 134.823  -3.424  1.00 46.48      A16S
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ATOM  41149  C2   CYT  1051     191.742 135.820  -2.669  1.00 46.48      A16S
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ATOM  41155  C2'  CYT  1051     191.522 132.673  -2.508  1.00 48.13      A16S
ATOM  41156  O2'  CYT  1051     191.754 131.865  -1.372  1.00 48.13      A16S
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ATOM  41174  C5   URI  1052     188.246 136.430  -4.598  1.00 43.94      A16S
ATOM  41175  C2'  URI  1052     186.680 134.593  -0.687  1.00 66.96      A16S
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ATOM  41180  O1P  CYT  1053     183.207 131.559  -0.501  1.00 44.56      A16S
ATOM  41181  O2P  CYT  1053     183.797 133.151  -2.441  1.00 44.56      A16S
ATOM  41182  O5'  CYT  1053     183.476 134.056  -0.142  1.00 50.85      A16S
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ATOM  41185  O4'  CYT  1053     184.454 136.408   1.170  1.00 50.85      A16S
ATOM  41186  C1'  CYT  1053     183.842 137.670   1.002  1.00 50.85      A16S
ATOM  41187  N1   CYT  1053     183.866 138.006  -0.427  1.00 44.56      A16S
ATOM  41188  C6   CYT  1053     184.251 137.082  -1.354  1.00 44.56      A16S
ATOM  41189  C2   CYT  1053     183.510 139.299  -0.826  1.00 44.56      A16S
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ATOM  41191  N3   CYT  1053     183.574 139.630  -2.135  1.00 44.56      A16S
ATOM  41192  C4   CYT  1053     183.968 138.723  -3.028  1.00 44.56      A16S
ATOM  41193  N4   CYT  1053     184.020 139.087  -4.302  1.00 44.56      A16S
ATOM  41194  C5   CYT  1053     184.323 137.399  -2.651  1.00 44.56      A16S
ATOM  41195  C2'  CYT  1053     182.448 137.590   1.612  1.00 50.85      A16S
ATOM  41196  O2'  CYT  1053     182.537 138.007   2.949  1.00 50.85      A16S
ATOM  41197  C3'  CYT  1053     182.165 136.099   1.524  1.00 50.85      A16S
ATOM  41198  O3'  CYT  1053     181.260 135.687   2.532  1.00 50.85      A16S
ATOM  41199  P    GUA  1054     179.691 135.632   2.218  1.00 53.73      A16S
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ATOM	41200	O1P	GUA	1054	179.135	134.932	3.416	1.00	37.99	A16S	ATOM	41253	C2	GUA	1056	175.274	140.441	-8.707	1.00	51.59	A16S
ATOM	41201	O2P	GUA	1054	179.410	135.086	0.865	1.00	37.99	A16S	ATOM	41254	N2	GUA	1056	175.478	140.771	-9.988	1.00	51.59	A16S
ATOM	41202	O5'	GUA	1054	179.281	137.175	2.179	1.00	53.73	A16S	ATOM	41255	N1	GUA	1056	175.970	139.355	-8.237	1.00	51.59	A16S
ATOM	41203	C5'	GUA	1054	179.158	137.946	3.371	1.00	53.73	A16S	ATOM	41256	C6	GUA	1056	175.884	138.847	-6.948	1.00	51.59	A16S
ATOM	41204	C4'	GUA	1054	178.719	139.354	3.037	1.00	53.73	A16S	ATOM	41257	O6	GUA	1056	176.559	137.857	-6.624	1.00	51.59	A16S
ATOM	41205	O4'	GUA	1054	179.753	140.005	2.252	1.00	53.73	A16S	ATOM	41258	C5	GUA	1056	174.974	139.594	-6.157	1.00	51.59	A16S
ATOM	41206	C1'	GUA	1054	179.160	140.957	1.381	1.00	53.73	A16S	ATOM	41259	N7	GUA	1056	174.580	139.427	-4.836	1.00	51.59	A16S
ATOM	41207	N9	GUA	1054	179.565	140.654	0.013	1.00	37.99	A16S	ATOM	41260	C8	GUA	1056	173.730	140.393	-4.631	1.00	51.59	A16S
ATOM	41208	C4	GUA	1054	179.564	141.523	-1.052	1.00	37.99	A16S	ATOM	41261	C2'	GUA	1056	171.440	142.071	-6.694	1.00	40.58	A16S
ATOM	41209	N3	GUA	1054	179.181	142.814	-1.019	1.00	37.99	A16S	ATOM	41262	O2'	GUA	1056	171.032	143.256	-7.358	1.00	40.58	A16S
ATOM	41210	C2	GUA	1054	179.309	143.399	-2.199	1.00	37.99	A16S	ATOM	41263	C3'	GUA	1056	170.456	141.593	-5.627	1.00	40.58	A16S
ATOM	41211	N2	GUA	1054	178.979	144.683	-2.345	1.00	37.99	A16S	ATOM	41264	O3'	GUA	1056	169.116	141.785	-6.053	1.00	40.58	A16S
ATOM	41212	N1	GUA	1054	179.773	142.765	-3.323	1.00	37.99	A16S	ATOM	41265	P	CYT	1057	168.286	140.555	-6.655	1.00	48.98	A16S
ATOM	41213	C6	GUA	1054	180.162	141.429	-3.382	1.00	37.99	A16S	ATOM	41266	O1P	CYT	1057	166.924	141.032	-6.998	1.00	50.01	A16S
ATOM	41214	O6	GUA	1054	180.559	140.948	-4.449	1.00	37.99	A16S	ATOM	41267	O2P	CYT	1057	168.460	139.403	-5.738	1.00	50.01	A16S
ATOM	41215	C5	GUA	1054	180.031	140.793	-2.120	1.00	37.99	A16S	ATOM	41268	O5'	CYT	1057	169.008	140.248	-8.027	1.00	48.98	A16S
ATOM	41216	N7	GUA	1054	180.302	139.486	-1.742	1.00	37.99	A16S	ATOM	41269	C5'	CYT	1057	168.828	141.116	-9.127	1.00	48.98	A16S
ATOM	41217	C8	GUA	1054	180.015	139.449	-0.470	1.00	37.99	A16S	ATOM	41270	C4'	CYT	1057	169.711	140.685	-10.256	1.00	48.98	A16S
ATOM	41218	C2'	GUA	1054	177.644	140.870	1.566	1.00	53.73	A16S	ATOM	41271	O4'	CYT	1057	171.092	140.776	-9.827	1.00	48.98	A16S
ATOM	41219	O2'	GUA	1054	177.202	141.904	2.407	1.00	53.73	A16S	ATOM	41272	C1'	CYT	1057	171.845	139.752	-10.451	1.00	48.98	A16S
ATOM	41220	C3'	GUA	1054	177.486	139.474	2.156	1.00	53.73	A16S	ATOM	41273	N1	CYT	1057	172.374	138.862	-9.418	1.00	50.01	A16S
ATOM	41221	O3'	GUA	1054	176.276	139.336	2.890	1.00	53.73	A16S	ATOM	41274	C6	CYT	1057	171.931	138.924	-8.129	1.00	50.01	A16S
ATOM	41222	P	URI	1055	175.094	138.406	2.304	1.00	39.19	A16S	ATOM	41275	C2	CYT	1057	173.328	137.922	-9.791	1.00	50.01	A16S
ATOM	41223	O1P	URI	1055	174.229	137.943	3.429	1.00	46.74	A16S	ATOM	41276	O2	CYT	1057	173.744	137.933	-10.959	1.00	50.01	A16S
ATOM	41224	O2P	URI	1055	175.744	137.401	1.426	1.00	46.74	A16S	ATOM	41277	N3	CYT	1057	173.777	137.035	-8.880	1.00	50.01	A16S
ATOM	41225	O5'	URI	1055	174.268	139.401	1.370	1.00	39.19	A16S	ATOM	41278	C4	CYT	1057	173.319	137.080	-7.634	1.00	50.01	A16S
ATOM	41226	C5'	URI	1055	173.729	140.606	1.887	1.00	39.19	A16S	ATOM	41279	N4	CYT	1057	173.770	136.172	-6.778	1.00	50.01	A16S
ATOM	41227	C4'	URI	1055	173.596	141.634	0.791	1.00	39.19	A16S	ATOM	41280	C5	CYT	1057	172.372	138.058	-7.212	1.00	50.01	A16S
ATOM	41228	O4'	URI	1055	174.910	142.075	0.344	1.00	39.19	A16S	ATOM	41281	C2'	CYT	1057	170.886	138.988	-11.364	1.00	48.98	A16S
ATOM	41229	C1'	URI	1055	174.835	142.457	-1.021	1.00	39.19	A16S	ATOM	41282	O2'	CYT	1057	170.930	139.551	-12.661	1.00	48.98	A16S
ATOM	41230	N1	URI	1055	175.734	141.598	-1.805	1.00	46.74	A16S	ATOM	41283	C3'	CYT	1057	169.566	139.232	-10.655	1.00	48.98	A16S
ATOM	41231	C6	URI	1055	176.159	140.384	-1.322	1.00	46.74	A16S	ATOM	41284	O3'	CYT	1057	168.465	139.061	-11.523	1.00	48.98	A16S
ATOM	41232	C2	URI	1055	176.108	142.033	-3.064	1.00	46.74	A16S	ATOM	41285	P	CYT	1058	167.684	137.662	-11.538	1.00	48.99	A16S
ATOM	41233	O2	URI	1055	175.801	143.118	-3.507	1.00	46.74	A16S	ATOM	41286	O1P	CYT	1058	166.483	137.856	-12.400	1.00	36.82	A16S
ATOM	41234	N3	URI	1055	176.859	141.144	-3.782	1.00	46.74	A16S	ATOM	41287	O2P	CYT	1058	167.537	137.191	-10.144	1.00	36.82	A16S
ATOM	41235	C4	URI	1055	177.285	139.898	-3.372	1.00	46.74	A16S	ATOM	41288	O5'	CYT	1058	168.681	136.657	-12.270	1.00	48.99	A16S
ATOM	41236	O4	URI	1055	177.915	139.184	-4.157	1.00	46.74	A16S	ATOM	41289	C5'	CYT	1058	168.944	136.776	-13.663	1.00	48.99	A16S
ATOM	41237	C5	URI	1055	176.900	139.543	-2.041	1.00	46.74	A16S	ATOM	41290	C4'	CYT	1058	169.817	135.640	-14.124	1.00	48.99	A16S
ATOM	41238	C2'	URI	1055	173.383	142.238	-1.456	1.00	39.19	A16S	ATOM	41291	O4'	CYT	1058	171.110	135.732	-13.481	1.00	48.99	A16S
ATOM	41239	O2'	URI	1055	172.658	143.419	-1.261	1.00	39.19	A16S	ATOM	41292	C1'	CYT	1058	171.638	134.437	-13.290	1.00	48.99	A16S
ATOM	41240	C3'	URI	1055	172.944	141.156	-0.487	1.00	39.19	A16S	ATOM	41293	N1	CYT	1058	171.860	134.265	-11.863	1.00	36.82	A16S
ATOM	41241	O3'	URI	1055	171.537	141.102	-0.368	1.00	39.19	A16S	ATOM	41294	C6	CYT	1058	171.355	135.165	-10.978	1.00	36.82	A16S
ATOM	41242	P	GUA	1056	170.694	140.139	-1.345	1.00	40.58	A16S	ATOM	41295	C2	CYT	1058	172.596	133.173	-11.416	1.00	36.82	A16S
ATOM	41243	O1P	GUA	1056	169.250	140.320	-1.029	1.00	51.59	A16S	ATOM	41296	O2	CYT	1058	173.044	132.375	-12.236	1.00	36.82	A16S
ATOM	41244	O2P	GUA	1056	171.281	138.777	-1.260	1.00	51.59	A16S	ATOM	41297	N3	CYT	1058	172.799	133.009	-10.102	1.00	36.82	A16S
ATOM	41245	O5'	GUA	1056	170.922	140.790	-2.785	1.00	40.58	A16S	ATOM	41298	C4	CYT	1058	172.292	133.885	-9.242	1.00	36.82	A16S
ATOM	41246	C5'	GUA	1056	170.390	142.073	-3.080	1.00	40.58	A16S	ATOM	41299	N4	CYT	1058	172.494	133.666	-7.946	1.00	36.82	A16S
ATOM	41247	C4'	GUA	1056	170.785	142.521	-4.469	1.00	40.58	A16S	ATOM	41300	C5	CYT	1058	171.548	135.018	-9.671	1.00	36.82	A16S
ATOM	41248	O4'	GUA	1056	172.224	142.698	-4.548	1.00	40.58	A16S	ATOM	41301	C2'	CYT	1058	170.618	133.444	-13.835	1.00	48.99	A16S
ATOM	41249	C1'	GUA	1056	172.679	142.358	-5.850	1.00	40.58	A16S	ATOM	41302	O2'	CYT	1058	170.941	133.105	-15.165	1.00	48.99	A16S
ATOM	41250	N9	GUA	1056	173.540	141.188	-5.736	1.00	51.59	A16S	ATOM	41303	C3'	CYT	1058	169.337	134.253	-13.754	1.00	48.99	A16S
ATOM	41251	C4	GUA	1056	174.332	140.672	-6.725	1.00	51.59	A16S	ATOM	41304	O3'	CYT	1058	168.397	133.780	-14.699	1.00	48.99	A16S
ATOM	41252	N3	GUA	1056	174.435	141.150	-7.980	1.00	51.59	A16S	ATOM	41305	P	GUA	1059	167.184	132.863	-14.205	1.00	41.61	A16S

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ATOM  41306  O1P GUA  1059     166.243 132.753 -15.352  1.00 44.26      A16S
ATOM  41307  O2P GUA  1059     166.717 133.395 -12.910  1.00 44.26      A16S
ATOM  41308  O5' GUA  1059     167.859 131.463 -13.870  1.00 41.61      A16S
ATOM  41309  C5' GUA  1059     168.446 130.667 -14.893  1.00 41.61      A16S
ATOM  41310  C4' GUA  1059     169.118 129.467 -14.282  1.00 41.61      A16S
ATOM  41311  O4' GUA  1059     170.247 129.906 -13.485  1.00 41.61      A16S
ATOM  41312  C1' GUA  1059     170.515 128.934 -12.493  1.00 41.61      A16S
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ATOM  41321  C5  GUA  1059     170.936 129.899  -9.054  1.00 44.26      A16S
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ATOM  41324  C2' GUA  1059     169.353 127.930 -12.504  1.00 41.61      A16S
ATOM  41325  O2' GUA  1059     169.718 126.724 -13.136  1.00 41.61      A16S
ATOM  41326  C3' GUA  1059     168.287 128.694 -13.274  1.00 41.61      A16S
ATOM  41327  O3' GUA  1059     167.371 127.803 -13.897  1.00 41.61      A16S
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ATOM  41329  O1P URI  1060     165.031 127.035 -14.406  1.00 46.74      A16S
ATOM  41330  O2P URI  1060     165.487 129.197 -13.126  1.00 46.74      A16S
ATOM  41331  O5' URI  1060     165.860 126.933 -12.068  1.00 35.56      A16S
ATOM  41332  C5' URI  1060     164.953 127.202 -11.021  1.00 35.56      A16S
ATOM  41333  C4' URI  1060     164.952 126.066 -10.041  1.00 35.56      A16S
ATOM  41334  O4' URI  1060     164.668 124.861 -10.775  1.00 35.56      A16S
ATOM  41335  C1' URI  1060     165.329 123.763 -10.171  1.00 35.56      A16S
ATOM  41336  N1  URI  1060     166.214 123.149 -11.165  1.00 46.74      A16S
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ATOM  41340  N3  URI  1060     167.362 121.294 -11.944  1.00 46.74      A16S
ATOM  41341  C4  URI  1060     167.951 121.968 -12.989  1.00 46.74      A16S
ATOM  41342  O4  URI  1060     168.676 121.363 -13.769  1.00 46.74      A16S
ATOM  41343  C5  URI  1060     167.593 123.348 -13.078  1.00 46.74      A16S
ATOM  41344  C2' URI  1060     166.095 124.301  -8.966  1.00 35.56      A16S
ATOM  41345  O2' URI  1060     165.287 124.149  -7.822  1.00 35.56      A16S
ATOM  41346  C3' URI  1060     166.267 125.762  -9.344  1.00 35.56      A16S
ATOM  41347  O3' URI  1060     166.373 126.529  -8.163  1.00 35.56      A16S
ATOM  41348  P   GUA  1061     167.787 127.134  -7.743  1.00 42.63      A16S
ATOM  41349  O1P GUA  1061     167.766 127.684  -6.358  1.00 32.80      A16S
ATOM  41350  O2P GUA  1061     168.170 128.020  -8.873  1.00 32.80      A16S
ATOM  41351  O5' GUA  1061     168.691 125.834  -7.630  1.00 42.63      A16S
ATOM  41352  C5' GUA  1061     168.459 124.912  -6.578  1.00 42.63      A16S
ATOM  41353  C4' GUA  1061     169.431 123.780  -6.666  1.00 42.63      A16S
ATOM  41354  O4' GUA  1061     169.218 123.080  -7.912  1.00 42.63      A16S
ATOM  41355  C1' GUA  1061     170.458 122.667  -8.445  1.00 42.63      A16S
ATOM  41356  N9  GUA  1061     170.594 123.263  -9.768  1.00 32.80      A16S
ATOM  41357  C4  GUA  1061     171.020 122.610 -10.888  1.00 32.80      A16S
ATOM  41358  N3  GUA  1061     171.440 121.333 -10.935  1.00 32.80      A16S
ATOM  41359  C2  GUA  1061     171.723 120.955 -12.164  1.00 32.80      A16S
ATOM  41360  N2  GUA  1061     172.142 119.696 -12.385  1.00 32.80      A16S
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ATOM  41364  C5  GUA  1061     170.881 123.514 -11.919  1.00 32.80      A16S
ATOM  41365  N7  GUA  1061     170.421 124.733 -11.445  1.00 32.80      A16S
ATOM  41366  C8  GUA  1061     170.279 124.542 -10.160  1.00 32.80      A16S
ATOM  41367  C2' GUA  1061     171.534 123.032  -7.424  1.00 42.63      A16S
ATOM  41368  O2' GUA  1061     171.731 121.924  -6.569  1.00 42.63      A16S
ATOM  41369  C3' GUA  1061     170.879 124.205  -6.712  1.00 42.63      A16S
ATOM  41370  O3' GUA  1061     171.351 124.332  -5.389  1.00 42.63      A16S
ATOM  41371  P   ADE  1062     172.669 125.188  -5.107  1.00 37.97      A16S
ATOM  41372  O1P ADE  1062     172.822 125.335  -3.635  1.00 36.67      A16S
ATOM  41373  O2P ADE  1062     172.631 126.380  -5.979  1.00 36.67      A16S
ATOM  41374  O5' ADE  1062     173.859 124.257  -5.593  1.00 37.97      A16S
ATOM  41375  C5' ADE  1062     174.323 123.204  -4.764  1.00 37.97      A16S
ATOM  41376  C4' ADE  1062     175.299 122.347  -5.517  1.00 37.97      A16S
ATOM  41377  O4' ADE  1062     174.672 121.865  -6.736  1.00 37.97      A16S
ATOM  41378  C1' ADE  1062     175.660 121.704  -7.736  1.00 37.97      A16S
ATOM  41379  N9  ADE  1062     175.296 122.541  -8.875  1.00 36.67      A16S
ATOM  41380  C4  ADE  1062     175.263 122.157 -10.193  1.00 36.67      A16S
ATOM  41381  N3  ADE  1062     175.569 120.955 -10.698  1.00 36.67      A16S
ATOM  41382  C2  ADE  1062     175.405 120.945 -12.012  1.00 36.67      A16S
ATOM  41383  N1  ADE  1062     175.003 121.922 -12.818  1.00 36.67      A16S
ATOM  41384  C6  ADE  1062     174.700 123.118 -12.278  1.00 36.67      A16S
ATOM  41385  N6  ADE  1062     174.280 124.094 -13.081  1.00 36.67      A16S
ATOM  41386  C5  ADE  1062     174.836 123.262 -10.898  1.00 36.67      A16S
ATOM  41387  N7  ADE  1062     174.618 124.335 -10.047  1.00 36.67      A16S
ATOM  41388  C8  ADE  1062     174.906 123.855  -8.860  1.00 36.67      A16S
ATOM  41389  C2' ADE  1062     176.996 122.074  -7.094  1.00 37.97      A16S
ATOM  41390  O2' ADE  1062     177.548 120.897  -6.540  1.00 37.97      A16S
ATOM  41391  C3' ADE  1062     176.560 123.037  -6.006  1.00 37.97      A16S
ATOM  41392  O3' ADE  1062     177.519 123.044  -4.952  1.00 37.97      A16S
ATOM  41393  P   GUA  1063     178.294 124.402  -4.563  1.00 35.53      A16S
ATOM  41394  O1P GUA  1063     179.072 124.123  -3.320  1.00 41.27      A16S
ATOM  41395  O2P GUA  1063     177.346 125.542  -4.595  1.00 41.27      A16S
ATOM  41396  O5' GUA  1063     179.292 124.605  -5.777  1.00 35.53      A16S
ATOM  41397  C5' GUA  1063     179.509 125.886  -6.333  1.00 35.53      A16S
ATOM  41398  C4' GUA  1063     179.014 125.905  -7.745  1.00 35.53      A16S
ATOM  41399  O4' GUA  1063     177.564 125.766  -7.744  1.00 35.53      A16S
ATOM  41400  C1' GUA  1063     177.010 126.543  -8.800  1.00 35.53      A16S
ATOM  41401  N9  GUA  1063     176.206 127.597  -8.198  1.00 41.27      A16S
ATOM  41402  C4  GUA  1063     175.586 128.623  -8.855  1.00 41.27      A16S
ATOM  41403  N3  GUA  1063     175.580 128.819 -10.183  1.00 41.27      A16S
ATOM  41404  C2  GUA  1063     174.904 129.900 -10.512  1.00 41.27      A16S
ATOM  41405  N2  GUA  1063     174.775 130.249 -11.785  1.00 41.27      A16S
ATOM  41406  N1  GUA  1063     174.297 130.722  -9.612  1.00 41.27      A16S
ATOM  41407  C6  GUA  1063     174.294 130.537  -8.237  1.00 41.27      A16S
ATOM  41408  O6  GUA  1063     173.709 131.344  -7.508  1.00 41.27      A16S
ATOM  41409  C5  GUA  1063     175.001 129.384  -7.871  1.00 41.27      A16S
ATOM  41410  N7  GUA  1063     175.231 128.836  -6.620  1.00 41.27      A16S
ATOM  41411  C8  GUA  1063     175.946 127.775  -6.862  1.00 41.27      A16S
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ATOM	41412	C2'	GUA	1063	178.188	127.121	-9.587	1.00	35.53	A16S	ATOM	41465	O4'	GUA	1066	181.698	139.981	-10.949	1.00	52.95	A16S
ATOM	41413	O2'	GUA	1063	178.523	126.239	-10.640	1.00	35.53	A16S	ATOM	41466	C1'	GUA	1066	182.163	139.977	-9.617	1.00	52.95	A16S
ATOM	41414	C3'	GUA	1063	179.252	127.195	-8.494	1.00	35.53	A16S	ATOM	41467	N9	GUA	1066	182.506	138.607	-9.271	1.00	51.72	A16S
ATOM	41415	O3'	GUA	1063	180.580	127.232	-8.978	1.00	35.53	A16S	ATOM	41468	C4	GUA	1066	182.299	137.991	-8.059	1.00	51.72	A16S
ATOM	41416	P	GUA	1064	181.389	128.613	-8.929	1.00	42.54	A16S	ATOM	41469	N3	GUA	1066	181.730	138.552	-6.976	1.00	51.72	A16S
ATOM	41417	O1P	GUA	1064	182.815	128.363	-9.288	1.00	45.11	A16S	ATOM	41470	C2	GUA	1066	181.664	137.710	-5.969	1.00	51.72	A16S
ATOM	41418	O2P	GUA	1064	181.061	129.243	-7.624	1.00	45.11	A16S	ATOM	41471	N2	GUA	1066	181.102	138.093	-4.810	1.00	51.72	A16S
ATOM	41419	O5'	GUA	1064	180.723	129.475	-10.093	1.00	42.54	A16S	ATOM	41472	N1	GUA	1066	182.137	136.427	-6.017	1.00	51.72	A16S
ATOM	41420	C5'	GUA	1064	180.589	128.940	-11.398	1.00	42.54	A16S	ATOM	41473	C6	GUA	1066	182.738	135.836	-7.116	1.00	51.72	A16S
ATOM	41421	C4'	GUA	1064	179.755	129.850	-12.262	1.00	42.54	A16S	ATOM	41474	O6	GUA	1066	183.166	134.674	-7.037	1.00	51.72	A16S
ATOM	41422	O4'	GUA	1064	178.375	129.845	-11.818	1.00	42.54	A16S	ATOM	41475	C5	GUA	1066	182.787	136.715	-8.209	1.00	51.72	A16S
ATOM	41423	C1'	GUA	1064	177.805	131.133	-12.018	1.00	42.54	A16S	ATOM	41476	N7	GUA	1066	183.277	136.523	-9.492	1.00	51.72	A16S
ATOM	41424	N9	GUA	1064	177.432	131.681	-10.717	1.00	45.11	A16S	ATOM	41477	C8	GUA	1066	183.092	137.672	-10.085	1.00	51.72	A16S
ATOM	41425	C4	GUA	1064	176.718	132.834	-10.483	1.00	45.11	A16S	ATOM	41478	C2'	GUA	1066	183.351	140.930	-9.553	1.00	52.95	A16S
ATOM	41426	N3	GUA	1064	176.207	133.654	-11.420	1.00	45.11	A16S	ATOM	41479	O2'	GUA	1066	182.898	142.202	-9.120	1.00	52.95	A16S
ATOM	41427	C2	GUA	1064	175.584	134.684	-10.884	1.00	45.11	A16S	ATOM	41480	C3'	GUA	1066	183.815	140.920	-11.002	1.00	52.95	A16S
ATOM	41428	N2	GUA	1064	175.000	135.582	-11.669	1.00	45.11	A16S	ATOM	41481	O3'	GUA	1066	184.514	142.100	-11.349	1.00	52.95	A16S
ATOM	41429	N1	GUA	1064	175.486	134.905	-9.539	1.00	45.11	A16S	ATOM	41482	P	URI	1067	186.057	142.251	-10.957	1.00	63.59	A16S
ATOM	41430	C6	GUA	1064	176.009	134.078	-8.555	1.00	45.11	A16S	ATOM	41483	O1P	URI	1067	186.513	143.494	-11.627	1.00	62.40	A16S
ATOM	41431	O6	GUA	1064	175.880	134.375	-7.367	1.00	45.11	A16S	ATOM	41484	O2P	URI	1067	186.207	142.103	-9.485	1.00	62.40	A16S
ATOM	41432	C5	GUA	1064	176.658	132.954	-9.113	1.00	45.11	A16S	ATOM	41485	O5'	URI	1067	186.744	141.008	-11.669	1.00	63.59	A16S
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ATOM	41438	O3'	GUA	1064	181.208	131.548	-13.134	1.00	42.54	A16S	ATOM	41491	C6	URI	1067	186.562	138.690	-8.738	1.00	62.40	A16S
ATOM	41439	P	URI	1065	182.301	132.674	-12.792	1.00	52.26	A16S	ATOM	41492	C2	URI	1067	186.845	136.311	-8.822	1.00	62.40	A16S
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ATOM	41442	O5'	URI	1065	181.459	134.025	-12.865	1.00	52.26	A16S	ATOM	41495	C4	URI	1067	185.628	137.378	-6.973	1.00	62.40	A16S
ATOM	41443	C5'	URI	1065	180.944	134.482	-14.110	1.00	52.26	A16S	ATOM	41496	O4	URI	1067	185.121	137.206	-5.864	1.00	62.40	A16S
ATOM	41444	C4'	URI	1065	180.091	135.714	-13.916	1.00	52.26	A16S	ATOM	41497	C5	URI	1067	185.860	138.640	-7.607	1.00	62.40	A16S
ATOM	41445	O4'	URI	1065	179.032	135.406	-12.985	1.00	52.26	A16S	ATOM	41498	C2'	URI	1067	187.438	137.319	-11.880	1.00	63.59	A16S
ATOM	41446	C1'	URI	1065	178.662	136.573	-12.280	1.00	52.26	A16S	ATOM	41499	O2'	URI	1067	188.163	136.246	-12.447	1.00	63.59	A16S
ATOM	41447	N1	URI	1065	178.804	136.287	-10.852	1.00	55.41	A16S	ATOM	41500	C3'	URI	1067	187.531	138.654	-12.622	1.00	63.59	A16S
ATOM	41448	C6	URI	1065	179.676	135.330	-10.421	1.00	55.41	A16S	ATOM	41501	O3'	URI	1067	187.848	138.625	-14.021	1.00	63.59	A16S
ATOM	41449	C2	URI	1065	178.028	137.001	-9.966	1.00	55.41	A16S	ATOM	41502	P	URI	1068	189.328	138.203	-14.536	1.00	61.18	A16S
ATOM	41450	O2	URI	1065	177.240	137.860	-10.321	1.00	55.41	A16S	ATOM	41503	O1P	URI	1068	189.929	137.147	-13.686	1.00	85.31	A16S
ATOM	41451	N3	URI	1065	178.208	136.666	-8.648	1.00	55.41	A16S	ATOM	41504	O2P	URI	1068	190.100	139.442	-14.809	1.00	85.31	A16S
ATOM	41452	C4	URI	1065	179.067	135.710	-8.150	1.00	55.41	A16S	ATOM	41505	O5'	URI	1068	189.001	137.533	-15.936	1.00	61.18	A16S
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ATOM	41457	C3'	URI	1065	180.752	136.950	-13.325	1.00	52.26	A16S	ATOM	41510	N1	URI	1068	185.506	138.669	-17.227	1.00	85.31	A16S
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ATOM  41729  O2  CYT  1078     195.957 149.638 -16.345  1.00 59.23      A16S
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ATOM  41755  O2' CYT  1079     192.005 153.817 -19.226  1.00 67.58      A16S
ATOM  41756  C3' CYT  1079     191.483 153.482 -16.888  1.00 67.58      A16S
ATOM  41757  O3' CYT  1079     190.719 154.669 -17.022  1.00 67.58      A16S
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ATOM  41759  O1P CYT  1080     188.628 155.985 -17.196  1.00 56.20      A16S
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ATOM  41762  C5' CYT  1080     188.802 154.180 -19.504  1.00 67.85      A16S
ATOM  41763  C4' CYT  1080     188.330 153.147 -20.498  1.00 67.85      A16S
ATOM  41764  O4' CYT  1080     189.238 152.015 -20.495  1.00 67.85      A16S
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ATOM  41773  C5  CYT  1080     189.028 149.553 -17.383  1.00 56.20      A16S
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ATOM  41775  O2' CYT  1080     186.891 151.528 -22.433  1.00 67.85      A16S
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ATOM  41784  O4' GUA  1081     184.764 149.305 -21.432  1.00 66.08      A16S
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ATOM  41803  O2P CYT  1082     180.082 150.505 -20.022  1.00 49.15      A16S
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ATOM  41806  C4' CYT  1082     179.311 145.660 -20.168  1.00 62.86      A16S
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ATOM  41815  N4  CYT  1082     183.032 148.313 -14.784  1.00 49.15      A16S
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ATOM  41817  C2' CYT  1082     179.189 144.680 -18.004  1.00 62.86      A16S
ATOM  41818  O2' CYT  1082     178.881 143.324 -18.243  1.00 62.86      A16S
ATOM  41819  C3' CYT  1082     178.443 145.644 -18.917  1.00 62.86      A16S
ATOM  41820  O3' CYT  1082     177.161 145.113 -19.220  1.00 62.86      A16S
ATOM  41821  P   ADE  1083     175.855 145.702 -18.489  1.00 53.93      A16S
ATOM  41822  O1P ADE  1083     174.716 145.182 -19.304  1.00 44.72      A16S
ATOM  41823  O2P ADE  1083     176.025 147.171 -18.301  1.00 44.72      A16S
ATOM  41824  O5' ADE  1083     175.829 144.992 -17.061  1.00 53.93      A16S
ATOM  41825  C5' ADE  1083     175.584 143.601 -16.957  1.00 53.93      A16S
ATOM  41826  C4' ADE  1083     175.882 143.120 -15.565  1.00 53.93      A16S
ATOM  41827  O4' ADE  1083     175.001 143.747 -14.625  1.00 53.93      A16S
ATOM  41828  C1' ADE  1083     174.694 142.841 -13.582  1.00 53.93      A16S
ATOM  41829  N9  ADE  1083     173.271 142.971 -13.264  1.00 44.72      A16S
ATOM  41830  C4  ADE  1083     172.771 143.179 -12.005  1.00 44.72      A16S
ATOM  41831  N3  ADE  1083     173.464 143.239 -10.860  1.00 44.72      A16S
ATOM  41832  C2  ADE  1083     172.656 143.502  -9.836  1.00 44.72      A16S
ATOM  41833  N1  ADE  1083     171.331 143.706  -9.828  1.00 44.72      A16S
ATOM  41834  C6  ADE  1083     170.667 143.636 -10.997  1.00 44.72      A16S
ATOM  41835  N6  ADE  1083     169.352 143.850 -10.990  1.00 44.72      A16S
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ATOM  41836  C5  ADE  1083     171.412 143.345 -12.161  1.00 44.72      A16S
ATOM  41837  N7  ADE  1083     171.051 143.194 -13.493  1.00 44.72      A16S
ATOM  41838  C8  ADE  1083     172.187 142.967 -14.102  1.00 44.72      A16S
ATOM  41839  C2' ADE  1083     175.217 141.445 -13.936  1.00 53.93      A16S
ATOM  41840  O2' ADE  1083     176.195 140.991 -13.022  1.00 53.93      A16S
ATOM  41841  C3' ADE  1083     175.707 141.629 -15.368  1.00 53.93      A16S
ATOM  41842  O3' ADE  1083     176.938 140.963 -15.672  1.00 53.93      A16S
ATOM  41843  P   ADE  1084     178.364 141.526 -15.120  1.00 49.71      A16S
ATOM  41844  O1P ADE  1084     179.186 141.487 -16.351  1.00 39.42      A16S
ATOM  41845  O2P ADE  1084     178.854 140.873 -13.867  1.00 39.42      A16S
ATOM  41846  O5' ADE  1084     178.174 143.064 -14.805  1.00 49.71      A16S
ATOM  41847  C5' ADE  1084     179.046 143.732 -13.912  1.00 49.71      A16S
ATOM  41848  C4' ADE  1084     178.228 144.530 -12.934  1.00 49.71      A16S
ATOM  41849  O4' ADE  1084     177.342 143.636 -12.209  1.00 49.71      A16S
ATOM  41850  C1' ADE  1084     177.236 144.058 -10.871  1.00 49.71      A16S
ATOM  41851  N9  ADE  1084     177.796 143.004 -10.040  1.00 39.42      A16S
ATOM  41852  C4  ADE  1084     177.589 142.815  -8.696  1.00 39.42      A16S
ATOM  41853  N3  ADE  1084     176.853 143.575  -7.863  1.00 39.42      A16S
ATOM  41854  C2  ADE  1084     176.856 143.058  -6.631  1.00 39.42      A16S
ATOM  41855  N1  ADE  1084     177.460 141.956  -6.175  1.00 39.42      A16S
ATOM  41856  C6  ADE  1084     178.195 141.222  -7.036  1.00 39.42      A16S
ATOM  41857  N6  ADE  1084     178.801 140.123  -6.582  1.00 39.42      A16S
ATOM  41858  C5  ADE  1084     178.277 141.664  -8.371  1.00 39.42      A16S
ATOM  41859  N7  ADE  1084     178.923 141.153  -9.483  1.00 39.42      A16S
ATOM  41860  C8  ADE  1084     178.609 141.987 -10.440  1.00 39.42      A16S
ATOM  41861  C2' ADE  1084     177.949 145.404 -10.770  1.00 49.71      A16S
ATOM  41862  O2' ADE  1084     177.003 146.403 -11.088  1.00 49.71      A16S
ATOM  41863  C3' ADE  1084     179.001 145.270 -11.866  1.00 49.71      A16S
ATOM  41864  O3' ADE  1084     179.381 146.530 -12.404  1.00 49.71      A16S
ATOM  41865  P   CYT  1085     180.474 147.432 -11.642  1.00 58.88      A16S
ATOM  41866  O1P CYT  1085     180.519 148.717 -12.400  1.00 45.12      A16S
ATOM  41867  O2P CYT  1085     181.722 146.652 -11.432  1.00 45.12      A16S
ATOM  41868  O5' CYT  1085     179.843 147.697 -10.203  1.00 58.88      A16S
ATOM  41869  C5' CYT  1085     178.958 148.783  -9.990  1.00 58.88      A16S
ATOM  41870  C4' CYT  1085     178.787 149.005  -8.521  1.00 58.88      A16S
ATOM  41871  O4' CYT  1085     178.151 147.843  -7.946  1.00 58.88      A16S
ATOM  41872  C1' CYT  1085     178.653 147.619  -6.646  1.00 58.88      A16S
ATOM  41873  N1  CYT  1085     179.272 146.303  -6.643  1.00 45.12      A16S
ATOM  41874  C6  CYT  1085     179.708 145.730  -7.804  1.00 45.12      A16S
ATOM  41875  C2  CYT  1085     179.402 145.637  -5.439  1.00 45.12      A16S
ATOM  41876  O2  CYT  1085     178.997 146.195  -4.419  1.00 45.12      A16S
ATOM  41877  N3  CYT  1085     179.960 144.402  -5.414  1.00 45.12      A16S
ATOM  41878  C4  CYT  1085     180.369 143.839  -6.553  1.00 45.12      A16S
ATOM  41879  N4  CYT  1085     180.882 142.620  -6.496  1.00 45.12      A16S
ATOM  41880  C5  CYT  1085     180.257 144.508  -7.805  1.00 45.12      A16S
ATOM  41881  C2' CYT  1085     179.651 148.732  -6.347  1.00 58.88      A16S
ATOM  41882  O2' CYT  1085     178.995 149.788  -5.678  1.00 58.88      A16S
ATOM  41883  C3' CYT  1085     180.086 149.108  -7.753  1.00 58.88      A16S
ATOM  41884  O3' CYT  1085     180.601 150.424  -7.820  1.00 58.88      A16S
ATOM  41885  P   GUA  1086     182.114 150.691  -7.387  1.00 56.90      A16S
ATOM  41886  O1P GUA  1086     182.407 152.126  -7.619  1.00 50.27      A16S
ATOM  41887  O2P GUA  1086     182.957 149.646  -8.022  1.00 50.27      A16S
ATOM  41888  O5' GUA  1086     182.089 150.441  -5.823  1.00 56.90      A16S
ATOM  41889  C5' GUA  1086     183.223 149.942  -5.153  1.00 56.90      A16S
ATOM  41890  C4' GUA  1086     182.789 149.250  -3.899  1.00 56.90      A16S
ATOM  41891  O4' GUA  1086     181.948 148.133  -4.260  1.00 56.90      A16S
ATOM  41892  C1' GUA  1086     182.136 147.084  -3.328  1.00 56.90      A16S
ATOM  41893  N9  GUA  1086     182.573 145.889  -4.043  1.00 50.27      A16S
ATOM  41894  C4  GUA  1086     182.795 144.661  -3.479  1.00 50.27      A16S
ATOM  41895  N3  GUA  1086     182.635 144.353  -2.175  1.00 50.27      A16S
ATOM  41896  C2  GUA  1086     182.917 143.093  -1.927  1.00 50.27      A16S
ATOM  41897  N2  GUA  1086     182.787 142.617  -0.688  1.00 50.27      A16S
ATOM  41898  N1  GUA  1086     183.342 142.205  -2.881  1.00 50.27      A16S
ATOM  41899  C6  GUA  1086     183.520 142.504  -4.232  1.00 50.27      A16S
ATOM  41900  O6  GUA  1086     183.913 141.627  -5.013  1.00 50.27      A16S
ATOM  41901  C5  GUA  1086     183.204 143.853  -4.511  1.00 50.27      A16S
ATOM  41902  N7  GUA  1086     183.232 144.556  -5.706  1.00 50.27      A16S
ATOM  41903  C8  GUA  1086     182.849 145.759  -5.382  1.00 50.27      A16S
ATOM  41904  C2' GUA  1086     183.180 147.550  -2.312  1.00 56.90      A16S
ATOM  41905  O2' GUA  1086     182.555 148.056  -1.156  1.00 56.90      A16S
ATOM  41906  C3' GUA  1086     183.910 148.614  -3.110  1.00 56.90      A16S
ATOM  41907  O3' GUA  1086     184.541 149.569  -2.277  1.00 56.90      A16S
ATOM  41908  P   ADE  1087     186.103 149.409  -1.943  1.00 65.90      A16S
ATOM  41909  O1P ADE  1087     186.517 150.658  -1.246  1.00 60.86      A16S
ATOM  41910  O2P ADE  1087     186.819 148.987  -3.181  1.00 60.86      A16S
ATOM  41911  O5' ADE  1087     186.121 148.201  -0.908  1.00 65.90      A16S
ATOM  41912  C5' ADE  1087     185.387 148.287   0.291  1.00 65.90      A16S
ATOM  41913  C4' ADE  1087     185.461 146.988   1.029  1.00 65.90      A16S
ATOM  41914  O4' ADE  1087     184.760 145.965   0.282  1.00 65.90      A16S
ATOM  41915  C1' ADE  1087     185.398 144.712   0.480  1.00 65.90      A16S
ATOM  41916  N9  ADE  1087     185.830 144.215  -0.828  1.00 60.86      A16S
ATOM  41917  C4  ADE  1087     186.196 142.927  -1.139  1.00 60.86      A16S
ATOM  41918  N3  ADE  1087     186.233 141.866  -0.313  1.00 60.86      A16S
ATOM  41919  C2  ADE  1087     186.621 140.775  -0.972  1.00 60.86      A16S
ATOM  41920  N1  ADE  1087     186.950 140.635  -2.265  1.00 60.86      A16S
ATOM  41921  C6  ADE  1087     186.899 141.720  -3.066  1.00 60.86      A16S
ATOM  41922  N6  ADE  1087     187.220 141.577  -4.355  1.00 60.86      A16S
ATOM  41923  C5  ADE  1087     186.505 142.939  -2.489  1.00 60.86      A16S
ATOM  41924  N7  ADE  1087     186.343 144.211  -3.017  1.00 60.86      A16S
ATOM  41925  C8  ADE  1087     185.944 144.929  -1.996  1.00 60.86      A16S
ATOM  41926  C2' ADE  1087     186.547 144.960   1.458  1.00 65.90      A16S
ATOM  41927  O2' ADE  1087     186.085 144.784   2.782  1.00 65.90      A16S
ATOM  41928  C3' ADE  1087     186.851 146.420   1.178  1.00 65.90      A16S
ATOM  41929  O3' ADE  1087     187.525 147.025   2.258  1.00 65.90      A16S
ATOM  41930  P   GUA  1088     189.119 146.903   2.347  1.00 59.21      A16S
ATOM  41931  O1P GUA  1088     189.614 147.721   3.496  1.00 47.45      A16S
ATOM  41932  O2P GUA  1088     189.641 147.150   0.968  1.00 47.45      A16S
ATOM  41933  O5' GUA  1088     189.351 145.386   2.756  1.00 59.21      A16S
ATOM  41934  C5' GUA  1088     189.044 144.960   4.066  1.00 59.21      A16S
ATOM  41935  C4' GUA  1088     189.261 143.487   4.183  1.00 59.21      A16S
ATOM  41936  O4' GUA  1088     188.510 142.845   3.125  1.00 59.21      A16S
ATOM  41937  C1' GUA  1088     189.159 141.646   2.751  1.00 59.21      A16S
ATOM  41938  N9  GUA  1088     189.401 141.672   1.315  1.00 47.45      A16S
ATOM  41939  C4  GUA  1088     189.783 140.596   0.559  1.00 47.45      A16S
ATOM  41940  N3  GUA  1088     190.011 139.350   1.027  1.00 47.45      A16S
ATOM  41941  C2  GUA  1088     190.340 138.516   0.063  1.00 47.45      A16S
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ATOM  41942  N2  GUA  1088     190.591 137.233   0.358  1.00 47.45      A16S
ATOM  41943  N1  GUA  1088     190.443 138.880  -1.261  1.00 47.45      A16S
ATOM  41944  C6  GUA  1088     190.216 140.159  -1.761  1.00 47.45      A16S
ATOM  41945  O6  GUA  1088     190.336 140.377  -2.971  1.00 47.45      A16S
ATOM  41946  C5  GUA  1088     189.858 141.062  -0.734  1.00 47.45      A16S
ATOM  41947  N7  GUA  1088     189.541 142.413  -0.790  1.00 47.45      A16S
ATOM  41948  C8  GUA  1088     189.284 142.735   0.451  1.00 47.45      A16S
ATOM  41949  C2' GUA  1088     190.450 141.561   3.557  1.00 59.21      A16S
ATOM  41950  O2' GUA  1088     190.237 140.766   4.699  1.00 59.21      A16S
ATOM  41951  C3' GUA  1088     190.670 143.024   3.893  1.00 59.21      A16S
ATOM  41952  O3' GUA  1088     191.529 143.183   5.002  1.00 59.21      A16S
ATOM  41953  P   CYT  1089     193.083 143.444   4.736  1.00 49.40      A16S
ATOM  41954  O1P CYT  1089     193.766 143.753   6.017  1.00 37.39      A16S
ATOM  41955  O2P CYT  1089     193.165 144.414   3.612  1.00 37.39      A16S
ATOM  41956  O5' CYT  1089     193.619 142.017   4.269  1.00 49.40      A16S
ATOM  41957  C5' CYT  1089     193.905 141.006   5.233  1.00 49.40      A16S
ATOM  41958  C4' CYT  1089     194.373 139.731   4.558  1.00 49.40      A16S
ATOM  41959  O4' CYT  1089     193.356 139.257   3.638  1.00 49.40      A16S
ATOM  41960  C1' CYT  1089     193.973 138.551   2.572  1.00 49.40      A16S
ATOM  41961  N1  CYT  1089     193.730 139.297   1.341  1.00 37.39      A16S
ATOM  41962  C6  CYT  1089     193.343 140.606   1.378  1.00 37.39      A16S
ATOM  41963  C2  CYT  1089     193.929 138.655   0.128  1.00 37.39      A16S
ATOM  41964  O2  CYT  1089     194.179 137.434   0.141  1.00 37.39      A16S
ATOM  41965  N3  CYT  1089     193.821 139.368  -1.024  1.00 37.39      A16S
ATOM  41966  C4  CYT  1089     193.474 140.654  -0.976  1.00 37.39      A16S
ATOM  41967  N4  CYT  1089     193.397 141.330  -2.116  1.00 37.39      A16S
ATOM  41968  C5  CYT  1089     193.197 141.313   0.253  1.00 37.39      A16S
ATOM  41969  C2' CYT  1089     195.467 138.524   2.875  1.00 49.40      A16S
ATOM  41970  O2' CYT  1089     195.780 137.392   3.660  1.00 49.40      A16S
ATOM  41971  C3' CYT  1089     195.613 139.800   3.683  1.00 49.40      A16S
ATOM  41972  O3' CYT  1089     196.786 139.729   4.466  1.00 49.40      A16S
ATOM  41973  P   GUA  1090     197.934 140.820   4.262  1.00 64.12      A16S
ATOM  41974  O1P GUA  1090     198.959 140.435   5.262  1.00 55.46      A16S
ATOM  41975  O2P GUA  1090     197.333 142.167   4.304  1.00 55.46      A16S
ATOM  41976  O5' GUA  1090     198.456 140.567   2.776  1.00 64.12      A16S
ATOM  41977  C5' GUA  1090     198.887 139.273   2.391  1.00 64.12      A16S
ATOM  41978  C4' GUA  1090     198.893 139.101   0.884  1.00 64.12      A16S
ATOM  41979  O4' GUA  1090     197.591 139.367   0.284  1.00 64.12      A16S
ATOM  41980  C1' GUA  1090     197.763 139.419  -1.121  1.00 64.12      A16S
ATOM  41981  N9  GUA  1090     197.116 140.596  -1.688  1.00 55.46      A16S
ATOM  41982  C4  GUA  1090     197.134 140.915  -3.026  1.00 55.46      A16S
ATOM  41983  N3  GUA  1090     197.729 140.191  -3.995  1.00 55.46      A16S
ATOM  41984  C2  GUA  1090     197.598 140.746  -5.184  1.00 55.46      A16S
ATOM  41985  N2  GUA  1090     198.141 140.150  -6.255  1.00 55.46      A16S
ATOM  41986  N1  GUA  1090     196.928 141.920  -5.417  1.00 55.46      A16S
ATOM  41987  C6  GUA  1090     196.292 142.684  -4.448  1.00 55.46      A16S
ATOM  41988  O6  GUA  1090     195.689 143.727  -4.787  1.00 55.46      A16S
ATOM  41989  C5  GUA  1090     196.440 142.097  -3.138  1.00 55.46      A16S
ATOM  41990  N7  GUA  1090     195.987 142.515  -1.892  1.00 55.46      A16S
ATOM  41991  C8  GUA  1090     196.410 141.589  -1.064  1.00 55.46      A16S
ATOM  41992  C2' GUA  1090     199.272 139.470  -1.357  1.00 64.12      A16S
ATOM  41993  O2' GUA  1090     199.706 138.145  -1.596  1.00 64.12      A16S
ATOM  41994  C3' GUA  1090     199.768 139.961  -0.003  1.00 64.12      A16S
ATOM  41995  O3' GUA  1090     201.164 139.701   0.130  1.00 64.12      A16S
ATOM  41996  P   CYT  1091     202.230 140.791  -0.404  1.00 45.09      A16S
ATOM  41997  O1P CYT  1091     203.525 140.087  -0.552  1.00 67.86      A16S
ATOM  41998  O2P CYT  1091     202.157 142.027   0.411  1.00 67.86      A16S
ATOM  41999  O5' CYT  1091     201.696 141.201  -1.848  1.00 45.09      A16S
ATOM  42000  C5' CYT  1091     202.152 140.526  -3.017  1.00 45.09      A16S
ATOM  42001  C4' CYT  1091     202.224 141.484  -4.181  1.00 45.09      A16S
ATOM  42002  O4' CYT  1091     200.890 141.869  -4.605  1.00 45.09      A16S
ATOM  42003  C1' CYT  1091     200.894 143.224  -5.037  1.00 45.09      A16S
ATOM  42004  N1  CYT  1091     200.018 143.987  -4.136  1.00 67.86      A16S
ATOM  42005  C6  CYT  1091     199.598 143.449  -2.950  1.00 67.86      A16S
ATOM  42006  C2  CYT  1091     199.625 145.284  -4.505  1.00 67.86      A16S
ATOM  42007  O2  CYT  1091     200.011 145.744  -5.594  1.00 67.86      A16S
ATOM  42008  N3  CYT  1091     198.840 145.997  -3.664  1.00 67.86      A16S
ATOM  42009  C4  CYT  1091     198.451 145.465  -2.500  1.00 67.86      A16S
ATOM  42010  N4  CYT  1091     197.699 146.210  -1.691  1.00 67.86      A16S
ATOM  42011  C5  CYT  1091     198.824 144.145  -2.111  1.00 67.86      A16S
ATOM  42012  C2' CYT  1091     202.342 143.712  -4.976  1.00 45.09      A16S
ATOM  42013  O2' CYT  1091     202.940 143.562  -6.250  1.00 45.09      A16S
ATOM  42014  C3' CYT  1091     202.914 142.803  -3.888  1.00 45.09      A16S
ATOM  42015  O3' CYT  1091     204.323 142.651  -3.940  1.00 45.09      A16S
ATOM  42016  P   ADE  1092     205.263 143.693  -3.177  1.00 56.11      A16S
ATOM  42017  O1P ADE  1092     206.618 143.507  -3.754  1.00 56.50      A16S
ATOM  42018  O2P ADE  1092     205.070 143.562  -1.695  1.00 56.50      A16S
ATOM  42019  O5' ADE  1092     204.702 145.114  -3.648  1.00 56.11      A16S
ATOM  42020  C5' ADE  1092     205.078 145.696  -4.899  1.00 56.11      A16S
ATOM  42021  C4' ADE  1092     204.505 147.098  -5.026  1.00 56.11      A16S
ATOM  42022  O4' ADE  1092     203.051 147.021  -4.997  1.00 56.11      A16S
ATOM  42023  C1' ADE  1092     202.525 148.052  -4.173  1.00 56.11      A16S
ATOM  42024  N9  ADE  1092     202.092 147.442  -2.914  1.00 56.50      A16S
ATOM  42025  C4  ADE  1092     201.202 147.951  -1.999  1.00 56.50      A16S
ATOM  42026  N3  ADE  1092     200.538 149.116  -2.064  1.00 56.50      A16S
ATOM  42027  C2  ADE  1092     199.788 149.285  -0.984  1.00 56.50      A16S
ATOM  42028  N1  ADE  1092     199.629 148.482   0.072  1.00 56.50      A16S
ATOM  42029  C6  ADE  1092     200.298 147.313   0.099  1.00 56.50      A16S
ATOM  42030  N6  ADE  1092     200.123 146.499   1.143  1.00 56.50      A16S
ATOM  42031  C5  ADE  1092     201.138 147.021  -0.980  1.00 56.50      A16S
ATOM  42032  N7  ADE  1092     201.966 145.944  -1.247  1.00 56.50      A16S
ATOM  42033  C8  ADE  1092     202.503 146.241  -2.401  1.00 56.50      A16S
ATOM  42034  C2' ADE  1092     203.671 149.035  -3.961  1.00 56.11      A16S
ATOM  42035  O2' ADE  1092     203.732 149.897  -5.076  1.00 56.11      A16S
ATOM  42036  C3' ADE  1092     204.853 148.078  -3.908  1.00 56.11      A16S
ATOM  42037  O3' ADE  1092     206.099 148.747  -4.129  1.00 56.11      A16S
ATOM  42038  P   ADE  1093     207.079 149.050  -2.884  1.00 77.27      A16S
ATOM  42039  O1P ADE  1093     208.333 149.605  -3.436  1.00 58.86      A16S
ATOM  42040  O2P ADE  1093     207.127 147.860  -1.993  1.00 58.86      A16S
ATOM  42041  O5' ADE  1093     206.349 150.213  -2.085  1.00 77.27      A16S
ATOM  42042  C5' ADE  1093     206.151 151.498  -2.663  1.00 77.27      A16S
ATOM  42043  C4' ADE  1093     205.260 152.327  -1.770  1.00 77.27      A16S
ATOM  42044  O4' ADE  1093     203.949 151.699  -1.705  1.00 77.27      A16S
ATOM  42045  C1' ADE  1093     203.444 151.782  -0.382  1.00 77.27      A16S
ATOM  42046  N9  ADE  1093     203.441 150.438   0.195  1.00 58.86      A16S
ATOM  42047  C4  ADE  1093     202.679 150.026   1.259  1.00 58.86      A16S
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ATOM	42048	N3	ADE	1093	201.777	150.750	1.942	1.00	58.86	A16S	ATOM	42101	O1P	CYT	1096	214.511	154.677	9.007	1.00	60.49	A16S
ATOM	42049	C2	ADE	1093	201.245	150.028	2.924	1.00	58.86	A16S	ATOM	42102	O2P	CYT	1096	213.620	154.205	6.647	1.00	60.49	A16S
ATOM	42050	N1	ADE	1093	201.492	148.764	3.274	1.00	58.86	A16S	ATOM	42103	O5'	CYT	1096	215.104	152.576	7.857	1.00	61.26	A16S
ATOM	42051	C6	ADE	1093	202.403	148.065	2.570	1.00	58.86	A16S	ATOM	42104	C5'	CYT	1096	215.491	151.831	8.988	1.00	61.26	A16S
ATOM	42052	N6	ADE	1093	202.648	146.809	2.932	1.00	58.86	A16S	ATOM	42105	C4'	CYT	1096	216.332	150.673	8.557	1.00	61.26	A16S
ATOM	42053	C5	ADE	1093	203.039	148.715	1.498	1.00	58.86	A16S	ATOM	42106	O4'	CYT	1096	215.514	149.762	7.777	1.00	61.26	A16S
ATOM	42054	N7	ADE	1093	203.997	148.298	0.586	1.00	58.86	A16S	ATOM	42107	C1'	CYT	1096	216.302	149.187	6.741	1.00	61.26	A16S
ATOM	42055	C8	ADE	1093	204.194	149.353	-0.167	1.00	58.86	A16S	ATOM	42108	N1	CYT	1096	215.735	149.589	5.448	1.00	60.49	A16S
ATOM	42056	C2'	ADE	1093	204.395	152.694	0.391	1.00	77.27	A16S	ATOM	42109	C6	CYT	1096	214.739	150.521	5.371	1.00	60.49	A16S
ATOM	42057	O2'	ADE	1093	203.996	154.041	0.254	1.00	77.27	A16S	ATOM	42110	C2	CYT	1096	216.232	148.992	4.297	1.00	60.49	A16S
ATOM	42058	C3'	ADE	1093	205.706	152.399	-0.315	1.00	77.27	A16S	ATOM	42111	O2	CYT	1096	217.139	148.167	4.407	1.00	60.49	A16S
ATOM	42059	O3'	ADE	1093	206.678	153.414	-0.096	1.00	77.27	A16S	ATOM	42112	N3	CYT	1096	215.718	149.327	3.095	1.00	60.49	A16S
ATOM	42060	P	CYT	1094	207.865	153.166	0.962	1.00	79.07	A16S	ATOM	42113	C4	CYT	1096	214.739	150.231	3.022	1.00	60.49	A16S
ATOM	42061	O1P	CYT	1094	208.799	154.299	0.780	1.00	66.43	A16S	ATOM	42114	N4	CYT	1096	214.251	150.530	1.813	1.00	60.49	A16S
ATOM	42062	O2P	CYT	1094	208.373	151.775	0.844	1.00	66.43	A16S	ATOM	42115	C5	CYT	1096	214.214	150.870	4.189	1.00	60.49	A16S
ATOM	42063	O5'	CYT	1094	207.157	153.319	2.382	1.00	79.07	A16S	ATOM	42116	C2'	CYT	1096	217.729	149.695	6.937	1.00	61.26	A16S
ATOM	42064	C5'	CYT	1094	206.679	154.588	2.831	1.00	79.07	A16S	ATOM	42117	O2'	CYT	1096	218.411	148.787	7.779	1.00	61.26	A16S
ATOM	42065	C4'	CYT	1094	205.990	154.445	4.166	1.00	79.07	A16S	ATOM	42118	C3'	CYT	1096	217.459	151.036	7.606	1.00	61.26	A16S
ATOM	42066	O4'	CYT	1094	204.865	153.548	4.012	1.00	79.07	A16S	ATOM	42119	O3'	CYT	1096	218.581	151.545	8.310	1.00	61.26	A16S
ATOM	42067	C1'	CYT	1094	204.737	152.740	5.163	1.00	79.07	A16S	ATOM	42120	P	CYT	1097	219.477	152.701	7.643	1.00	87.93	A16S
ATOM	42068	N1	CYT	1094	204.923	151.348	4.757	1.00	66.43	A16S	ATOM	42121	O1P	CYT	1097	220.362	153.205	8.725	1.00	57.09	A16S
ATOM	42069	C6	CYT	1094	205.444	151.041	3.534	1.00	66.43	A16S	ATOM	42122	O2P	CYT	1097	218.623	153.654	6.889	1.00	57.09	A16S
ATOM	42070	C2	CYT	1094	204.565	150.340	5.639	1.00	66.43	A16S	ATOM	42123	O5'	CYT	1097	220.355	151.916	6.573	1.00	87.93	A16S
ATOM	42071	O2	CYT	1094	204.104	150.645	6.738	1.00	66.43	A16S	ATOM	42124	C5'	CYT	1097	221.178	150.831	6.971	1.00	87.93	A16S
ATOM	42072	N3	CYT	1094	204.731	149.054	5.280	1.00	66.43	A16S	ATOM	42125	C4'	CYT	1097	221.813	150.196	5.765	1.00	87.93	A16S
ATOM	42073	C4	CYT	1094	205.236	148.759	4.087	1.00	66.43	A16S	ATOM	42126	O4'	CYT	1097	220.825	149.457	5.001	1.00	87.93	A16S
ATOM	42074	N4	CYT	1094	205.377	147.470	3.775	1.00	66.43	A16S	ATOM	42127	C1'	CYT	1097	221.191	149.469	3.627	1.00	87.93	A16S
ATOM	42075	C5	CYT	1094	205.618	149.771	3.162	1.00	66.43	A16S	ATOM	42128	N1	CYT	1097	220.127	150.124	2.858	1.00	57.09	A16S
ATOM	42076	C2'	CYT	1094	205.786	153.201	6.175	1.00	79.07	A16S	ATOM	42129	C6	CYT	1097	219.079	150.741	3.477	1.00	57.09	A16S
ATOM	42077	O2'	CYT	1094	205.224	154.132	7.077	1.00	79.07	A16S	ATOM	42130	C2	CYT	1097	220.205	150.096	1.472	1.00	57.09	A16S
ATOM	42078	C3'	CYT	1094	206.835	153.825	5.267	1.00	79.07	A16S	ATOM	42131	O2	CYT	1097	221.162	149.526	0.949	1.00	57.09	A16S
ATOM	42079	O3'	CYT	1094	207.543	154.838	5.970	1.00	79.07	A16S	ATOM	42132	N3	CYT	1097	219.236	150.679	0.736	1.00	57.09	A16S
ATOM	42080	P	CYT	1095	209.119	155.012	5.742	1.00	60.79	A16S	ATOM	42133	C4	CYT	1097	218.205	151.259	1.343	1.00	57.09	A16S
ATOM	42081	O1P	CYT	1095	209.548	156.215	6.488	1.00	60.93	A16S	ATOM	42134	N4	CYT	1097	217.248	151.789	0.580	1.00	57.09	A16S
ATOM	42082	O2P	CYT	1095	209.346	154.948	4.272	1.00	60.93	A16S	ATOM	42135	C5	CYT	1097	218.101	151.312	2.763	1.00	57.09	A16S
ATOM	42083	O5'	CYT	1095	209.753	153.740	6.461	1.00	60.79	A16S	ATOM	42136	C2'	CYT	1097	222.493	150.253	3.530	1.00	87.93	A16S
ATOM	42084	C5'	CYT	1095	209.716	153.619	7.873	1.00	60.79	A16S	ATOM	42137	O2'	CYT	1097	223.582	149.362	3.660	1.00	87.93	A16S
ATOM	42085	C4'	CYT	1095	210.440	152.371	8.309	1.00	60.79	A16S	ATOM	42138	C3'	CYT	1097	222.351	151.162	4.734	1.00	87.93	A16S
ATOM	42086	O4'	CYT	1095	209.759	151.217	7.761	1.00	60.79	A16S	ATOM	42139	O3'	CYT	1097	223.583	151.717	5.111	1.00	87.93	A16S
ATOM	42087	C1'	CYT	1095	210.704	150.215	7.426	1.00	60.79	A16S	ATOM	42140	P	CYT	1098	223.986	153.159	4.549	1.00	71.12	A16S
ATOM	42088	N1	CYT	1095	210.606	149.953	5.983	1.00	60.93	A16S	ATOM	42141	O1P	CYT	1098	225.251	153.491	5.253	1.00	52.30	A16S
ATOM	42089	C6	CYT	1095	209.895	150.783	5.164	1.00	60.93	A16S	ATOM	42142	O2P	CYT	1098	222.820	154.077	4.632	1.00	52.30	A16S
ATOM	42090	C2	CYT	1095	211.274	148.847	5.460	1.00	60.93	A16S	ATOM	42143	O5'	CYT	1098	224.247	152.930	2.995	1.00	71.12	A16S
ATOM	42091	O2	CYT	1095	211.872	148.088	6.235	1.00	60.93	A16S	ATOM	42144	C5'	CYT	1098	225.343	152.152	2.550	1.00	71.12	A16S
ATOM	42092	N3	CYT	1095	211.248	148.629	4.128	1.00	60.93	A16S	ATOM	42145	C4'	CYT	1098	225.283	151.974	1.056	1.00	71.12	A16S
ATOM	42093	C4	CYT	1095	210.578	149.459	3.333	1.00	60.93	A16S	ATOM	42146	O4'	CYT	1098	224.001	151.398	0.697	1.00	71.12	A16S
ATOM	42094	N4	CYT	1095	210.609	149.222	2.026	1.00	60.93	A16S	ATOM	42147	C1'	CYT	1098	223.696	151.744	-0.641	1.00	71.12	A16S
ATOM	42095	C5	CYT	1095	209.854	150.575	3.846	1.00	60.93	A16S	ATOM	42148	N1	CYT	1098	222.397	152.415	-0.686	1.00	52.30	A16S
ATOM	42096	C2'	CYT	1095	212.082	150.731	7.843	1.00	60.79	A16S	ATOM	42149	C6	CYT	1098	221.794	152.895	0.439	1.00	52.30	A16S
ATOM	42097	O2'	CYT	1095	212.402	150.249	9.129	1.00	60.79	A16S	ATOM	42150	C2	CYT	1098	221.804	152.583	-1.924	1.00	52.30	A16S
ATOM	42098	C3'	CYT	1095	211.862	152.238	7.799	1.00	60.79	A16S	ATOM	42151	O2	CYT	1098	222.360	152.089	-2.911	1.00	52.30	A16S
ATOM	42099	O3'	CYT	1095	212.764	152.942	8.644	1.00	60.79	A16S	ATOM	42152	N3	CYT	1098	220.642	153.272	-2.023	1.00	52.30	A16S
ATOM	42100	P	CYT	1096	214.013	153.716	7.998	1.00	61.26	A16S	ATOM	42153	C4	CYT	1098	220.073	153.771	-0.927	1.00	52.30	A16S

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ATOM  42154  N4  CYT  1098     218.952 154.475  -1.074  1.00 52.30      A16S
ATOM  42155  C5  CYT  1098     220.638 153.578   0.366  1.00 52.30      A16S
ATOM  42156  C2' CYT  1098     224.792 152.696  -1.116  1.00 71.12      A16S
ATOM  42157  O2' CYT  1098     225.769 151.984  -1.846  1.00 71.12      A16S
ATOM  42158  C3' CYT  1098     225.313 153.232   0.209  1.00 71.12      A16S
ATOM  42159  O3' CYT  1098     226.632 153.741   0.068  1.00 71.12      A16S
ATOM  42160  P   GUA  1099     226.881 155.332   0.052  1.00 73.05      A16S
ATOM  42161  O1P GUA  1099     228.241 155.522   0.625  1.00 63.93      A16S
ATOM  42162  O2P GUA  1099     225.712 155.997   0.682  1.00 63.93      A16S
ATOM  42163  O5' GUA  1099     226.889 155.724  -1.494  1.00 73.05      A16S
ATOM  42164  C5' GUA  1099     225.815 155.311  -2.316  1.00 73.05      A16S
ATOM  42165  C4' GUA  1099     225.834 155.997  -3.658  1.00 73.05      A16S
ATOM  42166  O4' GUA  1099     224.698 155.452  -4.368  1.00 73.05      A16S
ATOM  42167  C1' GUA  1099     223.883 156.493  -4.845  1.00 73.05      A16S
ATOM  42168  N9  GUA  1099     222.722 156.570  -3.969  1.00 63.93      A16S
ATOM  42169  C4  GUA  1099     221.431 156.776  -4.360  1.00 63.93      A16S
ATOM  42170  N3  GUA  1099     221.003 156.887  -5.632  1.00 63.93      A16S
ATOM  42171  C2  GUA  1099     219.704 157.099  -5.695  1.00 63.93      A16S
ATOM  42172  N2  GUA  1099     219.101 157.207  -6.895  1.00 63.93      A16S
ATOM  42173  N1  GUA  1099     218.898 157.211  -4.588  1.00 63.93      A16S
ATOM  42174  C6  GUA  1099     219.326 157.096  -3.271  1.00 63.93      A16S
ATOM  42175  O6  GUA  1099     218.519 157.212  -2.350  1.00 63.93      A16S
ATOM  42176  C5  GUA  1099     220.705 156.851  -3.196  1.00 63.93      A16S
ATOM  42177  N7  GUA  1099     221.519 156.658  -2.093  1.00 63.93      A16S
ATOM  42178  C8  GUA  1099     222.707 156.488  -2.599  1.00 63.93      A16S
ATOM  42179  C2' GUA  1099     224.730 157.766  -4.829  1.00 73.05      A16S
ATOM  42180  O2' GUA  1099     225.410 157.920  -6.054  1.00 73.05      A16S
ATOM  42181  C3' GUA  1099     225.637 157.509  -3.633  1.00 73.05      A16S
ATOM  42182  O3' GUA  1099     226.886 158.163  -3.809  1.00 73.05      A16S
ATOM  42183  P   CYT  1100     227.235 159.479  -2.959  1.00 61.96      A16S
ATOM  42184  O1P CYT  1100     228.617 159.874  -3.309  1.00 77.88      A16S
ATOM  42185  O2P CYT  1100     226.889 159.199  -1.544  1.00 77.88      A16S
ATOM  42186  O5' CYT  1100     226.267 160.599  -3.538  1.00 61.96      A16S
ATOM  42187  C5' CYT  1100     226.577 161.248  -4.760  1.00 61.96      A16S
ATOM  42188  C4' CYT  1100     225.707 162.468  -4.944  1.00 61.96      A16S
ATOM  42189  O4' CYT  1100     224.317 162.067  -5.044  1.00 61.96      A16S
ATOM  42190  C1' CYT  1100     223.494 163.050  -4.444  1.00 61.96      A16S
ATOM  42191  N1  CYT  1100     222.766 162.429  -3.336  1.00 77.88      A16S
ATOM  42192  C6  CYT  1100     223.134 161.211  -2.847  1.00 77.88      A16S
ATOM  42193  C2  CYT  1100     221.680 163.107  -2.790  1.00 77.88      A16S
ATOM  42194  O2  CYT  1100     221.377 164.214  -3.252  1.00 77.88      A16S
ATOM  42195  N3  CYT  1100     220.988 162.545  -1.779  1.00 77.88      A16S
ATOM  42196  C4  CYT  1100     221.348 161.353  -1.313  1.00 77.88      A16S
ATOM  42197  N4  CYT  1100     220.631 160.830  -0.319  1.00 77.88      A16S
ATOM  42198  C5  CYT  1100     222.458 160.641  -1.847  1.00 77.88      A16S
ATOM  42199  C2' CYT  1100     224.396 164.194  -3.997  1.00 61.96      A16S
ATOM  42200  O2' CYT  1100     224.403 165.166  -5.023  1.00 61.96      A16S
ATOM  42201  C3' CYT  1100     225.720 163.461  -3.797  1.00 61.96      A16S
ATOM  42202  O3' CYT  1100     226.859 164.316  -3.875  1.00 61.96      A16S
ATOM  42203  P   CYT  1101     227.537 164.857  -2.523  1.00 90.48      A16S
ATOM  42204  O1P CYT  1101     228.832 165.454  -2.916  1.00 77.25      A16S
ATOM  42205  O2P CYT  1101     227.513 163.775  -1.506  1.00 77.25      A16S
ATOM  42206  O5' CYT  1101     226.545 166.017  -2.068  1.00 90.48      A16S
ATOM  42207  C5' CYT  1101     226.223 167.077  -2.964  1.00 90.48      A16S
ATOM  42208  C4' CYT  1101     224.952 167.776  -2.537  1.00 90.48      A16S
ATOM  42209  O4' CYT  1101     223.835 166.847  -2.584  1.00 90.48      A16S
ATOM  42210  C1' CYT  1101     222.891 167.189  -1.578  1.00 90.48      A16S
ATOM  42211  N1  CYT  1101     222.765 166.055  -0.648  1.00 77.25      A16S
ATOM  42212  C6  CYT  1101     223.702 165.062  -0.612  1.00 77.25      A16S
ATOM  42213  C2  CYT  1101     221.665 166.012   0.205  1.00 77.25      A16S
ATOM  42214  O2  CYT  1101     220.836 166.929   0.149  1.00 77.25      A16S
ATOM  42215  N3  CYT  1101     221.530 164.978   1.067  1.00 77.25      A16S
ATOM  42216  C4  CYT  1101     222.446 164.013   1.093  1.00 77.25      A16S
ATOM  42217  N4  CYT  1101     222.275 163.013   1.955  1.00 77.25      A16S
ATOM  42218  C5  CYT  1101     223.581 164.031   0.235  1.00 77.25      A16S
ATOM  42219  C2' CYT  1101     223.414 168.449  -0.888  1.00 90.48      A16S
ATOM  42220  O2' CYT  1101     222.886 169.591  -1.533  1.00 90.48      A16S
ATOM  42221  C3' CYT  1101     224.912 168.303  -1.113  1.00 90.48      A16S
ATOM  42222  O3' CYT  1101     225.587 169.547  -0.992  1.00 90.48      A16S
ATOM  42223  P   GUA  1102     226.280 169.934   0.404  1.00104.49      A16S
ATOM  42224  O1P GUA  1102     227.200 171.068   0.134  1.00 85.49      A16S
ATOM  42225  O2P GUA  1102     226.814 168.696   1.031  1.00 85.49      A16S
ATOM  42226  O5' GUA  1102     225.063 170.452   1.300  1.00104.49      A16S
ATOM  42227  C5' GUA  1102     224.286 171.583   0.903  1.00104.49      A16S
ATOM  42228  C4' GUA  1102     223.133 171.808   1.861  1.00104.49      A16S
ATOM  42229  O4' GUA  1102     222.232 170.670   1.817  1.00104.49      A16S
ATOM  42230  C1' GUA  1102     221.649 170.475   3.095  1.00104.49      A16S
ATOM  42231  N9  GUA  1102     222.040 169.156   3.582  1.00 85.49      A16S
ATOM  42232  C4  GUA  1102     221.483 168.481   4.642  1.00 85.49      A16S
ATOM  42233  N3  GUA  1102     220.453 168.909   5.404  1.00 85.49      A16S
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ATOM  42259  C4  URI  1103     223.515 168.135   7.957  1.00114.97      A16S
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ATOM  42313  C4' GUA  1106     233.901 169.366  17.901  1.00110.68      A16S
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ATOM	42366	C5	URI	1108	237.713	164.357	14.501	1.00200.66	A16S	ATOM	42419	C4'	CYT	1111	246.580	172.077	5.008	1.00198.77	A16S
ATOM	42367	C2'	URI	1108	239.398	160.932	12.181	1.00149.21	A16S	ATOM	42420	O4'	CYT	1111	246.182	172.747	6.232	1.00198.77	A16S
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ATOM	42369	C3'	URI	1108	240.529	161.068	13.191	1.00149.21	A16S	ATOM	42422	N1	CYT	1111	247.573	172.908	8.091	1.00181.76	A16S
ATOM	42370	O3'	URI	1108	241.704	160.422	12.700	1.00149.21	A16S	ATOM	42423	C6	CYT	1111	246.642	172.122	8.713	1.00181.76	A16S
ATOM	42371	P	GUA	1109	242.427	160.932	11.345	1.00 69.58	A16S	ATOM	42424	C2	CYT	1111	248.796	173.191	8.726	1.00181.76	A16S
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ATOM	42373	O2P	GUA	1109	243.568	161.798	11.730	1.00200.66	A16S	ATOM	42426	N3	CYT	1111	249.028	172.678	9.962	1.00181.76	A16S
ATOM	42374	O5'	GUA	1109	241.370	161.841	10.575	1.00 69.58	A16S	ATOM	42427	C4	CYT	1111	248.101	171.921	10.558	1.00181.76	A16S
ATOM	42375	C5'	GUA	1109	241.215	161.717	9.165	1.00 69.58	A16S	ATOM	42428	N4	CYT	1111	248.368	171.441	11.777	1.00181.76	A16S
ATOM	42376	C4'	GUA	1109	240.702	163.004	8.568	1.00 69.58	A16S	ATOM	42429	C5	CYT	1111	246.859	171.622	9.933	1.00181.76	A16S
ATOM	42377	O4'	GUA	1109	239.641	163.505	9.417	1.00 69.58	A16S	ATOM	42430	C2'	CYT	1111	248.377	173.517	5.694	1.00198.77	A16S
ATOM	42378	C1'	GUA	1109	239.666	164.920	9.434	1.00 69.58	A16S	ATOM	42431	O2'	CYT	1111	248.287	174.727	4.966	1.00198.77	A16S
ATOM	42379	N9	GUA	1109	239.927	165.343	10.802	1.00200.66	A16S	ATOM	42432	C3'	CYT	1111	248.084	172.250	4.890	1.00198.77	A16S
ATOM	42380	C4	GUA	1109	239.277	166.340	11.473	1.00200.66	A16S	ATOM	42433	O3'	CYT	1111	248.491	172.207	3.508	1.00198.77	A16S
ATOM	42381	N3	GUA	1109	238.290	167.109	10.976	1.00200.66	A16S	ATOM	42434	P	ADE	1112	247.929	173.294	2.447	1.00133.25	A16S
ATOM	42382	C2	GUA	1109	237.849	167.977	11.864	1.00200.66	A16S	ATOM	42435	O1P	ADE	1112	249.081	173.808	1.662	1.00 91.13	A16S
ATOM	42383	N2	GUA	1109	236.865	168.827	11.534	1.00200.66	A16S	ATOM	42436	O2P	ADE	1112	247.018	174.250	3.126	1.00 91.13	A16S
ATOM	42384	N1	GUA	1109	238.338	168.078	13.143	1.00200.66	A16S	ATOM	42437	O5'	ADE	1112	247.033	172.445	1.437	1.00133.25	A16S
ATOM	42385	C6	GUA	1109	239.355	167.294	13.676	1.00200.66	A16S	ATOM	42438	C5'	ADE	1112	245.836	171.813	1.883	1.00133.25	A16S
ATOM	42386	O6	GUA	1109	239.716	167.463	14.845	1.00200.66	A16S	ATOM	42439	C4'	ADE	1112	244.631	172.573	1.392	1.00133.25	A16S
ATOM	42387	C5	GUA	1109	239.840	166.362	12.730	1.00200.66	A16S	ATOM	42440	O4'	ADE	1112	243.460	172.068	2.079	1.00133.25	A16S
ATOM	42388	N7	GUA	1109	240.836	165.404	12.841	1.00200.66	A16S	ATOM	42441	C1'	ADE	1112	242.656	173.146	2.511	1.00133.25	A16S
ATOM	42389	C8	GUA	1109	240.854	164.825	11.673	1.00200.66	A16S	ATOM	42442	N9	ADE	1112	242.706	173.161	3.966	1.00 91.13	A16S
ATOM	42390	C2'	GUA	1109	240.750	165.367	8.458	1.00 69.58	A16S	ATOM	42443	C4	ADE	1112	241.927	173.889	4.828	1.00 91.13	A16S
ATOM	42391	O2'	GUA	1109	240.167	165.623	7.194	1.00 69.58	A16S	ATOM	42444	N3	ADE	1112	240.974	174.778	4.511	1.00 91.13	A16S
ATOM	42392	C3'	GUA	1109	241.684	164.161	8.482	1.00 69.58	A16S	ATOM	42445	C2	ADE	1112	240.413	175.269	5.612	1.00 91.13	A16S
ATOM	42393	O3'	GUA	1109	242.448	164.087	7.282	1.00 69.58	A16S	ATOM	42446	N1	ADE	1112	240.670	174.985	6.897	1.00 91.13	A16S
ATOM	42394	P	CYT	1110	244.034	163.839	7.357	1.00106.94	A16S	ATOM	42447	C6	ADE	1112	241.627	174.078	7.178	1.00 91.13	A16S
ATOM	42395	O1P	CYT	1110	244.305	162.505	6.764	1.00141.13	A16S	ATOM	42448	N6	ADE	1112	241.861	173.768	8.456	1.00 91.13	A16S
ATOM	42396	O2P	CYT	1110	244.498	164.134	8.733	1.00141.13	A16S	ATOM	42449	C5	ADE	1112	242.312	173.502	6.100	1.00 91.13	A16S
ATOM	42397	O5'	CYT	1110	244.617	164.936	6.367	1.00106.94	A16S	ATOM	42450	N7	ADE	1112	243.337	172.573	6.038	1.00 91.13	A16S
ATOM	42398	C5'	CYT	1110	243.796	165.479	5.344	1.00106.94	A16S	ATOM	42451	C8	ADE	1112	243.533	172.411	4.754	1.00 91.13	A16S
ATOM	42399	C4'	CYT	1110	243.394	166.885	5.702	1.00106.94	A16S	ATOM	42452	C2'	ADE	1112	243.199	174.414	1.856	1.00133.25	A16S
ATOM	42400	O4'	CYT	1110	242.943	166.885	7.075	1.00106.94	A16S	ATOM	42453	O2'	ADE	1112	242.548	174.617	0.621	1.00133.25	A16S
ATOM	42401	C1'	CYT	1110	243.150	168.164	7.632	1.00106.94	A16S	ATOM	42454	C3'	ADE	1112	244.671	174.063	1.695	1.00133.25	A16S
ATOM	42402	N1	CYT	1110	243.623	168.023	9.020	1.00141.13	A16S	ATOM	42455	O3'	ADE	1112	245.242	174.733	0.577	1.00133.25	A16S
ATOM	42403	C6	CYT	1110	244.022	166.812	9.509	1.00141.13	A16S	ATOM	42456	P	GUA	1113	246.113	176.069	0.788	1.00200.66	A16S
ATOM	42404	C2	CYT	1110	243.627	169.152	9.843	1.00141.13	A16S	ATOM	42457	O1P	GUA	1113	245.974	176.869	-0.459	1.00149.01	A16S
ATOM	42405	O2	CYT	1110	243.289	170.246	9.362	1.00141.13	A16S	ATOM	42458	O2P	GUA	1113	247.466	175.691	1.259	1.00149.01	A16S
ATOM	42406	N3	CYT	1110	244.003	169.025	11.138	1.00141.13	A16S	ATOM	42459	O5'	GUA	1113	245.366	176.864	1.950	1.00200.66	A16S
ATOM	42407	C4	CYT	1110	244.371	167.833	11.612	1.00141.13	A16S	ATOM	42460	C5'	GUA	1113	245.136	178.265	1.828	1.00200.66	A16S
ATOM	42408	N4	CYT	1110	244.722	167.752	12.897	1.00141.13	A16S	ATOM	42461	C4'	GUA	1113	245.544	178.982	3.093	1.00200.66	A16S
ATOM	42409	C5	CYT	1110	244.397	166.672	10.789	1.00141.13	A16S	ATOM	42462	O4'	GUA	1113	244.598	178.695	4.155	1.00200.66	A16S
ATOM	42410	C2'	CYT	1110	244.010	168.981	6.666	1.00106.94	A16S	ATOM	42463	C1'	GUA	1113	245.269	178.717	5.406	1.00200.66	A16S
ATOM	42411	O2'	CYT	1110	243.168	169.928	6.050	1.00106.94	A16S	ATOM	42464	N9	GUA	1113	245.131	177.403	6.021	1.00149.01	A16S
ATOM	42412	C3'	CYT	1110	244.505	167.921	5.677	1.00106.94	A16S	ATOM	42465	C4	GUA	1113	244.720	177.132	7.306	1.00149.01	A16S
ATOM	42413	O3'	CYT	1110	244.557	168.472	4.358	1.00106.94	A16S	ATOM	42466	N3	GUA	1113	244.342	178.040	8.230	1.00149.01	A16S
ATOM	42414	P	CYT	1111	245.944	168.517	3.556	1.00198.77	A16S	ATOM	42467	C2	GUA	1113	244.006	177.469	9.376	1.00149.01	A16S
ATOM	42415	O1P	CYT	1111	245.614	168.481	2.112	1.00181.76	A16S	ATOM	42468	N2	GUA	1113	243.586	178.219	10.405	1.00149.01	A16S
ATOM	42416	O2P	CYT	1111	246.873	167.510	4.127	1.00181.76	A16S	ATOM	42469	N1	GUA	1113	244.051	176.118	9.599	1.00149.01	A16S
ATOM	42417	O5'	CYT	1111	246.510	169.965	3.874	1.00198.77	A16S	ATOM	42470	C6	GUA	1113	244.439	175.166	8.664	1.00149.01	A16S
ATOM	42418	C5'	CYT	1111	246.136	170.640	5.064	1.00198.77	A16S	ATOM	42471	O6	GUA	1113	244.444	173.966	8.972	1.00149.01	A16S

ATOM	42472	C5	GUA	1113	244.790	175.763	7.427	1.00149.01	A16S	ATOM	42525	O5'	GUA	1116	257.902	178.244	12.096	1.00120.19	A16S
ATOM	42473	N7	GUA	1113	245.217	175.185	6.242	1.00149.01	A16S	ATOM	42526	C5'	GUA	1116	258.403	178.651	13.366	1.00120.19	A16S
ATOM	42474	C8	GUA	1113	245.406	176.194	5.438	1.00149.01	A16S	ATOM	42527	C4'	GUA	1116	258.236	177.549	14.387	1.00120.19	A16S
ATOM	42475	C2'	GUA	1113	246.735	179.059	5.126	1.00200.66	A16S	ATOM	42528	O4'	GUA	1116	256.823	177.263	14.569	1.00120.19	A16S
ATOM	42476	O2'	GUA	1113	246.943	180.450	5.265	1.00200.66	A16S	ATOM	42529	C1'	GUA	1116	256.649	175.880	14.839	1.00120.19	A16S
ATOM	42477	C3'	GUA	1113	246.884	178.585	3.688	1.00200.66	A16S	ATOM	42530	N9	GUA	1116	255.897	175.292	13.733	1.00189.55	A16S
ATOM	42478	O3'	GUA	1113	247.969	179.229	3.036	1.00200.66	A16S	ATOM	42531	C4	GUA	1116	255.382	174.016	13.678	1.00189.55	A16S
ATOM	42479	P	CYT	1114	249.472	178.760	3.352	1.00152.47	A16S	ATOM	42532	N3	GUA	1116	255.460	173.084	14.653	1.00189.55	A16S
ATOM	42480	O1P	CYT	1114	250.347	179.432	2.361	1.00138.08	A16S	ATOM	42533	C2	GUA	1116	254.879	171.950	14.299	1.00189.55	A16S
ATOM	42481	O2P	CYT	1114	249.497	177.281	3.461	1.00138.08	A16S	ATOM	42534	N2	GUA	1116	254.862	170.914	15.152	1.00189.55	A16S
ATOM	42482	O5'	CYT	1114	249.759	179.363	4.800	1.00152.47	A16S	ATOM	42535	N1	GUA	1116	254.270	171.746	13.085	1.00189.55	A16S
ATOM	42483	C5'	CYT	1114	249.784	180.772	5.010	1.00152.47	A16S	ATOM	42536	C6	GUA	1116	254.180	172.690	12.066	1.00189.55	A16S
ATOM	42484	C4'	CYT	1114	249.940	181.094	6.482	1.00152.47	A16S	ATOM	42537	O6	GUA	1116	253.613	172.400	11.004	1.00189.55	A16S
ATOM	42485	O4'	CYT	1114	248.787	180.615	7.219	1.00152.47	A16S	ATOM	42538	C5	GUA	1116	254.797	173.913	12.433	1.00189.55	A16S
ATOM	42486	C1'	CYT	1114	249.165	180.362	8.563	1.00152.47	A16S	ATOM	42539	N7	GUA	1116	254.926	175.101	11.728	1.00189.55	A16S
ATOM	42487	N1	CYT	1114	248.725	179.010	8.942	1.00138.08	A16S	ATOM	42540	C8	GUA	1116	255.582	175.889	12.537	1.00189.55	A16S
ATOM	42488	C6	CYT	1114	248.315	178.111	8.000	1.00138.08	A16S	ATOM	42541	C2'	GUA	1116	258.048	175.271	14.949	1.00120.19	A16S
ATOM	42489	C2	CYT	1114	248.729	178.660	10.299	1.00138.08	A16S	ATOM	42542	O2'	GUA	1116	258.491	175.311	16.292	1.00120.19	A16S
ATOM	42490	O2	CYT	1114	249.114	179.490	11.134	1.00138.08	A16S	ATOM	42543	C3'	GUA	1116	258.839	176.199	14.039	1.00120.19	A16S
ATOM	42491	N3	CYT	1114	248.315	177.430	10.665	1.00138.08	A16S	ATOM	42544	O3'	GUA	1116	260.227	176.148	14.335	1.00120.19	A16S
ATOM	42492	C4	CYT	1114	247.909	176.563	9.740	1.00138.08	A16S	ATOM	42545	P	URI	1117	261.208	175.309	13.382	1.00182.17	A16S
ATOM	42493	N4	CYT	1114	247.497	175.366	10.153	1.00138.08	A16S	ATOM	42546	O1P	URI	1117	260.843	175.658	11.986	1.00173.63	A16S
ATOM	42494	C5	CYT	1114	247.903	176.887	8.350	1.00138.08	A16S	ATOM	42547	O2P	URI	1117	262.602	175.506	13.846	1.00173.63	A16S
ATOM	42495	C2'	CYT	1114	250.679	180.565	8.669	1.00152.47	A16S	ATOM	42548	O5'	URI	1117	260.807	173.789	13.644	1.00182.17	A16S
ATOM	42496	O2'	CYT	1114	250.947	181.834	9.231	1.00152.47	A16S	ATOM	42549	C5'	URI	1117	260.973	173.198	14.931	1.00182.17	A16S
ATOM	42497	C3'	CYT	1114	251.113	180.458	7.210	1.00152.47	A16S	ATOM	42550	C4'	URI	1117	260.440	171.786	14.926	1.00182.17	A16S
ATOM	42498	O3'	CYT	1114	252.319	181.184	6.988	1.00152.47	A16S	ATOM	42551	O4'	URI	1117	259.033	171.820	14.571	1.00182.17	A16S
ATOM	42499	P	GUA	1115	253.737	180.491	7.303	1.00150.59	A16S	ATOM	42552	C1'	URI	1117	258.713	170.698	13.765	1.00182.17	A16S
ATOM	42500	O1P	GUA	1115	254.799	181.434	6.874	1.00161.13	A16S	ATOM	42553	N1	URI	1117	258.245	171.188	12.460	1.00173.63	A16S
ATOM	42501	O2P	GUA	1115	253.716	179.113	6.752	1.00161.13	A16S	ATOM	42554	C6	URI	1117	258.643	172.410	11.973	1.00173.63	A16S
ATOM	42502	O5'	GUA	1115	253.782	180.392	8.894	1.00150.59	A16S	ATOM	42555	C2	URI	1117	257.385	170.381	11.738	1.00173.63	A16S
ATOM	42503	C5'	GUA	1115	254.163	181.514	9.688	1.00150.59	A16S	ATOM	42556	O2	URI	1117	257.018	169.286	12.130	1.00173.63	A16S
ATOM	42504	C4'	GUA	1115	254.372	181.097	11.126	1.00150.59	A16S	ATOM	42557	N3	URI	1117	256.970	170.905	10.538	1.00173.63	A16S
ATOM	42505	O4'	GUA	1115	253.107	180.659	11.695	1.00150.59	A16S	ATOM	42558	C4	URI	1117	257.321	172.124	9.998	1.00173.63	A16S
ATOM	42506	C1'	GUA	1115	253.330	179.562	12.569	1.00150.59	A16S	ATOM	42559	O4	URI	1117	256.830	172.475	8.924	1.00173.63	A16S
ATOM	42507	N9	GUA	1115	252.716	178.380	11.972	1.00161.13	A16S	ATOM	42560	C5	URI	1117	258.223	172.892	10.799	1.00173.63	A16S
ATOM	42508	C4	GUA	1115	252.519	177.162	12.578	1.00161.13	A16S	ATOM	42561	C2'	URI	1117	259.966	169.824	13.681	1.00182.17	A16S
ATOM	42509	N3	GUA	1115	252.829	176.850	13.855	1.00161.13	A16S	ATOM	42562	O2'	URI	1117	259.935	168.838	14.694	1.00182.17	A16S
ATOM	42510	C2	GUA	1115	252.537	175.592	14.141	1.00161.13	A16S	ATOM	42563	C3'	URI	1117	261.067	170.851	13.903	1.00182.17	A16S
ATOM	42511	N2	GUA	1115	252.768	175.113	15.372	1.00161.13	A16S	ATOM	42564	O3'	URI	1117	262.237	170.238	14.432	1.00182.17	A16S
ATOM	42512	N1	GUA	1115	251.996	174.711	13.241	1.00161.13	A16S	ATOM	42565	P	URI	1118	263.123	169.275	13.499	1.00163.66	A16S
ATOM	42513	C6	GUA	1115	251.673	175.011	11.921	1.00161.13	A16S	ATOM	42566	O1P	URI	1118	262.510	169.276	12.146	1.00171.47	A16S
ATOM	42514	O6	GUA	1115	251.196	174.137	11.190	1.00161.13	A16S	ATOM	42567	O2P	URI	1118	264.545	169.664	13.659	1.00171.47	A16S
ATOM	42515	C5	GUA	1115	251.967	176.356	11.606	1.00161.13	A16S	ATOM	42568	O5'	URI	1118	262.925	167.827	14.136	1.00163.66	A16S
ATOM	42516	N7	GUA	1115	251.795	177.059	10.422	1.00161.13	A16S	ATOM	42569	C5'	URI	1118	263.883	166.792	13.921	1.00163.66	A16S
ATOM	42517	C8	GUA	1115	252.247	178.253	10.687	1.00161.13	A16S	ATOM	42570	C4'	URI	1118	263.583	165.614	14.818	1.00163.66	A16S
ATOM	42518	C2'	GUA	1115	254.846	179.399	12.695	1.00150.59	A16S	ATOM	42571	O4'	URI	1118	263.702	166.044	16.194	1.00163.66	A16S
ATOM	42519	O2'	GUA	1115	255.329	180.174	13.774	1.00150.59	A16S	ATOM	42572	C1'	URI	1118	262.703	165.425	16.978	1.00163.66	A16S
ATOM	42520	C3'	GUA	1115	255.308	179.919	11.342	1.00150.59	A16S	ATOM	42573	N1	URI	1118	261.915	166.483	17.623	1.00171.47	A16S
ATOM	42521	O3'	GUA	1115	256.673	180.321	11.357	1.00150.59	A16S	ATOM	42574	C6	URI	1118	261.876	167.758	17.105	1.00171.47	A16S
ATOM	42522	P	GUA	1116	257.812	179.285	10.890	1.00120.19	A16S	ATOM	42575	C2	URI	1118	261.224	166.159	18.774	1.00171.47	A16S
ATOM	42523	O1P	GUA	1116	259.097	180.025	10.820	1.00189.55	A16S	ATOM	42576	O2	URI	1118	261.229	165.037	19.256	1.00171.47	A16S
ATOM	42524	O2P	GUA	1116	257.316	178.569	9.689	1.00189.55	A16S	ATOM	42577	N3	URI	1118	260.528	167.199	19.341	1.00171.47	A16S

ATOM	42578	C4	URI	1118	260.455	168.499	18.881	1.00171.47	A16S	ATOM	42631	O5'	GUA	1121	251.448	161.915	9.101	1.00140.52	A16S
ATOM	42579	O4	URI	1118	259.806	169.330	19.517	1.00171.47	A16S	ATOM	42632	C5'	GUA	1121	250.486	161.723	10.137	1.00140.52	A16S
ATOM	42580	C5	URI	1118	261.190	168.750	17.679	1.00171.47	A16S	ATOM	42633	C4'	GUA	1121	250.537	162.875	11.107	1.00140.52	A16S
ATOM	42581	C2'	URI	1118	261.900	164.484	16.076	1.00163.66	A16S	ATOM	42634	O4'	GUA	1121	250.649	164.112	10.371	1.00140.52	A16S
ATOM	42582	O2'	URI	1118	262.370	163.160	16.231	1.00163.66	A16S	ATOM	42635	C1'	GUA	1121	250.094	165.155	11.141	1.00140.52	A16S
ATOM	42583	C3'	URI	1118	262.173	165.059	14.688	1.00163.66	A16S	ATOM	42636	N9	GUA	1121	249.165	165.901	10.310	1.00157.13	A16S
ATOM	42584	O3'	URI	1118	262.151	164.007	13.730	1.00163.66	A16S	ATOM	42637	C4	GUA	1121	248.437	166.986	10.705	1.00157.13	A16S
ATOM	42585	P	CYT	1119	262.262	164.341	12.162	1.00200.65	A16S	ATOM	42638	N3	GUA	1121	248.443	167.531	11.938	1.00157.13	A16S
ATOM	42586	O1P	CYT	1119	263.591	164.954	11.917	1.00156.76	A16S	ATOM	42639	C2	GUA	1121	247.652	168.580	12.013	1.00157.13	A16S
ATOM	42587	O2P	CYT	1119	261.876	163.114	11.420	1.00156.76	A16S	ATOM	42640	N2	GUA	1121	247.543	169.249	13.166	1.00157.13	A16S
ATOM	42588	O5'	CYT	1119	261.149	165.450	11.909	1.00200.65	A16S	ATOM	42641	N1	GUA	1121	246.910	169.053	10.960	1.00157.13	A16S
ATOM	42589	C5'	CYT	1119	259.798	165.231	12.296	1.00200.65	A16S	ATOM	42642	C6	GUA	1121	246.890	168.503	9.681	1.00157.13	A16S
ATOM	42590	C4'	CYT	1119	258.861	165.744	11.230	1.00200.65	A16S	ATOM	42643	O6	GUA	1121	246.184	169.010	8.798	1.00157.13	A16S
ATOM	42591	O4'	CYT	1119	259.134	167.147	10.997	1.00200.65	A16S	ATOM	42644	C5	GUA	1121	247.734	167.380	9.590	1.00157.13	A16S
ATOM	42592	C1'	CYT	1119	258.936	167.448	9.629	1.00200.65	A16S	ATOM	42645	N7	GUA	1121	248.008	166.546	8.514	1.00157.13	A16S
ATOM	42593	N1	CYT	1119	260.206	167.937	9.082	1.00156.76	A16S	ATOM	42646	C8	GUA	1121	248.859	165.680	8.991	1.00157.13	A16S
ATOM	42594	C6	CYT	1119	261.383	167.728	9.745	1.00156.76	A16S	ATOM	42647	C2'	GUA	1121	249.453	164.551	12.390	1.00140.52	A16S
ATOM	42595	C2	CYT	1119	260.191	168.620	7.866	1.00156.76	A16S	ATOM	42648	O2'	GUA	1121	250.317	164.768	13.480	1.00140.52	A16S
ATOM	42596	O2	CYT	1119	259.106	168.793	7.291	1.00156.76	A16S	ATOM	42649	C3'	GUA	1121	249.326	163.081	12.003	1.00140.52	A16S
ATOM	42597	N3	CYT	1119	261.355	169.074	7.349	1.00156.76	A16S	ATOM	42650	O3'	GUA	1121	249.394	162.218	13.134	1.00140.52	A16S
ATOM	42598	C4	CYT	1119	262.502	168.865	8.001	1.00156.76	A16S	ATOM	42651	P	CYT	1122	248.777	162.689	14.539	1.00140.49	A16S
ATOM	42599	N4	CYT	1119	263.628	169.329	7.452	1.00156.76	A16S	ATOM	42652	O1P	CYT	1122	248.455	161.473	15.329	1.00130.45	A16S
ATOM	42600	C5	CYT	1119	262.544	168.171	9.246	1.00156.76	A16S	ATOM	42653	O2P	CYT	1122	247.714	163.693	14.271	1.00130.45	A16S
ATOM	42601	C2'	CYT	1119	258.431	166.178	8.943	1.00200.65	A16S	ATOM	42654	O5'	CYT	1122	250.006	163.419	15.244	1.00140.49	A16S
ATOM	42602	O2'	CYT	1119	257.019	166.201	8.910	1.00200.65	A16S	ATOM	42655	C5'	CYT	1122	251.123	162.672	15.726	1.00140.49	A16S
ATOM	42603	C3'	CYT	1119	258.983	165.093	9.861	1.00200.65	A16S	ATOM	42656	C4'	CYT	1122	252.162	163.596	16.329	1.00140.49	A16S
ATOM	42604	O3'	CYT	1119	258.166	163.925	9.815	1.00200.65	A16S	ATOM	42657	O4'	CYT	1122	253.170	163.972	15.357	1.00140.49	A16S
ATOM	42605	P	GUA	1120	258.687	162.599	9.064	1.00191.97	A16S	ATOM	42658	C1'	CYT	1122	253.727	165.225	15.731	1.00140.49	A16S
ATOM	42606	O1P	GUA	1120	258.577	162.823	7.599	1.00181.99	A16S	ATOM	42659	N1	CYT	1122	253.679	166.140	14.580	1.00130.45	A16S
ATOM	42607	O2P	GUA	1120	259.991	162.202	9.651	1.00181.99	A16S	ATOM	42660	C6	CYT	1122	253.100	165.765	13.401	1.00130.45	A16S
ATOM	42608	O5'	GUA	1120	257.601	161.509	9.477	1.00191.97	A16S	ATOM	42661	C2	CYT	1122	254.244	167.411	14.713	1.00130.45	A16S
ATOM	42609	C5'	GUA	1120	256.275	161.916	9.787	1.00191.97	A16S	ATOM	42662	O2	CYT	1122	254.751	167.729	15.799	1.00130.45	A16S
ATOM	42610	C4'	GUA	1120	255.675	161.034	10.857	1.00191.97	A16S	ATOM	42663	N3	CYT	1122	254.221	168.262	13.661	1.00130.45	A16S
ATOM	42611	O4'	GUA	1120	256.624	160.837	11.935	1.00191.97	A16S	ATOM	42664	C4	CYT	1122	253.659	167.885	12.514	1.00130.45	A16S
ATOM	42612	C1'	GUA	1120	255.944	160.865	13.178	1.00191.97	A16S	ATOM	42665	N4	CYT	1122	253.664	168.753	11.502	1.00130.45	A16S
ATOM	42613	N9	GUA	1120	256.510	161.953	13.969	1.00181.99	A16S	ATOM	42666	C5	CYT	1122	253.068	166.600	12.352	1.00130.45	A16S
ATOM	42614	C4	GUA	1120	256.509	163.288	13.646	1.00181.99	A16S	ATOM	42667	C2'	CYT	1122	252.942	165.742	16.940	1.00140.49	A16S
ATOM	42615	N3	GUA	1120	255.975	163.835	12.533	1.00181.99	A16S	ATOM	42668	O2'	CYT	1122	253.659	165.484	18.128	1.00140.49	A16S
ATOM	42616	C2	GUA	1120	256.148	165.143	12.494	1.00181.99	A16S	ATOM	42669	C3'	CYT	1122	251.658	164.931	16.842	1.00140.49	A16S
ATOM	42617	N2	GUA	1120	255.690	165.847	11.451	1.00181.99	A16S	ATOM	42670	O3'	CYT	1122	251.029	164.816	18.106	1.00140.49	A16S
ATOM	42618	N1	GUA	1120	256.788	165.860	13.472	1.00181.99	A16S	ATOM	42671	P	CYT	1123	250.014	165.959	18.579	1.00145.12	A16S
ATOM	42619	C6	GUA	1120	257.347	165.319	14.625	1.00181.99	A16S	ATOM	42672	O1P	CYT	1123	249.584	165.624	19.959	1.00163.68	A16S
ATOM	42620	O6	GUA	1120	257.911	166.058	15.442	1.00181.99	A16S	ATOM	42673	O2P	CYT	1123	248.993	166.142	17.515	1.00163.68	A16S
ATOM	42621	C5	GUA	1120	257.173	163.915	14.679	1.00181.99	A16S	ATOM	42674	O5'	CYT	1123	250.923	167.266	18.632	1.00145.12	A16S
ATOM	42622	N7	GUA	1120	257.574	162.994	15.638	1.00181.99	A16S	ATOM	42675	C5'	CYT	1123	251.786	167.515	19.739	1.00145.12	A16S
ATOM	42623	C8	GUA	1120	257.158	161.846	15.177	1.00181.99	A16S	ATOM	42676	C4'	CYT	1123	252.154	168.978	19.789	1.00145.12	A16S
ATOM	42624	C2'	GUA	1120	254.445	160.991	12.891	1.00191.97	A16S	ATOM	42677	O4'	CYT	1123	253.004	169.303	18.657	1.00145.12	A16S
ATOM	42625	O2'	GUA	1120	253.850	159.710	12.889	1.00191.97	A16S	ATOM	42678	C1'	CYT	1123	252.681	170.596	18.171	1.00145.12	A16S
ATOM	42626	C3'	GUA	1120	254.452	161.649	11.516	1.00191.97	A16S	ATOM	42679	N1	CYT	1123	252.191	170.454	16.793	1.00163.68	A16S
ATOM	42627	O3'	GUA	1120	253.287	161.361	10.755	1.00191.97	A16S	ATOM	42680	C6	CYT	1123	251.855	169.226	16.294	1.00163.68	A16S
ATOM	42628	P	GUA	1121	252.978	162.221	9.434	1.00140.52	A16S	ATOM	42681	C2	CYT	1123	252.070	171.596	15.998	1.00163.68	A16S
ATOM	42629	O1P	GUA	1121	253.804	161.645	8.343	1.00157.13	A16S	ATOM	42682	O2	CYT	1123	252.384	172.696	16.477	1.00163.68	A16S
ATOM	42630	O2P	GUA	1121	253.110	163.661	9.767	1.00157.13	A16S	ATOM	42683	N3	CYT	1123	251.613	171.473	14.731	1.00163.68	A16S

ATOM	42684	C4	CYT	1123	251.283	170.271	14.256	1.00163.68	A16S	ATOM	42737	P	GUA	1126	241.135	177.299	17.703	1.00120.12	A16S
ATOM	42685	N4	CYT	1123	250.830	170.196	13.004	1.00163.68	A16S	ATOM	42738	O1P	GUA	1126	240.246	178.439	18.047	1.00187.37	A16S
ATOM	42686	C5	CYT	1123	251.400	169.090	15.044	1.00163.68	A16S	ATOM	42739	O2P	GUA	1126	241.025	176.028	18.465	1.00187.37	A16S
ATOM	42687	C2'	CYT	1123	251.633	171.190	19.114	1.00145.12	A16S	ATOM	42740	O5'	GUA	1126	240.958	176.979	16.154	1.00120.12	A16S
ATOM	42688	O2'	CYT	1123	252.262	171.964	20.114	1.00145.12	A16S	ATOM	42741	C5'	GUA	1126	240.937	178.028	15.190	1.00120.12	A16S
ATOM	42689	C3'	CYT	1123	250.978	169.930	19.663	1.00145.12	A16S	ATOM	42742	C4'	GUA	1126	240.729	177.460	13.805	1.00120.12	A16S
ATOM	42690	O3'	CYT	1123	250.357	170.151	20.921	1.00145.12	A16S	ATOM	42743	O4'	GUA	1126	241.917	176.731	13.391	1.00120.12	A16S
ATOM	42691	P	GUA	1124	248.844	170.684	20.972	1.00116.98	A16S	ATOM	42744	C1'	GUA	1126	241.536	175.585	12.645	1.00120.12	A16S
ATOM	42692	O1P	GUA	1124	248.410	170.666	22.394	1.00145.33	A16S	ATOM	42745	N9	GUA	1126	241.887	174.402	13.423	1.00187.37	A16S
ATOM	42693	O2P	GUA	1124	248.055	169.944	19.956	1.00145.33	A16S	ATOM	42746	C4	GUA	1126	241.714	173.092	13.046	1.00187.37	A16S
ATOM	42694	O5'	GUA	1124	248.962	172.204	20.510	1.00116.98	A16S	ATOM	42747	N3	GUA	1126	241.186	172.665	11.880	1.00187.37	A16S
ATOM	42695	C5'	GUA	1124	249.484	173.195	21.390	1.00116.98	A16S	ATOM	42748	C2	GUA	1126	241.148	171.345	11.810	1.00187.37	A16S
ATOM	42696	C4'	GUA	1124	249.324	174.567	20.782	1.00116.98	A16S	ATOM	42749	N2	GUA	1126	240.652	170.749	10.717	1.00187.37	A16S
ATOM	42697	O4'	GUA	1124	250.208	174.707	19.643	1.00116.98	A16S	ATOM	42750	N1	GUA	1126	241.593	170.512	12.807	1.00187.37	A16S
ATOM	42698	C1'	GUA	1124	249.607	175.550	18.677	1.00116.98	A16S	ATOM	42751	C6	GUA	1126	242.141	170.932	14.015	1.00187.37	A16S
ATOM	42699	N9	GUA	1124	249.541	174.822	17.419	1.00145.33	A16S	ATOM	42752	O6	GUA	1126	242.516	170.097	14.846	1.00187.37	A16S
ATOM	42700	C4	GUA	1124	249.476	175.365	16.160	1.00145.33	A16S	ATOM	42753	C5	GUA	1126	242.186	172.343	14.103	1.00187.37	A16S
ATOM	42701	N3	GUA	1124	249.488	176.681	15.861	1.00145.33	A16S	ATOM	42754	N7	GUA	1126	242.646	173.164	15.122	1.00187.37	A16S
ATOM	42702	C2	GUA	1124	249.399	176.891	14.557	1.00145.33	A16S	ATOM	42755	C8	GUA	1126	242.449	174.374	14.675	1.00187.37	A16S
ATOM	42703	N2	GUA	1124	249.409	178.141	14.073	1.00145.33	A16S	ATOM	42756	C2'	GUA	1126	240.029	175.690	12.423	1.00120.12	A16S
ATOM	42704	N1	GUA	1124	249.297	175.890	13.629	1.00145.33	A16S	ATOM	42757	O2'	GUA	1126	239.789	176.429	11.244	1.00120.12	A16S
ATOM	42705	C6	GUA	1124	249.281	174.531	13.917	1.00145.33	A16S	ATOM	42758	C3'	GUA	1126	239.608	176.442	13.676	1.00120.12	A16S
ATOM	42706	O6	GUA	1124	249.183	173.710	13.002	1.00145.33	A16S	ATOM	42759	O3'	GUA	1126	238.336	177.064	13.525	1.00120.12	A16S
ATOM	42707	C5	GUA	1124	249.387	174.291	15.305	1.00145.33	A16S	ATOM	42760	P	CYT	1127	237.096	176.587	14.439	1.00116.05	A16S
ATOM	42708	N7	GUA	1124	249.418	173.096	16.010	1.00145.33	A16S	ATOM	42761	O1P	CYT	1127	237.125	177.368	15.703	1.00126.83	A16S
ATOM	42709	C8	GUA	1124	249.513	173.460	17.258	1.00145.33	A16S	ATOM	42762	O2P	CYT	1127	237.086	175.106	14.503	1.00126.83	A16S
ATOM	42710	C2'	GUA	1124	248.226	175.954	19.200	1.00116.98	A16S	ATOM	42763	O5'	CYT	1127	235.823	177.061	13.611	1.00116.05	A16S
ATOM	42711	O2'	GUA	1124	248.284	177.250	19.753	1.00116.98	A16S	ATOM	42764	C5'	CYT	1127	234.841	176.125	13.192	1.00116.05	A16S
ATOM	42712	C3'	GUA	1124	247.943	174.863	20.227	1.00116.98	A16S	ATOM	42765	C4'	CYT	1127	235.311	175.396	11.955	1.00116.05	A16S
ATOM	42713	O3'	GUA	1124	247.086	175.315	21.270	1.00116.98	A16S	ATOM	42766	O4'	CYT	1127	236.542	174.691	12.236	1.00116.05	A16S
ATOM	42714	P	GUA	1125	245.532	174.910	21.256	1.00108.72	A16S	ATOM	42767	C1'	CYT	1127	236.544	173.437	11.583	1.00116.05	A16S
ATOM	42715	O1P	GUA	1125	244.891	175.554	22.431	1.00183.58	A16S	ATOM	42768	N1	CYT	1127	236.729	172.406	12.607	1.00126.83	A16S
ATOM	42716	O2P	GUA	1125	245.434	173.438	21.084	1.00183.58	A16S	ATOM	42769	C6	CYT	1127	235.995	172.417	13.760	1.00126.83	A16S
ATOM	42717	O5'	GUA	1125	244.971	175.617	19.942	1.00108.72	A16S	ATOM	42770	C2	CYT	1127	237.694	171.433	12.397	1.00126.83	A16S
ATOM	42718	C5'	GUA	1125	245.085	177.025	19.766	1.00108.72	A16S	ATOM	42771	O2	CYT	1127	238.297	171.417	11.315	1.00126.83	A16S
ATOM	42719	C4'	GUA	1125	244.978	177.384	18.301	1.00108.72	A16S	ATOM	42772	N3	CYT	1127	237.945	170.532	13.370	1.00126.83	A16S
ATOM	42720	O4'	GUA	1125	246.053	176.744	17.565	1.00108.72	A16S	ATOM	42773	C4	CYT	1127	237.252	170.571	14.509	1.00126.83	A16S
ATOM	42721	C1'	GUA	1125	245.607	176.421	16.257	1.00108.72	A16S	ATOM	42774	N4	CYT	1127	237.559	169.684	15.458	1.00126.83	A16S
ATOM	42722	N9	GUA	1125	245.701	174.976	16.082	1.00183.58	A16S	ATOM	42775	C5	CYT	1127	236.221	171.526	14.730	1.00126.83	A16S
ATOM	42723	C4	GUA	1125	245.623	174.295	14.891	1.00183.58	A16S	ATOM	42776	C2'	CYT	1127	235.260	173.327	10.763	1.00116.05	A16S
ATOM	42724	N3	GUA	1125	245.466	174.850	13.672	1.00183.58	A16S	ATOM	42777	O2'	CYT	1127	235.550	173.680	9.434	1.00116.05	A16S
ATOM	42725	C2	GUA	1125	245.407	173.936	12.719	1.00183.58	A16S	ATOM	42778	C3'	CYT	1127	234.351	174.335	11.462	1.00116.05	A16S
ATOM	42726	N2	GUA	1125	245.254	174.314	11.445	1.00183.58	A16S	ATOM	42779	O3'	CYT	1127	233.452	174.970	10.570	1.00116.05	A16S
ATOM	42727	N1	GUA	1125	245.494	172.585	12.945	1.00183.58	A16S	ATOM	42780	P	ADE	1128	232.649	174.096	9.506	1.00127.47	A16S
ATOM	42728	C6	GUA	1125	245.655	171.992	14.192	1.00183.58	A16S	ATOM	42781	O1P	ADE	1128	231.437	174.866	9.135	1.00 69.09	A16S
ATOM	42729	O6	GUA	1125	245.717	170.761	14.285	1.00183.58	A16S	ATOM	42782	O2P	ADE	1128	232.513	172.734	10.092	1.00 69.09	A16S
ATOM	42730	C5	GUA	1125	245.723	172.961	15.225	1.00183.58	A16S	ATOM	42783	O5'	ADE	1128	233.617	174.053	8.239	1.00127.47	A16S
ATOM	42731	N7	GUA	1125	245.877	172.806	16.596	1.00183.58	A16S	ATOM	42784	C5'	ADE	1128	233.598	175.109	7.284	1.00127.47	A16S
ATOM	42732	C8	GUA	1125	245.863	174.026	17.062	1.00183.58	A16S	ATOM	42785	C4'	ADE	1128	234.470	174.775	6.092	1.00127.47	A16S
ATOM	42733	C2'	GUA	1125	244.166	176.917	16.129	1.00108.72	A16S	ATOM	42786	O4'	ADE	1128	235.874	174.904	6.425	1.00127.47	A16S
ATOM	42734	O2'	GUA	1125	244.146	178.192	15.526	1.00108.72	A16S	ATOM	42787	C1'	ADE	1128	236.636	174.084	5.555	1.00127.47	A16S
ATOM	42735	C3'	GUA	1125	243.721	176.918	17.586	1.00108.72	A16S	ATOM	42788	N9	ADE	1128	237.500	173.221	6.356	1.00 69.09	A16S
ATOM	42736	O3'	GUA	1125	242.648	177.823	17.806	1.00108.72	A16S	ATOM	42789	C4	ADE	1128	238.476	172.397	5.858	1.00 69.09	A16S

ATOM	42790	N3	ADE	1128	238.817	172.230	4.569	1.00	69.09	A16S	ATOM	42843	O1P	CYT	1131	232.586	160.211	1.866	1.00	74.96	A16S
ATOM	42791	C2	ADE	1128	239.798	171.336	4.457	1.00	69.09	A16S	ATOM	42844	O2P	CYT	1131	232.083	162.533	2.831	1.00	74.96	A16S
ATOM	42792	N1	ADE	1128	240.426	170.641	5.416	1.00	69.09	A16S	ATOM	42845	O5'	CYT	1131	233.118	160.746	4.258	1.00	62.46	A16S
ATOM	42793	C6	ADE	1128	240.060	170.833	6.701	1.00	69.09	A16S	ATOM	42846	C5'	CYT	1131	234.048	159.705	4.535	1.00	62.46	A16S
ATOM	42794	N6	ADE	1128	240.684	170.133	7.653	1.00	69.09	A16S	ATOM	42847	C4'	CYT	1131	234.366	159.663	6.016	1.00	62.46	A16S
ATOM	42795	C5	ADE	1128	239.033	171.761	6.955	1.00	69.09	A16S	ATOM	42848	O4'	CYT	1131	234.841	160.975	6.423	1.00	62.46	A16S
ATOM	42796	N7	ADE	1128	238.424	172.184	8.128	1.00	69.09	A16S	ATOM	42849	C1'	CYT	1131	234.450	161.232	7.762	1.00	62.46	A16S
ATOM	42797	C8	ADE	1128	237.524	173.048	7.717	1.00	69.09	A16S	ATOM	42850	N1	CYT	1131	233.676	162.482	7.790	1.00	74.96	A16S
ATOM	42798	C2'	ADE	1128	235.651	173.293	4.693	1.00	127.47	A16S	ATOM	42851	C6	CYT	1131	233.074	162.961	6.660	1.00	74.96	A16S
ATOM	42799	O2'	ADE	1128	235.506	173.928	3.439	1.00	127.47	A16S	ATOM	42852	C2	CYT	1131	233.575	163.183	8.995	1.00	74.96	A16S
ATOM	42800	C3'	ADE	1128	234.385	173.368	5.536	1.00	127.47	A16S	ATOM	42853	O2	CYT	1131	234.105	162.711	10.008	1.00	74.96	A16S
ATOM	42801	O3'	ADE	1128	233.231	173.186	4.737	1.00	127.47	A16S	ATOM	42854	N3	CYT	1131	232.900	164.351	9.024	1.00	74.96	A16S
ATOM	42802	P	CYT	1129	232.524	171.747	4.696	1.00	102.14	A16S	ATOM	42855	C4	CYT	1131	232.332	164.821	7.912	1.00	74.96	A16S
ATOM	42803	O1P	CYT	1129	232.299	171.321	6.109	1.00	72.85	A16S	ATOM	42856	N4	CYT	1131	231.696	165.991	7.982	1.00	74.96	A16S
ATOM	42804	O2P	CYT	1129	231.367	171.856	3.764	1.00	72.85	A16S	ATOM	42857	C5	CYT	1131	232.397	164.115	6.676	1.00	74.96	A16S
ATOM	42805	O5'	CYT	1129	233.636	170.795	4.059	1.00	102.14	A16S	ATOM	42858	C2'	CYT	1131	233.673	160.016	8.268	1.00	62.46	A16S
ATOM	42806	C5'	CYT	1129	234.057	170.969	2.706	1.00	102.14	A16S	ATOM	42859	O2'	CYT	1131	234.522	159.167	9.018	1.00	62.46	A16S
ATOM	42807	C4'	CYT	1129	235.172	170.003	2.362	1.00	102.14	A16S	ATOM	42860	C3'	CYT	1131	233.200	159.384	6.961	1.00	62.46	A16S
ATOM	42808	O4'	CYT	1129	236.351	170.310	3.144	1.00	102.14	A16S	ATOM	42861	O3'	CYT	1131	232.995	157.984	7.149	1.00	62.46	A16S
ATOM	42809	C1'	CYT	1129	237.089	169.124	3.370	1.00	102.14	A16S	ATOM	42862	P	URI	1132	231.548	157.448	7.584	1.00	78.75	A16S
ATOM	42810	N1	CYT	1129	237.261	168.948	4.814	1.00	72.85	A16S	ATOM	42863	O1P	URI	1132	231.561	155.970	7.519	1.00	67.64	A16S
ATOM	42811	C6	CYT	1129	236.476	169.624	5.702	1.00	72.85	A16S	ATOM	42864	O2P	URI	1132	230.553	158.221	6.802	1.00	67.64	A16S
ATOM	42812	C2	CYT	1129	238.254	168.076	5.270	1.00	72.85	A16S	ATOM	42865	O5'	URI	1132	231.394	157.852	9.113	1.00	78.75	A16S
ATOM	42813	O2	CYT	1129	238.929	167.453	4.442	1.00	72.85	A16S	ATOM	42866	C5'	URI	1132	232.048	157.121	10.138	1.00	78.75	A16S
ATOM	42814	N3	CYT	1129	238.448	167.929	6.599	1.00	72.85	A16S	ATOM	42867	C4'	URI	1132	231.809	157.794	11.464	1.00	78.75	A16S
ATOM	42815	C4	CYT	1129	237.689	168.609	7.459	1.00	72.85	A16S	ATOM	42868	O4'	URI	1132	232.227	159.175	11.332	1.00	78.75	A16S
ATOM	42816	N4	CYT	1129	237.930	168.455	8.757	1.00	72.85	A16S	ATOM	42869	C1'	URI	1132	231.348	160.012	12.059	1.00	78.75	A16S
ATOM	42817	C5	CYT	1129	236.652	169.484	7.023	1.00	72.85	A16S	ATOM	42870	N1	URI	1132	230.789	161.010	11.139	1.00	67.64	A16S
ATOM	42818	C2'	CYT	1129	236.331	167.972	2.714	1.00	102.14	A16S	ATOM	42871	C6	URI	1132	230.951	160.901	9.787	1.00	67.64	A16S
ATOM	42819	O2'	CYT	1129	236.894	167.736	1.445	1.00	102.14	A16S	ATOM	42872	C2	URI	1132	230.114	162.073	11.688	1.00	67.64	A16S
ATOM	42820	C3'	CYT	1129	234.914	168.532	2.644	1.00	102.14	A16S	ATOM	42873	O2	URI	1132	229.922	162.176	12.884	1.00	67.64	A16S
ATOM	42821	O3'	CYT	1129	234.184	167.943	1.571	1.00	102.14	A16S	ATOM	42874	N3	URI	1132	229.666	163.008	10.788	1.00	67.64	A16S
ATOM	42822	P	URI	1130	233.328	166.602	1.819	1.00	76.68	A16S	ATOM	42875	C4	URI	1132	229.811	162.974	9.419	1.00	67.64	A16S
ATOM	42823	O1P	URI	1130	232.347	166.819	2.906	1.00	83.26	A16S	ATOM	42876	O4	URI	1132	229.363	163.897	8.732	1.00	67.64	A16S
ATOM	42824	O2P	URI	1130	232.851	166.169	0.481	1.00	83.26	A16S	ATOM	42877	C5	URI	1132	230.498	161.820	8.929	1.00	67.64	A16S
ATOM	42825	O5'	URI	1130	234.396	165.548	2.349	1.00	76.68	A16S	ATOM	42878	C2'	URI	1132	230.323	159.123	12.762	1.00	78.75	A16S
ATOM	42826	C5'	URI	1130	235.156	164.784	1.429	1.00	76.68	A16S	ATOM	42879	O2'	URI	1132	230.758	158.885	14.088	1.00	78.75	A16S
ATOM	42827	C4'	URI	1130	235.902	163.689	2.143	1.00	76.68	A16S	ATOM	42880	C3'	URI	1132	230.348	157.876	11.884	1.00	78.75	A16S
ATOM	42828	O4'	URI	1130	236.889	164.273	3.029	1.00	76.68	A16S	ATOM	42881	O3'	URI	1132	229.981	156.711	12.622	1.00	78.75	A16S
ATOM	42829	C1'	URI	1130	237.081	163.421	4.146	1.00	76.68	A16S	ATOM	42882	P	ADE	1133	228.643	155.906	12.234	1.00	69.33	A16S
ATOM	42830	N1	URI	1130	236.699	164.154	5.359	1.00	83.26	A16S	ATOM	42883	O1P	ADE	1133	228.607	154.670	13.070	1.00	70.87	A16S
ATOM	42831	C6	URI	1130	235.896	165.262	5.298	1.00	83.26	A16S	ATOM	42884	O2P	ADE	1133	228.577	155.801	10.754	1.00	70.87	A16S
ATOM	42832	C2	URI	1130	237.175	163.683	6.569	1.00	83.26	A16S	ATOM	42885	O5'	ADE	1133	227.455	156.867	12.672	1.00	69.33	A16S
ATOM	42833	O2	URI	1130	237.889	162.701	6.658	1.00	83.26	A16S	ATOM	42886	C5'	ADE	1133	227.298	157.267	14.024	1.00	69.33	A16S
ATOM	42834	N3	URI	1130	236.781	164.401	7.669	1.00	83.26	A16S	ATOM	42887	C4'	ADE	1133	226.348	158.429	14.103	1.00	69.33	A16S
ATOM	42835	C4	URI	1130	235.976	165.516	7.678	1.00	83.26	A16S	ATOM	42888	O4'	ADE	1133	226.823	159.489	13.258	1.00	69.33	A16S
ATOM	42836	O4	URI	1130	235.687	166.043	8.751	1.00	83.26	A16S	ATOM	42889	C1'	ADE	1133	225.746	160.349	13.011	1.00	69.33	A16S
ATOM	42837	C5	URI	1130	235.527	165.941	6.386	1.00	83.26	A16S	ATOM	42890	N9	ADE	1133	225.991	161.150	11.818	1.00	70.87	A16S
ATOM	42838	C2'	URI	1130	236.198	162.195	3.919	1.00	76.68	A16S	ATOM	42891	C4	ADE	1133	225.741	162.498	11.757	1.00	70.87	A16S
ATOM	42839	O2'	URI	1130	236.930	161.213	3.211	1.00	76.68	A16S	ATOM	42892	N3	ADE	1133	225.216	163.270	12.723	1.00	70.87	A16S
ATOM	42840	C3'	URI	1130	235.094	162.792	3.063	1.00	76.68	A16S	ATOM	42893	C2	ADE	1133	225.120	164.532	12.316	1.00	70.87	A16S
ATOM	42841	O3'	URI	1130	234.425	161.771	2.343	1.00	76.68	A16S	ATOM	42894	N1	ADE	1133	225.464	165.068	11.143	1.00	70.87	A16S
ATOM	42842	P	CYT	1131	232.946	161.324	2.780	1.00	62.46	A16S	ATOM	42895	C6	ADE	1133	225.991	164.264	10.195	1.00	70.87	A16S

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ATOM  42896  N6  ADE  1133     226.337 164.805   9.026  1.00 70.87      A16S
ATOM  42897  C5  ADE  1133     226.142 162.900  10.503  1.00 70.87      A16S
ATOM  42898  N7  ADE  1133     226.624 161.821   9.776  1.00 70.87      A16S
ATOM  42899  C8  ADE  1133     226.506 160.808  10.601  1.00 70.87      A16S
ATOM  42900  C2' ADE  1133     224.444 159.559  13.147  1.00 69.33      A16S
ATOM  42901  O2' ADE  1133     223.660 160.219  14.115  1.00 69.33      A16S
ATOM  42902  C3' ADE  1133     224.932 158.178  13.608  1.00 69.33      A16S
ATOM  42903  O3' ADE  1133     224.184 157.734  14.742  1.00 69.33      A16S
ATOM  42904  P   ADE  1134     222.638 157.347  14.593  1.00 70.37      A16S
ATOM  42905  O1P ADE  1134     222.261 156.761  15.898  1.00 84.68      A16S
ATOM  42906  O2P ADE  1134     222.510 156.539  13.363  1.00 84.68      A16S
ATOM  42907  O5' ADE  1134     221.862 158.726  14.374  1.00 70.37      A16S
ATOM  42908  C5' ADE  1134     220.848 159.146  15.286  1.00 70.37      A16S
ATOM  42909  C4' ADE  1134     220.307 160.526  14.926  1.00 70.37      A16S
ATOM  42910  O4' ADE  1134     221.399 161.418  14.574  1.00 70.37      A16S
ATOM  42911  C1' ADE  1134     220.890 162.500  13.812  1.00 70.37      A16S
ATOM  42912  N9  ADE  1134     221.673 162.647  12.589  1.00 84.68      A16S
ATOM  42913  C4  ADE  1134     221.737 163.793  11.836  1.00 84.68      A16S
ATOM  42914  N3  ADE  1134     221.129 164.964  12.085  1.00 84.68      A16S
ATOM  42915  C2  ADE  1134     221.407 165.849  11.131  1.00 84.68      A16S
ATOM  42916  N1  ADE  1134     222.162 165.705  10.039  1.00 84.68      A16S
ATOM  42917  C6  ADE  1134     222.756 164.513   9.819  1.00 84.68      A16S
ATOM  42918  N6  ADE  1134     223.502 164.368   8.726  1.00 84.68      A16S
ATOM  42919  C5  ADE  1134     222.545 163.492  10.759  1.00 84.68      A16S
ATOM  42920  N7  ADE  1134     222.996 162.182  10.837  1.00 84.68      A16S
ATOM  42921  C8  ADE  1134     222.453 161.728  11.940  1.00 84.68      A16S
ATOM  42922  C2' ADE  1134     219.425 162.190  13.506  1.00 70.37      A16S
ATOM  42923  O2' ADE  1134     218.604 162.894  14.414  1.00 70.37      A16S
ATOM  42924  C3' ADE  1134     219.372 160.684  13.733  1.00 70.37      A16S
ATOM  42925  O3' ADE  1134     218.029 160.317  14.045  1.00 70.37      A16S
ATOM  42926  P   CYT  1135     216.940 160.189  12.864  1.00 64.10      A16S
ATOM  42927  O1P CYT  1135     215.666 159.761  13.496  1.00100.99      A16S
ATOM  42928  O2P CYT  1135     217.525 159.378  11.764  1.00100.99      A16S
ATOM  42929  O5' CYT  1135     216.744 161.672  12.317  1.00 64.10      A16S
ATOM  42930  C5' CYT  1135     216.049 162.638  13.085  1.00 64.10      A16S
ATOM  42931  C4' CYT  1135     216.125 163.989  12.422  1.00 64.10      A16S
ATOM  42932  O4' CYT  1135     217.515 164.337  12.179  1.00 64.10      A16S
ATOM  42933  C1' CYT  1135     217.592 165.204  11.054  1.00 64.10      A16S
ATOM  42934  N1  CYT  1135     218.523 164.628  10.079  1.00100.99      A16S
ATOM  42935  C6  CYT  1135     218.930 163.329  10.176  1.00100.99      A16S
ATOM  42936  C2  CYT  1135     218.981 165.438   9.039  1.00100.99      A16S
ATOM  42937  O2  CYT  1135     218.593 166.612   8.981  1.00100.99      A16S
ATOM  42938  N3  CYT  1135     219.830 164.924   8.128  1.00100.99      A16S
ATOM  42939  C4  CYT  1135     220.223 163.655   8.229  1.00100.99      A16S
ATOM  42940  N4  CYT  1135     221.068 163.192   7.311  1.00100.99      A16S
ATOM  42941  C5  CYT  1135     219.770 162.806   9.279  1.00100.99      A16S
ATOM  42942  C2' CYT  1135     216.183 165.329  10.471  1.00 64.10      A16S
ATOM  42943  O2' CYT  1135     215.572 166.538  10.879  1.00 64.10      A16S
ATOM  42944  C3' CYT  1135     215.510 164.086  11.040  1.00 64.10      A16S
ATOM  42945  O3' CYT  1135     214.108 164.266  11.104  1.00 64.10      A16S
ATOM  42946  P   GUA  1136     213.204 163.784   9.873  1.00 91.65      A16S
ATOM  42947  O1P GUA  1136     211.803 164.145  10.212  1.00100.24      A16S
ATOM  42948  O2P GUA  1136     213.554 162.365   9.590  1.00100.24      A16S
ATOM  42949  O5' GUA  1136     213.693 164.683   8.647  1.00 91.65      A16S
ATOM  42950  C5' GUA  1136     213.365 166.067   8.593  1.00 91.65      A16S
ATOM  42951  C4' GUA  1136     214.143 166.771   7.502  1.00 91.65      A16S
ATOM  42952  O4' GUA  1136     215.556 166.496   7.655  1.00 91.65      A16S
ATOM  42953  C1' GUA  1136     216.201 166.699   6.412  1.00 91.65      A16S
ATOM  42954  N9  GUA  1136     217.014 165.532   6.097  1.00100.24      A16S
ATOM  42955  C4  GUA  1136     217.928 165.449   5.079  1.00100.24      A16S
ATOM  42956  N3  GUA  1136     218.238 166.439   4.217  1.00100.24      A16S
ATOM  42957  C2  GUA  1136     219.149 166.064   3.341  1.00100.24      A16S
ATOM  42958  N2  GUA  1136     219.577 166.934   2.421  1.00100.24      A16S
ATOM  42959  N1  GUA  1136     219.707 164.808   3.306  1.00100.24      A16S
ATOM  42960  C6  GUA  1136     219.397 163.769   4.180  1.00100.24      A16S
ATOM  42961  O6  GUA  1136     219.948 162.667   4.052  1.00100.24      A16S
ATOM  42962  C5  GUA  1136     218.427 164.168   5.137  1.00100.24      A16S
ATOM  42963  N7  GUA  1136     217.849 163.463   6.184  1.00100.24      A16S
ATOM  42964  C8  GUA  1136     217.018 164.312   6.726  1.00100.24      A16S
ATOM  42965  C2' GUA  1136     215.116 166.954   5.365  1.00 91.65      A16S
ATOM  42966  O2' GUA  1136     215.025 168.343   5.128  1.00 91.65      A16S
ATOM  42967  C3' GUA  1136     213.881 166.387   6.056  1.00 91.65      A16S
ATOM  42968  O3' GUA  1136     212.710 167.028   5.564  1.00 91.65      A16S
ATOM  42969  P   GUA  1137     211.953 166.434   4.272  1.00 81.99      A16S
ATOM  42970  O1P GUA  1137     210.604 167.058   4.210  1.00 76.69      A16S
ATOM  42971  O2P GUA  1137     212.075 164.951   4.317  1.00 76.69      A16S
ATOM  42972  O5' GUA  1137     212.788 166.996   3.039  1.00 81.99      A16S
ATOM  42973  C5' GUA  1137     212.849 168.392   2.791  1.00 81.99      A16S
ATOM  42974  C4' GUA  1137     213.828 168.683   1.685  1.00 81.99      A16S
ATOM  42975  O4' GUA  1137     215.152 168.268   2.092  1.00 81.99      A16S
ATOM  42976  C1' GUA  1137     215.869 167.805   0.966  1.00 81.99      A16S
ATOM  42977  N9  GUA  1137     216.337 166.456   1.254  1.00 76.69      A16S
ATOM  42978  C4  GUA  1137     217.225 165.725   0.506  1.00 76.69      A16S
ATOM  42979  N3  GUA  1137     217.806 166.122  -0.643  1.00 76.69      A16S
ATOM  42980  C2  GUA  1137     218.618 165.201  -1.126  1.00 76.69      A16S
ATOM  42981  N2  GUA  1137     219.273 165.424  -2.266  1.00 76.69      A16S
ATOM  42982  N1  GUA  1137     218.849 163.991  -0.527  1.00 76.69      A16S
ATOM  42983  C6  GUA  1137     218.268 163.561   0.657  1.00 76.69      A16S
ATOM  42984  O6  GUA  1137     218.556 162.450   1.115  1.00 76.69      A16S
ATOM  42985  C5  GUA  1137     217.382 164.536   1.184  1.00 76.69      A16S
ATOM  42986  N7  GUA  1137     216.598 164.516   2.331  1.00 76.69      A16S
ATOM  42987  C8  GUA  1137     215.994 165.672   2.328  1.00 76.69      A16S
ATOM  42988  C2' GUA  1137     214.948 167.902  -0.251  1.00 81.99      A16S
ATOM  42989  O2' GUA  1137     215.216 169.088  -0.968  1.00 81.99      A16S
ATOM  42990  C3' GUA  1137     213.574 167.928   0.399  1.00 81.99      A16S
ATOM  42991  O3' GUA  1137     212.665 168.659  -0.400  1.00 81.99      A16S
ATOM  42992  P   GUA  1138     211.708 167.877  -1.415  1.00 88.53      A16S
ATOM  42993  O1P GUA  1138     211.050 168.884  -2.285  1.00 80.12      A16S
ATOM  42994  O2P GUA  1138     210.871 166.939  -0.617  1.00 80.12      A16S
ATOM  42995  O5' GUA  1138     212.731 167.053  -2.322  1.00 88.53      A16S
ATOM  42996  C5' GUA  1138     213.444 167.702  -3.367  1.00 88.53      A16S
ATOM  42997  C4' GUA  1138     214.308 166.720  -4.121  1.00 88.53      A16S
ATOM  42998  O4' GUA  1138     215.388 166.246  -3.275  1.00 88.53      A16S
ATOM  42999  C1' GUA  1138     215.765 164.944  -3.681  1.00 88.53      A16S
ATOM  43000  N9  GUA  1138     215.584 164.049  -2.547  1.00 80.12      A16S
ATOM  43001  C4  GUA  1138     216.284 162.897  -2.283  1.00 80.12      A16S
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ATOM	43002	N3	GUA	1138	217.295	162.395	-3.018	1.00	80.12	A16S	ATOM	43055	C3'	CYT	1140	206.292	160.119	-9.123	1.00	96.95	A16S
ATOM	43003	C2	GUA	1138	217.755	161.263	-2.514	1.00	80.12	A16S	ATOM	43056	O3'	CYT	1140	205.365	159.031	-9.216	1.00	96.95	A16S
ATOM	43004	N2	GUA	1138	218.760	160.624	-3.117	1.00	80.12	A16S	ATOM	43057	P	URI	1141	205.416	158.024	-10.466	1.00	93.19	A16S
ATOM	43005	N1	GUA	1138	217.262	160.672	-1.380	1.00	80.12	A16S	ATOM	43058	O1P	URI	1141	205.103	156.664	-9.957	1.00	146.05	A16S
ATOM	43006	C6	GUA	1138	216.221	161.172	-0.609	1.00	80.12	A16S	ATOM	43059	O2P	URI	1141	206.679	158.252	-11.205	1.00	146.05	A16S
ATOM	43007	O6	GUA	1138	215.846	160.557	0.398	1.00	80.12	A16S	ATOM	43060	O5'	URI	1141	204.215	158.507	-11.390	1.00	93.19	A16S
ATOM	43008	C5	GUA	1138	215.722	162.385	-1.135	1.00	80.12	A16S	ATOM	43061	C5'	URI	1141	204.313	158.390	-12.798	1.00	93.19	A16S
ATOM	43009	N7	GUA	1138	214.705	163.205	-0.678	1.00	80.12	A16S	ATOM	43062	C4'	URI	1141	205.022	159.595	-13.367	1.00	93.19	A16S
ATOM	43010	C8	GUA	1138	214.663	164.181	-1.543	1.00	80.12	A16S	ATOM	43063	O4'	URI	1141	206.006	159.163	-14.325	1.00	93.19	A16S
ATOM	43011	C2'	GUA	1138	214.861	164.566	-4.858	1.00	88.53	A16S	ATOM	43064	C1'	URI	1141	206.247	160.204	-15.243	1.00	93.19	A16S
ATOM	43012	O2'	GUA	1138	215.512	164.908	-6.063	1.00	88.53	A16S	ATOM	43065	N1	URI	1141	206.334	159.626	-16.588	1.00	146.05	A16S
ATOM	43013	C3'	GUA	1138	213.644	165.445	-4.603	1.00	88.53	A16S	ATOM	43066	C6	URI	1141	205.214	159.305	-17.313	1.00	146.05	A16S
ATOM	43014	O3'	GUA	1138	212.914	165.677	-5.803	1.00	88.53	A16S	ATOM	43067	C2	URI	1141	207.599	159.425	-17.100	1.00	146.05	A16S
ATOM	43015	P	ADE	1139	211.367	165.246	-5.892	1.00	129.49	A16S	ATOM	43068	O2	URI	1141	208.615	159.694	-16.475	1.00	146.05	A16S
ATOM	43016	O1P	ADE	1139	210.790	165.932	-7.070	1.00	109.04	A16S	ATOM	43069	N3	URI	1141	207.633	158.895	-18.364	1.00	146.05	A16S
ATOM	43017	O2P	ADE	1139	210.754	165.448	-4.563	1.00	109.04	A16S	ATOM	43070	C4	URI	1141	206.550	158.554	-19.149	1.00	146.05	A16S
ATOM	43018	O5'	ADE	1139	211.395	163.680	-6.188	1.00	129.49	A16S	ATOM	43071	O4	URI	1141	206.740	158.089	-20.274	1.00	146.05	A16S
ATOM	43019	C5'	ADE	1139	210.212	162.984	-6.591	1.00	129.49	A16S	ATOM	43072	C5	URI	1141	205.276	158.790	-18.545	1.00	146.05	A16S
ATOM	43020	C4'	ADE	1139	210.554	161.971	-7.655	1.00	129.49	A16S	ATOM	43073	C2'	URI	1141	205.175	161.285	-15.051	1.00	93.19	A16S
ATOM	43021	O4'	ADE	1139	211.188	162.685	-8.736	1.00	129.49	A16S	ATOM	43074	O2'	URI	1141	205.762	162.431	-14.483	1.00	93.19	A16S
ATOM	43022	C1'	ADE	1139	212.116	161.839	-9.366	1.00	129.49	A16S	ATOM	43075	C3'	URI	1141	204.171	160.607	-14.115	1.00	93.19	A16S
ATOM	43023	N9	ADE	1139	213.284	162.613	-9.774	1.00	109.04	A16S	ATOM	43076	O3'	URI	1141	203.606	161.530	-13.182	1.00	93.19	A16S
ATOM	43024	C4	ADE	1139	214.437	162.116	-10.328	1.00	109.04	A16S	ATOM	43077	P	GUA	1142	202.943	162.902	-13.702	1.00	97.11	A16S
ATOM	43025	N3	ADE	1139	214.744	160.829	-10.549	1.00	109.04	A16S	ATOM	43078	O1P	GUA	1142	201.756	163.151	-12.847	1.00	100.06	A16S
ATOM	43026	C2	ADE	1139	215.940	160.725	-11.124	1.00	109.04	A16S	ATOM	43079	O2P	GUA	1142	202.779	162.849	-15.179	1.00	100.06	A16S
ATOM	43027	N1	ADE	1139	216.798	161.689	-11.478	1.00	109.04	A16S	ATOM	43080	O5'	GUA	1142	204.041	164.007	-13.367	1.00	97.11	A16S
ATOM	43028	C6	ADE	1139	216.456	162.973	-11.241	1.00	109.04	A16S	ATOM	43081	C5'	GUA	1142	203.775	165.031	-12.417	1.00	97.11	A16S
ATOM	43029	N6	ADE	1139	217.309	163.938	-11.592	1.00	109.04	A16S	ATOM	43082	C4'	GUA	1142	204.789	166.147	-12.535	1.00	97.11	A16S
ATOM	43030	C5	ADE	1139	215.213	163.216	-10.631	1.00	109.04	A16S	ATOM	43083	O4'	GUA	1142	206.078	165.727	-12.015	1.00	97.11	A16S
ATOM	43031	N7	ADE	1139	214.576	164.385	-10.248	1.00	109.04	A16S	ATOM	43084	C1'	GUA	1142	207.106	166.448	-12.678	1.00	97.11	A16S
ATOM	43032	C8	ADE	1139	213.443	163.971	-9.737	1.00	109.04	A16S	ATOM	43085	N9	GUA	1142	208.012	165.498	-13.310	1.00	100.06	A16S
ATOM	43033	C2'	ADE	1139	212.354	160.604	-8.496	1.00	129.49	A16S	ATOM	43086	C4	GUA	1142	209.128	165.816	-14.038	1.00	100.06	A16S
ATOM	43034	O2'	ADE	1139	211.871	159.462	-9.174	1.00	129.49	A16S	ATOM	43087	N3	GUA	1142	209.592	167.060	-14.268	1.00	100.06	A16S
ATOM	43035	C3'	ADE	1139	211.571	160.921	-7.218	1.00	129.49	A16S	ATOM	43088	C2	GUA	1142	210.678	167.048	-15.013	1.00	100.06	A16S
ATOM	43036	O3'	ADE	1139	210.944	159.692	-6.827	1.00	129.49	A16S	ATOM	43089	N2	GUA	1142	211.275	168.198	-15.333	1.00	100.06	A16S
ATOM	43037	P	CYT	1140	209.573	159.694	-5.982	1.00	96.95	A16S	ATOM	43090	N1	GUA	1142	211.260	165.908	-15.499	1.00	100.06	A16S
ATOM	43038	O1P	CYT	1140	209.689	160.708	-4.906	1.00	102.02	A16S	ATOM	43091	C6	GUA	1142	210.795	164.618	-15.279	1.00	100.06	A16S
ATOM	43039	O2P	CYT	1140	209.257	158.287	-5.629	1.00	102.02	A16S	ATOM	43092	O6	GUA	1142	211.384	163.659	-15.781	1.00	100.06	A16S
ATOM	43040	O5'	CYT	1140	208.451	160.166	-7.010	1.00	96.95	A16S	ATOM	43093	C5	GUA	1142	209.637	164.615	-14.472	1.00	100.06	A16S
ATOM	43041	C5'	CYT	1140	207.074	160.048	-6.666	1.00	96.95	A16S	ATOM	43094	N7	GUA	1142	208.866	163.559	-14.011	1.00	100.06	A16S
ATOM	43042	C4'	CYT	1140	206.203	160.698	-7.717	1.00	96.95	A16S	ATOM	43095	C8	GUA	1142	207.916	164.130	-13.323	1.00	100.06	A16S
ATOM	43043	O4'	CYT	1140	206.558	162.093	-7.850	1.00	96.95	A16S	ATOM	43096	C2'	GUA	1142	206.436	167.346	-13.720	1.00	97.11	A16S
ATOM	43044	C1'	CYT	1140	206.300	162.507	-9.171	1.00	96.95	A16S	ATOM	43097	O2'	GUA	1142	206.261	168.648	-13.204	1.00	97.11	A16S
ATOM	43045	N1	CYT	1140	207.422	163.336	-9.624	1.00	102.02	A16S	ATOM	43098	C3'	GUA	1142	205.115	166.624	-13.937	1.00	97.11	A16S
ATOM	43046	C6	CYT	1140	207.403	164.687	-9.424	1.00	102.02	A16S	ATOM	43099	O3'	GUA	1142	204.140	167.517	-14.440	1.00	97.11	A16S
ATOM	43047	C2	CYT	1140	208.489	162.740	-10.278	1.00	102.02	A16S	ATOM	43100	P	CYT	1143	204.038	167.756	-16.020	1.00	110.79	A16S
ATOM	43048	O2	CYT	1140	208.504	161.513	-10.396	1.00	102.02	A16S	ATOM	43101	O1P	CYT	1143	203.101	168.889	-16.229	1.00	111.41	A16S
ATOM	43049	N3	CYT	1140	209.488	163.514	-10.755	1.00	102.02	A16S	ATOM	43102	O2P	CYT	1143	203.769	166.449	-16.670	1.00	111.41	A16S
ATOM	43050	C4	CYT	1140	209.450	164.833	-10.579	1.00	102.02	A16S	ATOM	43103	O5'	CYT	1143	205.505	168.225	-16.432	1.00	110.79	A16S
ATOM	43051	N4	CYT	1140	210.444	165.560	-11.090	1.00	102.02	A16S	ATOM	43104	C5'	CYT	1143	205.895	169.589	-16.314	1.00	110.79	A16S
ATOM	43052	C5	CYT	1140	208.388	165.465	-9.879	1.00	102.02	A16S	ATOM	43105	C4'	CYT	1143	207.049	169.887	-17.241	1.00	110.79	A16S
ATOM	43053	C2'	CYT	1140	205.896	161.296	-10.021	1.00	96.95	A16S	ATOM	43106	O4'	CYT	1143	208.226	169.162	-16.802	1.00	110.79	A16S
ATOM	43054	O2'	CYT	1140	204.519	161.367	-10.328	1.00	96.95	A16S	ATOM	43107	C1'	CYT	1143	209.042	168.859	-17.925	1.00	110.79	A16S

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ATOM  43108  N1  CYT  1143     209.252 167.404 -17.988  1.00111.41      A16S
ATOM  43109  C6  CYT  1143     208.291 166.531 -17.560  1.00111.41      A16S
ATOM  43110  C2  CYT  1143     210.453 166.925 -18.521  1.00111.41      A16S
ATOM  43111  O2  CYT  1143     211.320 167.739 -18.869  1.00111.41      A16S
ATOM  43112  N3  CYT  1143     210.640 165.591 -18.641  1.00111.41      A16S
ATOM  43113  C4  CYT  1143     209.687 164.748 -18.241  1.00111.41      A16S
ATOM  43114  N4  CYT  1143     209.908 163.442 -18.394  1.00111.41      A16S
ATOM  43115  C5  CYT  1143     208.464 165.208 -17.669  1.00111.41      A16S
ATOM  43116  C2' CYT  1143     208.317 169.374 -19.171  1.00110.79      A16S
ATOM  43117  O2' CYT  1143     208.831 170.632 -19.549  1.00110.79      A16S
ATOM  43118  C3' CYT  1143     206.876 169.439 -18.682  1.00110.79      A16S
ATOM  43119  O3' CYT  1143     206.122 170.372 -19.440  1.00110.79      A16S
ATOM  43120  P   CYT  1144     205.340 169.878 -20.752  1.00105.40      A16S
ATOM  43121  O1P CYT  1144     204.444 170.984 -21.176  1.00126.64      A16S
ATOM  43122  O2P CYT  1144     204.768 168.539 -20.462  1.00126.64      A16S
ATOM  43123  O5' CYT  1144     206.481 169.709 -21.853  1.00105.40      A16S
ATOM  43124  C5' CYT  1144     207.104 170.848 -22.442  1.00105.40      A16S
ATOM  43125  C4' CYT  1144     208.128 170.416 -23.467  1.00105.40      A16S
ATOM  43126  O4' CYT  1144     209.192 169.672 -22.812  1.00105.40      A16S
ATOM  43127  C1' CYT  1144     209.691 168.678 -23.695  1.00105.40      A16S
ATOM  43128  N1  CYT  1144     209.530 167.365 -23.056  1.00126.64      A16S
ATOM  43129  C6  CYT  1144     208.786 167.226 -21.918  1.00126.64      A16S
ATOM  43130  C2  CYT  1144     210.151 166.255 -23.633  1.00126.64      A16S
ATOM  43131  O2  CYT  1144     210.817 166.411 -24.666  1.00126.64      A16S
ATOM  43132  N3  CYT  1144     210.008 165.043 -23.054  1.00126.64      A16S
ATOM  43133  C4  CYT  1144     209.280 164.918 -21.943  1.00126.64      A16S
ATOM  43134  N4  CYT  1144     209.166 163.705 -21.403  1.00126.64      A16S
ATOM  43135  C5  CYT  1144     208.636 166.032 -21.335  1.00126.64      A16S
ATOM  43136  C2' CYT  1144     208.917 168.799 -25.009  1.00105.40      A16S
ATOM  43137  O2' CYT  1144     209.649 169.590 -25.921  1.00105.40      A16S
ATOM  43138  C3' CYT  1144     207.629 169.466 -24.542  1.00105.40      A16S
ATOM  43139  O3' CYT  1144     206.996 170.168 -25.604  1.00105.40      A16S
ATOM  43140  P   CYT  1145     206.045 169.370 -26.623  1.00112.56      A16S
ATOM  43141  O1P CYT  1145     205.614 170.312 -27.686  1.00 95.42      A16S
ATOM  43142  O2P CYT  1145     205.024 168.650 -25.821  1.00 95.42      A16S
ATOM  43143  O5' CYT  1145     207.009 168.286 -27.280  1.00112.56      A16S
ATOM  43144  C5' CYT  1145     207.708 168.571 -28.483  1.00112.56      A16S
ATOM  43145  C4' CYT  1145     207.961 167.298 -29.248  1.00112.56      A16S
ATOM  43146  O4' CYT  1145     208.909 166.471 -28.521  1.00112.56      A16S
ATOM  43147  C1' CYT  1145     208.560 165.103 -28.670  1.00112.56      A16S
ATOM  43148  N1  CYT  1145     208.184 164.581 -27.350  1.00 95.42      A16S
ATOM  43149  C6  CYT  1145     207.972 165.425 -26.295  1.00 95.42      A16S
ATOM  43150  C2  CYT  1145     208.030 163.203 -27.192  1.00 95.42      A16S
ATOM  43151  O2  CYT  1145     208.245 162.461 -28.164  1.00 95.42      A16S
ATOM  43152  N3  CYT  1145     207.649 162.715 -25.990  1.00 95.42      A16S
ATOM  43153  C4  CYT  1145     207.430 163.547 -24.972  1.00 95.42      A16S
ATOM  43154  N4  CYT  1145     207.043 163.024 -23.809  1.00 95.42      A16S
ATOM  43155  C5  CYT  1145     207.596 164.955 -25.101  1.00 95.42      A16S
ATOM  43156  C2' CYT  1145     207.384 165.045 -29.645  1.00112.56      A16S
ATOM  43157  O2' CYT  1145     207.847 164.868 -30.968  1.00112.56      A16S
ATOM  43158  C3' CYT  1145     206.746 166.405 -29.410  1.00112.56      A16S
ATOM  43159  O3' CYT  1145     205.928 166.816 -30.494  1.00112.56      A16S
ATOM  43160  P   GUA  1146     204.359 166.476 -30.470  1.00106.31      A16S
ATOM  43161  O1P GUA  1146     203.708 167.344 -31.486  1.00 98.17      A16S
ATOM  43162  O2P GUA  1146     203.889 166.518 -29.056  1.00 98.17      A16S
ATOM  43163  O5' GUA  1146     204.295 164.970 -30.981  1.00106.31      A16S
ATOM  43164  C5' GUA  1146     204.949 164.589 -32.181  1.00106.31      A16S
ATOM  43165  C4' GUA  1146     205.175 163.100 -32.198  1.00106.31      A16S
ATOM  43166  O4' GUA  1146     206.132 162.727 -31.166  1.00106.31      A16S
ATOM  43167  C1' GUA  1146     205.800 161.443 -30.654  1.00106.31      A16S
ATOM  43168  N9  GUA  1146     205.436 161.588 -29.248  1.00 98.17      A16S
ATOM  43169  C4  GUA  1146     205.223 160.565 -28.355  1.00 98.17      A16S
ATOM  43170  N3  GUA  1146     205.331 159.245 -28.620  1.00 98.17      A16S
ATOM  43171  C2  GUA  1146     205.051 158.501 -27.564  1.00 98.17      A16S
ATOM  43172  N2  GUA  1146     205.114 157.169 -27.655  1.00 98.17      A16S
ATOM  43173  N1  GUA  1146     204.688 159.010 -26.341  1.00 98.17      A16S
ATOM  43174  C6  GUA  1146     204.566 160.366 -26.041  1.00 98.17      A16S
ATOM  43175  O6  GUA  1146     204.225 160.718 -24.902  1.00 98.17      A16S
ATOM  43176  C5  GUA  1146     204.871 161.180 -27.172  1.00 98.17      A16S
ATOM  43177  N7  GUA  1146     204.873 162.562 -27.315  1.00 98.17      A16S
ATOM  43178  C8  GUA  1146     205.215 162.756 -28.560  1.00 98.17      A16S
ATOM  43179  C2' GUA  1146     204.607 160.942 -31.469  1.00106.31      A16S
ATOM  43180  O2' GUA  1146     205.056 160.205 -32.589  1.00106.31      A16S
ATOM  43181  C3' GUA  1146     203.962 162.262 -31.852  1.00106.31      A16S
ATOM  43182  O3' GUA  1146     203.058 162.143 -32.933  1.00106.31      A16S
ATOM  43183  P   CYT  1147     201.488 162.034 -32.626  1.00118.85      A16S
ATOM  43184  O1P CYT  1147     200.759 162.360 -33.879  1.00 79.74      A16S
ATOM  43185  O2P CYT  1147     201.213 162.813 -31.393  1.00 79.74      A16S
ATOM  43186  O5' CYT  1147     201.286 160.494 -32.278  1.00118.85      A16S
ATOM  43187  C5' CYT  1147     201.653 159.492 -33.216  1.00118.85      A16S
ATOM  43188  C4' CYT  1147     201.478 158.120 -32.613  1.00118.85      A16S
ATOM  43189  O4' CYT  1147     202.464 157.915 -31.565  1.00118.85      A16S
ATOM  43190  C1' CYT  1147     201.901 157.115 -30.535  1.00118.85      A16S
ATOM  43191  N1  CYT  1147     201.815 157.928 -29.316  1.00 79.74      A16S
ATOM  43192  C6  CYT  1147     201.812 159.293 -29.379  1.00 79.74      A16S
ATOM  43193  C2  CYT  1147     201.722 157.277 -28.086  1.00 79.74      A16S
ATOM  43194  O2  CYT  1147     201.731 156.037 -28.063  1.00 79.74      A16S
ATOM  43195  N3  CYT  1147     201.620 158.010 -26.957  1.00 79.74      A16S
ATOM  43196  C4  CYT  1147     201.610 159.340 -27.028  1.00 79.74      A16S
ATOM  43197  N4  CYT  1147     201.507 160.022 -25.890  1.00 79.74      A16S
ATOM  43198  C5  CYT  1147     201.706 160.031 -28.272  1.00 79.74      A16S
ATOM  43199  C2' CYT  1147     200.507 156.704 -31.008  1.00118.85      A16S
ATOM  43200  O2' CYT  1147     200.568 155.480 -31.711  1.00118.85      A16S
ATOM  43201  C3' CYT  1147     200.159 157.880 -31.904  1.00118.85      A16S
ATOM  43202  O3' CYT  1147     199.097 157.587 -32.797  1.00118.85      A16S
ATOM  43203  P   GUA  1148     197.604 158.037 -32.410  1.00 98.34      A16S
ATOM  43204  O1P GUA  1148     196.667 157.364 -33.347  1.00102.69      A16S
ATOM  43205  O2P GUA  1148     197.565 159.518 -32.265  1.00102.69      A16S
ATOM  43206  O5' GUA  1148     197.386 157.386 -30.976  1.00 98.34      A16S
ATOM  43207  C5' GUA  1148     197.311 155.975 -30.831  1.00 98.34      A16S
ATOM  43208  C4' GUA  1148     196.924 155.616 -29.423  1.00 98.34      A16S
ATOM  43209  O4' GUA  1148     197.983 156.015 -28.512  1.00 98.34      A16S
ATOM  43210  C1' GUA  1148     197.417 156.376 -27.261  1.00 98.34      A16S
ATOM  43211  N9  GUA  1148     197.702 157.783 -27.014  1.00102.69      A16S
ATOM  43212  C4  GUA  1148     197.636 158.414 -25.802  1.00102.69      A16S
ATOM  43213  N3  GUA  1148     197.325 157.833 -24.627  1.00102.69      A16S
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ATOM  43214  C2  GUA  1148     197.316 158.703 -23.633  1.00102.69      A16S
ATOM  43215  N2  GUA  1148     197.016 158.296 -22.399  1.00102.69      A16S
ATOM  43216  N1  GUA  1148     197.598 160.037 -23.778  1.00102.69      A16S
ATOM  43217  C6  GUA  1148     197.927 160.659 -24.978  1.00102.69      A16S
ATOM  43218  O6  GUA  1148     198.170 161.873 -24.995  1.00102.69      A16S
ATOM  43219  C5  GUA  1148     197.934 159.735 -26.058  1.00102.69      A16S
ATOM  43220  N7  GUA  1148     198.199 159.926 -27.407  1.00102.69      A16S
ATOM  43221  C8  GUA  1148     198.056 158.741 -27.934  1.00102.69      A16S
ATOM  43222  C2' GUA  1148     195.913 156.132 -27.380  1.00 98.34      A16S
ATOM  43223  O2' GUA  1148     195.628 154.800 -27.000  1.00 98.34      A16S
ATOM  43224  C3' GUA  1148     195.714 156.342 -28.871  1.00 98.34      A16S
ATOM  43225  O3' GUA  1148     194.494 155.795 -29.350  1.00 98.34      A16S
ATOM  43226  P   ADE  1149     193.316 156.786 -29.816  1.00108.38      A16S
ATOM  43227  O1P ADE  1149     192.477 156.036 -30.781  1.00 83.02      A16S
ATOM  43228  O2P ADE  1149     193.925 158.078 -30.223  1.00 83.02      A16S
ATOM  43229  O5' ADE  1149     192.470 157.038 -28.490  1.00108.38      A16S
ATOM  43230  C5' ADE  1149     191.653 158.199 -28.344  1.00108.38      A16S
ATOM  43231  C4' ADE  1149     190.977 158.185 -26.992  1.00108.38      A16S
ATOM  43232  O4' ADE  1149     190.165 156.987 -26.910  1.00108.38      A16S
ATOM  43233  C1' ADE  1149     190.307 156.396 -25.634  1.00108.38      A16S
ATOM  43234  N9  ADE  1149     190.939 155.092 -25.823  1.00 83.02      A16S
ATOM  43235  C4  ADE  1149     190.942 154.053 -24.927  1.00 83.02      A16S
ATOM  43236  N3  ADE  1149     190.398 154.039 -23.700  1.00 83.02      A16S
ATOM  43237  C2  ADE  1149     190.573 152.853 -23.129  1.00 83.02      A16S
ATOM  43238  N1  ADE  1149     191.183 151.763 -23.608  1.00 83.02      A16S
ATOM  43239  C6  ADE  1149     191.720 151.812 -24.844  1.00 83.02      A16S
ATOM  43240  N6  ADE  1149     192.325 150.723 -25.318  1.00 83.02      A16S
ATOM  43241  C5  ADE  1149     191.606 153.016 -25.555  1.00 83.02      A16S
ATOM  43242  N7  ADE  1149     192.038 153.402 -26.816  1.00 83.02      A16S
ATOM  43243  C8  ADE  1149     191.622 154.639 -26.925  1.00 83.02      A16S
ATOM  43244  C2' ADE  1149     191.106 157.362 -24.759  1.00108.38      A16S
ATOM  43245  O2' ADE  1149     190.243 158.212 -24.032  1.00108.38      A16S
ATOM  43246  C3' ADE  1149     191.925 158.107 -25.803  1.00108.38      A16S
ATOM  43247  O3' ADE  1149     192.276 159.405 -25.340  1.00108.38      A16S
ATOM  43248  P   ADE  1150     193.728 159.651 -24.701  1.00 90.39      A16S
ATOM  43249  O1P ADE  1150     193.870 161.098 -24.399  1.00 78.30      A16S
ATOM  43250  O2P ADE  1150     194.704 158.989 -25.604  1.00 78.30      A16S
ATOM  43251  O5' ADE  1150     193.690 158.872 -23.311  1.00 90.39      A16S
ATOM  43252  C5' ADE  1150     192.856 159.315 -22.242  1.00 90.39      A16S
ATOM  43253  C4' ADE  1150     192.750 158.242 -21.183  1.00 90.39      A16S
ATOM  43254  O4' ADE  1150     192.130 157.069 -21.765  1.00 90.39      A16S
ATOM  43255  C1' ADE  1150     192.760 155.899 -21.276  1.00 90.39      A16S
ATOM  43256  N9  ADE  1150     193.392 155.219 -22.407  1.00 78.30      A16S
ATOM  43257  C4  ADE  1150     193.690 153.882 -22.502  1.00 78.30      A16S
ATOM  43258  N3  ADE  1150     193.473 152.933 -21.579  1.00 78.30      A16S
ATOM  43259  C2  ADE  1150     193.888 151.752 -22.019  1.00 78.30      A16S
ATOM  43260  N1  ADE  1150     194.452 151.434 -23.189  1.00 78.30      A16S
ATOM  43261  C6  ADE  1150     194.658 152.412 -24.092  1.00 78.30      A16S
ATOM  43262  N6  ADE  1150     195.222 152.094 -25.258  1.00 78.30      A16S
ATOM  43263  C5  ADE  1150     194.262 153.711 -23.746  1.00 78.30      A16S
ATOM  43264  N7  ADE  1150     194.331 154.917 -24.425  1.00 78.30      A16S
ATOM  43265  C8  ADE  1150     193.805 155.777 -23.591  1.00 78.30      A16S
ATOM  43266  C2' ADE  1150     193.740 156.330 -20.182  1.00 90.39      A16S
ATOM  43267  O2' ADE  1150     193.099 156.284 -18.925  1.00 90.39      A16S
ATOM  43268  C3' ADE  1150     194.073 157.752 -20.609  1.00 90.39      A16S
ATOM  43269  O3' ADE  1150     194.438 158.548 -19.483  1.00 90.39      A16S
ATOM  43270  P   ADE  1151     195.966 158.586 -18.981  1.00 75.36      A16S
ATOM  43271  O1P ADE  1151     196.002 159.449 -17.774  1.00 73.47      A16S
ATOM  43272  O2P ADE  1151     196.845 158.903 -20.132  1.00 73.47      A16S
ATOM  43273  O5' ADE  1151     196.270 157.094 -18.511  1.00 75.36      A16S
ATOM  43274  C5' ADE  1151     195.974 156.682 -17.179  1.00 75.36      A16S
ATOM  43275  C4' ADE  1151     196.229 155.206 -17.022  1.00 75.36      A16S
ATOM  43276  O4' ADE  1151     195.535 154.538 -18.103  1.00 75.36      A16S
ATOM  43277  C1' ADE  1151     196.308 153.450 -18.568  1.00 75.36      A16S
ATOM  43278  N9  ADE  1151     196.707 153.739 -19.943  1.00 73.47      A16S
ATOM  43279  C4  ADE  1151     197.017 152.815 -20.910  1.00 73.47      A16S
ATOM  43280  N3  ADE  1151     197.040 151.480 -20.782  1.00 73.47      A16S
ATOM  43281  C2  ADE  1151     197.362 150.906 -21.932  1.00 73.47      A16S
ATOM  43282  N1  ADE  1151     197.642 151.471 -23.110  1.00 73.47      A16S
ATOM  43283  C6  ADE  1151     197.612 152.817 -23.205  1.00 73.47      A16S
ATOM  43284  N6  ADE  1151     197.886 153.381 -24.383  1.00 73.47      A16S
ATOM  43285  C5  ADE  1151     197.287 153.543 -22.053  1.00 73.47      A16S
ATOM  43286  N7  ADE  1151     197.170 154.903 -21.809  1.00 73.47      A16S
ATOM  43287  C8  ADE  1151     196.830 154.966 -20.544  1.00 73.47      A16S
ATOM  43288  C2' ADE  1151     197.482 153.306 -17.608  1.00 75.36      A16S
ATOM  43289  O2' ADE  1151     197.088 152.473 -16.538  1.00 75.36      A16S
ATOM  43290  C3' ADE  1151     197.671 154.748 -17.170  1.00 75.36      A16S
ATOM  43291  O3' ADE  1151     198.372 154.804 -15.932  1.00 75.36      A16S
ATOM  43292  P   GUA  1152     199.858 155.427 -15.876  1.00 84.17      A16S
ATOM  43293  O1P GUA  1152     200.430 155.035 -14.560  1.00 74.98      A16S
ATOM  43294  O2P GUA  1152     199.783 156.865 -16.244  1.00 74.98      A16S
ATOM  43295  O5' GUA  1152     200.669 154.681 -17.030  1.00 84.17      A16S
ATOM  43296  C5' GUA  1152     200.869 153.273 -16.996  1.00 84.17      A16S
ATOM  43297  C4' GUA  1152     201.013 152.727 -18.401  1.00 84.17      A16S
ATOM  43298  O4' GUA  1152     200.000 153.348 -19.242  1.00 84.17      A16S
ATOM  43299  C1' GUA  1152     200.480 153.458 -20.573  1.00 84.17      A16S
ATOM  43300  N9  GUA  1152     200.489 154.868 -20.949  1.00 74.98      A16S
ATOM  43301  C4  GUA  1152     200.701 155.371 -22.210  1.00 74.98      A16S
ATOM  43302  N3  GUA  1152     200.961 154.646 -23.320  1.00 74.98      A16S
ATOM  43303  C2  GUA  1152     201.110 155.415 -24.389  1.00 74.98      A16S
ATOM  43304  N2  GUA  1152     201.386 154.859 -25.580  1.00 74.98      A16S
ATOM  43305  N1  GUA  1152     201.002 156.786 -24.370  1.00 74.98      A16S
ATOM  43306  C6  GUA  1152     200.734 157.550 -23.239  1.00 74.98      A16S
ATOM  43307  O6  GUA  1152     200.654 158.778 -23.332  1.00 74.98      A16S
ATOM  43308  C5  GUA  1152     200.583 156.738 -22.083  1.00 74.98      A16S
ATOM  43309  N7  GUA  1152     200.319 157.089 -20.767  1.00 74.98      A16S
ATOM  43310  C8  GUA  1152     200.276 155.950 -20.132  1.00 74.98      A16S
ATOM  43311  C2' GUA  1152     201.868 152.828 -20.595  1.00 84.17      A16S
ATOM  43312  O2' GUA  1152     201.735 151.463 -20.939  1.00 84.17      A16S
ATOM  43313  C3' GUA  1152     202.300 153.035 -19.149  1.00 84.17      A16S
ATOM  43314  O3' GUA  1152     203.365 152.151 -18.804  1.00 84.17      A16S
ATOM  43315  P   CYT  1153     204.870 152.539 -19.218  1.00 91.94      A16S
ATOM  43316  O1P CYT  1153     205.800 151.514 -18.693  1.00 74.39      A16S
ATOM  43317  O2P CYT  1153     205.076 153.967 -18.872  1.00 74.39      A16S
ATOM  43318  O5' CYT  1153     204.863 152.428 -20.803  1.00 91.94      A16S
ATOM  43319  C5' CYT  1153     204.799 151.163 -21.445  1.00 91.94      A16S
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ATOM  43320  C4' CYT  1153     205.156 151.318 -22.896  1.00 91.94      A16S
ATOM  43321  O4' CYT  1153     204.141 152.121 -23.548  1.00 91.94      A16S
ATOM  43322  C1' CYT  1153     204.747 152.978 -24.504  1.00 91.94      A16S
ATOM  43323  N1  CYT  1153     204.556 154.365 -24.066  1.00 74.39      A16S
ATOM  43324  C6  CYT  1153     204.340 154.671 -22.748  1.00 74.39      A16S
ATOM  43325  C2  CYT  1153     204.611 155.379 -25.028  1.00 74.39      A16S
ATOM  43326  O2  CYT  1153     204.798 155.062 -26.218  1.00 74.39      A16S
ATOM  43327  N3  CYT  1153     204.459 156.673 -24.638  1.00 74.39      A16S
ATOM  43328  C4  CYT  1153     204.255 156.961 -23.347  1.00 74.39      A16S
ATOM  43329  N4  CYT  1153     204.113 158.245 -23.008  1.00 74.39      A16S
ATOM  43330  C5  CYT  1153     204.187 155.943 -22.348  1.00 74.39      A16S
ATOM  43331  C2' CYT  1153     206.227 152.615 -24.545  1.00 91.94      A16S
ATOM  43332  O2' CYT  1153     206.450 151.608 -25.508  1.00 91.94      A16S
ATOM  43333  C3' CYT  1153     206.425 152.113 -23.129  1.00 91.94      A16S
ATOM  43334  O3' CYT  1153     207.584 151.318 -22.997  1.00 91.94      A16S
ATOM  43335  P   GUA  1154     208.971 152.025 -22.628  1.00 96.88      A16S
ATOM  43336  O1P GUA  1154     209.950 150.939 -22.376  1.00 92.20      A16S
ATOM  43337  O2P GUA  1154     208.720 153.052 -21.579  1.00 92.20      A16S
ATOM  43338  O5' GUA  1154     209.358 152.771 -23.980  1.00 96.88      A16S
ATOM  43339  C5' GUA  1154     209.549 152.037 -25.185  1.00 96.88      A16S
ATOM  43340  C4' GUA  1154     209.862 152.976 -26.322  1.00 96.88      A16S
ATOM  43341  O4' GUA  1154     208.682 153.744 -26.663  1.00 96.88      A16S
ATOM  43342  C1' GUA  1154     209.068 155.039 -27.094  1.00 96.88      A16S
ATOM  43343  N9  GUA  1154     208.465 156.018 -26.199  1.00 92.20      A16S
ATOM  43344  C4  GUA  1154     208.297 157.350 -26.461  1.00 92.20      A16S
ATOM  43345  N3  GUA  1154     208.630 157.976 -27.607  1.00 92.20      A16S
ATOM  43346  C2  GUA  1154     208.365 159.269 -27.555  1.00 92.20      A16S
ATOM  43347  N2  GUA  1154     208.621 160.049 -28.617  1.00 92.20      A16S
ATOM  43348  N1  GUA  1154     207.827 159.896 -26.459  1.00 92.20      A16S
ATOM  43349  C6  GUA  1154     207.481 159.269 -25.268  1.00 92.20      A16S
ATOM  43350  O6  GUA  1154     207.014 159.931 -24.339  1.00 92.20      A16S
ATOM  43351  C5  GUA  1154     207.745 157.882 -25.316  1.00 92.20      A16S
ATOM  43352  N7  GUA  1154     207.547 156.895 -24.361  1.00 92.20      A16S
ATOM  43353  C8  GUA  1154     207.983 155.805 -24.930  1.00 92.20      A16S
ATOM  43354  C2' GUA  1154     210.596 155.108 -27.042  1.00 96.88      A16S
ATOM  43355  O2' GUA  1154     211.146 154.856 -28.320  1.00 96.88      A16S
ATOM  43356  C3' GUA  1154     210.909 154.029 -26.013  1.00 96.88      A16S
ATOM  43357  O3' GUA  1154     212.222 153.508 -26.149  1.00 96.88      A16S
ATOM  43358  P   GUA  1155     213.420 154.162 -25.307  1.00117.92      A16S
ATOM  43359  O1P GUA  1155     214.644 153.407 -25.671  1.00 99.18      A16S
ATOM  43360  O2P GUA  1155     213.012 154.250 -23.881  1.00 99.18      A16S
ATOM  43361  O5' GUA  1155     213.521 155.643 -25.893  1.00117.92      A16S
ATOM  43362  C5' GUA  1155     213.883 155.859 -27.254  1.00117.92      A16S
ATOM  43363  C4' GUA  1155     213.806 157.328 -27.610  1.00117.92      A16S
ATOM  43364  O4' GUA  1155     212.432 157.794 -27.525  1.00117.92      A16S
ATOM  43365  C1' GUA  1155     212.427 159.188 -27.236  1.00117.92      A16S
ATOM  43366  N9  GUA  1155     211.708 159.414 -25.989  1.00 99.18      A16S
ATOM  43367  C4  GUA  1155     211.226 160.621 -25.546  1.00 99.18      A16S
ATOM  43368  N3  GUA  1155     211.309 161.797 -26.204  1.00 99.18      A16S
ATOM  43369  C2  GUA  1155     210.762 162.786 -25.518  1.00 99.18      A16S
ATOM  43370  N2  GUA  1155     210.746 164.029 -26.025  1.00 99.18      A16S
ATOM  43371  N1  GUA  1155     210.186 162.633 -24.283  1.00 99.18      A16S
ATOM  43372  C6  GUA  1155     210.091 161.433 -23.588  1.00 99.18      A16S
ATOM  43373  O6  GUA  1155     209.551 161.407 -22.478  1.00 99.18      A16S
ATOM  43374  C5  GUA  1155     210.670 160.362 -24.314  1.00 99.18      A16S
ATOM  43375  N7  GUA  1155     210.789 159.016 -23.993  1.00 99.18      A16S
ATOM  43376  C8  GUA  1155     211.404 158.492 -25.017  1.00 99.18      A16S
ATOM  43377  C2' GUA  1155     213.884 159.622 -27.074  1.00117.92      A16S
ATOM  43378  O2' GUA  1155     214.367 160.202 -28.270  1.00117.92      A16S
ATOM  43379  C3' GUA  1155     214.548 158.300 -26.710  1.00117.92      A16S
ATOM  43380  O3' GUA  1155     215.943 158.341 -26.962  1.00117.92      A16S
ATOM  43381  P   GUA  1156     216.927 158.951 -25.845  1.00110.27      A16S
ATOM  43382  O1P GUA  1156     218.303 158.892 -26.399  1.00114.69      A16S
ATOM  43383  O2P GUA  1156     216.629 158.284 -24.553  1.00114.69      A16S
ATOM  43384  O5' GUA  1156     216.497 160.485 -25.731  1.00110.27      A16S
ATOM  43385  C5' GUA  1156     216.802 161.409 -26.773  1.00110.27      A16S
ATOM  43386  C4' GUA  1156     216.386 162.815 -26.388  1.00110.27      A16S
ATOM  43387  O4' GUA  1156     214.943 162.875 -26.213  1.00110.27      A16S
ATOM  43388  C1' GUA  1156     214.623 163.877 -25.254  1.00110.27      A16S
ATOM  43389  N9  GUA  1156     213.976 163.242 -24.111  1.00114.69      A16S
ATOM  43390  C4  GUA  1156     213.411 163.892 -23.038  1.00114.69      A16S
ATOM  43391  N3  GUA  1156     213.324 165.229 -22.877  1.00114.69      A16S
ATOM  43392  C2  GUA  1156     212.748 165.552 -21.732  1.00114.69      A16S
ATOM  43393  N2  GUA  1156     212.581 166.839 -21.409  1.00114.69      A16S
ATOM  43394  N1  GUA  1156     212.293 164.637 -20.819  1.00114.69      A16S
ATOM  43395  C6  GUA  1156     212.370 163.256 -20.964  1.00114.69      A16S
ATOM  43396  O6  GUA  1156     211.930 162.519 -20.076  1.00114.69      A16S
ATOM  43397  C5  GUA  1156     212.984 162.893 -22.190  1.00114.69      A16S
ATOM  43398  N7  GUA  1156     213.254 161.641 -22.726  1.00114.69      A16S
ATOM  43399  C8  GUA  1156     213.836 161.897 -23.867  1.00114.69      A16S
ATOM  43400  C2' GUA  1156     215.940 164.521 -24.823  1.00110.27      A16S
ATOM  43401  O2' GUA  1156     216.180 165.676 -25.601  1.00110.27      A16S
ATOM  43402  C3' GUA  1156     216.919 163.379 -25.079  1.00110.27      A16S
ATOM  43403  O3' GUA  1156     218.265 163.839 -25.180  1.00110.27      A16S
ATOM  43404  P   ADE  1157     219.141 164.051 -23.843  1.00104.31      A16S
ATOM  43405  O1P ADE  1157     220.498 164.473 -24.272  1.00102.46      A16S
ATOM  43406  O2P ADE  1157     218.989 162.870 -22.953  1.00102.46      A16S
ATOM  43407  O5' ADE  1157     218.458 165.302 -23.136  1.00104.31      A16S
ATOM  43408  C5' ADE  1157     218.470 166.581 -23.761  1.00104.31      A16S
ATOM  43409  C4' ADE  1157     217.961 167.632 -22.808  1.00104.31      A16S
ATOM  43410  O4' ADE  1157     216.561 167.389 -22.523  1.00104.31      A16S
ATOM  43411  C1' ADE  1157     216.281 167.747 -21.180  1.00104.31      A16S
ATOM  43412  N9  ADE  1157     215.772 166.563 -20.488  1.00102.46      A16S
ATOM  43413  C4  ADE  1157     215.048 166.554 -19.321  1.00102.46      A16S
ATOM  43414  N3  ADE  1157     214.660 167.617 -18.594  1.00102.46      A16S
ATOM  43415  C2  ADE  1157     213.984 167.225 -17.517  1.00102.46      A16S
ATOM  43416  N1  ADE  1157     213.674 165.985 -17.115  1.00102.46      A16S
ATOM  43417  C6  ADE  1157     214.078 164.941 -17.872  1.00102.46      A16S
ATOM  43418  N6  ADE  1157     213.771 163.707 -17.473  1.00102.46      A16S
ATOM  43419  C5  ADE  1157     214.803 165.223 -19.039  1.00102.46      A16S
ATOM  43420  N7  ADE  1157     215.353 164.405 -20.016  1.00102.46      A16S
ATOM  43421  C8  ADE  1157     215.914 165.246 -20.849  1.00102.46      A16S
ATOM  43422  C2' ADE  1157     217.573 168.302 -20.571  1.00104.31      A16S
ATOM  43423  O2' ADE  1157     217.587 169.712 -20.665  1.00104.31      A16S
ATOM  43424  C3' ADE  1157     218.633 167.646 -21.446  1.00104.31      A16S
ATOM  43425  O3' ADE  1157     219.828 168.414 -21.492  1.00104.31      A16S
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ATOM  43426  P   GUA  1158     221.042 168.059 -20.500  1.00 88.47      A16S
ATOM  43427  O1P GUA  1158     222.186 168.934 -20.867  1.00 91.31      A16S
ATOM  43428  O2P GUA  1158     221.218 166.583 -20.507  1.00 91.31      A16S
ATOM  43429  O5' GUA  1158     220.520 168.525 -19.065  1.00 88.47      A16S
ATOM  43430  C5' GUA  1158     220.210 169.896 -18.813  1.00 88.47      A16S
ATOM  43431  C4' GUA  1158     219.317 170.017 -17.603  1.00 88.47      A16S
ATOM  43432  O4' GUA  1158     218.100 169.268 -17.847  1.00 88.47      A16S
ATOM  43433  C1' GUA  1158     217.676 168.643 -16.649  1.00 88.47      A16S
ATOM  43434  N9  GUA  1158     217.724 167.201 -16.844  1.00 91.31      A16S
ATOM  43435  C4  GUA  1158     217.050 166.266 -16.106  1.00 91.31      A16S
ATOM  43436  N3  GUA  1158     216.197 166.526 -15.097  1.00 91.31      A16S
ATOM  43437  C2  GUA  1158     215.729 165.420 -14.554  1.00 91.31      A16S
ATOM  43438  N2  GUA  1158     214.870 165.499 -13.524  1.00 91.31      A16S
ATOM  43439  N1  GUA  1158     216.070 164.156 -14.973  1.00 91.31      A16S
ATOM  43440  C6  GUA  1158     216.946 163.865 -16.012  1.00 91.31      A16S
ATOM  43441  O6  GUA  1158     217.192 162.691 -16.300  1.00 91.31      A16S
ATOM  43442  C5  GUA  1158     217.453 165.045 -16.604  1.00 91.31      A16S
ATOM  43443  N7  GUA  1158     218.341 165.212 -17.656  1.00 91.31      A16S
ATOM  43444  C8  GUA  1158     218.467 166.507 -17.768  1.00 91.31      A16S
ATOM  43445  C2' GUA  1158     218.627 169.078 -15.534  1.00 88.47      A16S
ATOM  43446  O2' GUA  1158     218.097 170.171 -14.819  1.00 88.47      A16S
ATOM  43447  C3' GUA  1158     219.881 169.424 -16.323  1.00 88.47      A16S
ATOM  43448  O3' GUA  1158     220.658 170.383 -15.628  1.00 88.47      A16S
ATOM  43449  P   GUA  1159     221.976 169.918 -14.849  1.00111.88      A16S
ATOM  43450  O1P GUA  1159     222.415 171.060 -14.013  1.00 94.19      A16S
ATOM  43451  O2P GUA  1159     222.914 169.319 -15.838  1.00 94.19      A16S
ATOM  43452  O5' GUA  1159     221.468 168.783 -13.856  1.00111.88      A16S
ATOM  43453  C5' GUA  1159     220.980 169.118 -12.562  1.00111.88      A16S
ATOM  43454  C4' GUA  1159     220.549 167.872 -11.822  1.00111.88      A16S
ATOM  43455  O4' GUA  1159     219.517 167.194 -12.594  1.00111.88      A16S
ATOM  43456  C1' GUA  1159     219.639 165.790 -12.423  1.00111.88      A16S
ATOM  43457  N9  GUA  1159     220.014 165.201 -13.703  1.00 94.19      A16S
ATOM  43458  C4  GUA  1159     219.804 163.902 -14.085  1.00 94.19      A16S
ATOM  43459  N3  GUA  1159     219.164 162.961 -13.363  1.00 94.19      A16S
ATOM  43460  C2  GUA  1159     219.130 161.799 -13.986  1.00 94.19      A16S
ATOM  43461  N2  GUA  1159     218.507 160.755 -13.413  1.00 94.19      A16S
ATOM  43462  N1  GUA  1159     219.700 161.575 -15.216  1.00 94.19      A16S
ATOM  43463  C6  GUA  1159     220.371 162.529 -15.974  1.00 94.19      A16S
ATOM  43464  O6  GUA  1159     220.859 162.218 -17.064  1.00 94.19      A16S
ATOM  43465  C5  GUA  1159     220.393 163.785 -15.324  1.00 94.19      A16S
ATOM  43466  N7  GUA  1159     220.933 164.997 -15.728  1.00 94.19      A16S
ATOM  43467  C8  GUA  1159     220.677 165.809 -14.739  1.00 94.19      A16S
ATOM  43468  C2' GUA  1159     220.747 165.566 -11.394  1.00111.88      A16S
ATOM  43469  O2' GUA  1159     220.199 165.527 -10.092  1.00111.88      A16S
ATOM  43470  C3' GUA  1159     221.608 166.796 -11.630  1.00111.88      A16S
ATOM  43471  O3' GUA  1159     222.456 167.062 -10.520  1.00111.88      A16S
ATOM  43472  P   ADE  1160     224.031 166.763 -10.639  1.00 85.77      A16S
ATOM  43473  O1P ADE  1160     224.732 167.507  -9.558  1.00 79.05      A16S
ATOM  43474  O2P ADE  1160     224.433 166.967 -12.060  1.00 79.05      A16S
ATOM  43475  O5' ADE  1160     224.173 165.213 -10.304  1.00 85.77      A16S
ATOM  43476  C5' ADE  1160     225.422 164.553 -10.467  1.00 85.77      A16S
ATOM  43477  C4' ADE  1160     225.312 163.116 -10.024  1.00 85.77      A16S
ATOM  43478  O4' ADE  1160     225.076 163.060  -8.592  1.00 85.77      A16S
ATOM  43479  C1' ADE  1160     224.187 161.998  -8.298  1.00 85.77      A16S
ATOM  43480  N9  ADE  1160     222.966 162.581  -7.746  1.00 79.05      A16S
ATOM  43481  C4  ADE  1160     222.018 161.941  -6.985  1.00 79.05      A16S
ATOM  43482  N3  ADE  1160     222.011 160.653  -6.603  1.00 79.05      A16S
ATOM  43483  C2  ADE  1160     220.946 160.396  -5.853  1.00 79.05      A16S
ATOM  43484  N1  ADE  1160     219.962 161.216  -5.471  1.00 79.05      A16S
ATOM  43485  C6  ADE  1160     220.001 162.502  -5.874  1.00 79.05      A16S
ATOM  43486  N6  ADE  1160     219.024 163.320  -5.487  1.00 79.05      A16S
ATOM  43487  C5  ADE  1160     221.075 162.900  -6.675  1.00 79.05      A16S
ATOM  43488  N7  ADE  1160     221.411 164.118  -7.242  1.00 79.05      A16S
ATOM  43489  C8  ADE  1160     222.537 163.874  -7.867  1.00 79.05      A16S
ATOM  43490  C2' ADE  1160     223.953 161.243  -9.606  1.00 85.77      A16S
ATOM  43491  O2' ADE  1160     224.927 160.228  -9.746  1.00 85.77      A16S
ATOM  43492  C3' ADE  1160     224.145 162.359 -10.617  1.00 85.77      A16S
ATOM  43493  O3' ADE  1160     224.476 161.858 -11.891  1.00 85.77      A16S
ATOM  43494  P   ADE  1161     223.321 161.677 -12.983  1.00 80.48      A16S
ATOM  43495  O1P ADE  1161     223.937 161.055 -14.181  1.00 89.49      A16S
ATOM  43496  O2P ADE  1161     222.599 162.968 -13.112  1.00 89.49      A16S
ATOM  43497  O5' ADE  1161     222.340 160.612 -12.322  1.00 80.48      A16S
ATOM  43498  C5' ADE  1161     222.771 159.278 -12.081  1.00 80.48      A16S
ATOM  43499  C4' ADE  1161     221.717 158.528 -11.309  1.00 80.48      A16S
ATOM  43500  O4' ADE  1161     221.519 159.176 -10.028  1.00 80.48      A16S
ATOM  43501  C1' ADE  1161     220.148 159.154  -9.693  1.00 80.48      A16S
ATOM  43502  N9  ADE  1161     219.705 160.537  -9.581  1.00 89.49      A16S
ATOM  43503  C4  ADE  1161     218.650 160.995  -8.837  1.00 89.49      A16S
ATOM  43504  N3  ADE  1161     217.809 160.267  -8.089  1.00 89.49      A16S
ATOM  43505  C2  ADE  1161     216.915 161.049  -7.500  1.00 89.49      A16S
ATOM  43506  N1  ADE  1161     216.778 162.376  -7.566  1.00 89.49      A16S
ATOM  43507  C6  ADE  1161     217.645 163.077  -8.324  1.00 89.49      A16S
ATOM  43508  N6  ADE  1161     217.517 164.401  -8.383  1.00 89.49      A16S
ATOM  43509  C5  ADE  1161     218.636 162.364  -9.005  1.00 89.49      A16S
ATOM  43510  N7  ADE  1161     219.654 162.764  -9.856  1.00 89.49      A16S
ATOM  43511  C8  ADE  1161     220.256 161.644 -10.170  1.00 89.49      A16S
ATOM  43512  C2' ADE  1161     219.414 158.346 -10.767  1.00 80.48      A16S
ATOM  43513  O2' ADE  1161     219.301 156.997 -10.365  1.00 80.48      A16S
ATOM  43514  C3' ADE  1161     220.343 158.501 -11.962  1.00 80.48      A16S
ATOM  43515  O3' ADE  1161     220.254 157.371 -12.821  1.00 80.48      A16S
ATOM  43516  P   GUA  1162     219.399 157.457 -14.171  1.00113.25      A16S
ATOM  43517  O1P GUA  1162     219.702 156.227 -14.931  1.00 94.34      A16S
ATOM  43518  O2P GUA  1162     219.610 158.777 -14.797  1.00 94.34      A16S
ATOM  43519  O5' GUA  1162     217.897 157.365 -13.671  1.00113.25      A16S
ATOM  43520  C5' GUA  1162     217.523 156.358 -12.751  1.00113.25      A16S
ATOM  43521  C4' GUA  1162     216.028 156.246 -12.687  1.00113.25      A16S
ATOM  43522  O4' GUA  1162     215.484 157.495 -12.203  1.00113.25      A16S
ATOM  43523  C1' GUA  1162     214.226 157.723 -12.806  1.00113.25      A16S
ATOM  43524  N9  GUA  1162     214.294 158.989 -13.520  1.00 94.34      A16S
ATOM  43525  C4  GUA  1162     213.449 160.051 -13.348  1.00 94.34      A16S
ATOM  43526  N3  GUA  1162     212.383 160.086 -12.526  1.00 94.34      A16S
ATOM  43527  C2  GUA  1162     211.774 161.256 -12.562  1.00 94.34      A16S
ATOM  43528  N2  GUA  1162     210.679 161.454 -11.827  1.00 94.34      A16S
ATOM  43529  N1  GUA  1162     212.188 162.314 -13.327  1.00 94.34      A16S
ATOM  43530  C6  GUA  1162     213.281 162.297 -14.181  1.00 94.34      A16S
ATOM  43531  O6  GUA  1162     213.566 163.305 -14.832  1.00 94.34      A16S
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ATOM  43532  C5  GUA  1162     213.936 161.041 -14.167  1.00 94.34      A16S
ATOM  43533  N7  GUA  1162     215.047 160.597 -14.868  1.00 94.34      A16S
ATOM  43534  C8  GUA  1162     215.218 159.370 -14.458  1.00 94.34      A16S
ATOM  43535  C2' GUA  1162     213.916 156.517 -13.691  1.00113.25      A16S
ATOM  43536  O2' GUA  1162     213.192 155.588 -12.906  1.00113.25      A16S
ATOM  43537  C3' GUA  1162     215.316 156.015 -14.009  1.00113.25      A16S
ATOM  43538  O3' GUA  1162     215.299 154.623 -14.306  1.00113.25      A16S
ATOM  43539  P   GUA  1163     214.733 154.116 -15.717  1.00 84.64      A16S
ATOM  43540  O1P GUA  1163     215.273 152.754 -15.937  1.00146.40      A16S
ATOM  43541  O2P GUA  1163     214.982 155.179 -16.723  1.00146.40      A16S
ATOM  43542  O5' GUA  1163     213.160 154.014 -15.494  1.00 84.64      A16S
ATOM  43543  C5' GUA  1163     212.620 153.380 -14.339  1.00 84.64      A16S
ATOM  43544  C4' GUA  1163     211.191 153.816 -14.132  1.00 84.64      A16S
ATOM  43545  O4' GUA  1163     211.162 155.264 -14.086  1.00 84.64      A16S
ATOM  43546  C1' GUA  1163     209.999 155.746 -14.724  1.00 84.64      A16S
ATOM  43547  N9  GUA  1163     210.392 156.783 -15.677  1.00146.40      A16S
ATOM  43548  C4  GUA  1163     210.138 156.827 -17.030  1.00146.40      A16S
ATOM  43549  N3  GUA  1163     209.468 155.897 -17.747  1.00146.40      A16S
ATOM  43550  C2  GUA  1163     209.388 156.222 -19.030  1.00146.40      A16S
ATOM  43551  N2  GUA  1163     208.755 155.406 -19.891  1.00146.40      A16S
ATOM  43552  N1  GUA  1163     209.921 157.370 -19.564  1.00146.40      A16S
ATOM  43553  C6  GUA  1163     210.614 158.342 -18.847  1.00146.40      A16S
ATOM  43554  O6  GUA  1163     211.054 159.343 -19.430  1.00146.40      A16S
ATOM  43555  C5  GUA  1163     210.709 158.005 -17.469  1.00146.40      A16S
ATOM  43556  N7  GUA  1163     211.305 158.688 -16.418  1.00146.40      A16S
ATOM  43557  C8  GUA  1163     211.094 157.929 -15.380  1.00146.40      A16S
ATOM  43558  C2' GUA  1163     209.187 154.550 -15.235  1.00 84.64      A16S
ATOM  43559  O2' GUA  1163     208.098 154.331 -14.366  1.00 84.64      A16S
ATOM  43560  C3' GUA  1163     210.232 153.438 -15.248  1.00 84.64      A16S
ATOM  43561  O3' GUA  1163     209.767 152.078 -15.105  1.00 84.64      A16S
ATOM  43562  P   ADE  1164     208.816 151.630 -13.861  1.00 96.91      A16S
ATOM  43563  O1P ADE  1164     208.725 150.148 -13.953  1.00 87.63      A16S
ATOM  43564  O2P ADE  1164     207.567 152.426 -13.762  1.00 87.63      A16S
ATOM  43565  O5' ADE  1164     209.682 151.920 -12.563  1.00 96.91      A16S
ATOM  43566  C5' ADE  1164     209.085 152.480 -11.409  1.00 96.91      A16S
ATOM  43567  C4' ADE  1164     209.663 151.848 -10.172  1.00 96.91      A16S
ATOM  43568  O4' ADE  1164     209.039 150.571  -9.918  1.00 96.91      A16S
ATOM  43569  C1' ADE  1164     209.918 149.777  -9.148  1.00 96.91      A16S
ATOM  43570  N9  ADE  1164     209.845 148.394  -9.619  1.00 87.63      A16S
ATOM  43571  C4  ADE  1164     209.532 147.309  -8.835  1.00 87.63      A16S
ATOM  43572  N3  ADE  1164     209.237 147.310  -7.524  1.00 87.63      A16S
ATOM  43573  C2  ADE  1164     208.994 146.072  -7.095  1.00 87.63      A16S
ATOM  43574  N1  ADE  1164     209.013 144.921  -7.776  1.00 87.63      A16S
ATOM  43575  C6  ADE  1164     209.312 144.955  -9.091  1.00 87.63      A16S
ATOM  43576  N6  ADE  1164     209.336 143.806  -9.767  1.00 87.63      A16S
ATOM  43577  C5  ADE  1164     209.586 146.209  -9.669  1.00 87.63      A16S
ATOM  43578  N7  ADE  1164     209.919 146.591 -10.962  1.00 87.63      A16S
ATOM  43579  C8  ADE  1164     210.061 147.894 -10.879  1.00 87.63      A16S
ATOM  43580  C2' ADE  1164     211.303 150.441  -9.150  1.00 96.91      A16S
ATOM  43581  O2' ADE  1164     211.586 150.893  -7.839  1.00 96.91      A16S
ATOM  43582  C3' ADE  1164     211.144 151.528 -10.228  1.00 96.91      A16S
ATOM  43583  O3' ADE  1164     211.881 152.755 -10.105  1.00 96.91      A16S
ATOM  43584  P   GUA  1165     213.053 152.909  -9.015  1.00 90.62      A16S
ATOM  43585  O1P GUA  1165     213.675 151.586  -8.758  1.00 60.91      A16S
ATOM  43586  O2P GUA  1165     212.493 153.687  -7.875  1.00 60.91      A16S
ATOM  43587  O5' GUA  1165     214.150 153.809  -9.741  1.00 90.62      A16S
ATOM  43588  C5' GUA  1165     214.774 153.378 -10.947  1.00 90.62      A16S
ATOM  43589  C4' GUA  1165     216.249 153.114 -10.718  1.00 90.62      A16S
ATOM  43590  O4' GUA  1165     216.831 154.249 -10.023  1.00 90.62      A16S
ATOM  43591  C1' GUA  1165     217.861 153.806  -9.154  1.00 90.62      A16S
ATOM  43592  N9  GUA  1165     217.484 154.168  -7.793  1.00 60.91      A16S
ATOM  43593  C4  GUA  1165     218.220 153.972  -6.651  1.00 60.91      A16S
ATOM  43594  N3  GUA  1165     219.447 153.428  -6.585  1.00 60.91      A16S
ATOM  43595  C2  GUA  1165     219.892 153.361  -5.343  1.00 60.91      A16S
ATOM  43596  N2  GUA  1165     221.099 152.846  -5.098  1.00 60.91      A16S
ATOM  43597  N1  GUA  1165     219.187 153.789  -4.250  1.00 60.91      A16S
ATOM  43598  C6  GUA  1165     217.917 154.349  -4.292  1.00 60.91      A16S
ATOM  43599  O6  GUA  1165     217.359 154.693  -3.242  1.00 60.91      A16S
ATOM  43600  C5  GUA  1165     217.432 154.436  -5.624  1.00 60.91      A16S
ATOM  43601  N7  GUA  1165     216.234 154.939  -6.113  1.00 60.91      A16S
ATOM  43602  C8  GUA  1165     216.311 154.762  -7.402  1.00 60.91      A16S
ATOM  43603  C2' GUA  1165     218.001 152.298  -9.357  1.00 90.62      A16S
ATOM  43604  O2' GUA  1165     218.989 152.049 -10.336  1.00 90.62      A16S
ATOM  43605  C3' GUA  1165     216.603 151.930  -9.834  1.00 90.62      A16S
ATOM  43606  O3' GUA  1165     216.630 150.732 -10.600  1.00 90.62      A16S
ATOM  43607  P   GUA  1166     216.320 149.323  -9.891  1.00 60.81      A16S
ATOM  43608  O1P GUA  1166     216.203 148.313 -10.970  1.00 62.76      A16S
ATOM  43609  O2P GUA  1166     215.220 149.493  -8.918  1.00 62.76      A16S
ATOM  43610  O5' GUA  1166     217.646 148.977  -9.089  1.00 60.81      A16S
ATOM  43611  C5' GUA  1166     218.796 148.532  -9.785  1.00 60.81      A16S
ATOM  43612  C4' GUA  1166     219.884 148.181  -8.816  1.00 60.81      A16S
ATOM  43613  O4' GUA  1166     220.351 149.378  -8.143  1.00 60.81      A16S
ATOM  43614  C1' GUA  1166     220.690 149.061  -6.803  1.00 60.81      A16S
ATOM  43615  N9  GUA  1166     219.736 149.735  -5.932  1.00 62.76      A16S
ATOM  43616  C4  GUA  1166     219.786 149.803  -4.562  1.00 62.76      A16S
ATOM  43617  N3  GUA  1166     220.752 149.285  -3.780  1.00 62.76      A16S
ATOM  43618  C2  GUA  1166     220.518 149.499  -2.499  1.00 62.76      A16S
ATOM  43619  N2  GUA  1166     221.384 149.056  -1.584  1.00 62.76      A16S
ATOM  43620  N1  GUA  1166     219.419 150.166  -2.023  1.00 62.76      A16S
ATOM  43621  C6  GUA  1166     218.412 150.708  -2.811  1.00 62.76      A16S
ATOM  43622  O6  GUA  1166     217.458 151.286  -2.279  1.00 62.76      A16S
ATOM  43623  C5  GUA  1166     218.656 150.491  -4.189  1.00 62.76      A16S
ATOM  43624  N7  GUA  1166     217.921 150.870  -5.303  1.00 62.76      A16S
ATOM  43625  C8  GUA  1166     218.601 150.402  -6.313  1.00 62.76      A16S
ATOM  43626  C2' GUA  1166     220.566 147.542  -6.679  1.00 60.81      A16S
ATOM  43627  O2' GUA  1166     221.777 146.924  -7.075  1.00 60.81      A16S
ATOM  43628  C3' GUA  1166     219.459 147.277  -7.680  1.00 60.81      A16S
ATOM  43629  O3' GUA  1166     219.445 145.931  -8.095  1.00 60.81      A16S
ATOM  43630  P   GUA  1167     218.408 144.916  -7.430  1.00 57.85      A16S
ATOM  43631  O1P GUA  1167     218.531 143.633  -8.165  1.00 61.50      A16S
ATOM  43632  O2P GUA  1167     217.108 145.613  -7.375  1.00 61.50      A16S
ATOM  43633  O5' GUA  1167     218.946 144.725  -5.946  1.00 57.85      A16S
ATOM  43634  C5' GUA  1167     220.224 144.150  -5.717  1.00 57.85      A16S
ATOM  43635  C4' GUA  1167     220.505 144.069  -4.240  1.00 57.85      A16S
ATOM  43636  O4' GUA  1167     220.658 145.404  -3.686  1.00 57.85      A16S
ATOM  43637  C1' GUA  1167     220.150 145.433  -2.357  1.00 57.85      A16S
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ATOM	43638	N9	GUA	1167	219.035	146.372	-2.316	1.00	61.50	A16S	ATOM	43691	C5	ADE	1169	211.700	144.145	2.806	1.00	51.48	A16S
ATOM	43639	C4	GUA	1167	218.461	146.905	-1.192	1.00	61.50	A16S	ATOM	43692	N7	ADE	1169	212.708	143.380	2.242	1.00	51.48	A16S
ATOM	43640	N3	GUA	1167	218.836	146.660	0.079	1.00	61.50	A16S	ATOM	43693	C8	ADE	1169	213.363	142.914	3.276	1.00	51.48	A16S
ATOM	43641	C2	GUA	1167	218.100	147.329	0.950	1.00	61.50	A16S	ATOM	43694	C2'	ADE	1169	212.464	141.976	6.544	1.00	62.77	A16S
ATOM	43642	N2	GUA	1167	218.349	147.204	2.260	1.00	61.50	A16S	ATOM	43695	O2'	ADE	1169	212.476	142.224	7.928	1.00	62.77	A16S
ATOM	43643	N1	GUA	1167	217.072	148.169	0.598	1.00	61.50	A16S	ATOM	43696	C3'	ADE	1169	213.200	140.687	6.249	1.00	62.77	A16S
ATOM	43644	C6	GUA	1167	216.669	148.435	-0.705	1.00	61.50	A16S	ATOM	43697	O3'	ADE	1169	212.975	139.746	7.282	1.00	62.77	A16S
ATOM	43645	O6	GUA	1167	215.727	149.211	-0.915	1.00	61.50	A16S	ATOM	43698	P	CYT	1170	212.029	138.490	7.002	1.00	54.99	A16S
ATOM	43646	C5	GUA	1167	217.455	147.726	-1.649	1.00	61.50	A16S	ATOM	43699	O1P	CYT	1170	211.717	137.816	8.287	1.00	62.44	A16S
ATOM	43647	N7	GUA	1167	217.401	147.711	-3.034	1.00	61.50	A16S	ATOM	43700	O2P	CYT	1170	212.645	137.714	5.903	1.00	62.44	A16S
ATOM	43648	C8	GUA	1167	218.355	146.895	-3.384	1.00	61.50	A16S	ATOM	43701	O5'	CYT	1170	210.703	139.175	6.449	1.00	54.99	A16S
ATOM	43649	C2'	GUA	1167	219.725	144.005	-2.016	1.00	57.85	A16S	ATOM	43702	C5'	CYT	1170	209.903	139.995	7.292	1.00	54.99	A16S
ATOM	43650	O2'	GUA	1167	220.805	143.326	-1.410	1.00	57.85	A16S	ATOM	43703	C4'	CYT	1170	208.717	140.518	6.534	1.00	54.99	A16S
ATOM	43651	C3'	GUA	1167	219.398	143.463	-3.402	1.00	57.85	A16S	ATOM	43704	O4'	CYT	1170	209.159	141.473	5.548	1.00	54.99	A16S
ATOM	43652	O3'	GUA	1167	219.424	142.050	-3.443	1.00	57.85	A16S	ATOM	43705	C1'	CYT	1170	208.325	141.397	4.409	1.00	54.99	A16S
ATOM	43653	P	GUA	1168	218.273	141.232	-2.693	1.00	57.12	A16S	ATOM	43706	N1	CYT	1170	209.161	141.046	3.257	1.00	62.44	A16S
ATOM	43654	O1P	GUA	1168	218.445	139.774	-2.945	1.00	49.98	A16S	ATOM	43707	C6	CYT	1170	210.157	140.117	3.372	1.00	62.44	A16S
ATOM	43655	O2P	GUA	1168	216.989	141.901	-3.017	1.00	49.98	A16S	ATOM	43708	C2	CYT	1170	208.911	141.666	2.033	1.00	62.44	A16S
ATOM	43656	O5'	GUA	1168	218.572	141.491	-1.156	1.00	57.12	A16S	ATOM	43709	O2	CYT	1170	208.014	142.524	1.964	1.00	62.44	A16S
ATOM	43657	C5'	GUA	1168	217.610	141.159	-0.179	1.00	57.12	A16S	ATOM	43710	N3	CYT	1170	209.649	141.319	0.955	1.00	62.44	A16S
ATOM	43658	C4'	GUA	1168	217.930	141.841	1.121	1.00	57.12	A16S	ATOM	43711	C4	CYT	1170	210.603	140.395	1.072	1.00	62.44	A16S
ATOM	43659	O4'	GUA	1168	218.006	143.279	0.931	1.00	57.12	A16S	ATOM	43712	N4	CYT	1170	211.287	140.065	-0.024	1.00	62.44	A16S
ATOM	43660	C1'	GUA	1168	217.385	143.936	2.024	1.00	57.12	A16S	ATOM	43713	C5	CYT	1170	210.894	139.764	2.317	1.00	62.44	A16S
ATOM	43661	N9	GUA	1168	216.241	144.683	1.505	1.00	49.98	A16S	ATOM	43714	C2'	CYT	1170	207.250	140.343	4.701	1.00	54.99	A16S
ATOM	43662	C4	GUA	1168	215.291	145.351	2.236	1.00	49.98	A16S	ATOM	43715	O2'	CYT	1170	206.089	140.955	5.237	1.00	54.99	A16S
ATOM	43663	N3	GUA	1168	215.239	145.430	3.580	1.00	49.98	A16S	ATOM	43716	C3'	CYT	1170	207.947	139.481	5.739	1.00	54.99	A16S
ATOM	43664	C2	GUA	1168	214.228	146.175	3.993	1.00	49.98	A16S	ATOM	43717	O3'	CYT	1170	206.984	138.880	6.580	1.00	54.99	A16S
ATOM	43665	N2	GUA	1168	214.067	146.402	5.302	1.00	49.98	A16S	ATOM	43718	P	GUA	1171	206.800	137.297	6.581	1.00	64.04	A16S
ATOM	43666	N1	GUA	1168	213.309	146.764	3.154	1.00	49.98	A16S	ATOM	43719	O1P	GUA	1171	205.741	137.029	7.577	1.00	92.63	A16S
ATOM	43667	C6	GUA	1168	213.332	146.685	1.766	1.00	49.98	A16S	ATOM	43720	O2P	GUA	1171	208.118	136.633	6.704	1.00	92.63	A16S
ATOM	43668	O6	GUA	1168	212.447	147.243	1.102	1.00	49.98	A16S	ATOM	43721	O5'	GUA	1171	206.183	137.011	5.155	1.00	64.04	A16S
ATOM	43669	C5	GUA	1168	214.442	145.916	1.307	1.00	49.98	A16S	ATOM	43722	C5'	GUA	1171	204.822	137.296	4.903	1.00	64.04	A16S
ATOM	43670	N7	GUA	1168	214.850	145.609	0.018	1.00	49.98	A16S	ATOM	43723	C4'	GUA	1171	204.380	136.569	3.671	1.00	64.04	A16S
ATOM	43671	C8	GUA	1168	215.913	144.872	0.184	1.00	49.98	A16S	ATOM	43724	O4'	GUA	1171	205.401	136.836	2.686	1.00	64.04	A16S
ATOM	43672	C2'	GUA	1168	217.043	142.858	3.055	1.00	57.12	A16S	ATOM	43725	C1'	GUA	1171	205.641	135.671	1.933	1.00	64.04	A16S
ATOM	43673	O2'	GUA	1168	218.143	142.677	3.920	1.00	57.12	A16S	ATOM	43726	N9	GUA	1171	207.003	135.238	2.195	1.00	92.63	A16S
ATOM	43674	C3'	GUA	1168	216.849	141.648	2.157	1.00	57.12	A16S	ATOM	43727	C4	GUA	1171	207.810	134.620	1.298	1.00	92.63	A16S
ATOM	43675	O3'	GUA	1168	217.094	140.424	2.813	1.00	57.12	A16S	ATOM	43728	N3	GUA	1171	207.475	134.317	0.039	1.00	92.63	A16S
ATOM	43676	P	ADE	1169	215.891	139.389	3.013	1.00	62.77	A16S	ATOM	43729	C2	GUA	1171	208.460	133.753	-0.606	1.00	92.63	A16S
ATOM	43677	O1P	ADE	1169	216.434	138.110	3.537	1.00	51.48	A16S	ATOM	43730	N2	GUA	1171	208.297	133.455	-1.885	1.00	92.63	A16S
ATOM	43678	O2P	ADE	1169	215.086	139.395	1.770	1.00	51.48	A16S	ATOM	43731	N1	GUA	1171	209.678	133.465	-0.047	1.00	92.63	A16S
ATOM	43679	O5'	ADE	1169	215.023	140.067	4.158	1.00	62.77	A16S	ATOM	43732	C6	GUA	1171	210.047	133.762	1.258	1.00	92.63	A16S
ATOM	43680	C5'	ADE	1169	215.565	140.261	5.459	1.00	62.77	A16S	ATOM	43733	O6	GUA	1171	211.178	133.462	1.665	1.00	92.63	A16S
ATOM	43681	C4'	ADE	1169	214.648	141.134	6.266	1.00	62.77	A16S	ATOM	43734	C5	GUA	1171	208.997	134.403	1.953	1.00	92.63	A16S
ATOM	43682	O4'	ADE	1169	214.624	142.454	5.681	1.00	62.77	A16S	ATOM	43735	N7	GUA	1171	208.932	134.882	3.253	1.00	92.63	A16S
ATOM	43683	C1'	ADE	1169	213.334	143.001	5.814	1.00	62.77	A16S	ATOM	43736	C8	GUA	1171	207.725	135.366	3.352	1.00	92.63	A16S
ATOM	43684	N9	ADE	1169	212.855	143.325	4.479	1.00	51.48	A16S	ATOM	43737	C2'	GUA	1171	204.581	134.636	2.317	1.00	64.04	A16S
ATOM	43685	C4	ADE	1169	211.781	144.121	4.182	1.00	51.48	A16S	ATOM	43738	O2'	GUA	1171	203.458	134.795	1.468	1.00	64.04	A16S
ATOM	43686	N3	ADE	1169	210.975	144.751	5.050	1.00	51.48	A16S	ATOM	43739	C3'	GUA	1171	204.283	135.040	3.750	1.00	64.04	A16S
ATOM	43687	C2	ADE	1169	210.042	145.437	4.400	1.00	51.48	A16S	ATOM	43740	O3'	GUA	1171	202.974	134.664	4.232	1.00	64.04	A16S
ATOM	43688	N1	ADE	1169	209.838	145.552	3.083	1.00	51.48	A16S	ATOM	43741	P	ADE	1172	202.047	133.584	3.444	1.00	47.98	A16S
ATOM	43689	C6	ADE	1169	210.668	144.899	2.244	1.00	51.48	A16S	ATOM	43742	O1P	ADE	1172	202.840	132.807	2.462	1.00	64.90	A16S
ATOM	43690	N6	ADE	1169	210.462	145.000	0.932	1.00	51.48	A16S	ATOM	43743	O2P	ADE	1172	201.285	132.852	4.494	1.00	64.90	A16S

ATOM	43744	O5'	ADE	1172	200.991	134.478	2.648	1.00	47.98	A16S	ATOM	43797	C6	GUA	1174	200.650	127.855	1.448	1.00	67.94	A16S
ATOM	43745	C5'	ADE	1172	200.318	135.545	3.307	1.00	47.98	A16S	ATOM	43798	O6	GUA	1174	201.614	128.332	2.062	1.00	67.94	A16S
ATOM	43746	C4'	ADE	1172	198.944	135.775	2.712	1.00	47.98	A16S	ATOM	43799	C5	GUA	1174	199.266	127.938	1.762	1.00	67.94	A16S
ATOM	43747	O4'	ADE	1172	199.052	136.271	1.360	1.00	47.98	A16S	ATOM	43800	N7	GUA	1174	198.618	128.557	2.821	1.00	67.94	A16S
ATOM	43748	C1'	ADE	1172	198.105	135.629	0.542	1.00	47.98	A16S	ATOM	43801	C8	GUA	1174	197.355	128.298	2.623	1.00	67.94	A16S
ATOM	43749	N9	ADE	1172	198.841	134.841	-0.438	1.00	64.90	A16S	ATOM	43802	C2'	GUA	1174	195.743	125.506	1.100	1.00	48.98	A16S
ATOM	43750	C4	ADE	1172	198.334	134.266	-1.573	1.00	64.90	A16S	ATOM	43803	O2'	GUA	1174	194.730	125.061	0.230	1.00	48.98	A16S
ATOM	43751	N3	ADE	1172	197.059	134.283	-1.993	1.00	64.90	A16S	ATOM	43804	C3'	GUA	1174	195.266	125.308	2.522	1.00	48.98	A16S
ATOM	43752	C2	ADE	1172	196.943	133.649	-3.154	1.00	64.90	A16S	ATOM	43805	O3'	GUA	1174	194.620	124.056	2.634	1.00	48.98	A16S
ATOM	43753	N1	ADE	1172	197.888	133.049	-3.889	1.00	64.90	A16S	ATOM	43806	P	URI	1175	195.421	122.808	3.227	1.00	51.18	A16S
ATOM	43754	C6	ADE	1172	199.160	133.050	-3.438	1.00	64.90	A16S	ATOM	43807	O1P	URI	1175	194.481	121.684	3.440	1.00	69.09	A16S
ATOM	43755	N6	ADE	1172	200.101	132.463	-4.178	1.00	64.90	A16S	ATOM	43808	O2P	URI	1175	196.248	123.293	4.357	1.00	69.09	A16S
ATOM	43756	C5	ADE	1172	199.413	133.682	-2.211	1.00	64.90	A16S	ATOM	43809	O5'	URI	1175	196.385	122.405	2.034	1.00	51.18	A16S
ATOM	43757	N7	ADE	1172	200.575	133.862	-1.474	1.00	64.90	A16S	ATOM	43810	C5'	URI	1175	195.896	122.271	0.703	1.00	51.18	A16S
ATOM	43758	C8	ADE	1172	200.180	134.548	-0.432	1.00	64.90	A16S	ATOM	43811	C4'	URI	1175	197.046	121.978	-0.234	1.00	51.18	A16S
ATOM	43759	C2'	ADE	1172	197.163	134.818	1.438	1.00	47.98	A16S	ATOM	43812	O4'	URI	1175	197.908	123.138	-0.344	1.00	51.18	A16S
ATOM	43760	O2'	ADE	1172	196.014	135.596	1.706	1.00	47.98	A16S	ATOM	43813	C1'	URI	1175	199.251	122.718	-0.508	1.00	51.18	A16S
ATOM	43761	C3'	ADE	1172	198.014	134.572	2.684	1.00	47.98	A16S	ATOM	43814	N1	URI	1175	200.050	123.339	0.551	1.00	69.09	A16S
ATOM	43762	O3'	ADE	1172	197.179	134.661	3.840	1.00	47.98	A16S	ATOM	43815	C6	URI	1175	199.467	123.772	1.714	1.00	69.09	A16S
ATOM	43763	P	CYT	1173	197.055	133.428	4.853	1.00	49.98	A16S	ATOM	43816	C2	URI	1175	201.396	123.501	0.328	1.00	69.09	A16S
ATOM	43764	O1P	CYT	1173	196.671	133.997	6.165	1.00	71.11	A16S	ATOM	43817	O2	URI	1175	201.951	123.086	-0.672	1.00	69.09	A16S
ATOM	43765	O2P	CYT	1173	198.275	132.586	4.744	1.00	71.11	A16S	ATOM	43818	N3	URI	1175	202.069	124.167	1.321	1.00	69.09	A16S
ATOM	43766	O5'	CYT	1173	195.802	132.618	4.303	1.00	49.98	A16S	ATOM	43819	C4	URI	1175	201.537	124.667	2.490	1.00	69.09	A16S
ATOM	43767	C5'	CYT	1173	194.497	133.183	4.348	1.00	49.98	A16S	ATOM	43820	O4	URI	1175	202.227	125.383	3.205	1.00	69.09	A16S
ATOM	43768	C4'	CYT	1173	193.572	132.427	3.429	1.00	49.98	A16S	ATOM	43821	C5	URI	1175	200.147	124.413	2.666	1.00	69.09	A16S
ATOM	43769	O4'	CYT	1173	193.916	132.705	2.049	1.00	49.98	A16S	ATOM	43822	C2'	URI	1175	199.260	121.192	-0.514	1.00	51.18	A16S
ATOM	43770	C1'	CYT	1173	193.753	131.531	1.275	1.00	49.98	A16S	ATOM	43823	O2'	URI	1175	199.187	120.758	-1.855	1.00	51.18	A16S
ATOM	43771	N1	CYT	1173	195.059	131.176	0.709	1.00	71.11	A16S	ATOM	43824	C3'	URI	1175	197.977	120.877	0.237	1.00	51.18	A16S
ATOM	43772	C6	CYT	1173	196.201	131.339	1.438	1.00	71.11	A16S	ATOM	43825	O3'	URI	1175	197.450	119.635	-0.172	1.00	51.18	A16S
ATOM	43773	C2	CYT	1173	195.117	130.670	-0.584	1.00	71.11	A16S	ATOM	43826	P	CYT	1176	197.159	118.508	0.917	1.00	58.22	A16S
ATOM	43774	O2	CYT	1173	194.066	130.543	-1.227	1.00	71.11	A16S	ATOM	43827	O1P	CYT	1176	196.243	117.504	0.315	1.00	59.16	A16S
ATOM	43775	N3	CYT	1173	196.316	130.338	-1.107	1.00	71.11	A16S	ATOM	43828	O2P	CYT	1176	196.793	119.189	2.187	1.00	59.16	A16S
ATOM	43776	C4	CYT	1173	197.425	130.501	-0.389	1.00	71.11	A16S	ATOM	43829	O5'	CYT	1176	198.556	117.789	1.093	1.00	58.22	A16S
ATOM	43777	N4	CYT	1173	198.586	130.164	-0.946	1.00	71.11	A16S	ATOM	43830	C5'	CYT	1176	199.135	117.105	0.004	1.00	58.22	A16S
ATOM	43778	C5	CYT	1173	197.394	131.019	0.932	1.00	71.11	A16S	ATOM	43831	C4'	CYT	1176	200.601	116.969	0.232	1.00	58.22	A16S
ATOM	43779	C2'	CYT	1173	193.192	130.441	2.190	1.00	49.98	A16S	ATOM	43832	O4'	CYT	1176	201.115	118.291	0.463	1.00	58.22	A16S
ATOM	43780	O2'	CYT	1173	191.789	130.374	2.084	1.00	49.98	A16S	ATOM	43833	C1'	CYT	1176	202.231	118.211	1.318	1.00	58.22	A16S
ATOM	43781	C3'	CYT	1173	193.651	130.917	3.558	1.00	49.98	A16S	ATOM	43834	N1	CYT	1176	202.180	119.346	2.264	1.00	59.16	A16S
ATOM	43782	O3'	CYT	1173	192.765	130.455	4.560	1.00	49.98	A16S	ATOM	43835	C6	CYT	1176	200.984	119.829	2.708	1.00	59.16	A16S
ATOM	43783	P	GUA	1174	193.008	129.020	5.223	1.00	48.98	A16S	ATOM	43836	C2	CYT	1176	203.381	119.963	2.663	1.00	59.16	A16S
ATOM	43784	O1P	GUA	1174	191.806	128.642	6.007	1.00	67.94	A16S	ATOM	43837	O2	CYT	1176	204.461	119.481	2.293	1.00	59.16	A16S
ATOM	43785	O2P	GUA	1174	194.341	129.055	5.881	1.00	67.94	A16S	ATOM	43838	N3	CYT	1176	203.330	121.067	3.439	1.00	59.16	A16S
ATOM	43786	O5'	GUA	1174	193.098	128.031	3.983	1.00	48.98	A16S	ATOM	43839	C4	CYT	1176	202.154	121.552	3.831	1.00	59.16	A16S
ATOM	43787	C5'	GUA	1174	193.939	126.887	4.033	1.00	48.98	A16S	ATOM	43840	N4	CYT	1176	202.150	122.657	4.567	1.00	59.16	A16S
ATOM	43788	C4'	GUA	1174	194.252	126.427	2.639	1.00	48.98	A16S	ATOM	43841	C5	CYT	1176	200.927	120.924	3.479	1.00	59.16	A16S
ATOM	43789	O4'	GUA	1174	194.835	127.528	1.890	1.00	48.98	A16S	ATOM	43842	C2'	CYT	1176	202.358	116.761	1.811	1.00	58.22	A16S
ATOM	43790	C1'	GUA	1174	195.843	127.034	1.027	1.00	48.98	A16S	ATOM	43843	O2'	CYT	1176	203.357	116.161	1.013	1.00	58.22	A16S
ATOM	43791	N9	GUA	1174	197.130	127.539	1.502	1.00	67.94	A16S	ATOM	43844	C3'	CYT	1176	200.990	116.177	1.469	1.00	58.22	A16S
ATOM	43792	C4	GUA	1174	198.360	127.322	0.930	1.00	67.94	A16S	ATOM	43845	O3'	CYT	1176	201.043	114.807	1.043	1.00	58.22	A16S
ATOM	43793	N3	GUA	1174	198.595	126.624	-0.197	1.00	67.94	A16S	ATOM	43846	P	URI	1177	201.442	113.633	2.068	1.00	77.32	A16S
ATOM	43794	C2	GUA	1174	199.881	126.550	-0.473	1.00	67.94	A16S	ATOM	43847	O1P	URI	1177	202.798	113.929	2.574	1.00	123.28	A16S
ATOM	43795	N2	GUA	1174	200.288	125.877	-1.551	1.00	67.94	A16S	ATOM	43848	O2P	URI	1177	201.188	112.353	1.370	1.00	123.28	A16S
ATOM	43796	N1	GUA	1174	200.864	127.125	0.288	1.00	67.94	A16S	ATOM	43849	O5'	URI	1177	200.403	113.728	3.275	1.00	77.32	A16S

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ATOM  43850  C5' URI  1177     200.542 114.719   4.294  1.00 77.32      A16S
ATOM  43851  C4' URI  1177     200.180 114.148   5.649  1.00 77.32      A16S
ATOM  43852  O4' URI  1177     198.860 113.564   5.575  1.00 77.32      A16S
ATOM  43853  C1' URI  1177     198.701 112.680   6.667  1.00 77.32      A16S
ATOM  43854  N1  URI  1177     197.899 111.517   6.269  1.00123.28      A16S
ATOM  43855  C6  URI  1177     198.065 110.915   5.049  1.00123.28      A16S
ATOM  43856  C2  URI  1177     196.977 111.033   7.188  1.00123.28      A16S
ATOM  43857  O2  URI  1177     196.772 111.561   8.267  1.00123.28      A16S
ATOM  43858  N3  URI  1177     196.300 109.912   6.791  1.00123.28      A16S
ATOM  43859  C4  URI  1177     196.435 109.245   5.591  1.00123.28      A16S
ATOM  43860  O4  URI  1177     195.788 108.213   5.396  1.00123.28      A16S
ATOM  43861  C5  URI  1177     197.383 109.825   4.686  1.00123.28      A16S
ATOM  43862  C2' URI  1177     200.098 112.317   7.178  1.00 77.32      A16S
ATOM  43863  O2' URI  1177     200.252 112.821   8.485  1.00 77.32      A16S
ATOM  43864  C3' URI  1177     201.023 112.985   6.153  1.00 77.32      A16S
ATOM  43865  O3' URI  1177     202.227 113.360   6.848  1.00 77.32      A16S
ATOM  43866  P   GUA  1178     202.515 114.900   7.250  1.00 44.73      A16S
ATOM  43867  O1P GUA  1178     203.625 114.820   8.226  1.00 70.23      A16S
ATOM  43868  O2P GUA  1178     201.254 115.596   7.623  1.00 70.23      A16S
ATOM  43869  O5' GUA  1178     203.084 115.594   5.939  1.00 44.73      A16S
ATOM  43870  C5' GUA  1178     203.886 114.866   5.018  1.00 44.73      A16S
ATOM  43871  C4' GUA  1178     205.198 115.569   4.792  1.00 44.73      A16S
ATOM  43872  O4' GUA  1178     204.935 116.931   4.374  1.00 44.73      A16S
ATOM  43873  C1' GUA  1178     205.956 117.778   4.862  1.00 44.73      A16S
ATOM  43874  N9  GUA  1178     205.315 118.855   5.605  1.00 70.23      A16S
ATOM  43875  C4  GUA  1178     205.937 119.875   6.291  1.00 70.23      A16S
ATOM  43876  N3  GUA  1178     207.270 120.058   6.414  1.00 70.23      A16S
ATOM  43877  C2  GUA  1178     207.557 121.129   7.130  1.00 70.23      A16S
ATOM  43878  N2  GUA  1178     208.829 121.465   7.351  1.00 70.23      A16S
ATOM  43879  N1  GUA  1178     206.616 121.951   7.681  1.00 70.23      A16S
ATOM  43880  C6  GUA  1178     205.240 121.784   7.571  1.00 70.23      A16S
ATOM  43881  O6  GUA  1178     204.475 122.589   8.113  1.00 70.23      A16S
ATOM  43882  C5  GUA  1178     204.915 120.641   6.805  1.00 70.23      A16S
ATOM  43883  N7  GUA  1178     203.677 120.114   6.452  1.00 70.23      A16S
ATOM  43884  C8  GUA  1178     203.964 119.057   5.746  1.00 70.23      A16S
ATOM  43885  C2' GUA  1178     206.950 116.914   5.650  1.00 44.73      A16S
ATOM  43886  O2' GUA  1178     208.014 116.581   4.777  1.00 44.73      A16S
ATOM  43887  C3' GUA  1178     206.102 115.695   6.008  1.00 44.73      A16S
ATOM  43888  O3' GUA  1178     206.893 114.509   6.096  1.00 44.73      A16S
ATOM  43889  P   GUA  1179     207.260 113.888   7.536  1.00 47.29      A16S
ATOM  43890  O1P GUA  1179     208.225 112.772   7.347  1.00 67.35      A16S
ATOM  43891  O2P GUA  1179     205.974 113.621   8.248  1.00 67.35      A16S
ATOM  43892  O5' GUA  1179     208.084 115.072   8.210  1.00 47.29      A16S
ATOM  43893  C5' GUA  1179     209.416 115.339   7.768  1.00 47.29      A16S
ATOM  43894  C4' GUA  1179     210.097 116.362   8.646  1.00 47.29      A16S
ATOM  43895  O4' GUA  1179     209.634 117.700   8.346  1.00 47.29      A16S
ATOM  43896  C1' GUA  1179     209.819 118.513   9.491  1.00 47.29      A16S
ATOM  43897  N9  GUA  1179     208.548 119.115   9.866  1.00 67.35      A16S
ATOM  43898  C4  GUA  1179     208.387 120.257  10.607  1.00 67.35      A16S
ATOM  43899  N3  GUA  1179     209.379 121.027  11.100  1.00 67.35      A16S
ATOM  43900  C2  GUA  1179     208.909 122.072  11.759  1.00 67.35      A16S
ATOM  43901  N2  GUA  1179     209.754 122.969  12.288  1.00 67.35      A16S
ATOM  43902  N1  GUA  1179     207.576 122.326  11.940  1.00 67.35      A16S
ATOM  43903  C6  GUA  1179     206.539 121.545  11.450  1.00 67.35      A16S
ATOM  43904  O6  GUA  1179     205.367 121.867  11.675  1.00 67.35      A16S
ATOM  43905  C5  GUA  1179     207.029 120.428  10.722  1.00 67.35      A16S
ATOM  43906  N7  GUA  1179     206.350 119.416  10.064  1.00 67.35      A16S
ATOM  43907  C8  GUA  1179     207.292 118.662   9.571  1.00 67.35      A16S
ATOM  43908  C2' GUA  1179     210.350 117.610  10.602  1.00 47.29      A16S
ATOM  43909  O2' GUA  1179     211.747 117.698  10.597  1.00 47.29      A16S
ATOM  43910  C3' GUA  1179     209.887 116.247  10.138  1.00 47.29      A16S
ATOM  43911  O3' GUA  1179     210.694 115.235  10.692  1.00 47.29      A16S
ATOM  43912  P   URI  1180     210.053 114.217  11.753  1.00 46.92      A16S
ATOM  43913  O1P URI  1180     210.439 112.798  11.429  1.00 55.68      A16S
ATOM  43914  O2P URI  1180     208.614 114.574  11.834  1.00 55.68      A16S
ATOM  43915  O5' URI  1180     210.711 114.653  13.136  1.00 46.92      A16S
ATOM  43916  C5' URI  1180     211.953 115.348  13.178  1.00 46.92      A16S
ATOM  43917  C4' URI  1180     211.863 116.558  14.094  1.00 46.92      A16S
ATOM  43918  O4' URI  1180     211.069 117.603  13.497  1.00 46.92      A16S
ATOM  43919  C1' URI  1180     210.524 118.417  14.507  1.00 46.92      A16S
ATOM  43920  N1  URI  1180     209.090 118.568  14.247  1.00 55.68      A16S
ATOM  43921  C6  URI  1180     208.318 117.537  13.766  1.00 55.68      A16S
ATOM  43922  C2  URI  1180     208.550 119.796  14.492  1.00 55.68      A16S
ATOM  43923  O2  URI  1180     209.201 120.711  14.941  1.00 55.68      A16S
ATOM  43924  N3  URI  1180     207.216 119.916  14.194  1.00 55.68      A16S
ATOM  43925  C4  URI  1180     206.382 118.939  13.691  1.00 55.68      A16S
ATOM  43926  O4  URI  1180     205.215 119.226  13.406  1.00 55.68      A16S
ATOM  43927  C5  URI  1180     207.012 117.676  13.488  1.00 55.68      A16S
ATOM  43928  C2' URI  1180     210.868 117.782  15.855  1.00 46.92      A16S
ATOM  43929  O2' URI  1180     211.954 118.468  16.452  1.00 46.92      A16S
ATOM  43930  C3' URI  1180     211.236 116.360  15.455  1.00 46.92      A16S
ATOM  43931  O3' URI  1180     212.212 115.856  16.336  1.00 46.92      A16S
ATOM  43932  P   CYT  1181     211.907 114.530  17.150  1.00 75.81      A16S
ATOM  43933  O1P CYT  1181     213.174 114.111  17.794  1.00 78.25      A16S
ATOM  43934  O2P CYT  1181     211.217 113.611  16.224  1.00 78.25      A16S
ATOM  43935  O5' CYT  1181     210.879 115.007  18.263  1.00 75.81      A16S
ATOM  43936  C5' CYT  1181     210.753 114.282  19.483  1.00 75.81      A16S
ATOM  43937  C4' CYT  1181     209.789 114.977  20.413  1.00 75.81      A16S
ATOM  43938  O4' CYT  1181     208.512 115.134  19.754  1.00 75.81      A16S
ATOM  43939  C1' CYT  1181     207.495 115.146  20.725  1.00 75.81      A16S
ATOM  43940  N1  CYT  1181     206.343 114.374  20.236  1.00 78.25      A16S
ATOM  43941  C6  CYT  1181     206.401 113.700  19.051  1.00 78.25      A16S
ATOM  43942  C2  CYT  1181     205.167 114.368  20.994  1.00 78.25      A16S
ATOM  43943  O2  CYT  1181     205.144 114.968  22.081  1.00 78.25      A16S
ATOM  43944  N3  CYT  1181     204.086 113.712  20.527  1.00 78.25      A16S
ATOM  43945  C4  CYT  1181     204.147 113.073  19.361  1.00 78.25      A16S
ATOM  43946  N4  CYT  1181     203.048 112.450  18.938  1.00 78.25      A16S
ATOM  43947  C5  CYT  1181     205.336 113.046  18.578  1.00 78.25      A16S
ATOM  43948  C2' CYT  1181     208.098 114.743  22.076  1.00 75.81      A16S
ATOM  43949  O2' CYT  1181     208.228 115.904  22.882  1.00 75.81      A16S
ATOM  43950  C3' CYT  1181     209.479 114.217  21.694  1.00 75.81      A16S
ATOM  43951  O3' CYT  1181     210.359 114.677  22.717  1.00 75.81      A16S
ATOM  43952  P   ADE  1182     211.634 113.808  23.156  1.00 66.97      A16S
ATOM  43953  O1P ADE  1182     211.464 112.402  22.699  1.00 59.33      A16S
ATOM  43954  O2P ADE  1182     211.857 114.081  24.599  1.00 59.33      A16S
ATOM  43955  O5' ADE  1182     212.835 114.485  22.351  1.00 66.97      A16S
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ATOM  43956  C5' ADE  1182     213.120 115.887  22.471  1.00 66.97      A16S
ATOM  43957  C4' ADE  1182     214.339 116.238  21.646  1.00 66.97      A16S
ATOM  43958  O4' ADE  1182     215.418 115.390  22.079  1.00 66.97      A16S
ATOM  43959  C1' ADE  1182     216.232 115.055  20.988  1.00 66.97      A16S
ATOM  43960  N9  ADE  1182     216.662 113.670  21.152  1.00 59.33      A16S
ATOM  43961  C4  ADE  1182     217.887 113.149  20.801  1.00 59.33      A16S
ATOM  43962  N3  ADE  1182     218.912 113.788  20.208  1.00 59.33      A16S
ATOM  43963  C2  ADE  1182     219.944 112.961  20.031  1.00 59.33      A16S
ATOM  43964  N1  ADE  1182     220.055 111.667  20.350  1.00 59.33      A16S
ATOM  43965  C6  ADE  1182     219.001 111.054  20.940  1.00 59.33      A16S
ATOM  43966  N6  ADE  1182     219.097 109.762  21.248  1.00 59.33      A16S
ATOM  43967  C5  ADE  1182     217.856 111.820  21.190  1.00 59.33      A16S
ATOM  43968  N7  ADE  1182     216.636 111.506  21.766  1.00 59.33      A16S
ATOM  43969  C8  ADE  1182     215.963 112.635  21.711  1.00 59.33      A16S
ATOM  43970  C2' ADE  1182     215.534 115.452  19.684  1.00 66.97      A16S
ATOM  43971  O2' ADE  1182     216.297 116.384  18.964  1.00 66.97      A16S
ATOM  43972  C3' ADE  1182     214.181 115.962  20.164  1.00 66.97      A16S
ATOM  43973  O3' ADE  1182     213.619 117.091  19.474  1.00 66.97      A16S
ATOM  43974  P   GUA  1183     214.401 118.508  19.396  1.00 55.25      A16S
ATOM  43975  O1P GUA  1183     213.394 119.491  18.933  1.00 58.04      A16S
ATOM  43976  O2P GUA  1183     215.675 118.400  18.656  1.00 58.04      A16S
ATOM  43977  O5' GUA  1183     214.725 118.898  20.907  1.00 55.25      A16S
ATOM  43978  C5' GUA  1183     216.013 119.398  21.285  1.00 55.25      A16S
ATOM  43979  C4' GUA  1183     215.884 120.647  22.142  1.00 55.25      A16S
ATOM  43980  O4' GUA  1183     215.734 121.817  21.309  1.00 55.25      A16S
ATOM  43981  C1' GUA  1183     214.958 122.787  21.986  1.00 55.25      A16S
ATOM  43982  N9  GUA  1183     213.784 123.078  21.174  1.00 58.04      A16S
ATOM  43983  C4  GUA  1183     212.973 124.186  21.266  1.00 58.04      A16S
ATOM  43984  N3  GUA  1183     213.125 125.210  22.128  1.00 58.04      A16S
ATOM  43985  C2  GUA  1183     212.180 126.118  21.982  1.00 58.04      A16S
ATOM  43986  N2  GUA  1183     212.165 127.206  22.754  1.00 58.04      A16S
ATOM  43987  N1  GUA  1183     211.173 126.030  21.068  1.00 58.04      A16S
ATOM  43988  C6  GUA  1183     210.986 124.983  20.182  1.00 58.04      A16S
ATOM  43989  O6  GUA  1183     210.011 124.992  19.424  1.00 58.04      A16S
ATOM  43990  C5  GUA  1183     211.997 124.005  20.315  1.00 58.04      A16S
ATOM  43991  N7  GUA  1183     212.194 122.817  19.625  1.00 58.04      A16S
ATOM  43992  C8  GUA  1183     213.262 122.300  20.170  1.00 58.04      A16S
ATOM  43993  C2' GUA  1183     214.594 122.209  23.351  1.00 55.25      A16S
ATOM  43994  O2' GUA  1183     215.532 122.620  24.312  1.00 55.25      A16S
ATOM  43995  C3' GUA  1183     214.701 120.716  23.094  1.00 55.25      A16S
ATOM  43996  O3' GUA  1183     214.948 120.025  24.316  1.00 55.25      A16S
ATOM  43997  P   CYT  1184     213.706 119.476  25.180  1.00 60.44      A16S
ATOM  43998  O1P CYT  1184     214.199 119.085  26.529  1.00 65.71      A16S
ATOM  43999  O2P CYT  1184     212.979 118.477  24.361  1.00 65.71      A16S
ATOM  44000  O5' CYT  1184     212.786 120.765  25.339  1.00 60.44      A16S
ATOM  44001  C5' CYT  1184     213.226 121.866  26.109  1.00 60.44      A16S
ATOM  44002  C4' CYT  1184     212.212 122.971  26.053  1.00 60.44      A16S
ATOM  44003  O4' CYT  1184     212.117 123.479  24.697  1.00 60.44      A16S
ATOM  44004  C1' CYT  1184     210.781 123.874  24.425  1.00 60.44      A16S
ATOM  44005  N1  CYT  1184     210.275 123.018  23.343  1.00 65.71      A16S
ATOM  44006  C6  CYT  1184     210.893 121.834  23.048  1.00 65.71      A16S
ATOM  44007  C2  CYT  1184     209.146 123.428  22.620  1.00 65.71      A16S
ATOM  44008  O2  CYT  1184     208.602 124.504  22.914  1.00 65.71      A16S
ATOM  44009  N3  CYT  1184     208.678 122.637  21.626  1.00 65.71      A16S
ATOM  44010  C4  CYT  1184     209.283 121.476  21.355  1.00 65.71      A16S
ATOM  44011  N4  CYT  1184     208.777 120.716  20.384  1.00 65.71      A16S
ATOM  44012  C5  CYT  1184     210.433 121.039  22.074  1.00 65.71      A16S
ATOM  44013  C2' CYT  1184     210.003 123.688  25.729  1.00 60.44      A16S
ATOM  44014  O2' CYT  1184     210.058 124.885  26.479  1.00 60.44      A16S
ATOM  44015  C3' CYT  1184     210.793 122.555  26.364  1.00 60.44      A16S
ATOM  44016  O3' CYT  1184     210.593 122.417  27.757  1.00 60.44      A16S
ATOM  44017  P   ADE  1185     209.848 121.109  28.312  1.00 66.81      A16S
ATOM  44018  O1P ADE  1185     210.174 120.963  29.747  1.00 79.61      A16S
ATOM  44019  O2P ADE  1185     210.124 119.979  27.390  1.00 79.61      A16S
ATOM  44020  O5' ADE  1185     208.318 121.505  28.165  1.00 66.81      A16S
ATOM  44021  C5' ADE  1185     207.881 122.813  28.489  1.00 66.81      A16S
ATOM  44022  C4' ADE  1185     206.585 123.115  27.782  1.00 66.81      A16S
ATOM  44023  O4' ADE  1185     206.826 123.268  26.358  1.00 66.81      A16S
ATOM  44024  C1' ADE  1185     205.682 122.830  25.638  1.00 66.81      A16S
ATOM  44025  N9  ADE  1185     206.074 121.719  24.765  1.00 79.61      A16S
ATOM  44026  C4  ADE  1185     205.288 121.146  23.792  1.00 79.61      A16S
ATOM  44027  N3  ADE  1185     204.037 121.490  23.447  1.00 79.61      A16S
ATOM  44028  C2  ADE  1185     203.588 120.708  22.472  1.00 79.61      A16S
ATOM  44029  N1  ADE  1185     204.195 119.701  21.845  1.00 79.61      A16S
ATOM  44030  C6  ADE  1185     205.451 119.377  22.212  1.00 79.61      A16S
ATOM  44031  N6  ADE  1185     206.053 118.364  21.587  1.00 79.61      A16S
ATOM  44032  C5  ADE  1185     206.048 120.131  23.241  1.00 79.61      A16S
ATOM  44033  N7  ADE  1185     207.296 120.064  23.850  1.00 79.61      A16S
ATOM  44034  C8  ADE  1185     207.263 121.026  24.742  1.00 79.61      A16S
ATOM  44035  C2' ADE  1185     204.636 122.414  26.677  1.00 66.81      A16S
ATOM  44036  O2' ADE  1185     203.822 123.523  26.994  1.00 66.81      A16S
ATOM  44037  C3' ADE  1185     205.524 122.029  27.848  1.00 66.81      A16S
ATOM  44038  O3' ADE  1185     204.810 122.064  29.073  1.00 66.81      A16S
ATOM  44039  P   URI  1186     204.204 120.706  29.681  1.00 74.94      A16S
ATOM  44040  O1P URI  1186     203.406 121.112  30.863  1.00 62.87      A16S
ATOM  44041  O2P URI  1186     205.272 119.682  29.833  1.00 62.87      A16S
ATOM  44042  O5' URI  1186     203.184 120.203  28.568  1.00 74.94      A16S
ATOM  44043  C5' URI  1186     201.900 120.802  28.434  1.00 74.94      A16S
ATOM  44044  C4' URI  1186     201.099 120.084  27.378  1.00 74.94      A16S
ATOM  44045  O4' URI  1186     201.780 120.230  26.105  1.00 74.94      A16S
ATOM  44046  C1' URI  1186     201.620 119.045  25.340  1.00 74.94      A16S
ATOM  44047  N1  URI  1186     202.943 118.441  25.145  1.00 62.87      A16S
ATOM  44048  C6  URI  1186     203.981 118.724  25.996  1.00 62.87      A16S
ATOM  44049  C2  URI  1186     203.102 117.561  24.088  1.00 62.87      A16S
ATOM  44050  O2  URI  1186     202.210 117.311  23.286  1.00 62.87      A16S
ATOM  44051  N3  URI  1186     204.348 116.989  24.000  1.00 62.87      A16S
ATOM  44052  C4  URI  1186     205.421 117.215  24.834  1.00 62.87      A16S
ATOM  44053  O4  URI  1186     206.466 116.603  24.646  1.00 62.87      A16S
ATOM  44054  C5  URI  1186     205.180 118.156  25.881  1.00 62.87      A16S
ATOM  44055  C2' URI  1186     200.686 118.123  26.129  1.00 74.94      A16S
ATOM  44056  O2' URI  1186     199.349 118.349  25.735  1.00 74.94      A16S
ATOM  44057  C3' URI  1186     200.958 118.577  27.555  1.00 74.94      A16S
ATOM  44058  O3' URI  1186     199.879 118.244  28.428  1.00 74.94      A16S
ATOM  44059  P   GUA  1187     199.719 116.732  28.971  1.00 77.95      A16S
ATOM  44060  O1P GUA  1187     198.937 116.814  30.226  1.00 72.07      A16S
ATOM  44061  O2P GUA  1187     201.041 116.056  28.975  1.00 72.07      A16S
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ATOM	44062	O5'	GUA	1187	198.783	116.035	27.886	1.00	77.95	A16S	ATOM	44115	C2	CYT	1189	203.167	105.801	26.441	1.00	73.34	A16S
ATOM	44063	C5'	GUA	1187	197.403	116.393	27.777	1.00	77.95	A16S	ATOM	44116	O2	CYT	1189	203.696	104.960	25.698	1.00	73.34	A16S
ATOM	44064	C4'	GUA	1187	196.666	115.380	26.939	1.00	77.95	A16S	ATOM	44117	N3	CYT	1189	203.880	106.806	26.998	1.00	73.34	A16S
ATOM	44065	O4'	GUA	1187	197.088	115.501	25.558	1.00	77.95	A16S	ATOM	44118	C4	CYT	1189	203.270	107.699	27.775	1.00	73.34	A16S
ATOM	44066	C1'	GUA	1187	197.225	114.210	24.985	1.00	77.95	A16S	ATOM	44119	N4	CYT	1189	204.012	108.667	28.309	1.00	73.34	A16S
ATOM	44067	N9	GUA	1187	198.637	113.998	24.691	1.00	72.07	A16S	ATOM	44120	C5	CYT	1189	201.871	107.638	28.038	1.00	73.34	A16S
ATOM	44068	C4	GUA	1187	199.188	112.949	23.991	1.00	72.07	A16S	ATOM	44121	C2'	CYT	1189	201.256	103.300	26.937	1.00	84.52	A16S
ATOM	44069	N3	GUA	1187	198.516	111.922	23.436	1.00	72.07	A16S	ATOM	44122	O2'	CYT	1189	201.184	102.163	26.099	1.00	84.52	A16S
ATOM	44070	C2	GUA	1187	199.327	111.061	22.841	1.00	72.07	A16S	ATOM	44123	C3'	CYT	1189	200.074	103.370	27.886	1.00	84.52	A16S
ATOM	44071	N2	GUA	1187	198.825	109.972	22.246	1.00	72.07	A16S	ATOM	44124	O3'	CYT	1189	199.800	102.083	28.421	1.00	84.52	A16S
ATOM	44072	N1	GUA	1187	200.686	111.201	22.789	1.00	72.07	A16S	ATOM	44125	P	CYT	1190	200.383	101.688	29.868	1.00	92.61	A16S
ATOM	44073	C6	GUA	1187	201.399	112.249	23.351	1.00	72.07	A16S	ATOM	44126	O1P	CYT	1190	199.912	100.310	30.167	1.00	72.52	A16S
ATOM	44074	O6	GUA	1187	202.627	112.278	23.248	1.00	72.07	A16S	ATOM	44127	O2P	CYT	1190	200.055	102.796	30.797	1.00	72.52	A16S
ATOM	44075	C5	GUA	1187	200.543	113.178	23.999	1.00	72.07	A16S	ATOM	44128	O5'	CYT	1190	201.967	101.664	29.679	1.00	92.61	A16S
ATOM	44076	N7	GUA	1187	200.840	114.350	24.681	1.00	72.07	A16S	ATOM	44129	C5'	CYT	1190	202.592	100.676	28.862	1.00	92.61	A16S
ATOM	44077	C8	GUA	1187	199.680	114.802	25.070	1.00	72.07	A16S	ATOM	44130	C4'	CYT	1190	204.078	100.946	28.737	1.00	92.61	A16S
ATOM	44078	C2'	GUA	1187	196.695	113.201	26.006	1.00	77.95	A16S	ATOM	44131	O4'	CYT	1190	204.290	102.235	28.098	1.00	92.61	A16S
ATOM	44079	O2'	GUA	1187	195.323	112.946	25.782	1.00	77.95	A16S	ATOM	44132	C1'	CYT	1190	205.479	102.824	28.597	1.00	92.61	A16S
ATOM	44080	C3'	GUA	1187	196.955	113.934	27.311	1.00	77.95	A16S	ATOM	44133	N1	CYT	1190	205.117	104.065	29.280	1.00	72.52	A16S
ATOM	44081	O3'	GUA	1187	196.086	113.487	28.339	1.00	77.95	A16S	ATOM	44134	C6	CYT	1190	203.819	104.332	29.600	1.00	72.52	A16S
ATOM	44082	P	GUA	1188	196.631	112.469	29.447	1.00	61.37	A16S	ATOM	44135	C2	CYT	1190	206.129	104.967	29.616	1.00	72.52	A16S
ATOM	44083	O1P	GUA	1188	195.548	112.293	30.440	1.00	75.40	A16S	ATOM	44136	O2	CYT	1190	207.298	104.710	29.284	1.00	72.52	A16S
ATOM	44084	O2P	GUA	1188	197.965	112.940	29.893	1.00	75.40	A16S	ATOM	44137	N3	CYT	1190	205.813	106.095	30.289	1.00	72.52	A16S
ATOM	44085	O5'	GUA	1188	196.840	111.103	28.660	1.00	61.37	A16S	ATOM	44138	C4	CYT	1190	204.545	106.338	30.613	1.00	72.52	A16S
ATOM	44086	C5'	GUA	1188	195.799	110.559	27.865	1.00	61.37	A16S	ATOM	44139	N4	CYT	1190	204.278	107.453	31.290	1.00	72.52	A16S
ATOM	44087	C4'	GUA	1188	196.355	109.560	26.881	1.00	61.37	A16S	ATOM	44140	C5	CYT	1190	203.491	105.446	30.260	1.00	72.52	A16S
ATOM	44088	O4'	GUA	1188	197.259	110.228	25.960	1.00	61.37	A16S	ATOM	44141	C2'	CYT	1190	206.094	101.828	29.578	1.00	92.61	A16S
ATOM	44089	C1'	GUA	1188	198.208	109.286	25.478	1.00	61.37	A16S	ATOM	44142	O2'	CYT	1190	207.021	100.992	28.914	1.00	92.61	A16S
ATOM	44090	N9	GUA	1188	199.551	109.800	25.708	1.00	75.40	A16S	ATOM	44143	C3'	CYT	1190	204.856	101.076	30.034	1.00	92.61	A16S
ATOM	44091	C4	GUA	1188	200.699	109.276	25.176	1.00	75.40	A16S	ATOM	44144	O3'	CYT	1190	205.198	99.819	30.590	1.00	92.61	A16S
ATOM	44092	N3	GUA	1188	200.770	108.202	24.361	1.00	75.40	A16S	ATOM	44145	P	CYT	1191	205.397	99.697	32.178	1.00	86.24	A16S
ATOM	44093	C2	GUA	1188	202.012	107.936	23.999	1.00	75.40	A16S	ATOM	44146	O1P	CYT	1191	205.389	98.250	32.520	1.00	56.73	A16S
ATOM	44094	N2	GUA	1188	202.263	106.887	23.200	1.00	75.40	A16S	ATOM	44147	O2P	CYT	1191	204.429	100.619	32.834	1.00	56.73	A16S
ATOM	44095	N1	GUA	1188	203.098	108.675	24.400	1.00	75.40	A16S	ATOM	44148	O5'	CYT	1191	206.858	100.273	32.427	1.00	86.24	A16S
ATOM	44096	C6	GUA	1188	203.046	109.785	25.238	1.00	75.40	A16S	ATOM	44149	C5'	CYT	1191	207.995	99.635	31.865	1.00	86.24	A16S
ATOM	44097	O6	GUA	1188	204.085	110.376	25.534	1.00	75.40	A16S	ATOM	44150	C4'	CYT	1191	209.245	100.271	32.397	1.00	86.24	A16S
ATOM	44098	C5	GUA	1188	201.718	110.073	25.643	1.00	75.40	A16S	ATOM	44151	O4'	CYT	1191	209.277	101.655	31.981	1.00	86.24	A16S
ATOM	44099	N7	GUA	1188	201.221	111.074	26.466	1.00	75.40	A16S	ATOM	44152	C1'	CYT	1191	209.919	102.434	32.971	1.00	86.24	A16S
ATOM	44100	C8	GUA	1188	199.930	110.873	26.475	1.00	75.40	A16S	ATOM	44153	N1	CYT	1191	209.020	103.530	33.338	1.00	56.73	A16S
ATOM	44101	C2'	GUA	1188	197.984	107.972	26.228	1.00	61.37	A16S	ATOM	44154	C6	CYT	1191	207.712	103.518	32.945	1.00	56.73	A16S
ATOM	44102	O2'	GUA	1188	197.257	107.060	25.428	1.00	61.37	A16S	ATOM	44155	C2	CYT	1191	209.532	104.614	34.071	1.00	56.73	A16S
ATOM	44103	C3'	GUA	1188	197.223	108.454	27.458	1.00	61.37	A16S	ATOM	44156	O2	CYT	1191	210.713	104.575	34.458	1.00	56.73	A16S
ATOM	44104	O3'	GUA	1188	196.463	107.402	28.020	1.00	61.37	A16S	ATOM	44157	N3	CYT	1191	208.725	105.668	34.340	1.00	56.73	A16S
ATOM	44105	P	CYT	1189	197.107	106.510	29.185	1.00	84.52	A16S	ATOM	44158	C4	CYT	1191	207.455	105.657	33.919	1.00	56.73	A16S
ATOM	44106	O1P	CYT	1189	196.007	105.652	29.702	1.00	73.34	A16S	ATOM	44159	N4	CYT	1191	206.703	106.724	34.175	1.00	56.73	A16S
ATOM	44107	O2P	CYT	1189	197.841	107.417	30.106	1.00	73.34	A16S	ATOM	44160	C5	CYT	1191	206.903	104.550	33.208	1.00	56.73	A16S
ATOM	44108	O5'	CYT	1189	198.183	105.591	28.454	1.00	84.52	A16S	ATOM	44161	C2'	CYT	1191	210.306	101.496	34.109	1.00	86.24	A16S
ATOM	44109	C5'	CYT	1189	197.778	104.511	27.623	1.00	84.52	A16S	ATOM	44162	O2'	CYT	1191	211.635	101.075	33.895	1.00	86.24	A16S
ATOM	44110	C4'	CYT	1189	198.977	103.875	26.963	1.00	84.52	A16S	ATOM	44163	C3'	CYT	1191	209.311	100.366	33.905	1.00	86.24	A16S
ATOM	44111	O4'	CYT	1189	199.662	104.876	26.163	1.00	84.52	A16S	ATOM	44164	O3'	CYT	1191	209.769	99.143	34.452	1.00	86.24	A16S
ATOM	44112	C1'	CYT	1189	201.051	104.577	26.123	1.00	84.52	A16S	ATOM	44165	P	URI	1192	209.311	98.723	35.930	1.00	94.09	A16S
ATOM	44113	N1	CYT	1189	201.797	105.705	26.700	1.00	73.34	A16S	ATOM	44166	O1P	URI	1192	209.097	97.250	35.912	1.00	64.96	A16S
ATOM	44114	C6	CYT	1189	201.180	106.634	27.484	1.00	73.34	A16S	ATOM	44167	O2P	URI	1192	208.203	99.625	36.353	1.00	64.96	A16S

ATOM	44168	O5'	URI	1192	210.584	99.069	36.816	1.00	94.09	A16S	ATOM	44221	N7	ADE	1194	216.485	103.119	39.430	1.00	86.11	A16S
ATOM	44169	C5'	URI	1192	210.435	99.503	38.155	1.00	94.09	A16S	ATOM	44222	C8	ADE	1194	216.556	101.954	38.831	1.00	86.11	A16S
ATOM	44170	C4'	URI	1192	210.930	100.918	38.298	1.00	94.09	A16S	ATOM	44223	C2'	ADE	1194	215.200	100.521	35.670	1.00	171.53	A16S
ATOM	44171	O4'	URI	1192	210.161	101.799	37.448	1.00	94.09	A16S	ATOM	44224	O2'	ADE	1194	213.897	100.164	35.262	1.00	171.53	A16S
ATOM	44172	C1'	URI	1192	210.249	103.105	37.975	1.00	94.09	A16S	ATOM	44225	C3'	ADE	1194	216.236	99.457	35.292	1.00	171.53	A16S
ATOM	44173	N1	URI	1192	209.013	103.859	37.712	1.00	64.96	A16S	ATOM	44226	O3'	ADE	1194	215.745	98.685	34.200	1.00	171.53	A16S
ATOM	44174	C6	URI	1192	207.918	103.298	37.090	1.00	64.96	A16S	ATOM	44227	P	CYT	1195	216.246	98.989	32.705	1.00	88.78	A16S
ATOM	44175	C2	URI	1192	209.002	105.192	38.106	1.00	64.96	A16S	ATOM	44228	O1P	CYT	1195	215.460	98.103	31.817	1.00	88.65	A16S
ATOM	44176	O2	URI	1192	209.945	105.721	38.670	1.00	64.96	A16S	ATOM	44229	O2P	CYT	1195	217.728	98.908	32.689	1.00	88.65	A16S
ATOM	44177	N3	URI	1192	207.851	105.882	37.816	1.00	64.96	A16S	ATOM	44230	O5'	CYT	1195	215.795	100.495	32.420	1.00	88.78	A16S
ATOM	44178	C4	URI	1192	206.728	105.393	37.191	1.00	64.96	A16S	ATOM	44231	C5'	CYT	1195	216.632	101.395	31.687	1.00	88.78	A16S
ATOM	44179	O4	URI	1192	205.776	106.151	36.992	1.00	64.96	A16S	ATOM	44232	C4'	CYT	1195	215.796	102.446	30.998	1.00	88.78	A16S
ATOM	44180	C5	URI	1192	206.804	104.002	36.820	1.00	64.96	A16S	ATOM	44233	O4'	CYT	1195	214.959	101.796	30.019	1.00	88.78	A16S
ATOM	44181	C2'	URI	1192	210.690	103.011	39.440	1.00	94.09	A16S	ATOM	44234	C1'	CYT	1195	213.791	102.569	29.830	1.00	88.78	A16S
ATOM	44182	O2'	URI	1192	211.944	103.634	39.608	1.00	94.09	A16S	ATOM	44235	N1	CYT	1195	212.630	101.680	29.664	1.00	88.65	A16S
ATOM	44183	C3'	URI	1192	210.739	101.503	39.687	1.00	94.09	A16S	ATOM	44236	C6	CYT	1195	212.762	100.323	29.745	1.00	88.65	A16S
ATOM	44184	O3'	URI	1192	211.873	101.196	40.493	1.00	94.09	A16S	ATOM	44237	C2	CYT	1195	211.383	102.252	29.383	1.00	88.65	A16S
ATOM	44185	P	URI	1193	211.802	99.992	41.549	1.00	129.52	A16S	ATOM	44238	O2	CYT	1195	211.281	103.489	29.367	1.00	88.65	A16S
ATOM	44186	O1P	URI	1193	210.379	99.848	41.951	1.00	169.82	A16S	ATOM	44239	N3	CYT	1195	210.320	101.445	29.144	1.00	88.65	A16S
ATOM	44187	O2P	URI	1193	212.835	100.237	42.583	1.00	169.82	A16S	ATOM	44240	C4	CYT	1195	210.465	100.119	29.203	1.00	88.65	A16S
ATOM	44188	O5'	URI	1193	212.211	98.713	40.692	1.00	129.52	A16S	ATOM	44241	N4	CYT	1195	209.394	99.360	28.952	1.00	88.65	A16S
ATOM	44189	C5'	URI	1193	213.239	97.825	41.125	1.00	129.52	A16S	ATOM	44242	C5	CYT	1195	211.717	99.512	29.522	1.00	88.65	A16S
ATOM	44190	C4'	URI	1193	214.593	98.430	40.844	1.00	129.52	A16S	ATOM	44243	C2'	CYT	1195	213.705	103.615	30.943	1.00	88.78	A16S
ATOM	44191	O4'	URI	1193	214.945	99.326	41.930	1.00	129.52	A16S	ATOM	44244	O2'	CYT	1195	213.904	104.907	30.394	1.00	88.78	A16S
ATOM	44192	C1'	URI	1193	216.354	99.362	42.087	1.00	129.52	A16S	ATOM	44245	C3'	CYT	1195	214.813	103.174	31.902	1.00	88.78	A16S
ATOM	44193	N1	URI	1193	216.683	99.035	43.483	1.00	169.82	A16S	ATOM	44246	O3'	CYT	1195	215.364	104.348	32.505	1.00	88.78	A16S
ATOM	44194	C6	URI	1193	216.728	97.732	43.926	1.00	169.82	A16S	ATOM	44247	P	GUA	1196	216.720	105.013	31.931	1.00	80.94	A16S
ATOM	44195	C2	URI	1193	216.968	100.087	44.342	1.00	169.82	A16S	ATOM	44248	O1P	GUA	1196	216.448	105.461	30.538	1.00	72.32	A16S
ATOM	44196	O2	URI	1193	216.915	101.254	44.001	1.00	169.82	A16S	ATOM	44249	O2P	GUA	1196	217.866	104.115	32.200	1.00	72.32	A16S
ATOM	44197	N3	URI	1193	217.308	99.720	45.619	1.00	169.82	A16S	ATOM	44250	O5'	GUA	1196	216.882	106.330	32.817	1.00	80.94	A16S
ATOM	44198	C4	URI	1193	217.384	98.440	46.122	1.00	169.82	A16S	ATOM	44251	C5'	GUA	1196	215.832	107.300	32.873	1.00	80.94	A16S
ATOM	44199	O4	URI	1193	217.713	98.271	47.297	1.00	169.82	A16S	ATOM	44252	C4'	GUA	1196	215.652	107.823	34.287	1.00	80.94	A16S
ATOM	44200	C5	URI	1193	217.061	97.407	45.181	1.00	169.82	A16S	ATOM	44253	O4'	GUA	1196	215.239	106.751	35.177	1.00	80.94	A16S
ATOM	44201	C2'	URI	1193	216.948	98.390	41.062	1.00	129.52	A16S	ATOM	44254	C1'	GUA	1196	215.842	106.926	36.449	1.00	80.94	A16S
ATOM	44202	O2'	URI	1193	217.353	99.122	39.925	1.00	129.52	A16S	ATOM	44255	N9	GUA	1196	216.730	105.791	36.676	1.00	72.32	A16S
ATOM	44203	C3'	URI	1193	215.763	97.466	40.787	1.00	129.52	A16S	ATOM	44256	C4	GUA	1196	217.642	105.630	37.694	1.00	72.32	A16S
ATOM	44204	O3'	URI	1193	215.784	96.870	39.489	1.00	129.52	A16S	ATOM	44257	N3	GUA	1196	217.884	106.503	38.692	1.00	72.32	A16S
ATOM	44205	P	ADE	1194	217.155	96.287	38.886	1.00	171.53	A16S	ATOM	44258	C2	GUA	1196	218.808	106.054	39.531	1.00	72.32	A16S
ATOM	44206	O1P	ADE	1194	216.779	95.256	37.884	1.00	86.11	A16S	ATOM	44259	N2	GUA	1196	219.153	106.785	40.603	1.00	72.32	A16S
ATOM	44207	O2P	ADE	1194	218.052	95.921	40.011	1.00	86.11	A16S	ATOM	44260	N1	GUA	1196	219.457	104.853	39.388	1.00	72.32	A16S
ATOM	44208	O5'	ADE	1194	217.793	97.541	38.132	1.00	171.53	A16S	ATOM	44261	C6	GUA	1196	219.228	103.940	38.364	1.00	72.32	A16S
ATOM	44209	C5'	ADE	1194	217.575	97.778	36.737	1.00	171.53	A16S	ATOM	44262	O6	GUA	1196	219.872	102.878	38.323	1.00	72.32	A16S
ATOM	44210	C4'	ADE	1194	216.306	98.575	36.531	1.00	171.53	A16S	ATOM	44263	C5	GUA	1196	218.225	104.402	37.469	1.00	72.32	A16S
ATOM	44211	O4'	ADE	1194	216.106	99.483	37.627	1.00	171.53	A16S	ATOM	44264	N7	GUA	1196	217.688	103.802	36.339	1.00	72.32	A16S
ATOM	44212	C1'	ADE	1194	215.243	100.506	37.201	1.00	171.53	A16S	ATOM	44265	C8	GUA	1196	216.812	104.662	35.902	1.00	72.32	A16S
ATOM	44213	N9	ADE	1194	215.549	101.734	37.927	1.00	86.11	A16S	ATOM	44266	C2'	GUA	1196	216.556	108.275	36.418	1.00	80.94	A16S
ATOM	44214	C4	ADE	1194	214.811	102.890	37.904	1.00	86.11	A16S	ATOM	44267	O2'	GUA	1196	215.657	109.282	36.836	1.00	80.94	A16S
ATOM	44215	N3	ADE	1194	213.742	103.155	37.137	1.00	86.11	A16S	ATOM	44268	C3'	GUA	1196	216.895	108.392	34.941	1.00	80.94	A16S
ATOM	44216	C2	ADE	1194	213.257	104.364	37.417	1.00	86.11	A16S	ATOM	44269	O3'	GUA	1196	217.076	109.740	34.545	1.00	80.94	A16S
ATOM	44217	N1	ADE	1194	213.678	105.262	38.323	1.00	86.11	A16S	ATOM	44270	P	GUA	1197	218.511	110.217	34.021	1.00	79.68	A16S
ATOM	44218	C6	ADE	1194	214.750	104.954	39.084	1.00	86.11	A16S	ATOM	44271	O1P	GUA	1197	218.405	111.653	33.653	1.00	81.08	A16S
ATOM	44219	N6	ADE	1194	215.148	105.830	40.007	1.00	86.11	A16S	ATOM	44272	O2P	GUA	1197	218.964	109.228	33.015	1.00	81.08	A16S
ATOM	44220	C5	ADE	1194	215.372	103.716	38.862	1.00	86.11	A16S	ATOM	44273	O5'	GUA	1197	219.442	110.086	35.305	1.00	79.68	A16S

ATOM	44274	C5'	GUA	1197	219.217	110.917	36.432	1.00	79.68	A16S	ATOM	44327	N4	CYT	1199	228.387	105.310	34.046	1.00	67.83	A16S
ATOM	44275	C4'	GUA	1197	220.131	110.538	37.564	1.00	79.68	A16S	ATOM	44328	C5	CYT	1199	228.926	107.269	35.309	1.00	67.83	A16S
ATOM	44276	O4'	GUA	1197	219.837	109.191	38.006	1.00	79.68	A16S	ATOM	44329	C2'	CYT	1199	233.004	108.233	37.132	1.00	81.47	A16S
ATOM	44277	C1'	GUA	1197	220.991	108.647	38.619	1.00	79.68	A16S	ATOM	44330	O2'	CYT	1199	234.068	107.885	37.991	1.00	81.47	A16S
ATOM	44278	N9	GUA	1197	221.307	107.368	38.004	1.00	81.08	A16S	ATOM	44331	C3'	CYT	1199	232.758	109.738	37.077	1.00	81.47	A16S
ATOM	44279	C4	GUA	1197	222.277	106.509	38.432	1.00	81.08	A16S	ATOM	44332	O3'	CYT	1199	233.965	110.491	37.188	1.00	81.47	A16S
ATOM	44280	N3	GUA	1197	223.101	106.715	39.478	1.00	81.08	A16S	ATOM	44333	P	URI	1200	234.756	110.930	35.862	1.00	77.76	A16S
ATOM	44281	C2	GUA	1197	223.922	105.703	39.662	1.00	81.08	A16S	ATOM	44334	O1P	URI	1200	235.764	111.945	36.251	1.00	66.18	A16S
ATOM	44282	N2	GUA	1197	224.808	105.745	40.662	1.00	81.08	A16S	ATOM	44335	O2P	URI	1200	233.752	111.264	34.818	1.00	66.18	A16S
ATOM	44283	N1	GUA	1197	223.934	104.574	38.880	1.00	81.08	A16S	ATOM	44336	O5'	URI	1200	235.511	109.594	35.444	1.00	77.76	A16S
ATOM	44284	C6	GUA	1197	223.092	104.345	37.793	1.00	81.08	A16S	ATOM	44337	C5'	URI	1200	236.464	109.001	36.315	1.00	77.76	A16S
ATOM	44285	O6	GUA	1197	223.179	103.291	37.153	1.00	81.08	A16S	ATOM	44338	C4'	URI	1200	236.804	107.610	35.848	1.00	77.76	A16S
ATOM	44286	C5	GUA	1197	222.210	105.426	37.585	1.00	81.08	A16S	ATOM	44339	O4'	URI	1200	235.679	106.715	36.069	1.00	77.76	A16S
ATOM	44287	N7	GUA	1197	221.225	105.610	36.628	1.00	81.08	A16S	ATOM	44340	C1'	URI	1200	235.632	105.740	35.034	1.00	77.76	A16S
ATOM	44288	C8	GUA	1197	220.715	106.778	36.914	1.00	81.08	A16S	ATOM	44341	N1	URI	1200	234.383	105.929	34.280	1.00	66.18	A16S
ATOM	44289	C2'	GUA	1197	222.122	109.653	38.436	1.00	79.68	A16S	ATOM	44342	C6	URI	1200	233.766	107.155	34.238	1.00	66.18	A16S
ATOM	44290	O2'	GUA	1197	222.220	110.416	39.619	1.00	79.68	A16S	ATOM	44343	C2	URI	1200	233.850	104.838	33.601	1.00	66.18	A16S
ATOM	44291	C3'	GUA	1197	221.611	110.458	37.249	1.00	79.68	A16S	ATOM	44344	O2	URI	1200	234.353	103.731	33.621	1.00	66.18	A16S
ATOM	44292	O3'	GUA	1197	222.218	111.741	37.171	1.00	79.68	A16S	ATOM	44345	N3	URI	1200	232.700	105.100	32.898	1.00	66.18	A16S
ATOM	44293	P	CYT	1198	223.555	111.925	36.299	1.00	77.83	A16S	ATOM	44346	C4	URI	1200	232.039	106.310	32.804	1.00	66.18	A16S
ATOM	44294	O1P	CYT	1198	223.727	113.383	36.083	1.00	66.62	A16S	ATOM	44347	O4	URI	1200	231.036	106.403	32.093	1.00	66.18	A16S
ATOM	44295	O2P	CYT	1198	223.492	111.008	35.132	1.00	66.62	A16S	ATOM	44348	C5	URI	1200	232.643	107.378	33.544	1.00	66.18	A16S
ATOM	44296	O5'	CYT	1198	224.710	111.377	37.245	1.00	77.83	A16S	ATOM	44349	C2'	URI	1200	236.865	105.983	34.164	1.00	77.76	A16S
ATOM	44297	C5'	CYT	1198	224.985	112.003	38.484	1.00	77.83	A16S	ATOM	44350	O2'	URI	1200	237.949	105.241	34.681	1.00	77.76	A16S
ATOM	44298	C4'	CYT	1198	226.100	111.283	39.191	1.00	77.83	A16S	ATOM	44351	C3'	URI	1200	237.059	107.476	34.361	1.00	77.76	A16S
ATOM	44299	O4'	CYT	1198	225.677	109.940	39.524	1.00	77.83	A16S	ATOM	44352	O3'	URI	1200	238.350	107.934	33.989	1.00	77.76	A16S
ATOM	44300	C1'	CYT	1198	226.815	109.099	39.613	1.00	77.83	A16S	ATOM	44353	P	GUA	1201	238.532	108.707	32.592	1.00	76.23	A16S
ATOM	44301	N1	CYT	1198	226.618	107.955	38.723	1.00	66.62	A16S	ATOM	44354	O1P	GUA	1201	239.925	109.200	32.521	1.00	48.66	A16S
ATOM	44302	C6	CYT	1198	225.737	108.018	37.682	1.00	66.62	A16S	ATOM	44355	O2P	GUA	1201	237.403	109.677	32.454	1.00	48.66	A16S
ATOM	44303	C2	CYT	1198	227.352	106.794	38.957	1.00	66.62	A16S	ATOM	44356	O5'	GUA	1201	238.377	107.533	31.527	1.00	76.23	A16S
ATOM	44304	O2	CYT	1198	228.137	106.767	39.919	1.00	66.62	A16S	ATOM	44357	C5'	GUA	1201	239.358	106.509	31.469	1.00	76.23	A16S
ATOM	44305	N3	CYT	1198	227.189	105.733	38.137	1.00	66.62	A16S	ATOM	44358	C4'	GUA	1201	238.849	105.308	30.713	1.00	76.23	A16S
ATOM	44306	C4	CYT	1198	226.329	105.803	37.122	1.00	66.62	A16S	ATOM	44359	O4'	GUA	1201	237.676	104.760	31.375	1.00	76.23	A16S
ATOM	44307	N4	CYT	1198	226.199	104.734	36.338	1.00	66.62	A16S	ATOM	44360	C1'	GUA	1201	236.867	104.089	30.414	1.00	76.23	A16S
ATOM	44308	C5	CYT	1198	225.563	106.974	36.864	1.00	66.62	A16S	ATOM	44361	N9	GUA	1201	235.578	104.766	30.318	1.00	48.66	A16S
ATOM	44309	C2'	CYT	1198	228.023	109.940	39.210	1.00	77.83	A16S	ATOM	44362	C4	GUA	1201	234.460	104.252	29.726	1.00	48.66	A16S
ATOM	44310	O2'	CYT	1198	228.640	110.448	40.379	1.00	77.83	A16S	ATOM	44363	N3	GUA	1201	234.364	103.035	29.155	1.00	48.66	A16S
ATOM	44311	C3'	CYT	1198	227.354	111.027	38.384	1.00	77.83	A16S	ATOM	44364	C2	GUA	1201	233.178	102.838	28.614	1.00	48.66	A16S
ATOM	44312	O3'	CYT	1198	228.162	112.183	38.296	1.00	77.83	A16S	ATOM	44365	N2	GUA	1201	232.934	101.693	27.963	1.00	48.66	A16S
ATOM	44313	P	CYT	1199	229.131	112.363	37.033	1.00	81.47	A16S	ATOM	44366	N1	GUA	1201	232.154	103.754	28.663	1.00	48.66	A16S
ATOM	44314	O1P	CYT	1199	229.812	113.681	37.184	1.00	67.83	A16S	ATOM	44367	C6	GUA	1201	232.234	105.011	29.262	1.00	48.66	A16S
ATOM	44315	O2P	CYT	1199	228.353	112.060	35.799	1.00	67.83	A16S	ATOM	44368	O6	GUA	1201	231.252	105.765	29.259	1.00	48.66	A16S
ATOM	44316	O5'	CYT	1199	230.210	111.208	37.204	1.00	81.47	A16S	ATOM	44369	C5	GUA	1201	233.508	105.243	29.815	1.00	48.66	A16S
ATOM	44317	C5'	CYT	1199	231.085	111.211	38.313	1.00	81.47	A16S	ATOM	44370	N7	GUA	1201	234.015	106.359	30.466	1.00	48.66	A16S
ATOM	44318	C4'	CYT	1199	231.910	109.961	38.314	1.00	81.47	A16S	ATOM	44371	C8	GUA	1201	235.245	106.029	30.754	1.00	48.66	A16S
ATOM	44319	O4'	CYT	1199	231.030	108.815	38.328	1.00	81.47	A16S	ATOM	44372	C2'	GUA	1201	237.591	104.225	29.076	1.00	76.23	A16S
ATOM	44320	C1'	CYT	1199	231.688	107.719	37.727	1.00	81.47	A16S	ATOM	44373	O2'	GUA	1201	238.462	103.129	28.887	1.00	76.23	A16S
ATOM	44321	N1	CYT	1199	230.779	107.111	36.749	1.00	67.83	A16S	ATOM	44374	C3'	GUA	1201	238.338	105.527	29.304	1.00	76.23	A16S
ATOM	44322	C6	CYT	1199	229.745	107.822	36.208	1.00	67.83	A16S	ATOM	44375	O3'	GUA	1201	239.365	105.714	28.353	1.00	76.23	A16S
ATOM	44323	C2	CYT	1199	230.995	105.781	36.375	1.00	67.83	A16S	ATOM	44376	P	GUA	1202	239.072	106.611	27.060	1.00	86.75	A16S
ATOM	44324	O2	CYT	1199	231.943	105.163	36.886	1.00	67.83	A16S	ATOM	44377	O1P	GUA	1202	240.384	106.914	26.465	1.00	62.09	A16S
ATOM	44325	N3	CYT	1199	230.171	105.207	35.471	1.00	67.83	A16S	ATOM	44378	O2P	GUA	1202	238.188	107.735	27.455	1.00	62.09	A16S
ATOM	44326	C4	CYT	1199	229.169	105.913	34.943	1.00	67.83	A16S	ATOM	44379	O5'	GUA	1202	238.262	105.624	26.102	1.00	86.75	A16S

ATOM	44380	C5'	GUA	1202	238.840	104.391	25.681	1.00	86.75	A16S	ATOM	44433	O2	CYT	1204	228.474	110.800	19.641	1.00	72.66	A16S
ATOM	44381	C4'	GUA	1202	237.798	103.485	25.065	1.00	86.75	A16S	ATOM	44434	N3	CYT	1204	230.341	111.484	20.715	1.00	72.66	A16S
ATOM	44382	O4'	GUA	1202	236.783	103.166	26.054	1.00	86.75	A16S	ATOM	44435	C4	CYT	1204	231.651	111.324	20.909	1.00	72.66	A16S
ATOM	44383	C1'	GUA	1202	235.520	103.055	25.419	1.00	86.75	A16S	ATOM	44436	N4	CYT	1204	232.259	112.147	21.764	1.00	72.66	A16S
ATOM	44384	N9	GUA	1202	234.707	104.185	25.840	1.00	62.09	A16S	ATOM	44437	C5	CYT	1204	232.396	110.314	20.231	1.00	72.66	A16S
ATOM	44385	C4	GUA	1202	233.391	104.400	25.522	1.00	62.09	A16S	ATOM	44438	C2'	CYT	1204	229.612	109.478	16.798	1.00	60.16	A16S
ATOM	44386	N3	GUA	1202	232.616	103.587	24.782	1.00	62.09	A16S	ATOM	44439	O2'	CYT	1204	228.339	109.276	16.223	1.00	60.16	A16S
ATOM	44387	C2	GUA	1202	231.404	104.076	24.620	1.00	62.09	A16S	ATOM	44440	C3'	CYT	1204	230.693	108.703	16.057	1.00	60.16	A16S
ATOM	44388	N2	GUA	1202	230.515	103.404	23.885	1.00	62.09	A16S	ATOM	44441	O3'	CYT	1204	230.341	108.617	14.678	1.00	60.16	A16S
ATOM	44389	N1	GUA	1202	230.978	105.259	25.160	1.00	62.09	A16S	ATOM	44442	P	GUA	1205	230.860	109.732	13.639	1.00	68.46	A16S
ATOM	44390	C6	GUA	1202	231.757	106.111	25.935	1.00	62.09	A16S	ATOM	44443	O1P	GUA	1205	230.264	111.074	13.959	1.00	66.76	A16S
ATOM	44391	O6	GUA	1202	231.271	107.159	26.384	1.00	62.09	A16S	ATOM	44444	O2P	GUA	1205	230.643	109.152	12.296	1.00	66.76	A16S
ATOM	44392	C5	GUA	1202	233.067	105.606	26.098	1.00	62.09	A16S	ATOM	44445	O5'	GUA	1205	232.426	109.757	13.912	1.00	68.46	A16S
ATOM	44393	N7	GUA	1202	234.156	106.136	26.776	1.00	62.09	A16S	ATOM	44446	C5'	GUA	1205	233.207	108.565	13.830	1.00	68.46	A16S
ATOM	44394	C8	GUA	1202	235.103	105.256	26.600	1.00	62.09	A16S	ATOM	44447	C4'	GUA	1205	234.655	108.924	13.586	1.00	68.46	A16S
ATOM	44395	C2'	GUA	1202	235.776	103.140	23.917	1.00	86.75	A16S	ATOM	44448	O4'	GUA	1205	235.080	109.870	14.566	1.00	68.46	A16S
ATOM	44396	O2'	GUA	1202	236.005	101.844	23.403	1.00	86.75	A16S	ATOM	44449	C1'	GUA	1205	236.466	109.804	14.675	1.00	68.46	A16S
ATOM	44397	C3'	GUA	1202	237.007	104.035	23.889	1.00	86.75	A16S	ATOM	44450	N9	GUA	1205	236.844	110.327	15.979	1.00	66.76	A16S
ATOM	44398	O3'	GUA	1202	237.725	103.908	22.666	1.00	86.75	A16S	ATOM	44451	C4	GUA	1205	237.597	111.453	16.167	1.00	66.76	A16S
ATOM	44399	P	GUA	1203	237.503	104.985	21.485	1.00	67.55	A16S	ATOM	44452	N3	GUA	1205	238.190	112.172	15.190	1.00	66.76	A16S
ATOM	44400	O1P	GUA	1203	238.346	104.491	20.369	1.00	68.80	A16S	ATOM	44453	C2	GUA	1205	238.799	113.240	15.665	1.00	66.76	A16S
ATOM	44401	O2P	GUA	1203	237.701	106.363	21.999	1.00	68.80	A16S	ATOM	44454	N2	GUA	1205	239.437	114.064	14.829	1.00	66.76	A16S
ATOM	44402	O5'	GUA	1203	235.962	104.841	21.090	1.00	67.55	A16S	ATOM	44455	N1	GUA	1205	238.828	113.580	16.993	1.00	66.76	A16S
ATOM	44403	C5'	GUA	1203	235.431	103.606	20.596	1.00	67.55	A16S	ATOM	44456	C6	GUA	1205	238.230	112.857	18.018	1.00	66.76	A16S
ATOM	44404	C4'	GUA	1203	233.962	103.758	20.256	1.00	67.55	A16S	ATOM	44457	O6	GUA	1205	238.320	113.260	19.180	1.00	66.76	A16S
ATOM	44405	O4'	GUA	1203	233.183	103.956	21.470	1.00	67.55	A16S	ATOM	44458	C5	GUA	1205	237.567	111.695	17.521	1.00	66.76	A16S
ATOM	44406	C1'	GUA	1203	232.097	104.835	21.213	1.00	67.55	A16S	ATOM	44459	N7	GUA	1205	236.858	110.701	18.182	1.00	66.76	A16S
ATOM	44407	N9	GUA	1203	232.305	106.046	21.995	1.00	68.80	A16S	ATOM	44460	C8	GUA	1205	236.467	109.897	17.227	1.00	66.76	A16S
ATOM	44408	C4	GUA	1203	231.385	107.035	22.253	1.00	68.80	A16S	ATOM	44461	C2'	GUA	1205	236.993	108.496	14.065	1.00	68.46	A16S
ATOM	44409	N3	GUA	1203	230.103	107.056	21.832	1.00	68.80	A16S	ATOM	44462	O2'	GUA	1205	237.927	108.879	13.070	1.00	68.46	A16S
ATOM	44410	C2	GUA	1203	229.471	108.150	22.231	1.00	68.80	A16S	ATOM	44463	C3'	GUA	1205	235.700	107.810	13.559	1.00	68.46	A16S
ATOM	44411	N2	GUA	1203	228.188	108.349	21.885	1.00	68.80	A16S	ATOM	44464	O3'	GUA	1205	235.631	107.408	12.170	1.00	68.46	A16S
ATOM	44412	N1	GUA	1203	230.049	109.133	22.996	1.00	68.80	A16S	ATOM	44465	P	ADE	1206	236.807	106.576	11.441	1.00	69.95	A16S
ATOM	44413	C6	GUA	1203	231.364	109.128	23.451	1.00	68.80	A16S	ATOM	44466	O1P	ADE	1206	238.161	107.001	11.906	1.00	63.56	A16S
ATOM	44414	O6	GUA	1203	231.783	110.064	24.161	1.00	68.80	A16S	ATOM	44467	O2P	ADE	1206	236.473	106.670	10.001	1.00	63.56	A16S
ATOM	44415	C5	GUA	1203	232.057	107.970	23.011	1.00	68.80	A16S	ATOM	44468	O5'	ADE	1206	236.597	105.063	11.886	1.00	69.95	A16S
ATOM	44416	N7	GUA	1203	233.370	107.578	23.223	1.00	68.80	A16S	ATOM	44469	C5'	ADE	1206	237.624	104.362	12.579	1.00	69.95	A16S
ATOM	44417	C8	GUA	1203	233.469	106.432	22.610	1.00	68.80	A16S	ATOM	44470	C4'	ADE	1206	237.176	102.960	12.853	1.00	69.95	A16S
ATOM	44418	C2'	GUA	1203	232.122	105.124	19.716	1.00	67.55	A16S	ATOM	44471	O4'	ADE	1206	235.848	103.050	13.397	1.00	69.95	A16S
ATOM	44419	O2'	GUA	1203	231.349	104.156	19.051	1.00	67.55	A16S	ATOM	44472	C1'	ADE	1206	235.109	101.933	12.996	1.00	69.95	A16S
ATOM	44420	C3'	GUA	1203	233.605	104.971	19.420	1.00	67.55	A16S	ATOM	44473	N9	ADE	1206	233.738	102.350	12.742	1.00	63.56	A16S
ATOM	44421	O3'	GUA	1203	233.859	104.775	18.039	1.00	67.55	A16S	ATOM	44474	C4	ADE	1206	232.845	101.846	11.830	1.00	63.56	A16S
ATOM	44422	P	CYT	1204	234.267	106.036	17.137	1.00	60.16	A16S	ATOM	44475	N3	ADE	1206	233.062	100.892	10.912	1.00	63.56	A16S
ATOM	44423	O1P	CYT	1204	234.509	105.534	15.767	1.00	72.66	A16S	ATOM	44476	C2	ADE	1206	231.950	100.639	10.228	1.00	63.56	A16S
ATOM	44424	O2P	CYT	1204	235.334	106.781	17.852	1.00	72.66	A16S	ATOM	44477	N1	ADE	1206	230.743	101.187	10.347	1.00	63.56	A16S
ATOM	44425	O5'	CYT	1204	232.943	106.919	17.106	1.00	60.16	A16S	ATOM	44478	C6	ADE	1206	230.563	102.150	11.272	1.00	63.56	A16S
ATOM	44426	C5'	CYT	1204	231.748	106.371	16.573	1.00	60.16	A16S	ATOM	44479	N6	ADE	1206	229.359	102.712	11.385	1.00	63.56	A16S
ATOM	44427	C4'	CYT	1204	230.589	107.334	16.707	1.00	60.16	A16S	ATOM	44480	C5	ADE	1206	231.661	102.509	12.062	1.00	63.56	A16S
ATOM	44428	O4'	CYT	1204	230.340	107.618	18.098	1.00	60.16	A16S	ATOM	44481	N7	ADE	1206	231.814	103.444	13.072	1.00	63.56	A16S
ATOM	44429	C1'	CYT	1204	229.672	108.858	18.199	1.00	60.16	A16S	ATOM	44482	C8	ADE	1206	233.063	103.315	13.431	1.00	63.56	A16S
ATOM	44430	N1	CYT	1204	230.393	109.697	19.159	1.00	72.66	A16S	ATOM	44483	C2'	ADE	1206	235.875	101.165	11.915	1.00	69.95	A16S
ATOM	44431	C6	CYT	1204	231.732	109.528	19.373	1.00	72.66	A16S	ATOM	44484	O2'	ADE	1206	236.284	99.939	12.479	1.00	69.95	A16S
ATOM	44432	C2	CYT	1204	229.687	110.684	19.846	1.00	72.66	A16S	ATOM	44485	C3'	ADE	1206	237.067	102.082	11.615	1.00	69.95	A16S

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ATOM  44486  O3' ADE  1206     238.243 101.265  11.576  1.00 69.95      A16S
ATOM  44487  P   CYT  1207     239.477 101.642  10.624  1.00 76.37      A16S
ATOM  44488  O1P CYT  1207     240.576 100.737  11.023  1.00 51.18      A16S
ATOM  44489  O2P CYT  1207     239.707 103.103  10.618  1.00 51.18      A16S
ATOM  44490  O5' CYT  1207     238.982 101.202   9.183  1.00 76.37      A16S
ATOM  44491  C5' CYT  1207     239.252  99.896   8.702  1.00 76.37      A16S
ATOM  44492  C4' CYT  1207     238.383  99.593   7.513  1.00 76.37      A16S
ATOM  44493  O4' CYT  1207     237.015  99.758   7.927  1.00 76.37      A16S
ATOM  44494  C1' CYT  1207     236.239 100.160   6.818  1.00 76.37      A16S
ATOM  44495  N1  CYT  1207     235.388 101.286   7.218  1.00 51.18      A16S
ATOM  44496  C6  CYT  1207     235.836 102.254   8.072  1.00 51.18      A16S
ATOM  44497  C2  CYT  1207     234.079 101.314   6.742  1.00 51.18      A16S
ATOM  44498  O2  CYT  1207     233.731 100.460   5.916  1.00 51.18      A16S
ATOM  44499  N3  CYT  1207     233.229 102.261   7.191  1.00 51.18      A16S
ATOM  44500  C4  CYT  1207     233.651 103.167   8.073  1.00 51.18      A16S
ATOM  44501  N4  CYT  1207     232.756 104.048   8.538  1.00 51.18      A16S
ATOM  44502  C5  CYT  1207     235.007 103.202   8.529  1.00 51.18      A16S
ATOM  44503  C2' CYT  1207     237.161 100.369   5.618  1.00 76.37      A16S
ATOM  44504  O2' CYT  1207     237.074  99.228   4.786  1.00 76.37      A16S
ATOM  44505  C3' CYT  1207     238.517 100.492   6.288  1.00 76.37      A16S
ATOM  44506  O3' CYT  1207     239.588 100.092   5.421  1.00 76.37      A16S
ATOM  44507  P   ADE  1208     239.836  98.526   5.063  1.00 59.04      A16S
ATOM  44508  O1P ADE  1208     239.293  97.633   6.118  1.00 72.09      A16S
ATOM  44509  O2P ADE  1208     241.269  98.423   4.688  1.00 72.09      A16S
ATOM  44510  O5' ADE  1208     239.000  98.179   3.749  1.00 59.04      A16S
ATOM  44511  C5' ADE  1208     239.325  96.986   3.033  1.00 59.04      A16S
ATOM  44512  C4' ADE  1208     238.408  96.752   1.849  1.00 59.04      A16S
ATOM  44513  O4' ADE  1208     237.189  96.059   2.229  1.00 59.04      A16S
ATOM  44514  C1' ADE  1208     236.213  96.269   1.220  1.00 59.04      A16S
ATOM  44515  N9  ADE  1208     235.014  96.840   1.829  1.00 72.09      A16S
ATOM  44516  C4  ADE  1208     233.804  96.216   1.931  1.00 72.09      A16S
ATOM  44517  N3  ADE  1208     233.505  94.975   1.528  1.00 72.09      A16S
ATOM  44518  C2  ADE  1208     232.223  94.707   1.770  1.00 72.09      A16S
ATOM  44519  N1  ADE  1208     231.282  95.484   2.334  1.00 72.09      A16S
ATOM  44520  C6  ADE  1208     231.625  96.735   2.724  1.00 72.09      A16S
ATOM  44521  N6  ADE  1208     230.689  97.519   3.271  1.00 72.09      A16S
ATOM  44522  C5  ADE  1208     232.951  97.136   2.521  1.00 72.09      A16S
ATOM  44523  N7  ADE  1208     233.617  98.321   2.798  1.00 72.09      A16S
ATOM  44524  C8  ADE  1208     234.837  98.094   2.378  1.00 72.09      A16S
ATOM  44525  C2' ADE  1208     236.824  97.237   0.199  1.00 59.04      A16S
ATOM  44526  O2' ADE  1208     237.378  96.502  -0.875  1.00 59.04      A16S
ATOM  44527  C3' ADE  1208     237.900  97.922   1.032  1.00 59.04      A16S
ATOM  44528  O3' ADE  1208     238.888  98.495   0.187  1.00 59.04      A16S
ATOM  44529  P   CYT  1209     238.566  99.883  -0.554  1.00 59.71      A16S
ATOM  44530  O1P CYT  1209     239.674 100.253  -1.470  1.00 62.43      A16S
ATOM  44531  O2P CYT  1209     238.121 100.848   0.487  1.00 62.43      A16S
ATOM  44532  O5' CYT  1209     237.314  99.512  -1.448  1.00 59.71      A16S
ATOM  44533  C5' CYT  1209     236.416 100.506  -1.880  1.00 59.71      A16S
ATOM  44534  C4' CYT  1209     235.052  99.911  -2.020  1.00 59.71      A16S
ATOM  44535  O4' CYT  1209     234.640  99.380  -0.732  1.00 59.71      A16S
ATOM  44536  C1' CYT  1209     233.267  99.671  -0.517  1.00 59.71      A16S
ATOM  44537  N1  CYT  1209     233.171 100.651   0.583  1.00 62.43      A16S
ATOM  44538  C6  CYT  1209     234.268 101.360   0.987  1.00 62.43      A16S
ATOM  44539  C2  CYT  1209     231.936 100.854   1.204  1.00 62.43      A16S
ATOM  44540  O2  CYT  1209     230.964 100.175   0.841  1.00 62.43      A16S
ATOM  44541  N3  CYT  1209     231.832 101.780   2.190  1.00 62.43      A16S
ATOM  44542  C4  CYT  1209     232.905 102.474   2.569  1.00 62.43      A16S
ATOM  44543  N4  CYT  1209     232.756 103.378   3.541  1.00 62.43      A16S
ATOM  44544  C5  CYT  1209     234.182 102.272   1.968  1.00 62.43      A16S
ATOM  44545  C2' CYT  1209     232.732 100.214  -1.846  1.00 59.71      A16S
ATOM  44546  O2' CYT  1209     232.318  99.135  -2.663  1.00 59.71      A16S
ATOM  44547  C3' CYT  1209     233.973 100.903  -2.389  1.00 59.71      A16S
ATOM  44548  O3' CYT  1209     233.940 101.086  -3.794  1.00 59.71      A16S
ATOM  44549  P   ADE  1210     233.811 102.567  -4.386  1.00 57.36      A16S
ATOM  44550  O1P ADE  1210     234.123 102.525  -5.839  1.00 51.99      A16S
ATOM  44551  O2P ADE  1210     234.589 103.466  -3.482  1.00 51.99      A16S
ATOM  44552  O5' ADE  1210     232.271 102.935  -4.201  1.00 57.36      A16S
ATOM  44553  C5' ADE  1210     231.265 102.384  -5.045  1.00 57.36      A16S
ATOM  44554  C4' ADE  1210     229.924 103.018  -4.732  1.00 57.36      A16S
ATOM  44555  O4' ADE  1210     229.504 102.643  -3.390  1.00 57.36      A16S
ATOM  44556  C1' ADE  1210     228.917 103.757  -2.734  1.00 57.36      A16S
ATOM  44557  N9  ADE  1210     229.800 104.152  -1.634  1.00 51.99      A16S
ATOM  44558  C4  ADE  1210     229.513 105.002  -0.588  1.00 51.99      A16S
ATOM  44559  N3  ADE  1210     228.353 105.632  -0.331  1.00 51.99      A16S
ATOM  44560  C2  ADE  1210     228.458 106.385   0.759  1.00 51.99      A16S
ATOM  44561  N1  ADE  1210     229.508 106.576   1.557  1.00 51.99      A16S
ATOM  44562  C6  ADE  1210     230.660 105.933   1.271  1.00 51.99      A16S
ATOM  44563  N6  ADE  1210     231.721 106.133   2.057  1.00 51.99      A16S
ATOM  44564  C5  ADE  1210     230.678 105.093   0.151  1.00 51.99      A16S
ATOM  44565  N7  ADE  1210     231.673 104.299  -0.401  1.00 51.99      A16S
ATOM  44566  C8  ADE  1210     231.102 103.762  -1.451  1.00 51.99      A16S
ATOM  44567  C2' ADE  1210     228.774 104.856  -3.785  1.00 57.36      A16S
ATOM  44568  O2' ADE  1210     227.527 104.756  -4.441  1.00 57.36      A16S
ATOM  44569  C3' ADE  1210     229.943 104.533  -4.699  1.00 57.36      A16S
ATOM  44570  O3' ADE  1210     229.782 105.099  -5.983  1.00 57.36      A16S
ATOM  44571  P   CYT  1211     230.376 106.559  -6.265  1.00 46.13      A16S
ATOM  44572  O1P CYT  1211     230.413 106.761  -7.728  1.00 51.81      A16S
ATOM  44573  O2P CYT  1211     231.632 106.691  -5.473  1.00 51.81      A16S
ATOM  44574  O5' CYT  1211     229.287 107.541  -5.636  1.00 46.13      A16S
ATOM  44575  C5' CYT  1211     227.930 107.524  -6.078  1.00 46.13      A16S
ATOM  44576  C4' CYT  1211     227.097 108.457  -5.235  1.00 46.13      A16S
ATOM  44577  O4' CYT  1211     227.056 107.952  -3.879  1.00 46.13      A16S
ATOM  44578  C1' CYT  1211     227.096 109.034  -2.961  1.00 46.13      A16S
ATOM  44579  N1  CYT  1211     228.302 108.900  -2.134  1.00 51.81      A16S
ATOM  44580  C6  CYT  1211     229.287 108.012  -2.460  1.00 51.81      A16S
ATOM  44581  C2  CYT  1211     228.419 109.692  -0.997  1.00 51.81      A16S
ATOM  44582  O2  CYT  1211     227.527 110.497  -0.747  1.00 51.81      A16S
ATOM  44583  N3  CYT  1211     229.501 109.561  -0.198  1.00 51.81      A16S
ATOM  44584  C4  CYT  1211     230.446 108.673  -0.504  1.00 51.81      A16S
ATOM  44585  N4  CYT  1211     231.483 108.545   0.337  1.00 51.81      A16S
ATOM  44586  C5  CYT  1211     230.366 107.864  -1.681  1.00 51.81      A16S
ATOM  44587  C2' CYT  1211     227.049 110.321  -3.779  1.00 46.13      A16S
ATOM  44588  O2' CYT  1211     225.708 110.739  -3.933  1.00 46.13      A16S
ATOM  44589  C3' CYT  1211     227.664 109.854  -5.085  1.00 46.13      A16S
ATOM  44590  O3' CYT  1211     227.252 110.684  -6.148  1.00 46.13      A16S
ATOM  44591  P   GUA  1212     228.006 112.072  -6.388  1.00 44.50      A16S
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ATOM  44592  O1P GUA  1212     227.587 112.608  -7.716  1.00 50.21      A16S
ATOM  44593  O2P GUA  1212     229.445 111.877  -6.081  1.00 50.21      A16S
ATOM  44594  O5' GUA  1212     227.417 113.018  -5.267  1.00 44.50      A16S
ATOM  44595  C5' GUA  1212     226.044 113.340  -5.247  1.00 44.50      A16S
ATOM  44596  C4' GUA  1212     225.733 114.127  -4.008  1.00 44.50      A16S
ATOM  44597  O4' GUA  1212     226.077 113.335  -2.839  1.00 44.50      A16S
ATOM  44598  C1' GUA  1212     226.440 114.208  -1.780  1.00 44.50      A16S
ATOM  44599  N9  GUA  1212     227.777 113.853  -1.338  1.00 50.21      A16S
ATOM  44600  C4  GUA  1212     228.450 114.400  -0.286  1.00 50.21      A16S
ATOM  44601  N3  GUA  1212     227.994 115.379   0.514  1.00 50.21      A16S
ATOM  44602  C2  GUA  1212     228.879 115.710   1.429  1.00 50.21      A16S
ATOM  44603  N2  GUA  1212     228.605 116.697   2.293  1.00 50.21      A16S
ATOM  44604  N1  GUA  1212     230.104 115.109   1.561  1.00 50.21      A16S
ATOM  44605  C6  GUA  1212     230.583 114.090   0.752  1.00 50.21      A16S
ATOM  44606  O6  GUA  1212     231.701 113.606   0.963  1.00 50.21      A16S
ATOM  44607  C5  GUA  1212     229.655 113.745  -0.243  1.00 50.21      A16S
ATOM  44608  N7  GUA  1212     229.739 112.808  -1.256  1.00 50.21      A16S
ATOM  44609  C8  GUA  1212     228.601 112.910  -1.880  1.00 50.21      A16S
ATOM  44610  C2' GUA  1212     226.346 115.632  -2.326  1.00 44.50      A16S
ATOM  44611  O2' GUA  1212     225.053 116.148  -2.084  1.00 44.50      A16S
ATOM  44612  C3' GUA  1212     226.567 115.374  -3.801  1.00 44.50      A16S
ATOM  44613  O3' GUA  1212     226.124 116.447  -4.595  1.00 44.50      A16S
ATOM  44614  P   URI  1213     227.201 117.493  -5.152  1.00 37.93      A16S
ATOM  44615  O1P URI  1213     226.569 118.425  -6.132  1.00 58.08      A16S
ATOM  44616  O2P URI  1213     228.402 116.714  -5.542  1.00 58.08      A16S
ATOM  44617  O5' URI  1213     227.535 118.336  -3.859  1.00 37.93      A16S
ATOM  44618  C5' URI  1213     226.545 119.151  -3.267  1.00 37.93      A16S
ATOM  44619  C4' URI  1213     227.116 119.810  -2.055  1.00 37.93      A16S
ATOM  44620  O4' URI  1213     227.569 118.783  -1.146  1.00 37.93      A16S
ATOM  44621  C1' URI  1213     228.737 119.215  -0.489  1.00 37.93      A16S
ATOM  44622  N1  URI  1213     229.765 118.206  -0.732  1.00 58.08      A16S
ATOM  44623  C6  URI  1213     229.603 117.264  -1.707  1.00 58.08      A16S
ATOM  44624  C2  URI  1213     230.895 118.243   0.051  1.00 58.08      A16S
ATOM  44625  O2  URI  1213     231.060 119.073   0.930  1.00 58.08      A16S
ATOM  44626  N3  URI  1213     231.826 117.275  -0.237  1.00 58.08      A16S
ATOM  44627  C4  URI  1213     231.730 116.305  -1.209  1.00 58.08      A16S
ATOM  44628  O4  URI  1213     232.648 115.508  -1.360  1.00 58.08      A16S
ATOM  44629  C5  URI  1213     230.522 116.338  -1.967  1.00 58.08      A16S
ATOM  44630  C2' URI  1213     229.103 120.596  -1.036  1.00 37.93      A16S
ATOM  44631  O2' URI  1213     228.661 121.608  -0.163  1.00 37.93      A16S
ATOM  44632  C3' URI  1213     228.364 120.602  -2.365  1.00 37.93      A16S
ATOM  44633  O3' URI  1213     227.994 121.906  -2.787  1.00 37.93      A16S
ATOM  44634  P   GUA  1214     229.098 122.856  -3.433  1.00 42.67      A16S
ATOM  44635  O1P GUA  1214     228.526 124.213  -3.615  1.00 54.71      A16S
ATOM  44636  O2P GUA  1214     229.664 122.130  -4.597  1.00 54.71      A16S
ATOM  44637  O5' GUA  1214     230.199 122.901  -2.287  1.00 42.67      A16S
ATOM  44638  C5' GUA  1214     231.506 123.345  -2.546  1.00 42.67      A16S
ATOM  44639  C4' GUA  1214     232.358 123.063  -1.361  1.00 42.67      A16S
ATOM  44640  O4' GUA  1214     232.257 121.655  -1.043  1.00 42.67      A16S
ATOM  44641  C1' GUA  1214     233.478 121.219  -0.463  1.00 42.67      A16S
ATOM  44642  N9  GUA  1214     233.982 120.099  -1.246  1.00 54.71      A16S
ATOM  44643  C4  GUA  1214     235.115 119.367  -0.999  1.00 54.71      A16S
ATOM  44644  N3  GUA  1214     236.007 119.591  -0.014  1.00 54.71      A16S
ATOM  44645  C2  GUA  1214     236.986 118.698  -0.026  1.00 54.71      A16S
ATOM  44646  N2  GUA  1214     237.981 118.778   0.866  1.00 54.71      A16S
ATOM  44647  N1  GUA  1214     237.065 117.662  -0.914  1.00 54.71      A16S
ATOM  44648  C6  GUA  1214     236.155 117.408  -1.927  1.00 54.71      A16S
ATOM  44649  O6  GUA  1214     236.310 116.425  -2.658  1.00 54.71      A16S
ATOM  44650  C5  GUA  1214     235.120 118.372  -1.949  1.00 54.71      A16S
ATOM  44651  N7  GUA  1214     234.038 118.505  -2.803  1.00 54.71      A16S
ATOM  44652  C8  GUA  1214     233.396 119.546  -2.351  1.00 54.71      A16S
ATOM  44653  C2' GUA  1214     234.414 122.429  -0.421  1.00 42.67      A16S
ATOM  44654  O2' GUA  1214     234.287 123.050   0.843  1.00 42.67      A16S
ATOM  44655  C3' GUA  1214     233.842 123.274  -1.554  1.00 42.67      A16S
ATOM  44656  O3' GUA  1214     234.170 124.652  -1.461  1.00 42.67      A16S
ATOM  44657  P   CYT  1215     235.273 125.272  -2.457  1.00 54.77      A16S
ATOM  44658  O1P CYT  1215     235.209 126.759  -2.342  1.00 50.70      A16S
ATOM  44659  O2P CYT  1215     235.104 124.639  -3.794  1.00 50.70      A16S
ATOM  44660  O5' CYT  1215     236.634 124.759  -1.800  1.00 54.77      A16S
ATOM  44661  C5' CYT  1215     237.015 125.228  -0.517  1.00 54.77      A16S
ATOM  44662  C4' CYT  1215     238.165 124.427   0.032  1.00 54.77      A16S
ATOM  44663  O4' CYT  1215     237.806 123.028   0.100  1.00 54.77      A16S
ATOM  44664  C1' CYT  1215     238.944 122.227  -0.153  1.00 54.77      A16S
ATOM  44665  N1  CYT  1215     238.673 121.426  -1.358  1.00 50.70      A16S
ATOM  44666  C6  CYT  1215     237.547 121.644  -2.107  1.00 50.70      A16S
ATOM  44667  C2  CYT  1215     239.571 120.416  -1.714  1.00 50.70      A16S
ATOM  44668  O2  CYT  1215     240.619 120.293  -1.066  1.00 50.70      A16S
ATOM  44669  N3  CYT  1215     239.282 119.611  -2.764  1.00 50.70      A16S
ATOM  44670  C4  CYT  1215     238.163 119.802  -3.460  1.00 50.70      A16S
ATOM  44671  N4  CYT  1215     237.899 118.958  -4.452  1.00 50.70      A16S
ATOM  44672  C5  CYT  1215     237.258 120.863  -3.157  1.00 50.70      A16S
ATOM  44673  C2' CYT  1215     240.125 123.183  -0.293  1.00 54.77      A16S
ATOM  44674  O2' CYT  1215     240.706 123.343   0.981  1.00 54.77      A16S
ATOM  44675  C3' CYT  1215     239.423 124.436  -0.795  1.00 54.77      A16S
ATOM  44676  O3' CYT  1215     240.148 125.616  -0.522  1.00 54.77      A16S
ATOM  44677  P   URI  1216     240.896 126.373  -1.720  1.00 45.23      A16S
ATOM  44678  O1P URI  1216     241.475 127.632  -1.161  1.00 50.00      A16S
ATOM  44679  O2P URI  1216     239.960 126.454  -2.867  1.00 50.00      A16S
ATOM  44680  O5' URI  1216     242.087 125.371  -2.071  1.00 45.23      A16S
ATOM  44681  C5' URI  1216     243.113 125.107  -1.125  1.00 45.23      A16S
ATOM  44682  C4' URI  1216     244.050 124.055  -1.655  1.00 45.23      A16S
ATOM  44683  O4' URI  1216     243.380 122.768  -1.690  1.00 45.23      A16S
ATOM  44684  C1' URI  1216     243.906 121.986  -2.759  1.00 45.23      A16S
ATOM  44685  N1  URI  1216     242.813 121.602  -3.674  1.00 50.00      A16S
ATOM  44686  C6  URI  1216     241.615 122.281  -3.696  1.00 50.00      A16S
ATOM  44687  C2  URI  1216     243.030 120.519  -4.528  1.00 50.00      A16S
ATOM  44688  O2  URI  1216     244.068 119.879  -4.546  1.00 50.00      A16S
ATOM  44689  N3  URI  1216     241.983 120.215  -5.358  1.00 50.00      A16S
ATOM  44690  C4  URI  1216     240.772 120.861  -5.432  1.00 50.00      A16S
ATOM  44691  O4  URI  1216     239.978 120.535  -6.307  1.00 50.00      A16S
ATOM  44692  C5  URI  1216     240.616 121.954  -4.520  1.00 50.00      A16S
ATOM  44693  C2' URI  1216     244.968 122.842  -3.443  1.00 45.23      A16S
ATOM  44694  O2' URI  1216     246.219 122.598  -2.854  1.00 45.23      A16S
ATOM  44695  C3' URI  1216     244.494 124.237  -3.092  1.00 45.23      A16S
ATOM  44696  O3' URI  1216     245.558 125.156  -3.226  1.00 45.23      A16S
ATOM  44697  P   ADE  1217     245.706 125.987  -4.591  1.00 51.23      A16S
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ATOM  44698  O1P ADE  1217     246.937 126.801  -4.411  1.00 45.59      A16S
ATOM  44699  O2P ADE  1217     244.419 126.674  -4.864  1.00 45.59      A16S
ATOM  44700  O5' ADE  1217     245.911 124.872  -5.725  1.00 51.23      A16S
ATOM  44701  C5' ADE  1217     247.088 124.079  -5.738  1.00 51.23      A16S
ATOM  44702  C4' ADE  1217     246.989 122.892  -6.694  1.00 51.23      A16S
ATOM  44703  O4' ADE  1217     245.826 122.060  -6.438  1.00 51.23      A16S
ATOM  44704  C1' ADE  1217     245.660 121.170  -7.537  1.00 51.23      A16S
ATOM  44705  N9  ADE  1217     244.270 121.187  -8.011  1.00 45.59      A16S
ATOM  44706  C4  ADE  1217     243.628 120.132  -8.619  1.00 45.59      A16S
ATOM  44707  N3  ADE  1217     244.120 118.903  -8.861  1.00 45.59      A16S
ATOM  44708  C2  ADE  1217     243.213 118.143  -9.469  1.00 45.59      A16S
ATOM  44709  N1  ADE  1217     241.965 118.452  -9.844  1.00 45.59      A16S
ATOM  44710  C6  ADE  1217     241.508 119.700  -9.599  1.00 45.59      A16S
ATOM  44711  N6  ADE  1217     240.275 120.018  -9.992  1.00 45.59      A16S
ATOM  44712  C5  ADE  1217     242.369 120.596  -8.946  1.00 45.59      A16S
ATOM  44713  N7  ADE  1217     242.213 121.911  -8.546  1.00 45.59      A16S
ATOM  44714  C8  ADE  1217     243.361 122.211  -7.990  1.00 45.59      A16S
ATOM  44715  C2' ADE  1217     246.652 121.618  -8.615  1.00 51.23      A16S
ATOM  44716  O2' ADE  1217     247.806 120.834  -8.448  1.00 51.23      A16S
ATOM  44717  C3' ADE  1217     246.938 123.059  -8.206  1.00 51.23      A16S
ATOM  44718  O3' ADE  1217     248.214 123.416  -8.737  1.00 51.23      A16S
ATOM  44719  P   CYT  1218     248.321 124.090 -10.197  1.00 59.54      A16S
ATOM  44720  O1P CYT  1218     249.573 124.875 -10.259  1.00 49.73      A16S
ATOM  44721  O2P CYT  1218     247.035 124.763 -10.484  1.00 49.73      A16S
ATOM  44722  O5' CYT  1218     248.479 122.857 -11.192  1.00 59.54      A16S
ATOM  44723  C5' CYT  1218     249.579 121.969 -11.081  1.00 59.54      A16S
ATOM  44724  C4' CYT  1218     249.293 120.695 -11.835  1.00 59.54      A16S
ATOM  44725  O4' CYT  1218     248.197 119.994 -11.204  1.00 59.54      A16S
ATOM  44726  C1' CYT  1218     247.384 119.380 -12.189  1.00 59.54      A16S
ATOM  44727  N1  CYT  1218     246.033 119.967 -12.108  1.00 49.73      A16S
ATOM  44728  C6  CYT  1218     245.866 121.271 -11.736  1.00 49.73      A16S
ATOM  44729  C2  CYT  1218     244.923 119.186 -12.454  1.00 49.73      A16S
ATOM  44730  O2  CYT  1218     245.082 117.980 -12.691  1.00 49.73      A16S
ATOM  44731  N3  CYT  1218     243.702 119.763 -12.502  1.00 49.73      A16S
ATOM  44732  C4  CYT  1218     243.561 121.054 -12.184  1.00 49.73      A16S
ATOM  44733  N4  CYT  1218     242.350 121.596 -12.287  1.00 49.73      A16S
ATOM  44734  C5  CYT  1218     244.660 121.848 -11.758  1.00 49.73      A16S
ATOM  44735  C2' CYT  1218     248.048 119.627 -13.550  1.00 59.54      A16S
ATOM  44736  O2' CYT  1218     248.851 118.533 -13.938  1.00 59.54      A16S
ATOM  44737  C3' CYT  1218     248.876 120.876 -13.283  1.00 59.54      A16S
ATOM  44738  O3' CYT  1218     250.051 120.877 -14.082  1.00 59.54      A16S
ATOM  44739  P   ADE  1219     249.943 120.891 -15.683  1.00 49.79      A16S
ATOM  44740  O1P ADE  1219     248.547 120.621 -16.080  1.00 66.41      A16S
ATOM  44741  O2P ADE  1219     251.023 120.012 -16.199  1.00 66.41      A16S
ATOM  44742  O5' ADE  1219     250.298 122.400 -16.050  1.00 49.79      A16S
ATOM  44743  C5' ADE  1219     249.279 123.371 -16.149  1.00 49.79      A16S
ATOM  44744  C4' ADE  1219     249.596 124.573 -15.287  1.00 49.79      A16S
ATOM  44745  O4' ADE  1219     250.285 124.141 -14.081  1.00 49.79      A16S
ATOM  44746  C1' ADE  1219     250.991 125.248 -13.532  1.00 49.79      A16S
ATOM  44747  N9  ADE  1219     252.398 124.898 -13.355  1.00 66.41      A16S
ATOM  44748  C4  ADE  1219     253.358 125.762 -12.890  1.00 66.41      A16S
ATOM  44749  N3  ADE  1219     253.184 127.033 -12.492  1.00 66.41      A16S
ATOM  44750  C2  ADE  1219     254.341 127.568 -12.114  1.00 66.41      A16S
ATOM  44751  N1  ADE  1219     255.558 127.019 -12.097  1.00 66.41      A16S
ATOM  44752  C6  ADE  1219     255.696 125.741 -12.508  1.00 66.41      A16S
ATOM  44753  N6  ADE  1219     256.906 125.198 -12.503  1.00 66.41      A16S
ATOM  44754  C5  ADE  1219     254.545 125.060 -12.923  1.00 66.41      A16S
ATOM  44755  N7  ADE  1219     254.338 123.767 -13.381  1.00 66.41      A16S
ATOM  44756  C8  ADE  1219     253.049 123.720 -13.618  1.00 66.41      A16S
ATOM  44757  C2' ADE  1219     250.846 126.395 -14.527  1.00 49.79      A16S
ATOM  44758  O2' ADE  1219     249.757 127.177 -14.105  1.00 49.79      A16S
ATOM  44759  C3' ADE  1219     250.536 125.642 -15.813  1.00 49.79      A16S
ATOM  44760  O3' ADE  1219     249.886 126.516 -16.727  1.00 49.79      A16S
ATOM  44761  P   ADE  1220     250.753 127.312 -17.815  1.00 57.26      A16S
ATOM  44762  O1P ADE  1220     249.855 127.930 -18.808  1.00 47.80      A16S
ATOM  44763  O2P ADE  1220     251.786 126.350 -18.259  1.00 47.80      A16S
ATOM  44764  O5' ADE  1220     251.446 128.486 -16.983  1.00 57.26      A16S
ATOM  44765  C5' ADE  1220     251.200 129.875 -17.274  1.00 57.26      A16S
ATOM  44766  C4' ADE  1220     252.513 130.628 -17.322  1.00 57.26      A16S
ATOM  44767  O4' ADE  1220     253.435 129.897 -16.489  1.00 57.26      A16S
ATOM  44768  C1' ADE  1220     254.727 130.175 -16.941  1.00 57.26      A16S
ATOM  44769  N9  ADE  1220     255.658 129.136 -16.544  1.00 47.80      A16S
ATOM  44770  C4  ADE  1220     257.006 129.361 -16.469  1.00 47.80      A16S
ATOM  44771  N3  ADE  1220     257.647 130.516 -16.728  1.00 47.80      A16S
ATOM  44772  C2  ADE  1220     258.956 130.370 -16.559  1.00 47.80      A16S
ATOM  44773  N1  ADE  1220     259.648 129.284 -16.181  1.00 47.80      A16S
ATOM  44774  C6  ADE  1220     258.971 128.142 -15.918  1.00 47.80      A16S
ATOM  44775  N6  ADE  1220     259.659 127.068 -15.518  1.00 47.80      A16S
ATOM  44776  C5  ADE  1220     257.568 128.164 -16.076  1.00 47.80      A16S
ATOM  44777  N7  ADE  1220     256.584 127.196 -15.906  1.00 47.80      A16S
ATOM  44778  C8  ADE  1220     255.470 127.829 -16.191  1.00 47.80      A16S
ATOM  44779  C2' ADE  1220     254.672 130.462 -18.437  1.00 57.26      A16S
ATOM  44780  O2' ADE  1220     255.487 131.576 -18.721  1.00 57.26      A16S
ATOM  44781  C3' ADE  1220     253.179 130.685 -18.700  1.00 57.26      A16S
ATOM  44782  O3' ADE  1220     253.163 131.999 -19.281  1.00 57.26      A16S
ATOM  44783  P   URI  1221     251.795 132.809 -19.485  1.00 56.77      A16S
ATOM  44784  O1P URI  1221     250.778 131.884 -20.040  1.00 62.78      A16S
ATOM  44785  O2P URI  1221     252.132 134.045 -20.223  1.00 62.78      A16S
ATOM  44786  O5' URI  1221     251.363 133.204 -18.006  1.00 56.77      A16S
ATOM  44787  C5' URI  1221     251.497 134.544 -17.541  1.00 56.77      A16S
ATOM  44788  C4' URI  1221     250.136 135.146 -17.244  1.00 56.77      A16S
ATOM  44789  O4' URI  1221     249.328 135.178 -18.427  1.00 56.77      A16S
ATOM  44790  C1' URI  1221     247.996 135.305 -18.036  1.00 56.77      A16S
ATOM  44791  N1  URI  1221     247.127 134.913 -19.149  1.00 62.78      A16S
ATOM  44792  C6  URI  1221     247.461 133.903 -20.009  1.00 62.78      A16S
ATOM  44793  C2  URI  1221     245.982 135.650 -19.333  1.00 62.78      A16S
ATOM  44794  O2  URI  1221     245.622 136.505 -18.553  1.00 62.78      A16S
ATOM  44795  N3  URI  1221     245.275 135.353 -20.466  1.00 62.78      A16S
ATOM  44796  C4  URI  1221     245.584 134.399 -21.402  1.00 62.78      A16S
ATOM  44797  O4  URI  1221     244.944 134.359 -22.446  1.00 62.78      A16S
ATOM  44798  C5  URI  1221     246.748 133.627 -21.105  1.00 62.78      A16S
ATOM  44799  C2' URI  1221     247.830 134.736 -16.623  1.00 56.77      A16S
ATOM  44800  O2' URI  1221     247.192 135.726 -15.855  1.00 56.77      A16S
ATOM  44801  C3' URI  1221     249.283 134.477 -16.176  1.00 56.77      A16S
ATOM  44802  O3' URI  1221     249.607 135.241 -15.010  1.00 56.77      A16S
ATOM  44803  P   GUA  1222     249.170 134.755 -13.542  1.00 51.54      A16S
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ATOM	44804	O1P	GUA	1222	247.708	134.497	-13.545	1.00	66.76	A16S	ATOM	44857	O2	CYT	1224	260.602	133.301	-6.715	1.00	55.98	A16S
ATOM	44805	O2P	GUA	1222	249.718	135.750	-12.595	1.00	66.76	A16S	ATOM	44858	N3	CYT	1224	258.919	134.449	-7.707	1.00	55.98	A16S
ATOM	44806	O5'	GUA	1222	249.956	133.387	-13.321	1.00	51.54	A16S	ATOM	44859	C4	CYT	1224	257.610	134.542	-7.937	1.00	55.98	A16S
ATOM	44807	C5'	GUA	1222	249.255	132.162	-13.254	1.00	51.54	A16S	ATOM	44860	N4	CYT	1224	257.174	135.546	-8.702	1.00	55.98	A16S
ATOM	44808	C4'	GUA	1222	250.171	131.055	-12.814	1.00	51.54	A16S	ATOM	44861	C5	CYT	1224	256.685	133.606	-7.399	1.00	55.98	A16S
ATOM	44809	O4'	GUA	1222	251.143	130.784	-13.854	1.00	51.54	A16S	ATOM	44862	C2'	CYT	1224	259.347	131.892	-4.148	1.00	60.14	A16S
ATOM	44810	C1'	GUA	1222	252.368	130.401	-13.263	1.00	51.54	A16S	ATOM	44863	O2'	CYT	1224	260.496	131.206	-3.690	1.00	60.14	A16S
ATOM	44811	N9	GUA	1222	253.388	131.353	-13.690	1.00	66.76	A16S	ATOM	44864	C3'	CYT	1224	258.065	131.484	-3.425	1.00	60.14	A16S
ATOM	44812	C4	GUA	1222	254.748	131.208	-13.569	1.00	66.76	A16S	ATOM	44865	O3'	CYT	1224	258.258	131.248	-2.029	1.00	60.14	A16S
ATOM	44813	N3	GUA	1222	255.387	130.157	-13.019	1.00	66.76	A16S	ATOM	44866	P	CYT	1225	257.907	132.405	-0.968	1.00	103.33	A16S
ATOM	44814	C2	GUA	1222	256.695	130.304	-13.058	1.00	66.76	A16S	ATOM	44867	O1P	CYT	1225	257.824	131.744	0.359	1.00	72.42	A16S
ATOM	44815	N2	GUA	1222	257.479	129.354	-12.561	1.00	66.76	A16S	ATOM	44868	O2P	CYT	1225	256.764	133.206	-1.465	1.00	72.42	A16S
ATOM	44816	N1	GUA	1222	257.328	131.395	-13.589	1.00	66.76	A16S	ATOM	44869	O5'	CYT	1225	259.184	133.355	-0.994	1.00	103.33	A16S
ATOM	44817	C6	GUA	1222	256.690	132.491	-14.155	1.00	66.76	A16S	ATOM	44870	C5'	CYT	1225	260.402	132.945	-0.385	1.00	103.33	A16S
ATOM	44818	O6	GUA	1222	257.354	133.432	-14.596	1.00	66.76	A16S	ATOM	44871	C4'	CYT	1225	261.490	133.945	-0.674	1.00	103.33	A16S
ATOM	44819	C5	GUA	1222	255.288	132.345	-14.128	1.00	66.76	A16S	ATOM	44872	O4'	CYT	1225	261.771	133.943	-2.097	1.00	103.33	A16S
ATOM	44820	N7	GUA	1222	254.290	133.189	-14.590	1.00	66.76	A16S	ATOM	44873	C1'	CYT	1225	262.132	135.247	-2.510	1.00	103.33	A16S
ATOM	44821	C8	GUA	1222	253.182	132.562	-14.307	1.00	66.76	A16S	ATOM	44874	N1	CYT	1225	261.112	135.725	-3.439	1.00	72.42	A16S
ATOM	44822	C2'	GUA	1222	252.141	130.331	-11.747	1.00	51.54	A16S	ATOM	44875	C6	CYT	1225	259.847	135.208	-3.423	1.00	72.42	A16S
ATOM	44823	O2'	GUA	1222	251.761	129.015	-11.394	1.00	51.54	A16S	ATOM	44876	C2	CYT	1225	261.452	136.736	-4.334	1.00	72.42	A16S
ATOM	44824	C3'	GUA	1222	250.988	131.313	-11.561	1.00	51.54	A16S	ATOM	44877	O2	CYT	1225	262.612	137.159	-4.337	1.00	72.42	A16S
ATOM	44825	O3'	GUA	1222	250.209	130.991	-10.411	1.00	51.54	A16S	ATOM	44878	N3	CYT	1225	260.511	137.224	-5.174	1.00	72.42	A16S
ATOM	44826	P	CYT	1223	250.664	131.498	-8.951	1.00	47.06	A16S	ATOM	44879	C4	CYT	1225	259.274	136.723	-5.147	1.00	72.42	A16S
ATOM	44827	O1P	CYT	1223	249.655	131.030	-7.971	1.00	56.63	A16S	ATOM	44880	N4	CYT	1225	258.378	137.232	-5.988	1.00	72.42	A16S
ATOM	44828	O2P	CYT	1223	251.000	132.937	-9.020	1.00	56.63	A16S	ATOM	44881	C5	CYT	1225	258.903	135.674	-4.252	1.00	72.42	A16S
ATOM	44829	O5'	CYT	1223	251.982	130.668	-8.656	1.00	47.06	A16S	ATOM	44882	C2'	CYT	1225	262.163	136.117	-1.257	1.00	103.33	A16S
ATOM	44830	C5'	CYT	1223	251.887	129.307	-8.283	1.00	47.06	A16S	ATOM	44883	O2'	CYT	1225	263.461	136.093	-0.702	1.00	103.33	A16S
ATOM	44831	C4'	CYT	1223	253.245	128.773	-7.934	1.00	47.06	A16S	ATOM	44884	C3'	CYT	1225	261.152	135.396	-0.383	1.00	103.33	A16S
ATOM	44832	O4'	CYT	1223	254.043	128.731	-9.141	1.00	47.06	A16S	ATOM	44885	O3'	CYT	1225	261.312	135.721	0.993	1.00	103.33	A16S
ATOM	44833	C1'	CYT	1223	255.386	129.064	-8.828	1.00	47.06	A16S	ATOM	44886	P	ADE	1226	260.599	137.036	1.584	1.00	78.83	A16S
ATOM	44834	N1	CYT	1223	255.697	130.349	-9.468	1.00	56.63	A16S	ATOM	44887	O1P	ADE	1226	260.993	137.140	3.015	1.00	105.07	A16S
ATOM	44835	C6	CYT	1223	254.704	131.166	-9.938	1.00	56.63	A16S	ATOM	44888	O2P	ADE	1226	259.157	136.999	1.220	1.00	105.07	A16S
ATOM	44836	C2	CYT	1223	257.029	130.722	-9.582	1.00	56.63	A16S	ATOM	44889	O5'	ADE	1226	261.287	138.229	0.783	1.00	78.83	A16S
ATOM	44837	O2	CYT	1223	257.899	129.952	-9.144	1.00	56.63	A16S	ATOM	44890	C5'	ADE	1226	262.661	138.519	0.979	1.00	78.83	A16S
ATOM	44838	N3	CYT	1223	257.337	131.907	-10.161	1.00	56.63	A16S	ATOM	44891	C4'	ADE	1226	263.069	139.702	0.146	1.00	78.83	A16S
ATOM	44839	C4	CYT	1223	256.364	132.701	-10.616	1.00	56.63	A16S	ATOM	44892	O4'	ADE	1226	262.828	139.396	-1.249	1.00	78.83	A16S
ATOM	44840	N4	CYT	1223	256.713	133.859	-11.182	1.00	56.63	A16S	ATOM	44893	C1'	ADE	1226	262.519	140.589	-1.950	1.00	78.83	A16S
ATOM	44841	C5	CYT	1223	254.989	132.340	-10.510	1.00	56.63	A16S	ATOM	44894	N9	ADE	1226	261.223	140.415	-2.603	1.00	105.07	A16S
ATOM	44842	C2'	CYT	1223	255.469	129.157	-7.305	1.00	47.06	A16S	ATOM	44895	C4	ADE	1226	260.723	141.196	-3.616	1.00	105.07	A16S
ATOM	44843	O2'	CYT	1223	255.740	127.877	-6.762	1.00	47.06	A16S	ATOM	44896	N3	ADE	1226	261.319	142.248	-4.201	1.00	105.07	A16S
ATOM	44844	C3'	CYT	1223	254.064	129.632	-6.982	1.00	47.06	A16S	ATOM	44897	C2	ADE	1226	260.534	142.770	-5.139	1.00	105.07	A16S
ATOM	44845	O3'	CYT	1223	253.721	129.392	-5.621	1.00	47.06	A16S	ATOM	44898	N1	ADE	1226	259.313	142.391	-5.528	1.00	105.07	A16S
ATOM	44846	P	CYT	1224	253.834	130.584	-4.550	1.00	60.14	A16S	ATOM	44899	C6	ADE	1226	258.742	141.329	-4.917	1.00	105.07	A16S
ATOM	44847	O1P	CYT	1224	253.357	130.056	-3.247	1.00	55.98	A16S	ATOM	44900	N6	ADE	1226	257.520	140.957	-5.297	1.00	105.07	A16S
ATOM	44848	O2P	CYT	1224	253.216	131.795	-5.131	1.00	55.98	A16S	ATOM	44901	C5	ADE	1226	259.476	140.683	-3.908	1.00	105.07	A16S
ATOM	44849	O5'	CYT	1224	255.400	130.825	-4.418	1.00	60.14	A16S	ATOM	44902	N7	ADE	1226	259.195	139.588	-3.101	1.00	105.07	A16S
ATOM	44850	C5'	CYT	1224	256.264	129.759	-4.022	1.00	60.14	A16S	ATOM	44903	C8	ADE	1226	260.260	139.470	-2.348	1.00	105.07	A16S
ATOM	44851	C4'	CYT	1224	257.713	130.184	-4.122	1.00	60.14	A16S	ATOM	44904	C2'	ADE	1226	262.530	141.732	-0.931	1.00	78.83	A16S
ATOM	44852	O4'	CYT	1224	258.075	130.416	-5.509	1.00	60.14	A16S	ATOM	44905	O2'	ADE	1226	263.782	142.389	-0.960	1.00	78.83	A16S
ATOM	44853	C1'	CYT	1224	259.046	131.440	-5.578	1.00	60.14	A16S	ATOM	44906	C3'	ADE	1226	262.275	140.974	0.367	1.00	78.83	A16S
ATOM	44854	N1	CYT	1224	258.511	132.515	-6.408	1.00	55.98	A16S	ATOM	44907	O3'	ADE	1226	262.720	141.689	1.515	1.00	78.83	A16S
ATOM	44855	C6	CYT	1224	257.175	132.616	-6.647	1.00	55.98	A16S	ATOM	44908	P	CYT	1227	261.674	142.592	2.338	1.00	76.63	A16S
ATOM	44856	C2	CYT	1224	259.395	133.437	-6.947	1.00	55.98	A16S	ATOM	44909	O1P	CYT	1227	262.357	143.010	3.584	1.00	98.30	A16S

ATOM	44910	O2P	CYT	1227	260.376	141.872	2.424	1.00	98.30	A16S	ATOM	44963	C5	ADE	1229	249.954	146.776	-2.032	1.00	77.99	A16S
ATOM	44911	O5'	CYT	1227	261.477	143.878	1.420	1.00	76.63	A16S	ATOM	44964	N7	ADE	1229	251.031	146.837	-1.161	1.00	77.99	A16S
ATOM	44912	C5'	CYT	1227	262.541	144.796	1.230	1.00	76.63	A16S	ATOM	44965	C8	ADE	1229	251.363	148.105	-1.163	1.00	77.99	A16S
ATOM	44913	C4'	CYT	1227	262.180	145.801	0.169	1.00	76.63	A16S	ATOM	44966	C2'	ADE	1229	249.887	151.198	-1.281	1.00	88.13	A16S
ATOM	44914	O4'	CYT	1227	262.004	145.112	-1.096	1.00	76.63	A16S	ATOM	44967	O2'	ADE	1229	249.435	152.335	-1.989	1.00	88.13	A16S
ATOM	44915	C1'	CYT	1227	260.993	145.762	-1.855	1.00	76.63	A16S	ATOM	44968	C3'	ADE	1229	250.953	151.599	-0.271	1.00	88.13	A16S
ATOM	44916	N1	CYT	1227	259.881	144.817	-2.034	1.00	98.30	A16S	ATOM	44969	O3'	ADE	1229	250.600	152.815	0.377	1.00	88.13	A16S
ATOM	44917	C6	CYT	1227	259.776	143.702	-1.250	1.00	98.30	A16S	ATOM	44970	P	CYT	1230	249.278	152.879	1.295	1.00	80.99	A16S
ATOM	44918	C2	CYT	1227	258.924	145.082	-3.018	1.00	98.30	A16S	ATOM	44971	O1P	CYT	1230	249.146	154.240	1.877	1.00	56.30	A16S
ATOM	44919	O2	CYT	1227	259.047	146.098	-3.712	1.00	98.30	A16S	ATOM	44972	O2P	CYT	1230	249.241	151.697	2.196	1.00	56.30	A16S
ATOM	44920	N3	CYT	1227	257.892	144.228	-3.183	1.00	98.30	A16S	ATOM	44973	O5'	CYT	1230	248.097	152.761	0.242	1.00	80.99	A16S
ATOM	44921	C4	CYT	1227	257.793	143.146	-2.407	1.00	98.30	A16S	ATOM	44974	C5'	CYT	1230	246.780	152.518	0.680	1.00	80.99	A16S
ATOM	44922	N4	CYT	1227	256.751	142.333	-2.598	1.00	98.30	A16S	ATOM	44975	C4'	CYT	1230	245.848	152.450	-0.493	1.00	80.99	A16S
ATOM	44923	C5	CYT	1227	258.757	142.849	-1.399	1.00	98.30	A16S	ATOM	44976	O4'	CYT	1230	246.441	151.651	-1.549	1.00	80.99	A16S
ATOM	44924	C2'	CYT	1227	260.562	146.991	-1.055	1.00	76.63	A16S	ATOM	44977	C1'	CYT	1230	245.511	150.678	-1.982	1.00	80.99	A16S
ATOM	44925	O2'	CYT	1227	261.335	148.114	-1.425	1.00	76.63	A16S	ATOM	44978	N1	CYT	1230	245.937	149.404	-1.393	1.00	56.30	A16S
ATOM	44926	C3'	CYT	1227	260.857	146.519	0.359	1.00	76.63	A16S	ATOM	44979	C6	CYT	1230	246.919	149.378	-0.443	1.00	56.30	A16S
ATOM	44927	O3'	CYT	1227	260.952	147.595	1.275	1.00	76.63	A16S	ATOM	44980	C2	CYT	1230	245.331	148.223	-1.813	1.00	56.30	A16S
ATOM	44928	P	URI	1228	259.714	147.913	2.248	1.00	79.35	A16S	ATOM	44981	O2	CYT	1230	244.447	148.279	-2.690	1.00	56.30	A16S
ATOM	44929	O1P	URI	1228	260.163	148.955	3.204	1.00	79.93	A16S	ATOM	44982	N3	CYT	1230	245.726	147.050	-1.260	1.00	56.30	A16S
ATOM	44930	O2P	URI	1228	259.167	146.631	2.768	1.00	79.93	A16S	ATOM	44983	C4	CYT	1230	246.686	147.041	-0.334	1.00	56.30	A16S
ATOM	44931	O5'	URI	1228	258.649	148.567	1.266	1.00	79.35	A16S	ATOM	44984	N4	CYT	1230	247.048	145.870	0.181	1.00	56.30	A16S
ATOM	44932	C5'	URI	1228	259.022	149.646	0.424	1.00	79.35	A16S	ATOM	44985	C5	CYT	1230	247.320	148.232	0.104	1.00	56.30	A16S
ATOM	44933	C4'	URI	1228	257.977	149.865	-0.639	1.00	79.35	A16S	ATOM	44986	C2'	CYT	1230	244.147	151.141	-1.466	1.00	80.99	A16S
ATOM	44934	O4'	URI	1228	257.985	148.760	-1.588	1.00	79.35	A16S	ATOM	44987	O2'	CYT	1230	243.603	152.116	-2.328	1.00	80.99	A16S
ATOM	44935	C1'	URI	1228	256.659	148.492	-2.020	1.00	79.35	A16S	ATOM	44988	C3'	CYT	1230	244.554	151.750	-0.140	1.00	80.99	A16S
ATOM	44936	N1	URI	1228	256.264	147.176	-1.492	1.00	79.93	A16S	ATOM	44989	O3'	CYT	1230	243.646	152.690	0.388	1.00	80.99	A16S
ATOM	44937	C6	URI	1228	256.931	146.605	-0.434	1.00	79.93	A16S	ATOM	44990	P	ADE	1231	243.414	152.733	1.968	1.00	77.41	A16S
ATOM	44938	C2	URI	1228	255.196	146.531	-2.084	1.00	79.93	A16S	ATOM	44991	O1P	ADE	1231	242.937	154.108	2.282	1.00	50.68	A16S
ATOM	44939	O2	URI	1228	254.586	146.997	-3.028	1.00	79.93	A16S	ATOM	44992	O2P	ADE	1231	244.649	152.212	2.601	1.00	50.68	A16S
ATOM	44940	N3	URI	1228	254.867	145.318	-1.527	1.00	79.93	A16S	ATOM	44993	O5'	ADE	1231	242.251	151.666	2.201	1.00	77.41	A16S
ATOM	44941	C4	URI	1228	255.485	144.697	-0.461	1.00	79.93	A16S	ATOM	44994	C5'	ADE	1231	241.383	151.343	1.130	1.00	77.41	A16S
ATOM	44942	O4	URI	1228	255.047	143.624	-0.043	1.00	79.93	A16S	ATOM	44995	C4'	ADE	1231	240.366	150.294	1.519	1.00	77.41	A16S
ATOM	44943	C5	URI	1228	256.587	145.420	0.088	1.00	79.93	A16S	ATOM	44996	O4'	ADE	1231	240.910	148.957	1.520	1.00	77.41	A16S
ATOM	44944	C2'	URI	1228	255.798	149.619	-1.447	1.00	79.35	A16S	ATOM	44997	C1'	ADE	1231	239.941	148.108	2.101	1.00	77.41	A16S
ATOM	44945	O2'	URI	1228	255.834	150.733	-2.320	1.00	79.35	A16S	ATOM	44998	N9	ADE	1231	240.573	147.118	2.964	1.00	50.68	A16S
ATOM	44946	C3'	URI	1228	256.542	149.901	-0.153	1.00	79.35	A16S	ATOM	44999	C4	ADE	1231	240.137	145.823	3.059	1.00	50.68	A16S
ATOM	44947	O3'	URI	1228	256.194	151.153	0.424	1.00	79.35	A16S	ATOM	45000	N3	ADE	1231	239.118	145.268	2.390	1.00	50.68	A16S
ATOM	44948	P	ADE	1229	254.943	151.239	1.430	1.00	88.13	A16S	ATOM	45001	C2	ADE	1231	238.977	143.997	2.734	1.00	50.68	A16S
ATOM	44949	O1P	ADE	1229	254.876	152.637	1.920	1.00	77.99	A16S	ATOM	45002	N1	ADE	1231	239.681	143.273	3.606	1.00	50.68	A16S
ATOM	44950	O2P	ADE	1229	255.012	150.119	2.404	1.00	77.99	A16S	ATOM	45003	C6	ADE	1231	240.693	143.863	4.264	1.00	50.68	A16S
ATOM	44951	O5'	ADE	1229	253.699	151.028	0.463	1.00	88.13	A16S	ATOM	45004	N6	ADE	1231	241.381	143.135	5.141	1.00	50.68	A16S
ATOM	44952	C5'	ADE	1229	253.512	151.933	-0.611	1.00	88.13	A16S	ATOM	45005	C5	ADE	1231	240.953	145.212	3.983	1.00	50.68	A16S
ATOM	44953	C4'	ADE	1229	252.130	151.808	-1.197	1.00	88.13	A16S	ATOM	45006	N7	ADE	1231	241.899	146.102	4.461	1.00	50.68	A16S
ATOM	44954	O4'	ADE	1229	252.045	150.687	-2.105	1.00	88.13	A16S	ATOM	45007	C8	ADE	1231	241.632	147.218	3.821	1.00	50.68	A16S
ATOM	44955	C1'	ADE	1229	250.690	150.314	-2.241	1.00	88.13	A16S	ATOM	45008	C2'	ADE	1231	238.939	148.998	2.838	1.00	77.41	A16S
ATOM	44956	N9	ADE	1229	250.581	148.881	-1.981	1.00	77.99	A16S	ATOM	45009	O2'	ADE	1231	237.763	149.033	2.061	1.00	77.41	A16S
ATOM	44957	C4	ADE	1229	249.660	148.029	-2.537	1.00	77.99	A16S	ATOM	45010	C3'	ADE	1231	239.662	150.343	2.855	1.00	77.41	A16S
ATOM	44958	N3	ADE	1229	248.683	148.342	-3.405	1.00	77.99	A16S	ATOM	45011	O3'	ADE	1231	238.724	151.403	2.898	1.00	77.41	A16S
ATOM	44959	C2	ADE	1229	247.994	147.257	-3.743	1.00	77.99	A16S	ATOM	45012	P	ADE	1232	238.094	151.856	4.308	1.00	73.41	A16S
ATOM	44960	N1	ADE	1229	248.159	145.988	-3.344	1.00	77.99	A16S	ATOM	45013	O1P	ADE	1232	237.435	153.165	4.057	1.00	59.73	A16S
ATOM	44961	C6	ADE	1229	249.154	145.708	-2.472	1.00	77.99	A16S	ATOM	45014	O2P	ADE	1232	239.108	151.733	5.387	1.00	59.73	A16S
ATOM	44962	N6	ADE	1229	249.327	144.439	-2.077	1.00	77.99	A16S	ATOM	45015	O5'	ADE	1232	236.960	150.779	4.609	1.00	73.41	A16S

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ATOM  45016  C5' ADE  1232     235.795 150.722   3.805  1.00 73.41      A16S
ATOM  45017  C4' ADE  1232     235.072 149.429   4.035  1.00 73.41      A16S
ATOM  45018  O4' ADE  1232     235.965 148.323   3.761  1.00 73.41      A16S
ATOM  45019  C1' ADE  1232     235.668 147.249   4.630  1.00 73.41      A16S
ATOM  45020  N9  ADE  1232     236.880 146.924   5.380  1.00 59.73      A16S
ATOM  45021  C4  ADE  1232     237.275 145.679   5.814  1.00 59.73      A16S
ATOM  45022  N3  ADE  1232     236.626 144.514   5.657  1.00 59.73      A16S
ATOM  45023  C2  ADE  1232     237.325 143.510   6.196  1.00 59.73      A16S
ATOM  45024  N1  ADE  1232     238.507 143.539   6.827  1.00 59.73      A16S
ATOM  45025  C6  ADE  1232     239.127 144.727   6.973  1.00 59.73      A16S
ATOM  45026  N6  ADE  1232     240.297 144.756   7.609  1.00 59.73      A16S
ATOM  45027  C5  ADE  1232     238.494 145.866   6.442  1.00 59.73      A16S
ATOM  45028  N7  ADE  1232     238.854 147.202   6.415  1.00 59.73      A16S
ATOM  45029  C8  ADE  1232     237.863 147.786   5.779  1.00 59.73      A16S
ATOM  45030  C2' ADE  1232     234.480 147.688   5.487  1.00 73.41      A16S
ATOM  45031  O2' ADE  1232     233.289 147.331   4.819  1.00 73.41      A16S
ATOM  45032  C3' ADE  1232     234.634 149.197   5.464  1.00 73.41      A16S
ATOM  45033  O3' ADE  1232     233.380 149.838   5.652  1.00 73.41      A16S
ATOM  45034  P   ADE  1233     232.882 150.204   7.133  1.00 62.78      A16S
ATOM  45035  O1P ADE  1233     231.635 150.987   6.968  1.00 63.80      A16S
ATOM  45036  O2P ADE  1233     234.018 150.765   7.912  1.00 63.80      A16S
ATOM  45037  O5' ADE  1233     232.508 148.803   7.785  1.00 62.78      A16S
ATOM  45038  C5' ADE  1233     231.472 148.002   7.245  1.00 62.78      A16S
ATOM  45039  C4' ADE  1233     231.619 146.583   7.730  1.00 62.78      A16S
ATOM  45040  O4' ADE  1233     232.942 146.101   7.379  1.00 62.78      A16S
ATOM  45041  C1' ADE  1233     233.395 145.188   8.362  1.00 62.78      A16S
ATOM  45042  N9  ADE  1233     234.694 145.649   8.852  1.00 63.80      A16S
ATOM  45043  C4  ADE  1233     235.664 144.851   9.407  1.00 63.80      A16S
ATOM  45044  N3  ADE  1233     235.600 143.525   9.628  1.00 63.80      A16S
ATOM  45045  C2  ADE  1233     236.734 143.083  10.160  1.00 63.80      A16S
ATOM  45046  N1  ADE  1233     237.842 143.762  10.471  1.00 63.80      A16S
ATOM  45047  C6  ADE  1233     237.873 145.090  10.235  1.00 63.80      A16S
ATOM  45048  N6  ADE  1233     238.979 145.760  10.545  1.00 63.80      A16S
ATOM  45049  C5  ADE  1233     236.729 145.683   9.675  1.00 63.80      A16S
ATOM  45050  N7  ADE  1233     236.431 146.990   9.314  1.00 63.80      A16S
ATOM  45051  C8  ADE  1233     235.213 146.917   8.838  1.00 63.80      A16S
ATOM  45052  C2' ADE  1233     232.311 145.092   9.431  1.00 62.78      A16S
ATOM  45053  O2' ADE  1233     231.495 143.977   9.153  1.00 62.78      A16S
ATOM  45054  C3' ADE  1233     231.586 146.414   9.232  1.00 62.78      A16S
ATOM  45055  O3' ADE  1233     230.255 146.362   9.701  1.00 62.78      A16S
ATOM  45056  P   GUA  1234     229.976 146.564  11.262  1.00 62.31      A16S
ATOM  45057  O1P GUA  1234     228.498 146.660  11.447  1.00 56.98      A16S
ATOM  45058  O2P GUA  1234     230.852 147.671  11.722  1.00 56.98      A16S
ATOM  45059  O5' GUA  1234     230.515 145.205  11.885  1.00 62.31      A16S
ATOM  45060  C5' GUA  1234     231.061 145.156  13.184  1.00 62.31      A16S
ATOM  45061  C4' GUA  1234     231.834 143.883  13.340  1.00 62.31      A16S
ATOM  45062  O4' GUA  1234     232.958 143.912  12.430  1.00 62.31      A16S
ATOM  45063  C1' GUA  1234     234.071 143.264  13.029  1.00 62.31      A16S
ATOM  45064  N9  GUA  1234     235.137 144.249  13.185  1.00 56.98      A16S
ATOM  45065  C4  GUA  1234     236.387 144.030  13.708  1.00 56.98      A16S
ATOM  45066  N3  GUA  1234     236.861 142.855  14.176  1.00 56.98      A16S
ATOM  45067  C2  GUA  1234     238.103 142.964  14.612  1.00 56.98      A16S
ATOM  45068  N2  GUA  1234     238.733 141.897  15.120  1.00 56.98      A16S
ATOM  45069  N1  GUA  1234     238.817 144.127  14.586  1.00 56.98      A16S
ATOM  45070  C6  GUA  1234     238.345 145.344  14.106  1.00 56.98      A16S
ATOM  45071  O6  GUA  1234     239.071 146.336  14.126  1.00 56.98      A16S
ATOM  45072  C5  GUA  1234     237.024 145.245  13.642  1.00 56.98      A16S
ATOM  45073  N7  GUA  1234     236.195 146.210  13.090  1.00 56.98      A16S
ATOM  45074  C8  GUA  1234     235.088 145.575  12.835  1.00 56.98      A16S
ATOM  45075  C2' GUA  1234     233.594 142.691  14.365  1.00 62.31      A16S
ATOM  45076  O2' GUA  1234     233.158 141.357  14.202  1.00 62.31      A16S
ATOM  45077  C3' GUA  1234     232.456 143.642  14.698  1.00 62.31      A16S
ATOM  45078  O3' GUA  1234     231.521 143.026  15.560  1.00 62.31      A16S
ATOM  45079  P   CYT  1235     231.482 143.453  17.091  1.00 65.74      A16S
ATOM  45080  O1P CYT  1235     230.285 142.821  17.702  1.00 63.83      A16S
ATOM  45081  O2P CYT  1235     231.642 144.932  17.108  1.00 63.83      A16S
ATOM  45082  O5' CYT  1235     232.783 142.781  17.704  1.00 65.74      A16S
ATOM  45083  C5' CYT  1235     232.867 141.372  17.824  1.00 65.74      A16S
ATOM  45084  C4' CYT  1235     234.262 140.966  18.227  1.00 65.74      A16S
ATOM  45085  O4' CYT  1235     235.196 141.438  17.221  1.00 65.74      A16S
ATOM  45086  C1' CYT  1235     236.417 141.797  17.839  1.00 65.74      A16S
ATOM  45087  N1  CYT  1235     236.638 143.222  17.595  1.00 63.83      A16S
ATOM  45088  C6  CYT  1235     235.617 144.026  17.177  1.00 63.83      A16S
ATOM  45089  C2  CYT  1235     237.917 143.739  17.774  1.00 63.83      A16S
ATOM  45090  O2  CYT  1235     238.813 142.979  18.185  1.00 63.83      A16S
ATOM  45091  N3  CYT  1235     238.145 145.047  17.496  1.00 63.83      A16S
ATOM  45092  C4  CYT  1235     237.142 145.820  17.060  1.00 63.83      A16S
ATOM  45093  N4  CYT  1235     237.406 147.098  16.771  1.00 63.83      A16S
ATOM  45094  C5  CYT  1235     235.823 145.316  16.895  1.00 63.83      A16S
ATOM  45095  C2' CYT  1235     236.292 141.433  19.315  1.00 65.74      A16S
ATOM  45096  O2' CYT  1235     236.707 140.091  19.490  1.00 65.74      A16S
ATOM  45097  C3' CYT  1235     234.792 141.572  19.516  1.00 65.74      A16S
ATOM  45098  O3' CYT  1235     234.349 140.845  20.661  1.00 65.74      A16S
ATOM  45099  P   GUA  1236     233.956 141.644  21.996  1.00 74.54      A16S
ATOM  45100  O1P GUA  1236     233.136 140.738  22.832  1.00 57.60      A16S
ATOM  45101  O2P GUA  1236     233.416 142.968  21.597  1.00 57.60      A16S
ATOM  45102  O5' GUA  1236     235.346 141.862  22.735  1.00 74.54      A16S
ATOM  45103  C5' GUA  1236     236.095 140.749  23.207  1.00 74.54      A16S
ATOM  45104  C4' GUA  1236     237.509 141.172  23.522  1.00 74.54      A16S
ATOM  45105  O4' GUA  1236     238.052 141.832  22.354  1.00 74.54      A16S
ATOM  45106  C1' GUA  1236     239.004 142.794  22.753  1.00 74.54      A16S
ATOM  45107  N9  GUA  1236     238.683 144.058  22.098  1.00 57.60      A16S
ATOM  45108  C4  GUA  1236     239.519 145.135  21.979  1.00 57.60      A16S
ATOM  45109  N3  GUA  1236     240.769 145.215  22.473  1.00 57.60      A16S
ATOM  45110  C2  GUA  1236     241.327 146.382  22.211  1.00 57.60      A16S
ATOM  45111  N2  GUA  1236     242.578 146.629  22.634  1.00 57.60      A16S
ATOM  45112  N1  GUA  1236     240.704 147.390  21.514  1.00 57.60      A16S
ATOM  45113  C6  GUA  1236     239.416 147.327  20.995  1.00 57.60      A16S
ATOM  45114  O6  GUA  1236     238.950 148.297  20.383  1.00 57.60      A16S
ATOM  45115  C5  GUA  1236     238.807 146.080  21.270  1.00 57.60      A16S
ATOM  45116  N7  GUA  1236     237.542 145.608  20.955  1.00 57.60      A16S
ATOM  45117  C8  GUA  1236     237.510 144.406  21.469  1.00 57.60      A16S
ATOM  45118  C2' GUA  1236     239.024 142.822  24.283  1.00 74.54      A16S
ATOM  45119  O2' GUA  1236     240.085 142.014  24.747  1.00 74.54      A16S
ATOM  45120  C3' GUA  1236     237.673 142.205  24.626  1.00 74.54      A16S
ATOM  45121  O3' GUA  1236     237.735 141.560  25.899  1.00 74.54      A16S
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ATOM	45122	P	ADE	1237	236.496	141.674	26.911	1.00124.72	A16S	ATOM	45175	C2	GUA	1239	242.263	144.031	26.827	1.00104.46	A16S
ATOM	45123	O1P	ADE	1237	235.487	140.693	26.440	1.00120.46	A16S	ATOM	45176	N2	GUA	1239	241.891	144.983	25.960	1.00104.46	A16S
ATOM	45124	O2P	ADE	1237	236.131	143.110	27.016	1.00120.46	A16S	ATOM	45177	N1	GUA	1239	243.234	144.380	27.728	1.00104.46	A16S
ATOM	45125	O5'	ADE	1237	237.071	141.175	28.319	1.00124.72	A16S	ATOM	45178	C6	GUA	1239	243.761	143.542	28.701	1.00104.46	A16S
ATOM	45126	C5'	ADE	1237	237.606	139.854	28.481	1.00124.72	A16S	ATOM	45179	O6	GUA	1239	244.630	143.965	29.475	1.00104.46	A16S
ATOM	45127	C4'	ADE	1237	238.214	139.682	29.867	1.00124.72	A16S	ATOM	45180	C5	GUA	1239	243.173	142.254	28.650	1.00104.46	A16S
ATOM	45128	O4'	ADE	1237	239.167	140.750	30.101	1.00124.72	A16S	ATOM	45181	N7	GUA	1239	243.408	141.125	29.424	1.00104.46	A16S
ATOM	45129	C1'	ADE	1237	239.125	141.153	31.458	1.00124.72	A16S	ATOM	45182	C8	GUA	1239	242.589	140.228	28.945	1.00104.46	A16S
ATOM	45130	N9	ADE	1237	238.724	142.553	31.492	1.00120.46	A16S	ATOM	45183	C2'	GUA	1239	241.403	139.428	25.812	1.00126.84	A16S
ATOM	45131	C4	ADE	1237	239.456	143.601	31.000	1.00120.46	A16S	ATOM	45184	O2'	GUA	1239	240.402	139.497	24.821	1.00126.84	A16S
ATOM	45132	N3	ADE	1237	240.658	143.544	30.407	1.00120.46	A16S	ATOM	45185	C3'	GUA	1239	241.752	137.994	26.188	1.00126.84	A16S
ATOM	45133	C2	ADE	1237	241.063	144.757	30.059	1.00120.46	A16S	ATOM	45186	O3'	GUA	1239	241.797	137.170	25.035	1.00126.84	A16S
ATOM	45134	N1	ADE	1237	240.451	145.931	30.223	1.00120.46	A16S	ATOM	45187	P	CYT	1240	243.182	136.999	24.243	1.00 84.14	A16S
ATOM	45135	C6	ADE	1237	239.242	145.955	30.821	1.00120.46	A16S	ATOM	45188	O1P	CYT	1240	243.035	135.848	23.317	1.00104.12	A16S
ATOM	45136	N6	ADE	1237	238.628	147.131	30.985	1.00120.46	A16S	ATOM	45189	O2P	CYT	1240	244.281	136.997	25.242	1.00104.12	A16S
ATOM	45137	C5	ADE	1237	238.701	144.733	31.238	1.00120.46	A16S	ATOM	45190	O5'	CYT	1240	243.295	138.334	23.381	1.00 84.14	A16S
ATOM	45138	N7	ADE	1237	237.510	144.405	31.870	1.00120.46	A16S	ATOM	45191	C5'	CYT	1240	242.363	138.604	22.348	1.00 84.14	A16S
ATOM	45139	C8	ADE	1237	237.574	143.103	31.999	1.00120.46	A16S	ATOM	45192	C4'	CYT	1240	242.665	139.931	21.700	1.00 84.14	A16S
ATOM	45140	C2'	ADE	1237	238.160	140.228	32.197	1.00124.72	A16S	ATOM	45193	O4'	CYT	1240	242.465	141.004	22.654	1.00 84.14	A16S
ATOM	45141	O2'	ADE	1237	238.907	139.251	32.879	1.00124.72	A16S	ATOM	45194	C1'	CYT	1240	243.363	142.066	22.369	1.00 84.14	A16S
ATOM	45142	C3'	ADE	1237	237.267	139.729	31.059	1.00124.72	A16S	ATOM	45195	N1	CYT	1240	244.188	142.308	23.562	1.00104.12	A16S
ATOM	45143	O3'	ADE	1237	236.659	138.442	31.247	1.00124.72	A16S	ATOM	45196	C6	CYT	1240	244.397	141.319	24.481	1.00104.12	A16S
ATOM	45144	P	URI	1238	236.851	137.628	32.628	1.00173.76	A16S	ATOM	45197	C2	CYT	1240	244.762	143.570	23.738	1.00104.12	A16S
ATOM	45145	O1P	URI	1238	235.920	136.473	32.576	1.00200.66	A16S	ATOM	45198	O2	CYT	1240	244.554	144.449	22.889	1.00104.12	A16S
ATOM	45146	O2P	URI	1238	236.793	138.559	33.784	1.00200.66	A16S	ATOM	45199	N3	CYT	1240	245.528	143.798	24.825	1.00104.12	A16S
ATOM	45147	O5'	URI	1238	238.328	137.045	32.500	1.00173.76	A16S	ATOM	45200	C4	CYT	1240	245.728	142.825	25.715	1.00104.12	A16S
ATOM	45148	C5'	URI	1238	238.849	136.726	31.218	1.00173.76	A16S	ATOM	45201	N4	CYT	1240	246.491	143.095	26.772	1.00104.12	A16S
ATOM	45149	C4'	URI	1238	240.306	137.106	31.120	1.00173.76	A16S	ATOM	45202	C5	CYT	1240	245.155	141.532	25.560	1.00104.12	A16S
ATOM	45150	O4'	URI	1238	240.562	138.291	31.919	1.00173.76	A16S	ATOM	45203	C2'	CYT	1240	244.201	141.645	21.159	1.00 84.14	A16S
ATOM	45151	C1'	URI	1238	241.899	138.265	32.401	1.00173.76	A16S	ATOM	45204	O2'	CYT	1240	243.661	142.202	19.978	1.00 84.14	A16S
ATOM	45152	N1	URI	1238	241.883	138.338	33.869	1.00200.66	A16S	ATOM	45205	C3'	CYT	1240	244.093	140.125	21.231	1.00 84.14	A16S
ATOM	45153	C6	URI	1238	240.823	137.862	34.604	1.00200.66	A16S	ATOM	45206	O3'	CYT	1240	244.308	139.516	19.967	1.00 84.14	A16S
ATOM	45154	C2	URI	1238	242.983	138.902	34.490	1.00200.66	A16S	ATOM	45207	P	CYT	1241	245.766	138.973	19.597	1.00105.58	A16S
ATOM	45155	O2	URI	1238	243.941	139.335	33.872	1.00200.66	A16S	ATOM	45208	O1P	CYT	1241	245.769	138.579	18.171	1.00 86.60	A16S
ATOM	45156	N3	URI	1238	242.921	138.941	35.859	1.00200.66	A16S	ATOM	45209	O2P	CYT	1241	246.166	137.989	20.636	1.00 86.60	A16S
ATOM	45157	C4	URI	1238	241.893	138.484	36.656	1.00200.66	A16S	ATOM	45210	O5'	CYT	1241	246.669	140.271	19.727	1.00105.58	A16S
ATOM	45158	O4	URI	1238	241.980	138.599	37.879	1.00200.66	A16S	ATOM	45211	C5'	CYT	1241	248.042	140.181	20.067	1.00105.58	A16S
ATOM	45159	C5	URI	1238	240.791	137.914	35.940	1.00200.66	A16S	ATOM	45212	C4'	CYT	1241	248.518	141.517	20.564	1.00105.58	A16S
ATOM	45160	C2'	URI	1238	242.543	136.983	31.877	1.00173.76	A16S	ATOM	45213	O4'	CYT	1241	247.742	141.880	21.737	1.00105.58	A16S
ATOM	45161	O2'	URI	1238	243.260	137.327	30.711	1.00173.76	A16S	ATOM	45214	C1'	CYT	1241	248.580	142.513	22.684	1.00105.58	A16S
ATOM	45162	C3'	URI	1238	241.310	136.107	31.658	1.00173.76	A16S	ATOM	45215	N1	CYT	1241	248.731	141.600	23.826	1.00 86.60	A16S
ATOM	45163	O3'	URI	1238	241.439	135.015	30.746	1.00173.76	A16S	ATOM	45216	C6	CYT	1241	248.478	140.263	23.700	1.00 86.60	A16S
ATOM	45164	P	GUA	1239	242.452	135.103	29.499	1.00126.84	A16S	ATOM	45217	C2	CYT	1241	249.137	142.122	25.040	1.00 86.60	A16S
ATOM	45165	O1P	GUA	1239	242.138	133.912	28.662	1.00104.46	A16S	ATOM	45218	O2	CYT	1241	249.367	143.331	25.113	1.00 86.60	A16S
ATOM	45166	O2P	GUA	1239	243.845	135.294	30.001	1.00104.46	A16S	ATOM	45219	N3	CYT	1241	249.272	141.300	26.108	1.00 86.60	A16S
ATOM	45167	O5'	GUA	1239	241.977	136.406	28.698	1.00126.84	A16S	ATOM	45220	C4	CYT	1241	249.020	139.999	25.981	1.00 86.60	A16S
ATOM	45168	C5'	GUA	1239	240.732	136.407	27.992	1.00126.84	A16S	ATOM	45221	N4	CYT	1241	249.161	139.226	27.061	1.00 86.60	A16S
ATOM	45169	C4'	GUA	1239	240.595	137.630	27.100	1.00126.84	A16S	ATOM	45222	C5	CYT	1241	248.609	139.433	24.743	1.00 86.60	A16S
ATOM	45170	O4'	GUA	1239	240.409	138.835	27.886	1.00126.84	A16S	ATOM	45223	C2'	CYT	1241	249.900	142.791	21.966	1.00105.58	A16S
ATOM	45171	C1'	GUA	1239	240.836	139.958	27.129	1.00126.84	A16S	ATOM	45224	O2'	CYT	1241	249.787	144.016	21.267	1.00105.58	A16S
ATOM	45172	N9	GUA	1239	241.831	140.696	27.899	1.00104.46	A16S	ATOM	45225	C3'	CYT	1241	249.962	141.598	21.025	1.00105.58	A16S
ATOM	45173	C4	GUA	1239	242.201	142.005	27.706	1.00104.46	A16S	ATOM	45226	O3'	CYT	1241	250.818	141.815	19.910	1.00105.58	A16S
ATOM	45174	N3	GUA	1239	241.700	142.838	26.775	1.00104.46	A16S	ATOM	45227	P	ADE	1242	252.393	142.016	20.139	1.00 79.51	A16S

ATOM	45228	O1P	ADE	1242	253.115	141.309	19.052	1.00	93.44	A16S	ATOM	45281	N3	CYT	1244	259.893	141.643	24.075	1.00105.85	A16S
ATOM	45229	O2P	ADE	1242	252.689	141.671	21.551	1.00	93.44	A16S	ATOM	45282	C4	CYT	1244	259.029	141.901	23.091	1.00105.85	A16S
ATOM	45230	O5'	ADE	1242	252.578	143.583	19.917	1.00	79.51	A16S	ATOM	45283	N4	CYT	1244	258.000	141.066	22.932	1.00105.85	A16S
ATOM	45231	C5'	ADE	1242	251.828	144.262	18.910	1.00	79.51	A16S	ATOM	45284	C5	CYT	1244	259.181	143.027	22.229	1.00105.85	A16S
ATOM	45232	C4'	ADE	1242	252.011	145.758	19.028	1.00	79.51	A16S	ATOM	45285	C2'	CYT	1244	263.573	143.898	23.165	1.00 98.35	A16S
ATOM	45233	O4'	ADE	1242	251.438	146.227	20.276	1.00	79.51	A16S	ATOM	45286	O2'	CYT	1244	264.623	144.242	24.042	1.00 98.35	A16S
ATOM	45234	C1'	ADE	1242	252.264	147.235	20.833	1.00	79.51	A16S	ATOM	45287	C3'	CYT	1244	263.675	144.578	21.806	1.00 98.35	A16S
ATOM	45235	N9	ADE	1242	252.825	146.725	22.084	1.00	93.44	A16S	ATOM	45288	O3'	CYT	1244	265.026	144.712	21.387	1.00 98.35	A16S
ATOM	45236	C4	ADE	1242	253.702	147.382	22.912	1.00	93.44	A16S	ATOM	45289	P	CYT	1245	265.702	143.557	20.500	1.00 78.91	A16S
ATOM	45237	N3	ADE	1242	254.220	148.611	22.740	1.00	93.44	A16S	ATOM	45290	O1P	CYT	1245	267.046	144.038	20.084	1.00125.20	A16S
ATOM	45238	C2	ADE	1242	255.021	148.924	23.753	1.00	93.44	A16S	ATOM	45291	O2P	CYT	1245	264.720	143.151	19.463	1.00125.20	A16S
ATOM	45239	N1	ADE	1242	255.340	148.204	24.837	1.00	93.44	A16S	ATOM	45292	O5'	CYT	1245	265.895	142.352	21.528	1.00 78.91	A16S
ATOM	45240	C6	ADE	1242	254.804	146.973	24.978	1.00	93.44	A16S	ATOM	45293	C5'	CYT	1245	266.840	142.446	22.585	1.00 78.91	A16S
ATOM	45241	N6	ADE	1242	255.124	146.254	26.057	1.00	93.44	A16S	ATOM	45294	C4'	CYT	1245	266.662	141.306	23.556	1.00 78.91	A16S
ATOM	45242	C5	ADE	1242	253.935	146.523	23.971	1.00	93.44	A16S	ATOM	45295	O4'	CYT	1245	265.339	141.380	24.139	1.00 78.91	A16S
ATOM	45243	N7	ADE	1242	253.225	145.342	23.811	1.00	93.44	A16S	ATOM	45296	C1'	CYT	1245	264.872	140.073	24.434	1.00 78.91	A16S
ATOM	45244	C8	ADE	1242	252.586	145.511	22.680	1.00	93.44	A16S	ATOM	45297	N1	CYT	1245	263.612	139.854	23.708	1.00125.20	A16S
ATOM	45245	C2'	ADE	1242	253.330	147.570	19.791	1.00	79.51	A16S	ATOM	45298	C6	CYT	1245	263.280	140.618	22.624	1.00125.20	A16S
ATOM	45246	O2'	ADE	1242	252.856	148.619	18.972	1.00	79.51	A16S	ATOM	45299	C2	CYT	1245	262.761	138.835	24.140	1.00125.20	A16S
ATOM	45247	C3'	ADE	1242	253.451	146.245	19.049	1.00	79.51	A16S	ATOM	45300	O2	CYT	1245	263.081	138.171	25.138	1.00125.20	A16S
ATOM	45248	O3'	ADE	1242	253.920	146.446	17.721	1.00	79.51	A16S	ATOM	45301	N3	CYT	1245	261.614	138.600	23.463	1.00125.20	A16S
ATOM	45249	P	CYT	1243	255.371	145.905	17.295	1.00115.95		A16S	ATOM	45302	C4	CYT	1245	261.305	139.341	22.398	1.00125.20	A16S
ATOM	45250	O1P	CYT	1243	255.726	146.629	16.047	1.00	89.98	A16S	ATOM	45303	N4	CYT	1245	260.169	139.063	21.753	1.00125.20	A16S
ATOM	45251	O2P	CYT	1243	255.365	144.420	17.310	1.00	89.98	A16S	ATOM	45304	C5	CYT	1245	262.147	140.399	21.946	1.00125.20	A16S
ATOM	45252	O5'	CYT	1243	256.327	146.385	18.474	1.00115.95		A16S	ATOM	45305	C2'	CYT	1245	265.966	139.093	24.010	1.00 78.91	A16S
ATOM	45253	C5'	CYT	1243	256.719	147.747	18.601	1.00115.95		A16S	ATOM	45306	O2'	CYT	1245	266.750	138.748	25.130	1.00 78.91	A16S
ATOM	45254	C4'	CYT	1243	257.566	147.926	19.837	1.00115.95		A16S	ATOM	45307	C3'	CYT	1245	266.715	139.912	22.965	1.00 78.91	A16S
ATOM	45255	O4'	CYT	1243	256.752	147.706	21.018	1.00115.95		A16S	ATOM	45308	O3'	CYT	1245	268.055	139.471	22.818	1.00 78.91	A16S
ATOM	45256	C1'	CYT	1243	257.540	147.103	22.031	1.00115.95		A16S	ATOM	45309	P	GUA	1246	268.394	138.313	21.759	1.00 91.95	A16S
ATOM	45257	N1	CYT	1243	256.926	145.824	22.397	1.00	89.98	A16S	ATOM	45310	O1P	GUA	1246	269.869	138.137	21.717	1.00 95.91	A16S
ATOM	45258	C6	CYT	1243	256.000	145.225	21.588	1.00	89.98	A16S	ATOM	45311	O2P	GUA	1246	267.656	138.626	20.509	1.00 95.91	A16S
ATOM	45259	C2	CYT	1243	257.309	145.224	23.596	1.00	89.98	A16S	ATOM	45312	O5'	GUA	1246	267.771	137.002	22.409	1.00 91.95	A16S
ATOM	45260	O2	CYT	1243	258.165	145.786	24.298	1.00	89.98	A16S	ATOM	45313	C5'	GUA	1246	268.413	136.368	23.504	1.00 91.95	A16S
ATOM	45261	N3	CYT	1243	256.747	144.050	23.958	1.00	89.98	A16S	ATOM	45314	C4'	GUA	1246	267.743	135.055	23.807	1.00 91.95	A16S
ATOM	45262	C4	CYT	1243	255.843	143.473	23.165	1.00	89.98	A16S	ATOM	45315	O4'	GUA	1246	266.409	135.295	24.328	1.00 91.95	A16S
ATOM	45263	N4	CYT	1243	255.318	142.316	23.562	1.00	89.98	A16S	ATOM	45316	C1'	GUA	1246	265.528	134.281	23.866	1.00 91.95	A16S
ATOM	45264	C5	CYT	1243	255.440	144.059	21.929	1.00	89.98	A16S	ATOM	45317	N9	GUA	1246	264.509	134.906	23.028	1.00 95.91	A16S
ATOM	45265	C2'	CYT	1243	258.956	146.926	21.484	1.00115.95		A16S	ATOM	45318	C4	GUA	1246	263.286	134.372	22.696	1.00 95.91	A16S
ATOM	45266	O2'	CYT	1243	259.781	147.982	21.931	1.00115.95		A16S	ATOM	45319	N3	GUA	1246	262.817	133.168	23.082	1.00 95.91	A16S
ATOM	45267	C3'	CYT	1243	258.701	146.926	19.982	1.00115.95		A16S	ATOM	45320	C2	GUA	1246	261.607	132.934	22.607	1.00 95.91	A16S
ATOM	45268	O3'	CYT	1243	259.845	147.336	19.250	1.00115.95		A16S	ATOM	45321	N2	GUA	1246	260.997	131.775	22.888	1.00 95.91	A16S
ATOM	45269	P	CYT	1244	260.927	146.243	18.805	1.00	98.35	A16S	ATOM	45322	N1	GUA	1246	260.907	133.815	21.819	1.00 95.91	A16S
ATOM	45270	O1P	CYT	1244	261.941	146.943	17.975	1.00105.85		A16S	ATOM	45323	C6	GUA	1246	261.367	135.060	21.407	1.00 95.91	A16S
ATOM	45271	O2P	CYT	1244	260.200	145.076	18.250	1.00105.85		A16S	ATOM	45324	O6	GUA	1246	260.652	135.776	20.691	1.00 95.91	A16S
ATOM	45272	O5'	CYT	1244	261.600	145.789	20.176	1.00	98.35	A16S	ATOM	45325	C5	GUA	1246	262.673	135.323	21.907	1.00 95.91	A16S
ATOM	45273	C5'	CYT	1244	262.502	146.648	20.868	1.00	98.35	A16S	ATOM	45326	N7	GUA	1246	263.497	136.428	21.737	1.00 95.91	A16S
ATOM	45274	C4'	CYT	1244	263.070	145.944	22.076	1.00	98.35	A16S	ATOM	45327	C8	GUA	1246	264.573	136.136	22.418	1.00 95.91	A16S
ATOM	45275	O4'	CYT	1244	262.006	145.685	23.025	1.00	98.35	A16S	ATOM	45328	C2'	GUA	1246	266.381	133.275	23.094	1.00 91.95	A16S
ATOM	45276	C1'	CYT	1244	262.254	144.463	23.694	1.00	98.35	A16S	ATOM	45329	O2'	GUA	1246	266.840	132.274	23.979	1.00 91.95	A16S
ATOM	45277	N1	CYT	1244	261.113	143.576	23.453	1.00105.85		A16S	ATOM	45330	C3'	GUA	1246	267.502	134.174	22.598	1.00 91.95	A16S
ATOM	45278	C6	CYT	1244	260.226	143.832	22.446	1.00105.85		A16S	ATOM	45331	O3'	GUA	1246	268.663	133.449	22.236	1.00 91.95	A16S
ATOM	45279	C2	CYT	1244	260.949	142.461	24.274	1.00105.85		A16S	ATOM	45332	P	GUA	1247	269.024	133.274	20.681	1.00113.05	A16S
ATOM	45280	O2	CYT	1244	261.783	142.246	25.164	1.00105.85		A16S	ATOM	45333	O1P	GUA	1247	270.349	132.608	20.600	1.00 98.80	A16S

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ATOM  45334  O2P GUA  1247     268.804 134.578  19.999  1.00 98.80      A16S
ATOM  45335  O5' GUA  1247     267.935 132.247  20.141  1.00113.05      A16S
ATOM  45336  C5' GUA  1247     267.931 130.896  20.584  1.00113.05      A16S
ATOM  45337  C4' GUA  1247     266.657 130.210  20.159  1.00113.05      A16S
ATOM  45338  O4' GUA  1247     265.525 130.905  20.745  1.00113.05      A16S
ATOM  45339  C1' GUA  1247     264.402 130.777  19.889  1.00113.05      A16S
ATOM  45340  N9  GUA  1247     263.988 132.103  19.447  1.00 98.80      A16S
ATOM  45341  C4  GUA  1247     262.745 132.423  18.975  1.00 98.80      A16S
ATOM  45342  N3  GUA  1247     261.703 131.571  18.867  1.00 98.80      A16S
ATOM  45343  C2  GUA  1247     260.636 132.154  18.356  1.00 98.80      A16S
ATOM  45344  N2  GUA  1247     259.514 131.432  18.174  1.00 98.80      A16S
ATOM  45345  N1  GUA  1247     260.591 133.482  17.986  1.00 98.80      A16S
ATOM  45346  C6  GUA  1247     261.649 134.381  18.095  1.00 98.80      A16S
ATOM  45347  O6  GUA  1247     261.497 135.558  17.739  1.00 98.80      A16S
ATOM  45348  C5  GUA  1247     262.810 133.757  18.636  1.00 98.80      A16S
ATOM  45349  N7  GUA  1247     264.074 134.269  18.901  1.00 98.80      A16S
ATOM  45350  C8  GUA  1247     264.736 133.253  19.387  1.00 98.80      A16S
ATOM  45351  C2' GUA  1247     264.848 129.935  18.697  1.00113.05      A16S
ATOM  45352  O2' GUA  1247     264.599 128.567  18.957  1.00113.05      A16S
ATOM  45353  C3' GUA  1247     266.332 130.246  18.676  1.00113.05      A16S
ATOM  45354  O3' GUA  1247     267.047 129.273  17.937  1.00113.05      A16S
ATOM  45355  P   CYT  1248     267.797 129.710  16.589  1.00 82.97      A16S
ATOM  45356  O1P CYT  1248     268.466 128.504  16.037  1.00 72.61      A16S
ATOM  45357  O2P CYT  1248     268.591 130.927  16.880  1.00 72.61      A16S
ATOM  45358  O5' CYT  1248     266.636 130.137  15.588  1.00 82.97      A16S
ATOM  45359  C5' CYT  1248     266.930 130.937  14.447  1.00 82.97      A16S
ATOM  45360  C4' CYT  1248     266.036 130.558  13.290  1.00 82.97      A16S
ATOM  45361  O4' CYT  1248     266.282 129.181  12.904  1.00 82.97      A16S
ATOM  45362  C1' CYT  1248     265.080 128.599  12.430  1.00 82.97      A16S
ATOM  45363  N1  CYT  1248     264.796 127.414  13.252  1.00 72.61      A16S
ATOM  45364  C6  CYT  1248     265.207 127.349  14.553  1.00 72.61      A16S
ATOM  45365  C2  CYT  1248     264.108 126.346  12.675  1.00 72.61      A16S
ATOM  45366  O2  CYT  1248     263.717 126.449  11.505  1.00 72.61      A16S
ATOM  45367  N3  CYT  1248     263.884 125.231  13.406  1.00 72.61      A16S
ATOM  45368  C4  CYT  1248     264.312 125.167  14.668  1.00 72.61      A16S
ATOM  45369  N4  CYT  1248     264.097 124.038  15.344  1.00 72.61      A16S
ATOM  45370  C5  CYT  1248     264.987 126.255  15.291  1.00 72.61      A16S
ATOM  45371  C2' CYT  1248     263.993 129.675  12.497  1.00 82.97      A16S
ATOM  45372  O2' CYT  1248     263.887 130.322  11.244  1.00 82.97      A16S
ATOM  45373  C3' CYT  1248     264.549 130.594  13.576  1.00 82.97      A16S
ATOM  45374  O3' CYT  1248     264.063 131.919  13.459  1.00 82.97      A16S
ATOM  45375  P   ADE  1249     263.299 132.582  14.699  1.00 83.69      A16S
ATOM  45376  O1P ADE  1249     263.185 134.041  14.434  1.00 66.01      A16S
ATOM  45377  O2P ADE  1249     263.969 132.103  15.937  1.00 66.01      A16S
ATOM  45378  O5' ADE  1249     261.853 131.914  14.656  1.00 83.69      A16S
ATOM  45379  C5' ADE  1249     261.049 131.981  13.479  1.00 83.69      A16S
ATOM  45380  C4' ADE  1249     260.030 130.863  13.472  1.00 83.69      A16S
ATOM  45381  O4' ADE  1249     260.720 129.589  13.522  1.00 83.69      A16S
ATOM  45382  C1' ADE  1249     259.957 128.663  14.267  1.00 83.69      A16S
ATOM  45383  N9  ADE  1249     260.801 128.175  15.350  1.00 66.01      A16S
ATOM  45384  C4  ADE  1249     260.873 126.890  15.814  1.00 66.01      A16S
ATOM  45385  N3  ADE  1249     260.167 125.835  15.388  1.00 66.01      A16S
ATOM  45386  C2  ADE  1249     260.521 124.736  16.051  1.00 66.01      A16S
ATOM  45387  N1  ADE  1249     261.434 124.586  17.018  1.00 66.01      A16S
ATOM  45388  C6  ADE  1249     262.125 125.675  17.421  1.00 66.01      A16S
ATOM  45389  N6  ADE  1249     263.039 125.532  18.379  1.00 66.01      A16S
ATOM  45390  C5  ADE  1249     261.839 126.897  16.797  1.00 66.01      A16S
ATOM  45391  N7  ADE  1249     262.357 128.169  16.965  1.00 66.01      A16S
ATOM  45392  C8  ADE  1249     261.703 128.891  16.089  1.00 66.01      A16S
ATOM  45393  C2' ADE  1249     258.664 129.359  14.705  1.00 83.69      A16S
ATOM  45394  O2' ADE  1249     257.627 129.039  13.795  1.00 83.69      A16S
ATOM  45395  C3' ADE  1249     259.064 130.831  14.646  1.00 83.69      A16S
ATOM  45396  O3' ADE  1249     257.945 131.660  14.344  1.00 83.69      A16S
ATOM  45397  P   ADE  1250     257.080 132.301  15.534  1.00 66.06      A16S
ATOM  45398  O1P ADE  1250     256.258 133.402  14.954  1.00 73.57      A16S
ATOM  45399  O2P ADE  1250     257.996 132.590  16.658  1.00 73.57      A16S
ATOM  45400  O5' ADE  1250     256.115 131.118  15.999  1.00 66.06      A16S
ATOM  45401  C5' ADE  1250     254.998 130.728  15.203  1.00 66.06      A16S
ATOM  45402  C4' ADE  1250     254.456 129.403  15.678  1.00 66.06      A16S
ATOM  45403  O4' ADE  1250     255.518 128.421  15.629  1.00 66.06      A16S
ATOM  45404  C1' ADE  1250     255.386 127.517  16.711  1.00 66.06      A16S
ATOM  45405  N9  ADE  1250     256.594 127.597  17.534  1.00 73.57      A16S
ATOM  45406  C4  ADE  1250     257.285 126.530  18.046  1.00 73.57      A16S
ATOM  45407  N3  ADE  1250     256.993 125.230  17.900  1.00 73.57      A16S
ATOM  45408  C2  ADE  1250     257.884 124.476  18.534  1.00 73.57      A16S
ATOM  45409  N1  ADE  1250     258.956 124.844  19.240  1.00 73.57      A16S
ATOM  45410  C6  ADE  1250     259.226 126.160  19.359  1.00 73.57      A16S
ATOM  45411  N6  ADE  1250     260.312 126.526  20.044  1.00 73.57      A16S
ATOM  45412  C5  ADE  1250     258.347 127.067  18.741  1.00 73.57      A16S
ATOM  45413  N7  ADE  1250     258.324 128.452  18.679  1.00 73.57      A16S
ATOM  45414  C8  ADE  1250     257.268 128.716  17.952  1.00 73.57      A16S
ATOM  45415  C2' ADE  1250     254.111 127.892  17.465  1.00 66.06      A16S
ATOM  45416  O2' ADE  1250     253.044 127.116  16.967  1.00 66.06      A16S
ATOM  45417  C3' ADE  1250     253.966 129.367  17.115  1.00 66.06      A16S
ATOM  45418  O3' ADE  1250     252.592 129.719  17.156  1.00 66.06      A16S
ATOM  45419  P   CYT  1251     252.099 130.933  18.074  1.00 73.32      A16S
ATOM  45420  O1P CYT  1251     250.666 130.672  18.317  1.00 69.97      A16S
ATOM  45421  O2P CYT  1251     252.508 132.201  17.429  1.00 69.97      A16S
ATOM  45422  O5' CYT  1251     252.890 130.760  19.448  1.00 73.32      A16S
ATOM  45423  C5' CYT  1251     252.587 129.692  20.336  1.00 73.32      A16S
ATOM  45424  C4' CYT  1251     253.779 129.376  21.217  1.00 73.32      A16S
ATOM  45425  O4' CYT  1251     254.981 129.458  20.399  1.00 73.32      A16S
ATOM  45426  C1' CYT  1251     256.079 129.885  21.194  1.00 73.32      A16S
ATOM  45427  N1  CYT  1251     256.484 131.228  20.756  1.00 69.97      A16S
ATOM  45428  C6  CYT  1251     255.603 132.065  20.132  1.00 69.97      A16S
ATOM  45429  C2  CYT  1251     257.784 131.644  21.012  1.00 69.97      A16S
ATOM  45430  O2  CYT  1251     258.565 130.852  21.546  1.00 69.97      A16S
ATOM  45431  N3  CYT  1251     258.161 132.892  20.669  1.00 69.97      A16S
ATOM  45432  C4  CYT  1251     257.294 133.709  20.078  1.00 69.97      A16S
ATOM  45433  N4  CYT  1251     257.706 134.938  19.769  1.00 69.97      A16S
ATOM  45434  C5  CYT  1251     255.962 133.303  19.780  1.00 69.97      A16S
ATOM  45435  C2' CYT  1251     255.558 129.946  22.624  1.00 73.32      A16S
ATOM  45436  O2' CYT  1251     255.678 128.667  23.220  1.00 73.32      A16S
ATOM  45437  C3' CYT  1251     254.109 130.319  22.367  1.00 73.32      A16S
ATOM  45438  O3' CYT  1251     253.332 130.093  23.537  1.00 73.32      A16S
ATOM  45439  P   GUA  1252     253.190 131.269  24.627  1.00 89.27      A16S
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ATOM  45440  O1P GUA  1252     252.150 130.886  25.616  1.00 80.09      A16S
ATOM  45441  O2P GUA  1252     253.059 132.543  23.880  1.00 80.09      A16S
ATOM  45442  O5' GUA  1252     254.594 131.279  25.373  1.00 89.27      A16S
ATOM  45443  C5' GUA  1252     255.098 130.106  25.998  1.00 89.27      A16S
ATOM  45444  C4' GUA  1252     256.510 130.340  26.480  1.00 89.27      A16S
ATOM  45445  O4' GUA  1252     257.383 130.612  25.348  1.00 89.27      A16S
ATOM  45446  C1' GUA  1252     258.373 131.560  25.725  1.00 89.27      A16S
ATOM  45447  N9  GUA  1252     258.138 132.787  24.973  1.00 80.09      A16S
ATOM  45448  C4  GUA  1252     258.983 133.869  24.877  1.00 80.09      A16S
ATOM  45449  N3  GUA  1252     260.181 134.003  25.489  1.00 80.09      A16S
ATOM  45450  C2  GUA  1252     260.765 135.157  25.186  1.00 80.09      A16S
ATOM  45451  N2  GUA  1252     261.955 135.474  25.726  1.00 80.09      A16S
ATOM  45452  N1  GUA  1252     260.223 136.089  24.336  1.00 80.09      A16S
ATOM  45453  C6  GUA  1252     258.997 135.968  23.693  1.00 80.09      A16S
ATOM  45454  O6  GUA  1252     258.612 136.863  22.939  1.00 80.09      A16S
ATOM  45455  C5  GUA  1252     258.351 134.751  24.025  1.00 80.09      A16S
ATOM  45456  N7  GUA  1252     257.124 134.248  23.618  1.00 80.09      A16S
ATOM  45457  C8  GUA  1252     257.041 133.085  24.207  1.00 80.09      A16S
ATOM  45458  C2' GUA  1252     258.207 131.771  27.225  1.00 89.27      A16S
ATOM  45459  O2' GUA  1252     258.937 130.767  27.909  1.00 89.27      A16S
ATOM  45460  C3' GUA  1252     256.712 131.558  27.364  1.00 89.27      A16S
ATOM  45461  O3' GUA  1252     256.358 131.288  28.705  1.00 89.27      A16S
ATOM  45462  P   GUA  1253     255.875 132.488  29.652  1.00 98.60      A16S
ATOM  45463  O1P GUA  1253     255.588 131.817  30.949  1.00 72.59      A16S
ATOM  45464  O2P GUA  1253     254.815 133.284  28.977  1.00 72.59      A16S
ATOM  45465  O5' GUA  1253     257.160 133.422  29.805  1.00 98.60      A16S
ATOM  45466  C5' GUA  1253     258.155 133.134  30.786  1.00 98.60      A16S
ATOM  45467  C4' GUA  1253     259.154 134.264  30.881  1.00 98.60      A16S
ATOM  45468  O4' GUA  1253     259.806 134.440  29.594  1.00 98.60      A16S
ATOM  45469  C1' GUA  1253     260.090 135.814  29.386  1.00 98.60      A16S
ATOM  45470  N9  GUA  1253     259.274 136.285  28.276  1.00 72.59      A16S
ATOM  45471  C4  GUA  1253     259.499 137.400  27.509  1.00 72.59      A16S
ATOM  45472  N3  GUA  1253     260.548 138.243  27.619  1.00 72.59      A16S
ATOM  45473  C2  GUA  1253     260.469 139.240  26.749  1.00 72.59      A16S
ATOM  45474  N2  GUA  1253     261.423 140.175  26.696  1.00 72.59      A16S
ATOM  45475  N1  GUA  1253     259.445 139.398  25.859  1.00 72.59      A16S
ATOM  45476  C6  GUA  1253     258.358 138.545  25.732  1.00 72.59      A16S
ATOM  45477  O6  GUA  1253     257.482 138.790  24.898  1.00 72.59      A16S
ATOM  45478  C5  GUA  1253     258.431 137.468  26.643  1.00 72.59      A16S
ATOM  45479  N7  GUA  1253     257.567 136.402  26.840  1.00 72.59      A16S
ATOM  45480  C8  GUA  1253     258.110 135.723  27.813  1.00 72.59      A16S
ATOM  45481  C2' GUA  1253     259.711 136.540  30.675  1.00 98.60      A16S
ATOM  45482  O2' GUA  1253     260.831 136.559  31.532  1.00 98.60      A16S
ATOM  45483  C3' GUA  1253     258.598 135.644  31.197  1.00 98.60      A16S
ATOM  45484  O3' GUA  1253     258.398 135.823  32.597  1.00 98.60      A16S
ATOM  45485  P   GUA  1254     257.321 136.899  33.118  1.00 87.04      A16S
ATOM  45486  O1P GUA  1254     257.409 136.896  34.598  1.00100.69      A16S
ATOM  45487  O2P GUA  1254     256.016 136.620  32.464  1.00100.69      A16S
ATOM  45488  O5' GUA  1254     257.867 138.302  32.589  1.00 87.04      A16S
ATOM  45489  C5' GUA  1254     259.089 138.834  33.087  1.00 87.04      A16S
ATOM  45490  C4' GUA  1254     259.530 140.027  32.268  1.00 87.04      A16S
ATOM  45491  O4' GUA  1254     259.613 139.650  30.869  1.00 87.04      A16S
ATOM  45492  C1' GUA  1254     259.405 140.799  30.061  1.00 87.04      A16S
ATOM  45493  N9  GUA  1254     258.302 140.549  29.143  1.00100.69      A16S
ATOM  45494  C4  GUA  1254     257.981 141.321  28.054  1.00100.69      A16S
ATOM  45495  N3  GUA  1254     258.658 142.410  27.631  1.00100.69      A16S
ATOM  45496  C2  GUA  1254     258.105 142.949  26.561  1.00100.69      A16S
ATOM  45497  N2  GUA  1254     258.663 144.024  25.995  1.00100.69      A16S
ATOM  45498  N1  GUA  1254     256.968 142.469  25.962  1.00100.69      A16S
ATOM  45499  C6  GUA  1254     256.253 141.352  26.380  1.00100.69      A16S
ATOM  45500  O6  GUA  1254     255.238 141.007  25.767  1.00100.69      A16S
ATOM  45501  C5  GUA  1254     256.845 140.752  27.523  1.00100.69      A16S
ATOM  45502  N7  GUA  1254     256.471 139.627  28.249  1.00100.69      A16S
ATOM  45503  C8  GUA  1254     257.367 139.542  29.196  1.00100.69      A16S
ATOM  45504  C2' GUA  1254     259.070 141.962  30.995  1.00 87.04      A16S
ATOM  45505  O2' GUA  1254     260.220 142.749  31.202  1.00 87.04      A16S
ATOM  45506  C3' GUA  1254     258.596 141.224  32.241  1.00 87.04      A16S
ATOM  45507  O3' GUA  1254     258.746 142.034  33.398  1.00 87.04      A16S
ATOM  45508  P   GUA  1255     257.473 142.813  33.988  1.00 84.96      A16S
ATOM  45509  O1P GUA  1255     257.942 143.628  35.137  1.00110.50      A16S
ATOM  45510  O2P GUA  1255     256.384 141.824  34.189  1.00110.50      A16S
ATOM  45511  O5' GUA  1255     257.055 143.812  32.821  1.00 84.96      A16S
ATOM  45512  C5' GUA  1255     257.859 144.940  32.505  1.00 84.96      A16S
ATOM  45513  C4' GUA  1255     257.348 145.607  31.253  1.00 84.96      A16S
ATOM  45514  O4' GUA  1255     257.444 144.667  30.148  1.00 84.96      A16S
ATOM  45515  C1' GUA  1255     256.300 144.788  29.312  1.00 84.96      A16S
ATOM  45516  N9  GUA  1255     255.551 143.537  29.400  1.00110.50      A16S
ATOM  45517  C4  GUA  1255     254.518 143.140  28.588  1.00110.50      A16S
ATOM  45518  N3  GUA  1255     254.008 143.841  27.554  1.00110.50      A16S
ATOM  45519  C2  GUA  1255     253.021 143.193  26.959  1.00110.50      A16S
ATOM  45520  N2  GUA  1255     252.400 143.744  25.909  1.00110.50      A16S
ATOM  45521  N1  GUA  1255     252.573 141.957  27.350  1.00110.50      A16S
ATOM  45522  C6  GUA  1255     253.087 141.217  28.408  1.00110.50      A16S
ATOM  45523  O6  GUA  1255     252.619 140.108  28.669  1.00110.50      A16S
ATOM  45524  C5  GUA  1255     254.140 141.900  29.056  1.00110.50      A16S
ATOM  45525  N7  GUA  1255     254.918 141.524  30.142  1.00110.50      A16S
ATOM  45526  C8  GUA  1255     255.739 142.524  30.310  1.00110.50      A16S
ATOM  45527  C2' GUA  1255     255.502 145.996  29.812  1.00 84.96      A16S
ATOM  45528  O2' GUA  1255     255.894 147.175  29.132  1.00 84.96      A16S
ATOM  45529  C3' GUA  1255     255.880 146.006  31.287  1.00 84.96      A16S
ATOM  45530  O3' GUA  1255     255.706 147.291  31.866  1.00 84.96      A16S
ATOM  45531  P   ADE  1256     254.223 147.839  32.139  1.00 96.43      A16S
ATOM  45532  O1P ADE  1256     254.257 148.680  33.360  1.00107.35      A16S
ATOM  45533  O2P ADE  1256     253.295 146.686  32.073  1.00107.35      A16S
ATOM  45534  O5' ADE  1256     253.939 148.791  30.898  1.00 96.43      A16S
ATOM  45535  C5' ADE  1256     254.636 150.018  30.767  1.00 96.43      A16S
ATOM  45536  C4' ADE  1256     254.212 150.724  29.510  1.00 96.43      A16S
ATOM  45537  O4' ADE  1256     254.547 149.887  28.372  1.00 96.43      A16S
ATOM  45538  C1' ADE  1256     253.579 150.069  27.349  1.00 96.43      A16S
ATOM  45539  N9  ADE  1256     252.870 148.804  27.149  1.00107.35      A16S
ATOM  45540  C4  ADE  1256     252.099 148.488  26.058  1.00107.35      A16S
ATOM  45541  N3  ADE  1256     251.876 149.247  24.972  1.00107.35      A16S
ATOM  45542  C2  ADE  1256     251.063 148.623  24.123  1.00107.35      A16S
ATOM  45543  N1  ADE  1256     250.492 147.417  24.230  1.00107.35      A16S
ATOM  45544  C6  ADE  1256     250.736 146.683  25.337  1.00107.35      A16S
ATOM  45545  N6  ADE  1256     250.161 145.490  25.449  1.00107.35      A16S
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ATOM  45547  N7  ADE  1256     252.037 146.751  27.534  1.00107.35      A16S
ATOM  45548  C8  ADE  1256     252.799 147.717  27.987  1.00107.35      A16S
ATOM  45549  C2' ADE  1256     252.620 151.153  27.841  1.00 96.43      A16S
ATOM  45550  O2' ADE  1256     253.060 152.428  27.417  1.00 96.43      A16S
ATOM  45551  C3' ADE  1256     252.720 150.959  29.346  1.00 96.43      A16S
ATOM  45552  O3' ADE  1256     252.263 152.103  30.055  1.00 96.43      A16S
ATOM  45553  P   GUA  1257     250.724 152.186  30.524  1.00115.31      A16S
ATOM  45554  O1P GUA  1257     250.520 153.506  31.180  1.00 97.86      A16S
ATOM  45555  O2P GUA  1257     250.392 150.936  31.262  1.00 97.86      A16S
ATOM  45556  O5' GUA  1257     249.913 152.209  29.153  1.00115.31      A16S
ATOM  45557  C5' GUA  1257     250.155 153.228  28.186  1.00115.31      A16S
ATOM  45558  C4' GUA  1257     249.379 152.950  26.918  1.00115.31      A16S
ATOM  45559  O4' GUA  1257     249.812 151.689  26.341  1.00115.31      A16S
ATOM  45560  C1' GUA  1257     248.707 151.037  25.735  1.00115.31      A16S
ATOM  45561  N9  GUA  1257     248.474 149.785  26.445  1.00 97.86      A16S
ATOM  45562  C4  GUA  1257     247.825 148.680  25.955  1.00 97.86      A16S
ATOM  45563  N3  GUA  1257     247.271 148.566  24.730  1.00 97.86      A16S
ATOM  45564  C2  GUA  1257     246.732 147.375  24.543  1.00 97.86      A16S
ATOM  45565  N2  GUA  1257     246.138 147.088  23.378  1.00 97.86      A16S
ATOM  45566  N1  GUA  1257     246.737 146.377  25.483  1.00 97.86      A16S
ATOM  45567  C6  GUA  1257     247.302 146.474  26.749  1.00 97.86      A16S
ATOM  45568  O6  GUA  1257     247.257 145.511  27.518  1.00 97.86      A16S
ATOM  45569  C5  GUA  1257     247.880 147.746  26.965  1.00 97.86      A16S
ATOM  45570  N7  GUA  1257     248.535 148.258  28.075  1.00 97.86      A16S
ATOM  45571  C8  GUA  1257     248.865 149.470  27.723  1.00 97.86      A16S
ATOM  45572  C2' GUA  1257     247.521 151.993  25.832  1.00115.31      A16S
ATOM  45573  O2' GUA  1257     247.490 152.813  24.682  1.00115.31      A16S
ATOM  45574  C3' GUA  1257     247.884 152.766  27.090  1.00115.31      A16S
ATOM  45575  O3' GUA  1257     247.217 154.012  27.147  1.00115.31      A16S
ATOM  45576  P   CYT  1258     245.797 154.106  27.877  1.00109.31      A16S
ATOM  45577  O1P CYT  1258     245.322 155.506  27.707  1.00 82.13      A16S
ATOM  45578  O2P CYT  1258     245.916 153.519  29.240  1.00 82.13      A16S
ATOM  45579  O5' CYT  1258     244.866 153.145  27.016  1.00109.31      A16S
ATOM  45580  C5' CYT  1258     244.294 153.591  25.793  1.00109.31      A16S
ATOM  45581  C4' CYT  1258     243.318 152.566  25.270  1.00109.31      A16S
ATOM  45582  O4' CYT  1258     244.033 151.330  25.009  1.00109.31      A16S
ATOM  45583  C1' CYT  1258     243.157 150.231  25.190  1.00109.31      A16S
ATOM  45584  N1  CYT  1258     243.713 149.348  26.223  1.00 82.13      A16S
ATOM  45585  C6  CYT  1258     244.432 149.849  27.270  1.00 82.13      A16S
ATOM  45586  C2  CYT  1258     243.482 147.973  26.120  1.00 82.13      A16S
ATOM  45587  O2  CYT  1258     242.825 147.548  25.158  1.00 82.13      A16S
ATOM  45588  N3  CYT  1258     243.973 147.143  27.068  1.00 82.13      A16S
ATOM  45589  C4  CYT  1258     244.665 147.639  28.092  1.00 82.13      A16S
ATOM  45590  N4  CYT  1258     245.118 146.781  29.010  1.00 82.13      A16S
ATOM  45591  C5  CYT  1258     244.921 149.038  28.221  1.00 82.13      A16S
ATOM  45592  C2' CYT  1258     241.797 150.810  25.576  1.00109.31      A16S
ATOM  45593  O2' CYT  1258     241.047 151.020  24.395  1.00109.31      A16S
ATOM  45594  C3' CYT  1258     242.212 152.124  26.218  1.00109.31      A16S
ATOM  45595  O3' CYT  1258     241.129 153.048  26.243  1.00109.31      A16S
ATOM  45596  P   URI  1259     240.519 153.520  27.653  1.00141.54      A16S
ATOM  45597  O1P URI  1259     240.060 154.921  27.497  1.00151.15      A16S
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ATOM  45599  O5' URI  1259     239.230 152.611  27.858  1.00141.54      A16S
ATOM  45600  C5' URI  1259     238.502 152.115  26.743  1.00141.54      A16S
ATOM  45601  C4' URI  1259     238.156 150.665  26.968  1.00141.54      A16S
ATOM  45602  O4' URI  1259     239.395 149.933  27.095  1.00141.54      A16S
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ATOM  45604  N1  URI  1259     240.415 149.354  29.100  1.00151.15      A16S
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ATOM  45606  C2  URI  1259     241.423 148.415  29.258  1.00151.15      A16S
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ATOM  45608  N3  URI  1259     242.436 148.785  30.109  1.00151.15      A16S
ATOM  45609  C4  URI  1259     242.548 149.972  30.801  1.00151.15      A16S
ATOM  45610  O4  URI  1259     243.557 150.186  31.474  1.00151.15      A16S
ATOM  45611  C5  URI  1259     241.463 150.885  30.598  1.00151.15      A16S
ATOM  45612  C2' URI  1259     237.882 149.057  28.722  1.00141.54      A16S
ATOM  45613  O2' URI  1259     237.123 147.989  28.187  1.00141.54      A16S
ATOM  45614  C3' URI  1259     237.376 150.421  28.250  1.00141.54      A16S
ATOM  45615  O3' URI  1259     235.983 150.355  27.939  1.00141.54      A16S
ATOM  45616  P   ADE  1260     235.255 151.599  27.216  1.00117.46      A16S
ATOM  45617  O1P ADE  1260     233.805 151.294  27.195  1.00 85.12      A16S
ATOM  45618  O2P ADE  1260     235.732 152.870  27.831  1.00 85.12      A16S
ATOM  45619  O5' ADE  1260     235.750 151.541  25.703  1.00117.46      A16S
ATOM  45620  C5' ADE  1260     236.049 152.735  24.989  1.00117.46      A16S
ATOM  45621  C4' ADE  1260     236.818 152.412  23.731  1.00117.46      A16S
ATOM  45622  O4' ADE  1260     237.968 151.588  24.054  1.00117.46      A16S
ATOM  45623  C1' ADE  1260     238.208 150.661  23.012  1.00117.46      A16S
ATOM  45624  N9  ADE  1260     238.314 149.326  23.596  1.00 85.12      A16S
ATOM  45625  C4  ADE  1260     237.335 148.371  23.683  1.00 85.12      A16S
ATOM  45626  N3  ADE  1260     236.082 148.445  23.212  1.00 85.12      A16S
ATOM  45627  C2  ADE  1260     235.408 147.338  23.508  1.00 85.12      A16S
ATOM  45628  N1  ADE  1260     235.814 146.251  24.177  1.00 85.12      A16S
ATOM  45629  C6  ADE  1260     237.081 146.215  24.640  1.00 85.12      A16S
ATOM  45630  N6  ADE  1260     237.483 145.143  25.322  1.00 85.12      A16S
ATOM  45631  C5  ADE  1260     237.898 147.318  24.381  1.00 85.12      A16S
ATOM  45632  N7  ADE  1260     239.219 147.587  24.694  1.00 85.12      A16S
ATOM  45633  C8  ADE  1260     239.418 148.783  24.201  1.00 85.12      A16S
ATOM  45634  C2' ADE  1260     237.146 150.856  21.929  1.00117.46      A16S
ATOM  45635  O2' ADE  1260     237.737 151.546  20.860  1.00117.46      A16S
ATOM  45636  C3' ADE  1260     236.057 151.632  22.673  1.00117.46      A16S
ATOM  45637  O3' ADE  1260     235.245 152.510  21.867  1.00117.46      A16S
ATOM  45638  P   ADE  1261     235.795 153.972  21.436  1.00110.44      A16S
ATOM  45639  O1P ADE  1261     237.167 154.118  21.962  1.00 73.59      A16S
ATOM  45640  O2P ADE  1261     234.767 154.978  21.799  1.00 73.59      A16S
ATOM  45641  O5' ADE  1261     235.891 153.955  19.842  1.00110.44      A16S
ATOM  45642  C5' ADE  1261     236.425 152.830  19.146  1.00110.44      A16S
ATOM  45643  C4' ADE  1261     237.510 153.259  18.179  1.00110.44      A16S
ATOM  45644  O4' ADE  1261     236.926 154.072  17.140  1.00110.44      A16S
ATOM  45645  C1' ADE  1261     237.904 154.950  16.630  1.00110.44      A16S
ATOM  45646  N9  ADE  1261     237.311 156.281  16.543  1.00 73.59      A16S
ATOM  45647  C4  ADE  1261     236.741 156.846  15.422  1.00 73.59      A16S
ATOM  45648  N3  ADE  1261     236.611 156.296  14.201  1.00 73.59      A16S
ATOM  45649  C2  ADE  1261     236.017 157.148  13.358  1.00 73.59      A16S
ATOM  45650  N1  ADE  1261     235.573 158.391  13.581  1.00 73.59      A16S
ATOM  45651  C6  ADE  1261     235.717 158.912  14.818  1.00 73.59      A16S
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ATOM  45652  N6  ADE  1261     235.274 160.146  15.037  1.00 73.59      A16S
ATOM  45653  C5  ADE  1261     236.331 158.109  15.803  1.00 73.59      A16S
ATOM  45654  N7  ADE  1261     236.631 158.332  17.136  1.00 73.59      A16S
ATOM  45655  C8  ADE  1261     237.207 157.218  17.526  1.00 73.59      A16S
ATOM  45656  C2' ADE  1261     239.163 154.833  17.501  1.00110.44      A16S
ATOM  45657  O2' ADE  1261     240.146 154.084  16.821  1.00110.44      A16S
ATOM  45658  C3' ADE  1261     238.644 154.103  18.740  1.00110.44      A16S
ATOM  45659  O3' ADE  1261     239.667 153.250  19.259  1.00110.44      A16S
ATOM  45660  P   URI  1262     240.110 153.363  20.807  1.00199.88      A16S
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ATOM  45662  O2P URI  1262     239.604 154.639  21.373  1.00147.93      A16S
ATOM  45663  O5' URI  1262     241.698 153.429  20.748  1.00199.88      A16S
ATOM  45664  C5' URI  1262     242.423 154.493  21.342  1.00199.88      A16S
ATOM  45665  C4' URI  1262     242.829 155.473  20.278  1.00199.88      A16S
ATOM  45666  O4' URI  1262     241.649 156.164  19.798  1.00199.88      A16S
ATOM  45667  C1' URI  1262     241.934 157.537  19.609  1.00199.88      A16S
ATOM  45668  N1  URI  1262     241.044 158.300  20.499  1.00147.93      A16S
ATOM  45669  C6  URI  1262     240.570 157.751  21.671  1.00147.93      A16S
ATOM  45670  C2  URI  1262     240.661 159.568  20.104  1.00147.93      A16S
ATOM  45671  O2  URI  1262     241.114 160.117  19.112  1.00147.93      A16S
ATOM  45672  N3  URI  1262     239.733 160.171  20.919  1.00147.93      A16S
ATOM  45673  C4  URI  1262     239.179 159.654  22.076  1.00147.93      A16S
ATOM  45674  O4  URI  1262     238.245 160.247  22.618  1.00147.93      A16S
ATOM  45675  C5  URI  1262     239.678 158.368  22.450  1.00147.93      A16S
ATOM  45676  C2' URI  1262     243.444 157.727  19.789  1.00199.88      A16S
ATOM  45677  O2' URI  1262     244.073 157.659  18.525  1.00199.88      A16S
ATOM  45678  C3' URI  1262     243.793 156.560  20.709  1.00199.88      A16S
ATOM  45679  O3' URI  1262     245.140 156.072  20.628  1.00199.88      A16S
ATOM  45680  P   CYT  1263     245.655 155.295  19.303  1.00 86.56      A16S
ATOM  45681  O1P CYT  1263     246.884 155.967  18.815  1.00104.20      A16S
ATOM  45682  O2P CYT  1263     244.531 155.069  18.364  1.00104.20      A16S
ATOM  45683  O5' CYT  1263     246.106 153.879  19.869  1.00 86.56      A16S
ATOM  45684  C5' CYT  1263     247.098 153.799  20.878  1.00 86.56      A16S
ATOM  45685  C4' CYT  1263     247.073 152.445  21.531  1.00 86.56      A16S
ATOM  45686  O4' CYT  1263     245.806 152.257  22.217  1.00 86.56      A16S
ATOM  45687  C1' CYT  1263     245.461 150.876  22.204  1.00 86.56      A16S
ATOM  45688  N1  CYT  1263     244.200 150.711  21.467  1.00104.20      A16S
ATOM  45689  C6  CYT  1263     243.875 151.540  20.433  1.00104.20      A16S
ATOM  45690  C2  CYT  1263     243.343 149.675  21.833  1.00104.20      A16S
ATOM  45691  O2  CYT  1263     243.671 148.932  22.764  1.00104.20      A16S
ATOM  45692  N3  CYT  1263     242.183 149.506  21.161  1.00104.20      A16S
ATOM  45693  C4  CYT  1263     241.874 150.320  20.153  1.00104.20      A16S
ATOM  45694  N4  CYT  1263     240.714 150.124  19.521  1.00104.20      A16S
ATOM  45695  C5  CYT  1263     242.737 151.376  19.748  1.00104.20      A16S
ATOM  45696  C2' CYT  1263     246.598 150.147  21.489  1.00 86.56      A16S
ATOM  45697  O2' CYT  1263     247.547 149.690  22.434  1.00 86.56      A16S
ATOM  45698  C3' CYT  1263     247.118 151.258  20.589  1.00 86.56      A16S
ATOM  45699  O3' CYT  1263     248.414 151.003  20.068  1.00 86.56      A16S
ATOM  45700  P   GUA  1264     248.559 150.459  18.565  1.00 87.57      A16S
ATOM  45701  O1P GUA  1264     249.993 150.436  18.213  1.00 77.57      A16S
ATOM  45702  O2P GUA  1264     247.616 151.225  17.722  1.00 77.57      A16S
ATOM  45703  O5' GUA  1264     248.056 148.955  18.676  1.00 87.57      A16S
ATOM  45704  C5' GUA  1264     248.647 148.075  19.619  1.00 87.57      A16S
ATOM  45705  C4' GUA  1264     247.820 146.823  19.764  1.00 87.57      A16S
ATOM  45706  O4' GUA  1264     246.539 147.120  20.384  1.00 87.57      A16S
ATOM  45707  C1' GUA  1264     245.572 146.174  19.938  1.00 87.57      A16S
ATOM  45708  N9  GUA  1264     244.523 146.875  19.208  1.00 77.57      A16S
ATOM  45709  C4  GUA  1264     243.257 146.402  18.957  1.00 77.57      A16S
ATOM  45710  N3  GUA  1264     242.759 145.218  19.365  1.00 77.57      A16S
ATOM  45711  C2  GUA  1264     241.516 145.041  18.953  1.00 77.57      A16S
ATOM  45712  N2  GUA  1264     240.866 143.919  19.271  1.00 77.57      A16S
ATOM  45713  N1  GUA  1264     240.819 145.951  18.201  1.00 77.57      A16S
ATOM  45714  C6  GUA  1264     241.311 147.177  17.773  1.00 77.57      A16S
ATOM  45715  O6  GUA  1264     240.595 147.931  17.107  1.00 77.57      A16S
ATOM  45716  C5  GUA  1264     242.644 147.380  18.204  1.00 77.57      A16S
ATOM  45717  N7  GUA  1264     243.504 148.450  17.993  1.00 77.57      A16S
ATOM  45718  C8  GUA  1264     244.603 148.110  18.612  1.00 77.57      A16S
ATOM  45719  C2' GUA  1264     246.302 145.225  18.992  1.00 87.57      A16S
ATOM  45720  O2' GUA  1264     246.799 144.132  19.739  1.00 87.57      A16S
ATOM  45721  C3' GUA  1264     247.403 146.138  18.477  1.00 87.57      A16S
ATOM  45722  O3' GUA  1264     248.476 145.420  17.893  1.00 87.57      A16S
ATOM  45723  P   CYT  1265     248.426 145.053  16.332  1.00 78.50      A16S
ATOM  45724  O1P CYT  1265     249.782 144.566  15.976  1.00 66.90      A16S
ATOM  45725  O2P CYT  1265     247.845 146.203  15.592  1.00 66.90      A16S
ATOM  45726  O5' CYT  1265     247.424 143.814  16.285  1.00 78.50      A16S
ATOM  45727  C5' CYT  1265     247.608 142.692  17.154  1.00 78.50      A16S
ATOM  45728  C4' CYT  1265     246.469 141.710  16.997  1.00 78.50      A16S
ATOM  45729  O4' CYT  1265     245.235 142.298  17.484  1.00 78.50      A16S
ATOM  45730  C1' CYT  1265     244.151 141.871  16.680  1.00 78.50      A16S
ATOM  45731  N1  CYT  1265     243.545 143.057  16.059  1.00 66.90      A16S
ATOM  45732  C6  CYT  1265     244.269 144.200  15.887  1.00 66.90      A16S
ATOM  45733  C2  CYT  1265     242.214 142.996  15.637  1.00 66.90      A16S
ATOM  45734  O2  CYT  1265     241.577 141.944  15.809  1.00 66.90      A16S
ATOM  45735  N3  CYT  1265     241.658 144.081  15.049  1.00 66.90      A16S
ATOM  45736  C4  CYT  1265     242.381 145.188  14.872  1.00 66.90      A16S
ATOM  45737  N4  CYT  1265     241.805 146.225  14.267  1.00 66.90      A16S
ATOM  45738  C5  CYT  1265     243.733 145.278  15.301  1.00 66.90      A16S
ATOM  45739  C2' CYT  1265     244.707 140.883  15.654  1.00 78.50      A16S
ATOM  45740  O2' CYT  1265     244.561 139.572  16.149  1.00 78.50      A16S
ATOM  45741  C3' CYT  1265     246.163 141.319  15.565  1.00 78.50      A16S
ATOM  45742  O3' CYT  1265     247.015 140.254  15.166  1.00 78.50      A16S
ATOM  45743  P   ADE  1266     247.523 140.168  13.646  1.00 87.58      A16S
ATOM  45744  O1P ADE  1266     246.327 140.165  12.771  1.00 73.52      A16S
ATOM  45745  O2P ADE  1266     248.507 139.060  13.558  1.00 73.52      A16S
ATOM  45746  O5' ADE  1266     248.267 141.548  13.387  1.00 87.58      A16S
ATOM  45747  C5' ADE  1266     248.932 141.796  12.155  1.00 87.58      A16S
ATOM  45748  C4' ADE  1266     248.426 143.078  11.549  1.00 87.58      A16S
ATOM  45749  O4' ADE  1266     247.086 142.878  11.063  1.00 87.58      A16S
ATOM  45750  C1' ADE  1266     246.343 144.068  11.216  1.00 87.58      A16S
ATOM  45751  N9  ADE  1266     245.013 143.719  11.712  1.00 73.52      A16S
ATOM  45752  C4  ADE  1266     243.852 144.380  11.395  1.00 73.52      A16S
ATOM  45753  N3  ADE  1266     243.727 145.479  10.634  1.00 73.52      A16S
ATOM  45754  C2  ADE  1266     242.452 145.817  10.510  1.00 73.52      A16S
ATOM  45755  N1  ADE  1266     241.367 145.229  11.020  1.00 73.52      A16S
ATOM  45756  C6  ADE  1266     241.523 144.130  11.781  1.00 73.52      A16S
ATOM  45757  N6  ADE  1266     240.433 143.550  12.283  1.00 73.52      A16S
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ATOM  45758  C5  ADE  1266     242.833 143.666  11.994  1.00 73.52      A16S
ATOM  45759  N7  ADE  1266     243.344 142.590  12.709  1.00 73.52      A16S
ATOM  45760  C8  ADE  1266     244.640 142.672  12.520  1.00 73.52      A16S
ATOM  45761  C2' ADE  1266     247.153 145.085  12.028  1.00 87.58      A16S
ATOM  45762  O2' ADE  1266     247.451 146.224  11.247  1.00 87.58      A16S
ATOM  45763  C3' ADE  1266     248.345 144.252  12.512  1.00 87.58      A16S
ATOM  45764  O3' ADE  1266     249.613 144.923  12.640  1.00 87.58      A16S
ATOM  45765  P   ADE  1267     250.337 145.597  11.354  1.00 70.63      A16S
ATOM  45766  O1P ADE  1267     251.768 145.695  11.730  1.00 82.42      A16S
ATOM  45767  O2P ADE  1267     249.630 146.813  10.872  1.00 82.42      A16S
ATOM  45768  O5' ADE  1267     250.272 144.485  10.218  1.00 70.63      A16S
ATOM  45769  C5' ADE  1267     251.472 143.968   9.676  1.00 70.63      A16S
ATOM  45770  C4' ADE  1267     251.207 143.126   8.448  1.00 70.63      A16S
ATOM  45771  O4' ADE  1267     250.594 141.865   8.824  1.00 70.63      A16S
ATOM  45772  C1' ADE  1267     249.833 141.371   7.730  1.00 70.63      A16S
ATOM  45773  N9  ADE  1267     248.423 141.352   8.106  1.00 82.42      A16S
ATOM  45774  C4  ADE  1267     247.710 140.315   8.644  1.00 82.42      A16S
ATOM  45775  N3  ADE  1267     248.162 139.094   8.968  1.00 82.42      A16S
ATOM  45776  C2  ADE  1267     247.171 138.345   9.451  1.00 82.42      A16S
ATOM  45777  N1  ADE  1267     245.881 138.665   9.639  1.00 82.42      A16S
ATOM  45778  C6  ADE  1267     245.472 139.911   9.310  1.00 82.42      A16S
ATOM  45779  N6  ADE  1267     244.200 140.250   9.514  1.00 82.42      A16S
ATOM  45780  C5  ADE  1267     246.416 140.785   8.778  1.00 82.42      A16S
ATOM  45781  N7  ADE  1267     246.316 142.094   8.336  1.00 82.42      A16S
ATOM  45782  C8  ADE  1267     247.528 142.386   7.958  1.00 82.42      A16S
ATOM  45783  C2' ADE  1267     250.030 142.364   6.586  1.00 70.63      A16S
ATOM  45784  O2' ADE  1267     251.136 141.958   5.818  1.00 70.63      A16S
ATOM  45785  C3' ADE  1267     250.289 143.649   7.356  1.00 70.63      A16S
ATOM  45786  O3' ADE  1267     250.921 144.595   6.512  1.00 70.63      A16S
ATOM  45787  P   ADE  1268     250.051 145.410   5.427  1.00 97.67      A16S
ATOM  45788  O1P ADE  1268     250.990 145.783   4.331  1.00 56.93      A16S
ATOM  45789  O2P ADE  1268     249.244 146.476   6.101  1.00 56.93      A16S
ATOM  45790  O5' ADE  1268     249.043 144.328   4.831  1.00 97.67      A16S
ATOM  45791  C5' ADE  1268     247.645 144.606   4.739  1.00 97.67      A16S
ATOM  45792  C4' ADE  1268     246.852 143.326   4.601  1.00 97.67      A16S
ATOM  45793  O4' ADE  1268     245.442 143.644   4.639  1.00 97.67      A16S
ATOM  45794  C1' ADE  1268     244.745 142.814   3.736  1.00 97.67      A16S
ATOM  45795  N9  ADE  1268     244.137 143.680   2.735  1.00 56.93      A16S
ATOM  45796  C4  ADE  1268     243.058 143.377   1.942  1.00 56.93      A16S
ATOM  45797  N3  ADE  1268     242.386 142.216   1.895  1.00 56.93      A16S
ATOM  45798  C2  ADE  1268     241.374 142.299   1.044  1.00 56.93      A16S
ATOM  45799  N1  ADE  1268     240.983 143.330   0.287  1.00 56.93      A16S
ATOM  45800  C6  ADE  1268     241.683 144.478   0.350  1.00 56.93      A16S
ATOM  45801  N6  ADE  1268     241.295 145.502  -0.410  1.00 56.93      A16S
ATOM  45802  C5  ADE  1268     242.785 144.522   1.220  1.00 56.93      A16S
ATOM  45803  N7  ADE  1268     243.700 145.519   1.527  1.00 56.93      A16S
ATOM  45804  C8  ADE  1268     244.483 144.965   2.421  1.00 56.93      A16S
ATOM  45805  C2' ADE  1268     245.734 141.800   3.173  1.00 97.67      A16S
ATOM  45806  O2' ADE  1268     245.702 140.629   3.958  1.00 97.67      A16S
ATOM  45807  C3' ADE  1268     247.040 142.562   3.301  1.00 97.67      A16S
ATOM  45808  O3' ADE  1268     248.129 141.653   3.394  1.00 97.67      A16S
ATOM  45809  P   ADE  1269     249.298 141.702   2.297  1.00 63.78      A16S
ATOM  45810  O1P ADE  1269     250.483 141.073   2.939  1.00 62.96      A16S
ATOM  45811  O2P ADE  1269     249.369 143.103   1.786  1.00 62.96      A16S
ATOM  45812  O5' ADE  1269     248.815 140.756   1.113  1.00 63.78      A16S
ATOM  45813  C5' ADE  1269     248.661 139.361   1.319  1.00 63.78      A16S
ATOM  45814  C4' ADE  1269     247.636 138.817   0.368  1.00 63.78      A16S
ATOM  45815  O4' ADE  1269     246.352 139.425   0.662  1.00 63.78      A16S
ATOM  45816  C1' ADE  1269     245.633 139.613  -0.538  1.00 63.78      A16S
ATOM  45817  N9  ADE  1269     245.421 141.045  -0.718  1.00 62.96      A16S
ATOM  45818  C4  ADE  1269     244.380 141.629  -1.402  1.00 62.96      A16S
ATOM  45819  N3  ADE  1269     243.360 141.010  -2.021  1.00 62.96      A16S
ATOM  45820  C2  ADE  1269     242.549 141.898  -2.586  1.00 62.96      A16S
ATOM  45821  N1  ADE  1269     242.633 143.232  -2.606  1.00 62.96      A16S
ATOM  45822  C6  ADE  1269     243.669 143.821  -1.976  1.00 62.96      A16S
ATOM  45823  N6  ADE  1269     243.757 145.151  -2.007  1.00 62.96      A16S
ATOM  45824  C5  ADE  1269     244.599 142.989  -1.330  1.00 62.96      A16S
ATOM  45825  N7  ADE  1269     245.749 143.259  -0.605  1.00 62.96      A16S
ATOM  45826  C8  ADE  1269     246.196 142.074  -0.266  1.00 62.96      A16S
ATOM  45827  C2' ADE  1269     246.471 139.006  -1.661  1.00 63.78      A16S
ATOM  45828  O2' ADE  1269     246.141 137.640  -1.821  1.00 63.78      A16S
ATOM  45829  C3' ADE  1269     247.866 139.170  -1.090  1.00 63.78      A16S
ATOM  45830  O3' ADE  1269     248.805 138.308  -1.729  1.00 63.78      A16S
ATOM  45831  P   ADE  1270     249.724 138.895  -2.906  1.00 65.93      A16S
ATOM  45832  O1P ADE  1270     250.814 137.923  -3.191  1.00 65.65      A16S
ATOM  45833  O2P ADE  1270     250.048 140.294  -2.525  1.00 65.65      A16S
ATOM  45834  O5' ADE  1270     248.765 139.004  -4.171  1.00 65.93      A16S
ATOM  45835  C5' ADE  1270     248.164 137.856  -4.745  1.00 65.93      A16S
ATOM  45836  C4' ADE  1270     246.975 138.265  -5.575  1.00 65.93      A16S
ATOM  45837  O4' ADE  1270     246.027 138.983  -4.734  1.00 65.93      A16S
ATOM  45838  C1' ADE  1270     245.285 139.891  -5.532  1.00 65.93      A16S
ATOM  45839  N9  ADE  1270     245.510 141.250  -5.050  1.00 65.65      A16S
ATOM  45840  C4  ADE  1270     244.671 142.309  -5.288  1.00 65.65      A16S
ATOM  45841  N3  ADE  1270     243.487 142.278  -5.918  1.00 65.65      A16S
ATOM  45842  C2  ADE  1270     242.970 143.492  -5.998  1.00 65.65      A16S
ATOM  45843  N1  ADE  1270     243.465 144.650  -5.563  1.00 65.65      A16S
ATOM  45844  C6  ADE  1270     244.659 144.650  -4.940  1.00 65.65      A16S
ATOM  45845  N6  ADE  1270     245.158 145.813  -4.527  1.00 65.65      A16S
ATOM  45846  C5  ADE  1270     245.306 143.419  -4.773  1.00 65.65      A16S
ATOM  45847  N7  ADE  1270     246.504 143.063  -4.170  1.00 65.65      A16S
ATOM  45848  C8  ADE  1270     246.573 141.765  -4.350  1.00 65.65      A16S
ATOM  45849  C2' ADE  1270     245.830 139.769  -6.953  1.00 65.93      A16S
ATOM  45850  O2' ADE  1270     245.059 138.835  -7.684  1.00 65.93      A16S
ATOM  45851  C3' ADE  1270     247.241 139.276  -6.673  1.00 65.93      A16S
ATOM  45852  O3' ADE  1270     247.821 138.678  -7.819  1.00 65.93      A16S
ATOM  45853  P   GUA  1271     248.909 139.497  -8.681  1.00 61.52      A16S
ATOM  45854  O1P GUA  1271     248.692 139.156 -10.115  1.00 67.30      A16S
ATOM  45855  O2P GUA  1271     250.234 139.254  -8.059  1.00 67.30      A16S
ATOM  45856  O5' GUA  1271     248.525 141.034  -8.496  1.00 61.52      A16S
ATOM  45857  C5' GUA  1271     247.621 141.684  -9.392  1.00 61.52      A16S
ATOM  45858  C4' GUA  1271     247.634 143.176  -9.152  1.00 61.52      A16S
ATOM  45859  O4' GUA  1271     247.505 143.394  -7.720  1.00 61.52      A16S
ATOM  45860  C1' GUA  1271     248.322 144.481  -7.315  1.00 61.52      A16S
ATOM  45861  N9  GUA  1271     249.333 143.973  -6.393  1.00 67.30      A16S
ATOM  45862  C4  GUA  1271     250.244 144.718  -5.691  1.00 67.30      A16S
ATOM  45863  N3  GUA  1271     250.380 146.055  -5.747  1.00 67.30      A16S
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ATOM	45864	C2	GUA	1271	251.338	146.488	-4.948	1.00	67.30	A16S	ATOM	45917	C3'	URI	1273	259.168	147.303	-11.496	1.00	86.78	A16S
ATOM	45865	N2	GUA	1271	251.613	147.796	-4.898	1.00	67.30	A16S	ATOM	45918	O3'	URI	1273	259.980	147.540	-12.632	1.00	86.78	A16S
ATOM	45866	N1	GUA	1271	252.097	145.675	-4.143	1.00	67.30	A16S	ATOM	45919	P	GUA	1274	260.524	146.286	-13.477	1.00	86.17	A16S
ATOM	45867	C6	GUA	1271	251.973	144.293	-4.061	1.00	67.30	A16S	ATOM	45920	O1P	GUA	1274	261.380	146.818	-14.574	1.00	85.25	A16S
ATOM	45868	O6	GUA	1271	252.700	143.651	-3.286	1.00	67.30	A16S	ATOM	45921	O2P	GUA	1274	259.349	145.431	-13.810	1.00	85.25	A16S
ATOM	45869	C5	GUA	1271	250.955	143.811	-4.933	1.00	67.30	A16S	ATOM	45922	O5'	GUA	1274	261.455	145.507	-12.438	1.00	86.17	A16S
ATOM	45870	N7	GUA	1271	250.515	142.517	-5.174	1.00	67.30	A16S	ATOM	45923	C5'	GUA	1274	262.631	146.123	-11.933	1.00	86.17	A16S
ATOM	45871	C8	GUA	1271	249.554	142.663	-6.046	1.00	67.30	A16S	ATOM	45924	C4'	GUA	1274	263.368	145.200	-10.993	1.00	86.17	A16S
ATOM	45872	C2'	GUA	1271	248.904	145.095	-8.587	1.00	61.52	A16S	ATOM	45925	O4'	GUA	1274	262.556	144.921	-9.824	1.00	86.17	A16S
ATOM	45873	O2'	GUA	1271	248.051	146.132	-9.034	1.00	61.52	A16S	ATOM	45926	C1'	GUA	1274	262.954	143.675	-9.269	1.00	86.17	A16S
ATOM	45874	C3'	GUA	1271	248.933	143.881	-9.511	1.00	61.52	A16S	ATOM	45927	N9	GUA	1274	261.784	142.805	-9.152	1.00	85.25	A16S
ATOM	45875	O3'	GUA	1271	248.983	144.237	-10.893	1.00	61.52	A16S	ATOM	45928	C4	GUA	1274	261.654	141.735	-8.300	1.00	85.25	A16S
ATOM	45876	P	GUA	1272	250.335	143.979	-11.733	1.00	81.35	A16S	ATOM	45929	N3	GUA	1274	262.581	141.310	-7.421	1.00	85.25	A16S
ATOM	45877	O1P	GUA	1272	250.014	144.211	-13.166	1.00	69.86	A16S	ATOM	45930	C2	GUA	1274	262.177	140.248	-6.747	1.00	85.25	A16S
ATOM	45878	O2P	GUA	1272	250.923	142.680	-11.312	1.00	69.86	A16S	ATOM	45931	N2	GUA	1274	262.981	139.693	-5.833	1.00	85.25	A16S
ATOM	45879	O5'	GUA	1272	251.310	145.139	-11.238	1.00	81.35	A16S	ATOM	45932	N1	GUA	1274	260.956	139.650	-6.919	1.00	85.25	A16S
ATOM	45880	C5'	GUA	1272	251.002	146.509	-11.488	1.00	81.35	A16S	ATOM	45933	C6	GUA	1274	259.981	140.068	-7.816	1.00	85.25	A16S
ATOM	45881	C4'	GUA	1272	251.936	147.411	-10.713	1.00	81.35	A16S	ATOM	45934	O6	GUA	1274	258.909	139.454	-7.886	1.00	85.25	A16S
ATOM	45882	O4'	GUA	1272	251.723	147.228	-9.288	1.00	81.35	A16S	ATOM	45935	C5	GUA	1274	260.407	141.212	-8.554	1.00	85.25	A16S
ATOM	45883	C1'	GUA	1272	252.945	147.427	-8.594	1.00	81.35	A16S	ATOM	45936	N7	GUA	1274	259.761	141.940	-9.543	1.00	85.25	A16S
ATOM	45884	N9	GUA	1272	253.275	146.192	-7.895	1.00	69.86	A16S	ATOM	45937	C8	GUA	1274	260.612	142.876	-9.865	1.00	85.25	A16S
ATOM	45885	C4	GUA	1272	254.289	146.004	-6.984	1.00	69.86	A16S	ATOM	45938	C2'	GUA	1274	264.026	143.096	-10.195	1.00	86.17	A16S
ATOM	45886	N3	GUA	1272	255.168	146.939	-6.565	1.00	69.86	A16S	ATOM	45939	O2'	GUA	1274	265.305	143.443	-9.715	1.00	86.17	A16S
ATOM	45887	C2	GUA	1272	256.026	146.451	-5.676	1.00	69.86	A16S	ATOM	45940	C3'	GUA	1274	263.714	143.813	-11.498	1.00	86.17	A16S
ATOM	45888	N2	GUA	1272	256.972	147.243	-5.144	1.00	69.86	A16S	ATOM	45941	O3'	GUA	1274	264.851	143.816	-12.345	1.00	86.17	A16S
ATOM	45889	N1	GUA	1272	256.020	145.149	-5.241	1.00	69.86	A16S	ATOM	45942	P	GUA	1275	265.103	142.570	-13.329	1.00	94.58	A16S
ATOM	45890	C6	GUA	1272	255.127	144.170	-5.662	1.00	69.86	A16S	ATOM	45943	O1P	GUA	1275	266.363	142.832	-14.068	1.00	89.76	A16S
ATOM	45891	O6	GUA	1272	255.217	143.020	-5.215	1.00	69.86	A16S	ATOM	45944	O2P	GUA	1275	263.856	142.305	-14.086	1.00	89.76	A16S
ATOM	45892	C5	GUA	1272	254.199	144.681	-6.607	1.00	69.86	A16S	ATOM	45945	O5'	GUA	1275	265.358	141.353	-12.338	1.00	94.58	A16S
ATOM	45893	N7	GUA	1272	253.153	144.053	-7.265	1.00	69.86	A16S	ATOM	45946	C5'	GUA	1275	266.504	141.346	-11.502	1.00	94.58	A16S
ATOM	45894	C8	GUA	1272	252.636	144.986	-8.017	1.00	69.86	A16S	ATOM	45947	C4'	GUA	1275	266.465	140.174	-10.554	1.00	94.58	A16S
ATOM	45895	C2'	GUA	1272	253.990	147.814	-9.638	1.00	81.35	A16S	ATOM	45948	O4'	GUA	1275	265.352	140.310	-9.626	1.00	94.58	A16S
ATOM	45896	O2'	GUA	1272	254.007	149.220	-9.752	1.00	81.35	A16S	ATOM	45949	C1'	GUA	1275	264.935	139.013	-9.200	1.00	94.58	A16S
ATOM	45897	C3'	GUA	1272	253.422	147.149	-10.884	1.00	81.35	A16S	ATOM	45950	N9	GUA	1275	263.544	138.803	-9.593	1.00	89.76	A16S
ATOM	45898	O3'	GUA	1272	253.921	147.751	-12.073	1.00	81.35	A16S	ATOM	45951	C4	GUA	1275	262.728	137.804	-9.131	1.00	89.76	A16S
ATOM	45899	P	URI	1273	255.047	146.996	-12.936	1.00	86.78	A16S	ATOM	45952	N3	GUA	1275	263.061	136.880	-8.211	1.00	89.76	A16S
ATOM	45900	O1P	URI	1273	255.158	147.730	-14.218	1.00	84.65	A16S	ATOM	45953	C2	GUA	1275	262.076	136.037	-7.982	1.00	89.76	A16S
ATOM	45901	O2P	URI	1273	254.755	145.544	-12.948	1.00	84.65	A16S	ATOM	45954	N2	GUA	1275	262.245	135.057	-7.088	1.00	89.76	A16S
ATOM	45902	O5'	URI	1273	256.383	147.221	-12.105	1.00	86.78	A16S	ATOM	45955	N1	GUA	1275	260.856	136.095	-8.611	1.00	89.76	A16S
ATOM	45903	C5'	URI	1273	256.997	148.500	-12.060	1.00	86.78	A16S	ATOM	45956	C6	GUA	1275	260.492	137.039	-9.565	1.00	89.76	A16S
ATOM	45904	C4'	URI	1273	258.229	148.452	-11.198	1.00	86.78	A16S	ATOM	45957	O6	GUA	1275	259.369	137.000	-10.079	1.00	89.76	A16S
ATOM	45905	O4'	URI	1273	257.852	148.208	-9.815	1.00	86.78	A16S	ATOM	45958	C5	GUA	1275	261.541	137.953	-9.814	1.00	89.76	A16S
ATOM	45906	C1'	URI	1273	258.860	147.435	-9.173	1.00	86.78	A16S	ATOM	45959	N7	GUA	1275	261.602	139.039	-10.676	1.00	89.76	A16S
ATOM	45907	N1	URI	1273	258.281	146.150	-8.753	1.00	84.65	A16S	ATOM	45960	C8	GUA	1275	262.806	139.517	-10.507	1.00	89.76	A16S
ATOM	45908	C6	URI	1273	257.128	145.650	-9.320	1.00	84.65	A16S	ATOM	45961	C2'	GUA	1275	265.827	138.007	-9.928	1.00	94.58	A16S
ATOM	45909	C2	URI	1273	258.953	145.443	-7.772	1.00	84.65	A16S	ATOM	45962	O2'	GUA	1275	266.937	137.655	-9.121	1.00	94.58	A16S
ATOM	45910	O2	URI	1273	259.961	145.859	-7.239	1.00	84.65	A16S	ATOM	45963	C3'	GUA	1275	266.203	138.812	-11.162	1.00	94.58	A16S
ATOM	45911	N3	URI	1273	258.401	144.232	-7.441	1.00	84.65	A16S	ATOM	45964	O3'	GUA	1275	267.324	138.269	-11.820	1.00	94.58	A16S
ATOM	45912	C4	URI	1273	257.267	143.667	-7.976	1.00	84.65	A16S	ATOM	45965	P	GUA	1276	267.093	137.225	-13.012	1.00	67.57	A16S
ATOM	45913	O4	URI	1273	256.901	142.565	-7.575	1.00	84.65	A16S	ATOM	45966	O1P	GUA	1276	268.405	137.067	-13.691	1.00	70.90	A16S
ATOM	45914	C5	URI	1273	256.613	144.463	-8.977	1.00	84.65	A16S	ATOM	45967	O2P	GUA	1276	265.906	137.670	-13.801	1.00	70.90	A16S
ATOM	45915	C2'	URI	1273	259.966	147.218	-10.204	1.00	86.78	A16S	ATOM	45968	O5'	GUA	1276	266.756	135.853	-12.269	1.00	67.57	A16S
ATOM	45916	O2'	URI	1273	260.939	148.235	-10.083	1.00	86.78	A16S	ATOM	45969	C5'	GUA	1276	267.677	135.296	-11.344	1.00	67.57	A16S

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ATOM  45970  C4' GUA  1276     267.050 134.155 -10.575  1.00 67.57      A16S
ATOM  45971  O4' GUA  1276     265.895 134.624  -9.828  1.00 67.57      A16S
ATOM  45972  C1' GUA  1276     264.963 133.559  -9.681  1.00 67.57      A16S
ATOM  45973  N9  GUA  1276     263.717 133.938 -10.338  1.00 70.90      A16S
ATOM  45974  C4  GUA  1276     262.525 133.254 -10.289  1.00 70.90      A16S
ATOM  45975  N3  GUA  1276     262.296 132.104  -9.620  1.00 70.90      A16S
ATOM  45976  C2  GUA  1276     261.054 131.683  -9.777  1.00 70.90      A16S
ATOM  45977  N2  GUA  1276     260.662 130.539  -9.206  1.00 70.90      A16S
ATOM  45978  N1  GUA  1276     260.111 132.347 -10.512  1.00 70.90      A16S
ATOM  45979  C6  GUA  1276     260.324 133.530 -11.204  1.00 70.90      A16S
ATOM  45980  O6  GUA  1276     259.401 134.044 -11.839  1.00 70.90      A16S
ATOM  45981  C5  GUA  1276     261.652 133.985 -11.060  1.00 70.90      A16S
ATOM  45982  N7  GUA  1276     262.280 135.102 -11.588  1.00 70.90      A16S
ATOM  45983  C8  GUA  1276     263.500 135.035 -11.131  1.00 70.90      A16S
ATOM  45984  C2' GUA  1276     265.591 132.334 -10.343  1.00 67.57      A16S
ATOM  45985  O2' GUA  1276     266.326 131.605  -9.383  1.00 67.57      A16S
ATOM  45986  C3' GUA  1276     266.486 132.999 -11.376  1.00 67.57      A16S
ATOM  45987  O3' GUA  1276     267.494 132.109 -11.814  1.00 67.57      A16S
ATOM  45988  P   CYT  1277     267.310 131.345 -13.213  1.00 79.98      A16S
ATOM  45989  O1P CYT  1277     268.492 130.474 -13.421  1.00 51.97      A16S
ATOM  45990  O2P CYT  1277     266.928 132.350 -14.248  1.00 51.97      A16S
ATOM  45991  O5' CYT  1277     266.086 130.367 -12.952  1.00 79.98      A16S
ATOM  45992  C5' CYT  1277     266.225 129.280 -12.054  1.00 79.98      A16S
ATOM  45993  C4' CYT  1277     264.945 128.501 -11.987  1.00 79.98      A16S
ATOM  45994  O4' CYT  1277     263.885 129.367 -11.529  1.00 79.98      A16S
ATOM  45995  C1' CYT  1277     262.668 128.984 -12.136  1.00 79.98      A16S
ATOM  45996  N1  CYT  1277     262.126 130.152 -12.841  1.00 51.97      A16S
ATOM  45997  C6  CYT  1277     262.951 131.148 -13.275  1.00 51.97      A16S
ATOM  45998  C2  CYT  1277     260.749 130.230 -13.062  1.00 51.97      A16S
ATOM  45999  O2  CYT  1277     260.027 129.314 -12.646  1.00 51.97      A16S
ATOM  46000  N3  CYT  1277     260.244 131.296 -13.719  1.00 51.97      A16S
ATOM  46001  C4  CYT  1277     261.062 132.260 -14.146  1.00 51.97      A16S
ATOM  46002  N4  CYT  1277     260.532 133.293 -14.801  1.00 51.97      A16S
ATOM  46003  C5  CYT  1277     262.466 132.209 -13.924  1.00 51.97      A16S
ATOM  46004  C2' CYT  1277     262.961 127.783 -13.039  1.00 79.98      A16S
ATOM  46005  O2' CYT  1277     262.693 126.595 -12.327  1.00 79.98      A16S
ATOM  46006  C3' CYT  1277     264.451 127.941 -13.301  1.00 79.98      A16S
ATOM  46007  O3' CYT  1277     265.054 126.668 -13.467  1.00 79.98      A16S
ATOM  46008  P   CYT  1278     265.930 126.365 -14.770  1.00 58.95      A16S
ATOM  46009  O1P CYT  1278     266.551 125.031 -14.571  1.00 60.12      A16S
ATOM  46010  O2P CYT  1278     266.785 127.547 -15.035  1.00 60.12      A16S
ATOM  46011  O5' CYT  1278     264.855 126.273 -15.939  1.00 58.95      A16S
ATOM  46012  C5' CYT  1278     263.969 125.161 -16.059  1.00 58.95      A16S
ATOM  46013  C4' CYT  1278     263.066 125.387 -17.238  1.00 58.95      A16S
ATOM  46014  O4' CYT  1278     262.435 126.657 -17.027  1.00 58.95      A16S
ATOM  46015  C1' CYT  1278     262.349 127.358 -18.235  1.00 58.95      A16S
ATOM  46016  N1  CYT  1278     262.607 128.767 -17.945  1.00 60.12      A16S
ATOM  46017  C6  CYT  1278     263.407 129.128 -16.901  1.00 60.12      A16S
ATOM  46018  C2  CYT  1278     261.977 129.735 -18.718  1.00 60.12      A16S
ATOM  46019  O2  CYT  1278     261.294 129.375 -19.687  1.00 60.12      A16S
ATOM  46020  N3  CYT  1278     262.121 131.038 -18.392  1.00 60.12      A16S
ATOM  46021  C4  CYT  1278     262.868 131.380 -17.344  1.00 60.12      A16S
ATOM  46022  N4  CYT  1278     262.948 132.674 -17.032  1.00 60.12      A16S
ATOM  46023  C5  CYT  1278     263.558 130.412 -16.564  1.00 60.12      A16S
ATOM  46024  C2' CYT  1278     263.119 126.622 -19.335  1.00 58.95      A16S
ATOM  46025  O2' CYT  1278     262.208 126.238 -20.339  1.00 58.95      A16S
ATOM  46026  C3' CYT  1278     263.806 125.487 -18.563  1.00 58.95      A16S
ATOM  46027  O3' CYT  1278     263.846 124.149 -19.105  1.00 58.95      A16S
ATOM  46028  P   CYT  1279     263.266 123.807 -20.575  1.00 73.26      A16S
ATOM  46029  O1P CYT  1279     263.888 122.521 -20.949  1.00 73.54      A16S
ATOM  46030  O2P CYT  1279     263.329 124.945 -21.519  1.00 73.54      A16S
ATOM  46031  O5' CYT  1279     261.755 123.428 -20.304  1.00 73.26      A16S
ATOM  46032  C5' CYT  1279     261.428 122.528 -19.258  1.00 73.26      A16S
ATOM  46033  C4' CYT  1279     259.944 122.520 -19.044  1.00 73.26      A16S
ATOM  46034  O4' CYT  1279     259.483 123.830 -18.677  1.00 73.26      A16S
ATOM  46035  C1' CYT  1279     258.153 123.965 -19.082  1.00 73.26      A16S
ATOM  46036  N1  CYT  1279     257.871 125.391 -19.272  1.00 73.54      A16S
ATOM  46037  C6  CYT  1279     258.876 126.307 -19.157  1.00 73.54      A16S
ATOM  46038  C2  CYT  1279     256.566 125.806 -19.523  1.00 73.54      A16S
ATOM  46039  O2  CYT  1279     255.677 124.953 -19.643  1.00 73.54      A16S
ATOM  46040  N3  CYT  1279     256.303 127.128 -19.624  1.00 73.54      A16S
ATOM  46041  C4  CYT  1279     257.291 128.015 -19.489  1.00 73.54      A16S
ATOM  46042  N4  CYT  1279     256.990 129.310 -19.581  1.00 73.54      A16S
ATOM  46043  C5  CYT  1279     258.632 127.616 -19.252  1.00 73.54      A16S
ATOM  46044  C2' CYT  1279     257.834 122.913 -20.156  1.00 73.26      A16S
ATOM  46045  O2' CYT  1279     256.738 122.162 -19.697  1.00 73.26      A16S
ATOM  46046  C3' CYT  1279     259.136 122.097 -20.253  1.00 73.26      A16S
ATOM  46047  O3' CYT  1279     258.996 120.710 -19.946  1.00 73.26      A16S
ATOM  46048  P   ADE  1280     258.228 119.695 -20.924  1.00 61.77      A16S
ATOM  46049  O1P ADE  1280     256.799 120.093 -21.051  1.00 78.43      A16S
ATOM  46050  O2P ADE  1280     259.043 119.477 -22.149  1.00 78.43      A16S
ATOM  46051  O5' ADE  1280     258.284 118.351 -20.074  1.00 61.77      A16S
ATOM  46052  C5' ADE  1280     259.517 117.665 -19.930  1.00 61.77      A16S
ATOM  46053  C4' ADE  1280     260.025 117.742 -18.505  1.00 61.77      A16S
ATOM  46054  O4' ADE  1280     260.295 119.096 -18.101  1.00 61.77      A16S
ATOM  46055  C1' ADE  1280     260.327 119.139 -16.687  1.00 61.77      A16S
ATOM  46056  N9  ADE  1280     259.957 120.482 -16.228  1.00 78.43      A16S
ATOM  46057  C4  ADE  1280     258.727 121.093 -16.241  1.00 78.43      A16S
ATOM  46058  N3  ADE  1280     257.557 120.559 -16.618  1.00 78.43      A16S
ATOM  46059  C2  ADE  1280     256.593 121.471 -16.555  1.00 78.43      A16S
ATOM  46060  N1  ADE  1280     256.665 122.767 -16.199  1.00 78.43      A16S
ATOM  46061  C6  ADE  1280     257.862 123.271 -15.838  1.00 78.43      A16S
ATOM  46062  N6  ADE  1280     257.945 124.563 -15.525  1.00 78.43      A16S
ATOM  46063  C5  ADE  1280     258.955 122.404 -15.835  1.00 78.43      A16S
ATOM  46064  N7  ADE  1280     260.287 122.597 -15.510  1.00 78.43      A16S
ATOM  46065  C8  ADE  1280     260.837 121.430 -15.744  1.00 78.43      A16S
ATOM  46066  C2' ADE  1280     259.628 117.893 -16.137  1.00 61.77      A16S
ATOM  46067  O2' ADE  1280     260.606 117.168 -15.431  1.00 61.77      A16S
ATOM  46068  C3' ADE  1280     259.128 117.188 -17.416  1.00 61.77      A16S
ATOM  46069  O3' ADE  1280     259.403 115.788 -17.395  1.00 61.77      A16S
ATOM  46070  P   GUA  1281     258.266 114.741 -16.987  1.00 84.22      A16S
ATOM  46071  O1P GUA  1281     258.163 113.782 -18.103  1.00 65.70      A16S
ATOM  46072  O2P GUA  1281     257.069 115.496 -16.556  1.00 65.70      A16S
ATOM  46073  O5' GUA  1281     258.910 113.993 -15.737  1.00 84.22      A16S
ATOM  46074  C5' GUA  1281     258.143 113.639 -14.580  1.00 84.22      A16S
ATOM  46075  C4' GUA  1281     257.815 114.872 -13.769  1.00 84.22      A16S
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ATOM	46076	O4'	GUA	1281	256.527	115.350	-14.214	1.00	84.22	A16S	ATOM	46129	C2'	URI	1283	260.286	126.058	-8.084	1.00	75.51	A16S
ATOM	46077	C1'	GUA	1281	255.792	115.829	-13.116	1.00	84.22	A16S	ATOM	46130	O2'	URI	1283	259.647	126.939	-7.178	1.00	75.51	A16S
ATOM	46078	N9	GUA	1281	254.523	115.109	-13.061	1.00	65.70	A16S	ATOM	46131	C3'	URI	1283	259.676	124.651	-8.025	1.00	75.51	A16S
ATOM	46079	C4	GUA	1281	253.289	115.702	-13.057	1.00	65.70	A16S	ATOM	46132	O3'	URI	1283	258.683	124.886	-7.025	1.00	75.51	A16S
ATOM	46080	N3	GUA	1281	253.060	117.030	-13.031	1.00	65.70	A16S	ATOM	46133	P	CYT	1284	257.569	123.794	-6.676	1.00	59.03	A16S
ATOM	46081	C2	GUA	1281	251.781	117.313	-13.072	1.00	65.70	A16S	ATOM	46134	O1P	CYT	1284	256.699	124.433	-5.638	1.00	52.79	A16S
ATOM	46082	N2	GUA	1281	251.391	118.598	-13.045	1.00	65.70	A16S	ATOM	46135	O2P	CYT	1284	258.191	122.466	-6.386	1.00	52.79	A16S
ATOM	46083	N1	GUA	1281	250.794	116.361	-13.142	1.00	65.70	A16S	ATOM	46136	O5'	CYT	1284	256.716	123.692	-8.014	1.00	59.03	A16S
ATOM	46084	C6	GUA	1281	251.004	114.988	-13.179	1.00	65.70	A16S	ATOM	46137	C5'	CYT	1284	256.331	124.855	-8.726	1.00	59.03	A16S
ATOM	46085	O6	GUA	1281	250.038	114.221	-13.274	1.00	65.70	A16S	ATOM	46138	C4'	CYT	1284	255.080	124.573	-9.505	1.00	59.03	A16S
ATOM	46086	C5	GUA	1281	252.384	114.671	-13.117	1.00	65.70	A16S	ATOM	46139	O4'	CYT	1284	255.317	123.452	-10.404	1.00	59.03	A16S
ATOM	46087	N7	GUA	1281	253.033	113.443	-13.108	1.00	65.70	A16S	ATOM	46140	C1'	CYT	1284	254.149	122.649	-10.490	1.00	59.03	A16S
ATOM	46088	C8	GUA	1281	254.302	113.753	-13.061	1.00	65.70	A16S	ATOM	46141	N1	CYT	1284	254.493	121.287	-10.047	1.00	52.79	A16S
ATOM	46089	C2'	GUA	1281	256.699	115.791	-11.891	1.00	84.22	A16S	ATOM	46142	C6	CYT	1284	255.691	121.031	-9.453	1.00	52.79	A16S
ATOM	46090	O2'	GUA	1281	257.375	117.025	-11.824	1.00	84.22	A16S	ATOM	46143	C2	CYT	1284	253.588	120.249	-10.275	1.00	52.79	A16S
ATOM	46091	C3'	GUA	1281	257.669	114.685	-12.262	1.00	84.22	A16S	ATOM	46144	O2	CYT	1284	252.485	120.513	-10.761	1.00	52.79	A16S
ATOM	46092	O3'	GUA	1281	258.962	114.867	-11.667	1.00	84.22	A16S	ATOM	46145	N3	CYT	1284	253.936	118.982	-9.955	1.00	52.79	A16S
ATOM	46093	P	URI	1282	259.142	115.700	-10.289	1.00	68.16	A16S	ATOM	46146	C4	CYT	1284	255.121	118.741	-9.405	1.00	52.79	A16S
ATOM	46094	O1P	URI	1282	260.342	115.117	-9.642	1.00	59.14	A16S	ATOM	46147	N4	CYT	1284	255.430	117.483	-9.121	1.00	52.79	A16S
ATOM	46095	O2P	URI	1282	257.879	115.766	-9.522	1.00	59.14	A16S	ATOM	46148	C5	CYT	1284	256.043	119.783	-9.122	1.00	52.79	A16S
ATOM	46096	O5'	URI	1282	259.565	117.165	-10.767	1.00	68.16	A16S	ATOM	46149	C2'	CYT	1284	253.072	123.342	-9.657	1.00	59.03	A16S
ATOM	46097	C5'	URI	1282	260.846	117.381	-11.364	1.00	68.16	A16S	ATOM	46150	O2'	CYT	1284	252.326	124.213	-10.481	1.00	59.03	A16S
ATOM	46098	C4'	URI	1282	260.995	118.809	-11.849	1.00	68.16	A16S	ATOM	46151	C3'	CYT	1284	253.930	124.089	-8.646	1.00	59.03	A16S
ATOM	46099	O4'	URI	1282	259.976	119.108	-12.820	1.00	68.16	A16S	ATOM	46152	O3'	CYT	1284	253.255	125.164	-8.012	1.00	59.03	A16S
ATOM	46100	C1'	URI	1282	259.645	120.476	-12.745	1.00	68.16	A16S	ATOM	46153	P	GUA	1285	252.797	125.000	-6.483	1.00	59.49	A16S
ATOM	46101	N1	URI	1282	258.182	120.596	-12.775	1.00	59.14	A16S	ATOM	46154	O1P	GUA	1285	251.705	125.977	-6.258	1.00	66.11	A16S
ATOM	46102	C6	URI	1282	257.389	119.478	-12.770	1.00	59.14	A16S	ATOM	46155	O2P	GUA	1285	253.986	124.992	-5.574	1.00	66.11	A16S
ATOM	46103	C2	URI	1282	257.633	121.850	-12.864	1.00	59.14	A16S	ATOM	46156	O5'	GUA	1285	252.147	123.554	-6.472	1.00	59.49	A16S
ATOM	46104	O2	URI	1282	258.298	122.864	-12.776	1.00	59.14	A16S	ATOM	46157	C5'	GUA	1285	250.968	123.287	-7.213	1.00	59.49	A16S
ATOM	46105	N3	URI	1282	256.271	121.869	-13.049	1.00	59.14	A16S	ATOM	46158	C4'	GUA	1285	250.387	121.990	-6.757	1.00	59.49	A16S
ATOM	46106	C4	URI	1282	255.430	120.778	-13.118	1.00	59.14	A16S	ATOM	46159	O4'	GUA	1285	251.060	120.878	-7.391	1.00	59.49	A16S
ATOM	46107	O4	URI	1282	254.261	120.935	-13.448	1.00	59.14	A16S	ATOM	46160	C1'	GUA	1285	251.249	119.832	-6.451	1.00	59.49	A16S
ATOM	46108	C5	URI	1282	256.071	119.525	-12.931	1.00	59.14	A16S	ATOM	46161	N9	GUA	1285	252.687	119.647	-6.312	1.00	66.11	A16S
ATOM	46109	C2'	URI	1282	260.417	121.125	-11.592	1.00	68.16	A16S	ATOM	46162	C4	GUA	1285	253.393	118.470	-6.274	1.00	66.11	A16S
ATOM	46110	O2'	URI	1282	261.484	121.890	-12.119	1.00	68.16	A16S	ATOM	46163	N3	GUA	1285	252.877	117.225	-6.336	1.00	66.11	A16S
ATOM	46111	C3'	URI	1282	260.927	119.917	-10.807	1.00	68.16	A16S	ATOM	46164	C2	GUA	1285	253.824	116.297	-6.290	1.00	66.11	A16S
ATOM	46112	O3'	URI	1282	262.273	120.110	-10.350	1.00	68.16	A16S	ATOM	46165	N2	GUA	1285	253.496	114.996	-6.321	1.00	66.11	A16S
ATOM	46113	P	URI	1283	262.736	121.510	-9.707	1.00	75.51	A16S	ATOM	46166	N1	GUA	1285	255.163	116.582	-6.205	1.00	66.11	A16S
ATOM	46114	O1P	URI	1283	263.451	122.263	-10.766	1.00	71.90	A16S	ATOM	46167	C6	GUA	1285	255.704	117.865	-6.143	1.00	66.11	A16S
ATOM	46115	O2P	URI	1283	263.442	121.131	-8.471	1.00	71.90	A16S	ATOM	46168	O6	GUA	1285	256.932	118.028	-6.072	1.00	66.11	A16S
ATOM	46116	O5'	URI	1283	261.403	122.304	-9.312	1.00	75.51	A16S	ATOM	46169	C5	GUA	1285	254.712	118.845	-6.176	1.00	66.11	A16S
ATOM	46117	C5'	URI	1283	260.920	122.329	-7.959	1.00	75.51	A16S	ATOM	46170	N7	GUA	1285	254.833	120.220	-6.137	1.00	66.11	A16S
ATOM	46118	C4'	URI	1283	260.788	123.758	-7.460	1.00	75.51	A16S	ATOM	46171	C8	GUA	1285	253.610	120.652	-6.217	1.00	66.11	A16S
ATOM	46119	O4'	URI	1283	262.002	124.462	-7.745	1.00	75.51	A16S	ATOM	46172	C2'	GUA	1285	250.529	120.262	-5.169	1.00	59.49	A16S
ATOM	46120	C1'	URI	1283	261.718	125.821	-7.609	1.00	75.51	A16S	ATOM	46173	O2'	GUA	1285	249.205	119.809	-5.250	1.00	59.49	A16S
ATOM	46121	N1	URI	1283	262.813	126.648	-8.123	1.00	71.90	A16S	ATOM	46174	C3'	GUA	1285	250.603	121.777	-5.279	1.00	59.49	A16S
ATOM	46122	C6	URI	1283	263.763	126.161	-8.989	1.00	71.90	A16S	ATOM	46175	O3'	GUA	1285	249.583	122.491	-4.603	1.00	59.49	A16S
ATOM	46123	C2	URI	1283	262.862	127.944	-7.659	1.00	71.90	A16S	ATOM	46176	P	GUA	1286	249.734	122.835	-3.048	1.00	47.56	A16S
ATOM	46124	O2	URI	1283	262.026	128.406	-6.898	1.00	71.90	A16S	ATOM	46177	O1P	GUA	1286	248.765	123.913	-2.735	1.00	70.20	A16S
ATOM	46125	N3	URI	1283	263.931	128.676	-8.104	1.00	71.90	A16S	ATOM	46178	O2P	GUA	1286	251.160	123.020	-2.720	1.00	70.20	A16S
ATOM	46126	C4	URI	1283	264.936	128.247	-8.940	1.00	71.90	A16S	ATOM	46179	O5'	GUA	1286	249.225	121.494	-2.382	1.00	47.56	A16S
ATOM	46127	O4	URI	1283	265.869	129.008	-9.195	1.00	71.90	A16S	ATOM	46180	C5'	GUA	1286	249.248	121.318	-0.994	1.00	47.56	A16S
ATOM	46128	C5	URI	1283	264.800	126.892	-9.397	1.00	71.90	A16S	ATOM	46181	C4'	GUA	1286	249.363	119.866	-0.713	1.00	47.56	A16S

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ATOM  46182  O4' GUA  1286     250.156 119.306  -1.768  1.00 47.56      A16S
ATOM  46183  C1' GUA  1286     251.198 118.551  -1.208  1.00 47.56      A16S
ATOM  46184  N9  GUA  1286     252.450 119.218  -1.540  1.00 70.20      A16S
ATOM  46185  C4  GUA  1286     253.537 118.621  -2.110  1.00 70.20      A16S
ATOM  46186  N3  GUA  1286     253.647 117.313  -2.410  1.00 70.20      A16S
ATOM  46187  C2  GUA  1286     254.802 117.036  -2.980  1.00 70.20      A16S
ATOM  46188  N2  GUA  1286     255.062 115.791  -3.362  1.00 70.20      A16S
ATOM  46189  N1  GUA  1286     255.780 117.967  -3.223  1.00 70.20      A16S
ATOM  46190  C6  GUA  1286     255.686 119.318  -2.919  1.00 70.20      A16S
ATOM  46191  O6  GUA  1286     256.622 120.068  -3.180  1.00 70.20      A16S
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ATOM  46193  N7  GUA  1286     253.945 120.844  -1.869  1.00 70.20      A16S
ATOM  46194  C8  GUA  1286     252.763 120.548  -1.401  1.00 70.20      A16S
ATOM  46195  C2' GUA  1286     250.867 118.313   0.269  1.00 47.56      A16S
ATOM  46196  O2' GUA  1286     250.033 117.185   0.353  1.00 47.56      A16S
ATOM  46197  C3' GUA  1286     250.021 119.522   0.610  1.00 47.56      A16S
ATOM  46198  O3' GUA  1286     248.953 119.147   1.474  1.00 47.56      A16S
ATOM  46199  P   ADE  1287     249.211 118.155   2.717  1.00 49.66      A16S
ATOM  46200  O1P ADE  1287     248.153 118.542   3.694  1.00 47.84      A16S
ATOM  46201  O2P ADE  1287     250.638 118.187   3.130  1.00 47.84      A16S
ATOM  46202  O5' ADE  1287     248.881 116.685   2.190  1.00 49.66      A16S
ATOM  46203  C5' ADE  1287     247.551 116.316   1.841  1.00 49.66      A16S
ATOM  46204  C4' ADE  1287     247.521 114.923   1.261  1.00 49.66      A16S
ATOM  46205  O4' ADE  1287     248.347 114.862   0.064  1.00 49.66      A16S
ATOM  46206  C1' ADE  1287     249.030 113.616   0.014  1.00 49.66      A16S
ATOM  46207  N9  ADE  1287     250.464 113.889   0.108  1.00 47.84      A16S
ATOM  46208  C4  ADE  1287     251.495 112.986   0.058  1.00 47.84      A16S
ATOM  46209  N3  ADE  1287     251.413 111.657  -0.105  1.00 47.84      A16S
ATOM  46210  C2  ADE  1287     252.623 111.117  -0.111  1.00 47.84      A16S
ATOM  46211  N1  ADE  1287     253.816 111.705   0.026  1.00 47.84      A16S
ATOM  46212  C6  ADE  1287     253.859 113.039   0.199  1.00 47.84      A16S
ATOM  46213  N6  ADE  1287     255.040 113.630   0.359  1.00 47.84      A16S
ATOM  46214  C5  ADE  1287     252.647 113.731   0.208  1.00 47.84      A16S
ATOM  46215  N7  ADE  1287     252.348 115.076   0.340  1.00 47.84      A16S
ATOM  46216  C8  ADE  1287     251.048 115.109   0.273  1.00 47.84      A16S
ATOM  46217  C2' ADE  1287     248.515 112.766   1.179  1.00 49.66      A16S
ATOM  46218  O2' ADE  1287     247.467 111.912   0.751  1.00 49.66      A16S
ATOM  46219  C3' ADE  1287     248.084 113.849   2.169  1.00 49.66      A16S
ATOM  46220  O3' ADE  1287     247.089 113.403   3.075  1.00 49.66      A16S
ATOM  46221  P   URI  1288     247.518 112.897   4.529  1.00 52.44      A16S
ATOM  46222  O1P URI  1288     246.335 112.253   5.142  1.00 54.97      A16S
ATOM  46223  O2P URI  1288     248.192 114.011   5.231  1.00 54.97      A16S
ATOM  46224  O5' URI  1288     248.600 111.774   4.229  1.00 52.44      A16S
ATOM  46225  C5' URI  1288     248.235 110.562   3.586  1.00 52.44      A16S
ATOM  46226  C4' URI  1288     249.437 109.667   3.487  1.00 52.44      A16S
ATOM  46227  O4' URI  1288     250.377 110.222   2.530  1.00 52.44      A16S
ATOM  46228  C1' URI  1288     251.710 110.016   2.986  1.00 52.44      A16S
ATOM  46229  N1  URI  1288     252.340 111.334   3.157  1.00 54.97      A16S
ATOM  46230  C6  URI  1288     251.583 112.454   3.329  1.00 54.97      A16S
ATOM  46231  C2  URI  1288     253.719 111.408   3.137  1.00 54.97      A16S
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ATOM  46234  C4  URI  1288     253.531 113.826   3.473  1.00 54.97      A16S
ATOM  46235  O4  URI  1288     254.133 114.894   3.574  1.00 54.97      A16S
ATOM  46236  C5  URI  1288     252.115 113.662   3.483  1.00 54.97      A16S
ATOM  46237  C2' URI  1288     251.622 109.212   4.286  1.00 52.44      A16S
ATOM  46238  O2' URI  1288     251.760 107.828   4.027  1.00 52.44      A16S
ATOM  46239  C3' URI  1288     250.230 109.599   4.776  1.00 52.44      A16S
ATOM  46240  O3' URI  1288     249.668 108.674   5.695  1.00 52.44      A16S
ATOM  46241  P   URI  1289     249.936 108.872   7.265  1.00 65.71      A16S
ATOM  46242  O1P URI  1289     249.190 107.828   8.017  1.00 66.83      A16S
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ATOM  46244  O5' URI  1289     251.499 108.574   7.418  1.00 65.71      A16S
ATOM  46245  C5' URI  1289     252.025 107.273   7.148  1.00 65.71      A16S
ATOM  46246  C4' URI  1289     253.545 107.293   7.139  1.00 65.71      A16S
ATOM  46247  O4' URI  1289     254.023 108.164   6.080  1.00 65.71      A16S
ATOM  46248  C1' URI  1289     255.250 108.762   6.467  1.00 65.71      A16S
ATOM  46249  N1  URI  1289     255.042 110.212   6.545  1.00 66.83      A16S
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ATOM  46251  C2  URI  1289     256.143 111.039   6.405  1.00 66.83      A16S
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ATOM  46261  P   GUA  1290     254.868 107.259  10.852  1.00 83.31      A16S
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ATOM  46264  O5' GUA  1290     256.411 107.615  10.645  1.00 83.31      A16S
ATOM  46265  C5' GUA  1290     257.378 106.586  10.443  1.00 83.31      A16S
ATOM  46266  C4' GUA  1290     258.781 107.148  10.515  1.00 83.31      A16S
ATOM  46267  O4' GUA  1290     259.006 108.027   9.382  1.00 83.31      A16S
ATOM  46268  C1' GUA  1290     259.874 109.080   9.767  1.00 83.31      A16S
ATOM  46269  N9  GUA  1290     259.116 110.317   9.761  1.00 63.48      A16S
ATOM  46270  C4  GUA  1290     259.637 111.582   9.811  1.00 63.48      A16S
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ATOM  46272  C2  GUA  1290     261.141 113.207   9.909  1.00 63.48      A16S
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ATOM  46279  C8  GUA  1290     257.752 110.456   9.724  1.00 63.48      A16S
ATOM  46280  C2' GUA  1290     260.316 108.793  11.196  1.00 83.31      A16S
ATOM  46281  O2' GUA  1290     261.498 108.021  11.189  1.00 83.31      A16S
ATOM  46282  C3' GUA  1290     259.112 108.027  11.714  1.00 83.31      A16S
ATOM  46283  O3' GUA  1290     259.445 107.295  12.888  1.00 83.31      A16S
ATOM  46284  P   GUA  1291     259.170 107.948  14.335  1.00 84.25      A16S
ATOM  46285  O1P GUA  1291     259.668 106.983  15.344  1.00 69.91      A16S
ATOM  46286  O2P GUA  1291     257.761 108.417  14.393  1.00 69.91      A16S
ATOM  46287  O5' GUA  1291     260.088 109.252  14.378  1.00 84.25      A16S
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ATOM	46288	C5'	GUA	1291	261.504	109.151	14.322	1.00	84.25	A16S	ATOM	46341	C2	GUA	1293	255.154	121.378	17.707	1.00	71.88	A16S
ATOM	46289	C4'	GUA	1291	262.141	110.525	14.375	1.00	84.25	A16S	ATOM	46342	N2	GUA	1293	254.659	122.588	17.406	1.00	71.88	A16S
ATOM	46290	O4'	GUA	1291	261.778	111.301	13.198	1.00	84.25	A16S	ATOM	46343	N1	GUA	1293	254.329	120.300	17.482	1.00	71.88	A16S
ATOM	46291	C1'	GUA	1291	261.878	112.687	13.505	1.00	84.25	A16S	ATOM	46344	C6	GUA	1293	254.659	118.973	17.741	1.00	71.88	A16S
ATOM	46292	N9	GUA	1291	260.605	113.345	13.221	1.00	69.91	A16S	ATOM	46345	O6	GUA	1293	253.844	118.072	17.491	1.00	71.88	A16S
ATOM	46293	C4	GUA	1291	260.416	114.697	13.066	1.00	69.91	A16S	ATOM	46346	C5	GUA	1293	255.971	118.860	18.282	1.00	71.88	A16S
ATOM	46294	N3	GUA	1291	261.379	115.643	13.127	1.00	69.91	A16S	ATOM	46347	N7	GUA	1293	256.690	117.742	18.686	1.00	71.88	A16S
ATOM	46295	C2	GUA	1291	260.885	116.861	12.962	1.00	69.91	A16S	ATOM	46348	C8	GUA	1293	257.833	118.225	19.092	1.00	71.88	A16S
ATOM	46296	N2	GUA	1291	261.698	117.920	13.008	1.00	69.91	A16S	ATOM	46349	C2'	GUA	1293	258.750	121.226	20.638	1.00	86.38	A16S
ATOM	46297	N1	GUA	1291	259.555	117.127	12.747	1.00	69.91	A16S	ATOM	46350	O2'	GUA	1293	259.254	122.536	20.492	1.00	86.38	A16S
ATOM	46298	C6	GUA	1291	258.549	116.170	12.688	1.00	69.91	A16S	ATOM	46351	C3'	GUA	1293	259.570	120.411	21.631	1.00	86.38	A16S
ATOM	46299	O6	GUA	1291	257.380	116.520	12.520	1.00	69.91	A16S	ATOM	46352	O3'	GUA	1293	259.909	121.221	22.749	1.00	86.38	A16S
ATOM	46300	C5	GUA	1291	259.063	114.859	12.859	1.00	69.91	A16S	ATOM	46353	P	URI	1294	258.804	121.521	23.879	1.00	85.17	A16S
ATOM	46301	N7	GUA	1291	258.416	113.633	12.864	1.00	69.91	A16S	ATOM	46354	O1P	URI	1294	259.468	122.196	25.020	1.00	67.80	A16S
ATOM	46302	C8	GUA	1291	259.369	112.764	13.079	1.00	69.91	A16S	ATOM	46355	O2P	URI	1294	258.054	120.260	24.118	1.00	67.80	A16S
ATOM	46303	C2'	GUA	1291	262.244	112.788	14.987	1.00	84.25	A16S	ATOM	46356	O5'	URI	1294	257.845	122.593	23.196	1.00	85.17	A16S
ATOM	46304	O2'	GUA	1291	263.647	112.906	15.124	1.00	84.25	A16S	ATOM	46357	C5'	URI	1294	258.341	123.873	22.832	1.00	85.17	A16S
ATOM	46305	C3'	GUA	1291	261.735	111.451	15.509	1.00	84.25	A16S	ATOM	46358	C4'	URI	1294	257.235	124.724	22.255	1.00	85.17	A16S
ATOM	46306	O3'	GUA	1291	262.364	111.130	16.743	1.00	84.25	A16S	ATOM	46359	O4'	URI	1294	256.736	124.118	21.037	1.00	85.17	A16S
ATOM	46307	P	GUA	1292	261.785	111.751	18.114	1.00	77.18	A16S	ATOM	46360	C1'	URI	1294	255.338	124.337	20.931	1.00	85.17	A16S
ATOM	46308	O1P	GUA	1292	262.650	111.246	19.220	1.00	64.90	A16S	ATOM	46361	N1	URI	1294	254.674	123.030	20.960	1.00	67.80	A16S
ATOM	46309	O2P	GUA	1292	260.313	111.516	18.168	1.00	64.90	A16S	ATOM	46362	C6	URI	1294	255.367	121.895	21.291	1.00	67.80	A16S
ATOM	46310	O5'	GUA	1292	262.032	113.322	17.974	1.00	77.18	A16S	ATOM	46363	C2	URI	1294	253.337	122.981	20.636	1.00	67.80	A16S
ATOM	46311	C5'	GUA	1292	263.338	113.868	18.122	1.00	77.18	A16S	ATOM	46364	O2	URI	1294	252.685	123.979	20.365	1.00	67.80	A16S
ATOM	46312	C4'	GUA	1292	263.295	115.375	18.028	1.00	77.18	A16S	ATOM	46365	N3	URI	1294	252.785	121.723	20.652	1.00	67.80	A16S
ATOM	46313	O4'	GUA	1292	262.742	115.749	16.739	1.00	77.18	A16S	ATOM	46366	C4	URI	1294	253.424	120.539	20.972	1.00	67.80	A16S
ATOM	46314	C1'	GUA	1292	262.026	116.968	16.867	1.00	77.18	A16S	ATOM	46367	O4	URI	1294	252.779	119.493	21.021	1.00	67.80	A16S
ATOM	46315	N9	GUA	1292	260.636	116.742	16.482	1.00	64.90	A16S	ATOM	46368	C5	URI	1294	254.806	120.685	21.307	1.00	67.80	A16S
ATOM	46316	C4	GUA	1292	259.735	117.711	16.119	1.00	64.90	A16S	ATOM	46369	C2'	URI	1294	254.933	125.232	22.100	1.00	85.17	A16S
ATOM	46317	N3	GUA	1292	259.984	119.036	16.051	1.00	64.90	A16S	ATOM	46370	O2'	URI	1294	254.991	126.590	21.708	1.00	85.17	A16S
ATOM	46318	C2	GUA	1292	258.915	119.720	15.681	1.00	64.90	A16S	ATOM	46371	C3'	URI	1294	256.000	124.870	23.122	1.00	85.17	A16S
ATOM	46319	N2	GUA	1292	258.980	121.048	15.580	1.00	64.90	A16S	ATOM	46372	O3'	URI	1294	256.175	125.909	24.065	1.00	85.17	A16S
ATOM	46320	N1	GUA	1292	257.702	119.151	15.384	1.00	64.90	A16S	ATOM	46373	P	CYT	1295	255.361	125.868	25.441	1.00	93.17	A16S
ATOM	46321	C6	GUA	1292	257.424	117.790	15.433	1.00	64.90	A16S	ATOM	46374	O1P	CYT	1295	255.749	127.109	26.164	1.00	57.16	A16S
ATOM	46322	O6	GUA	1292	256.299	117.381	15.121	1.00	64.90	A16S	ATOM	46375	O2P	CYT	1295	255.563	124.534	26.080	1.00	57.16	A16S
ATOM	46323	C5	GUA	1292	258.560	117.040	15.851	1.00	64.90	A16S	ATOM	46376	O5'	CYT	1295	253.839	126.011	24.994	1.00	93.17	A16S
ATOM	46324	N7	GUA	1292	258.720	115.673	16.045	1.00	64.90	A16S	ATOM	46377	C5'	CYT	1295	253.332	127.264	24.556	1.00	93.17	A16S
ATOM	46325	C8	GUA	1292	259.965	115.543	16.415	1.00	64.90	A16S	ATOM	46378	C4'	CYT	1295	251.865	127.151	24.217	1.00	93.17	A16S
ATOM	46326	C2'	GUA	1292	262.152	117.420	18.323	1.00	77.18	A16S	ATOM	46379	O4'	CYT	1295	251.688	126.273	23.069	1.00	93.17	A16S
ATOM	46327	O2'	GUA	1292	263.230	118.322	18.467	1.00	77.18	A16S	ATOM	46380	C1'	CYT	1295	250.425	125.631	23.157	1.00	93.17	A16S
ATOM	46328	C3'	GUA	1292	262.400	116.095	19.024	1.00	77.18	A16S	ATOM	46381	N1	CYT	1295	250.638	124.177	23.213	1.00	57.16	A16S
ATOM	46329	O3'	GUA	1292	263.049	116.321	20.263	1.00	77.18	A16S	ATOM	46382	C6	CYT	1295	251.823	123.656	23.644	1.00	57.16	A16S
ATOM	46330	P	GUA	1293	262.168	116.516	21.594	1.00	86.38	A16S	ATOM	46383	C2	CYT	1295	249.593	123.327	22.827	1.00	57.16	A16S
ATOM	46331	O1P	GUA	1293	263.109	116.963	22.653	1.00	71.88	A16S	ATOM	46384	O2	CYT	1295	248.528	123.827	22.436	1.00	57.16	A16S
ATOM	46332	O2P	GUA	1293	261.354	115.285	21.803	1.00	71.88	A16S	ATOM	46385	N3	CYT	1295	249.766	121.985	22.894	1.00	57.16	A16S
ATOM	46333	O5'	GUA	1293	261.222	117.762	21.278	1.00	86.38	A16S	ATOM	46386	C4	CYT	1295	250.922	121.487	23.328	1.00	57.16	A16S
ATOM	46334	C5'	GUA	1293	261.783	119.064	21.259	1.00	86.38	A16S	ATOM	46387	N4	CYT	1295	251.045	120.163	23.392	1.00	57.16	A16S
ATOM	46335	C4'	GUA	1293	260.789	120.099	20.787	1.00	86.38	A16S	ATOM	46388	C5	CYT	1295	252.006	122.328	23.719	1.00	57.16	A16S
ATOM	46336	O4'	GUA	1293	260.190	119.711	19.526	1.00	86.38	A16S	ATOM	46389	C2'	CYT	1295	249.756	126.154	24.428	1.00	93.17	A16S
ATOM	46337	C1'	GUA	1293	259.012	120.474	19.334	1.00	86.38	A16S	ATOM	46390	O2'	CYT	1295	249.001	127.303	24.116	1.00	93.17	A16S
ATOM	46338	N9	GUA	1293	257.907	119.593	18.980	1.00	71.88	A16S	ATOM	46391	C3'	CYT	1295	250.968	126.520	25.266	1.00	93.17	A16S
ATOM	46339	C4	GUA	1293	256.712	120.005	18.460	1.00	71.88	A16S	ATOM	46392	O3'	CYT	1295	250.612	127.425	26.301	1.00	93.17	A16S
ATOM	46340	N3	GUA	1293	256.373	121.280	18.195	1.00	71.88	A16S	ATOM	46393	P	URI	1296	249.894	126.862	27.627	1.00	75.96	A16S

ATOM	46394	O1P	URI	1296	249.670	128.028	28.529	1.00	61.60	A16S	ATOM	46447	O2	CYT	1298	242.727	114.571	34.890	1.00	83.42	A16S
ATOM	46395	O2P	URI	1296	250.625	125.666	28.132	1.00	61.60	A16S	ATOM	46448	N3	CYT	1298	241.044	114.921	33.432	1.00	83.42	A16S
ATOM	46396	O5'	URI	1296	248.476	126.361	27.099	1.00	75.96	A16S	ATOM	46449	C4	CYT	1298	240.367	115.791	32.678	1.00	83.42	A16S
ATOM	46397	C5'	URI	1296	247.482	127.292	26.670	1.00	75.96	A16S	ATOM	46450	N4	CYT	1298	239.352	115.322	31.943	1.00	83.42	A16S
ATOM	46398	C4'	URI	1296	246.214	126.565	26.302	1.00	75.96	A16S	ATOM	46451	C5	CYT	1298	240.699	117.177	32.644	1.00	83.42	A16S
ATOM	46399	O4'	URI	1296	246.498	125.661	25.213	1.00	75.96	A16S	ATOM	46452	C2'	CYT	1298	244.898	116.995	34.318	1.00	73.90	A16S
ATOM	46400	C1'	URI	1296	245.647	124.537	25.301	1.00	75.96	A16S	ATOM	46453	O2'	CYT	1298	245.855	116.570	35.267	1.00	73.90	A16S
ATOM	46401	N1	URI	1296	246.479	123.332	25.293	1.00	61.60	A16S	ATOM	46454	C3'	CYT	1298	245.141	118.417	33.824	1.00	73.90	A16S
ATOM	46402	C6	URI	1296	247.797	123.367	25.658	1.00	61.60	A16S	ATOM	46455	O3'	CYT	1298	246.522	118.676	33.620	1.00	73.90	A16S
ATOM	46403	C2	URI	1296	245.879	122.157	24.902	1.00	61.60	A16S	ATOM	46456	P	ADE	1299	247.043	119.022	32.143	1.00	101.50	A16S
ATOM	46404	O2	URI	1296	244.713	122.102	24.563	1.00	61.60	A16S	ATOM	46457	O1P	ADE	1299	248.490	119.319	32.203	1.00	61.56	A16S
ATOM	46405	N3	URI	1296	246.692	121.051	24.920	1.00	61.60	A16S	ATOM	46458	O2P	ADE	1299	246.111	120.035	31.587	1.00	61.56	A16S
ATOM	46406	C4	URI	1296	248.020	121.011	25.280	1.00	61.60	A16S	ATOM	46459	O5'	ADE	1299	246.886	117.644	31.362	1.00	101.50	A16S
ATOM	46407	O4	URI	1296	248.618	119.932	25.278	1.00	61.60	A16S	ATOM	46460	C5'	ADE	1299	247.502	116.462	31.862	1.00	101.50	A16S
ATOM	46408	C5	URI	1296	248.570	122.277	25.664	1.00	61.60	A16S	ATOM	46461	C4'	ADE	1299	246.790	115.237	31.342	1.00	101.50	A16S
ATOM	46409	C2'	URI	1296	244.794	124.691	26.558	1.00	75.96	A16S	ATOM	46462	O4'	ADE	1299	245.386	115.338	31.676	1.00	101.50	A16S
ATOM	46410	O2'	URI	1296	243.534	125.227	26.204	1.00	75.96	A16S	ATOM	46463	C1'	ADE	1299	244.604	114.820	30.616	1.00	101.50	A16S
ATOM	46411	C3'	URI	1296	245.633	125.664	27.377	1.00	75.96	A16S	ATOM	46464	N9	ADE	1299	243.728	115.890	30.144	1.00	61.56	A16S
ATOM	46412	O3'	URI	1296	244.809	126.438	28.241	1.00	75.96	A16S	ATOM	46465	C4	ADE	1299	242.513	115.717	29.536	1.00	61.56	A16S
ATOM	46413	P	GUA	1297	244.918	126.259	29.836	1.00	69.00	A16S	ATOM	46466	N3	ADE	1299	241.923	114.553	29.226	1.00	61.56	A16S
ATOM	46414	O1P	GUA	1297	244.055	127.326	30.393	1.00	67.23	A16S	ATOM	46467	C2	ADE	1299	240.736	114.768	28.670	1.00	61.56	A16S
ATOM	46415	O2P	GUA	1297	246.347	126.184	30.232	1.00	67.23	A16S	ATOM	46468	N1	ADE	1299	240.118	115.927	28.410	1.00	61.56	A16S
ATOM	46416	O5'	GUA	1297	244.252	124.843	30.138	1.00	69.00	A16S	ATOM	46469	C6	ADE	1299	240.742	117.080	28.737	1.00	61.56	A16S
ATOM	46417	C5'	GUA	1297	242.852	124.649	29.991	1.00	69.00	A16S	ATOM	46470	N6	ADE	1299	240.122	118.237	28.486	1.00	61.56	A16S
ATOM	46418	C4'	GUA	1297	242.567	123.202	29.710	1.00	69.00	A16S	ATOM	46471	C5	ADE	1299	242.011	116.988	29.328	1.00	61.56	A16S
ATOM	46419	O4'	GUA	1297	243.293	122.819	28.519	1.00	69.00	A16S	ATOM	46472	N7	ADE	1299	242.908	117.951	29.772	1.00	61.56	A16S
ATOM	46420	C1'	GUA	1297	243.712	121.472	28.628	1.00	69.00	A16S	ATOM	46473	C8	ADE	1299	243.910	117.251	30.239	1.00	61.56	A16S
ATOM	46421	N9	GUA	1297	245.166	121.440	28.573	1.00	67.23	A16S	ATOM	46474	C2'	ADE	1299	245.557	114.241	29.569	1.00	101.50	A16S
ATOM	46422	C4	GUA	1297	245.936	120.341	28.304	1.00	67.23	A16S	ATOM	46475	O2'	ADE	1299	245.740	112.858	29.808	1.00	101.50	A16S
ATOM	46423	N3	GUA	1297	245.477	119.119	27.962	1.00	67.23	A16S	ATOM	46476	C3'	ADE	1299	246.826	115.041	29.834	1.00	101.50	A16S
ATOM	46424	C2	GUA	1297	246.456	118.247	27.817	1.00	67.23	A16S	ATOM	46477	O3'	ADE	1299	247.966	114.266	29.503	1.00	101.50	A16S
ATOM	46425	N2	GUA	1297	246.175	116.977	27.463	1.00	67.23	A16S	ATOM	46478	P	ADE	1300	248.787	114.593	28.174	1.00	85.74	A16S
ATOM	46426	N1	GUA	1297	247.782	118.554	28.007	1.00	67.23	A16S	ATOM	46479	O1P	ADE	1300	249.929	113.652	28.110	1.00	56.12	A16S
ATOM	46427	C6	GUA	1297	248.270	119.808	28.361	1.00	67.23	A16S	ATOM	46480	O2P	ADE	1300	249.024	116.053	28.150	1.00	56.12	A16S
ATOM	46428	O6	GUA	1297	249.480	119.974	28.524	1.00	67.23	A16S	ATOM	46481	O5'	ADE	1300	247.793	114.198	27.000	1.00	85.74	A16S
ATOM	46429	C5	GUA	1297	247.232	120.750	28.497	1.00	67.23	A16S	ATOM	46482	C5'	ADE	1300	248.278	113.947	25.681	1.00	85.74	A16S
ATOM	46430	N7	GUA	1297	247.279	122.099	28.814	1.00	67.23	A16S	ATOM	46483	C4'	ADE	1300	247.124	113.932	24.710	1.00	85.74	A16S
ATOM	46431	C8	GUA	1297	246.031	122.469	28.836	1.00	67.23	A16S	ATOM	46484	O4'	ADE	1300	246.385	115.151	24.878	1.00	85.74	A16S
ATOM	46432	C2'	GUA	1297	243.223	120.947	29.978	1.00	69.00	A16S	ATOM	46485	C1'	ADE	1300	245.620	115.355	23.726	1.00	85.74	A16S
ATOM	46433	O2'	GUA	1297	242.016	120.233	29.828	1.00	69.00	A16S	ATOM	46486	N9	ADE	1300	245.356	116.775	23.577	1.00	56.12	A16S
ATOM	46434	C3'	GUA	1297	243.078	122.242	30.764	1.00	69.00	A16S	ATOM	46487	C4	ADE	1300	244.198	117.297	23.061	1.00	56.12	A16S
ATOM	46435	O3'	GUA	1297	242.134	122.115	31.813	1.00	69.00	A16S	ATOM	46488	N3	ADE	1300	243.146	116.614	22.578	1.00	56.12	A16S
ATOM	46436	P	CYT	1298	242.628	122.199	33.339	1.00	73.90	A16S	ATOM	46489	C2	ADE	1300	242.208	117.451	22.154	1.00	56.12	A16S
ATOM	46437	O1P	CYT	1298	243.616	123.310	33.427	1.00	83.42	A16S	ATOM	46490	N1	ADE	1300	242.203	118.789	22.159	1.00	56.12	A16S
ATOM	46438	O2P	CYT	1298	241.410	122.229	34.191	1.00	83.42	A16S	ATOM	46491	C6	ADE	1300	243.277	119.439	22.653	1.00	56.12	A16S
ATOM	46439	O5'	CYT	1298	243.380	120.815	33.597	1.00	73.90	A16S	ATOM	46492	N6	ADE	1300	243.277	120.773	22.645	1.00	56.12	A16S
ATOM	46440	C5'	CYT	1298	244.265	120.683	34.700	1.00	73.90	A16S	ATOM	46493	C5	ADE	1300	244.334	118.669	23.139	1.00	56.12	A16S
ATOM	46441	C4'	CYT	1298	244.582	119.235	34.969	1.00	73.90	A16S	ATOM	46494	N7	ADE	1300	245.557	119.009	23.695	1.00	56.12	A16S
ATOM	46442	O4'	CYT	1298	243.367	118.522	35.297	1.00	73.90	A16S	ATOM	46495	C8	ADE	1300	246.128	117.848	23.930	1.00	56.12	A16S
ATOM	46443	C1'	CYT	1298	243.540	117.145	35.006	1.00	73.90	A16S	ATOM	46496	C2'	ADE	1300	246.252	114.588	22.562	1.00	85.74	A16S
ATOM	46444	N1	CYT	1298	242.418	116.699	34.175	1.00	83.42	A16S	ATOM	46497	O2'	ADE	1300	245.276	113.704	22.032	1.00	85.74	A16S
ATOM	46445	C6	CYT	1298	241.721	117.584	33.403	1.00	83.42	A16S	ATOM	46498	C3'	ADE	1300	247.457	113.892	23.223	1.00	85.74	A16S
ATOM	46446	C2	CYT	1298	242.075	115.348	34.187	1.00	83.42	A16S	ATOM	46499	O3'	ADE	1300	247.493	112.537	22.764	1.00	85.74	A16S

ATOM	46500	P	CYT	1301	248.553	111.494	23.380	1.00	76.90	A16S
ATOM	46501	O1P	CYT	1301	248.307	111.382	24.844	1.00	71.81	A16S
ATOM	46502	O2P	CYT	1301	249.909	111.849	22.887	1.00	71.81	A16S
ATOM	46503	O5'	CYT	1301	248.130	110.097	22.737	1.00	76.90	A16S
ATOM	46504	C5'	CYT	1301	249.073	109.293	22.034	1.00	76.90	A16S
ATOM	46505	C4'	CYT	1301	248.470	107.949	21.690	1.00	76.90	A16S
ATOM	46506	O4'	CYT	1301	248.208	107.209	22.910	1.00	76.90	A16S
ATOM	46507	C1'	CYT	1301	247.058	106.393	22.737	1.00	76.90	A16S
ATOM	46508	N1	CYT	1301	246.043	106.813	23.710	1.00	71.81	A16S
ATOM	46509	C6	CYT	1301	246.109	108.042	24.303	1.00	71.81	A16S
ATOM	46510	C2	CYT	1301	245.003	105.931	24.020	1.00	71.81	A16S
ATOM	46511	O2	CYT	1301	244.979	104.813	23.479	1.00	71.81	A16S
ATOM	46512	N3	CYT	1301	244.054	106.317	24.905	1.00	71.81	A16S
ATOM	46513	C4	CYT	1301	244.128	107.522	25.477	1.00	71.81	A16S
ATOM	46514	N4	CYT	1301	243.172	107.863	26.339	1.00	71.81	A16S
ATOM	46515	C5	CYT	1301	245.183	108.432	25.186	1.00	71.81	A16S
ATOM	46516	C2'	CYT	1301	246.591	106.577	21.297	1.00	76.90	A16S
ATOM	46517	O2'	CYT	1301	247.181	105.580	20.489	1.00	76.90	A16S
ATOM	46518	C3'	CYT	1301	247.116	107.973	21.002	1.00	76.90	A16S
ATOM	46519	O3'	CYT	1301	247.233	108.202	19.610	1.00	76.90	A16S
ATOM	46520	P	CYT	1302	246.041	108.942	18.833	1.00	69.51	A16S
ATOM	46521	O1P	CYT	1302	246.428	108.983	17.398	1.00	61.49	A16S
ATOM	46522	O2P	CYT	1302	245.691	110.203	19.540	1.00	61.49	A16S
ATOM	46523	O5'	CYT	1302	244.819	107.943	18.980	1.00	69.51	A16S
ATOM	46524	C5'	CYT	1302	244.829	106.704	18.300	1.00	69.51	A16S
ATOM	46525	C4'	CYT	1302	243.634	105.891	18.704	1.00	69.51	A16S
ATOM	46526	O4'	CYT	1302	243.687	105.677	20.138	1.00	69.51	A16S
ATOM	46527	C1'	CYT	1302	242.372	105.613	20.653	1.00	69.51	A16S
ATOM	46528	N1	CYT	1302	242.228	106.645	21.688	1.00	61.49	A16S
ATOM	46529	C6	CYT	1302	242.713	107.908	21.498	1.00	61.49	A16S
ATOM	46530	C2	CYT	1302	241.567	106.314	22.874	1.00	61.49	A16S
ATOM	46531	O2	CYT	1302	241.166	105.149	23.030	1.00	61.49	A16S
ATOM	46532	N3	CYT	1302	241.389	107.264	23.821	1.00	61.49	A16S
ATOM	46533	C4	CYT	1302	241.852	108.496	23.624	1.00	61.49	A16S
ATOM	46534	N4	CYT	1302	241.644	109.400	24.582	1.00	61.49	A16S
ATOM	46535	C5	CYT	1302	242.549	108.858	22.433	1.00	61.49	A16S
ATOM	46536	C2'	CYT	1302	241.410	105.790	19.474	1.00	69.51	A16S
ATOM	46537	O2'	CYT	1302	241.047	104.502	19.027	1.00	69.51	A16S
ATOM	46538	C3'	CYT	1302	242.284	106.552	18.479	1.00	69.51	A16S
ATOM	46539	O3'	CYT	1302	241.877	106.383	17.117	1.00	69.51	A16S
ATOM	46540	P	CYT	1303	241.065	107.552	16.360	1.00	68.99	A16S
ATOM	46541	O1P	CYT	1303	241.101	107.281	14.904	1.00	85.68	A16S
ATOM	46542	O2P	CYT	1303	239.757	107.735	17.029	1.00	85.68	A16S
ATOM	46543	O5'	CYT	1303	241.909	108.874	16.591	1.00	68.99	A16S
ATOM	46544	C5'	CYT	1303	241.489	110.092	15.991	1.00	68.99	A16S
ATOM	46545	C4'	CYT	1303	241.378	111.171	17.036	1.00	68.99	A16S
ATOM	46546	O4'	CYT	1303	240.484	110.754	18.071	1.00	68.99	A16S
ATOM	46547	C1'	CYT	1303	240.834	111.415	19.251	1.00	68.99	A16S
ATOM	46548	N1	CYT	1303	240.280	110.662	20.369	1.00	85.68	A16S
ATOM	46549	C6	CYT	1303	239.729	109.431	20.159	1.00	85.68	A16S
ATOM	46550	C2	CYT	1303	240.259	111.236	21.623	1.00	85.68	A16S
ATOM	46551	O2	CYT	1303	240.845	112.313	21.797	1.00	85.68	A16S
ATOM	46552	N3	CYT	1303	239.610	110.604	22.619	1.00	85.68	A16S
ATOM	46553	C4	CYT	1303	239.024	109.426	22.393	1.00	85.68	A16S
ATOM	46554	N4	CYT	1303	238.355	108.853	23.396	1.00	85.68	A16S
ATOM	46555	C5	CYT	1303	239.092	108.787	21.132	1.00	85.68	A16S
ATOM	46556	C2'	CYT	1303	242.307	111.850	19.188	1.00	68.99	A16S
ATOM	46557	O2'	CYT	1303	242.418	113.191	19.644	1.00	68.99	A16S
ATOM	46558	C3'	CYT	1303	242.679	111.585	17.708	1.00	68.99	A16S
ATOM	46559	O3'	CYT	1303	242.972	112.778	16.975	1.00	68.99	A16S
ATOM	46560	P	GUA	1304	244.445	113.403	16.948	1.00	66.01	A16S
ATOM	46561	O1P	GUA	1304	244.999	113.187	15.584	1.00	75.46	A16S
ATOM	46562	O2P	GUA	1304	245.196	112.904	18.132	1.00	75.46	A16S
ATOM	46563	O5'	GUA	1304	244.156	114.965	17.116	1.00	66.01	A16S
ATOM	46564	C5'	GUA	1304	242.828	115.465	17.015	1.00	66.01	A16S
ATOM	46565	C4'	GUA	1304	242.761	116.915	17.440	1.00	66.01	A16S
ATOM	46566	O4'	GUA	1304	243.087	117.051	18.848	1.00	66.01	A16S
ATOM	46567	C1'	GUA	1304	243.709	118.312	19.074	1.00	66.01	A16S
ATOM	46568	N9	GUA	1304	245.028	118.073	19.659	1.00	75.46	A16S
ATOM	46569	C4	GUA	1304	245.870	119.009	20.221	1.00	75.46	A16S
ATOM	46570	N3	GUA	1304	245.632	120.333	20.329	1.00	75.46	A16S
ATOM	46571	C2	GUA	1304	246.627	120.963	20.929	1.00	75.46	A16S
ATOM	46572	N2	GUA	1304	246.558	122.278	21.126	1.00	75.46	A16S
ATOM	46573	N1	GUA	1304	247.765	120.347	21.383	1.00	75.46	A16S
ATOM	46574	C6	GUA	1304	248.033	118.987	21.282	1.00	75.46	A16S
ATOM	46575	O6	GUA	1304	249.097	118.531	21.721	1.00	75.46	A16S
ATOM	46576	C5	GUA	1304	246.973	118.296	20.646	1.00	75.46	A16S
ATOM	46577	N7	GUA	1304	246.831	116.947	20.355	1.00	75.46	A16S
ATOM	46578	C8	GUA	1304	245.670	116.862	19.768	1.00	75.46	A16S
ATOM	46579	C2'	GUA	1304	243.741	119.041	17.731	1.00	66.01	A16S
ATOM	46580	O2'	GUA	1304	242.589	119.849	17.645	1.00	66.01	A16S
ATOM	46581	C3'	GUA	1304	243.717	117.870	16.753	1.00	66.01	A16S
ATOM	46582	O3'	GUA	1304	243.199	118.232	15.485	1.00	66.01	A16S
ATOM	46583	P	ADE	1305	244.156	118.211	14.197	1.00	61.86	A16S
ATOM	46584	O1P	ADE	1305	243.292	118.066	12.997	1.00	62.85	A16S
ATOM	46585	O2P	ADE	1305	245.270	117.249	14.418	1.00	62.85	A16S
ATOM	46586	O5'	ADE	1305	244.737	119.684	14.189	1.00	61.86	A16S
ATOM	46587	C5'	ADE	1305	243.854	120.782	14.104	1.00	61.86	A16S
ATOM	46588	C4'	ADE	1305	244.463	121.981	14.763	1.00	61.86	A16S
ATOM	46589	O4'	ADE	1305	244.689	121.681	16.161	1.00	61.86	A16S
ATOM	46590	C1'	ADE	1305	245.880	122.312	16.591	1.00	61.86	A16S
ATOM	46591	N9	ADE	1305	246.825	121.262	16.961	1.00	62.85	A16S
ATOM	46592	C4	ADE	1305	247.919	121.389	17.784	1.00	62.85	A16S
ATOM	46593	N3	ADE	1305	248.346	122.500	18.409	1.00	62.85	A16S
ATOM	46594	C2	ADE	1305	249.424	122.240	19.135	1.00	62.85	A16S
ATOM	46595	N1	ADE	1305	250.077	121.084	19.299	1.00	62.85	A16S
ATOM	46596	C6	ADE	1305	249.622	119.986	18.657	1.00	62.85	A16S
ATOM	46597	N6	ADE	1305	250.269	118.829	18.824	1.00	62.85	A16S
ATOM	46598	C5	ADE	1305	248.485	120.130	17.852	1.00	62.85	A16S
ATOM	46599	N7	ADE	1305	247.769	119.226	17.079	1.00	62.85	A16S
ATOM	46600	C8	ADE	1305	246.799	119.947	16.572	1.00	62.85	A16S
ATOM	46601	C2'	ADE	1305	246.361	123.171	15.424	1.00	61.86	A16S
ATOM	46602	O2'	ADE	1305	245.709	124.423	15.496	1.00	61.86	A16S
ATOM	46603	C3'	ADE	1305	245.837	122.365	14.252	1.00	61.86	A16S
ATOM	46604	O3'	ADE	1305	245.722	123.150	13.073	1.00	61.86	A16S
ATOM	46605	P	CYT	1306	246.831	123.014	11.919	1.00	62.35	A16S

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ATOM  46606  O1P CYT  1306     246.333 123.760  10.734  1.00 53.71      A16S
ATOM  46607  O2P CYT  1306     247.230 121.583  11.785  1.00 53.71      A16S
ATOM  46608  O5' CYT  1306     248.055 123.827  12.509  1.00 62.35      A16S
ATOM  46609  C5' CYT  1306     247.928 125.204  12.786  1.00 62.35      A16S
ATOM  46610  C4' CYT  1306     249.110 125.654  13.579  1.00 62.35      A16S
ATOM  46611  O4' CYT  1306     249.127 124.905  14.817  1.00 62.35      A16S
ATOM  46612  C1' CYT  1306     250.462 124.663  15.208  1.00 62.35      A16S
ATOM  46613  N1  CYT  1306     250.653 123.220  15.284  1.00 53.71      A16S
ATOM  46614  C6  CYT  1306     249.950 122.373  14.477  1.00 53.71      A16S
ATOM  46615  C2  CYT  1306     251.573 122.724  16.196  1.00 53.71      A16S
ATOM  46616  O2  CYT  1306     252.176 123.522  16.923  1.00 53.71      A16S
ATOM  46617  N3  CYT  1306     251.778 121.392  16.272  1.00 53.71      A16S
ATOM  46618  C4  CYT  1306     251.084 120.569  15.489  1.00 53.71      A16S
ATOM  46619  N4  CYT  1306     251.300 119.263  15.612  1.00 53.71      A16S
ATOM  46620  C5  CYT  1306     250.132 121.050  14.547  1.00 53.71      A16S
ATOM  46621  C2' CYT  1306     251.359 125.310  14.159  1.00 62.35      A16S
ATOM  46622  O2' CYT  1306     251.663 126.617  14.596  1.00 62.35      A16S
ATOM  46623  C3' CYT  1306     250.440 125.305  12.951  1.00 62.35      A16S
ATOM  46624  O3' CYT  1306     250.811 126.265  11.976  1.00 62.35      A16S
ATOM  46625  P   CYT  1307     251.847 125.848  10.831  1.00 59.64      A16S
ATOM  46626  O1P CYT  1307     251.769 126.883   9.784  1.00 49.58      A16S
ATOM  46627  O2P CYT  1307     251.624 124.428  10.486  1.00 49.58      A16S
ATOM  46628  O5' CYT  1307     253.263 125.878  11.555  1.00 59.64      A16S
ATOM  46629  C5' CYT  1307     253.721 127.044  12.224  1.00 59.64      A16S
ATOM  46630  C4' CYT  1307     255.039 126.763  12.901  1.00 59.64      A16S
ATOM  46631  O4' CYT  1307     254.835 125.849  14.004  1.00 59.64      A16S
ATOM  46632  C1' CYT  1307     255.983 125.044  14.163  1.00 59.64      A16S
ATOM  46633  N1  CYT  1307     255.561 123.645  14.115  1.00 49.58      A16S
ATOM  46634  C6  CYT  1307     254.344 123.296  13.605  1.00 49.58      A16S
ATOM  46635  C2  CYT  1307     256.418 122.674  14.612  1.00 49.58      A16S
ATOM  46636  O2  CYT  1307     257.516 123.026  15.057  1.00 49.58      A16S
ATOM  46637  N3  CYT  1307     256.031 121.376  14.599  1.00 49.58      A16S
ATOM  46638  C4  CYT  1307     254.836 121.045  14.115  1.00 49.58      A16S
ATOM  46639  N4  CYT  1307     254.488 119.765  14.140  1.00 49.58      A16S
ATOM  46640  C5  CYT  1307     253.945 122.017  13.588  1.00 49.58      A16S
ATOM  46641  C2' CYT  1307     256.989 125.438  13.081  1.00 59.64      A16S
ATOM  46642  O2' CYT  1307     257.885 126.379  13.626  1.00 59.64      A16S
ATOM  46643  C3' CYT  1307     256.088 126.081  12.037  1.00 59.64      A16S
ATOM  46644  O3' CYT  1307     256.797 127.064  11.283  1.00 59.64      A16S
ATOM  46645  P   CYT  1308     257.371 126.697   9.828  1.00 63.83      A16S
ATOM  46646  O1P CYT  1308     257.870 127.960   9.219  1.00 71.21      A16S
ATOM  46647  O2P CYT  1308     256.350 125.894   9.120  1.00 71.21      A16S
ATOM  46648  O5' CYT  1308     258.609 125.741  10.139  1.00 63.83      A16S
ATOM  46649  C5' CYT  1308     259.795 126.258  10.731  1.00 63.83      A16S
ATOM  46650  C4' CYT  1308     260.721 125.136  11.142  1.00 63.83      A16S
ATOM  46651  O4' CYT  1308     260.124 124.351  12.204  1.00 63.83      A16S
ATOM  46652  C1' CYT  1308     260.656 123.035  12.164  1.00 63.83      A16S
ATOM  46653  N1  CYT  1308     259.553 122.075  12.095  1.00 71.21      A16S
ATOM  46654  C6  CYT  1308     258.306 122.451  11.685  1.00 71.21      A16S
ATOM  46655  C2  CYT  1308     259.809 120.758  12.449  1.00 71.21      A16S
ATOM  46656  O2  CYT  1308     260.945 120.457  12.827  1.00 71.21      A16S
ATOM  46657  N3  CYT  1308     258.818 119.846  12.375  1.00 71.21      A16S
ATOM  46658  C4  CYT  1308     257.605 120.216  11.968  1.00 71.21      A16S
ATOM  46659  N4  CYT  1308     256.659 119.282  11.906  1.00 71.21      A16S
ATOM  46660  C5  CYT  1308     257.310 121.562  11.607  1.00 71.21      A16S
ATOM  46661  C2' CYT  1308     261.556 122.936  10.930  1.00 63.83      A16S
ATOM  46662  O2' CYT  1308     262.913 123.080  11.305  1.00 63.83      A16S
ATOM  46663  C3' CYT  1308     261.042 124.095  10.087  1.00 63.83      A16S
ATOM  46664  O3' CYT  1308     262.037 124.540   9.185  1.00 63.83      A16S
ATOM  46665  P   CYT  1309     262.218 123.782   7.788  1.00 63.01      A16S
ATOM  46666  O1P CYT  1309     263.279 124.506   7.044  1.00 73.76      A16S
ATOM  46667  O2P CYT  1309     260.878 123.612   7.169  1.00 73.76      A16S
ATOM  46668  O5' CYT  1309     262.776 122.346   8.197  1.00 63.01      A16S
ATOM  46669  C5' CYT  1309     264.121 122.201   8.630  1.00 63.01      A16S
ATOM  46670  C4' CYT  1309     264.507 120.743   8.703  1.00 63.01      A16S
ATOM  46671  O4' CYT  1309     263.775 120.077   9.765  1.00 63.01      A16S
ATOM  46672  C1' CYT  1309     263.578 118.712   9.424  1.00 63.01      A16S
ATOM  46673  N1  CYT  1309     262.136 118.429   9.451  1.00 73.76      A16S
ATOM  46674  C6  CYT  1309     261.221 119.430   9.295  1.00 73.76      A16S
ATOM  46675  C2  CYT  1309     261.716 117.113   9.631  1.00 73.76      A16S
ATOM  46676  O2  CYT  1309     262.569 116.232   9.778  1.00 73.76      A16S
ATOM  46677  N3  CYT  1309     260.395 116.835   9.641  1.00 73.76      A16S
ATOM  46678  C4  CYT  1309     259.509 117.817   9.481  1.00 73.76      A16S
ATOM  46679  N4  CYT  1309     258.215 117.500   9.492  1.00 73.76      A16S
ATOM  46680  C5  CYT  1309     259.910 119.171   9.301  1.00 73.76      A16S
ATOM  46681  C2' CYT  1309     264.195 118.496   8.041  1.00 63.01      A16S
ATOM  46682  O2' CYT  1309     265.483 117.947   8.190  1.00 63.01      A16S
ATOM  46683  C3' CYT  1309     264.192 119.915   7.478  1.00 63.01      A16S
ATOM  46684  O3' CYT  1309     265.160 120.115   6.458  1.00 63.01      A16S
ATOM  46685  P   ADE  1310     264.764 119.823   4.926  1.00 56.04      A16S
ATOM  46686  O1P ADE  1310     265.981 120.067   4.105  1.00 60.21      A16S
ATOM  46687  O2P ADE  1310     263.511 120.561   4.601  1.00 60.21      A16S
ATOM  46688  O5' ADE  1310     264.464 118.255   4.946  1.00 56.04      A16S
ATOM  46689  C5' ADE  1310     265.529 117.329   5.116  1.00 56.04      A16S
ATOM  46690  C4' ADE  1310     265.002 115.936   5.348  1.00 56.04      A16S
ATOM  46691  O4' ADE  1310     264.197 115.917   6.557  1.00 56.04      A16S
ATOM  46692  C1' ADE  1310     263.205 114.906   6.449  1.00 56.04      A16S
ATOM  46693  N9  ADE  1310     261.889 115.539   6.471  1.00 60.21      A16S
ATOM  46694  C4  ADE  1310     260.680 114.882   6.522  1.00 60.21      A16S
ATOM  46695  N3  ADE  1310     260.469 113.555   6.619  1.00 60.21      A16S
ATOM  46696  C2  ADE  1310     259.165 113.283   6.607  1.00 60.21      A16S
ATOM  46697  N1  ADE  1310     258.127 114.118   6.510  1.00 60.21      A16S
ATOM  46698  C6  ADE  1310     258.374 115.443   6.408  1.00 60.21      A16S
ATOM  46699  N6  ADE  1310     257.343 116.281   6.292  1.00 60.21      A16S
ATOM  46700  C5  ADE  1310     259.716 115.865   6.422  1.00 60.21      A16S
ATOM  46701  N7  ADE  1310     260.303 117.123   6.346  1.00 60.21      A16S
ATOM  46702  C8  ADE  1310     261.589 116.875   6.390  1.00 60.21      A16S
ATOM  46703  C2' ADE  1310     263.419 114.232   5.094  1.00 56.04      A16S
ATOM  46704  O2' ADE  1310     264.260 113.116   5.262  1.00 56.04      A16S
ATOM  46705  C3' ADE  1310     264.057 115.367   4.310  1.00 56.04      A16S
ATOM  46706  O3' ADE  1310     264.709 114.930   3.123  1.00 56.04      A16S
ATOM  46707  P   URI  1311     264.035 115.260   1.703  1.00 66.38      A16S
ATOM  46708  O1P URI  1311     265.008 115.298   0.577  1.00 59.12      A16S
ATOM  46709  O2P URI  1311     263.200 116.461   1.968  1.00 59.12      A16S
ATOM  46710  O5' URI  1311     263.071 114.019   1.468  1.00 66.38      A16S
ATOM  46711  C5' URI  1311     263.387 112.737   1.982  1.00 66.38      A16S
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ATOM	46712	C4'	URI	1311	262.118	111.964	2.235	1.00	66.38	A16S	ATOM	46765	C5	ADE	1313	251.339	113.941	-3.095	1.00	58.23	A16S
ATOM	46713	O4'	URI	1311	261.368	112.616	3.290	1.00	66.38	A16S	ATOM	46766	N7	ADE	1313	252.707	113.957	-2.885	1.00	58.23	A16S
ATOM	46714	C1'	URI	1311	259.983	112.371	3.105	1.00	66.38	A16S	ATOM	46767	C8	ADE	1313	253.052	112.700	-2.986	1.00	58.23	A16S
ATOM	46715	N1	URI	1311	259.275	113.656	3.154	1.00	59.12	A16S	ATOM	46768	C2'	ADE	1313	251.673	109.812	-4.703	1.00	61.75	A16S
ATOM	46716	C6	URI	1311	259.947	114.830	2.976	1.00	59.12	A16S	ATOM	46769	O2'	ADE	1313	251.323	108.463	-4.506	1.00	61.75	A16S
ATOM	46717	C2	URI	1311	257.908	113.643	3.391	1.00	59.12	A16S	ATOM	46770	C3'	ADE	1313	252.976	109.876	-5.472	1.00	61.75	A16S
ATOM	46718	O2	URI	1311	257.270	112.615	3.564	1.00	59.12	A16S	ATOM	46771	O3'	ADE	1313	253.008	108.881	-6.482	1.00	61.75	A16S
ATOM	46719	N3	URI	1311	257.317	114.878	3.420	1.00	59.12	A16S	ATOM	46772	P	ADE	1314	252.871	109.308	-8.023	1.00	69.70	A16S
ATOM	46720	C4	URI	1311	257.935	116.091	3.243	1.00	59.12	A16S	ATOM	46773	O1P	ADE	1314	253.316	108.126	-8.807	1.00	45.88	A16S
ATOM	46721	O4	URI	1311	257.271	117.122	3.291	1.00	59.12	A16S	ATOM	46774	O2P	ADE	1314	253.538	110.619	-8.229	1.00	45.88	A16S
ATOM	46722	C5	URI	1311	259.342	116.015	3.012	1.00	59.12	A16S	ATOM	46775	O5'	ADE	1314	251.304	109.537	-8.223	1.00	69.70	A16S
ATOM	46723	C2'	URI	1311	259.817	111.614	1.784	1.00	66.38	A16S	ATOM	46776	C5'	ADE	1314	250.373	108.478	-8.017	1.00	69.70	A16S
ATOM	46724	O2'	URI	1311	259.685	110.229	2.037	1.00	66.38	A16S	ATOM	46777	C4'	ADE	1314	248.973	109.028	-7.875	1.00	69.70	A16S
ATOM	46725	C3'	URI	1311	261.129	111.933	1.080	1.00	66.38	A16S	ATOM	46778	O4'	ADE	1314	248.919	109.883	-6.705	1.00	69.70	A16S
ATOM	46726	O3'	URI	1311	261.464	110.914	0.150	1.00	66.38	A16S	ATOM	46779	C1'	ADE	1314	248.008	110.941	-6.935	1.00	69.70	A16S
ATOM	46727	P	GUA	1312	261.675	111.297	-1.390	1.00	76.64	A16S	ATOM	46780	N9	ADE	1314	248.738	112.194	-6.834	1.00	45.88	A16S
ATOM	46728	O1P	GUA	1312	261.846	110.029	-2.138	1.00	68.73	A16S	ATOM	46781	C4	ADE	1314	248.179	113.440	-6.718	1.00	45.88	A16S
ATOM	46729	O2P	GUA	1312	262.690	112.376	-1.511	1.00	68.73	A16S	ATOM	46782	N3	ADE	1314	246.869	113.745	-6.673	1.00	45.88	A16S
ATOM	46730	O5'	GUA	1312	260.288	111.931	-1.803	1.00	76.64	A16S	ATOM	46783	C2	ADE	1314	246.699	115.053	-6.534	1.00	45.88	A16S
ATOM	46731	C5'	GUA	1312	259.099	111.182	-1.684	1.00	76.64	A16S	ATOM	46784	N1	ADE	1314	247.619	116.021	-6.439	1.00	45.88	A16S
ATOM	46732	C4'	GUA	1312	257.921	112.071	-1.938	1.00	76.64	A16S	ATOM	46785	C6	ADE	1314	248.924	115.680	-6.488	1.00	45.88	A16S
ATOM	46733	O4'	GUA	1312	257.864	113.075	-0.904	1.00	76.64	A16S	ATOM	46786	N6	ADE	1314	249.836	116.645	-6.387	1.00	45.88	A16S
ATOM	46734	C1'	GUA	1312	257.185	114.200	-1.406	1.00	76.64	A16S	ATOM	46787	C5	ADE	1314	249.237	114.323	-6.640	1.00	45.88	A16S
ATOM	46735	N9	GUA	1312	257.823	115.413	-0.898	1.00	68.73	A16S	ATOM	46788	N7	ADE	1314	250.441	113.647	-6.719	1.00	45.88	A16S
ATOM	46736	C4	GUA	1312	257.176	116.470	-0.285	1.00	68.73	A16S	ATOM	46789	C8	ADE	1314	250.089	112.388	-6.832	1.00	45.88	A16S
ATOM	46737	N3	GUA	1312	255.846	116.558	-0.037	1.00	68.73	A16S	ATOM	46790	C2'	ADE	1314	247.401	110.738	-8.321	1.00	69.70	A16S
ATOM	46738	C2	GUA	1312	255.526	117.706	0.546	1.00	68.73	A16S	ATOM	46791	O2'	ADE	1314	246.191	110.029	-8.197	1.00	69.70	A16S
ATOM	46739	N2	GUA	1312	254.248	117.963	0.871	1.00	68.73	A16S	ATOM	46792	C3'	ADE	1314	248.480	109.916	-9.009	1.00	69.70	A16S
ATOM	46740	N1	GUA	1312	256.433	118.684	0.853	1.00	68.73	A16S	ATOM	46793	O3'	ADE	1314	247.909	109.139	-10.052	1.00	69.70	A16S
ATOM	46741	C6	GUA	1312	257.799	118.617	0.605	1.00	68.73	A16S	ATOM	46794	P	GUA	1315	247.971	109.672	-11.565	1.00	45.27	A16S
ATOM	46742	O6	GUA	1312	258.520	119.569	0.906	1.00	68.73	A16S	ATOM	46795	O1P	GUA	1315	246.974	108.912	-12.360	1.00	56.39	A16S
ATOM	46743	C5	GUA	1312	258.163	117.389	-0.006	1.00	68.73	A16S	ATOM	46796	O2P	GUA	1315	249.389	109.682	-11.997	1.00	56.39	A16S
ATOM	46744	N7	GUA	1312	259.403	116.917	-0.408	1.00	68.73	A16S	ATOM	46797	O5'	GUA	1315	247.506	111.196	-11.460	1.00	45.27	A16S
ATOM	46745	C8	GUA	1312	259.154	115.743	-0.928	1.00	68.73	A16S	ATOM	46798	C5'	GUA	1315	246.130	111.540	-11.330	1.00	45.27	A16S
ATOM	46746	C2'	GUA	1312	257.013	114.020	-2.922	1.00	76.64	A16S	ATOM	46799	C4'	GUA	1315	245.982	113.018	-11.068	1.00	45.27	A16S
ATOM	46747	O2'	GUA	1312	255.679	113.622	-3.146	1.00	76.64	A16S	ATOM	46800	O4'	GUA	1315	246.810	113.372	-9.932	1.00	45.27	A16S
ATOM	46748	C3'	GUA	1312	257.976	112.877	-3.222	1.00	76.64	A16S	ATOM	46801	C1'	GUA	1315	247.341	114.672	-10.108	1.00	45.27	A16S
ATOM	46749	O3'	GUA	1312	257.656	111.974	-4.298	1.00	76.64	A16S	ATOM	46802	N9	GUA	1315	248.797	114.581	-10.014	1.00	56.39	A16S
ATOM	46750	P	ADE	1313	256.539	112.333	-5.415	1.00	61.75	A16S	ATOM	46803	C4	GUA	1315	249.694	115.624	-9.907	1.00	56.39	A16S
ATOM	46751	O1P	ADE	1313	256.995	111.677	-6.673	1.00	58.23	A16S	ATOM	46804	N3	GUA	1315	249.386	116.938	-9.852	1.00	56.39	A16S
ATOM	46752	O2P	ADE	1313	256.214	113.789	-5.445	1.00	58.23	A16S	ATOM	46805	C2	GUA	1315	250.464	117.697	-9.753	1.00	56.39	A16S
ATOM	46753	O5'	ADE	1313	255.270	111.522	-4.895	1.00	61.75	A16S	ATOM	46806	N2	GUA	1315	250.341	119.020	-9.682	1.00	56.39	A16S
ATOM	46754	C5'	ADE	1313	255.368	110.122	-4.623	1.00	61.75	A16S	ATOM	46807	N1	GUA	1315	251.744	117.213	-9.717	1.00	56.39	A16S
ATOM	46755	C4'	ADE	1313	253.994	109.532	-4.400	1.00	61.75	A16S	ATOM	46808	C6	GUA	1315	252.091	115.868	-9.780	1.00	56.39	A16S
ATOM	46756	O4'	ADE	1313	253.440	110.049	-3.164	1.00	61.75	A16S	ATOM	46809	O6	GUA	1315	253.294	115.537	-9.756	1.00	56.39	A16S
ATOM	46757	C1'	ADE	1313	252.089	110.403	-3.357	1.00	61.75	A16S	ATOM	46810	C5	GUA	1315	250.936	115.035	-9.875	1.00	56.39	A16S
ATOM	46758	N9	ADE	1313	252.006	111.857	-3.238	1.00	58.23	A16S	ATOM	46811	N7	GUA	1315	250.826	113.654	-9.946	1.00	56.39	A16S
ATOM	46759	C4	ADE	1313	250.895	112.657	-3.325	1.00	58.23	A16S	ATOM	46812	C8	GUA	1315	249.544	113.432	-10.022	1.00	56.39	A16S
ATOM	46760	N3	ADE	1313	249.632	112.277	-3.570	1.00	58.23	A16S	ATOM	46813	C2'	GUA	1315	246.821	115.210	-11.447	1.00	45.27	A16S
ATOM	46761	C2	ADE	1313	248.823	113.326	-3.561	1.00	58.23	A16S	ATOM	46814	O2'	GUA	1315	245.724	116.066	-11.236	1.00	45.27	A16S
ATOM	46762	N1	ADE	1313	249.107	114.610	-3.355	1.00	58.23	A16S	ATOM	46815	C3'	GUA	1315	246.448	113.928	-12.188	1.00	45.27	A16S
ATOM	46763	C6	ADE	1313	250.384	114.956	-3.112	1.00	58.23	A16S	ATOM	46816	O3'	GUA	1315	245.380	114.164	-13.101	1.00	45.27	A16S
ATOM	46764	N6	ADE	1313	250.669	116.242	-2.903	1.00	58.23	A16S	ATOM	46817	P	CYT	1316	245.577	113.842	-14.661	1.00	57.78	A16S

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ATOM  46818  O1P CYT  1316     244.337 114.207 -15.390  1.00 56.90      A16S
ATOM  46819  O2P CYT  1316     246.105 112.459 -14.749  1.00 56.90      A16S
ATOM  46820  O5' CYT  1316     246.689 114.877 -15.129  1.00 57.78      A16S
ATOM  46821  C5' CYT  1316     246.425 116.267 -15.089  1.00 57.78      A16S
ATOM  46822  C4' CYT  1316     247.228 116.982 -16.140  1.00 57.78      A16S
ATOM  46823  O4' CYT  1316     248.618 116.801 -15.862  1.00 57.78      A16S
ATOM  46824  C1' CYT  1316     249.342 116.941 -17.057  1.00 57.78      A16S
ATOM  46825  N1  CYT  1316     250.537 116.102 -16.965  1.00 56.90      A16S
ATOM  46826  C6  CYT  1316     250.459 114.816 -16.518  1.00 56.90      A16S
ATOM  46827  C2  CYT  1316     251.765 116.655 -17.311  1.00 56.90      A16S
ATOM  46828  O2  CYT  1316     251.801 117.824 -17.738  1.00 56.90      A16S
ATOM  46829  N3  CYT  1316     252.884 115.912 -17.170  1.00 56.90      A16S
ATOM  46830  C4  CYT  1316     252.801 114.662 -16.711  1.00 56.90      A16S
ATOM  46831  N4  CYT  1316     253.931 113.969 -16.572  1.00 56.90      A16S
ATOM  46832  C5  CYT  1316     251.557 114.068 -16.373  1.00 56.90      A16S
ATOM  46833  C2' CYT  1316     248.391 116.756 -18.250  1.00 57.78      A16S
ATOM  46834  O2' CYT  1316     248.472 117.905 -19.072  1.00 57.78      A16S
ATOM  46835  C3' CYT  1316     247.026 116.521 -17.574  1.00 57.78      A16S
ATOM  46836  O3' CYT  1316     245.991 117.368 -18.088  1.00 57.78      A16S
ATOM  46837  P   CYT  1317     245.369 117.114 -19.542  1.00 58.02      A16S
ATOM  46838  O1P CYT  1317     245.619 115.692 -19.885  1.00 75.83      A16S
ATOM  46839  O2P CYT  1317     245.829 118.189 -20.457  1.00 75.83      A16S
ATOM  46840  O5' CYT  1317     243.808 117.322 -19.331  1.00 58.02      A16S
ATOM  46841  C5' CYT  1317     243.103 116.606 -18.321  1.00 58.02      A16S
ATOM  46842  C4' CYT  1317     242.261 117.556 -17.497  1.00 58.02      A16S
ATOM  46843  O4' CYT  1317     243.086 118.379 -16.671  1.00 58.02      A16S
ATOM  46844  C1' CYT  1317     242.415 119.570 -16.408  1.00 58.02      A16S
ATOM  46845  N1  CYT  1317     243.413 120.618 -16.152  1.00 75.83      A16S
ATOM  46846  C6  CYT  1317     244.734 120.286 -16.054  1.00 75.83      A16S
ATOM  46847  C2  CYT  1317     243.003 121.935 -15.965  1.00 75.83      A16S
ATOM  46848  O2  CYT  1317     241.800 122.218 -16.086  1.00 75.83      A16S
ATOM  46849  N3  CYT  1317     243.931 122.870 -15.654  1.00 75.83      A16S
ATOM  46850  C4  CYT  1317     245.216 122.524 -15.539  1.00 75.83      A16S
ATOM  46851  N4  CYT  1317     246.096 123.470 -15.222  1.00 75.83      A16S
ATOM  46852  C5  CYT  1317     245.656 121.195 -15.744  1.00 75.83      A16S
ATOM  46853  C2' CYT  1317     241.254 119.745 -17.394  1.00 58.02      A16S
ATOM  46854  O2' CYT  1317     240.079 119.754 -16.620  1.00 58.02      A16S
ATOM  46855  C3' CYT  1317     241.332 118.482 -18.260  1.00 58.02      A16S
ATOM  46856  O3' CYT  1317     240.127 117.712 -18.196  1.00 58.02      A16S
ATOM  46857  P   GUA  1318     238.764 118.198 -18.893  1.00 49.43      A16S
ATOM  46858  O1P GUA  1318     239.036 118.576 -20.307  1.00 48.74      A16S
ATOM  46859  O2P GUA  1318     238.042 119.145 -18.010  1.00 48.74      A16S
ATOM  46860  O5' GUA  1318     237.934 116.844 -18.884  1.00 49.43      A16S
ATOM  46861  C5' GUA  1318     238.537 115.611 -19.291  1.00 49.43      A16S
ATOM  46862  C4' GUA  1318     238.365 114.572 -18.214  1.00 49.43      A16S
ATOM  46863  O4' GUA  1318     239.261 114.869 -17.123  1.00 49.43      A16S
ATOM  46864  C1' GUA  1318     238.583 114.762 -15.890  1.00 49.43      A16S
ATOM  46865  N9  GUA  1318     238.631 116.085 -15.274  1.00 48.74      A16S
ATOM  46866  C4  GUA  1318     239.731 116.664 -14.682  1.00 48.74      A16S
ATOM  46867  N3  GUA  1318     240.941 116.086 -14.518  1.00 48.74      A16S
ATOM  46868  C2  GUA  1318     241.814 116.914 -13.966  1.00 48.74      A16S
ATOM  46869  N2  GUA  1318     243.073 116.503 -13.733  1.00 48.74      A16S
ATOM  46870  N1  GUA  1318     241.520 118.201 -13.603  1.00 48.74      A16S
ATOM  46871  C6  GUA  1318     240.282 118.811 -13.761  1.00 48.74      A16S
ATOM  46872  O6  GUA  1318     240.125 119.991 -13.405  1.00 48.74      A16S
ATOM  46873  C5  GUA  1318     239.339 117.934 -14.349  1.00 48.74      A16S
ATOM  46874  N7  GUA  1318     238.013 118.140 -14.679  1.00 48.74      A16S
ATOM  46875  C8  GUA  1318     237.632 117.015 -15.214  1.00 48.74      A16S
ATOM  46876  C2' GUA  1318     237.203 114.157 -16.175  1.00 49.43      A16S
ATOM  46877  O2' GUA  1318     237.278 112.761 -16.042  1.00 49.43      A16S
ATOM  46878  C3' GUA  1318     236.966 114.543 -17.631  1.00 49.43      A16S
ATOM  46879  O3' GUA  1318     236.201 113.562 -18.334  1.00 49.43      A16S
ATOM  46880  P   GUA  1319     235.322 113.996 -19.612  1.00 47.02      A16S
ATOM  46881  O1P GUA  1319     234.299 114.979 -19.167  1.00 61.08      A16S
ATOM  46882  O2P GUA  1319     236.247 114.365 -20.712  1.00 61.08      A16S
ATOM  46883  O5' GUA  1319     234.547 112.659 -20.013  1.00 47.02      A16S
ATOM  46884  C5' GUA  1319     235.253 111.473 -20.363  1.00 47.02      A16S
ATOM  46885  C4' GUA  1319     234.288 110.353 -20.693  1.00 47.02      A16S
ATOM  46886  O4' GUA  1319     234.496 109.251 -19.774  1.00 47.02      A16S
ATOM  46887  C1' GUA  1319     233.252 108.808 -19.266  1.00 47.02      A16S
ATOM  46888  N9  GUA  1319     233.158 109.309 -17.899  1.00 61.08      A16S
ATOM  46889  C4  GUA  1319     232.550 108.702 -16.833  1.00 61.08      A16S
ATOM  46890  N3  GUA  1319     231.888 107.529 -16.859  1.00 61.08      A16S
ATOM  46891  C2  GUA  1319     231.419 107.203 -15.668  1.00 61.08      A16S
ATOM  46892  N2  GUA  1319     230.716 106.083 -15.513  1.00 61.08      A16S
ATOM  46893  N1  GUA  1319     231.602 107.955 -14.541  1.00 61.08      A16S
ATOM  46894  C6  GUA  1319     232.288 109.164 -14.491  1.00 61.08      A16S
ATOM  46895  O6  GUA  1319     232.409 109.763 -13.414  1.00 61.08      A16S
ATOM  46896  C5  GUA  1319     232.774 109.536 -15.763  1.00 61.08      A16S
ATOM  46897  N7  GUA  1319     233.487 110.656 -16.154  1.00 61.08      A16S
ATOM  46898  C8  GUA  1319     233.690 110.480 -17.427  1.00 61.08      A16S
ATOM  46899  C2' GUA  1319     232.178 109.380 -20.192  1.00 47.02      A16S
ATOM  46900  O2' GUA  1319     231.975 108.503 -21.279  1.00 47.02      A16S
ATOM  46901  C3' GUA  1319     232.811 110.704 -20.595  1.00 47.02      A16S
ATOM  46902  O3' GUA  1319     232.330 111.144 -21.852  1.00 47.02      A16S
ATOM  46903  P   ADE  1320     231.083 112.141 -21.914  1.00 47.67      A16S
ATOM  46904  O1P ADE  1320     230.835 112.505 -23.335  1.00 53.95      A16S
ATOM  46905  O2P ADE  1320     231.322 113.217 -20.918  1.00 53.95      A16S
ATOM  46906  O5' ADE  1320     229.864 111.239 -21.429  1.00 47.67      A16S
ATOM  46907  C5' ADE  1320     229.245 110.311 -22.315  1.00 47.67      A16S
ATOM  46908  C4' ADE  1320     228.206 109.502 -21.580  1.00 47.67      A16S
ATOM  46909  O4' ADE  1320     228.866 108.779 -20.508  1.00 47.67      A16S
ATOM  46910  C1' ADE  1320     228.041 108.775 -19.360  1.00 47.67      A16S
ATOM  46911  N9  ADE  1320     228.666 109.614 -18.351  1.00 53.95      A16S
ATOM  46912  C4  ADE  1320     228.648 109.415 -16.996  1.00 53.95      A16S
ATOM  46913  N3  ADE  1320     228.077 108.399 -16.327  1.00 53.95      A16S
ATOM  46914  C2  ADE  1320     228.247 108.546 -15.018  1.00 53.95      A16S
ATOM  46915  N1  ADE  1320     228.878 109.519 -14.353  1.00 53.95      A16S
ATOM  46916  C6  ADE  1320     229.447 110.522 -15.063  1.00 53.95      A16S
ATOM  46917  N6  ADE  1320     230.090 111.491 -14.411  1.00 53.95      A16S
ATOM  46918  C5  ADE  1320     229.331 110.481 -16.456  1.00 53.95      A16S
ATOM  46919  N7  ADE  1320     229.783 111.330 -17.455  1.00 53.95      A16S
ATOM  46920  C8  ADE  1320     229.366 110.769 -18.555  1.00 53.95      A16S
ATOM  46921  C2' ADE  1320     226.694 109.361 -19.774  1.00 47.67      A16S
ATOM  46922  O2' ADE  1320     225.867 108.293 -20.175  1.00 47.67      A16S
ATOM  46923  C3' ADE  1320     227.107 110.302 -20.899  1.00 47.67      A16S
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ATOM	46924	O3'	ADE	1320	226.027	110.531	-21.797	1.00	47.67	A16S	ATOM	46977	C2	CYT	1323	226.709	123.752	-12.926	1.00	54.58	A16S
ATOM	46925	P	ADE	1321	225.368	111.995	-21.919	1.00	54.59	A16S	ATOM	46978	O2	CYT	1323	227.023	124.503	-11.998	1.00	54.58	A16S
ATOM	46926	O1P	ADE	1321	224.121	111.829	-22.695	1.00	58.63	A16S	ATOM	46979	N3	CYT	1323	227.169	123.938	-14.178	1.00	54.58	A16S
ATOM	46927	O2P	ADE	1321	226.386	112.965	-22.383	1.00	58.63	A16S	ATOM	46980	C4	CYT	1323	226.804	123.105	-15.145	1.00	54.58	A16S
ATOM	46928	O5'	ADE	1321	224.979	112.385	-20.426	1.00	54.59	A16S	ATOM	46981	N4	CYT	1323	227.280	123.334	-16.367	1.00	54.58	A16S
ATOM	46929	C5'	ADE	1321	223.961	111.672	-19.740	1.00	54.59	A16S	ATOM	46982	C5	CYT	1323	225.934	122.001	-14.901	1.00	54.58	A16S
ATOM	46930	C4'	ADE	1321	224.087	111.853	-18.245	1.00	54.59	A16S	ATOM	46983	C2'	CYT	1323	224.419	123.683	-10.887	1.00	49.12	A16S
ATOM	46931	O4'	ADE	1321	225.425	111.488	-17.807	1.00	54.59	A16S	ATOM	46984	O2'	CYT	1323	224.556	123.909	-9.503	1.00	49.12	A16S
ATOM	46932	C1'	ADE	1321	225.799	112.294	-16.702	1.00	54.59	A16S	ATOM	46985	C3'	CYT	1323	223.069	123.078	-11.234	1.00	49.12	A16S
ATOM	46933	N9	ADE	1321	226.868	113.189	-17.133	1.00	58.63	A16S	ATOM	46986	O3'	CYT	1323	222.035	123.684	-10.472	1.00	49.12	A16S
ATOM	46934	C4	ADE	1321	227.605	114.008	-16.317	1.00	58.63	A16S	ATOM	46987	P	GUA	1324	221.433	125.101	-10.924	1.00	52.98	A16S
ATOM	46935	N3	ADE	1321	227.519	114.117	-14.979	1.00	58.63	A16S	ATOM	46988	O1P	GUA	1324	220.293	125.338	-10.017	1.00	57.48	A16S
ATOM	46936	C2	ADE	1321	228.370	115.033	-14.532	1.00	58.63	A16S	ATOM	46989	O2P	GUA	1324	221.217	125.112	-12.392	1.00	57.48	A16S
ATOM	46937	N1	ADE	1321	229.227	115.797	-15.218	1.00	58.63	A16S	ATOM	46990	O5'	GUA	1324	222.575	126.157	-10.579	1.00	52.98	A16S
ATOM	46938	C6	ADE	1321	229.282	115.664	-16.559	1.00	58.63	A16S	ATOM	46991	C5'	GUA	1324	223.017	126.358	-9.228	1.00	52.98	A16S
ATOM	46939	N6	ADE	1321	230.120	116.439	-17.243	1.00	58.63	A16S	ATOM	46992	C4'	GUA	1324	224.017	127.499	-9.158	1.00	52.98	A16S
ATOM	46940	C5	ADE	1321	228.441	114.719	-17.155	1.00	58.63	A16S	ATOM	46993	O4'	GUA	1324	225.277	127.102	-9.754	1.00	52.98	A16S
ATOM	46941	N7	ADE	1321	228.258	114.332	-18.473	1.00	58.63	A16S	ATOM	46994	C1'	GUA	1324	225.825	128.187	-10.490	1.00	52.98	A16S
ATOM	46942	C8	ADE	1321	227.322	113.421	-18.406	1.00	58.63	A16S	ATOM	46995	N9	GUA	1324	225.897	127.788	-11.891	1.00	57.48	A16S
ATOM	46943	C2'	ADE	1321	224.562	113.108	-16.337	1.00	54.59	A16S	ATOM	46996	C4	GUA	1324	226.697	128.336	-12.866	1.00	57.48	A16S
ATOM	46944	O2'	ADE	1321	223.759	112.356	-15.451	1.00	54.59	A16S	ATOM	46997	N3	GUA	1324	227.579	129.349	-12.702	1.00	57.48	A16S
ATOM	46945	C3'	ADE	1321	223.918	113.255	-17.703	1.00	54.59	A16S	ATOM	46998	C2	GUA	1324	228.195	129.653	-13.835	1.00	57.48	A16S
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ATOM	46952	C4'	URI	1322	223.314	116.398	-14.214	1.00	56.41	A16S	ATOM	47005	C8	GUA	1324	225.176	126.792	-12.495	1.00	57.48	A16S
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ATOM	46954	C1'	URI	1322	225.468	117.325	-14.244	1.00	56.41	A16S	ATOM	47007	O2'	GUA	1324	225.405	130.175	-9.184	1.00	52.98	A16S
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ATOM	46963	C2'	URI	1322	224.485	118.393	-13.769	1.00	56.41	A16S	ATOM	47016	O4'	CYT	1325	225.215	132.476	-11.130	1.00	41.42	A16S
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ATOM	46967	P	CYT	1323	221.609	119.928	-13.920	1.00	49.12	A16S	ATOM	47020	C2	CYT	1325	225.782	131.920	-14.633	1.00	54.86	A16S
ATOM	46968	O1P	CYT	1323	220.201	120.058	-13.458	1.00	54.58	A16S	ATOM	47021	O2	CYT	1325	226.671	132.739	-14.844	1.00	54.86	A16S
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ATOM	46971	C5'	CYT	1323	222.377	120.634	-11.524	1.00	49.12	A16S	ATOM	47024	N4	CYT	1325	224.111	129.283	-16.243	1.00	54.86	A16S
ATOM	46972	C4'	CYT	1323	223.263	121.625	-10.821	1.00	49.12	A16S	ATOM	47025	C5	CYT	1325	223.792	130.119	-14.029	1.00	54.86	A16S
ATOM	46973	O4'	CYT	1323	224.642	121.335	-11.170	1.00	49.12	A16S	ATOM	47026	C2'	CYT	1325	224.831	134.271	-12.633	1.00	41.42	A16S
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ATOM  47155  C2' ADE  1331     236.298 133.684 -11.137  1.00 45.44      A16S
ATOM  47156  O2' ADE  1331     237.214 133.271 -12.121  1.00 45.44      A16S
ATOM  47157  C3' ADE  1331     235.495 132.538 -10.542  1.00 45.44      A16S
ATOM  47158  O3' ADE  1331     236.286 131.383 -10.347  1.00 45.44      A16S
ATOM  47159  P   URI  1332     236.822 131.023  -8.877  1.00 50.35      A16S
ATOM  47160  O1P URI  1332     237.438 129.665  -8.911  1.00 55.07      A16S
ATOM  47161  O2P URI  1332     235.746 131.320  -7.891  1.00 55.07      A16S
ATOM  47162  O5' URI  1332     237.960 132.100  -8.616  1.00 50.35      A16S
ATOM  47163  C5' URI  1332     239.139 132.136  -9.407  1.00 50.35      A16S
ATOM  47164  C4' URI  1332     239.909 133.395  -9.111  1.00 50.35      A16S
ATOM  47165  O4' URI  1332     239.084 134.535  -9.482  1.00 50.35      A16S
ATOM  47166  C1' URI  1332     239.287 135.589  -8.560  1.00 50.35      A16S
ATOM  47167  N1  URI  1332     238.014 135.863  -7.874  1.00 55.07      A16S
ATOM  47168  C6  URI  1332     237.061 134.893  -7.705  1.00 55.07      A16S
ATOM  47169  C2  URI  1332     237.813 137.137  -7.396  1.00 55.07      A16S
ATOM  47170  O2  URI  1332     238.612 138.028  -7.547  1.00 55.07      A16S
ATOM  47171  N3  URI  1332     236.633 137.334  -6.738  1.00 55.07      A16S
ATOM  47172  C4  URI  1332     235.648 136.415  -6.520  1.00 55.07      A16S
ATOM  47173  O4  URI  1332     234.657 136.747  -5.876  1.00 55.07      A16S
ATOM  47174  C5  URI  1332     235.912 135.118  -7.062  1.00 55.07      A16S
ATOM  47175  C2' URI  1332     240.410 135.141  -7.622  1.00 50.35      A16S
ATOM  47176  O2' URI  1332     241.651 135.502  -8.185  1.00 50.35      A16S
ATOM  47177  C3' URI  1332     240.233 133.635  -7.646  1.00 50.35      A16S
ATOM  47178  O3' URI  1332     241.430 132.974  -7.259  1.00 50.35      A16S
ATOM  47179  P   CYT  1333     241.720 132.694  -5.697  1.00 46.31      A16S
ATOM  47180  O1P CYT  1333     242.987 131.915  -5.594  1.00 68.90      A16S
ATOM  47181  O2P CYT  1333     240.487 132.161  -5.064  1.00 68.90      A16S
ATOM  47182  O5' CYT  1333     241.952 134.151  -5.104  1.00 46.31      A16S
ATOM  47183  C5' CYT  1333     243.179 134.837  -5.304  1.00 46.31      A16S
ATOM  47184  C4' CYT  1333     243.227 136.073  -4.439  1.00 46.31      A16S
ATOM  47185  O4' CYT  1333     242.186 136.997  -4.858  1.00 46.31      A16S
ATOM  47186  C1' CYT  1333     241.735 137.736  -3.733  1.00 46.31      A16S
ATOM  47187  N1  CYT  1333     240.294 137.515  -3.545  1.00 68.90      A16S
ATOM  47188  C6  CYT  1333     239.685 136.372  -3.980  1.00 68.90      A16S
ATOM  47189  C2  CYT  1333     239.556 138.501  -2.894  1.00 68.90      A16S
ATOM  47190  O2  CYT  1333     240.139 139.521  -2.503  1.00 68.90      A16S
ATOM  47191  N3  CYT  1333     238.233 138.321  -2.700  1.00 68.90      A16S
ATOM  47192  C4  CYT  1333     237.646 137.204  -3.122  1.00 68.90      A16S
ATOM  47193  N4  CYT  1333     236.341 137.071  -2.904  1.00 68.90      A16S
ATOM  47194  C5  CYT  1333     238.374 136.175  -3.788  1.00 68.90      A16S
ATOM  47195  C2' CYT  1333     242.545 137.258  -2.529  1.00 46.31      A16S
ATOM  47196  O2' CYT  1333     243.674 138.087  -2.399  1.00 46.31      A16S
ATOM  47197  C3' CYT  1333     242.927 135.858  -2.964  1.00 46.31      A16S
ATOM  47198  O3' CYT  1333     244.074 135.416  -2.263  1.00 46.31      A16S
ATOM  47199  P   GUA  1334     243.936 134.226  -1.200  1.00 55.41      A16S
ATOM  47200  O1P GUA  1334     245.215 133.472  -1.179  1.00 64.23      A16S
ATOM  47201  O2P GUA  1334     242.670 133.512  -1.502  1.00 64.23      A16S
ATOM  47202  O5' GUA  1334     243.765 134.962   0.202  1.00 55.41      A16S
ATOM  47203  C5' GUA  1334     244.780 135.819   0.695  1.00 55.41      A16S
ATOM  47204  C4' GUA  1334     244.192 137.144   1.123  1.00 55.41      A16S
ATOM  47205  O4' GUA  1334     243.171 137.530   0.170  1.00 55.41      A16S
ATOM  47206  C1' GUA  1334     242.252 138.409   0.800  1.00 55.41      A16S
ATOM  47207  N9  GUA  1334     240.896 137.896   0.629  1.00 64.23      A16S
ATOM  47208  C4  GUA  1334     239.739 138.508   1.055  1.00 64.23      A16S
ATOM  47209  N3  GUA  1334     239.657 139.684   1.709  1.00 64.23      A16S
ATOM  47210  C2  GUA  1334     238.407 139.996   2.006  1.00 64.23      A16S
ATOM  47211  N2  GUA  1334     238.135 141.112   2.679  1.00 64.23      A16S
ATOM  47212  N1  GUA  1334     237.328 139.232   1.672  1.00 64.23      A16S
ATOM  47213  C6  GUA  1334     237.385 138.029   0.993  1.00 64.23      A16S
ATOM  47214  O6  GUA  1334     236.346 137.434   0.732  1.00 64.23      A16S
ATOM  47215  C5  GUA  1334     238.722 137.663   0.684  1.00 64.23      A16S
ATOM  47216  N7  GUA  1334     239.224 136.541   0.038  1.00 64.23      A16S
ATOM  47217  C8  GUA  1334     240.516 136.724   0.025  1.00 64.23      A16S
ATOM  47218  C2' GUA  1334     242.665 138.497   2.268  1.00 55.41      A16S
ATOM  47219  O2' GUA  1334     243.517 139.607   2.420  1.00 55.41      A16S
ATOM  47220  C3' GUA  1334     243.433 137.202   2.435  1.00 55.41      A16S
ATOM  47221  O3' GUA  1334     244.320 137.337   3.524  1.00 55.41      A16S
ATOM  47222  P   CYT  1335     243.841 136.899   4.990  1.00 46.29      A16S
ATOM  47223  O1P CYT  1335     245.021 137.026   5.898  1.00 64.42      A16S
ATOM  47224  O2P CYT  1335     243.143 135.591   4.887  1.00 64.42      A16S
ATOM  47225  O5' CYT  1335     242.773 138.019   5.380  1.00 46.29      A16S
ATOM  47226  C5' CYT  1335     243.194 139.291   5.867  1.00 46.29      A16S
ATOM  47227  C4' CYT  1335     242.025 140.053   6.454  1.00 46.29      A16S
ATOM  47228  O4' CYT  1335     241.093 140.445   5.407  1.00 46.29      A16S
ATOM  47229  C1' CYT  1335     239.762 140.397   5.914  1.00 46.29      A16S
ATOM  47230  N1  CYT  1335     239.055 139.289   5.256  1.00 64.42      A16S
ATOM  47231  C6  CYT  1335     239.749 138.293   4.626  1.00 64.42      A16S
ATOM  47232  C2  CYT  1335     237.653 139.256   5.303  1.00 64.42      A16S
ATOM  47233  O2  CYT  1335     237.052 140.178   5.870  1.00 64.42      A16S
ATOM  47234  N3  CYT  1335     236.997 138.218   4.729  1.00 64.42      A16S
ATOM  47235  C4  CYT  1335     237.688 137.248   4.124  1.00 64.42      A16S
ATOM  47236  N4  CYT  1335     237.012 136.249   3.571  1.00 64.42      A16S
ATOM  47237  C5  CYT  1335     239.111 137.263   4.058  1.00 64.42      A16S
ATOM  47238  C2' CYT  1335     239.871 140.095   7.408  1.00 46.29      A16S
ATOM  47239  O2' CYT  1335     239.926 141.304   8.135  1.00 46.29      A16S
ATOM  47240  C3' CYT  1335     241.161 139.292   7.444  1.00 46.29      A16S
ATOM  47241  O3' CYT  1335     241.725 139.273   8.735  1.00 46.29      A16S
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ATOM	47242	P	GUA	1336	241.254	138.154	9.782	1.00	56.02	A16S	ATOM	47295	C1'	ADE	1338	229.455	133.748	16.278	1.00	60.32	A16S
ATOM	47243	O1P	GUA	1336	242.200	138.152	10.924	1.00	80.40	A16S	ATOM	47296	N9	ADE	1338	230.651	133.227	15.619	1.00	72.65	A16S
ATOM	47244	O2P	GUA	1336	241.026	136.891	9.034	1.00	80.40	A16S	ATOM	47297	C4	ADE	1338	230.684	132.230	14.678	1.00	72.65	A16S
ATOM	47245	O5'	GUA	1336	239.844	138.695	10.291	1.00	56.02	A16S	ATOM	47298	N3	ADE	1338	229.642	131.551	14.178	1.00	72.65	A16S
ATOM	47246	C5'	GUA	1336	239.716	139.980	10.886	1.00	56.02	A16S	ATOM	47299	C2	ADE	1338	230.053	130.654	13.296	1.00	72.65	A16S
ATOM	47247	C4'	GUA	1336	238.267	140.248	11.242	1.00	56.02	A16S	ATOM	47300	N1	ADE	1338	231.290	130.379	12.886	1.00	72.65	A16S
ATOM	47248	O4'	GUA	1336	237.464	140.295	10.031	1.00	56.02	A16S	ATOM	47301	C6	ADE	1338	232.314	131.080	13.404	1.00	72.65	A16S
ATOM	47249	C1'	GUA	1336	236.173	139.757	10.290	1.00	56.02	A16S	ATOM	47302	N6	ADE	1338	233.547	130.804	12.986	1.00	72.65	A16S
ATOM	47250	N9	GUA	1336	236.002	138.557	9.475	1.00	80.40	A16S	ATOM	47303	C5	ADE	1338	232.014	132.062	14.352	1.00	72.65	A16S
ATOM	47251	C4	GUA	1336	234.835	137.853	9.280	1.00	80.40	A16S	ATOM	47304	N7	ADE	1338	232.809	132.944	15.066	1.00	72.65	A16S
ATOM	47252	N3	GUA	1336	233.631	138.150	9.805	1.00	80.40	A16S	ATOM	47305	C8	ADE	1338	231.954	133.611	15.800	1.00	72.65	A16S
ATOM	47253	C2	GUA	1336	232.704	137.284	9.436	1.00	80.40	A16S	ATOM	47306	C2'	ADE	1338	229.080	133.034	17.582	1.00	60.32	A16S
ATOM	47254	N2	GUA	1336	231.447	137.423	9.868	1.00	80.40	A16S	ATOM	47307	O2'	ADE	1338	227.677	133.055	17.733	1.00	60.32	A16S
ATOM	47255	N1	GUA	1336	232.936	136.215	8.618	1.00	80.40	A16S	ATOM	47308	C3'	ADE	1338	229.737	133.920	18.627	1.00	60.32	A16S
ATOM	47256	C6	GUA	1336	234.164	135.886	8.064	1.00	80.40	A16S	ATOM	47309	O3'	ADE	1338	228.965	133.888	19.820	1.00	60.32	A16S
ATOM	47257	O6	GUA	1336	234.261	134.892	7.336	1.00	80.40	A16S	ATOM	47310	P	URI	1339	229.636	133.470	21.217	1.00	56.71	A16S
ATOM	47258	C5	GUA	1336	235.174	136.808	8.453	1.00	80.40	A16S	ATOM	47311	O1P	URI	1339	228.607	133.798	22.229	1.00	68.36	A16S
ATOM	47259	N7	GUA	1336	236.525	136.852	8.131	1.00	80.40	A16S	ATOM	47312	O2P	URI	1339	230.995	134.060	21.326	1.00	68.36	A16S
ATOM	47260	C8	GUA	1336	236.972	137.905	8.756	1.00	80.40	A16S	ATOM	47313	O5'	URI	1339	229.776	131.891	21.151	1.00	56.71	A16S
ATOM	47261	C2'	GUA	1336	236.113	139.448	11.784	1.00	56.02	A16S	ATOM	47314	C5'	URI	1339	228.629	131.075	21.006	1.00	56.71	A16S
ATOM	47262	O2'	GUA	1336	235.609	140.567	12.477	1.00	56.02	A16S	ATOM	47315	C4'	URI	1339	229.024	129.747	20.433	1.00	56.71	A16S
ATOM	47263	C3'	GUA	1336	237.579	139.191	12.089	1.00	56.02	A16S	ATOM	47316	O4'	URI	1339	229.548	129.927	19.102	1.00	56.71	A16S
ATOM	47264	O3'	GUA	1336	237.834	139.401	13.460	1.00	56.02	A16S	ATOM	47317	C1'	URI	1339	230.377	128.825	18.805	1.00	56.71	A16S
ATOM	47265	P	GUA	1337	237.671	138.187	14.488	1.00	70.94	A16S	ATOM	47318	N1	URI	1339	231.499	129.247	17.958	1.00	68.36	A16S
ATOM	47266	O1P	GUA	1337	238.133	138.672	15.811	1.00	80.43	A16S	ATOM	47319	C6	URI	1339	232.117	130.467	18.107	1.00	68.36	A16S
ATOM	47267	O2P	GUA	1337	238.296	136.981	13.889	1.00	80.43	A16S	ATOM	47320	C2	URI	1339	231.922	128.345	17.006	1.00	68.36	A16S
ATOM	47268	O5'	GUA	1337	236.097	137.963	14.571	1.00	70.94	A16S	ATOM	47321	O2	URI	1339	231.375	127.278	16.822	1.00	68.36	A16S
ATOM	47269	C5'	GUA	1337	235.216	139.020	14.948	1.00	70.94	A16S	ATOM	47322	N3	URI	1339	233.008	128.739	16.276	1.00	68.36	A16S
ATOM	47270	C4'	GUA	1337	233.788	138.532	14.924	1.00	70.94	A16S	ATOM	47323	C4	URI	1339	233.692	129.924	16.385	1.00	68.36	A16S
ATOM	47271	O4'	GUA	1337	233.415	138.214	13.560	1.00	70.94	A16S	ATOM	47324	O4	URI	1339	234.705	130.091	15.709	1.00	68.36	A16S
ATOM	47272	C1'	GUA	1337	232.575	137.074	13.552	1.00	70.94	A16S	ATOM	47325	C5	URI	1339	233.172	130.829	17.371	1.00	68.36	A16S
ATOM	47273	N9	GUA	1337	233.228	136.026	12.778	1.00	80.43	A16S	ATOM	47326	C2'	URI	1339	230.772	128.145	20.121	1.00	56.71	A16S
ATOM	47274	C4	GUA	1337	232.607	135.004	12.106	1.00	80.43	A16S	ATOM	47327	O2'	URI	1339	230.246	126.838	20.176	1.00	56.71	A16S
ATOM	47275	N3	GUA	1337	231.276	134.807	12.019	1.00	80.43	A16S	ATOM	47328	C3'	URI	1339	230.154	129.060	21.176	1.00	56.71	A16S
ATOM	47276	C2	GUA	1337	230.982	133.726	11.325	1.00	80.43	A16S	ATOM	47329	O3'	URI	1339	229.591	128.261	22.204	1.00	56.71	A16S
ATOM	47277	N2	GUA	1337	229.708	133.379	11.150	1.00	80.43	A16S	ATOM	47330	P	CYT	1340	230.191	128.322	23.686	1.00	63.39	A16S
ATOM	47278	N1	GUA	1337	231.919	132.904	10.758	1.00	80.43	A16S	ATOM	47331	O1P	CYT	1340	229.712	127.129	24.438	1.00	48.05	A16S
ATOM	47279	C6	GUA	1337	233.296	133.087	10.838	1.00	80.43	A16S	ATOM	47332	O2P	CYT	1340	229.898	129.681	24.196	1.00	48.05	A16S
ATOM	47280	O6	GUA	1337	234.059	132.276	10.304	1.00	80.43	A16S	ATOM	47333	O5'	CYT	1340	231.754	128.136	23.473	1.00	63.39	A16S
ATOM	47281	C5	GUA	1337	233.624	134.245	11.576	1.00	80.43	A16S	ATOM	47334	C5'	CYT	1340	232.295	126.842	23.271	1.00	63.39	A16S
ATOM	47282	N7	GUA	1337	234.860	134.790	11.889	1.00	80.43	A16S	ATOM	47335	C4'	CYT	1340	233.710	126.945	22.774	1.00	63.39	A16S
ATOM	47283	C8	GUA	1337	234.575	135.847	12.597	1.00	80.43	A16S	ATOM	47336	O4'	CYT	1340	233.723	127.672	21.521	1.00	63.39	A16S
ATOM	47284	C2'	GUA	1337	232.342	136.648	15.004	1.00	70.94	A16S	ATOM	47337	C1'	CYT	1340	234.922	128.419	21.416	1.00	63.39	A16S
ATOM	47285	O2'	GUA	1337	231.116	137.142	15.493	1.00	70.94	A16S	ATOM	47338	N1	CYT	1340	234.561	129.825	21.235	1.00	48.05	A16S
ATOM	47286	C3'	GUA	1337	233.547	137.251	15.706	1.00	70.94	A16S	ATOM	47339	C6	CYT	1340	233.435	130.346	21.806	1.00	48.05	A16S
ATOM	47287	O3'	GUA	1337	233.229	137.558	17.053	1.00	70.94	A16S	ATOM	47340	C2	CYT	1340	235.369	130.613	20.436	1.00	48.05	A16S
ATOM	47288	P	ADE	1338	233.327	136.420	18.180	1.00	60.32	A16S	ATOM	47341	O2	CYT	1340	236.409	130.114	19.964	1.00	48.05	A16S
ATOM	47289	O1P	ADE	1338	233.295	137.136	19.474	1.00	72.65	A16S	ATOM	47342	N3	CYT	1340	235.007	131.891	20.183	1.00	48.05	A16S
ATOM	47290	O2P	ADE	1338	234.434	135.480	17.882	1.00	72.65	A16S	ATOM	47343	C4	CYT	1340	233.880	132.380	20.702	1.00	48.05	A16S
ATOM	47291	O5'	ADE	1338	231.962	135.627	18.064	1.00	60.32	A16S	ATOM	47344	N4	CYT	1340	233.530	133.628	20.374	1.00	48.05	A16S
ATOM	47292	C5'	ADE	1338	230.724	136.231	18.405	1.00	60.32	A16S	ATOM	47345	C5	CYT	1340	233.056	131.608	21.566	1.00	48.05	A16S
ATOM	47293	C4'	ADE	1338	229.605	135.307	18.014	1.00	60.32	A16S	ATOM	47346	C2'	CYT	1340	235.745	128.116	22.661	1.00	63.39	A16S
ATOM	47294	O4'	ADE	1338	229.674	135.108	16.579	1.00	60.32	A16S	ATOM	47347	O2'	CYT	1340	236.566	127.004	22.363	1.00	63.39	A16S

ATOM	47348	C3'	CYT	1340	234.647	127.751	23.648	1.00	63.39	A16S	ATOM	47401	O4'	CYT	1343	241.366	122.809	18.129	1.00	61.71	A16S
ATOM	47349	O3'	CYT	1340	235.128	126.939	24.700	1.00	63.39	A16S	ATOM	47402	C1'	CYT	1343	240.138	122.311	17.620	1.00	61.71	A16S
ATOM	47350	P	ADE	1341	235.638	127.627	26.054	1.00	67.36	A16S	ATOM	47403	N1	CYT	1343	239.040	122.985	18.332	1.00	62.74	A16S
ATOM	47351	O1P	ADE	1341	234.681	128.710	26.416	1.00	65.32	A16S	ATOM	47404	C6	CYT	1343	239.134	124.303	18.676	1.00	62.74	A16S
ATOM	47352	O2P	ADE	1341	235.903	126.515	27.007	1.00	65.32	A16S	ATOM	47405	C2	CYT	1343	237.903	122.260	18.647	1.00	62.74	A16S
ATOM	47353	O5'	ADE	1341	237.020	128.299	25.628	1.00	67.36	A16S	ATOM	47406	O2	CYT	1343	237.849	121.072	18.319	1.00	62.74	A16S
ATOM	47354	C5'	ADE	1341	237.820	129.017	26.564	1.00	67.36	A16S	ATOM	47407	N3	CYT	1343	236.888	122.866	19.300	1.00	62.74	A16S
ATOM	47355	C4'	ADE	1341	239.184	128.373	26.685	1.00	67.36	A16S	ATOM	47408	C4	CYT	1343	236.984	124.153	19.631	1.00	62.74	A16S
ATOM	47356	O4'	ADE	1341	239.063	127.098	27.361	1.00	67.36	A16S	ATOM	47409	N4	CYT	1343	235.957	124.717	20.275	1.00	62.74	A16S
ATOM	47357	C1'	ADE	1341	240.100	126.239	26.927	1.00	67.36	A16S	ATOM	47410	C5	CYT	1343	238.138	124.922	19.319	1.00	62.74	A16S
ATOM	47358	N9	ADE	1341	239.510	124.956	26.562	1.00	65.32	A16S	ATOM	47411	C2'	CYT	1343	240.133	122.596	16.114	1.00	61.71	A16S
ATOM	47359	C4	ADE	1341	240.189	123.825	26.188	1.00	65.32	A16S	ATOM	47412	O2'	CYT	1343	240.706	121.512	15.411	1.00	61.71	A16S
ATOM	47360	N3	ADE	1341	241.513	123.687	26.036	1.00	65.32	A16S	ATOM	47413	C3'	CYT	1343	241.035	123.816	16.036	1.00	61.71	A16S
ATOM	47361	C2	ADE	1341	241.814	122.439	25.698	1.00	65.32	A16S	ATOM	47414	O3'	CYT	1343	241.588	123.952	14.734	1.00	61.71	A16S
ATOM	47362	N1	ADE	1341	241.002	121.391	25.514	1.00	65.32	A16S	ATOM	47415	P	CYT	1344	240.658	124.459	13.519	1.00	50.39	A16S
ATOM	47363	C6	ADE	1341	239.676	121.567	25.676	1.00	65.32	A16S	ATOM	47416	O1P	CYT	1344	241.430	125.341	12.596	1.00	58.96	A16S
ATOM	47364	N6	ADE	1341	238.864	120.517	25.507	1.00	65.32	A16S	ATOM	47417	O2P	CYT	1344	239.386	124.945	14.095	1.00	58.96	A16S
ATOM	47365	C5	ADE	1341	239.229	122.847	26.022	1.00	65.32	A16S	ATOM	47418	O5'	CYT	1344	240.363	123.126	12.718	1.00	50.39	A16S
ATOM	47366	N7	ADE	1341	237.963	123.359	26.250	1.00	65.32	A16S	ATOM	47419	C5'	CYT	1344	239.098	122.530	12.798	1.00	50.39	A16S
ATOM	47367	C8	ADE	1341	238.184	124.615	26.559	1.00	65.32	A16S	ATOM	47420	C4'	CYT	1344	239.141	121.150	12.217	1.00	50.39	A16S
ATOM	47368	C2'	ADE	1341	240.856	126.939	25.799	1.00	67.36	A16S	ATOM	47421	O4'	CYT	1344	240.069	120.345	12.982	1.00	50.39	A16S
ATOM	47369	O2'	ADE	1341	242.059	127.465	26.307	1.00	67.36	A16S	ATOM	47422	C1'	CYT	1344	239.673	118.990	12.921	1.00	50.39	A16S
ATOM	47370	C3'	ADE	1341	239.860	128.012	25.378	1.00	67.36	A16S	ATOM	47423	N1	CYT	1344	239.540	118.460	14.282	1.00	58.96	A16S
ATOM	47371	O3'	ADE	1341	240.507	129.131	24.803	1.00	67.36	A16S	ATOM	47424	C6	CYT	1344	238.892	119.155	15.266	1.00	58.96	A16S
ATOM	47372	P	GUA	1342	240.524	129.282	23.210	1.00	53.05	A16S	ATOM	47425	C2	CYT	1344	240.054	117.200	14.538	1.00	58.96	A16S
ATOM	47373	O1P	GUA	1342	241.419	130.401	22.821	1.00	57.60	A16S	ATOM	47426	O2	CYT	1344	240.697	116.631	13.640	1.00	58.96	A16S
ATOM	47374	O2P	GUA	1342	239.105	129.304	22.774	1.00	57.60	A16S	ATOM	47427	N3	CYT	1344	239.851	116.631	15.749	1.00	58.96	A16S
ATOM	47375	O5'	GUA	1342	241.207	127.920	22.745	1.00	53.05	A16S	ATOM	47428	C4	CYT	1344	239.180	117.293	16.692	1.00	58.96	A16S
ATOM	47376	C5'	GUA	1342	242.610	127.745	22.858	1.00	53.05	A16S	ATOM	47429	N4	CYT	1344	238.962	116.674	17.854	1.00	58.96	A16S
ATOM	47377	C4'	GUA	1342	243.013	126.383	22.353	1.00	53.05	A16S	ATOM	47430	C5	CYT	1344	238.690	118.613	16.477	1.00	58.96	A16S
ATOM	47378	O4'	GUA	1342	242.523	125.358	23.252	1.00	53.05	A16S	ATOM	47431	C2'	CYT	1344	238.346	118.939	12.163	1.00	50.39	A16S
ATOM	47379	C1'	GUA	1342	242.120	124.223	22.509	1.00	53.05	A16S	ATOM	47432	O2'	CYT	1344	238.573	118.566	10.833	1.00	50.39	A16S
ATOM	47380	N9	GUA	1342	240.674	124.117	22.647	1.00	57.60	A16S	ATOM	47433	C3'	CYT	1344	237.859	120.364	12.354	1.00	50.39	A16S
ATOM	47381	C4	GUA	1342	239.921	122.974	22.592	1.00	57.60	A16S	ATOM	47434	O3'	CYT	1344	236.780	120.870	11.566	1.00	50.39	A16S
ATOM	47382	N3	GUA	1342	240.387	121.729	22.392	1.00	57.60	A16S	ATOM	47435	P	ADE	1345	236.993	121.252	10.031	1.00	61.77	A16S
ATOM	47383	C2	GUA	1342	239.416	120.838	22.380	1.00	57.60	A16S	ATOM	47436	O1P	ADE	1345	235.621	121.430	9.531	1.00	74.56	A16S
ATOM	47384	N2	GUA	1342	239.691	119.545	22.165	1.00	57.60	A16S	ATOM	47437	O2P	ADE	1345	237.902	120.291	9.371	1.00	74.56	A16S
ATOM	47385	N1	GUA	1342	238.101	121.147	22.573	1.00	57.60	A16S	ATOM	47438	O5'	ADE	1345	237.660	122.701	10.021	1.00	61.77	A16S
ATOM	47386	C6	GUA	1342	237.605	122.423	22.791	1.00	57.60	A16S	ATOM	47439	C5'	ADE	1345	238.070	123.313	8.784	1.00	61.77	A16S
ATOM	47387	O6	GUA	1342	236.400	122.589	22.968	1.00	57.60	A16S	ATOM	47440	C4'	ADE	1345	237.678	124.771	8.774	1.00	61.77	A16S
ATOM	47388	C5	GUA	1342	238.624	123.383	22.781	1.00	57.60	A16S	ATOM	47441	O4'	ADE	1345	236.301	124.828	9.162	1.00	61.77	A16S
ATOM	47389	N7	GUA	1342	238.557	124.758	22.941	1.00	57.60	A16S	ATOM	47442	C1'	ADE	1345	236.093	125.893	10.049	1.00	61.77	A16S
ATOM	47390	C8	GUA	1342	239.795	125.151	22.857	1.00	57.60	A16S	ATOM	47443	N9	ADE	1345	235.234	125.410	11.123	1.00	74.56	A16S
ATOM	47391	C2'	GUA	1342	242.535	124.478	21.060	1.00	53.05	A16S	ATOM	47444	C4	ADE	1345	234.734	126.128	12.175	1.00	74.56	A16S
ATOM	47392	O2'	GUA	1342	243.847	124.013	20.841	1.00	53.05	A16S	ATOM	47445	N3	ADE	1345	234.958	127.419	12.457	1.00	74.56	A16S
ATOM	47393	C3'	GUA	1342	242.464	125.993	20.997	1.00	53.05	A16S	ATOM	47446	C2	ADE	1345	234.306	127.773	13.555	1.00	74.56	A16S
ATOM	47394	O3'	GUA	1342	243.281	126.500	19.961	1.00	53.05	A16S	ATOM	47447	N1	ADE	1345	233.511	127.040	14.339	1.00	74.56	A16S
ATOM	47395	P	CYT	1343	242.598	127.026	18.615	1.00	61.71	A16S	ATOM	47448	C6	ADE	1345	233.304	125.744	14.019	1.00	74.56	A16S
ATOM	47396	O1P	CYT	1343	243.651	127.565	17.711	1.00	62.74	A16S	ATOM	47449	N6	ADE	1345	232.500	125.009	14.790	1.00	74.56	A16S
ATOM	47397	O2P	CYT	1343	241.468	127.898	19.023	1.00	62.74	A16S	ATOM	47450	C5	ADE	1345	233.946	125.247	12.887	1.00	74.56	A16S
ATOM	47398	O5'	CYT	1343	242.019	125.689	17.971	1.00	61.71	A16S	ATOM	47451	N7	ADE	1345	233.960	123.989	12.302	1.00	74.56	A16S
ATOM	47399	C5'	CYT	1343	242.887	124.621	17.625	1.00	61.71	A16S	ATOM	47452	C8	ADE	1345	234.739	124.138	11.264	1.00	74.56	A16S
ATOM	47400	C4'	CYT	1343	242.097	123.469	17.065	1.00	61.71	A16S	ATOM	47453	C2'	ADE	1345	237.431	126.544	10.422	1.00	61.77	A16S

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ATOM  47454  O2' ADE  1345     237.475 127.901  10.002  1.00 61.77      A16S
ATOM  47455  C3' ADE  1345     238.471 125.642   9.742  1.00 61.77      A16S
ATOM  47456  O3' ADE  1345     239.367 126.517   9.022  1.00 61.77      A16S
ATOM  47457  P   URI  1346     239.920 126.125   7.547  1.00 65.38      A16S
ATOM  47458  O1P URI  1346     240.716 127.274   7.076  1.00 57.10      A16S
ATOM  47459  O2P URI  1346     240.534 124.777   7.607  1.00 57.10      A16S
ATOM  47460  O5' URI  1346     238.656 126.090   6.578  1.00 65.38      A16S
ATOM  47461  C5' URI  1346     238.660 126.796   5.328  1.00 65.38      A16S
ATOM  47462  C4' URI  1346     238.084 125.923   4.236  1.00 65.38      A16S
ATOM  47463  O4' URI  1346     239.039 124.914   3.895  1.00 65.38      A16S
ATOM  47464  C1' URI  1346     238.387 123.697   3.640  1.00 65.38      A16S
ATOM  47465  N1  URI  1346     239.221 122.637   4.216  1.00 57.10      A16S
ATOM  47466  C6  URI  1346     240.043 122.914   5.260  1.00 57.10      A16S
ATOM  47467  C2  URI  1346     239.190 121.379   3.647  1.00 57.10      A16S
ATOM  47468  O2  URI  1346     238.442 121.076   2.742  1.00 57.10      A16S
ATOM  47469  N3  URI  1346     240.079 120.488   4.178  1.00 57.10      A16S
ATOM  47470  C4  URI  1346     240.973 120.724   5.197  1.00 57.10      A16S
ATOM  47471  O4  URI  1346     241.839 119.884   5.453  1.00 57.10      A16S
ATOM  47472  C5  URI  1346     240.899 122.030   5.755  1.00 57.10      A16S
ATOM  47473  C2' URI  1346     236.909 123.806   4.032  1.00 65.38      A16S
ATOM  47474  O2' URI  1346     236.089 123.576   2.920  1.00 65.38      A16S
ATOM  47475  C3' URI  1346     236.819 125.202   4.648  1.00 65.38      A16S
ATOM  47476  O3' URI  1346     235.694 126.050   4.352  1.00 65.38      A16S
ATOM  47477  P   GUA  1347     234.935 125.993   2.921  1.00 41.30      A16S
ATOM  47478  O1P GUA  1347     235.852 125.524   1.873  1.00 63.37      A16S
ATOM  47479  O2P GUA  1347     234.251 127.302   2.753  1.00 63.37      A16S
ATOM  47480  O5' GUA  1347     233.798 124.913   3.178  1.00 41.30      A16S
ATOM  47481  C5' GUA  1347     233.666 124.322   4.463  1.00 41.30      A16S
ATOM  47482  C4' GUA  1347     232.221 124.287   4.904  1.00 41.30      A16S
ATOM  47483  O4' GUA  1347     232.238 123.886   6.303  1.00 41.30      A16S
ATOM  47484  C1' GUA  1347     231.468 124.790   7.069  1.00 41.30      A16S
ATOM  47485  N9  GUA  1347     232.384 125.735   7.707  1.00 63.37      A16S
ATOM  47486  C4  GUA  1347     232.127 126.523   8.804  1.00 63.37      A16S
ATOM  47487  N3  GUA  1347     230.984 126.541   9.519  1.00 63.37      A16S
ATOM  47488  C2  GUA  1347     231.028 127.428  10.495  1.00 63.37      A16S
ATOM  47489  N2  GUA  1347     229.979 127.573  11.314  1.00 63.37      A16S
ATOM  47490  N1  GUA  1347     232.104 128.237  10.742  1.00 63.37      A16S
ATOM  47491  C6  GUA  1347     233.287 128.237  10.019  1.00 63.37      A16S
ATOM  47492  O6  GUA  1347     234.188 129.016  10.321  1.00 63.37      A16S
ATOM  47493  C5  GUA  1347     233.259 127.284   8.979  1.00 63.37      A16S
ATOM  47494  N7  GUA  1347     234.218 126.964   8.030  1.00 63.37      A16S
ATOM  47495  C8  GUA  1347     233.660 126.039   7.305  1.00 63.37      A16S
ATOM  47496  C2' GUA  1347     230.559 125.500   6.070  1.00 41.30      A16S
ATOM  47497  O2' GUA  1347     229.486 124.686   5.712  1.00 41.30      A16S
ATOM  47498  C3' GUA  1347     231.467 125.619   4.868  1.00 41.30      A16S
ATOM  47499  O3' GUA  1347     230.647 125.715   3.703  1.00 41.30      A16S
ATOM  47500  P   CYT  1348     229.687 127.000   3.481  1.00 44.71      A16S
ATOM  47501  O1P CYT  1348     228.536 126.584   2.631  1.00 62.42      A16S
ATOM  47502  O2P CYT  1348     230.511 128.161   3.065  1.00 62.42      A16S
ATOM  47503  O5' CYT  1348     229.077 127.319   4.917  1.00 44.71      A16S
ATOM  47504  C5' CYT  1348     227.746 126.922   5.254  1.00 44.71      A16S
ATOM  47505  C4' CYT  1348     227.231 127.768   6.382  1.00 44.71      A16S
ATOM  47506  O4' CYT  1348     228.176 127.675   7.481  1.00 44.71      A16S
ATOM  47507  C1' CYT  1348     228.284 128.938   8.121  1.00 44.71      A16S
ATOM  47508  N1  CYT  1348     229.677 129.404   7.992  1.00 62.42      A16S
ATOM  47509  C6  CYT  1348     230.461 128.986   6.954  1.00 62.42      A16S
ATOM  47510  C2  CYT  1348     230.179 130.299   8.937  1.00 62.42      A16S
ATOM  47511  O2  CYT  1348     229.467 130.627   9.878  1.00 62.42      A16S
ATOM  47512  N3  CYT  1348     231.430 130.779   8.800  1.00 62.42      A16S
ATOM  47513  C4  CYT  1348     232.181 130.384   7.774  1.00 62.42      A16S
ATOM  47514  N4  CYT  1348     233.402 130.893   7.667  1.00 62.42      A16S
ATOM  47515  C5  CYT  1348     231.708 129.449   6.808  1.00 62.42      A16S
ATOM  47516  C2' CYT  1348     227.271 129.875   7.446  1.00 44.71      A16S
ATOM  47517  O2' CYT  1348     226.030 129.821   8.112  1.00 44.71      A16S
ATOM  47518  C3' CYT  1348     227.150 129.252   6.069  1.00 44.71      A16S
ATOM  47519  O3' CYT  1348     225.881 129.537   5.531  1.00 44.71      A16S
ATOM  47520  P   CYT  1349     225.617 130.941   4.817  1.00 44.60      A16S
ATOM  47521  O1P CYT  1349     224.181 130.974   4.432  1.00 66.75      A16S
ATOM  47522  O2P CYT  1349     226.658 131.147   3.789  1.00 66.75      A16S
ATOM  47523  O5' CYT  1349     225.846 132.003   5.976  1.00 44.60      A16S
ATOM  47524  C5' CYT  1349     224.812 132.292   6.920  1.00 44.60      A16S
ATOM  47525  C4' CYT  1349     225.180 133.500   7.741  1.00 44.60      A16S
ATOM  47526  O4' CYT  1349     226.355 133.199   8.539  1.00 44.60      A16S
ATOM  47527  C1' CYT  1349     227.169 134.358   8.628  1.00 44.60      A16S
ATOM  47528  N1  CYT  1349     228.470 134.062   8.032  1.00 66.75      A16S
ATOM  47529  C6  CYT  1349     228.676 132.919   7.317  1.00 66.75      A16S
ATOM  47530  C2  CYT  1349     229.500 134.971   8.215  1.00 66.75      A16S
ATOM  47531  O2  CYT  1349     229.270 136.001   8.851  1.00 66.75      A16S
ATOM  47532  N3  CYT  1349     230.716 134.713   7.693  1.00 66.75      A16S
ATOM  47533  C4  CYT  1349     230.915 133.594   7.000  1.00 66.75      A16S
ATOM  47534  N4  CYT  1349     232.131 133.377   6.500  1.00 66.75      A16S
ATOM  47535  C5  CYT  1349     229.874 132.647   6.789  1.00 66.75      A16S
ATOM  47536  C2' CYT  1349     226.463 135.488   7.884  1.00 44.60      A16S
ATOM  47537  O2' CYT  1349     225.732 136.278   8.794  1.00 44.60      A16S
ATOM  47538  C3' CYT  1349     225.593 134.704   6.915  1.00 44.60      A16S
ATOM  47539  O3' CYT  1349     224.479 135.462   6.488  1.00 44.60      A16S
ATOM  47540  P   GUA  1350     224.591 136.313   5.142  1.00 47.99      A16S
ATOM  47541  O1P GUA  1350     223.334 137.097   4.975  1.00 66.32      A16S
ATOM  47542  O2P GUA  1350     225.019 135.369   4.083  1.00 66.32      A16S
ATOM  47543  O5' GUA  1350     225.810 137.308   5.395  1.00 47.99      A16S
ATOM  47544  C5' GUA  1350     225.689 138.393   6.303  1.00 47.99      A16S
ATOM  47545  C4' GUA  1350     227.045 139.016   6.608  1.00 47.99      A16S
ATOM  47546  O4' GUA  1350     228.009 137.992   6.985  1.00 47.99      A16S
ATOM  47547  C1' GUA  1350     229.308 138.540   6.878  1.00 47.99      A16S
ATOM  47548  N9  GUA  1350     230.190 137.640   6.144  1.00 66.32      A16S
ATOM  47549  C4  GUA  1350     231.540 137.831   6.001  1.00 66.32      A16S
ATOM  47550  N3  GUA  1350     232.245 138.869   6.508  1.00 66.32      A16S
ATOM  47551  C2  GUA  1350     233.523 138.795   6.203  1.00 66.32      A16S
ATOM  47552  N2  GUA  1350     234.354 139.756   6.620  1.00 66.32      A16S
ATOM  47553  N1  GUA  1350     234.078 137.776   5.465  1.00 66.32      A16S
ATOM  47554  C6  GUA  1350     233.376 136.695   4.936  1.00 66.32      A16S
ATOM  47555  O6  GUA  1350     233.979 135.830   4.291  1.00 66.32      A16S
ATOM  47556  C5  GUA  1350     231.987 136.768   5.250  1.00 66.32      A16S
ATOM  47557  N7  GUA  1350     230.934 135.921   4.919  1.00 66.32      A16S
ATOM  47558  C8  GUA  1350     229.888 136.480   5.471  1.00 66.32      A16S
ATOM  47559  C2' GUA  1350     229.168 139.885   6.170  1.00 47.99      A16S
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ATOM	47560	O2'	GUA	1350	229.148	140.917	7.132	1.00	47.99	A16S	ATOM	47613	C1'	GUA	1353	239.477	144.705	-3.293	1.00	52.03	A16S
ATOM	47561	C3'	GUA	1350	227.808	139.746	5.515	1.00	47.99	A16S	ATOM	47614	N9	GUA	1353	238.477	143.681	-3.579	1.00	83.30	A16S
ATOM	47562	O3'	GUA	1350	227.327	141.056	5.245	1.00	47.99	A16S	ATOM	47615	C4	GUA	1353	238.675	142.532	-4.302	1.00	83.30	A16S
ATOM	47563	P	CYT	1351	227.924	141.863	3.987	1.00	47.40	A16S	ATOM	47616	N3	GUA	1353	239.832	142.150	-4.877	1.00	83.30	A16S
ATOM	47564	O1P	CYT	1351	227.243	143.181	3.881	1.00	73.01	A16S	ATOM	47617	C2	GUA	1353	239.715	140.989	-5.491	1.00	83.30	A16S
ATOM	47565	O2P	CYT	1351	227.919	140.939	2.821	1.00	73.01	A16S	ATOM	47618	N2	GUA	1353	240.773	140.450	-6.101	1.00	83.30	A16S
ATOM	47566	O5'	CYT	1351	229.443	142.125	4.391	1.00	47.40	A16S	ATOM	47619	N1	GUA	1353	238.554	140.265	-5.549	1.00	83.30	A16S
ATOM	47567	C5'	CYT	1351	229.784	143.106	5.369	1.00	47.40	A16S	ATOM	47620	C6	GUA	1353	237.348	140.642	-4.971	1.00	83.30	A16S
ATOM	47568	C4'	CYT	1351	231.206	143.581	5.166	1.00	47.40	A16S	ATOM	47621	O6	GUA	1353	236.353	139.912	-5.087	1.00	83.30	A16S
ATOM	47569	O4'	CYT	1351	232.131	142.507	5.472	1.00	47.40	A16S	ATOM	47622	C5	GUA	1353	237.461	141.883	-4.297	1.00	83.30	A16S
ATOM	47570	C1'	CYT	1351	233.266	142.607	4.631	1.00	47.40	A16S	ATOM	47623	N7	GUA	1353	236.517	142.609	-3.588	1.00	83.30	A16S
ATOM	47571	N1	CYT	1351	233.373	141.369	3.863	1.00	73.01	A16S	ATOM	47624	C8	GUA	1353	237.163	143.668	-3.182	1.00	83.30	A16S
ATOM	47572	C6	CYT	1351	232.280	140.580	3.661	1.00	73.01	A16S	ATOM	47625	C2'	GUA	1353	239.959	145.450	-4.537	1.00	52.03	A16S
ATOM	47573	C2	CYT	1351	234.602	141.021	3.321	1.00	73.01	A16S	ATOM	47626	O2'	GUA	1353	241.337	145.709	-4.399	1.00	52.03	A16S
ATOM	47574	O2	CYT	1351	235.581	141.737	3.553	1.00	73.01	A16S	ATOM	47627	C3'	GUA	1353	239.112	146.714	-4.482	1.00	52.03	A16S
ATOM	47575	N3	CYT	1351	234.695	139.912	2.563	1.00	73.01	A16S	ATOM	47628	O3'	GUA	1353	239.761	147.781	-5.139	1.00	52.03	A16S
ATOM	47576	C4	CYT	1351	233.619	139.156	2.356	1.00	73.01	A16S	ATOM	47629	P	URI	1354	239.156	148.336	-6.503	1.00	53.41	A16S
ATOM	47577	N4	CYT	1351	233.752	138.077	1.593	1.00	73.01	A16S	ATOM	47630	O1P	URI	1354	239.917	149.541	-6.902	1.00	82.44	A16S
ATOM	47578	C5	CYT	1351	232.358	139.476	2.921	1.00	73.01	A16S	ATOM	47631	O2P	URI	1354	237.683	148.423	-6.339	1.00	82.44	A16S
ATOM	47579	C2'	CYT	1351	233.057	143.814	3.710	1.00	47.40	A16S	ATOM	47632	O5'	URI	1354	239.479	147.167	-7.526	1.00	53.41	A16S
ATOM	47580	O2'	CYT	1351	233.717	144.933	4.233	1.00	47.40	A16S	ATOM	47633	C5'	URI	1354	240.820	146.798	-7.795	1.00	53.41	A16S
ATOM	47581	C3'	CYT	1351	231.551	143.988	3.747	1.00	47.40	A16S	ATOM	47634	C4'	URI	1354	240.861	145.643	-8.764	1.00	53.41	A16S
ATOM	47582	O3'	CYT	1351	231.217	145.343	3.536	1.00	47.40	A16S	ATOM	47635	O4'	URI	1354	240.537	144.402	-8.087	1.00	53.41	A16S
ATOM	47583	P	GUA	1352	230.879	145.850	2.055	1.00	54.38	A16S	ATOM	47636	C1'	URI	1354	239.886	143.530	-8.995	1.00	53.41	A16S
ATOM	47584	O1P	GUA	1352	230.307	147.218	2.160	1.00	75.97	A16S	ATOM	47637	N1	URI	1354	238.550	143.220	-8.472	1.00	82.44	A16S
ATOM	47585	O2P	GUA	1352	230.094	144.776	1.399	1.00	75.97	A16S	ATOM	47638	C6	URI	1354	237.972	143.971	-7.479	1.00	82.44	A16S
ATOM	47586	O5'	GUA	1352	232.302	145.978	1.349	1.00	54.38	A16S	ATOM	47639	C2	URI	1354	237.891	142.153	-9.030	1.00	82.44	A16S
ATOM	47587	C5'	GUA	1352	233.100	147.140	1.551	1.00	54.38	A16S	ATOM	47640	O2	URI	1354	238.390	141.459	-9.899	1.00	82.44	A16S
ATOM	47588	C4'	GUA	1352	234.545	146.856	1.221	1.00	54.38	A16S	ATOM	47641	N3	URI	1354	236.629	141.928	-8.535	1.00	82.44	A16S
ATOM	47589	O4'	GUA	1352	234.930	145.600	1.852	1.00	54.38	A16S	ATOM	47642	C4	URI	1354	235.979	142.651	-7.555	1.00	82.44	A16S
ATOM	47590	C1'	GUA	1352	235.837	144.903	1.014	1.00	54.38	A16S	ATOM	47643	O4	URI	1354	234.804	142.389	-7.285	1.00	82.44	A16S
ATOM	47591	N9	GUA	1352	235.167	143.706	0.514	1.00	75.97	A16S	ATOM	47644	C5	URI	1354	236.742	143.731	-7.014	1.00	82.44	A16S
ATOM	47592	C4	GUA	1352	235.763	142.611	-0.067	1.00	75.97	A16S	ATOM	47645	C2'	URI	1354	239.801	144.257	-10.338	1.00	53.41	A16S
ATOM	47593	N3	GUA	1352	237.090	142.406	-0.196	1.00	75.97	A16S	ATOM	47646	O2'	URI	1354	240.892	143.887	-11.152	1.00	53.41	A16S
ATOM	47594	C2	GUA	1352	237.356	141.293	-0.849	1.00	75.97	A16S	ATOM	47647	C3'	URI	1354	239.868	145.710	-9.906	1.00	53.41	A16S
ATOM	47595	N2	GUA	1352	238.633	140.947	-1.047	1.00	75.97	A16S	ATOM	47648	O3'	URI	1354	240.365	146.508	-10.954	1.00	53.41	A16S
ATOM	47596	N1	GUA	1352	236.391	140.444	-1.355	1.00	75.97	A16S	ATOM	47649	P	GUA	1355	239.346	147.125	-12.017	1.00	51.06	A16S
ATOM	47597	C6	GUA	1352	235.015	140.645	-1.251	1.00	75.97	A16S	ATOM	47650	O1P	GUA	1355	240.092	147.583	-13.219	1.00	75.01	A16S
ATOM	47598	O6	GUA	1352	234.218	139.851	-1.792	1.00	75.97	A16S	ATOM	47651	O2P	GUA	1355	238.484	148.086	-11.279	1.00	75.01	A16S
ATOM	47599	C5	GUA	1352	234.722	141.826	-0.518	1.00	75.97	A16S	ATOM	47652	O5'	GUA	1355	238.471	145.874	-12.465	1.00	51.06	A16S
ATOM	47600	N7	GUA	1352	233.502	142.381	-0.164	1.00	75.97	A16S	ATOM	47653	C5'	GUA	1355	239.038	144.816	-13.237	1.00	51.06	A16S
ATOM	47601	C8	GUA	1352	233.815	143.484	0.459	1.00	75.97	A16S	ATOM	47654	C4'	GUA	1355	238.018	143.725	-13.452	1.00	51.06	A16S
ATOM	47602	C2'	GUA	1352	236.169	145.852	-0.147	1.00	54.38	A16S	ATOM	47655	O4'	GUA	1355	237.716	143.050	-12.198	1.00	51.06	A16S
ATOM	47603	O2'	GUA	1352	237.262	146.668	0.206	1.00	54.38	A16S	ATOM	47656	C1'	GUA	1355	236.328	142.735	-12.148	1.00	51.06	A16S
ATOM	47604	C3'	GUA	1352	234.885	146.660	-0.247	1.00	54.38	A16S	ATOM	47657	N9	GUA	1355	235.693	143.596	-11.160	1.00	75.01	A16S
ATOM	47605	O3'	GUA	1352	235.125	147.920	-0.859	1.00	54.38	A16S	ATOM	47658	C4	GUA	1355	234.570	143.296	-10.439	1.00	75.01	A16S
ATOM	47606	P	GUA	1353	235.297	148.023	-2.455	1.00	52.03	A16S	ATOM	47659	N3	GUA	1355	233.888	142.136	-10.492	1.00	75.01	A16S
ATOM	47607	O1P	GUA	1353	235.537	149.438	-2.818	1.00	83.30	A16S	ATOM	47660	C2	GUA	1355	232.859	142.135	-9.675	1.00	75.01	A16S
ATOM	47608	O2P	GUA	1353	234.202	147.279	-3.118	1.00	83.30	A16S	ATOM	47661	N2	GUA	1355	232.085	141.052	-9.584	1.00	75.01	A16S
ATOM	47609	O5'	GUA	1353	236.660	147.243	-2.733	1.00	52.03	A16S	ATOM	47662	N1	GUA	1355	232.514	143.195	-8.879	1.00	75.01	A16S
ATOM	47610	C5'	GUA	1353	237.919	147.876	-2.517	1.00	52.03	A16S	ATOM	47663	C6	GUA	1355	233.187	144.405	-8.815	1.00	75.01	A16S
ATOM	47611	C4'	GUA	1353	239.049	146.991	-2.994	1.00	52.03	A16S	ATOM	47664	O6	GUA	1355	232.768	145.303	-8.072	1.00	75.01	A16S
ATOM	47612	O4'	GUA	1353	238.907	145.667	-2.418	1.00	52.03	A16S	ATOM	47665	C5	GUA	1355	234.313	144.414	-9.677	1.00	75.01	A16S

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ATOM  47666  N7  GUA  1355     235.268 145.394  -9.907  1.00 75.01      A16S
ATOM  47667  C8  GUA  1355     236.068 144.863 -10.790  1.00 75.01      A16S
ATOM  47668  C2' GUA  1355     235.758 143.070 -13.519  1.00 51.06      A16S
ATOM  47669  O2' GUA  1355     235.879 141.942 -14.348  1.00 51.06      A16S
ATOM  47670  C3' GUA  1355     236.665 144.217 -13.923  1.00 51.06      A16S
ATOM  47671  O3' GUA  1355     236.654 144.449 -15.308  1.00 51.06      A16S
ATOM  47672  P   ADE  1356     235.364 145.110 -15.968  1.00 45.84      A16S
ATOM  47673  O1P ADE  1356     235.687 145.539 -17.357  1.00 78.13      A16S
ATOM  47674  O2P ADE  1356     234.850 146.103 -15.003  1.00 78.13      A16S
ATOM  47675  O5' ADE  1356     234.354 143.887 -16.055  1.00 45.84      A16S
ATOM  47676  C5' ADE  1356     233.726 143.548 -17.288  1.00 45.84      A16S
ATOM  47677  C4' ADE  1356     234.326 142.281 -17.849  1.00 45.84      A16S
ATOM  47678  O4' ADE  1356     234.461 141.284 -16.807  1.00 45.84      A16S
ATOM  47679  C1' ADE  1356     234.179 140.003 -17.329  1.00 45.84      A16S
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ATOM  47689  C8  ADE  1356     232.336 140.090 -15.594  1.00 78.13      A16S
ATOM  47690  C2' ADE  1356     233.956 140.167 -18.833  1.00 45.84      A16S
ATOM  47691  O2' ADE  1356     235.178 139.974 -19.496  1.00 45.84      A16S
ATOM  47692  C3' ADE  1356     233.494 141.610 -18.920  1.00 45.84      A16S
ATOM  47693  O3' ADE  1356     233.814 142.178 -20.170  1.00 45.84      A16S
ATOM  47694  P   ADE  1357     232.707 142.228 -21.318  1.00 50.11      A16S
ATOM  47695  O1P ADE  1357     233.359 142.785 -22.538  1.00 58.77      A16S
ATOM  47696  O2P ADE  1357     231.495 142.884 -20.773  1.00 58.77      A16S
ATOM  47697  O5' ADE  1357     232.391 140.691 -21.565  1.00 50.11      A16S
ATOM  47698  C5' ADE  1357     233.364 139.850 -22.151  1.00 50.11      A16S
ATOM  47699  C4' ADE  1357     232.813 138.461 -22.306  1.00 50.11      A16S
ATOM  47700  O4' ADE  1357     232.555 137.894 -20.993  1.00 50.11      A16S
ATOM  47701  C1' ADE  1357     231.407 137.066 -21.043  1.00 50.11      A16S
ATOM  47702  N9  ADE  1357     230.402 137.669 -20.169  1.00 58.77      A16S
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ATOM  47706  N1  ADE  1357     226.821 136.598 -18.711  1.00 58.77      A16S
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ATOM  47712  C2' ADE  1357     230.981 137.013 -22.512  1.00 50.11      A16S
ATOM  47713  O2' ADE  1357     231.640 135.945 -23.163  1.00 50.11      A16S
ATOM  47714  C3' ADE  1357     231.478 138.359 -23.009  1.00 50.11      A16S
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ATOM  47719  O5' URI  1358     229.251 138.408 -25.123  1.00 50.48      A16S
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ATOM  47739  O5' ADE  1359     223.731 137.634 -26.781  1.00 53.63      A16S
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ATOM  47741  C4' ADE  1359     221.781 136.280 -26.369  1.00 53.63      A16S
ATOM  47742  O4' ADE  1359     222.183 136.065 -24.989  1.00 53.63      A16S
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ATOM  47755  O2' ADE  1359     219.073 136.126 -25.195  1.00 53.63      A16S
ATOM  47756  C3' ADE  1359     220.820 137.446 -26.273  1.00 53.63      A16S
ATOM  47757  O3' ADE  1359     219.949 137.492 -27.382  1.00 53.63      A16S
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ATOM  47761  O5' CYT  1360     218.457 138.613 -29.046  1.00 54.07      A16S
ATOM  47762  C5' CYT  1360     219.317 138.998 -30.115  1.00 54.07      A16S
ATOM  47763  C4' CYT  1360     219.128 138.067 -31.279  1.00 54.07      A16S
ATOM  47764  O4' CYT  1360     219.841 136.835 -31.045  1.00 54.07      A16S
ATOM  47765  C1' CYT  1360     219.096 135.749 -31.562  1.00 54.07      A16S
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ATOM  47771  C4  CYT  1360     218.892 132.804 -28.620  1.00 60.07      A16S
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ATOM  47921  O2' GUA  1367     207.439 125.846 -10.808  1.00 48.53      A16S
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ATOM  47928  C5' GUA  1368     204.210 125.863 -10.417  1.00 48.12      A16S
ATOM  47929  C4' GUA  1368     204.061 127.259 -10.956  1.00 48.12      A16S
ATOM  47930  O4' GUA  1368     205.028 127.474 -12.006  1.00 48.12      A16S
ATOM  47931  C1' GUA  1368     204.574 128.512 -12.852  1.00 48.12      A16S
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ATOM  47974  C5' CYT  1370     195.361 133.385 -14.142  1.00 42.95      A16S
ATOM  47975  C4' CYT  1370     195.026 133.902 -15.515  1.00 42.95      A16S
ATOM  47976  O4' CYT  1370     196.189 133.779 -16.371  1.00 42.95      A16S
ATOM  47977  C1' CYT  1370     195.776 133.506 -17.704  1.00 42.95      A16S
ATOM  47978  N1  CYT  1370     196.289 132.191 -18.104  1.00 50.91      A16S
ATOM  47979  C6  CYT  1370     196.671 131.269 -17.176  1.00 50.91      A16S
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ATOM  48131  C2' CYT  1377     189.819 110.792 -12.545  1.00 42.73      A16S
ATOM  48132  O2' CYT  1377     191.189 110.700 -12.228  1.00 42.73      A16S
ATOM  48133  C3' CYT  1377     189.068 109.479 -12.371  1.00 42.73      A16S
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ATOM  48139  C5' ADE  1378     189.738 110.376  -8.532  1.00 53.82      A16S
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ATOM  48142  C1' ADE  1378     187.746 113.237  -8.631  1.00 53.82      A16S
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ATOM  48149  N6  ADE  1378     184.786 116.088 -12.948  1.00 43.54      A16S
ATOM  48150  C5  ADE  1378     185.829 114.756 -11.244  1.00 43.54      A16S
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ATOM  48152  C8  ADE  1378     186.520 112.791 -10.848  1.00 43.54      A16S
ATOM  48153  C2' ADE  1378     187.195 112.696  -7.315  1.00 53.82      A16S
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ATOM  48160  O5' CYT  1379     190.342 111.128  -4.002  1.00 65.04      A16S
ATOM  48161  C5' CYT  1379     191.365 111.582  -4.902  1.00 65.04      A16S
ATOM  48162  C4' CYT  1379     192.700 110.941  -4.557  1.00 65.04      A16S
ATOM  48163  O4' CYT  1379     193.033 111.263  -3.184  1.00 65.04      A16S
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ATOM  48170  C4  CYT  1379     191.746 108.904   0.882  1.00120.23      A16S
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ATOM  48172  C5  CYT  1379     190.967 109.367  -0.220  1.00120.23      A16S
ATOM  48173  C2' CYT  1379     193.833 109.044  -3.605  1.00 65.04      A16S
ATOM  48174  O2' CYT  1379     195.153 108.984  -4.106  1.00 65.04      A16S
ATOM  48175  C3' CYT  1379     192.762 109.416  -4.621  1.00 65.04      A16S
ATOM  48176  O3' CYT  1379     193.072 108.968  -5.943  1.00 65.04      A16S
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ATOM  48181  C5' ADE  1380     194.615 111.161  -8.487  1.00 60.35      A16S
ATOM  48182  C4' ADE  1380     193.689 111.817  -9.461  1.00 60.35      A16S
ATOM  48183  O4' ADE  1380     192.544 112.329  -8.740  1.00 60.35      A16S
ATOM  48184  C1' ADE  1380     192.139 113.568  -9.304  1.00 60.35      A16S
ATOM  48185  N9  ADE  1380     192.309 114.616  -8.296  1.00 49.55      A16S
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ATOM  48192  C5  ADE  1380     192.212 116.530  -7.217  1.00 49.55      A16S
ATOM  48193  N7  ADE  1380     192.996 115.686  -6.445  1.00 49.55      A16S
ATOM  48194  C8  ADE  1380     193.022 114.567  -7.128  1.00 49.55      A16S
ATOM  48195  C2' ADE  1380     193.025 113.800 -10.525  1.00 60.35      A16S
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ATOM	48196	O2'	ADE	1380	192.413	113.256	-11.678	1.00	60.35	A16S	ATOM	48249	N3	GUA	1383	192.888	108.270	-15.279	1.00	58.99	A16S
ATOM	48197	C3'	ADE	1380	194.275	113.046	-10.113	1.00	60.35	A16S	ATOM	48250	C2	GUA	1383	192.461	107.942	-16.479	1.00	58.99	A16S
ATOM	48198	O3'	ADE	1380	195.064	112.665	-11.215	1.00	60.35	A16S	ATOM	48251	N2	GUA	1383	191.230	108.281	-16.858	1.00	58.99	A16S
ATOM	48199	P	CYT	1381	196.250	113.611	-11.689	1.00	54.55	A16S	ATOM	48252	N1	GUA	1383	193.211	107.258	-17.397	1.00	58.99	A16S
ATOM	48200	O1P	CYT	1381	197.114	113.850	-10.522	1.00	58.29	A16S	ATOM	48253	C6	GUA	1383	194.514	106.824	-17.200	1.00	58.99	A16S
ATOM	48201	O2P	CYT	1381	195.672	114.750	-12.423	1.00	58.29	A16S	ATOM	48254	O6	GUA	1383	195.093	106.199	-18.089	1.00	58.99	A16S
ATOM	48202	O5'	CYT	1381	197.049	112.715	-12.726	1.00	54.55	A16S	ATOM	48255	C5	GUA	1383	194.990	107.187	-15.918	1.00	58.99	A16S
ATOM	48203	C5'	CYT	1381	198.063	111.801	-12.306	1.00	54.55	A16S	ATOM	48256	N7	GUA	1383	196.221	106.970	-15.322	1.00	58.99	A16S
ATOM	48204	C4'	CYT	1381	198.625	111.098	-13.515	1.00	54.55	A16S	ATOM	48257	C8	GUA	1383	196.103	107.499	-14.138	1.00	58.99	A16S
ATOM	48205	O4'	CYT	1381	197.564	110.323	-14.084	1.00	54.55	A16S	ATOM	48258	C2'	GUA	1383	193.385	107.683	-12.010	1.00	54.04	A16S
ATOM	48206	C1'	CYT	1381	197.605	110.427	-15.483	1.00	54.55	A16S	ATOM	48259	O2'	GUA	1383	192.597	108.446	-11.125	1.00	54.04	A16S
ATOM	48207	N1	CYT	1381	196.249	110.711	-15.954	1.00	58.29	A16S	ATOM	48260	C3'	GUA	1383	194.327	106.790	-11.229	1.00	54.04	A16S
ATOM	48208	C6	CYT	1381	195.446	111.598	-15.298	1.00	58.29	A16S	ATOM	48261	O3'	GUA	1383	193.611	106.148	-10.192	1.00	54.04	A16S
ATOM	48209	C2	CYT	1381	195.784	110.035	-17.090	1.00	58.29	A16S	ATOM	48262	P	CYT	1384	193.263	104.585	-10.316	1.00	50.19	A16S
ATOM	48210	O2	CYT	1381	196.548	109.250	-17.672	1.00	58.29	A16S	ATOM	48263	O1P	CYT	1384	192.471	104.152	-9.128	1.00	56.54	A16S
ATOM	48211	N3	CYT	1381	194.519	110.254	-17.518	1.00	58.29	A16S	ATOM	48264	O2P	CYT	1384	194.519	103.876	-10.666	1.00	56.54	A16S
ATOM	48212	C4	CYT	1381	193.738	111.114	-16.863	1.00	58.29	A16S	ATOM	48265	O5'	CYT	1384	192.261	104.505	-11.544	1.00	50.19	A16S
ATOM	48213	N4	CYT	1381	192.494	111.294	-17.313	1.00	58.29	A16S	ATOM	48266	C5'	CYT	1384	190.986	105.119	-11.463	1.00	50.19	A16S
ATOM	48214	C5	CYT	1381	194.197	111.826	-15.712	1.00	58.29	A16S	ATOM	48267	C4'	CYT	1384	190.354	105.167	-12.823	1.00	50.19	A16S
ATOM	48215	C2'	CYT	1381	198.698	111.413	-15.911	1.00	54.55	A16S	ATOM	48268	O4'	CYT	1384	191.278	105.824	-13.732	1.00	50.19	A16S
ATOM	48216	O2'	CYT	1381	199.781	110.755	-16.542	1.00	54.55	A16S	ATOM	48269	C1'	CYT	1384	191.164	105.247	-15.018	1.00	50.19	A16S
ATOM	48217	C3'	CYT	1381	199.115	112.057	-14.599	1.00	54.55	A16S	ATOM	48270	N1	CYT	1384	192.445	104.630	-15.377	1.00	56.54	A16S
ATOM	48218	O3'	CYT	1381	200.552	112.208	-14.646	1.00	54.55	A16S	ATOM	48271	C6	CYT	1384	193.458	104.493	-14.474	1.00	56.54	A16S
ATOM	48219	P	CYT	1382	201.547	111.023	-14.125	1.00	44.62	A16S	ATOM	48272	C2	CYT	1384	192.594	104.174	-16.664	1.00	56.54	A16S
ATOM	48220	O1P	CYT	1382	202.309	111.559	-12.977	1.00	58.00	A16S	ATOM	48273	O2	CYT	1384	191.664	104.336	-17.449	1.00	56.54	A16S
ATOM	48221	O2P	CYT	1382	202.272	110.444	-15.284	1.00	58.00	A16S	ATOM	48274	N3	CYT	1384	193.734	103.569	-17.033	1.00	56.54	A16S
ATOM	48222	O5'	CYT	1382	200.618	109.877	-13.561	1.00	44.62	A16S	ATOM	48275	C4	CYT	1384	194.712	103.408	-16.149	1.00	56.54	A16S
ATOM	48223	C5'	CYT	1382	200.882	108.536	-13.875	1.00	44.62	A16S	ATOM	48276	N4	CYT	1384	195.814	102.757	-16.552	1.00	56.54	A16S
ATOM	48224	C4'	CYT	1382	201.353	107.831	-12.649	1.00	44.62	A16S	ATOM	48277	C5	CYT	1384	194.602	103.892	-14.814	1.00	56.54	A16S
ATOM	48225	O4'	CYT	1382	202.385	108.620	-12.064	1.00	44.62	A16S	ATOM	48278	C2'	CYT	1384	190.033	104.222	-14.945	1.00	50.19	A16S
ATOM	48226	C1'	CYT	1382	202.570	108.136	-10.772	1.00	44.62	A16S	ATOM	48279	O2'	CYT	1384	188.815	104.854	-15.287	1.00	50.19	A16S
ATOM	48227	N1	CYT	1382	203.529	108.978	-10.036	1.00	58.00	A16S	ATOM	48280	C3'	CYT	1384	190.098	103.824	-13.480	1.00	50.19	A16S
ATOM	48228	C6	CYT	1382	204.046	110.107	-10.610	1.00	58.00	A16S	ATOM	48281	O3'	CYT	1384	188.868	103.280	-13.037	1.00	50.19	A16S
ATOM	48229	C2	CYT	1382	203.961	108.569	-8.773	1.00	58.00	A16S	ATOM	48282	P	CYT	1385	188.700	101.686	-12.914	1.00	57.68	A16S
ATOM	48230	O2	CYT	1382	203.439	107.575	-8.252	1.00	58.00	A16S	ATOM	48283	O1P	CYT	1385	187.285	101.365	-12.591	1.00	77.93	A16S
ATOM	48231	N3	CYT	1382	204.939	109.264	-8.154	1.00	58.00	A16S	ATOM	48284	O2P	CYT	1385	189.784	101.149	-12.057	1.00	77.93	A16S
ATOM	48232	C4	CYT	1382	205.476	110.333	-8.748	1.00	58.00	A16S	ATOM	48285	O5'	CYT	1385	188.941	101.187	-14.399	1.00	57.68	A16S
ATOM	48233	N4	CYT	1382	206.481	110.963	-8.122	1.00	58.00	A16S	ATOM	48286	C5'	CYT	1385	188.139	101.673	-15.463	1.00	57.68	A16S
ATOM	48234	C5	CYT	1382	205.018	110.802	-10.014	1.00	58.00	A16S	ATOM	48287	C4'	CYT	1385	188.716	101.222	-16.773	1.00	57.68	A16S
ATOM	48235	C2'	CYT	1382	201.217	107.645	-10.248	1.00	44.62	A16S	ATOM	48288	O4'	CYT	1385	190.014	101.841	-16.966	1.00	57.68	A16S
ATOM	48236	O2'	CYT	1382	201.407	106.335	-9.775	1.00	44.62	A16S	ATOM	48289	C1'	CYT	1385	190.903	100.901	-17.523	1.00	57.68	A16S
ATOM	48237	C3'	CYT	1382	200.350	107.658	-11.520	1.00	44.62	A16S	ATOM	48290	N1	CYT	1385	191.982	100.685	-16.557	1.00	77.93	A16S
ATOM	48238	O3'	CYT	1382	199.775	106.374	-11.790	1.00	44.62	A16S	ATOM	48291	C6	CYT	1385	191.919	101.223	-15.304	1.00	77.93	A16S
ATOM	48239	P	GUA	1383	198.585	105.790	-10.884	1.00	54.04	A16S	ATOM	48292	C2	CYT	1385	193.075	99.932	-16.941	1.00	77.93	A16S
ATOM	48240	O1P	GUA	1383	198.958	106.000	-9.464	1.00	58.99	A16S	ATOM	48293	O2	CYT	1385	193.088	99.450	-18.071	1.00	77.93	A16S
ATOM	48241	O2P	GUA	1383	198.266	104.414	-11.353	1.00	58.99	A16S	ATOM	48294	N3	CYT	1385	194.090	99.743	-16.075	1.00	77.93	A16S
ATOM	48242	O5'	GUA	1383	197.345	106.729	-11.224	1.00	54.04	A16S	ATOM	48295	C4	CYT	1385	194.029	100.275	-14.857	1.00	77.93	A16S
ATOM	48243	C5'	GUA	1383	196.618	107.359	-10.177	1.00	54.04	A16S	ATOM	48296	N4	CYT	1385	195.058	100.067	-14.035	1.00	77.93	A16S
ATOM	48244	C4'	GUA	1383	195.276	107.832	-10.669	1.00	54.04	A16S	ATOM	48297	C5	CYT	1385	192.912	101.044	-14.428	1.00	77.93	A16S
ATOM	48245	O4'	GUA	1383	195.470	108.742	-11.785	1.00	54.04	A16S	ATOM	48298	C2'	CYT	1385	190.094	99.647	-17.867	1.00	57.68	A16S
ATOM	48246	C1'	GUA	1383	194.378	108.629	-12.681	1.00	54.04	A16S	ATOM	48299	O2'	CYT	1385	189.604	99.778	-19.183	1.00	57.68	A16S
ATOM	48247	N9	GUA	1383	194.867	108.036	-13.914	1.00	58.99	A16S	ATOM	48300	C3'	CYT	1385	188.961	99.726	-16.857	1.00	57.68	A16S
ATOM	48248	C4	GUA	1383	194.153	107.865	-15.068	1.00	58.99	A16S	ATOM	48301	O3'	CYT	1385	187.773	99.101	-17.340	1.00	57.68	A16S

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ATOM  48302  P   CYT  1386     187.504  97.547 -17.043  1.00 42.50      A16S
ATOM  48303  O1P CYT  1386     186.042  97.326 -16.921  1.00 56.25      A16S
ATOM  48304  O2P CYT  1386     188.398  97.129 -15.938  1.00 56.25      A16S
ATOM  48305  O5' CYT  1386     187.966  96.833 -18.385  1.00 42.50      A16S
ATOM  48306  C5' CYT  1386     187.454  97.262 -19.637  1.00 42.50      A16S
ATOM  48307  C4' CYT  1386     188.147  96.530 -20.753  1.00 42.50      A16S
ATOM  48308  O4' CYT  1386     189.498  97.029 -20.905  1.00 42.50      A16S
ATOM  48309  C1' CYT  1386     190.372  95.959 -21.191  1.00 42.50      A16S
ATOM  48310  N1  CYT  1386     191.313  95.845 -20.071  1.00 56.25      A16S
ATOM  48311  C6  CYT  1386     190.946  96.204 -18.803  1.00 56.25      A16S
ATOM  48312  C2  CYT  1386     192.588  95.380 -20.325  1.00 56.25      A16S
ATOM  48313  O2  CYT  1386     192.869  95.032 -21.474  1.00 56.25      A16S
ATOM  48314  N3  CYT  1386     193.483  95.313 -19.318  1.00 56.25      A16S
ATOM  48315  C4  CYT  1386     193.125  95.677 -18.085  1.00 56.25      A16S
ATOM  48316  N4  CYT  1386     194.040  95.600 -17.123  1.00 56.25      A16S
ATOM  48317  C5  CYT  1386     191.812  96.135 -17.787  1.00 56.25      A16S
ATOM  48318  C2' CYT  1386     189.502  94.720 -21.407  1.00 42.50      A16S
ATOM  48319  O2' CYT  1386     189.127  94.649 -22.768  1.00 42.50      A16S
ATOM  48320  C3' CYT  1386     188.308  95.042 -20.521  1.00 42.50      A16S
ATOM  48321  O3' CYT  1386     187.131  94.367 -20.932  1.00 42.50      A16S
ATOM  48322  P   GUA  1387     186.715  92.986 -20.229  1.00 37.84      A16S
ATOM  48323  O1P GUA  1387     185.293  92.735 -20.585  1.00 58.30      A16S
ATOM  48324  O2P GUA  1387     187.120  93.024 -18.807  1.00 58.30      A16S
ATOM  48325  O5' GUA  1387     187.608  91.897 -20.973  1.00 37.84      A16S
ATOM  48326  C5' GUA  1387     187.357  91.563 -22.332  1.00 37.84      A16S
ATOM  48327  C4' GUA  1387     188.461  90.700 -22.871  1.00 37.84      A16S
ATOM  48328  O4' GUA  1387     189.685  91.478 -22.981  1.00 37.84      A16S
ATOM  48329  C1' GUA  1387     190.803  90.647 -22.683  1.00 37.84      A16S
ATOM  48330  N9  GUA  1387     191.406  91.104 -21.432  1.00 58.30      A16S
ATOM  48331  C4  GUA  1387     192.749  91.110 -21.119  1.00 58.30      A16S
ATOM  48332  N3  GUA  1387     193.755  90.702 -21.921  1.00 58.30      A16S
ATOM  48333  C2  GUA  1387     194.934  90.831 -21.340  1.00 58.30      A16S
ATOM  48334  N2  GUA  1387     196.042  90.484 -22.005  1.00 58.30      A16S
ATOM  48335  N1  GUA  1387     195.115  91.313 -20.070  1.00 58.30      A16S
ATOM  48336  C6  GUA  1387     194.101  91.738 -19.223  1.00 58.30      A16S
ATOM  48337  O6  GUA  1387     194.378  92.152 -18.094  1.00 58.30      A16S
ATOM  48338  C5  GUA  1387     192.823  91.613 -19.837  1.00 58.30      A16S
ATOM  48339  N7  GUA  1387     191.558  91.923 -19.357  1.00 58.30      A16S
ATOM  48340  C8  GUA  1387     190.753  91.604 -20.333  1.00 58.30      A16S
ATOM  48341  C2' GUA  1387     190.249  89.230 -22.567  1.00 37.84      A16S
ATOM  48342  O2' GUA  1387     190.169  88.677 -23.869  1.00 37.84      A16S
ATOM  48343  C3' GUA  1387     188.868  89.522 -22.007  1.00 37.84      A16S
ATOM  48344  O3' GUA  1387     187.988  88.417 -22.148  1.00 37.84      A16S
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ATOM  48346  O1P URI  1388     187.039  86.215 -21.460  1.00 65.10      A16S
ATOM  48347  O2P URI  1388     188.218  87.727 -19.769  1.00 65.10      A16S
ATOM  48348  O5' URI  1388     189.500  86.501 -21.506  1.00 53.36      A16S
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ATOM  48355  C2  URI  1388     195.039  86.619 -20.784  1.00 65.10      A16S
ATOM  48356  O2  URI  1388     195.871  86.023 -21.437  1.00 65.10      A16S
ATOM  48357  N3  URI  1388     195.357  87.306 -19.642  1.00 65.10      A16S
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ATOM  48359  O4  URI  1388     194.914  88.530 -17.806  1.00 65.10      A16S
ATOM  48360  C5  URI  1388     193.142  88.038 -19.303  1.00 65.10      A16S
ATOM  48361  C2' URI  1388     193.041  84.428 -21.979  1.00 53.36      A16S
ATOM  48362  O2' URI  1388     193.447  83.604 -23.057  1.00 53.36      A16S
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ATOM  48365  P   CYT  1389     190.705  82.232 -20.692  1.00 63.28      A16S
ATOM  48366  O1P CYT  1389     190.260  80.918 -21.201  1.00 57.71      A16S
ATOM  48367  O2P CYT  1389     189.867  82.959 -19.711  1.00 57.71      A16S
ATOM  48368  O5' CYT  1389     192.128  82.093 -20.005  1.00 63.28      A16S
ATOM  48369  C5' CYT  1389     193.211  81.484 -20.680  1.00 63.28      A16S
ATOM  48370  C4' CYT  1389     194.437  81.535 -19.810  1.00 63.28      A16S
ATOM  48371  O4' CYT  1389     194.863  82.915 -19.648  1.00 63.28      A16S
ATOM  48372  C1' CYT  1389     195.415  83.090 -18.352  1.00 63.28      A16S
ATOM  48373  N1  CYT  1389     194.599  84.080 -17.641  1.00 57.71      A16S
ATOM  48374  C6  CYT  1389     193.341  84.398 -18.076  1.00 57.71      A16S
ATOM  48375  C2  CYT  1389     195.118  84.676 -16.507  1.00 57.71      A16S
ATOM  48376  O2  CYT  1389     196.268  84.380 -16.154  1.00 57.71      A16S
ATOM  48377  N3  CYT  1389     194.362  85.558 -15.820  1.00 57.71      A16S
ATOM  48378  C4  CYT  1389     193.133  85.849 -16.239  1.00 57.71      A16S
ATOM  48379  N4  CYT  1389     192.424  86.710 -15.526  1.00 57.71      A16S
ATOM  48380  C5  CYT  1389     192.579  85.267 -17.406  1.00 57.71      A16S
ATOM  48381  C2' CYT  1389     195.364  81.727 -17.656  1.00 63.28      A16S
ATOM  48382  O2' CYT  1389     196.564  81.007 -17.846  1.00 63.28      A16S
ATOM  48383  C3' CYT  1389     194.210  81.070 -18.386  1.00 63.28      A16S
ATOM  48384  O3' CYT  1389     194.277  79.666 -18.274  1.00 63.28      A16S
ATOM  48385  P   ADE  1390     193.558  78.950 -17.036  1.00 57.78      A16S
ATOM  48386  O1P ADE  1390     193.689  77.478 -17.222  1.00 73.81      A16S
ATOM  48387  O2P ADE  1390     192.210  79.552 -16.854  1.00 73.81      A16S
ATOM  48388  O5' ADE  1390     194.460  79.367 -15.796  1.00 57.78      A16S
ATOM  48389  C5' ADE  1390     195.747  78.810 -15.632  1.00 57.78      A16S
ATOM  48390  C4' ADE  1390     196.272  79.130 -14.265  1.00 57.78      A16S
ATOM  48391  O4' ADE  1390     196.503  80.551 -14.163  1.00 57.78      A16S
ATOM  48392  C1' ADE  1390     196.302  80.962 -12.825  1.00 57.78      A16S
ATOM  48393  N9  ADE  1390     195.246  81.962 -12.820  1.00 73.81      A16S
ATOM  48394  C4  ADE  1390     194.849  82.715 -11.748  1.00 73.81      A16S
ATOM  48395  N3  ADE  1390     195.389  82.730 -10.517  1.00 73.81      A16S
ATOM  48396  C2  ADE  1390     194.719  83.562  -9.727  1.00 73.81      A16S
ATOM  48397  N1  ADE  1390     193.649  84.314 -10.008  1.00 73.81      A16S
ATOM  48398  C6  ADE  1390     193.131  84.262 -11.254  1.00 73.81      A16S
ATOM  48399  N6  ADE  1390     192.051  84.985 -11.535  1.00 73.81      A16S
ATOM  48400  C5  ADE  1390     193.758  83.437 -12.183  1.00 73.81      A16S
ATOM  48401  N7  ADE  1390     193.502  83.181 -13.519  1.00 73.81      A16S
ATOM  48402  C8  ADE  1390     194.419  82.310 -13.852  1.00 73.81      A16S
ATOM  48403  C2' ADE  1390     195.898  79.722 -12.024  1.00 57.78      A16S
ATOM  48404  O2' ADE  1390     197.040  79.146 -11.446  1.00 57.78      A16S
ATOM  48405  C3' ADE  1390     195.342  78.822 -13.110  1.00 57.78      A16S
ATOM  48406  O3' ADE  1390     195.501  77.472 -12.725  1.00 57.78      A16S
ATOM  48407  P   CYT  1391     194.267  76.677 -12.092  1.00 53.98      A16S
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ATOM	48408	O1P	CYT	1391	194.686	75.269	-11.901	1.00	64.34	A16S	ATOM	48461	O2	CYT	1393	181.771	80.418	-6.911	1.00	55.94	A16S
ATOM	48409	O2P	CYT	1391	193.071	76.974	-12.917	1.00	64.34	A16S	ATOM	48462	N3	CYT	1393	183.145	79.860	-8.610	1.00	55.94	A16S
ATOM	48410	O5'	CYT	1391	194.082	77.333	-10.653	1.00	53.98	A16S	ATOM	48463	C4	CYT	1393	184.240	79.222	-9.007	1.00	55.94	A16S
ATOM	48411	C5'	CYT	1391	195.045	77.132	-9.634	1.00	53.98	A16S	ATOM	48464	N4	CYT	1393	184.570	79.304	-10.291	1.00	55.94	A16S
ATOM	48412	C4'	CYT	1391	194.638	77.860	-8.382	1.00	53.98	A16S	ATOM	48465	C5	CYT	1393	185.050	78.479	-8.103	1.00	55.94	A16S
ATOM	48413	O4'	CYT	1391	194.696	79.292	-8.617	1.00	53.98	A16S	ATOM	48466	C2'	CYT	1393	181.946	78.285	-4.699	1.00	77.54	A16S
ATOM	48414	C1'	CYT	1391	193.676	79.942	-7.860	1.00	53.98	A16S	ATOM	48467	O2'	CYT	1393	181.178	78.883	-3.675	1.00	77.54	A16S
ATOM	48415	N1	CYT	1391	192.724	80.577	-8.791	1.00	64.34	A16S	ATOM	48468	C3'	CYT	1393	182.581	76.974	-4.271	1.00	77.54	A16S
ATOM	48416	C6	CYT	1391	192.685	80.225	-10.110	1.00	64.34	A16S	ATOM	48469	O3'	CYT	1393	181.674	76.165	-3.537	1.00	77.54	A16S
ATOM	48417	C2	CYT	1391	191.850	81.536	-8.296	1.00	64.34	A16S	ATOM	48470	P	CYT	1394	180.841	75.023	-4.306	1.00	56.47	A16S
ATOM	48418	O2	CYT	1391	191.914	81.838	-7.101	1.00	64.34	A16S	ATOM	48471	O1P	CYT	1394	180.219	74.158	-3.267	1.00	57.23	A16S
ATOM	48419	N3	CYT	1391	190.958	82.108	-9.126	1.00	64.34	A16S	ATOM	48472	O2P	CYT	1394	181.726	74.416	-5.339	1.00	57.23	A16S
ATOM	48420	C4	CYT	1391	190.914	81.747	-10.406	1.00	64.34	A16S	ATOM	48473	O5'	CYT	1394	179.707	75.822	-5.090	1.00	56.47	A16S
ATOM	48421	N4	CYT	1391	189.998	82.321	-11.188	1.00	64.34	A16S	ATOM	48474	C5'	CYT	1394	178.794	76.651	-4.391	1.00	56.47	A16S
ATOM	48422	C5	CYT	1391	191.802	80.779	-10.943	1.00	64.34	A16S	ATOM	48475	C4'	CYT	1394	178.020	77.507	-5.357	1.00	56.47	A16S
ATOM	48423	C2'	CYT	1391	192.984	78.855	-7.039	1.00	53.98	A16S	ATOM	48476	O4'	CYT	1394	178.918	78.422	-6.027	1.00	56.47	A16S
ATOM	48424	O2'	CYT	1391	193.618	78.733	-5.783	1.00	53.98	A16S	ATOM	48477	C1'	CYT	1394	178.406	78.722	-7.310	1.00	56.47	A16S
ATOM	48425	C3'	CYT	1391	193.206	77.648	-7.931	1.00	53.98	A16S	ATOM	48478	N1	CYT	1394	179.421	78.356	-8.296	1.00	57.23	A16S
ATOM	48426	O3'	CYT	1391	193.015	76.434	-7.236	1.00	53.98	A16S	ATOM	48479	C6	CYT	1394	180.380	77.431	-8.002	1.00	57.23	A16S
ATOM	48427	P	GUA	1392	191.697	75.571	-7.537	1.00	68.35	A16S	ATOM	48480	C2	CYT	1394	179.388	78.965	-9.547	1.00	57.23	A16S
ATOM	48428	O1P	GUA	1392	191.916	74.185	-7.064	1.00	65.57	A16S	ATOM	48481	O2	CYT	1394	178.515	79.817	-9.774	1.00	57.23	A16S
ATOM	48429	O2P	GUA	1392	191.327	75.814	-8.954	1.00	65.57	A16S	ATOM	48482	N3	CYT	1394	180.307	78.619	-10.473	1.00	57.23	A16S
ATOM	48430	O5'	GUA	1392	190.595	76.244	-6.606	1.00	68.35	A16S	ATOM	48483	C4	CYT	1394	181.241	77.717	-10.177	1.00	57.23	A16S
ATOM	48431	C5'	GUA	1392	190.798	76.351	-5.200	1.00	68.35	A16S	ATOM	48484	N4	CYT	1394	182.133	77.416	-11.114	1.00	57.23	A16S
ATOM	48432	C4'	GUA	1392	189.747	77.246	-4.584	1.00	68.35	A16S	ATOM	48485	C5	CYT	1394	181.303	77.086	-8.904	1.00	57.23	A16S
ATOM	48433	O4'	GUA	1392	189.931	78.613	-5.040	1.00	68.35	A16S	ATOM	48486	C2'	CYT	1394	177.116	77.917	-7.488	1.00	56.47	A16S
ATOM	48434	C1'	GUA	1392	188.670	79.251	-5.138	1.00	68.35	A16S	ATOM	48487	O2'	CYT	1394	175.996	78.703	-7.133	1.00	56.47	A16S
ATOM	48435	N9	GUA	1392	188.466	79.627	-6.532	1.00	65.57	A16S	ATOM	48488	C3'	CYT	1394	177.330	76.786	-6.499	1.00	56.47	A16S
ATOM	48436	C4	GUA	1392	187.493	80.457	-7.028	1.00	65.57	A16S	ATOM	48489	O3'	CYT	1394	176.081	76.273	-6.078	1.00	56.47	A16S
ATOM	48437	N3	GUA	1392	186.530	81.064	-6.313	1.00	65.57	A16S	ATOM	48490	P	ADE	1395	175.454	75.010	-6.829	1.00	56.47	A16S
ATOM	48438	C2	GUA	1392	185.745	81.804	-7.074	1.00	65.57	A16S	ATOM	48491	O1P	ADE	1395	174.405	74.433	-5.952	1.00	59.17	A16S
ATOM	48439	N2	GUA	1392	184.718	82.466	-6.529	1.00	65.57	A16S	ATOM	48492	O2P	ADE	1395	176.577	74.159	-7.292	1.00	59.17	A16S
ATOM	48440	N1	GUA	1392	185.903	81.948	-8.426	1.00	65.57	A16S	ATOM	48493	O5'	ADE	1395	174.737	75.636	-8.105	1.00	56.47	A16S
ATOM	48441	C6	GUA	1392	186.889	81.333	-9.181	1.00	65.57	A16S	ATOM	48494	C5'	ADE	1395	173.489	76.305	-7.984	1.00	56.47	A16S
ATOM	48442	O6	GUA	1392	186.946	81.534	-10.400	1.00	65.57	A16S	ATOM	48495	C4'	ADE	1395	173.193	77.100	-9.232	1.00	56.47	A16S
ATOM	48443	C5	GUA	1392	187.727	80.525	-8.381	1.00	65.57	A16S	ATOM	48496	O4'	ADE	1395	174.298	78.004	-9.493	1.00	56.47	A16S
ATOM	48444	N7	GUA	1392	188.814	79.742	-8.731	1.00	65.57	A16S	ATOM	48497	C1'	ADE	1395	174.423	78.206	-10.886	1.00	56.47	A16S
ATOM	48445	C8	GUA	1392	189.218	79.229	-7.603	1.00	65.57	A16S	ATOM	48498	N9	ADE	1395	175.708	77.672	-11.313	1.00	59.17	A16S
ATOM	48446	C2'	GUA	1392	187.631	78.253	-4.624	1.00	68.35	A16S	ATOM	48499	C4	ADE	1395	176.321	77.951	-12.505	1.00	59.17	A16S
ATOM	48447	O2'	GUA	1392	187.485	78.410	-3.230	1.00	68.35	A16S	ATOM	48500	N3	ADE	1395	175.882	78.773	-13.467	1.00	59.17	A16S
ATOM	48448	C3'	GUA	1392	188.308	76.935	-4.945	1.00	68.35	A16S	ATOM	48501	C2	ADE	1395	176.723	78.782	-14.493	1.00	59.17	A16S
ATOM	48449	O3'	GUA	1392	187.793	75.907	-4.122	1.00	68.35	A16S	ATOM	48502	N1	ADE	1395	177.865	78.117	-14.653	1.00	59.17	A16S
ATOM	48450	P	CYT	1393	186.581	74.998	-4.652	1.00	77.54	A16S	ATOM	48503	C6	ADE	1395	178.280	77.303	-13.662	1.00	59.17	A16S
ATOM	48451	O1P	CYT	1393	186.453	73.870	-3.700	1.00	55.94	A16S	ATOM	48504	N6	ADE	1395	179.426	76.640	-13.819	1.00	59.17	A16S
ATOM	48452	O2P	CYT	1393	186.773	74.725	-6.099	1.00	55.94	A16S	ATOM	48505	C5	ADE	1395	177.475	77.203	-12.519	1.00	59.17	A16S
ATOM	48453	O5'	CYT	1393	185.294	75.930	-4.519	1.00	77.54	A16S	ATOM	48506	N7	ADE	1395	177.600	76.474	-11.347	1.00	59.17	A16S
ATOM	48454	C5'	CYT	1393	184.879	76.450	-3.255	1.00	77.54	A16S	ATOM	48507	C8	ADE	1395	176.531	76.792	-10.665	1.00	59.17	A16S
ATOM	48455	C4'	CYT	1393	183.759	77.452	-3.442	1.00	77.54	A16S	ATOM	48508	C2'	ADE	1395	173.282	77.437	-11.545	1.00	56.47	A16S
ATOM	48456	O4'	CYT	1393	184.247	78.593	-4.200	1.00	77.54	A16S	ATOM	48509	O2'	ADE	1395	172.162	78.287	-11.654	1.00	56.47	A16S
ATOM	48457	C1'	CYT	1393	183.186	79.134	-4.973	1.00	77.54	A16S	ATOM	48510	C3'	ADE	1395	173.052	76.329	-10.533	1.00	56.47	A16S
ATOM	48458	N1	CYT	1393	183.575	79.128	-6.393	1.00	55.94	A16S	ATOM	48511	O3'	ADE	1395	171.737	75.805	-10.668	1.00	56.47	A16S
ATOM	48459	C6	CYT	1393	184.685	78.459	-6.817	1.00	55.94	A16S	ATOM	48512	P	URI	1396	171.465	74.539	-11.628	1.00	50.56	A16S
ATOM	48460	C2	CYT	1393	182.784	79.834	-7.312	1.00	55.94	A16S	ATOM	48513	O1P	URI	1396	169.990	74.364	-11.687	1.00	62.61	A16S

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ATOM  48514  O2P URI  1396     172.327  73.404 -11.218  1.00 62.61      A16S
ATOM  48515  O5' URI  1396     171.926  75.008 -13.074  1.00 50.56      A16S
ATOM  48516  C5' URI  1396     171.145  75.927 -13.812  1.00 50.56      A16S
ATOM  48517  C4' URI  1396     171.868  76.338 -15.064  1.00 50.56      A16S
ATOM  48518  O4' URI  1396     173.195  76.829 -14.732  1.00 50.56      A16S
ATOM  48519  C1' URI  1396     174.063  76.612 -15.829  1.00 50.56      A16S
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ATOM  48521  C6  URI  1396     175.203  75.180 -14.163  1.00 62.61      A16S
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ATOM  48527  C5  URI  1396     176.171  74.348 -13.779  1.00 62.61      A16S
ATOM  48528  C2' URI  1396     173.234  75.901 -16.904  1.00 50.56      A16S
ATOM  48529  O2' URI  1396     172.691  76.867 -17.776  1.00 50.56      A16S
ATOM  48530  C3' URI  1396     172.153  75.241 -16.065  1.00 50.56      A16S
ATOM  48531  O3' URI  1396     170.992  74.972 -16.837  1.00 50.56      A16S
ATOM  48532  P   GUA  1397     170.830  73.554 -17.582  1.00 52.89      A16S
ATOM  48533  O1P GUA  1397     169.369  73.314 -17.720  1.00 69.53      A16S
ATOM  48534  O2P GUA  1397     171.680  72.534 -16.917  1.00 69.53      A16S
ATOM  48535  O5' GUA  1397     171.426  73.823 -19.030  1.00 52.89      A16S
ATOM  48536  C5' GUA  1397     170.879  74.837 -19.845  1.00 52.89      A16S
ATOM  48537  C4' GUA  1397     171.716  75.024 -21.081  1.00 52.89      A16S
ATOM  48538  O4' GUA  1397     173.036  75.492 -20.705  1.00 52.89      A16S
ATOM  48539  C1' GUA  1397     173.993  74.992 -21.622  1.00 52.89      A16S
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ATOM  48542  N3  GUA  1397     176.386  73.478 -22.678  1.00 69.53      A16S
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ATOM  48544  N2  GUA  1397     177.963  72.607 -24.101  1.00 69.53      A16S
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ATOM  48546  C6  GUA  1397     177.769  72.108 -20.518  1.00 69.53      A16S
ATOM  48547  O6  GUA  1397     178.446  71.488 -19.688  1.00 69.53      A16S
ATOM  48548  C5  GUA  1397     176.607  72.882 -20.306  1.00 69.53      A16S
ATOM  48549  N7  GUA  1397     175.914  73.160 -19.136  1.00 69.53      A16S
ATOM  48550  C8  GUA  1397     174.932  73.928 -19.522  1.00 69.53      A16S
ATOM  48551  C2' GUA  1397     173.222  74.204 -22.683  1.00 52.89      A16S
ATOM  48552  O2' GUA  1397     172.878  75.046 -23.767  1.00 52.89      A16S
ATOM  48553  C3' GUA  1397     172.000  73.775 -21.888  1.00 52.89      A16S
ATOM  48554  O3' GUA  1397     170.909  73.437 -22.726  1.00 52.89      A16S
ATOM  48555  P   GUA  1398     170.499  71.896 -22.891  1.00 59.12      A16S
ATOM  48556  O1P GUA  1398     169.221  71.834 -23.647  1.00 66.85      A16S
ATOM  48557  O2P GUA  1398     170.601  71.253 -21.554  1.00 66.85      A16S
ATOM  48558  O5' GUA  1398     171.625  71.324 -23.851  1.00 59.12      A16S
ATOM  48559  C5' GUA  1398     171.728  71.805 -25.178  1.00 59.12      A16S
ATOM  48560  C4' GUA  1398     172.934  71.218 -25.846  1.00 59.12      A16S
ATOM  48561  O4' GUA  1398     174.118  71.608 -25.109  1.00 59.12      A16S
ATOM  48562  C1' GUA  1398     175.075  70.567 -25.164  1.00 59.12      A16S
ATOM  48563  N9  GUA  1398     175.375  70.160 -23.799  1.00 66.85      A16S
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ATOM  48565  N3  GUA  1398     177.145  68.573 -24.230  1.00 66.85      A16S
ATOM  48566  C2  GUA  1398     177.961  67.783 -23.556  1.00 66.85      A16S
ATOM  48567  N2  GUA  1398     178.829  67.009 -24.212  1.00 66.85      A16S
ATOM  48568  N1  GUA  1398     177.982  67.692 -22.187  1.00 66.85      A16S
ATOM  48569  C6  GUA  1398     177.152  68.398 -21.326  1.00 66.85      A16S
ATOM  48570  O6  GUA  1398     177.255  68.248 -20.103  1.00 66.85      A16S
ATOM  48571  C5  GUA  1398     176.264  69.235 -22.035  1.00 66.85      A16S
ATOM  48572  N7  GUA  1398     175.278  70.089 -21.570  1.00 66.85      A16S
ATOM  48573  C8  GUA  1398     174.775  70.613 -22.653  1.00 66.85      A16S
ATOM  48574  C2' GUA  1398     174.489  69.456 -26.037  1.00 59.12      A16S
ATOM  48575  O2' GUA  1398     174.924  69.659 -27.370  1.00 59.12      A16S
ATOM  48576  C3' GUA  1398     172.995  69.703 -25.868  1.00 59.12      A16S
ATOM  48577  O3' GUA  1398     172.250  69.215 -26.974  1.00 59.12      A16S
ATOM  48578  P   GUA  1399     171.463  67.826 -26.852  1.00 75.31      A16S
ATOM  48579  O1P GUA  1399     171.001  67.478 -28.219  1.00 70.42      A16S
ATOM  48580  O2P GUA  1399     170.477  67.926 -25.756  1.00 70.42      A16S
ATOM  48581  O5' GUA  1399     172.594  66.801 -26.396  1.00 75.31      A16S
ATOM  48582  C5' GUA  1399     173.664  66.451 -27.271  1.00 75.31      A16S
ATOM  48583  C4' GUA  1399     174.661  65.570 -26.555  1.00 75.31      A16S
ATOM  48584  O4' GUA  1399     175.304  66.323 -25.497  1.00 75.31      A16S
ATOM  48585  C1' GUA  1399     175.578  65.467 -24.406  1.00 75.31      A16S
ATOM  48586  N9  GUA  1399     174.891  65.995 -23.233  1.00 70.42      A16S
ATOM  48587  C4  GUA  1399     175.198  65.729 -21.924  1.00 70.42      A16S
ATOM  48588  N3  GUA  1399     176.182  64.914 -21.495  1.00 70.42      A16S
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ATOM  48590  N2  GUA  1399     177.173  64.097 -19.584  1.00 70.42      A16S
ATOM  48591  N1  GUA  1399     175.412  65.568 -19.348  1.00 70.42      A16S
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ATOM  48593  O6  GUA  1399     173.707  67.009 -18.932  1.00 70.42      A16S
ATOM  48594  C5  GUA  1399     174.313  66.471 -21.181  1.00 70.42      A16S
ATOM  48595  N7  GUA  1399     173.452  67.181 -22.005  1.00 70.42      A16S
ATOM  48596  C8  GUA  1399     173.830  66.864 -23.213  1.00 70.42      A16S
ATOM  48597  C2' GUA  1399     175.140  64.057 -24.805  1.00 75.31      A16S
ATOM  48598  O2' GUA  1399     176.233  63.364 -25.367  1.00 75.31      A16S
ATOM  48599  C3' GUA  1399     174.078  64.357 -25.851  1.00 75.31      A16S
ATOM  48600  O3' GUA  1399     173.964  63.275 -26.762  1.00 75.31      A16S
ATOM  48601  P   ADE  1400     172.718  62.273 -26.655  1.00113.09     A16S
ATOM  48602  O1P ADE  1400     171.822  62.570 -27.800  1.00 89.93      A16S
ATOM  48603  O2P ADE  1400     172.189  62.317 -25.270  1.00 89.93      A16S
ATOM  48604  O5' ADE  1400     173.365  60.841 -26.895  1.00113.09     A16S
ATOM  48605  C5' ADE  1400     173.930  60.496 -28.152  1.00113.09     A16S
ATOM  48606  C4' ADE  1400     174.943  59.399 -27.970  1.00113.09     A16S
ATOM  48607  O4' ADE  1400     176.039  59.903 -27.155  1.00113.09     A16S
ATOM  48608  C1' ADE  1400     176.483  58.886 -26.269  1.00113.09     A16S
ATOM  48609  N9  ADE  1400     176.092  59.263 -24.914  1.00 89.93      A16S
ATOM  48610  C4  ADE  1400     176.675  58.825 -23.753  1.00 89.93      A16S
ATOM  48611  N3  ADE  1400     177.726  58.000 -23.634  1.00 89.93      A16S
ATOM  48612  C2  ADE  1400     178.005  57.784 -22.354  1.00 89.93      A16S
ATOM  48613  N1  ADE  1400     177.399  58.262 -21.262  1.00 89.93      A16S
ATOM  48614  C6  ADE  1400     176.343  59.087 -21.419  1.00 89.93      A16S
ATOM  48615  N6  ADE  1400     175.731  59.559 -20.331  1.00 89.93      A16S
ATOM  48616  C5  ADE  1400     175.949  59.397 -22.727  1.00 89.93      A16S
ATOM  48617  N7  ADE  1400     174.935  60.197 -23.230  1.00 89.93      A16S
ATOM  48618  C8  ADE  1400     175.066  60.088 -24.529  1.00 89.93      A16S
ATOM  48619  C2' ADE  1400     175.751  57.608 -26.676  1.00113.09     A16S
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ATOM	48620	O2'	ADE	1400	176.488	56.920	-27.667	1.00113.09	A16S	ATOM	48673	C1'	GUA	1403	166.458	54.222	-15.173	1.00133.70	A16S
ATOM	48621	C3'	ADE	1400	174.446	58.189	-27.195	1.00113.09	A16S	ATOM	48674	N9	GUA	1403	166.503	55.029	-16.388	1.00126.66	A16S
ATOM	48622	O3'	ADE	1400	173.722	57.274	-28.007	1.00113.09	A16S	ATOM	48675	C4	GUA	1403	165.896	56.247	-16.579	1.00126.66	A16S
ATOM	48623	P	GUA	1401	172.535	56.401	-27.357	1.00121.91	A16S	ATOM	48676	N3	GUA	1403	165.177	56.925	-15.661	1.00126.66	A16S
ATOM	48624	O1P	GUA	1401	172.329	55.255	-28.273	1.00105.79	A16S	ATOM	48677	C2	GUA	1403	164.710	58.062	-16.142	1.00126.66	A16S
ATOM	48625	O2P	GUA	1401	171.387	57.275	-27.013	1.00105.79	A16S	ATOM	48678	N2	GUA	1403	163.980	58.868	-15.358	1.00126.66	A16S
ATOM	48626	O5'	GUA	1401	173.150	55.849	-25.994	1.00121.91	A16S	ATOM	48679	N1	GUA	1403	164.926	58.496	-17.427	1.00126.66	A16S
ATOM	48627	C5'	GUA	1401	174.118	54.806	-25.997	1.00121.91	A16S	ATOM	48680	C6	GUA	1403	165.661	57.813	-18.389	1.00126.66	A16S
ATOM	48628	C4'	GUA	1401	174.469	54.418	-24.582	1.00121.91	A16S	ATOM	48681	O6	GUA	1403	165.789	58.293	-19.520	1.00126.66	A16S
ATOM	48629	O4'	GUA	1401	175.029	55.573	-23.903	1.00121.91	A16S	ATOM	48682	C5	GUA	1403	166.176	56.595	-17.882	1.00126.66	A16S
ATOM	48630	C1'	GUA	1401	174.612	55.580	-22.547	1.00121.91	A16S	ATOM	48683	N7	GUA	1403	166.957	55.625	-18.494	1.00126.66	A16S
ATOM	48631	N9	GUA	1401	173.773	56.755	-22.340	1.00105.79	A16S	ATOM	48684	C8	GUA	1403	167.129	54.718	-17.570	1.00126.66	A16S
ATOM	48632	C4	GUA	1401	173.498	57.369	-21.140	1.00105.79	A16S	ATOM	48685	C2'	GUA	1403	165.075	53.595	-14.997	1.00133.70	A16S
ATOM	48633	N3	GUA	1401	173.971	56.999	-19.930	1.00105.79	A16S	ATOM	48686	O2'	GUA	1403	164.845	53.338	-13.626	1.00133.70	A16S
ATOM	48634	C2	GUA	1401	173.518	57.780	-18.962	1.00105.79	A16S	ATOM	48687	C3'	GUA	1403	165.236	52.330	-15.829	1.00133.70	A16S
ATOM	48635	N2	GUA	1401	173.883	57.553	-17.692	1.00105.79	A16S	ATOM	48688	O3'	GUA	1403	164.247	51.345	-15.532	1.00133.70	A16S
ATOM	48636	N1	GUA	1401	172.673	58.839	-19.166	1.00105.79	A16S	ATOM	48689	P	GUA	1404	162.969	51.177	-16.503	1.00129.36	A16S
ATOM	48637	C6	GUA	1401	172.172	59.238	-20.401	1.00105.79	A16S	ATOM	48690	O1P	GUA	1404	162.357	49.859	-16.198	1.00117.46	A16S
ATOM	48638	O6	GUA	1401	171.406	60.211	-20.472	1.00105.79	A16S	ATOM	48691	O2P	GUA	1404	163.369	51.494	-17.897	1.00117.46	A16S
ATOM	48639	C5	GUA	1401	172.649	58.409	-21.449	1.00105.79	A16S	ATOM	48692	O5'	GUA	1404	161.952	52.296	-16.007	1.00129.36	A16S
ATOM	48640	N7	GUA	1401	172.401	58.454	-22.814	1.00105.79	A16S	ATOM	48693	C5'	GUA	1404	161.392	52.232	-14.702	1.00129.36	A16S
ATOM	48641	C8	GUA	1401	173.089	57.458	-23.301	1.00105.79	A16S	ATOM	48694	C4'	GUA	1404	160.683	53.520	-14.374	1.00129.36	A16S
ATOM	48642	C2'	GUA	1401	173.843	54.280	-22.313	1.00121.91	A16S	ATOM	48695	O4'	GUA	1404	161.635	54.621	-14.451	1.00129.36	A16S
ATOM	48643	O2'	GUA	1401	174.731	53.275	-21.868	1.00121.91	A16S	ATOM	48696	C1'	GUA	1404	160.987	55.779	-14.961	1.00129.36	A16S
ATOM	48644	C3'	GUA	1401	173.297	54.008	-23.706	1.00121.91	A16S	ATOM	48697	N9	GUA	1404	161.499	56.035	-16.302	1.00117.46	A16S
ATOM	48645	O3'	GUA	1401	172.973	52.635	-23.884	1.00121.91	A16S	ATOM	48698	C4	GUA	1404	161.330	57.186	-17.034	1.00117.46	A16S
ATOM	48646	P	CYT	1402	171.435	52.167	-23.831	1.00110.49	A16S	ATOM	48699	N3	GUA	1404	160.699	58.304	-16.619	1.00117.46	A16S
ATOM	48647	O1P	CYT	1402	171.402	50.725	-24.184	1.00167.38	A16S	ATOM	48700	C2	GUA	1404	160.681	59.237	-17.556	1.00117.46	A16S
ATOM	48648	O2P	CYT	1402	170.634	53.135	-24.622	1.00167.38	A16S	ATOM	48701	N2	GUA	1404	160.103	60.419	-17.309	1.00117.46	A16S
ATOM	48649	O5'	CYT	1402	171.031	52.312	-22.295	1.00110.49	A16S	ATOM	48702	N1	GUA	1404	161.230	59.080	-18.802	1.00117.46	A16S
ATOM	48650	C5'	CYT	1402	171.670	51.521	-21.298	1.00110.49	A16S	ATOM	48703	C6	GUA	1404	161.881	57.935	-19.251	1.00117.46	A16S
ATOM	48651	C4'	CYT	1402	171.503	52.149	-19.933	1.00110.49	A16S	ATOM	48704	O6	GUA	1404	162.334	57.894	-20.401	1.00117.46	A16S
ATOM	48652	O4'	CYT	1402	172.018	53.508	-19.968	1.00110.49	A16S	ATOM	48705	C5	GUA	1404	161.918	56.932	-18.253	1.00117.46	A16S
ATOM	48653	C1'	CYT	1402	171.254	54.332	-19.101	1.00110.49	A16S	ATOM	48706	N7	GUA	1404	162.471	55.660	-18.279	1.00117.46	A16S
ATOM	48654	N1	CYT	1402	170.603	55.377	-19.910	1.00167.38	A16S	ATOM	48707	C8	GUA	1404	162.205	55.168	-17.100	1.00117.46	A16S
ATOM	48655	C6	CYT	1402	170.599	55.307	-21.275	1.00167.38	A16S	ATOM	48708	C2'	GUA	1404	159.502	55.431	-15.046	1.00129.36	A16S
ATOM	48656	C2	CYT	1402	169.979	56.446	-19.257	1.00167.38	A16S	ATOM	48709	O2'	GUA	1404	158.873	55.721	-13.814	1.00129.36	A16S
ATOM	48657	O2	CYT	1402	170.004	56.489	-18.018	1.00167.38	A16S	ATOM	48710	C3'	GUA	1404	159.584	53.941	-15.336	1.00129.36	A16S
ATOM	48658	N3	CYT	1402	169.366	57.402	-19.991	1.00167.38	A16S	ATOM	48711	O3'	GUA	1404	158.351	53.270	-15.103	1.00129.36	A16S
ATOM	48659	C4	CYT	1402	169.365	57.322	-21.323	1.00167.38	A16S	ATOM	48712	P	GUA	1405	157.231	53.251	-16.260	1.00130.50	A16S
ATOM	48660	N4	CYT	1402	168.747	58.286	-22.007	1.00167.38	A16S	ATOM	48713	O1P	GUA	1405	156.156	52.310	-15.851	1.00123.46	A16S
ATOM	48661	C5	CYT	1402	169.999	56.248	-22.014	1.00167.38	A16S	ATOM	48714	O2P	GUA	1405	157.919	53.055	-17.562	1.00123.46	A16S
ATOM	48662	C2'	CYT	1402	170.252	53.420	-18.394	1.00110.49	A16S	ATOM	48715	O5'	GUA	1405	156.636	54.727	-16.230	1.00130.50	A16S
ATOM	48663	O2'	CYT	1402	170.810	52.946	-17.183	1.00110.49	A16S	ATOM	48716	C5'	GUA	1405	156.076	55.264	-15.034	1.00130.50	A16S
ATOM	48664	C3'	CYT	1402	170.079	52.320	-19.432	1.00110.49	A16S	ATOM	48717	C4'	GUA	1405	155.581	56.668	-15.277	1.00130.50	A16S
ATOM	48665	O3'	CYT	1402	169.581	51.124	-18.845	1.00110.49	A16S	ATOM	48718	O4'	GUA	1405	156.709	57.537	-15.570	1.00130.50	A16S
ATOM	48666	P	GUA	1403	168.009	50.795	-18.922	1.00133.70	A16S	ATOM	48719	C1'	GUA	1405	156.363	58.444	-16.607	1.00130.50	A16S
ATOM	48667	O1P	GUA	1403	167.851	49.342	-18.663	1.00126.66	A16S	ATOM	48720	N9	GUA	1405	157.137	58.087	-17.793	1.00123.46	A16S
ATOM	48668	O2P	GUA	1403	167.462	51.382	-20.173	1.00126.66	A16S	ATOM	48721	C4	GUA	1405	157.223	58.803	-18.962	1.00123.46	A16S
ATOM	48669	O5'	GUA	1403	167.384	51.581	-17.687	1.00133.70	A16S	ATOM	48722	N3	GUA	1405	156.603	59.973	-19.223	1.00123.46	A16S
ATOM	48670	C5'	GUA	1403	167.350	50.988	-16.396	1.00133.70	A16S	ATOM	48723	C2	GUA	1405	156.882	60.418	-20.437	1.00123.46	A16S
ATOM	48671	C4'	GUA	1403	166.636	51.892	-15.426	1.00133.70	A16S	ATOM	48724	N2	GUA	1405	156.350	61.570	-20.866	1.00123.46	A16S
ATOM	48672	O4'	GUA	1403	167.370	53.143	-15.322	1.00133.70	A16S	ATOM	48725	N1	GUA	1405	157.702	59.766	-21.323	1.00123.46	A16S

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ATOM  48726  C6  GUA  1405     158.349  58.560 -21.076  1.00123.46      A16S
ATOM  48727  O6  GUA  1405     159.066  58.057 -21.947  1.00123.46      A16S
ATOM  48728  C5  GUA  1405     158.061  58.071 -19.778  1.00123.46      A16S
ATOM  48729  N7  GUA  1405     158.493  56.919 -19.136  1.00123.46      A16S
ATOM  48730  C8  GUA  1405     157.921  56.970 -17.964  1.00123.46      A16S
ATOM  48731  C2' GUA  1405     154.862  58.284 -16.835  1.00130.50      A16S
ATOM  48732  O2' GUA  1405     154.156  59.132 -15.956  1.00130.50      A16S
ATOM  48733  C3' GUA  1405     154.681  56.816 -16.488  1.00130.50      A16S
ATOM  48734  O3' GUA  1405     153.337  56.484 -16.186  1.00130.50      A16S
ATOM  48735  P   CYT  1406     152.383  55.933 -17.354  1.00124.24      A16S
ATOM  48736  O1P CYT  1406     151.087  55.554 -16.734  1.00141.61      A16S
ATOM  48737  O2P CYT  1406     153.143  54.928 -18.145  1.00141.61      A16S
ATOM  48738  O5' CYT  1406     152.149  57.215 -18.268  1.00124.24      A16S
ATOM  48739  C5' CYT  1406     151.775  58.455 -17.684  1.00124.24      A16S
ATOM  48740  C4' CYT  1406     151.797  59.548 -18.719  1.00124.24      A16S
ATOM  48741  O4' CYT  1406     153.153  59.775 -19.178  1.00124.24      A16S
ATOM  48742  C1' CYT  1406     153.121  60.244 -20.516  1.00124.24      A16S
ATOM  48743  N1  CYT  1406     153.977  59.380 -21.335  1.00141.61      A16S
ATOM  48744  C6  CYT  1406     154.421  58.176 -20.866  1.00141.61      A16S
ATOM  48745  C2  CYT  1406     154.329  59.812 -22.613  1.00141.61      A16S
ATOM  48746  O2  CYT  1406     153.915  60.912 -23.005  1.00141.61      A16S
ATOM  48747  N3  CYT  1406     155.108  59.024 -23.387  1.00141.61      A16S
ATOM  48748  C4  CYT  1406     155.534  57.847 -22.924  1.00141.61      A16S
ATOM  48749  N4  CYT  1406     156.297  57.099 -23.724  1.00141.61      A16S
ATOM  48750  C5  CYT  1406     155.194  57.384 -21.619  1.00141.61      A16S
ATOM  48751  C2' CYT  1406     151.660  60.236 -20.973  1.00124.24      A16S
ATOM  48752  O2' CYT  1406     151.130  61.542 -20.859  1.00124.24      A16S
ATOM  48753  C3' CYT  1406     151.041  59.241 -19.995  1.00124.24      A16S
ATOM  48754  O3' CYT  1406     149.645  59.443 -19.810  1.00124.24      A16S
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ATOM  48757  O2P URI  1407     148.989  57.104 -20.445  1.00153.45      A16S
ATOM  48758  O5' URI  1407     148.834  58.944 -22.127  1.00124.40      A16S
ATOM  48759  C5' URI  1407     148.686  60.299 -22.532  1.00124.40      A16S
ATOM  48760  C4' URI  1407     149.150  60.474 -23.955  1.00124.40      A16S
ATOM  48761  O4' URI  1407     150.583  60.262 -24.037  1.00124.40      A16S
ATOM  48762  C1' URI  1407     150.911  59.743 -25.314  1.00124.40      A16S
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ATOM  48766  O2  URI  1407     152.654  58.761 -27.174  1.00153.45      A16S
ATOM  48767  N3  URI  1407     153.191  56.937 -25.935  1.00153.45      A16S
ATOM  48768  C4  URI  1407     153.108  56.127 -24.823  1.00153.45      A16S
ATOM  48769  O4  URI  1407     153.779  55.094 -24.776  1.00153.45      A16S
ATOM  48770  C5  URI  1407     152.211  56.594 -23.810  1.00153.45      A16S
ATOM  48771  C2' URI  1407     149.602  59.562 -26.090  1.00124.40      A16S
ATOM  48772  O2' URI  1407     149.404  60.671 -26.942  1.00124.40      A16S
ATOM  48773  C3' URI  1407     148.580  59.486 -24.958  1.00124.40      A16S
ATOM  48774  O3' URI  1407     147.267  59.873 -25.363  1.00124.40      A16S
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ATOM  48776  O1P CYT  1408     144.908  59.311 -25.997  1.00129.61      A16S
ATOM  48777  O2P CYT  1408     146.609  57.450 -25.522  1.00129.61      A16S
ATOM  48778  O5' CYT  1408     146.750  58.846 -27.587  1.00121.62      A16S
ATOM  48779  C5' CYT  1408     146.731  60.075 -28.298  1.00121.62      A16S
ATOM  48780  C4' CYT  1408     147.422  59.917 -29.624  1.00121.62      A16S
ATOM  48781  O4' CYT  1408     148.834  59.661 -29.412  1.00121.62      A16S
ATOM  48782  C1' CYT  1408     149.330  58.859 -30.472  1.00121.62      A16S
ATOM  48783  N1  CYT  1408     149.981  57.671 -29.898  1.00129.61      A16S
ATOM  48784  C6  CYT  1408     149.862  57.378 -28.569  1.00129.61      A16S
ATOM  48785  C2  CYT  1408     150.740  56.845 -30.740  1.00129.61      A16S
ATOM  48786  O2  CYT  1408     150.816  57.122 -31.946  1.00129.61      A16S
ATOM  48787  N3  CYT  1408     151.366  55.767 -30.218  1.00129.61      A16S
ATOM  48788  C4  CYT  1408     151.255  55.498 -28.915  1.00129.61      A16S
ATOM  48789  N4  CYT  1408     151.903  54.433 -28.438  1.00129.61      A16S
ATOM  48790  C5  CYT  1408     150.476  56.312 -28.040  1.00129.61      A16S
ATOM  48791  C2' CYT  1408     148.150  58.534 -31.390  1.00121.62      A16S
ATOM  48792  O2' CYT  1408     148.129  59.444 -32.471  1.00121.62      A16S
ATOM  48793  C3' CYT  1408     146.971  58.727 -30.447  1.00121.62      A16S
ATOM  48794  O3' CYT  1408     145.773  59.013 -31.153  1.00121.62      A16S
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ATOM  48797  O2P URI  1409     144.726  56.828 -30.514  1.00100.64      A16S
ATOM  48798  O5' URI  1409     145.651  57.118 -32.805  1.00123.33      A16S
ATOM  48799  C5' URI  1409     145.941  57.833 -34.000  1.00123.33      A16S
ATOM  48800  C4' URI  1409     146.792  56.992 -34.919  1.00123.33      A16S
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ATOM  48815  P   ADE  1410     144.174  54.299 -35.813  1.00123.72      A16S
ATOM  48816  O1P ADE  1410     143.093  54.492 -36.813  1.00 92.25      A16S
ATOM  48817  O2P ADE  1410     143.835  54.239 -34.366  1.00 92.25      A16S
ATOM  48818  O5' ADE  1410     144.984  52.980 -36.188  1.00123.72      A16S
ATOM  48819  C5' ADE  1410     145.497  52.784 -37.501  1.00123.72      A16S
ATOM  48820  C4' ADE  1410     146.270  51.492 -37.565  1.00123.72      A16S
ATOM  48821  O4' ADE  1410     147.507  51.622 -36.816  1.00123.72      A16S
ATOM  48822  C1' ADE  1410     147.833  50.376 -36.220  1.00123.72      A16S
ATOM  48823  N9  ADE  1410     147.946  50.565 -34.773  1.00 92.25      A16S
ATOM  48824  C4  ADE  1410     148.743  49.832 -33.926  1.00 92.25      A16S
ATOM  48825  N3  ADE  1410     149.551  48.808 -34.248  1.00 92.25      A16S
ATOM  48826  C2  ADE  1410     150.181  48.348 -33.171  1.00 92.25      A16S
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ATOM  48828  C6  ADE  1410     149.288  49.799 -31.612  1.00 92.25      A16S
ATOM  48829  N6  ADE  1410     149.227  50.221 -30.349  1.00 92.25      A16S
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ATOM  48831  N7  ADE  1410     147.639  51.418 -32.714  1.00 92.25      A16S
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ATOM  48834  O2' ADE  1410     147.141  48.658 -37.761  1.00123.72      A16S
ATOM  48835  C3' ADE  1410     145.579  50.311 -36.909  1.00123.72      A16S
ATOM  48836  O3' ADE  1410     144.638  49.703 -37.776  1.00123.72      A16S
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ATOM  48838  O1P CYT  1411     142.581  48.360 -38.259  1.00 90.82      A16S
ATOM  48839  O2P CYT  1411     142.918  49.514 -35.984  1.00 90.82      A16S
ATOM  48840  O5' CYT  1411     144.255  47.500 -36.638  1.00 96.82      A16S
ATOM  48841  C5' CYT  1411     144.830  46.596 -37.567  1.00 96.82      A16S
ATOM  48842  C4' CYT  1411     145.669  45.576 -36.849  1.00 96.82      A16S
ATOM  48843  O4' CYT  1411     146.761  46.243 -36.168  1.00 96.82      A16S
ATOM  48844  C1' CYT  1411     147.088  45.530 -34.986  1.00 96.82      A16S
ATOM  48845  N1  CYT  1411     146.873  46.415 -33.836  1.00 90.82      A16S
ATOM  48846  C6  CYT  1411     146.067  47.515 -33.929  1.00 90.82      A16S
ATOM  48847  C2  CYT  1411     147.500  46.099 -32.632  1.00 90.82      A16S
ATOM  48848  O2  CYT  1411     148.254  45.117 -32.593  1.00 90.82      A16S
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ATOM  48851  N4  CYT  1411     146.277  48.663 -30.543  1.00 90.82      A16S
ATOM  48852  C5  CYT  1411     145.846  48.299 -32.866  1.00 90.82      A16S
ATOM  48853  C2' CYT  1411     146.163  44.317 -34.935  1.00 96.82      A16S
ATOM  48854  O2' CYT  1411     146.792  43.221 -35.564  1.00 96.82      A16S
ATOM  48855  C3' CYT  1411     144.977  44.836 -35.727  1.00 96.82      A16S
ATOM  48856  O3' CYT  1411     144.172  43.787 -36.220  1.00 96.82      A16S
ATOM  48857  P   CYT  1412     142.924  43.290 -35.349  1.00 90.81      A16S
ATOM  48858  O1P CYT  1412     142.117  42.370 -36.191  1.00 87.10      A16S
ATOM  48859  O2P CYT  1412     142.290  44.500 -34.763  1.00 87.10      A16S
ATOM  48860  O5' CYT  1412     143.598  42.443 -34.180  1.00 90.81      A16S
ATOM  48861  C5' CYT  1412     144.407  41.314 -34.486  1.00 90.81      A16S
ATOM  48862  C4' CYT  1412     145.017  40.744 -33.228  1.00 90.81      A16S
ATOM  48863  O4' CYT  1412     145.998  41.665 -32.679  1.00 90.81      A16S
ATOM  48864  C1' CYT  1412     145.983  41.587 -31.263  1.00 90.81      A16S
ATOM  48865  N1  CYT  1412     145.566  42.895 -30.742  1.00 87.10      A16S
ATOM  48866  C6  CYT  1412     144.880  43.778 -31.528  1.00 87.10      A16S
ATOM  48867  C2  CYT  1412     145.878  43.219 -29.428  1.00 87.10      A16S
ATOM  48868  O2  CYT  1412     146.503  42.397 -28.746  1.00 87.10      A16S
ATOM  48869  N3  CYT  1412     145.496  44.416 -28.933  1.00 87.10      A16S
ATOM  48870  C4  CYT  1412     144.830  45.274 -29.707  1.00 87.10      A16S
ATOM  48871  N4  CYT  1412     144.482  46.449 -29.183  1.00 87.10      A16S
ATOM  48872  C5  CYT  1412     144.495  44.967 -31.055  1.00 87.10      A16S
ATOM  48873  C2' CYT  1412     145.000  40.476 -30.887  1.00 90.81      A16S
ATOM  48874  O2' CYT  1412     145.687  39.248 -30.755  1.00 90.81      A16S
ATOM  48875  C3' CYT  1412     144.056  40.506 -32.081  1.00 90.81      A16S
ATOM  48876  O3' CYT  1412     143.353  39.285 -32.247  1.00 90.81      A16S
ATOM  48877  P   CYT  1413     141.915  39.104 -31.556  1.00 95.21      A16S
ATOM  48878  O1P CYT  1413     141.339  37.815 -32.021  1.00 81.06      A16S
ATOM  48879  O2P CYT  1413     141.145  40.360 -31.755  1.00 81.06      A16S
ATOM  48880  O5' CYT  1413     142.274  38.967 -30.009  1.00 95.21      A16S
ATOM  48881  C5' CYT  1413     143.120  37.915 -29.550  1.00 95.21      A16S
ATOM  48882  C4' CYT  1413     143.408  38.073 -28.074  1.00 95.21      A16S
ATOM  48883  O4' CYT  1413     144.241  39.244 -27.850  1.00 95.21      A16S
ATOM  48884  C1' CYT  1413     143.914  39.825 -26.593  1.00 95.21      A16S
ATOM  48885  N1  CYT  1413     143.392  41.183 -26.823  1.00 81.06      A16S
ATOM  48886  C6  CYT  1413     143.047  41.604 -28.077  1.00 81.06      A16S
ATOM  48887  C2  CYT  1413     143.242  42.036 -25.727  1.00 81.06      A16S
ATOM  48888  O2  CYT  1413     143.576  41.631 -24.602  1.00 81.06      A16S
ATOM  48889  N3  CYT  1413     142.738  43.276 -25.921  1.00 81.06      A16S
ATOM  48890  C4  CYT  1413     142.392  43.672 -27.147  1.00 81.06      A16S
ATOM  48891  N4  CYT  1413     141.884  44.896 -27.289  1.00 81.06      A16S
ATOM  48892  C5  CYT  1413     142.548  42.829 -28.283  1.00 81.06      A16S
ATOM  48893  C2' CYT  1413     142.853  38.928 -25.958  1.00 95.21      A16S
ATOM  48894  O2' CYT  1413     143.453  37.931 -25.157  1.00 95.21      A16S
ATOM  48895  C3' CYT  1413     142.202  38.343 -27.195  1.00 95.21      A16S
ATOM  48896  O3' CYT  1413     141.465  37.178 -26.891  1.00 95.21      A16S
ATOM  48897  P   GUA  1414     139.883  37.297 -26.676  1.00 76.82      A16S
ATOM  48898  O1P GUA  1414     139.406  35.960 -26.233  1.00 81.47      A16S
ATOM  48899  O2P GUA  1414     139.283  37.934 -27.877  1.00 81.47      A16S
ATOM  48900  O5' GUA  1414     139.742  38.323 -25.465  1.00 76.82      A16S
ATOM  48901  C5' GUA  1414     140.293  38.024 -24.184  1.00 76.82      A16S
ATOM  48902  C4' GUA  1414     140.028  39.157 -23.221  1.00 76.82      A16S
ATOM  48903  O4' GUA  1414     140.738  40.347 -23.653  1.00 76.82      A16S
ATOM  48904  C1' GUA  1414     139.942  41.494 -23.420  1.00 76.82      A16S
ATOM  48905  N9  GUA  1414     139.600  42.065 -24.718  1.00 81.47      A16S
ATOM  48906  C4  GUA  1414     139.394  43.390 -25.005  1.00 81.47      A16S
ATOM  48907  N3  GUA  1414     139.487  44.415 -24.132  1.00 81.47      A16S
ATOM  48908  C2  GUA  1414     139.216  45.573 -24.705  1.00 81.47      A16S
ATOM  48909  N2  GUA  1414     139.266  46.698 -23.981  1.00 81.47      A16S
ATOM  48910  N1  GUA  1414     138.875  45.711 -26.029  1.00 81.47      A16S
ATOM  48911  C6  GUA  1414     138.770  44.664 -26.942  1.00 81.47      A16S
ATOM  48912  O6  GUA  1414     138.442  44.890 -28.115  1.00 81.47      A16S
ATOM  48913  C5  GUA  1414     139.066  43.426 -26.344  1.00 81.47      A16S
ATOM  48914  N7  GUA  1414     139.083  42.154 -26.889  1.00 81.47      A16S
ATOM  48915  C8  GUA  1414     139.407  41.381 -25.890  1.00 81.47      A16S
ATOM  48916  C2' GUA  1414     138.717  41.029 -22.629  1.00 76.82      A16S
ATOM  48917  O2' GUA  1414     138.980  41.111 -21.242  1.00 76.82      A16S
ATOM  48918  C3' GUA  1414     138.581  39.591 -23.107  1.00 76.82      A16S
ATOM  48919  O3' GUA  1414     137.924  38.777 -22.149  1.00 76.82      A16S
ATOM  48920  P   ADE  1415     136.394  39.074 -21.768  1.00 67.18      A16S
ATOM  48921  O1P ADE  1415     135.620  37.808 -21.838  1.00 62.64      A16S
ATOM  48922  O2P ADE  1415     135.955  40.248 -22.569  1.00 62.64      A16S
ATOM  48923  O5' ADE  1415     136.466  39.492 -20.234  1.00 67.18      A16S
ATOM  48924  C5' ADE  1415     137.083  38.644 -19.277  1.00 67.18      A16S
ATOM  48925  C4' ADE  1415     136.942  39.238 -17.903  1.00 67.18      A16S
ATOM  48926  O4' ADE  1415     137.728  40.454 -17.806  1.00 67.18      A16S
ATOM  48927  C1' ADE  1415     137.055  41.393 -16.980  1.00 67.18      A16S
ATOM  48928  N9  ADE  1415     136.795  42.592 -17.779  1.00 62.64      A16S
ATOM  48929  C4  ADE  1415     136.527  43.855 -17.310  1.00 62.64      A16S
ATOM  48930  N3  ADE  1415     136.454  44.253 -16.031  1.00 62.64      A16S
ATOM  48931  C2  ADE  1415     136.163  45.547 -15.963  1.00 62.64      A16S
ATOM  48932  N1  ADE  1415     135.952  46.420 -16.953  1.00 62.64      A16S
ATOM  48933  C6  ADE  1415     136.036  45.981 -18.225  1.00 62.64      A16S
ATOM  48934  N6  ADE  1415     135.828  46.840 -19.215  1.00 62.64      A16S
ATOM  48935  C5  ADE  1415     136.338  44.638 -18.431  1.00 62.64      A16S
ATOM  48936  N7  ADE  1415     136.492  43.889 -19.586  1.00 62.64      A16S
ATOM  48937  C8  ADE  1415     136.763  42.686 -19.148  1.00 62.64      A16S
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ATOM  48938  C2' ADE  1415     135.778  40.714 -16.471  1.00 67.18      A16S
ATOM  48939  O2' ADE  1415     136.018  40.130 -15.207  1.00 67.18      A16S
ATOM  48940  C3' ADE  1415     135.536  39.679 -17.562  1.00 67.18      A16S
ATOM  48941  O3' ADE  1415     134.786  38.576 -17.099  1.00 67.18      A16S
ATOM  48942  P   ADE  1416     133.215  38.527 -17.381  1.00 56.70      A16S
ATOM  48943  O1P ADE  1416     132.677  37.253 -16.846  1.00 56.67      A16S
ATOM  48944  O2P ADE  1416     132.985  38.883 -18.804  1.00 56.67      A16S
ATOM  48945  O5' ADE  1416     132.649  39.692 -16.461  1.00 56.70      A16S
ATOM  48946  C5' ADE  1416     132.802  39.624 -15.057  1.00 56.70      A16S
ATOM  48947  C4' ADE  1416     132.436  40.937 -14.437  1.00 56.70      A16S
ATOM  48948  O4' ADE  1416     133.347  41.957 -14.914  1.00 56.70      A16S
ATOM  48949  C1' ADE  1416     132.671  43.200 -14.953  1.00 56.70      A16S
ATOM  48950  N9  ADE  1416     132.708  43.716 -16.319  1.00 56.67      A16S
ATOM  48951  C4  ADE  1416     132.724  45.041 -16.671  1.00 56.67      A16S
ATOM  48952  N3  ADE  1416     132.758  46.098 -15.846  1.00 56.67      A16S
ATOM  48953  C2  ADE  1416     132.736  47.230 -16.537  1.00 56.67      A16S
ATOM  48954  N1  ADE  1416     132.687  47.414 -17.860  1.00 56.67      A16S
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ATOM  48957  C5  ADE  1416     132.680  45.066 -18.048  1.00 56.67      A16S
ATOM  48958  N7  ADE  1416     132.664  43.779 -18.560  1.00 56.67      A16S
ATOM  48959  C8  ADE  1416     132.692  43.018 -17.496  1.00 56.67      A16S
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ATOM  48961  O2' ADE  1416     131.113  43.214 -13.116  1.00 56.70      A16S
ATOM  48962  C3' ADE  1416     131.069  41.467 -14.814  1.00 56.70      A16S
ATOM  48963  O3' ADE  1416     130.073  40.884 -13.989  1.00 56.70      A16S
ATOM  48964  P   GUA  1417     128.718  40.310 -14.644  1.00 58.53      A16S
ATOM  48965  O1P GUA  1417     127.909  39.685 -13.562  1.00 60.79      A16S
ATOM  48966  O2P GUA  1417     129.107  39.509 -15.834  1.00 60.79      A16S
ATOM  48967  O5' GUA  1417     127.925  41.597 -15.143  1.00 58.53      A16S
ATOM  48968  C5' GUA  1417     127.518  42.600 -14.220  1.00 58.53      A16S
ATOM  48969  C4' GUA  1417     127.308  43.916 -14.928  1.00 58.53      A16S
ATOM  48970  O4' GUA  1417     128.546  44.324 -15.569  1.00 58.53      A16S
ATOM  48971  C1' GUA  1417     128.255  44.971 -16.792  1.00 58.53      A16S
ATOM  48972  N9  GUA  1417     128.793  44.150 -17.869  1.00 60.79      A16S
ATOM  48973  C4  GUA  1417     129.192  44.579 -19.112  1.00 60.79      A16S
ATOM  48974  N3  GUA  1417     129.165  45.848 -19.556  1.00 60.79      A16S
ATOM  48975  C2  GUA  1417     129.598  45.945 -20.796  1.00 60.79      A16S
ATOM  48976  N2  GUA  1417     129.625  47.138 -21.390  1.00 60.79      A16S
ATOM  48977  N1  GUA  1417     130.034  44.883 -21.545  1.00 60.79      A16S
ATOM  48978  C6  GUA  1417     130.077  43.568 -21.113  1.00 60.79      A16S
ATOM  48979  O6  GUA  1417     130.490  42.682 -21.872  1.00 60.79      A16S
ATOM  48980  C5  GUA  1417     129.605  43.445 -19.778  1.00 60.79      A16S
ATOM  48981  N7  GUA  1417     129.473  42.325 -18.968  1.00 60.79      A16S
ATOM  48982  C8  GUA  1417     128.992  42.792 -17.847  1.00 60.79      A16S
ATOM  48983  C2' GUA  1417     126.732  45.103 -16.866  1.00 58.53      A16S
ATOM  48984  O2' GUA  1417     126.315  46.304 -16.253  1.00 58.53      A16S
ATOM  48985  C3' GUA  1417     126.293  43.898 -16.055  1.00 58.53      A16S
ATOM  48986  O3' GUA  1417     124.971  44.060 -15.558  1.00 58.53      A16S
ATOM  48987  P   URI  1418     123.771  43.200 -16.196  1.00 57.29      A16S
ATOM  48988  O1P URI  1418     122.821  42.842 -15.103  1.00 65.69      A16S
ATOM  48989  O2P URI  1418     124.341  42.128 -17.057  1.00 65.69      A16S
ATOM  48990  O5' URI  1418     123.036  44.233 -17.155  1.00 57.29      A16S
ATOM  48991  C5' URI  1418     122.624  45.502 -16.671  1.00 57.29      A16S
ATOM  48992  C4' URI  1418     122.669  46.508 -17.786  1.00 57.29      A16S
ATOM  48993  O4' URI  1418     124.048  46.723 -18.192  1.00 57.29      A16S
ATOM  48994  C1' URI  1418     124.086  47.044 -19.571  1.00 57.29      A16S
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ATOM  48997  C2  URI  1418     125.524  46.518 -21.455  1.00 65.69      A16S
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ATOM  48999  N3  URI  1418     126.336  45.602 -22.073  1.00 65.69      A16S
ATOM  49000  C4  URI  1418     126.676  44.352 -21.609  1.00 65.69      A16S
ATOM  49001  O4  URI  1418     127.341  43.599 -22.324  1.00 65.69      A16S
ATOM  49002  C5  URI  1418     126.116  44.023 -20.334  1.00 65.69      A16S
ATOM  49003  C2' URI  1418     122.649  46.969 -20.103  1.00 57.29      A16S
ATOM  49004  O2' URI  1418     122.094  48.267 -20.127  1.00 57.29      A16S
ATOM  49005  C3' URI  1418     121.974  46.077 -19.066  1.00 57.29      A16S
ATOM  49006  O3' URI  1418     120.581  46.351 -18.973  1.00 57.29      A16S
ATOM  49007  P   CYT  1419     119.533  45.487 -19.829  1.00 50.80      A16S
ATOM  49008  O1P CYT  1419     118.197  46.112 -19.633  1.00 70.06      A16S
ATOM  49009  O2P CYT  1419     119.719  44.048 -19.532  1.00 70.06      A16S
ATOM  49010  O5' CYT  1419     119.971  45.750 -21.332  1.00 50.80      A16S
ATOM  49011  C5' CYT  1419     119.807  47.036 -21.901  1.00 50.80      A16S
ATOM  49012  C4' CYT  1419     120.414  47.079 -23.270  1.00 50.80      A16S
ATOM  49013  O4' CYT  1419     121.841  46.882 -23.159  1.00 50.80      A16S
ATOM  49014  C1' CYT  1419     122.319  46.260 -24.333  1.00 50.80      A16S
ATOM  49015  N1  CYT  1419     123.029  45.035 -23.953  1.00 70.06      A16S
ATOM  49016  C6  CYT  1419     122.782  44.417 -22.763  1.00 70.06      A16S
ATOM  49017  C2  CYT  1419     123.950  44.500 -24.844  1.00 70.06      A16S
ATOM  49018  O2  CYT  1419     124.186  45.111 -25.893  1.00 70.06      A16S
ATOM  49019  N3  CYT  1419     124.567  43.339 -24.541  1.00 70.06      A16S
ATOM  49020  C4  CYT  1419     124.304  42.730 -23.388  1.00 70.06      A16S
ATOM  49021  N4  CYT  1419     124.923  41.583 -23.135  1.00 70.06      A16S
ATOM  49022  C5  CYT  1419     123.392  43.272 -22.444  1.00 70.06      A16S
ATOM  49023  C2' CYT  1419     121.105  45.990 -25.229  1.00 50.80      A16S
ATOM  49024  O2' CYT  1419     120.943  47.064 -26.133  1.00 50.80      A16S
ATOM  49025  C3' CYT  1419     119.974  45.984 -24.218  1.00 50.80      A16S
ATOM  49026  O3' CYT  1419     118.764  46.354 -24.853  1.00 50.80      A16S
ATOM  49027  P   GUA  1420     117.823  45.221 -25.475  1.00 55.54      A16S
ATOM  49028  O1P GUA  1420     116.587  45.868 -25.994  1.00 64.18      A16S
ATOM  49029  O2P GUA  1420     117.719  44.151 -24.463  1.00 64.18      A16S
ATOM  49030  O5' GUA  1420     118.654  44.652 -26.703  1.00 55.54      A16S
ATOM  49031  C5' GUA  1420     118.615  45.300 -27.963  1.00 55.54      A16S
ATOM  49032  C4' GUA  1420     119.369  44.485 -28.977  1.00 55.54      A16S
ATOM  49033  O4' GUA  1420     120.727  44.311 -28.505  1.00 55.54      A16S
ATOM  49034  C1' GUA  1420     121.219  43.055 -28.933  1.00 55.54      A16S
ATOM  49035  N9  GUA  1420     121.726  42.325 -27.777  1.00 64.18      A16S
ATOM  49036  C4  GUA  1420     122.508  41.206 -27.827  1.00 64.18      A16S
ATOM  49037  N3  GUA  1420     122.931  40.594 -28.947  1.00 64.18      A16S
ATOM  49038  C2  GUA  1420     123.676  39.542 -28.681  1.00 64.18      A16S
ATOM  49039  N2  GUA  1420     124.188  38.817 -29.681  1.00 64.18      A16S
ATOM  49040  N1  GUA  1420     123.979  39.121 -27.418  1.00 64.18      A16S
ATOM  49041  C6  GUA  1420     123.557  39.732 -26.251  1.00 64.18      A16S
ATOM  49042  O6  GUA  1420     123.894  39.265 -25.164  1.00 64.18      A16S
ATOM  49043  C5  GUA  1420     122.756  40.870 -26.518  1.00 64.18      A16S
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ATOM	49044	N7	GUA	1420	122.137	41.763	-25.654	1.00	64.18	A16S	ATOM	49097	C1'	GUA	1423	117.215	30.277	-26.190	1.00	64.65	A16S
ATOM	49045	C8	GUA	1420	121.536	42.608	-26.446	1.00	64.18	A16S	ATOM	49098	N9	GUA	1423	116.608	31.603	-26.188	1.00	68.56	A16S
ATOM	49046	C2'	GUA	1420	120.095	42.341	-29.682	1.00	55.54	A16S	ATOM	49099	C4	GUA	1423	116.502	32.443	-25.113	1.00	68.56	A16S
ATOM	49047	O2'	GUA	1420	120.283	42.535	-31.061	1.00	55.54	A16S	ATOM	49100	N3	GUA	1423	116.959	32.195	-23.873	1.00	68.56	A16S
ATOM	49048	C3'	GUA	1420	118.864	43.066	-29.157	1.00	55.54	A16S	ATOM	49101	C2	GUA	1423	116.712	33.193	-23.051	1.00	68.56	A16S
ATOM	49049	O3'	GUA	1420	117.795	43.028	-30.090	1.00	55.54	A16S	ATOM	49102	N2	GUA	1423	117.107	33.111	-21.777	1.00	68.56	A16S
ATOM	49050	P	CYT	1421	116.686	41.873	-29.973	1.00	67.45	A16S	ATOM	49103	N1	GUA	1423	116.062	34.344	-23.415	1.00	68.56	A16S
ATOM	49051	O1P	CYT	1421	115.592	42.186	-30.928	1.00	74.06	A16S	ATOM	49104	C6	GUA	1423	115.575	34.617	-24.687	1.00	68.56	A16S
ATOM	49052	O2P	CYT	1421	116.371	41.706	-28.533	1.00	74.06	A16S	ATOM	49105	O6	GUA	1423	114.990	35.687	-24.912	1.00	68.56	A16S
ATOM	49053	O5'	CYT	1421	117.449	40.568	-30.479	1.00	67.45	A16S	ATOM	49106	C5	GUA	1423	115.842	33.555	-25.581	1.00	68.56	A16S
ATOM	49054	C5'	CYT	1421	117.867	40.457	-31.832	1.00	67.45	A16S	ATOM	49107	N7	GUA	1423	115.543	33.419	-26.927	1.00	68.56	A16S
ATOM	49055	C4'	CYT	1421	118.692	39.207	-32.030	1.00	67.45	A16S	ATOM	49108	C8	GUA	1423	116.019	32.248	-27.245	1.00	68.56	A16S
ATOM	49056	O4'	CYT	1421	119.948	39.318	-31.315	1.00	67.45	A16S	ATOM	49109	C2'	GUA	1423	116.239	29.200	-25.715	1.00	64.65	A16S
ATOM	49057	C1'	CYT	1421	120.360	38.033	-30.881	1.00	67.45	A16S	ATOM	49110	O2'	GUA	1423	116.944	28.153	-25.089	1.00	64.65	A16S
ATOM	49058	N1	CYT	1421	120.492	38.055	-29.422	1.00	74.06	A16S	ATOM	49111	C3'	GUA	1423	115.621	28.746	-27.029	1.00	64.65	A16S
ATOM	49059	C6	CYT	1421	119.882	39.018	-28.670	1.00	74.06	A16S	ATOM	49112	O3'	GUA	1423	115.149	27.416	-26.903	1.00	64.65	A16S
ATOM	49060	C2	CYT	1421	121.261	37.071	-28.816	1.00	74.06	A16S	ATOM	49113	P	GUA	1424	113.684	27.033	-27.421	1.00	79.89	A16S
ATOM	49061	O2	CYT	1421	121.782	36.203	-29.530	1.00	74.06	A16S	ATOM	49114	O1P	GUA	1424	113.257	28.047	-28.416	1.00	122.28	A16S
ATOM	49062	N3	CYT	1421	121.419	37.085	-27.476	1.00	74.06	A16S	ATOM	49115	O2P	GUA	1424	112.840	26.771	-26.227	1.00	122.28	A16S
ATOM	49063	C4	CYT	1421	120.834	38.035	-26.749	1.00	74.06	A16S	ATOM	49116	O5'	GUA	1424	113.932	25.655	-28.175	1.00	79.89	A16S
ATOM	49064	N4	CYT	1421	121.031	38.022	-25.431	1.00	74.06	A16S	ATOM	49117	C5'	GUA	1424	113.803	25.555	-29.587	1.00	79.89	A16S
ATOM	49065	C5	CYT	1421	120.025	39.045	-27.341	1.00	74.06	A16S	ATOM	49118	C4'	GUA	1424	114.852	24.620	-30.143	1.00	79.89	A16S
ATOM	49066	C2'	CYT	1421	119.308	37.033	-31.352	1.00	67.45	A16S	ATOM	49119	O4'	GUA	1424	116.090	25.335	-30.409	1.00	79.89	A16S
ATOM	49067	O2'	CYT	1421	119.710	36.474	-32.581	1.00	67.45	A16S	ATOM	49120	C1'	GUA	1424	117.194	24.468	-30.191	1.00	79.89	A16S
ATOM	49068	C3'	CYT	1421	118.088	37.928	-31.486	1.00	67.45	A16S	ATOM	49121	N9	GUA	1424	118.017	25.026	-29.119	1.00	122.28	A16S
ATOM	49069	O3'	CYT	1421	117.153	37.381	-32.391	1.00	67.45	A16S	ATOM	49122	C4	GUA	1424	118.593	24.339	-28.070	1.00	122.28	A16S
ATOM	49070	P	CYT	1422	115.975	36.459	-31.831	1.00	64.65	A16S	ATOM	49123	N3	GUA	1424	118.520	23.004	-27.851	1.00	122.28	A16S
ATOM	49071	O1P	CYT	1422	115.007	36.216	-32.932	1.00	66.46	A16S	ATOM	49124	C2	GUA	1424	119.170	22.643	-26.754	1.00	122.28	A16S
ATOM	49072	O2P	CYT	1422	115.509	37.066	-30.560	1.00	66.46	A16S	ATOM	49125	N2	GUA	1424	119.203	21.352	-26.387	1.00	122.28	A16S
ATOM	49073	O5'	CYT	1422	116.702	35.080	-31.502	1.00	64.65	A16S	ATOM	49126	N1	GUA	1424	119.835	23.523	-25.935	1.00	122.28	A16S
ATOM	49074	C5'	CYT	1422	117.108	34.213	-32.549	1.00	64.65	A16S	ATOM	49127	C6	GUA	1424	119.920	24.900	-26.137	1.00	122.28	A16S
ATOM	49075	C4'	CYT	1422	117.966	33.098	-32.005	1.00	64.65	A16S	ATOM	49128	O6	GUA	1424	120.534	25.605	-25.327	1.00	122.28	A16S
ATOM	49076	O4'	CYT	1422	119.081	33.674	-31.276	1.00	64.65	A16S	ATOM	49129	C5	GUA	1424	119.235	25.299	-27.316	1.00	122.28	A16S
ATOM	49077	C1'	CYT	1422	119.448	32.811	-30.215	1.00	64.65	A16S	ATOM	49130	N7	GUA	1424	119.086	26.555	-27.887	1.00	122.28	A16S
ATOM	49078	N1	CYT	1422	119.242	33.524	-28.953	1.00	66.46	A16S	ATOM	49131	C8	GUA	1424	118.363	26.343	-28.952	1.00	122.28	A16S
ATOM	49079	C6	CYT	1422	118.560	34.707	-28.917	1.00	66.46	A16S	ATOM	49132	C2'	GUA	1424	116.615	23.092	-29.856	1.00	79.89	A16S
ATOM	49080	C2	CYT	1422	119.742	32.964	-27.788	1.00	66.46	A16S	ATOM	49133	O2'	GUA	1424	116.466	22.350	-31.049	1.00	79.89	A16S
ATOM	49081	O2	CYT	1422	120.374	31.904	-27.865	1.00	66.46	A16S	ATOM	49134	C3'	GUA	1424	115.277	23.476	-29.236	1.00	79.89	A16S
ATOM	49082	N3	CYT	1422	119.526	33.587	-26.610	1.00	66.46	A16S	ATOM	49135	O3'	GUA	1424	114.349	22.385	-29.229	1.00	79.89	A16S
ATOM	49083	C4	CYT	1422	118.839	34.729	-26.579	1.00	66.46	A16S	ATOM	49136	P	GUA	1425	113.914	21.712	-27.828	1.00	122.26	A16S
ATOM	49084	N4	CYT	1422	118.618	35.296	-25.396	1.00	66.46	A16S	ATOM	49137	O1P	GUA	1425	112.601	22.303	-27.460	1.00	110.11	A16S
ATOM	49085	C5	CYT	1422	118.339	35.337	-27.762	1.00	66.46	A16S	ATOM	49138	O2P	GUA	1425	115.047	21.781	-26.862	1.00	110.11	A16S
ATOM	49086	C2'	CYT	1422	118.547	31.582	-30.308	1.00	64.65	A16S	ATOM	49139	O5'	GUA	1425	113.678	20.178	-28.184	1.00	122.26	A16S
ATOM	49087	O2'	CYT	1422	119.166	30.599	-31.108	1.00	64.65	A16S	ATOM	49140	C5'	GUA	1425	114.338	19.155	-27.446	1.00	122.26	A16S
ATOM	49088	C3'	CYT	1422	117.325	32.174	-30.987	1.00	64.65	A16S	ATOM	49141	C4'	GUA	1425	114.299	17.857	-28.208	1.00	122.26	A16S
ATOM	49089	O3'	CYT	1422	116.579	31.153	-31.625	1.00	64.65	A16S	ATOM	49142	O4'	GUA	1425	112.950	17.348	-28.207	1.00	122.26	A16S
ATOM	49090	P	GUA	1423	115.181	30.683	-30.994	1.00	64.65	A16S	ATOM	49143	C1'	GUA	1425	112.720	16.632	-29.399	1.00	122.26	A16S
ATOM	49091	O1P	GUA	1423	114.648	29.565	-31.819	1.00	68.56	A16S	ATOM	49144	N9	GUA	1425	111.440	17.059	-29.947	1.00	110.11	A16S
ATOM	49092	O2P	GUA	1423	114.359	31.903	-30.789	1.00	68.56	A16S	ATOM	49145	C4	GUA	1425	110.532	16.251	-30.570	1.00	110.11	A16S
ATOM	49093	O5'	GUA	1423	115.576	30.105	-29.567	1.00	64.65	A16S	ATOM	49146	N3	GUA	1425	110.689	14.938	-30.816	1.00	110.11	A16S
ATOM	49094	C5'	GUA	1423	116.448	28.992	-29.433	1.00	64.65	A16S	ATOM	49147	C2	GUA	1425	109.639	14.423	-31.432	1.00	110.11	A16S
ATOM	49095	C4'	GUA	1423	116.809	28.807	-27.978	1.00	64.65	A16S	ATOM	49148	N2	GUA	1425	109.635	13.122	-31.772	1.00	110.11	A16S
ATOM	49096	O4'	GUA	1423	117.578	29.955	-27.523	1.00	64.65	A16S	ATOM	49149	N1	GUA	1425	108.517	15.142	-31.765	1.00	110.11	A16S

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ATOM  49150  C6  GUA  1425     108.330  16.496 -31.513  1.00110.11      A16S
ATOM  49151  O6  GUA  1425     107.272  17.043 -31.846  1.00110.11      A16S
ATOM  49152  C5  GUA  1425     109.459  17.065 -30.867  1.00110.11      A16S
ATOM  49153  N7  GUA  1425     109.700  18.368 -30.455  1.00110.11      A16S
ATOM  49154  C8  GUA  1425     110.890  18.319 -29.920  1.00110.11      A16S
ATOM  49155  C2' GUA  1425     113.945  16.777 -30.305  1.00122.26      A16S
ATOM  49156  O2' GUA  1425     114.702  15.586 -30.252  1.00122.26      A16S
ATOM  49157  C3' GUA  1425     114.674  17.962 -29.675  1.00122.26      A16S
ATOM  49158  O3' GUA  1425     116.082  17.811 -29.812  1.00122.26      A16S
ATOM  49159  P   ADE  1426     116.917  18.877 -30.667  1.00166.50      A16S
ATOM  49160  O1P ADE  1426     115.938  19.710 -31.411  1.00200.66      A16S
ATOM  49161  O2P ADE  1426     117.975  18.147 -31.410  1.00200.66      A16S
ATOM  49162  O5' ADE  1426     117.627  19.786 -29.569  1.00166.50      A16S
ATOM  49163  C5' ADE  1426     117.196  19.785 -28.210  1.00166.50      A16S
ATOM  49164  C4' ADE  1426     117.657  18.524 -27.533  1.00166.50      A16S
ATOM  49165  O4' ADE  1426     118.766  17.991 -28.290  1.00166.50      A16S
ATOM  49166  C1' ADE  1426     119.755  17.509 -27.409  1.00166.50      A16S
ATOM  49167  N9  ADE  1426     120.971  18.292 -27.635  1.00200.66      A16S
ATOM  49168  C4  ADE  1426     122.129  17.845 -28.230  1.00200.66      A16S
ATOM  49169  N3  ADE  1426     122.379  16.613 -28.710  1.00200.66      A16S
ATOM  49170  C2  ADE  1426     123.609  16.547 -29.221  1.00200.66      A16S
ATOM  49171  N1  ADE  1426     124.546  17.500 -29.303  1.00200.66      A16S
ATOM  49172  C6  ADE  1426     124.264  18.728 -28.813  1.00200.66      A16S
ATOM  49173  N6  ADE  1426     125.198  19.678 -28.897  1.00200.66      A16S
ATOM  49174  C5  ADE  1426     122.990  18.928 -28.242  1.00200.66      A16S
ATOM  49175  N7  ADE  1426     122.389  20.037 -27.660  1.00200.66      A16S
ATOM  49176  C8  ADE  1426     121.198  19.608 -27.317  1.00200.66      A16S
ATOM  49177  C2' ADE  1426     119.187  17.574 -25.985  1.00166.50      A16S
ATOM  49178  O2' ADE  1426     118.597  16.334 -25.649  1.00166.50      A16S
ATOM  49179  C3' ADE  1426     118.157  18.692 -26.106  1.00166.50      A16S
ATOM  49180  O3' ADE  1426     117.098  18.527 -25.159  1.00166.50      A16S
ATOM  49181  P   GUA  1427     116.806  19.684 -24.079  1.00 93.16      A16S
ATOM  49182  O1P GUA  1427     115.366  20.056 -24.160  1.00 85.38      A16S
ATOM  49183  O2P GUA  1427     117.853  20.721 -24.319  1.00 85.38      A16S
ATOM  49184  O5' GUA  1427     117.037  19.005 -22.649  1.00 93.16      A16S
ATOM  49185  C5' GUA  1427     116.179  19.318 -21.548  1.00 93.16      A16S
ATOM  49186  C4' GUA  1427     116.982  19.840 -20.372  1.00 93.16      A16S
ATOM  49187  O4' GUA  1427     117.872  20.895 -20.819  1.00 93.16      A16S
ATOM  49188  C1' GUA  1427     117.888  21.951 -19.872  1.00 93.16      A16S
ATOM  49189  N9  GUA  1427     117.338  23.139 -20.518  1.00 85.38      A16S
ATOM  49190  C4  GUA  1427     117.018  24.336 -19.923  1.00 85.38      A16S
ATOM  49191  N3  GUA  1427     117.151  24.632 -18.617  1.00 85.38      A16S
ATOM  49192  C2  GUA  1427     116.760  25.866 -18.351  1.00 85.38      A16S
ATOM  49193  N2  GUA  1427     116.823  26.331 -17.098  1.00 85.38      A16S
ATOM  49194  N1  GUA  1427     116.279  26.735 -19.295  1.00 85.38      A16S
ATOM  49195  C6  GUA  1427     116.135  26.448 -20.645  1.00 85.38      A16S
ATOM  49196  O6  GUA  1427     115.691  27.306 -21.415  1.00 85.38      A16S
ATOM  49197  C5  GUA  1427     116.546  25.135 -20.942  1.00 85.38      A16S
ATOM  49198  N7  GUA  1427     116.563  24.457 -22.149  1.00 85.38      A16S
ATOM  49199  C8  GUA  1427     117.039  23.280 -21.850  1.00 85.38      A16S
ATOM  49200  C2' GUA  1427     117.096  21.487 -18.649  1.00 93.16      A16S
ATOM  49201  O2' GUA  1427     117.959  20.916 -17.689  1.00 93.16      A16S
ATOM  49202  C3' GUA  1427     116.145  20.470 -19.266  1.00 93.16      A16S
ATOM  49203  O3' GUA  1427     115.758  19.502 -18.303  1.00 93.16      A16S
ATOM  49204  P   CYT  1428     114.254  19.499 -17.740  1.00 83.31      A16S
ATOM  49205  O1P CYT  1428     114.128  18.348 -16.811  1.00 76.27      A16S
ATOM  49206  O2P CYT  1428     113.336  19.607 -18.907  1.00 76.27      A16S
ATOM  49207  O5' CYT  1428     114.140  20.835 -16.875  1.00 83.31      A16S
ATOM  49208  C5' CYT  1428     114.609  20.880 -15.533  1.00 83.31      A16S
ATOM  49209  C4' CYT  1428     114.228  22.191 -14.884  1.00 83.31      A16S
ATOM  49210  O4' CYT  1428     114.926  23.294 -15.525  1.00 83.31      A16S
ATOM  49211  C1' CYT  1428     114.100  24.450 -15.518  1.00 83.31      A16S
ATOM  49212  N1  CYT  1428     113.795  24.820 -16.908  1.00 76.27      A16S
ATOM  49213  C6  CYT  1428     114.041  23.957 -17.937  1.00 76.27      A16S
ATOM  49214  C2  CYT  1428     113.225  26.067 -17.157  1.00 76.27      A16S
ATOM  49215  O2  CYT  1428     113.044  26.839 -16.209  1.00 76.27      A16S
ATOM  49216  N3  CYT  1428     112.883  26.400 -18.421  1.00 76.27      A16S
ATOM  49217  C4  CYT  1428     113.103  25.541 -19.416  1.00 76.27      A16S
ATOM  49218  N4  CYT  1428     112.730  25.898 -20.642  1.00 76.27      A16S
ATOM  49219  C5  CYT  1428     113.711  24.273 -19.195  1.00 76.27      A16S
ATOM  49220  C2' CYT  1428     112.827  24.076 -14.762  1.00 83.31      A16S
ATOM  49221  O2' CYT  1428     112.971  24.392 -13.394  1.00 83.31      A16S
ATOM  49222  C3' CYT  1428     112.772  22.578 -15.007  1.00 83.31      A16S
ATOM  49223  O3' CYT  1428     111.995  21.939 -14.024  1.00 83.31      A16S
ATOM  49224  P   CYT  1429     110.435  21.704 -14.291  1.00 73.61      A16S
ATOM  49225  O1P CYT  1429     109.915  20.913 -13.150  1.00 62.70      A16S
ATOM  49226  O2P CYT  1429     110.272  21.198 -15.683  1.00 62.70      A16S
ATOM  49227  O5' CYT  1429     109.792  23.155 -14.188  1.00 73.61      A16S
ATOM  49228  C5' CYT  1429     109.500  23.723 -12.918  1.00 73.61      A16S
ATOM  49229  C4' CYT  1429     108.677  24.975 -13.083  1.00 73.61      A16S
ATOM  49230  O4' CYT  1429     109.469  26.009 -13.729  1.00 73.61      A16S
ATOM  49231  C1' CYT  1429     108.645  26.768 -14.595  1.00 73.61      A16S
ATOM  49232  N1  CYT  1429     109.075  26.513 -15.973  1.00 62.70      A16S
ATOM  49233  C6  CYT  1429     109.897  25.463 -16.272  1.00 62.70      A16S
ATOM  49234  C2  CYT  1429     108.609  27.351 -16.978  1.00 62.70      A16S
ATOM  49235  O2  CYT  1429     107.891  28.308 -16.662  1.00 62.70      A16S
ATOM  49236  N3  CYT  1429     108.946  27.098 -18.262  1.00 62.70      A16S
ATOM  49237  C4  CYT  1429     109.723  26.048 -18.549  1.00 62.70      A16S
ATOM  49238  N4  CYT  1429     110.006  25.803 -19.832  1.00 62.70      A16S
ATOM  49239  C5  CYT  1429     110.237  25.194 -17.533  1.00 62.70      A16S
ATOM  49240  C2' CYT  1429     107.215  26.286 -14.364  1.00 73.61      A16S
ATOM  49241  O2' CYT  1429     106.670  27.027 -13.298  1.00 73.61      A16S
ATOM  49242  C3' CYT  1429     107.458  24.838 -13.972  1.00 73.61      A16S
ATOM  49243  O3' CYT  1429     106.375  24.302 -13.233  1.00 73.61      A16S
ATOM  49244  P   URI  1430     105.167  23.583 -14.009  1.00 53.87      A16S
ATOM  49245  O1P URI  1430     104.110  23.265 -13.016  1.00 70.62      A16S
ATOM  49246  O2P URI  1430     105.740  22.504 -14.862  1.00 70.62      A16S
ATOM  49247  O5' URI  1430     104.587  24.725 -14.950  1.00 53.87      A16S
ATOM  49248  C5' URI  1430     103.940  25.863 -14.401  1.00 53.87      A16S
ATOM  49249  C4' URI  1430     103.513  26.780 -15.510  1.00 53.87      A16S
ATOM  49250  O4' URI  1430     104.685  27.172 -16.276  1.00 53.87      A16S
ATOM  49251  C1' URI  1430     104.322  27.364 -17.629  1.00 53.87      A16S
ATOM  49252  N1  URI  1430     105.158  26.497 -18.461  1.00 70.62      A16S
ATOM  49253  C6  URI  1430     105.869  25.459 -17.920  1.00 70.62      A16S
ATOM  49254  C2  URI  1430     105.196  26.763 -19.809  1.00 70.62      A16S
ATOM  49255  O2  URI  1430     104.594  27.695 -20.309  1.00 70.62      A16S
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ATOM	49256	N3	URI	1430	105.972	25.903	-20.550	1.00	70.62	A16S	ATOM	49309	O5'	GUA	1433	100.673	30.258	-26.434	1.00	58.01	A16S
ATOM	49257	C4	URI	1430	106.709	24.835	-20.075	1.00	70.62	A16S	ATOM	49310	C5'	GUA	1433	101.786	31.063	-26.838	1.00	58.01	A16S
ATOM	49258	O4	URI	1430	107.377	24.158	-20.860	1.00	70.62	A16S	ATOM	49311	C4'	GUA	1433	101.644	32.473	-26.306	1.00	58.01	A16S
ATOM	49259	C5	URI	1430	106.625	24.639	-18.661	1.00	70.62	A16S	ATOM	49312	O4'	GUA	1433	100.684	32.495	-25.227	1.00	58.01	A16S
ATOM	49260	C2'	URI	1430	102.835	27.040	-17.754	1.00	53.87	A16S	ATOM	49313	C1'	GUA	1433	101.080	33.455	-24.271	1.00	58.01	A16S
ATOM	49261	O2'	URI	1430	102.099	28.242	-17.686	1.00	53.87	A16S	ATOM	49314	N9	GUA	1433	100.994	32.841	-22.955	1.00	60.86	A16S
ATOM	49262	C3'	URI	1430	102.626	26.129	-16.550	1.00	53.87	A16S	ATOM	49315	C4	GUA	1433	101.718	31.776	-22.497	1.00	60.86	A16S
ATOM	49263	O3'	URI	1430	101.277	26.084	-16.107	1.00	53.87	A16S	ATOM	49316	N3	GUA	1433	102.656	31.106	-23.186	1.00	60.86	A16S
ATOM	49264	P	ADE	1431	100.215	25.181	-16.898	1.00	63.70	A16S	ATOM	49317	C2	GUA	1433	103.169	30.116	-22.482	1.00	60.86	A16S
ATOM	49265	O1P	ADE	1431	99.117	24.837	-15.962	1.00	92.68	A16S	ATOM	49318	N2	GUA	1433	104.121	29.344	-23.019	1.00	60.86	A16S
ATOM	49266	O2P	ADE	1431	100.955	24.105	-17.599	1.00	92.68	A16S	ATOM	49319	N1	GUA	1433	102.787	29.808	-21.203	1.00	60.86	A16S
ATOM	49267	O5'	ADE	1431	99.619	26.165	-17.995	1.00	63.70	A16S	ATOM	49320	C6	GUA	1433	101.810	30.477	-20.480	1.00	60.86	A16S
ATOM	49268	C5'	ADE	1431	98.387	25.884	-18.648	1.00	63.70	A16S	ATOM	49321	O6	GUA	1433	101.512	30.096	-19.342	1.00	60.86	A16S
ATOM	49269	C4'	ADE	1431	97.638	27.171	-18.890	1.00	63.70	A16S	ATOM	49322	C5	GUA	1433	101.264	31.548	-21.220	1.00	60.86	A16S
ATOM	49270	O4'	ADE	1431	97.163	27.697	-17.627	1.00	63.70	A16S	ATOM	49323	N7	GUA	1433	100.281	32.465	-20.877	1.00	60.86	A16S
ATOM	49271	C1'	ADE	1431	97.386	29.091	-17.568	1.00	63.70	A16S	ATOM	49324	C8	GUA	1433	100.157	33.212	-21.937	1.00	60.86	A16S
ATOM	49272	N9	ADE	1431	98.297	29.333	-16.460	1.00	92.68	A16S	ATOM	49325	C2'	GUA	1433	102.439	34.049	-24.670	1.00	58.01	A16S
ATOM	49273	C4	ADE	1431	97.999	30.012	-15.310	1.00	92.68	A16S	ATOM	49326	O2'	GUA	1433	102.294	35.377	-25.139	1.00	58.01	A16S
ATOM	49274	N3	ADE	1431	96.840	30.611	-14.999	1.00	92.68	A16S	ATOM	49327	C3'	GUA	1433	102.927	33.080	-25.748	1.00	58.01	A16S
ATOM	49275	C2	ADE	1431	96.908	31.150	-13.786	1.00	92.68	A16S	ATOM	49328	O3'	GUA	1433	103.610	33.810	-26.762	1.00	58.01	A16S
ATOM	49276	N1	ADE	1431	97.925	31.152	-12.918	1.00	92.68	A16S	ATOM	49329	P	GUA	1434	105.177	33.563	-27.017	1.00	62.81	A16S
ATOM	49277	C6	ADE	1431	99.074	30.534	-13.268	1.00	92.68	A16S	ATOM	49330	O1P	GUA	1434	105.608	34.609	-27.970	1.00	67.89	A16S
ATOM	49278	N6	ADE	1431	100.088	30.519	-12.402	1.00	92.68	A16S	ATOM	49331	O2P	GUA	1434	105.375	32.129	-27.354	1.00	67.89	A16S
ATOM	49279	C5	ADE	1431	99.132	29.935	-14.526	1.00	92.68	A16S	ATOM	49332	O5'	GUA	1434	105.903	33.895	-25.635	1.00	62.81	A16S
ATOM	49280	N7	ADE	1431	100.137	29.243	-15.182	1.00	92.68	A16S	ATOM	49333	C5'	GUA	1434	105.902	35.221	-25.125	1.00	62.81	A16S
ATOM	49281	C8	ADE	1431	99.593	28.914	-16.326	1.00	92.68	A16S	ATOM	49334	C4'	GUA	1434	106.058	35.211	-23.623	1.00	62.81	A16S
ATOM	49282	C2'	ADE	1431	97.910	29.555	-18.929	1.00	63.70	A16S	ATOM	49335	O4'	GUA	1434	105.243	34.132	-23.087	1.00	62.81	A16S
ATOM	49283	O2'	ADE	1431	96.852	30.099	-19.685	1.00	63.70	A16S	ATOM	49336	C1'	GUA	1434	105.891	33.545	-21.964	1.00	62.81	A16S
ATOM	49284	C3'	ADE	1431	98.502	28.266	-19.489	1.00	63.70	A16S	ATOM	49337	N9	GUA	1434	106.351	32.209	-22.335	1.00	67.89	A16S
ATOM	49285	O3'	ADE	1431	98.556	28.152	-20.913	1.00	63.70	A16S	ATOM	49338	C4	GUA	1434	106.808	31.242	-21.474	1.00	67.89	A16S
ATOM	49286	P	CYT	1432	97.204	27.990	-21.773	1.00	69.13	A16S	ATOM	49339	N3	GUA	1434	106.817	31.321	-20.131	1.00	67.89	A16S
ATOM	49287	O1P	CYT	1432	96.328	29.170	-21.631	1.00	55.97	A16S	ATOM	49340	C2	GUA	1434	107.384	30.268	-19.578	1.00	67.89	A16S
ATOM	49288	O2P	CYT	1432	96.647	26.654	-21.482	1.00	55.97	A16S	ATOM	49341	N2	GUA	1434	107.470	30.188	-18.256	1.00	67.89	A16S
ATOM	49289	O5'	CYT	1432	97.759	27.973	-23.270	1.00	69.13	A16S	ATOM	49342	N1	GUA	1434	107.912	29.216	-20.283	1.00	67.89	A16S
ATOM	49290	C5'	CYT	1432	98.314	29.146	-23.877	1.00	69.13	A16S	ATOM	49343	C6	GUA	1434	107.923	29.114	-21.669	1.00	67.89	A16S
ATOM	49291	C4'	CYT	1432	99.677	28.847	-24.469	1.00	69.13	A16S	ATOM	49344	O6	GUA	1434	108.461	28.137	-22.213	1.00	67.89	A16S
ATOM	49292	O4'	CYT	1432	100.547	28.459	-23.386	1.00	69.13	A16S	ATOM	49345	C5	GUA	1434	107.292	30.236	-22.278	1.00	67.89	A16S
ATOM	49293	C1'	CYT	1432	101.572	27.640	-23.895	1.00	69.13	A16S	ATOM	49346	N7	GUA	1434	107.073	30.530	-23.615	1.00	67.89	A16S
ATOM	49294	N1	CYT	1432	101.872	26.572	-22.932	1.00	55.97	A16S	ATOM	49347	C8	GUA	1434	106.497	31.701	-23.599	1.00	67.89	A16S
ATOM	49295	C6	CYT	1432	101.111	26.394	-21.813	1.00	55.97	A16S	ATOM	49348	C2'	GUA	1434	107.121	34.407	-21.684	1.00	62.81	A16S
ATOM	49296	C2	CYT	1432	102.982	25.764	-23.160	1.00	55.97	A16S	ATOM	49349	O2'	GUA	1434	106.835	35.430	-20.746	1.00	62.81	A16S
ATOM	49297	O2	CYT	1432	103.622	25.905	-24.203	1.00	55.97	A16S	ATOM	49350	C3'	GUA	1434	107.442	34.888	-23.093	1.00	62.81	A16S
ATOM	49298	N3	CYT	1432	103.334	24.845	-22.243	1.00	55.97	A16S	ATOM	49351	O3'	GUA	1434	108.332	35.997	-23.113	1.00	62.81	A16S
ATOM	49299	C4	CYT	1432	102.620	24.710	-21.131	1.00	55.97	A16S	ATOM	49352	P	GUA	1435	109.910	35.736	-22.947	1.00	53.26	A16S
ATOM	49300	N4	CYT	1432	103.049	23.830	-20.230	1.00	55.97	A16S	ATOM	49353	O1P	GUA	1435	110.655	37.001	-23.153	1.00	59.85	A16S
ATOM	49301	C5	CYT	1432	101.448	25.483	-20.889	1.00	55.97	A16S	ATOM	49354	O2P	GUA	1435	110.257	34.541	-23.755	1.00	59.85	A16S
ATOM	49302	C2'	CYT	1432	101.202	27.209	-25.315	1.00	69.13	A16S	ATOM	49355	O5'	GUA	1435	110.043	35.393	-21.398	1.00	53.26	A16S
ATOM	49303	O2'	CYT	1432	102.052	27.833	-26.267	1.00	69.13	A16S	ATOM	49356	C5'	GUA	1435	109.645	36.341	-20.413	1.00	53.26	A16S
ATOM	49304	C3'	CYT	1432	99.757	27.675	-25.440	1.00	69.13	A16S	ATOM	49357	C4'	GUA	1435	109.907	35.794	-19.035	1.00	53.26	A16S
ATOM	49305	O3'	CYT	1432	99.556	27.947	-26.843	1.00	69.13	A16S	ATOM	49358	O4'	GUA	1435	109.098	34.600	-18.848	1.00	53.26	A16S
ATOM	49306	P	GUA	1433	99.851	29.407	-27.498	1.00	58.01	A16S	ATOM	49359	C1'	GUA	1435	109.846	33.622	-18.135	1.00	53.26	A16S
ATOM	49307	O1P	GUA	1433	98.539	30.087	-27.698	1.00	60.86	A16S	ATOM	49360	N9	GUA	1435	110.160	32.539	-19.056	1.00	59.85	A16S
ATOM	49308	O2P	GUA	1433	100.753	29.191	-28.658	1.00	60.86	A16S	ATOM	49361	C4	GUA	1435	110.689	31.314	-18.729	1.00	59.85	A16S

ATOM	49362	N3	GUA	1435	110.968	30.877	-17.484	1.00	59.85	A16S	ATOM	49415	C3'	ADE	1437	120.879	30.486	-16.458	1.00	69.01	A16S
ATOM	49363	C2	GUA	1435	111.474	29.657	-17.493	1.00	59.85	A16S	ATOM	49416	O3'	ADE	1437	122.085	30.521	-15.734	1.00	69.01	A16S
ATOM	49364	N2	GUA	1435	111.785	29.059	-16.340	1.00	59.85	A16S	ATOM	49417	P	GUA	1438	123.367	31.207	-16.394	1.00	71.18	A16S
ATOM	49365	N1	GUA	1435	111.705	28.932	-18.632	1.00	59.85	A16S	ATOM	49418	O1P	GUA	1438	124.539	30.898	-15.538	1.00	76.17	A16S
ATOM	49366	C6	GUA	1435	111.432	29.365	-19.923	1.00	59.85	A16S	ATOM	49419	O2P	GUA	1438	123.010	32.624	-16.669	1.00	76.17	A16S
ATOM	49367	O6	GUA	1435	111.686	28.636	-20.883	1.00	59.85	A16S	ATOM	49420	O5'	GUA	1438	123.533	30.431	-17.772	1.00	71.18	A16S
ATOM	49368	C5	GUA	1435	110.872	30.664	-19.928	1.00	59.85	A16S	ATOM	49421	C5'	GUA	1438	123.905	29.063	-17.791	1.00	71.18	A16S
ATOM	49369	N7	GUA	1435	110.446	31.454	-20.987	1.00	59.85	A16S	ATOM	49422	C4'	GUA	1438	123.816	28.527	-19.194	1.00	71.18	A16S
ATOM	49370	C8	GUA	1435	110.025	32.552	-20.422	1.00	59.85	A16S	ATOM	49423	O4'	GUA	1438	122.440	28.610	-19.648	1.00	71.18	A16S
ATOM	49371	C2'	GUA	1435	111.143	34.296	-17.688	1.00	53.26	A16S	ATOM	49424	C1'	GUA	1438	122.412	28.948	-21.025	1.00	71.18	A16S
ATOM	49372	O2'	GUA	1435	110.998	34.876	-16.410	1.00	53.26	A16S	ATOM	49425	N9	GUA	1438	121.799	30.263	-21.153	1.00	76.17	A16S
ATOM	49373	C3'	GUA	1435	111.329	35.315	-18.801	1.00	53.26	A16S	ATOM	49426	C4	GUA	1438	121.353	30.833	-22.312	1.00	76.17	A16S
ATOM	49374	O3'	GUA	1435	112.226	36.354	-18.446	1.00	53.26	A16S	ATOM	49427	N3	GUA	1438	121.386	30.265	-23.532	1.00	76.17	A16S
ATOM	49375	P	CYT	1436	113.771	36.223	-18.865	1.00	61.94	A16S	ATOM	49428	C2	GUA	1438	120.905	31.066	-24.460	1.00	76.17	A16S
ATOM	49376	O1P	CYT	1436	114.479	37.479	-18.517	1.00	63.27	A16S	ATOM	49429	N2	GUA	1438	120.871	30.661	-25.733	1.00	76.17	A16S
ATOM	49377	O2P	CYT	1436	113.843	35.699	-20.255	1.00	63.27	A16S	ATOM	49430	N1	GUA	1438	120.424	32.324	-24.209	1.00	76.17	A16S
ATOM	49378	O5'	CYT	1436	114.312	35.080	-17.907	1.00	61.94	A16S	ATOM	49431	C6	GUA	1438	120.382	32.927	-22.957	1.00	76.17	A16S
ATOM	49379	C5'	CYT	1436	114.219	35.213	-16.501	1.00	61.94	A16S	ATOM	49432	O6	GUA	1438	119.938	34.071	-22.839	1.00	76.17	A16S
ATOM	49380	C4'	CYT	1436	114.742	33.969	-15.847	1.00	61.94	A16S	ATOM	49433	C5	GUA	1438	120.896	32.079	-21.955	1.00	76.17	A16S
ATOM	49381	O4'	CYT	1436	113.893	32.853	-16.223	1.00	61.94	A16S	ATOM	49434	N7	GUA	1438	121.041	32.285	-20.591	1.00	76.17	A16S
ATOM	49382	C1'	CYT	1436	114.679	31.683	-16.358	1.00	61.94	A16S	ATOM	49435	C8	GUA	1438	121.576	31.179	-20.156	1.00	76.17	A16S
ATOM	49383	N1	CYT	1436	114.621	31.241	-17.749	1.00	63.27	A16S	ATOM	49436	C2'	GUA	1438	123.861	28.970	-21.510	1.00	71.18	A16S
ATOM	49384	C6	CYT	1436	114.097	32.035	-18.726	1.00	63.27	A16S	ATOM	49437	O2'	GUA	1438	124.217	27.704	-22.013	1.00	71.18	A16S
ATOM	49385	C2	CYT	1436	115.138	30.001	-18.059	1.00	63.27	A16S	ATOM	49438	C3'	GUA	1438	124.592	29.321	-20.226	1.00	71.18	A16S
ATOM	49386	O2	CYT	1436	115.562	29.293	-17.138	1.00	63.27	A16S	ATOM	49439	O3'	GUA	1438	125.946	28.911	-20.258	1.00	71.18	A16S
ATOM	49387	N3	CYT	1436	115.163	29.594	-19.345	1.00	63.27	A16S	ATOM	49440	P	GUA	1439	127.075	29.950	-20.722	1.00	82.81	A16S
ATOM	49388	C4	CYT	1436	114.667	30.377	-20.296	1.00	63.27	A16S	ATOM	49441	O1P	GUA	1439	128.398	29.323	-20.458	1.00	72.98	A16S
ATOM	49389	N4	CYT	1436	114.713	29.938	-21.552	1.00	63.27	A16S	ATOM	49442	O2P	GUA	1439	126.754	31.261	-20.112	1.00	72.98	A16S
ATOM	49390	C5	CYT	1436	114.100	31.644	-20.002	1.00	63.27	A16S	ATOM	49443	O5'	GUA	1439	126.869	30.042	-22.300	1.00	82.81	A16S
ATOM	49391	C2'	CYT	1436	116.108	32.062	-15.988	1.00	61.94	A16S	ATOM	49444	C5'	GUA	1439	127.009	28.881	-23.113	1.00	82.81	A16S
ATOM	49392	O2'	CYT	1436	116.288	31.827	-14.615	1.00	61.94	A16S	ATOM	49445	C4'	GUA	1439	126.616	29.181	-24.540	1.00	82.81	A16S
ATOM	49393	C3'	CYT	1436	116.114	33.543	-16.327	1.00	61.94	A16S	ATOM	49446	O4'	GUA	1439	125.189	29.438	-24.624	1.00	82.81	A16S
ATOM	49394	O3'	CYT	1436	117.144	34.251	-15.648	1.00	61.94	A16S	ATOM	49447	C1'	GUA	1439	124.939	30.419	-25.620	1.00	82.81	A16S
ATOM	49395	P	ADE	1437	118.600	34.378	-16.327	1.00	69.01	A16S	ATOM	49448	N9	GUA	1439	124.388	31.598	-24.962	1.00	72.98	A16S
ATOM	49396	O1P	ADE	1437	119.441	35.199	-15.416	1.00	68.65	A16S	ATOM	49449	C4	GUA	1439	123.742	32.646	-25.566	1.00	72.98	A16S
ATOM	49397	O2P	ADE	1437	118.425	34.793	-17.737	1.00	68.65	A16S	ATOM	49450	N3	GUA	1439	123.467	32.755	-26.879	1.00	72.98	A16S
ATOM	49398	O5'	ADE	1437	119.158	32.882	-16.385	1.00	69.01	A16S	ATOM	49451	C2	GUA	1439	122.860	33.895	-27.160	1.00	72.98	A16S
ATOM	49399	C5'	ADE	1437	119.345	32.116	-15.201	1.00	69.01	A16S	ATOM	49452	N2	GUA	1439	122.506	34.170	-28.416	1.00	72.98	A16S
ATOM	49400	C4'	ADE	1437	119.684	30.686	-15.547	1.00	69.01	A16S	ATOM	49453	N1	GUA	1439	122.553	34.853	-26.228	1.00	72.98	A16S
ATOM	49401	O4'	ADE	1437	118.598	30.097	-16.303	1.00	69.01	A16S	ATOM	49454	C6	GUA	1439	122.829	34.764	-24.869	1.00	72.98	A16S
ATOM	49402	C1'	ADE	1437	119.119	29.115	-17.187	1.00	69.01	A16S	ATOM	49455	O6	GUA	1439	122.516	35.696	-24.110	1.00	72.98	A16S
ATOM	49403	N9	ADE	1437	118.754	29.483	-18.549	1.00	68.65	A16S	ATOM	49456	C5	GUA	1439	123.471	33.542	-24.551	1.00	72.98	A16S
ATOM	49404	C4	ADE	1437	118.936	28.708	-19.664	1.00	68.65	A16S	ATOM	49457	N7	GUA	1439	123.910	33.052	-23.331	1.00	72.98	A16S
ATOM	49405	N3	ADE	1437	119.479	27.480	-19.720	1.00	68.65	A16S	ATOM	49458	C8	GUA	1439	124.442	31.897	-23.622	1.00	72.98	A16S
ATOM	49406	C2	ADE	1437	119.486	27.031	-20.974	1.00	68.65	A16S	ATOM	49459	C2'	GUA	1439	126.283	30.728	-26.283	1.00	82.81	A16S
ATOM	49407	N1	ADE	1437	119.043	27.627	-22.092	1.00	68.65	A16S	ATOM	49460	O2'	GUA	1439	126.461	29.882	-27.397	1.00	82.81	A16S
ATOM	49408	C6	ADE	1437	118.502	28.863	-21.992	1.00	68.65	A16S	ATOM	49461	C3'	GUA	1439	127.251	30.415	-25.149	1.00	82.81	A16S
ATOM	49409	N6	ADE	1437	118.057	29.463	-23.097	1.00	68.65	A16S	ATOM	49462	O3'	GUA	1439	128.563	30.132	-25.614	1.00	82.81	A16S
ATOM	49410	C5	ADE	1437	118.440	29.447	-20.720	1.00	68.65	A16S	ATOM	49463	P	CYT	1440	129.610	31.333	-25.809	1.00	69.31	A16S
ATOM	49411	N7	ADE	1437	117.959	30.670	-20.280	1.00	68.65	A16S	ATOM	49464	O1P	CYT	1440	130.886	30.717	-26.249	1.00	61.05	A16S
ATOM	49412	C8	ADE	1437	118.170	30.642	-18.989	1.00	68.65	A16S	ATOM	49465	O2P	CYT	1440	129.598	32.206	-24.612	1.00	61.05	A16S
ATOM	49413	C2'	ADE	1437	120.634	29.091	-17.000	1.00	69.01	A16S	ATOM	49466	O5'	CYT	1440	128.998	32.149	-27.031	1.00	69.31	A16S
ATOM	49414	O2'	ADE	1437	120.998	28.084	-16.080	1.00	69.01	A16S	ATOM	49467	C5'	CYT	1440	128.966	31.562	-28.319	1.00	69.31	A16S

ATOM	49468	C4'	CYT	1440	128.367	32.508	-29.316	1.00	69.31	A16S	ATOM	49521	C5	CYT	1442	129.532	42.476	-27.220	1.00	70.08	A16S
ATOM	49469	O4'	CYT	1440	126.975	32.728	-28.997	1.00	69.31	A16S	ATOM	49522	C2'	CYT	1442	129.847	46.002	-30.063	1.00	66.10	A16S
ATOM	49470	C1'	CYT	1440	126.594	34.025	-29.430	1.00	69.31	A16S	ATOM	49523	O2'	CYT	1442	129.361	47.107	-30.798	1.00	66.10	A16S
ATOM	49471	N1	CYT	1440	126.227	34.806	-28.252	1.00	61.05	A16S	ATOM	49524	C3'	CYT	1442	130.897	45.205	-30.820	1.00	66.10	A16S
ATOM	49472	C6	CYT	1440	126.762	34.521	-27.027	1.00	61.05	A16S	ATOM	49525	O3'	CYT	1442	131.756	46.068	-31.551	1.00	66.10	A16S
ATOM	49473	C2	CYT	1440	125.339	35.861	-28.407	1.00	61.05	A16S	ATOM	49526	P	CYT	1443	133.184	46.475	-30.930	1.00	61.87	A16S
ATOM	49474	O2	CYT	1440	124.867	36.084	-29.533	1.00	61.05	A16S	ATOM	49527	O1P	CYT	1443	133.894	47.344	-31.907	1.00	71.49	A16S
ATOM	49475	N3	CYT	1440	125.018	36.613	-27.329	1.00	61.05	A16S	ATOM	49528	O2P	CYT	1443	133.838	45.239	-30.440	1.00	71.49	A16S
ATOM	49476	C4	CYT	1440	125.556	36.338	-26.139	1.00	61.05	A16S	ATOM	49529	O5'	CYT	1443	132.800	47.374	-29.680	1.00	61.87	A16S
ATOM	49477	N4	CYT	1440	125.227	37.114	-25.108	1.00	61.05	A16S	ATOM	49530	C5'	CYT	1443	131.971	48.512	-29.848	1.00	61.87	A16S
ATOM	49478	C5	CYT	1440	126.459	35.258	-25.954	1.00	61.05	A16S	ATOM	49531	C4'	CYT	1443	131.522	49.029	-28.509	1.00	61.87	A16S
ATOM	49479	C2'	CYT	1440	127.830	34.649	-30.069	1.00	69.31	A16S	ATOM	49532	O4'	CYT	1443	130.640	48.067	-27.877	1.00	61.87	A16S
ATOM	49480	O2'	CYT	1440	127.854	34.378	-31.452	1.00	69.31	A16S	ATOM	49533	C1'	CYT	1443	130.778	48.158	-26.471	1.00	61.87	A16S
ATOM	49481	C3'	CYT	1440	128.923	33.912	-29.326	1.00	69.31	A16S	ATOM	49534	N1	CYT	1443	131.131	46.834	-25.938	1.00	71.49	A16S
ATOM	49482	O3'	CYT	1440	130.147	34.005	-30.015	1.00	69.31	A16S	ATOM	49535	C6	CYT	1443	131.752	45.900	-26.717	1.00	71.49	A16S
ATOM	49483	P	GUA	1441	131.204	35.122	-29.570	1.00	75.88	A16S	ATOM	49536	C2	CYT	1443	130.825	46.548	-24.606	1.00	71.49	A16S
ATOM	49484	O1P	GUA	1441	132.412	34.899	-30.407	1.00	67.50	A16S	ATOM	49537	O2	CYT	1443	130.253	47.412	-23.929	1.00	71.49	A16S
ATOM	49485	O2P	GUA	1441	131.323	35.104	-28.089	1.00	67.50	A16S	ATOM	49538	N3	CYT	1443	131.156	45.341	-24.092	1.00	71.49	A16S
ATOM	49486	O5'	GUA	1441	130.504	36.492	-29.993	1.00	75.88	A16S	ATOM	49539	C4	CYT	1443	131.762	44.437	-24.860	1.00	71.49	A16S
ATOM	49487	C5'	GUA	1441	130.191	36.758	-31.353	1.00	75.88	A16S	ATOM	49540	N4	CYT	1443	132.060	43.259	-24.317	1.00	71.49	A16S
ATOM	49488	C4'	GUA	1441	129.468	38.078	-31.484	1.00	75.88	A16S	ATOM	49541	C5	CYT	1443	132.085	44.700	-26.222	1.00	71.49	A16S
ATOM	49489	O4'	GUA	1441	128.210	38.012	-30.772	1.00	75.88	A16S	ATOM	49542	C2'	CYT	1443	131.847	49.214	-26.188	1.00	61.87	A16S
ATOM	49490	C1'	GUA	1441	127.853	39.310	-30.332	1.00	75.88	A16S	ATOM	49543	O2'	CYT	1443	131.217	50.453	-25.959	1.00	61.87	A16S
ATOM	49491	N9	GUA	1441	127.730	39.283	-28.883	1.00	67.50	A16S	ATOM	49544	C3'	CYT	1443	132.627	49.217	-27.492	1.00	61.87	A16S
ATOM	49492	C4	GUA	1441	127.082	40.209	-28.115	1.00	67.50	A16S	ATOM	49545	O3'	CYT	1443	133.271	50.460	-27.698	1.00	61.87	A16S
ATOM	49493	N3	GUA	1441	126.416	41.284	-28.573	1.00	67.50	A16S	ATOM	49546	P	GUA	1444	134.833	50.611	-27.353	1.00	69.19	A16S
ATOM	49494	C2	GUA	1441	125.921	42.009	-27.590	1.00	67.50	A16S	ATOM	49547	O1P	GUA	1444	135.139	52.062	-27.415	1.00	72.76	A16S
ATOM	49495	N2	GUA	1441	125.236	43.124	-27.868	1.00	67.50	A16S	ATOM	49548	O2P	GUA	1444	135.615	49.658	-28.177	1.00	72.76	A16S
ATOM	49496	N1	GUA	1441	126.065	41.697	-26.265	1.00	67.50	A16S	ATOM	49549	O5'	GUA	1444	134.939	50.145	-25.836	1.00	69.19	A16S
ATOM	49497	C6	GUA	1441	126.744	40.589	-25.776	1.00	67.50	A16S	ATOM	49550	C5'	GUA	1444	134.291	50.873	-24.807	1.00	69.19	A16S
ATOM	49498	O6	GUA	1441	126.816	40.399	-24.563	1.00	67.50	A16S	ATOM	49551	C4'	GUA	1444	134.325	50.094	-23.526	1.00	69.19	A16S
ATOM	49499	C5	GUA	1441	127.280	39.809	-26.815	1.00	67.50	A16S	ATOM	49552	O4'	GUA	1444	133.625	48.837	-23.711	1.00	69.19	A16S
ATOM	49500	N7	GUA	1441	128.022	38.640	-26.767	1.00	67.50	A16S	ATOM	49553	C1'	GUA	1444	134.219	47.841	-22.893	1.00	69.19	A16S
ATOM	49501	C8	GUA	1441	128.258	38.360	-28.019	1.00	67.50	A16S	ATOM	49554	N9	GUA	1444	134.734	46.785	-23.756	1.00	72.76	A16S
ATOM	49502	C2'	GUA	1441	128.969	40.263	-30.762	1.00	75.88	A16S	ATOM	49555	C4	GUA	1444	134.825	45.451	-23.445	1.00	72.76	A16S
ATOM	49503	O2'	GUA	1441	128.637	40.885	-31.984	1.00	75.88	A16S	ATOM	49556	N3	GUA	1444	134.419	44.875	-22.292	1.00	72.76	A16S
ATOM	49504	C3'	GUA	1441	130.143	39.307	-30.898	1.00	75.88	A16S	ATOM	49557	C2	GUA	1444	134.653	43.571	-22.282	1.00	72.76	A16S
ATOM	49505	O3'	GUA	1441	131.099	39.836	-31.802	1.00	75.88	A16S	ATOM	49558	N2	GUA	1444	134.293	42.832	-21.220	1.00	72.76	A16S
ATOM	49506	P	CYT	1442	132.090	41.007	-31.326	1.00	66.10	A16S	ATOM	49559	N1	GUA	1444	135.252	42.892	-23.318	1.00	72.76	A16S
ATOM	49507	O1P	CYT	1442	132.955	41.287	-32.494	1.00	70.08	A16S	ATOM	49560	C6	GUA	1444	135.677	43.464	-24.513	1.00	72.76	A16S
ATOM	49508	O2P	CYT	1442	132.714	40.651	-30.032	1.00	70.08	A16S	ATOM	49561	O6	GUA	1444	136.209	42.758	-25.378	1.00	72.76	A16S
ATOM	49509	O5'	CYT	1442	131.127	42.261	-31.108	1.00	66.10	A16S	ATOM	49562	C5	GUA	1444	135.418	44.860	-24.543	1.00	72.76	A16S
ATOM	49510	C5'	CYT	1442	130.680	43.049	-32.213	1.00	66.10	A16S	ATOM	49563	N7	GUA	1444	135.672	45.801	-25.531	1.00	72.76	A16S
ATOM	49511	C4'	CYT	1442	130.043	44.330	-31.725	1.00	66.10	A16S	ATOM	49564	C8	GUA	1444	135.246	46.925	-25.023	1.00	72.76	A16S
ATOM	49512	O4'	CYT	1442	128.911	43.981	-30.891	1.00	66.10	A16S	ATOM	49565	C2'	GUA	1444	135.344	48.527	-22.117	1.00	69.19	A16S
ATOM	49513	C1'	CYT	1442	128.750	44.952	-29.870	1.00	66.10	A16S	ATOM	49566	O2'	GUA	1444	134.854	49.039	-20.891	1.00	69.19	A16S
ATOM	49514	N1	CYT	1442	128.818	44.278	-28.562	1.00	70.08	A16S	ATOM	49567	C3'	GUA	1444	135.700	49.651	-23.071	1.00	69.19	A16S
ATOM	49515	C6	CYT	1442	129.439	43.069	-28.420	1.00	70.08	A16S	ATOM	49568	O3'	GUA	1444	136.363	50.693	-22.387	1.00	69.19	A16S
ATOM	49516	C2	CYT	1442	128.244	44.909	-27.453	1.00	70.08	A16S	ATOM	49569	P	ADE	1445	137.941	50.884	-22.574	1.00	60.37	A16S
ATOM	49517	O2	CYT	1442	127.666	45.998	-27.614	1.00	70.08	A16S	ATOM	49570	O1P	ADE	1445	138.101	52.295	-22.994	1.00	61.32	A16S
ATOM	49518	N3	CYT	1442	128.330	44.323	-26.234	1.00	70.08	A16S	ATOM	49571	O2P	ADE	1445	138.500	49.796	-23.418	1.00	61.32	A16S
ATOM	49519	C4	CYT	1442	128.957	43.155	-26.102	1.00	70.08	A16S	ATOM	49572	O5'	ADE	1445	138.521	50.740	-21.097	1.00	60.37	A16S
ATOM	49520	N4	CYT	1442	129.044	42.632	-24.878	1.00	70.08	A16S	ATOM	49573	C5'	ADE	1445	138.107	51.631	-20.065	1.00	60.37	A16S

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ATOM  49574  C4' ADE  1445     138.468  51.074 -18.709  1.00 60.37      A16S
ATOM  49575  O4' ADE  1445     137.717  49.857 -18.471  1.00 60.37      A16S
ATOM  49576  C1' ADE  1445     138.540  48.914 -17.808  1.00 60.37      A16S
ATOM  49577  N9  ADE  1445     138.819  47.833 -18.743  1.00 61.32      A16S
ATOM  49578  C4  ADE  1445     139.225  46.567 -18.410  1.00 61.32      A16S
ATOM  49579  N3  ADE  1445     139.458  46.090 -17.178  1.00 61.32      A16S
ATOM  49580  C2  ADE  1445     139.807  44.812 -17.237  1.00 61.32      A16S
ATOM  49581  N1  ADE  1445     139.938  44.016 -18.308  1.00 61.32      A16S
ATOM  49582  C6  ADE  1445     139.694  44.530 -19.529  1.00 61.32      A16S
ATOM  49583  N6  ADE  1445     139.808  43.732 -20.595  1.00 61.32      A16S
ATOM  49584  C5  ADE  1445     139.325  45.879 -19.603  1.00 61.32      A16S
ATOM  49585  N7  ADE  1445     139.012  46.704 -20.672  1.00 61.32      A16S
ATOM  49586  C8  ADE  1445     138.722  47.850 -20.109  1.00 61.32      A16S
ATOM  49587  C2' ADE  1445     139.813  49.645 -17.408  1.00 60.37      A16S
ATOM  49588  O2' ADE  1445     139.604  50.255 -16.154  1.00 60.37      A16S
ATOM  49589  C3' ADE  1445     139.919  50.661 -18.531  1.00 60.37      A16S
ATOM  49590  O3' ADE  1445     140.711  51.764 -18.132  1.00 60.37      A16S
ATOM  49591  P   GUA  1446     142.062  52.083 -18.922  1.00 67.22      A16S
ATOM  49592  O1P GUA  1446     142.724  53.246 -18.275  1.00 72.78      A16S
ATOM  49593  O2P GUA  1446     141.688  52.145 -20.354  1.00 72.78      A16S
ATOM  49594  O5' GUA  1446     142.955  50.783 -18.712  1.00 67.22      A16S
ATOM  49595  C5' GUA  1446     143.256  50.318 -17.409  1.00 67.22      A16S
ATOM  49596  C4' GUA  1446     143.641  48.863 -17.452  1.00 67.22      A16S
ATOM  49597  O4' GUA  1446     142.549  48.101 -18.034  1.00 67.22      A16S
ATOM  49598  C1' GUA  1446     143.074  46.982 -18.735  1.00 67.22      A16S
ATOM  49599  N9  GUA  1446     142.739  47.130 -20.145  1.00 72.78      A16S
ATOM  49600  C4  GUA  1446     142.809  46.152 -21.107  1.00 72.78      A16S
ATOM  49601  N3  GUA  1446     143.183  44.869 -20.909  1.00 72.78      A16S
ATOM  49602  C2  GUA  1446     143.153  44.171 -22.030  1.00 72.78      A16S
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ATOM  49604  N1  GUA  1446     142.796  44.693 -23.246  1.00 72.78      A16S
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ATOM  49606  O6  GUA  1446     142.113  46.384 -24.615  1.00 72.78      A16S
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ATOM  49609  C8  GUA  1446     142.311  48.269 -20.781  1.00 72.78      A16S
ATOM  49610  C2' GUA  1446     144.587  47.008 -18.521  1.00 67.22      A16S
ATOM  49611  O2' GUA  1446     144.915  46.289 -17.345  1.00 67.22      A16S
ATOM  49612  C3' GUA  1446     144.821  48.498 -18.337  1.00 67.22      A16S
ATOM  49613  O3' GUA  1446     146.059  48.743 -17.687  1.00 67.22      A16S
ATOM  49614  P   GUA  1447     147.400  48.893 -18.558  1.00 80.00      A16S
ATOM  49615  O1P GUA  1447     148.508  49.046 -17.579  1.00 64.37      A16S
ATOM  49616  O2P GUA  1447     147.191  49.931 -19.596  1.00 64.37      A16S
ATOM  49617  O5' GUA  1447     147.559  47.480 -19.274  1.00 80.00      A16S
ATOM  49618  C5' GUA  1447     147.962  46.341 -18.526  1.00 80.00      A16S
ATOM  49619  C4' GUA  1447     148.101  45.135 -19.422  1.00 80.00      A16S
ATOM  49620  O4' GUA  1447     146.816  44.813 -20.019  1.00 80.00      A16S
ATOM  49621  C1' GUA  1447     147.018  44.234 -21.302  1.00 80.00      A16S
ATOM  49622  N9  GUA  1447     146.496  45.150 -22.301  1.00 64.37      A16S
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ATOM  49634  O2' GUA  1447     148.994  42.871 -21.074  1.00 80.00      A16S
ATOM  49635  C3' GUA  1447     148.995  45.295 -20.633  1.00 80.00      A16S
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ATOM  49637  P   GUA  1448     151.454  45.886 -21.278  1.00 98.80      A16S
ATOM  49638  O1P GUA  1448     152.754  45.811 -20.564  1.00 85.77      A16S
ATOM  49639  O2P GUA  1448     150.932  47.205 -21.720  1.00 85.77      A16S
ATOM  49640  O5' GUA  1448     151.488  44.925 -22.549  1.00 98.80      A16S
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ATOM  49653  C5  GUA  1448     148.667  46.045 -27.063  1.00 85.77      A16S
ATOM  49654  N7  GUA  1448     148.707  46.440 -25.733  1.00 85.77      A16S
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ATOM  49656  C2' GUA  1448     151.586  42.940 -26.085  1.00 98.80      A16S
ATOM  49657  O2' GUA  1448     151.831  41.595 -26.441  1.00 98.80      A16S
ATOM  49658  C3' GUA  1448     152.366  43.388 -24.854  1.00 98.80      A16S
ATOM  49659  O3' GUA  1448     153.687  42.859 -24.828  1.00 98.80      A16S
ATOM  49660  P   URI  1449     154.913  43.767 -25.329  1.00 95.86      A16S
ATOM  49661  O1P URI  1449     156.157  43.074 -24.915  1.00 73.98      A16S
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ATOM  49663  O5' URI  1449     154.805  43.718 -26.918  1.00 95.86      A16S
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ATOM  49665  C4' URI  1449     154.874  42.742 -29.115  1.00 95.86      A16S
ATOM  49666  O4' URI  1449     153.454  42.979 -29.309  1.00 95.86      A16S
ATOM  49667  C1' URI  1449     153.261  43.846 -30.420  1.00 95.86      A16S
ATOM  49668  N1  URI  1449     152.570  45.058 -29.960  1.00 73.98      A16S
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ATOM  49670  C2  URI  1449     151.754  45.727 -30.863  1.00 73.98      A16S
ATOM  49671  O2  URI  1449     151.536  45.324 -31.993  1.00 73.98      A16S
ATOM  49672  N3  URI  1449     151.196  46.883 -30.389  1.00 73.98      A16S
ATOM  49673  C4  URI  1449     151.350  47.423 -29.129  1.00 73.98      A16S
ATOM  49674  O4  URI  1449     150.834  48.513 -28.871  1.00 73.98      A16S
ATOM  49675  C5  URI  1449     152.176  46.655 -28.247  1.00 73.98      A16S
ATOM  49676  C2' URI  1449     154.647  44.170 -30.981  1.00 95.86      A16S
ATOM  49677  O2' URI  1449     154.964  43.275 -32.026  1.00 95.86      A16S
ATOM  49678  C3' URI  1449     155.523  43.962 -29.754  1.00 95.86      A16S
ATOM  49679  O3' URI  1449     156.884  43.736 -30.118  1.00 95.86      A16S
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ATOM  49680  P   ADE  1450     157.876  44.992 -30.309  1.00121.71      A16S
ATOM  49681  O1P ADE  1450     159.200  44.450 -30.711  1.00 97.92      A16S
ATOM  49682  O2P ADE  1450     157.782  45.874 -29.116  1.00 97.92      A16S
ATOM  49683  O5' ADE  1450     157.264  45.777 -31.554  1.00121.71      A16S
ATOM  49684  C5' ADE  1450     157.412  45.268 -32.875  1.00121.71      A16S
ATOM  49685  C4' ADE  1450     156.902  46.266 -33.885  1.00121.71      A16S
ATOM  49686  O4' ADE  1450     155.453  46.350 -33.820  1.00121.71      A16S
ATOM  49687  C1' ADE  1450     155.041  47.680 -34.098  1.00121.71      A16S
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ATOM  49689  C4  ADE  1450     153.533  49.280 -32.850  1.00 97.92      A16S
ATOM  49690  N3  ADE  1450     153.073  50.007 -33.884  1.00 97.92      A16S
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ATOM  49692  N1  ADE  1450     151.854  51.243 -32.210  1.00 97.92      A16S
ATOM  49693  C6  ADE  1450     152.336  50.494 -31.194  1.00 97.92      A16S
ATOM  49694  N6  ADE  1450     151.945  50.781 -29.950  1.00 97.92      A16S
ATOM  49695  C5  ADE  1450     153.223  49.453 -31.513  1.00 97.92      A16S
ATOM  49696  N7  ADE  1450     153.885  48.516 -30.731  1.00 97.92      A16S
ATOM  49697  C8  ADE  1450     154.570  47.810 -31.598  1.00 97.92      A16S
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ATOM  49699  O2' ADE  1450     156.510  48.421 -35.855  1.00121.71      A16S
ATOM  49700  C3' ADE  1450     157.352  47.699 -33.674  1.00121.71      A16S
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ATOM  49702  P   GUA  1451     159.504  49.175 -33.592  1.00130.60      A16S
ATOM  49703  O1P GUA  1451     160.894  49.034 -34.089  1.00135.77      A16S
ATOM  49704  O2P GUA  1451     159.256  49.285 -32.134  1.00135.77      A16S
ATOM  49705  O5' GUA  1451     158.836  50.429 -34.311  1.00130.60      A16S
ATOM  49706  C5' GUA  1451     158.903  50.568 -35.726  1.00130.60      A16S
ATOM  49707  C4' GUA  1451     157.995  51.679 -36.194  1.00130.60      A16S
ATOM  49708  O4' GUA  1451     156.614  51.337 -35.884  1.00130.60      A16S
ATOM  49709  C1' GUA  1451     155.908  52.509 -35.503  1.00130.60      A16S
ATOM  49710  N9  GUA  1451     155.625  52.418 -34.076  1.00135.77      A16S
ATOM  49711  C4  GUA  1451     154.713  53.170 -33.376  1.00135.77      A16S
ATOM  49712  N3  GUA  1451     153.891  54.108 -33.897  1.00135.77      A16S
ATOM  49713  C2  GUA  1451     153.138  54.673 -32.970  1.00135.77      A16S
ATOM  49714  N2  GUA  1451     152.264  55.629 -33.315  1.00135.77      A16S
ATOM  49715  N1  GUA  1451     153.188  54.344 -31.638  1.00135.77      A16S
ATOM  49716  C6  GUA  1451     154.027  53.383 -31.080  1.00135.77      A16S
ATOM  49717  O6  GUA  1451     153.998  53.168 -29.863  1.00135.77      A16S
ATOM  49718  C5  GUA  1451     154.838  52.768 -32.063  1.00135.77      A16S
ATOM  49719  N7  GUA  1451     155.798  51.773 -31.942  1.00135.77      A16S
ATOM  49720  C8  GUA  1451     156.232  51.594 -33.159  1.00135.77      A16S
ATOM  49721  C2' GUA  1451     156.843  53.687 -35.777  1.00130.60      A16S
ATOM  49722  O2' GUA  1451     156.679  54.147 -37.107  1.00130.60      A16S
ATOM  49723  C3' GUA  1451     158.194  53.033 -35.528  1.00130.60      A16S
ATOM  49724  O3' GUA  1451     159.273  53.774 -36.088  1.00130.60      A16S
ATOM  49725  P   GUA  1452     160.021  54.880 -35.192  1.00142.08      A16S
ATOM  49726  O1P GUA  1452     161.113  55.458 -36.016  1.00188.98      A16S
ATOM  49727  O2P GUA  1452     160.335  54.289 -33.867  1.00188.98      A16S
ATOM  49728  O5' GUA  1452     158.915  56.005 -34.980  1.00142.08      A16S
ATOM  49729  C5' GUA  1452     158.459  56.789 -36.076  1.00142.08      A16S
ATOM  49730  C4' GUA  1452     157.512  57.860 -35.595  1.00142.08      A16S
ATOM  49731  O4' GUA  1452     156.276  57.252 -35.133  1.00142.08      A16S
ATOM  49732  C1' GUA  1452     155.756  58.000 -34.040  1.00142.08      A16S
ATOM  49733  N9  GUA  1452     155.768  57.151 -32.852  1.00188.98      A16S
ATOM  49734  C4  GUA  1452     155.054  57.358 -31.695  1.00188.98      A16S
ATOM  49735  N3  GUA  1452     154.197  58.376 -31.463  1.00188.98      A16S
ATOM  49736  C2  GUA  1452     153.676  58.317 -30.249  1.00188.98      A16S
ATOM  49737  N2  GUA  1452     152.806  59.256 -29.852  1.00188.98      A16S
ATOM  49738  N1  GUA  1452     153.972  57.334 -29.333  1.00188.98      A16S
ATOM  49739  C6  GUA  1452     154.850  56.276 -29.549  1.00188.98      A16S
ATOM  49740  O6  GUA  1452     155.048  55.444 -28.653  1.00188.98      A16S
ATOM  49741  C5  GUA  1452     155.418  56.328 -30.851  1.00188.98      A16S
ATOM  49742  N7  GUA  1452     156.330  55.483 -31.470  1.00188.98      A16S
ATOM  49743  C8  GUA  1452     156.504  56.006 -32.654  1.00188.98      A16S
ATOM  49744  C2' GUA  1452     156.673  59.209 -33.856  1.00142.08      A16S
ATOM  49745  O2' GUA  1452     156.190  60.313 -34.597  1.00142.08      A16S
ATOM  49746  C3' GUA  1452     157.984  58.656 -34.391  1.00142.08      A16S
ATOM  49747  O3' GUA  1452     158.895  59.683 -34.737  1.00142.08      A16S
ATOM  49748  P   GUA  1453     159.890  60.256 -33.617  1.00140.54      A16S
ATOM  49749  O1P GUA  1453     160.867  61.143 -34.295  1.00185.35      A16S
ATOM  49750  O2P GUA  1453     160.378  59.107 -32.810  1.00185.35      A16S
ATOM  49751  O5' GUA  1453     158.946  61.153 -32.699  1.00140.54      A16S
ATOM  49752  C5' GUA  1453     158.253  62.274 -33.241  1.00140.54      A16S
ATOM  49753  C4' GUA  1453     157.344  62.881 -32.199  1.00140.54      A16S
ATOM  49754  O4' GUA  1453     156.287  61.940 -31.872  1.00140.54      A16S
ATOM  49755  C1' GUA  1453     155.990  62.016 -30.486  1.00140.54      A16S
ATOM  49756  N9  GUA  1453     156.326  60.731 -29.880  1.00185.35      A16S
ATOM  49757  C4  GUA  1453     155.989  60.301 -28.617  1.00185.35      A16S
ATOM  49758  N3  GUA  1453     155.288  61.001 -27.701  1.00185.35      A16S
ATOM  49759  C2  GUA  1453     155.120  60.318 -26.581  1.00185.35      A16S
ATOM  49760  N2  GUA  1453     154.447  60.865 -25.561  1.00185.35      A16S
ATOM  49761  N1  GUA  1453     155.600  59.047 -26.378  1.00185.35      A16S
ATOM  49762  C6  GUA  1453     156.323  58.306 -27.307  1.00185.35      A16S
ATOM  49763  O6  GUA  1453     156.705  57.163 -27.024  1.00185.35      A16S
ATOM  49764  C5  GUA  1453     156.515  59.030 -28.511  1.00185.35      A16S
ATOM  49765  N7  GUA  1453     157.173  58.670 -29.679  1.00185.35      A16S
ATOM  49766  C8  GUA  1453     157.037  59.708 -30.460  1.00185.35      A16S
ATOM  49767  C2' GUA  1453     156.809  63.175 -29.917  1.00140.54      A16S
ATOM  49768  O2' GUA  1453     156.057  64.370 -29.988  1.00140.54      A16S
ATOM  49769  C3' GUA  1453     158.000  63.185 -30.863  1.00140.54      A16S
ATOM  49770  O3' GUA  1453     158.646  64.451 -30.880  1.00140.54      A16S
ATOM  49771  P   CYT  1454     159.875  64.727 -29.881  1.00162.51      A16S
ATOM  49772  O1P CYT  1454     160.507  65.998 -30.317  1.00171.00      A16S
ATOM  49773  O2P CYT  1454     160.694  63.491 -29.798  1.00171.00      A16S
ATOM  49774  O5' CYT  1454     159.185  64.967 -28.463  1.00162.51      A16S
ATOM  49775  C5' CYT  1454     158.322  66.082 -28.251  1.00162.51      A16S
ATOM  49776  C4' CYT  1454     157.654  65.986 -26.898  1.00162.51      A16S
ATOM  49777  O4' CYT  1454     156.879  64.758 -26.836  1.00162.51      A16S
ATOM  49778  C1' CYT  1454     156.920  64.233 -25.519  1.00162.51      A16S
ATOM  49779  N1  CYT  1454     157.593  62.927 -25.565  1.00171.00      A16S
ATOM  49780  C6  CYT  1454     158.263  62.520 -26.685  1.00171.00      A16S
ATOM  49781  C2  CYT  1454     157.540  62.105 -24.437  1.00171.00      A16S
ATOM  49782  O2  CYT  1454     156.925  62.502 -23.436  1.00171.00      A16S
ATOM  49783  N3  CYT  1454     158.159  60.904 -24.465  1.00171.00      A16S
ATOM  49784  C4  CYT  1454     158.812  60.516 -25.562  1.00171.00      A16S
ATOM  49785  N4  CYT  1454     159.411  59.324 -25.544  1.00171.00      A16S
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ATOM  49786  C5  CYT  1454     158.882  61.334 -26.726  1.00171.00      A16S
ATOM  49787  C2' CYT  1454     157.673  65.245 -24.657  1.00162.51      A16S
ATOM  49788  O2' CYT  1454     156.755  66.153 -24.083  1.00162.51      A16S
ATOM  49789  C3' CYT  1454     158.579  65.894 -25.694  1.00162.51      A16S
ATOM  49790  O3' CYT  1454     159.026  67.179 -25.272  1.00162.51      A16S
ATOM  49791  P   CYT  1455     160.361  67.305 -24.380  1.00138.64      A16S
ATOM  49792  O1P CYT  1455     160.737  68.739 -24.353  1.00117.68      A16S
ATOM  49793  O2P CYT  1455     161.347  66.299 -24.854  1.00117.68      A16S
ATOM  49794  O5' CYT  1455     159.893  66.892 -22.911  1.00138.64      A16S
ATOM  49795  C5' CYT  1455     158.852  67.609 -22.247  1.00138.64      A16S
ATOM  49796  C4' CYT  1455     158.547  66.979 -20.906  1.00138.64      A16S
ATOM  49797  O4' CYT  1455     158.068  65.624 -21.102  1.00138.64      A16S
ATOM  49798  C1' CYT  1455     158.440  64.827 -19.991  1.00138.64      A16S
ATOM  49799  N1  CYT  1455     159.209  63.676 -20.475  1.00117.68      A16S
ATOM  49800  C6  CYT  1455     159.691  63.633 -21.752  1.00117.68      A16S
ATOM  49801  C2  CYT  1455     159.442  62.618 -19.597  1.00117.68      A16S
ATOM  49802  O2  CYT  1455     158.986  62.686 -18.446  1.00117.68      A16S
ATOM  49803  N3  CYT  1455     160.155  61.551 -20.019  1.00117.68      A16S
ATOM  49804  C4  CYT  1455     160.625  61.518 -21.267  1.00117.68      A16S
ATOM  49805  N4  CYT  1455     161.324  60.445 -21.642  1.00117.68      A16S
ATOM  49806  C5  CYT  1455     160.398  62.583 -22.186  1.00117.68      A16S
ATOM  49807  C2' CYT  1455     159.251  65.705 -19.039  1.00138.64      A16S
ATOM  49808  O2' CYT  1455     158.424  66.186 -18.002  1.00138.64      A16S
ATOM  49809  C3' CYT  1455     159.731  66.806 -19.972  1.00138.64      A16S
ATOM  49810  O3' CYT  1455     159.990  67.992 -19.242  1.00138.64      A16S
ATOM  49811  P   CYT  1456     161.431  68.205 -18.577  1.00141.27      A16S
ATOM  49812  O1P CYT  1456     161.417  69.499 -17.859  1.00 96.43      A16S
ATOM  49813  O2P CYT  1456     162.440  67.961 -19.630  1.00 96.43      A16S
ATOM  49814  O5' CYT  1456     161.541  67.038 -17.501  1.00141.27      A16S
ATOM  49815  C5' CYT  1456     160.953  67.177 -16.214  1.00141.27      A16S
ATOM  49816  C4' CYT  1456     161.343  66.014 -15.336  1.00141.27      A16S
ATOM  49817  O4' CYT  1456     160.839  64.785 -15.928  1.00141.27      A16S
ATOM  49818  C1' CYT  1456     161.752  63.725 -15.679  1.00141.27      A16S
ATOM  49819  N1  CYT  1456     162.297  63.261 -16.964  1.00 96.43      A16S
ATOM  49820  C6  CYT  1456     162.184  64.019 -18.098  1.00 96.43      A16S
ATOM  49821  C2  CYT  1456     162.943  62.029 -17.003  1.00 96.43      A16S
ATOM  49822  O2  CYT  1456     163.029  61.370 -15.958  1.00 96.43      A16S
ATOM  49823  N3  CYT  1456     163.461  61.587 -18.174  1.00 96.43      A16S
ATOM  49824  C4  CYT  1456     163.354  62.336 -19.275  1.00 96.43      A16S
ATOM  49825  N4  CYT  1456     163.893  61.870 -20.406  1.00 96.43      A16S
ATOM  49826  C5  CYT  1456     162.694  63.599 -19.265  1.00 96.43      A16S
ATOM  49827  C2' CYT  1456     162.850  64.291 -14.783  1.00141.27      A16S
ATOM  49828  O2' CYT  1456     162.496  64.102 -13.428  1.00141.27      A16S
ATOM  49829  C3' CYT  1456     162.835  65.752 -15.205  1.00141.27      A16S
ATOM  49830  O3' CYT  1456     163.464  66.594 -14.246  1.00141.27      A16S
ATOM  49831  P   GUA  1457     165.061  66.792 -14.296  1.00116.92      A16S
ATOM  49832  O1P GUA  1457     165.415  67.877 -13.349  1.00103.80      A16S
ATOM  49833  O2P GUA  1457     165.463  66.900 -15.720  1.00103.80      A16S
ATOM  49834  O5' GUA  1457     165.633  65.420 -13.721  1.00116.92      A16S
ATOM  49835  C5' GUA  1457     165.184  64.915 -12.466  1.00116.92      A16S
ATOM  49836  C4' GUA  1457     165.679  63.503 -12.255  1.00116.92      A16S
ATOM  49837  O4' GUA  1457     165.067  62.601 -13.215  1.00116.92      A16S
ATOM  49838  C1' GUA  1457     165.984  61.567 -13.543  1.00116.92      A16S
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ATOM  49841  N3  GUA  1457     167.489  59.574 -15.291  1.00103.80      A16S
ATOM  49842  C2  GUA  1457     168.095  58.906 -16.264  1.00103.80      A16S
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ATOM  49847  C5  GUA  1457     166.973  61.259 -17.010  1.00103.80      A16S
ATOM  49848  N7  GUA  1457     166.315  62.478 -17.048  1.00103.80      A16S
ATOM  49849  C8  GUA  1457     165.915  62.670 -15.820  1.00103.80      A16S
ATOM  49850  C2' GUA  1457     167.230  61.794 -12.687  1.00116.92      A16S
ATOM  49851  O2' GUA  1457     167.110  61.086 -11.471  1.00116.92      A16S
ATOM  49852  C3' GUA  1457     167.163  63.295 -12.470  1.00116.92      A16S
ATOM  49853  O3' GUA  1457     167.896  63.695 -11.326  1.00116.92      A16S
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ATOM  49856  O2P URI  1458     169.099  65.376 -12.731  1.00 91.96      A16S
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ATOM  49858  C5' URI  1458     170.401  62.223 -11.077  1.00 90.45      A16S
ATOM  49859  C4' URI  1458     171.039  61.136 -11.896  1.00 90.45      A16S
ATOM  49860  O4' URI  1458     170.175  60.775 -13.002  1.00 90.45      A16S
ATOM  49861  C1' URI  1458     170.966  60.348 -14.099  1.00 90.45      A16S
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ATOM  49868  O4  URI  1458     169.671  63.229 -18.594  1.00 91.96      A16S
ATOM  49869  C5  URI  1458     169.546  63.061 -16.221  1.00 91.96      A16S
ATOM  49870  C2' URI  1458     172.432  60.504 -13.689  1.00 90.45      A16S
ATOM  49871  O2' URI  1458     172.927  59.267 -13.221  1.00 90.45      A16S
ATOM  49872  C3' URI  1458     172.322  61.542 -12.583  1.00 90.45      A16S
ATOM  49873  O3' URI  1458     173.399  61.461 -11.675  1.00 90.45      A16S
ATOM  49874  P   GUA  1459     174.637  62.465 -11.832  1.00104.15      A16S
ATOM  49875  O1P GUA  1459     175.572  62.177 -10.714  1.00106.34      A16S
ATOM  49876  O2P GUA  1459     174.096  63.836 -12.004  1.00106.34      A16S
ATOM  49877  O5' GUA  1459     175.317  62.010 -13.198  1.00104.15      A16S
ATOM  49878  C5' GUA  1459     175.866  60.707 -13.333  1.00104.15      A16S
ATOM  49879  C4' GUA  1459     176.239  60.448 -14.767  1.00104.15      A16S
ATOM  49880  O4' GUA  1459     175.043  60.357 -15.577  1.00104.15      A16S
ATOM  49881  C1' GUA  1459     175.296  60.903 -16.860  1.00104.15      A16S
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ATOM  49883  C4  GUA  1459     173.934  62.521 -18.246  1.00106.34      A16S
ATOM  49884  N3  GUA  1459     174.279  62.077 -19.472  1.00106.34      A16S
ATOM  49885  C2  GUA  1459     173.673  62.757 -20.430  1.00106.34      A16S
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ATOM  49887  N1  GUA  1459     172.793  63.781 -20.199  1.00106.34      A16S
ATOM  49888  C6  GUA  1459     172.422  64.249 -18.943  1.00106.34      A16S
ATOM  49889  O6  GUA  1459     171.610  65.178 -18.844  1.00106.34      A16S
ATOM  49890  C5  GUA  1459     173.073  63.540 -17.912  1.00106.34      A16S
ATOM  49891  N7  GUA  1459     172.996  63.690 -16.536  1.00106.34      A16S
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ATOM	49892	C8	GUA	1459	173.792	62.771	-16.068	1.00106.34	A16S	ATOM	49945	O4'	URI	1462	183.121	67.762	-23.656	1.00 97.70	A16S
ATOM	49893	C2'	GUA	1459	176.767	61.317	-16.904	1.00104.15	A16S	ATOM	49946	C1'	URI	1462	182.149	68.764	-23.415	1.00 97.70	A16S
ATOM	49894	O2'	GUA	1459	177.538	60.280	-17.479	1.00104.15	A16S	ATOM	49947	N1	URI	1462	181.819	68.749	-21.985	1.00 65.70	A16S
ATOM	49895	C3'	GUA	1459	177.058	61.542	-15.426	1.00104.15	A16S	ATOM	49948	C6	URI	1462	182.629	68.128	-21.066	1.00 65.70	A16S
ATOM	49896	O3'	GUA	1459	178.433	61.372	-15.118	1.00104.15	A16S	ATOM	49949	C2	URI	1462	180.666	69.389	-21.596	1.00 65.70	A16S
ATOM	49897	P	ADE	1460	179.495	62.483	-15.579	1.00 95.62	A16S	ATOM	49950	O2	URI	1462	179.926	69.937	-22.377	1.00 65.70	A16S
ATOM	49898	O1P	ADE	1460	180.304	62.832	-14.382	1.00112.90	A16S	ATOM	49951	N3	URI	1462	180.410	69.360	-20.257	1.00 65.70	A16S
ATOM	49899	O2P	ADE	1460	178.781	63.551	-16.321	1.00112.90	A16S	ATOM	49952	C4	URI	1462	181.169	68.761	-19.287	1.00 65.70	A16S
ATOM	49900	O5'	ADE	1460	180.426	61.697	-16.604	1.00 95.62	A16S	ATOM	49953	O4	URI	1462	180.775	68.784	-18.124	1.00 65.70	A16S
ATOM	49901	C5'	ADE	1460	181.113	60.517	-16.206	1.00 95.62	A16S	ATOM	49954	C5	URI	1462	182.353	68.113	-19.764	1.00 65.70	A16S
ATOM	49902	C4'	ADE	1460	181.724	59.852	-17.408	1.00 95.62	A16S	ATOM	49955	C2'	URI	1462	182.773	70.093	-23.825	1.00 97.70	A16S
ATOM	49903	O4'	ADE	1460	180.664	59.430	-18.295	1.00 95.62	A16S	ATOM	49956	O2'	URI	1462	182.524	70.343	-25.192	1.00 97.70	A16S
ATOM	49904	C1'	ADE	1460	181.111	59.516	-19.637	1.00 95.62	A16S	ATOM	49957	C3'	URI	1462	184.238	69.808	-23.567	1.00 97.70	A16S
ATOM	49905	N9	ADE	1460	180.170	60.340	-20.388	1.00112.90	A16S	ATOM	49958	O3'	URI	1462	185.034	70.721	-24.300	1.00 97.70	A16S
ATOM	49906	C4	ADE	1460	180.031	60.340	-21.752	1.00112.90	A16S	ATOM	49959	P	GUA	1463	185.416	72.130	-23.637	1.00 86.37	A16S
ATOM	49907	N3	ADE	1460	180.719	59.603	-22.641	1.00112.90	A16S	ATOM	49960	O1P	GUA	1463	186.483	72.754	-24.464	1.00 64.09	A16S
ATOM	49908	C2	ADE	1460	180.308	59.857	-23.877	1.00112.90	A16S	ATOM	49961	O2P	GUA	1463	185.651	71.877	-22.190	1.00 64.09	A16S
ATOM	49909	N1	ADE	1460	179.360	60.701	-24.296	1.00112.90	A16S	ATOM	49962	O5'	GUA	1463	184.099	73.016	-23.792	1.00 86.37	A16S
ATOM	49910	C6	ADE	1460	178.690	61.429	-23.376	1.00112.90	A16S	ATOM	49963	C5'	GUA	1463	183.707	73.495	-25.071	1.00 86.37	A16S
ATOM	49911	N6	ADE	1460	177.746	62.271	-23.792	1.00112.90	A16S	ATOM	49964	C4'	GUA	1463	182.601	74.514	-24.947	1.00 86.37	A16S
ATOM	49912	C5	ADE	1460	179.032	61.251	-22.028	1.00112.90	A16S	ATOM	49965	O4'	GUA	1463	181.427	73.898	-24.362	1.00 86.37	A16S
ATOM	49913	N7	ADE	1460	178.553	61.823	-20.858	1.00112.90	A16S	ATOM	49966	C1'	GUA	1463	180.682	74.876	-23.656	1.00 86.37	A16S
ATOM	49914	C8	ADE	1460	179.260	61.250	-19.915	1.00112.90	A16S	ATOM	49967	N9	GUA	1463	180.587	74.455	-22.264	1.00 64.09	A16S
ATOM	49915	C2'	ADE	1460	182.529	60.088	-19.629	1.00 95.62	A16S	ATOM	49968	C4	GUA	1463	179.680	74.899	-21.331	1.00 64.09	A16S
ATOM	49916	O2'	ADE	1460	183.476	59.050	-19.775	1.00 95.62	A16S	ATOM	49969	N3	GUA	1463	178.689	75.784	-21.547	1.00 64.09	A16S
ATOM	49917	C3'	ADE	1460	182.575	60.768	-18.268	1.00 95.62	A16S	ATOM	49970	C2	GUA	1463	177.987	76.012	-20.452	1.00 64.09	A16S
ATOM	49918	O3'	ADE	1460	183.899	60.837	-17.770	1.00 95.62	A16S	ATOM	49971	N2	GUA	1463	176.945	76.850	-20.493	1.00 64.09	A16S
ATOM	49919	P	CYT	1461	184.561	62.269	-17.488	1.00 79.15	A16S	ATOM	49972	N1	GUA	1463	178.249	75.433	-19.236	1.00 64.09	A16S
ATOM	49920	O1P	CYT	1461	185.983	62.053	-17.121	1.00100.21	A16S	ATOM	49973	C6	GUA	1463	179.266	74.524	-18.989	1.00 64.09	A16S
ATOM	49921	O2P	CYT	1461	183.663	62.999	-16.554	1.00100.21	A16S	ATOM	49974	O6	GUA	1463	179.421	74.069	-17.850	1.00 64.09	A16S
ATOM	49922	O5'	CYT	1461	184.534	62.986	-18.910	1.00 79.15	A16S	ATOM	49975	C5	GUA	1463	180.015	74.253	-20.161	1.00 64.09	A16S
ATOM	49923	C5'	CYT	1461	185.276	62.452	-19.997	1.00 79.15	A16S	ATOM	49976	N7	GUA	1463	181.090	73.403	-20.360	1.00 64.09	A16S
ATOM	49924	C4'	CYT	1461	184.746	62.981	-21.301	1.00 79.15	A16S	ATOM	49977	C8	GUA	1463	181.394	73.556	-21.621	1.00 64.09	A16S
ATOM	49925	O4'	CYT	1461	183.341	62.631	-21.425	1.00 79.15	A16S	ATOM	49978	C2'	GUA	1463	181.441	76.193	-23.799	1.00 86.37	A16S
ATOM	49926	C1'	CYT	1461	182.662	63.648	-22.147	1.00 79.15	A16S	ATOM	49979	O2'	GUA	1463	180.961	76.895	-24.923	1.00 86.37	A16S
ATOM	49927	N1	CYT	1461	181.663	64.264	-21.261	1.00100.21	A16S	ATOM	49980	C3'	GUA	1463	182.854	75.691	-24.031	1.00 86.37	A16S
ATOM	49928	C6	CYT	1461	181.696	64.058	-19.910	1.00100.21	A16S	ATOM	49981	O3'	GUA	1463	183.647	76.686	-24.652	1.00 86.37	A16S
ATOM	49929	C2	CYT	1461	180.690	65.089	-21.824	1.00100.21	A16S	ATOM	49982	P	GUA	1464	184.808	77.394	-23.803	1.00 72.03	A16S
ATOM	49930	O2	CYT	1461	180.660	65.224	-23.053	1.00100.21	A16S	ATOM	49983	O1P	GUA	1464	185.803	77.953	-24.749	1.00 54.05	A16S
ATOM	49931	N3	CYT	1461	179.807	65.715	-21.017	1.00100.21	A16S	ATOM	49984	O2P	GUA	1464	185.233	76.420	-22.765	1.00 54.05	A16S
ATOM	49932	C4	CYT	1461	179.864	65.532	-19.698	1.00100.21	A16S	ATOM	49985	O5'	GUA	1464	184.089	78.597	-23.049	1.00 72.03	A16S
ATOM	49933	N4	CYT	1461	178.991	66.194	-18.940	1.00100.21	A16S	ATOM	49986	C5'	GUA	1464	183.548	79.681	-23.780	1.00 72.03	A16S
ATOM	49934	C5	CYT	1461	180.823	64.668	-19.098	1.00100.21	A16S	ATOM	49987	C4'	GUA	1464	182.231	80.117	-23.183	1.00 72.03	A16S
ATOM	49935	C2'	CYT	1461	183.723	64.667	-22.559	1.00 79.15	A16S	ATOM	49988	O4'	GUA	1464	181.462	78.942	-22.812	1.00 72.03	A16S
ATOM	49936	O2'	CYT	1461	184.263	64.319	-23.815	1.00 79.15	A16S	ATOM	49989	C1'	GUA	1464	180.584	79.271	-21.751	1.00 72.03	A16S
ATOM	49937	C3'	CYT	1461	184.732	64.487	-21.442	1.00 79.15	A16S	ATOM	49990	N9	GUA	1464	180.936	78.464	-20.592	1.00 54.05	A16S
ATOM	49938	O3'	CYT	1461	186.003	64.983	-21.809	1.00 79.15	A16S	ATOM	49991	C4	GUA	1464	180.193	78.318	-19.441	1.00 54.05	A16S
ATOM	49939	P	URI	1462	186.443	66.456	-21.336	1.00 97.70	A16S	ATOM	49992	N3	GUA	1464	178.987	78.876	-19.196	1.00 54.05	A16S
ATOM	49940	O1P	URI	1462	187.828	66.669	-21.844	1.00 65.70	A16S	ATOM	49993	C2	GUA	1464	178.524	78.557	-17.996	1.00 54.05	A16S
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ATOM	49942	O5'	URI	1462	185.453	67.430	-22.125	1.00 97.70	A16S	ATOM	49995	N1	GUA	1464	179.196	77.765	-17.102	1.00 54.05	A16S
ATOM	49943	C5'	URI	1462	185.526	67.558	-23.546	1.00 97.70	A16S	ATOM	49996	C6	GUA	1464	180.438	77.182	-17.328	1.00 54.05	A16S
ATOM	49944	C4'	URI	1462	184.366	68.381	-24.074	1.00 97.70	A16S	ATOM	49997	O6	GUA	1464	180.960	76.481	-16.445	1.00 54.05	A16S

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ATOM  49998  C5  GUA  1464     180.943  77.509 -18.623  1.00 54.05      A16S
ATOM  49999  N7  GUA  1464     182.127  77.140 -19.251  1.00 54.05      A16S
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ATOM  50001  C2' GUA  1464     180.808  80.751 -21.456  1.00 72.03      A16S
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ATOM  50003  C3' GUA  1464     182.252  80.910 -21.890  1.00 72.03      A16S
ATOM  50004  O3' GUA  1464     182.526  82.280 -22.140  1.00 72.03      A16S
ATOM  50005  P   GUA  1465     182.815  83.273 -20.911  1.00 50.85      A16S
ATOM  50006  O1P GUA  1465     182.820  84.659 -21.469  1.00 65.05      A16S
ATOM  50007  O2P GUA  1465     183.994  82.782 -20.150  1.00 65.05      A16S
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ATOM  50010  C4' GUA  1465     179.373  83.710 -19.093  1.00 50.85      A16S
ATOM  50011  O4' GUA  1465     179.108  82.345 -18.674  1.00 50.85      A16S
ATOM  50012  C1' GUA  1465     178.851  82.324 -17.279  1.00 50.85      A16S
ATOM  50013  N9  GUA  1465     179.810  81.424 -16.652  1.00 65.05      A16S
ATOM  50014  C4  GUA  1465     179.787  80.963 -15.357  1.00 65.05      A16S
ATOM  50015  N3  GUA  1465     178.840  81.230 -14.433  1.00 65.05      A16S
ATOM  50016  C2  GUA  1465     179.118  80.669 -13.265  1.00 65.05      A16S
ATOM  50017  N2  GUA  1465     178.292  80.831 -12.230  1.00 65.05      A16S
ATOM  50018  N1  GUA  1465     180.234  79.910 -13.026  1.00 65.05      A16S
ATOM  50019  C6  GUA  1465     181.221  79.623 -13.961  1.00 65.05      A16S
ATOM  50020  O6  GUA  1465     182.199  78.941 -13.635  1.00 65.05      A16S
ATOM  50021  C5  GUA  1465     180.931  80.210 -15.219  1.00 65.05      A16S
ATOM  50022  N7  GUA  1465     181.638  80.167 -16.410  1.00 65.05      A16S
ATOM  50023  C8  GUA  1465     180.933  80.896 -17.230  1.00 65.05      A16S
ATOM  50024  C2' GUA  1465     179.001  83.762 -16.772  1.00 50.85      A16S
ATOM  50025  O2' GUA  1465     177.742  84.396 -16.758  1.00 50.85      A16S
ATOM  50026  C3' GUA  1465     179.902  84.366 -17.833  1.00 50.85      A16S
ATOM  50027  O3' GUA  1465     179.730  85.770 -17.900  1.00 50.85      A16S
ATOM  50028  P   GUA  1466     180.602  86.725 -16.950  1.00 47.95      A16S
ATOM  50029  O1P GUA  1466     180.400  88.120 -17.397  1.00 53.50      A16S
ATOM  50030  O2P GUA  1466     181.975  86.182 -16.859  1.00 53.50      A16S
ATOM  50031  O5' GUA  1466     179.919  86.561 -15.525  1.00 47.95      A16S
ATOM  50032  C5' GUA  1466     178.585  87.004 -15.313  1.00 47.95      A16S
ATOM  50033  C4' GUA  1466     178.147  86.676 -13.911  1.00 47.95      A16S
ATOM  50034  O4' GUA  1466     178.187  85.238 -13.699  1.00 47.95      A16S
ATOM  50035  C1' GUA  1466     178.605  84.966 -12.372  1.00 47.95      A16S
ATOM  50036  N9  GUA  1466     179.849  84.208 -12.442  1.00 53.50      A16S
ATOM  50037  C4  GUA  1466     180.357  83.371 -11.479  1.00 53.50      A16S
ATOM  50038  N3  GUA  1466     179.807  83.121 -10.272  1.00 53.50      A16S
ATOM  50039  C2  GUA  1466     180.524  82.250  -9.575  1.00 53.50      A16S
ATOM  50040  N2  GUA  1466     180.138  81.886  -8.341  1.00 53.50      A16S
ATOM  50041  N1  GUA  1466     181.673  81.668 -10.035  1.00 53.50      A16S
ATOM  50042  C6  GUA  1466     182.244  81.904 -11.276  1.00 53.50      A16S
ATOM  50043  O6  GUA  1466     183.267  81.300 -11.600  1.00 53.50      A16S
ATOM  50044  C5  GUA  1466     181.505  82.846 -12.021  1.00 53.50      A16S
ATOM  50045  N7  GUA  1466     181.733  83.365 -13.285  1.00 53.50      A16S
ATOM  50046  C8  GUA  1466     180.728  84.169 -13.491  1.00 53.50      A16S
ATOM  50047  C2' GUA  1466     178.755  86.312 -11.665  1.00 47.95      A16S
ATOM  50048  O2' GUA  1466     177.529  86.649 -11.054  1.00 47.95      A16S
ATOM  50049  C3' GUA  1466     179.063  87.223 -12.839  1.00 47.95      A16S
ATOM  50050  O3' GUA  1466     178.746  88.570 -12.564  1.00 47.95      A16S
ATOM  50051  P   CYT  1467     179.827  89.480 -11.835  1.00 43.92      A16S
ATOM  50052  O1P CYT  1467     179.161  90.748 -11.445  1.00 59.55      A16S
ATOM  50053  O2P CYT  1467     181.033  89.521 -12.693  1.00 59.55      A16S
ATOM  50054  O5' CYT  1467     180.161  88.633 -10.523  1.00 43.92      A16S
ATOM  50055  C5' CYT  1467     179.274  88.629  -9.407  1.00 43.92      A16S
ATOM  50056  C4' CYT  1467     179.872  87.870  -8.246  1.00 43.92      A16S
ATOM  50057  O4' CYT  1467     180.063  86.480  -8.617  1.00 43.92      A16S
ATOM  50058  C1' CYT  1467     181.145  85.933  -7.880  1.00 43.92      A16S
ATOM  50059  N1  CYT  1467     182.133  85.420  -8.828  1.00 59.55      A16S
ATOM  50060  C6  CYT  1467     182.239  85.943 -10.082  1.00 59.55      A16S
ATOM  50061  C2  CYT  1467     182.978  84.406  -8.419  1.00 59.55      A16S
ATOM  50062  O2  CYT  1467     182.831  83.936  -7.288  1.00 59.55      A16S
ATOM  50063  N3  CYT  1467     183.932  83.956  -9.259  1.00 59.55      A16S
ATOM  50064  C4  CYT  1467     184.044  84.483 -10.476  1.00 59.55      A16S
ATOM  50065  N4  CYT  1467     185.008  84.023 -11.273  1.00 59.55      A16S
ATOM  50066  C5  CYT  1467     183.174  85.510 -10.931  1.00 59.55      A16S
ATOM  50067  C2' CYT  1467     181.729  87.061  -7.031  1.00 43.92      A16S
ATOM  50068  O2' CYT  1467     181.247  86.986  -5.709  1.00 43.92      A16S
ATOM  50069  C3' CYT  1467     181.254  88.288  -7.797  1.00 43.92      A16S
ATOM  50070  O3' CYT  1467     181.236  89.439  -6.981  1.00 43.92      A16S
ATOM  50071  P   GUA  1468     182.606  90.226  -6.723  1.00 42.28      A16S
ATOM  50072  O1P GUA  1468     182.318  91.382  -5.836  1.00 60.24      A16S
ATOM  50073  O2P GUA  1468     183.259  90.453  -8.034  1.00 60.24      A16S
ATOM  50074  O5' GUA  1468     183.476  89.176  -5.916  1.00 42.28      A16S
ATOM  50075  C5' GUA  1468     183.387  89.115  -4.512  1.00 42.28      A16S
ATOM  50076  C4' GUA  1468     184.527  88.311  -3.946  1.00 42.28      A16S
ATOM  50077  O4' GUA  1468     184.432  86.958  -4.483  1.00 42.28      A16S
ATOM  50078  C1' GUA  1468     185.729  86.404  -4.619  1.00 42.28      A16S
ATOM  50079  N9  GUA  1468     185.967  86.134  -6.035  1.00 60.24      A16S
ATOM  50080  C4  GUA  1468     186.910  85.281  -6.566  1.00 60.24      A16S
ATOM  50081  N3  GUA  1468     187.771  84.508  -5.870  1.00 60.24      A16S
ATOM  50082  C2  GUA  1468     188.577  83.823  -6.666  1.00 60.24      A16S
ATOM  50083  N2  GUA  1468     189.491  83.006  -6.149  1.00 60.24      A16S
ATOM  50084  N1  GUA  1468     188.546  83.891  -8.027  1.00 60.24      A16S
ATOM  50085  C6  GUA  1468     187.675  84.674  -8.766  1.00 60.24      A16S
ATOM  50086  O6  GUA  1468     187.743  84.664  -9.989  1.00 60.24      A16S
ATOM  50087  C5  GUA  1468     186.794  85.413  -7.932  1.00 60.24      A16S
ATOM  50088  N7  GUA  1468     185.783  86.303  -8.256  1.00 60.24      A16S
ATOM  50089  C8  GUA  1468     185.317  86.699  -7.103  1.00 60.24      A16S
ATOM  50090  C2' GUA  1468     186.690  87.435  -4.016  1.00 42.28      A16S
ATOM  50091  O2' GUA  1468     186.767  87.158  -2.631  1.00 42.28      A16S
ATOM  50092  C3' GUA  1468     185.947  88.742  -4.300  1.00 42.28      A16S
ATOM  50093  O3' GUA  1468     186.431  89.889  -3.563  1.00 42.28      A16S
ATOM  50094  P   ADE  1469     187.332  90.984  -4.312  0.00198.45     A16S
ATOM  50095  O1P ADE  1469     186.899  92.321  -3.831  0.00174.90     A16S
ATOM  50096  O2P ADE  1469     187.312  90.685  -5.767  0.00174.90     A16S
ATOM  50097  O5' ADE  1469     188.797  90.704  -3.759  0.00198.45     A16S
ATOM  50098  C5' ADE  1469     189.256  91.341  -2.574  0.00198.45     A16S
ATOM  50099  C4' ADE  1469     190.498  90.658  -2.055  0.00198.45     A16S
ATOM  50100  O4' ADE  1469     190.170  89.339  -1.543  0.00198.45     A16S
ATOM  50101  C1' ADE  1469     191.311  88.500  -1.652  0.00198.45     A16S
ATOM  50102  N9  ADE  1469     190.944  87.286  -2.379  0.00174.90     A16S
ATOM  50103  C4  ADE  1469     191.602  86.082  -2.296  0.00174.90     A16S
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ATOM	50104	N3	ADE	1469	192.677	85.793	-1.542	0.00174.90	A16S	ATOM	50157	C2'	GUA	1471	199.789	86.412	-9.946	1.00 69.87	A16S
ATOM	50105	C2	ADE	1469	193.050	84.528	-1.723	0.00174.90	A16S	ATOM	50158	O2'	GUA	1471	200.887	85.546	-9.803	1.00 69.87	A16S
ATOM	50106	N1	ADE	1469	192.512	83.591	-2.511	0.00174.90	A16S	ATOM	50159	C3'	GUA	1471	200.020	87.739	-9.247	1.00 69.87	A16S
ATOM	50107	C6	ADE	1469	191.432	83.913	-3.255	0.00174.90	A16S	ATOM	50160	O3'	GUA	1471	201.363	88.148	-9.391	1.00 69.87	A16S
ATOM	50108	N6	ADE	1469	190.897	82.977	-4.040	0.00174.90	A16S	ATOM	50161	P	URI	1472	201.729	89.228	-10.511	1.00 49.36	A16S
ATOM	50109	C5	ADE	1469	190.937	85.227	-3.155	0.00174.90	A16S	ATOM	50162	O1P	URI	1472	203.143	89.635	-10.313	1.00 49.99	A16S
ATOM	50110	N7	ADE	1469	189.872	85.876	-3.765	0.00174.90	A16S	ATOM	50163	O2P	URI	1472	200.659	90.263	-10.499	1.00 49.99	A16S
ATOM	50111	C8	ADE	1469	189.918	87.090	-3.271	0.00174.90	A16S	ATOM	50164	O5'	URI	1472	201.622	88.411	-11.877	1.00 49.36	A16S
ATOM	50112	C2'	ADE	1469	192.404	89.303	-2.360	0.00198.45	A16S	ATOM	50165	C5'	URI	1472	202.425	87.254	-12.115	1.00 49.36	A16S
ATOM	50113	O2'	ADE	1469	193.288	89.848	-1.402	0.00198.45	A16S	ATOM	50166	C4'	URI	1472	202.217	86.744	-13.526	1.00 49.36	A16S
ATOM	50114	C3'	ADE	1469	191.583	90.369	-3.076	0.00198.45	A16S	ATOM	50167	O4'	URI	1472	200.911	86.123	-13.636	1.00 49.36	A16S
ATOM	50115	O3'	ADE	1469	192.361	91.522	-3.366	0.00198.45	A16S	ATOM	50168	C1'	URI	1472	200.400	86.317	-14.950	1.00 49.36	A16S
ATOM	50116	P	ADE	1470	193.386	91.490	-4.602	0.00200.66	A16S	ATOM	50169	N1	URI	1472	199.118	87.030	-14.854	1.00 49.99	A16S
ATOM	50117	O1P	ADE	1470	194.052	92.816	-4.663	0.00200.66	A16S	ATOM	50170	C6	URI	1472	198.791	87.740	-13.725	1.00 49.99	A16S
ATOM	50118	O2P	ADE	1470	192.671	90.973	-5.796	0.00200.66	A16S	ATOM	50171	C2	URI	1472	198.251	86.985	-15.943	1.00 49.99	A16S
ATOM	50119	O5'	ADE	1470	194.469	90.410	-4.157	0.00200.66	A16S	ATOM	50172	O2	URI	1472	198.471	86.337	-16.952	1.00 49.99	A16S
ATOM	50120	C5'	ADE	1470	195.437	90.725	-3.163	0.00200.66	A16S	ATOM	50173	N3	URI	1472	197.107	87.731	-15.800	1.00 49.99	A16S
ATOM	50121	C4'	ADE	1470	196.544	89.699	-3.165	0.00200.66	A16S	ATOM	50174	C4	URI	1472	196.745	88.490	-14.709	1.00 49.99	A16S
ATOM	50122	O4'	ADE	1470	196.132	88.489	-2.469	0.00200.66	A16S	ATOM	50175	O4	URI	1472	195.797	89.251	-14.809	1.00 49.99	A16S
ATOM	50123	C1'	ADE	1470	196.747	87.359	-3.080	0.00200.66	A16S	ATOM	50176	C5	URI	1472	197.663	88.445	-13.617	1.00 49.99	A16S
ATOM	50124	N9	ADE	1470	195.708	86.572	-3.739	0.00200.66	A16S	ATOM	50177	C2'	URI	1472	201.452	87.101	-15.739	1.00 49.36	A16S
ATOM	50125	C4	ADE	1470	195.906	85.393	-4.416	0.00200.66	A16S	ATOM	50178	O2'	URI	1472	202.264	86.220	-16.480	1.00 49.36	A16S
ATOM	50126	N3	ADE	1470	197.063	84.728	-4.573	0.00200.66	A16S	ATOM	50179	C3'	URI	1472	202.223	87.794	-14.626	1.00 49.36	A16S
ATOM	50127	C2	ADE	1470	196.878	83.633	-5.307	0.00200.66	A16S	ATOM	50180	O3'	URI	1472	203.538	88.113	-15.054	1.00 49.36	A16S
ATOM	50128	N1	ADE	1470	195.754	83.166	-5.862	0.00200.66	A16S	ATOM	50181	P	CYT	1473	203.811	89.503	-15.817	1.00 50.11	A16S
ATOM	50129	C6	ADE	1470	194.610	83.862	-5.686	0.00200.66	A16S	ATOM	50182	O1P	CYT	1473	205.286	89.642	-15.979	1.00 59.38	A16S
ATOM	50130	N6	ADE	1470	193.491	83.404	-6.247	0.00200.66	A16S	ATOM	50183	O2P	CYT	1473	203.052	90.587	-15.138	1.00 59.38	A16S
ATOM	50131	C5	ADE	1470	194.670	85.038	-4.921	0.00200.66	A16S	ATOM	50184	O5'	CYT	1473	203.175	89.290	-17.263	1.00 50.11	A16S
ATOM	50132	N7	ADE	1470	193.705	85.965	-4.555	0.00200.66	A16S	ATOM	50185	C5'	CYT	1473	203.856	88.537	-18.247	1.00 50.11	A16S
ATOM	50133	C8	ADE	1470	194.370	86.849	-3.851	0.00200.66	A16S	ATOM	50186	C4'	CYT	1473	203.142	88.631	-19.564	1.00 50.11	A16S
ATOM	50134	C2'	ADE	1470	197.690	87.912	-4.147	0.00200.66	A16S	ATOM	50187	O4'	CYT	1473	201.826	88.044	-19.429	1.00 50.11	A16S
ATOM	50135	O2'	ADE	1470	198.966	88.170	-3.598	0.00200.66	A16S	ATOM	50188	C1'	CYT	1473	200.895	88.773	-20.209	1.00 50.11	A16S
ATOM	50136	C3'	ADE	1470	196.942	89.176	-4.529	0.00200.66	A16S	ATOM	50189	N1	CYT	1473	199.918	89.410	-19.305	1.00 59.38	A16S
ATOM	50137	O3'	ADE	1470	197.704	90.089	-5.292	0.00200.66	A16S	ATOM	50190	C6	CYT	1473	200.107	89.418	-17.952	1.00 59.38	A16S
ATOM	50138	P	GUA	1471	197.353	90.279	-6.846	1.00 69.87	A16S	ATOM	50191	C2	CYT	1473	198.795	90.022	-19.861	1.00 59.38	A16S
ATOM	50139	O1P	GUA	1471	197.392	91.731	-7.136	1.00 66.08	A16S	ATOM	50192	O2	CYT	1473	198.639	89.981	-21.084	1.00 59.38	A16S
ATOM	50140	O2P	GUA	1471	196.127	89.515	-7.140	1.00 66.08	A16S	ATOM	50193	N3	CYT	1473	197.909	90.641	-19.056	1.00 59.38	A16S
ATOM	50141	O5'	GUA	1471	198.544	89.533	-7.602	1.00 69.87	A16S	ATOM	50194	C4	CYT	1473	198.104	90.654	-17.739	1.00 59.38	A16S
ATOM	50142	C5'	GUA	1471	199.373	88.590	-6.917	1.00 69.87	A16S	ATOM	50195	N4	CYT	1473	197.199	91.281	-16.983	1.00 59.38	A16S
ATOM	50143	C4'	GUA	1471	199.689	87.407	-7.809	1.00 69.87	A16S	ATOM	50196	C5	CYT	1473	199.235	90.024	-17.139	1.00 59.38	A16S
ATOM	50144	O4'	GUA	1471	198.550	86.517	-7.920	1.00 69.87	A16S	ATOM	50197	C2'	CYT	1473	201.700	89.802	-21.001	1.00 50.11	A16S
ATOM	50145	C1'	GUA	1471	198.580	85.865	-9.183	1.00 69.87	A16S	ATOM	50198	O2'	CYT	1473	202.086	89.238	-22.237	1.00 50.11	A16S
ATOM	50146	N9	GUA	1471	197.331	86.142	-9.885	1.00 66.08	A16S	ATOM	50199	C3'	CYT	1473	202.871	90.035	-20.061	1.00 50.11	A16S
ATOM	50147	C4	GUA	1471	197.022	85.798	-11.182	1.00 66.08	A16S	ATOM	50200	O3'	CYT	1473	204.001	90.581	-20.727	1.00 50.11	A16S
ATOM	50148	N3	GUA	1471	197.803	85.099	-12.028	1.00 66.08	A16S	ATOM	50201	P	GUA	1474	204.630	91.963	-20.208	1.00 48.25	A16S
ATOM	50149	C2	GUA	1471	197.241	84.960	-13.217	1.00 66.08	A16S	ATOM	50202	O1P	GUA	1474	206.062	91.994	-20.590	1.00 81.85	A16S
ATOM	50150	N2	GUA	1471	197.868	84.283	-14.188	1.00 66.08	A16S	ATOM	50203	O2P	GUA	1474	204.250	92.089	-18.778	1.00 81.85	A16S
ATOM	50151	N1	GUA	1471	196.024	85.475	-13.547	1.00 66.08	A16S	ATOM	50204	O5'	GUA	1474	203.855	93.080	-21.035	1.00 48.25	A16S
ATOM	50152	C6	GUA	1471	195.210	86.205	-12.697	1.00 66.08	A16S	ATOM	50205	C5'	GUA	1474	203.994	93.151	-22.440	1.00 48.25	A16S
ATOM	50153	O6	GUA	1471	194.140	86.647	-13.108	1.00 66.08	A16S	ATOM	50206	C4'	GUA	1474	202.640	93.130	-23.110	1.00 48.25	A16S
ATOM	50154	C5	GUA	1471	195.784	86.342	-11.417	1.00 66.08	A16S	ATOM	50207	O4'	GUA	1474	201.712	92.318	-22.342	1.00 48.25	A16S
ATOM	50155	N7	GUA	1471	195.301	86.972	-10.282	1.00 66.08	A16S	ATOM	50208	C1'	GUA	1474	200.388	92.763	-22.587	1.00 48.25	A16S
ATOM	50156	C8	GUA	1471	196.249	86.824	-9.399	1.00 66.08	A16S	ATOM	50209	N9	GUA	1474	199.778	93.123	-21.313	1.00 81.85	A16S

ATOM	50210	C4	GUA	1474	198.469	93.493	-21.095	1.00	81.85	A16S	ATOM	50263	O2'	ADE	1476	191.131	99.349	-27.749	1.00	33.02	A16S
ATOM	50211	N3	GUA	1474	197.496	93.570	-22.027	1.00	81.85	A16S	ATOM	50264	C3'	ADE	1476	193.453	99.968	-27.314	1.00	33.02	A16S
ATOM	50212	C2	GUA	1474	196.338	93.947	-21.504	1.00	81.85	A16S	ATOM	50265	O3'	ADE	1476	193.248	101.005	-28.273	1.00	33.02	A16S
ATOM	50213	N2	GUA	1474	195.252	94.042	-22.282	1.00	81.85	A16S	ATOM	50266	P	ADE	1477	193.374	102.544	-27.819	1.00	40.72	A16S
ATOM	50214	N1	GUA	1474	196.157	94.248	-20.180	1.00	81.85	A16S	ATOM	50267	O1P	ADE	1477	193.362	103.440	-29.042	1.00	44.70	A16S
ATOM	50215	C6	GUA	1474	197.147	94.185	-19.206	1.00	81.85	A16S	ATOM	50268	O2P	ADE	1477	194.509	102.658	-26.818	1.00	44.70	A16S
ATOM	50216	O6	GUA	1474	196.883	94.488	-18.038	1.00	81.85	A16S	ATOM	50269	O5'	ADE	1477	192.027	102.745	-27.003	1.00	40.72	A16S
ATOM	50217	C5	GUA	1474	198.386	93.760	-19.747	1.00	81.85	A16S	ATOM	50270	C5'	ADE	1477	190.786	102.282	-27.517	1.00	40.72	A16S
ATOM	50218	N7	GUA	1474	199.609	93.551	-19.127	1.00	81.85	A16S	ATOM	50271	C4'	ADE	1477	189.689	102.498	-26.506	1.00	40.72	A16S
ATOM	50219	C8	GUA	1474	200.401	93.173	-20.093	1.00	81.85	A16S	ATOM	50272	O4'	ADE	1477	189.876	101.597	-25.382	1.00	40.72	A16S
ATOM	50220	C2'	GUA	1474	200.495	93.949	-23.546	1.00	48.25	A16S	ATOM	50273	C1'	ADE	1477	189.510	102.256	-24.180	1.00	40.72	A16S
ATOM	50221	O2'	GUA	1474	200.395	93.453	-24.867	1.00	48.25	A16S	ATOM	50274	N9	ADE	1477	190.701	102.386	-23.347	1.00	44.70	A16S
ATOM	50222	C3'	GUA	1474	201.903	94.447	-23.259	1.00	48.25	A16S	ATOM	50275	C4	ADE	1477	190.712	102.727	-22.019	1.00	44.70	A16S
ATOM	50223	O3'	GUA	1474	202.406	95.136	-24.396	1.00	48.25	A16S	ATOM	50276	N3	ADE	1477	189.655	103.016	-21.243	1.00	44.70	A16S
ATOM	50224	P	URI	1475	202.431	96.738	-24.414	1.00	56.96	A16S	ATOM	50277	C2	ADE	1477	190.045	103.262	-20.001	1.00	44.70	A16S
ATOM	50225	O1P	URI	1475	202.904	97.236	-25.726	1.00	46.89	A16S	ATOM	50278	N1	ADE	1477	191.270	103.251	-19.488	1.00	44.70	A16S
ATOM	50226	O2P	URI	1475	203.128	97.163	-23.188	1.00	46.89	A16S	ATOM	50279	C6	ADE	1477	192.306	102.956	-20.293	1.00	44.70	A16S
ATOM	50227	O5'	URI	1475	200.898	97.126	-24.277	1.00	56.96	A16S	ATOM	50280	N6	ADE	1477	193.523	102.925	-19.769	1.00	44.70	A16S
ATOM	50228	C5'	URI	1475	199.930	96.671	-25.214	1.00	56.96	A16S	ATOM	50281	C5	ADE	1477	192.033	102.687	-21.632	1.00	44.70	A16S
ATOM	50229	C4'	URI	1475	198.629	97.374	-24.951	1.00	56.96	A16S	ATOM	50282	N7	ADE	1477	192.845	102.354	-22.702	1.00	44.70	A16S
ATOM	50230	O4'	URI	1475	198.139	96.933	-23.677	1.00	56.96	A16S	ATOM	50283	C8	ADE	1477	192.008	102.190	-23.693	1.00	44.70	A16S
ATOM	50231	C1'	URI	1475	197.720	98.035	-22.916	1.00	56.96	A16S	ATOM	50284	C2'	ADE	1477	188.932	103.612	-24.576	1.00	40.72	A16S
ATOM	50232	N1	URI	1475	198.199	97.821	-21.543	1.00	46.89	A16S	ATOM	50285	O2'	ADE	1477	187.559	103.450	-24.815	1.00	40.72	A16S
ATOM	50233	C6	URI	1475	199.442	97.298	-21.292	1.00	46.89	A16S	ATOM	50286	C3'	ADE	1477	189.679	103.873	-25.868	1.00	40.72	A16S
ATOM	50234	C2	URI	1475	197.322	98.094	-20.506	1.00	46.89	A16S	ATOM	50287	O3'	ADE	1477	189.034	104.836	-26.679	1.00	40.72	A16S
ATOM	50235	O2	URI	1475	196.242	98.609	-20.682	1.00	46.89	A16S	ATOM	50288	P	CYT	1478	189.644	106.314	-26.761	1.00	35.84	A16S
ATOM	50236	N3	URI	1475	197.758	97.733	-19.256	1.00	46.89	A16S	ATOM	50289	O1P	CYT	1478	188.914	107.049	-27.835	1.00	59.83	A16S
ATOM	50237	C4	URI	1475	198.965	97.154	-18.940	1.00	46.89	A16S	ATOM	50290	O2P	CYT	1478	191.135	106.226	-26.799	1.00	59.83	A16S
ATOM	50238	O4	URI	1475	199.176	96.793	-17.778	1.00	46.89	A16S	ATOM	50291	O5'	CYT	1478	189.265	106.931	-25.347	1.00	35.84	A16S
ATOM	50239	C5	URI	1475	199.845	96.957	-20.062	1.00	46.89	A16S	ATOM	50292	C5'	CYT	1478	187.910	107.087	-24.975	1.00	35.84	A16S
ATOM	50240	C2'	URI	1475	197.941	99.342	-23.696	1.00	56.96	A16S	ATOM	50293	C4'	CYT	1478	187.822	107.546	-23.556	1.00	35.84	A16S
ATOM	50241	O2'	URI	1475	196.689	99.863	-24.070	1.00	56.96	A16S	ATOM	50294	O4'	CYT	1478	188.515	106.579	-22.735	1.00	35.84	A16S
ATOM	50242	C3'	URI	1475	198.797	98.882	-24.880	1.00	56.96	A16S	ATOM	50295	C1'	CYT	1478	188.965	107.214	-21.561	1.00	35.84	A16S
ATOM	50243	O3'	URI	1475	198.653	99.429	-26.222	1.00	56.96	A16S	ATOM	50296	N1	CYT	1478	190.361	106.841	-21.334	1.00	59.83	A16S
ATOM	50244	P	ADE	1476	197.246	100.031	-26.776	1.00	33.02	A16S	ATOM	50297	C6	CYT	1478	191.108	106.271	-22.323	1.00	59.83	A16S
ATOM	50245	O1P	ADE	1476	197.511	100.328	-28.196	1.00	53.27	A16S	ATOM	50298	C2	CYT	1478	190.911	107.070	-20.080	1.00	59.83	A16S
ATOM	50246	O2P	ADE	1476	196.697	101.146	-25.912	1.00	53.27	A16S	ATOM	50299	O2	CYT	1478	190.207	107.586	-19.209	1.00	59.83	A16S
ATOM	50247	O5'	ADE	1476	196.223	98.812	-26.863	1.00	33.02	A16S	ATOM	50300	N3	CYT	1478	192.196	106.726	-19.848	1.00	59.83	A16S
ATOM	50248	C5'	ADE	1476	195.529	98.567	-28.100	1.00	33.02	A16S	ATOM	50301	C4	CYT	1478	192.923	106.182	-20.821	1.00	59.83	A16S
ATOM	50249	C4'	ADE	1476	194.019	98.695	-27.941	1.00	33.02	A16S	ATOM	50302	N4	CYT	1478	194.189	105.893	-20.560	1.00	59.83	A16S
ATOM	50250	O4'	ADE	1476	193.516	97.605	-27.116	1.00	33.02	A16S	ATOM	50303	C5	CYT	1478	192.382	105.924	-22.110	1.00	59.83	A16S
ATOM	50251	C1'	ADE	1476	192.483	98.082	-26.273	1.00	33.02	A16S	ATOM	50304	C2'	CYT	1478	188.697	108.711	-21.724	1.00	35.84	A16S
ATOM	50252	N9	ADE	1476	192.983	98.077	-24.903	1.00	53.27	A16S	ATOM	50305	O2'	CYT	1478	187.474	108.989	-21.084	1.00	35.84	A16S
ATOM	50253	C4	ADE	1476	192.314	98.497	-23.781	1.00	53.27	A16S	ATOM	50306	C3'	CYT	1478	188.547	108.833	-23.231	1.00	35.84	A16S
ATOM	50254	N3	ADE	1476	191.073	99.017	-23.709	1.00	53.27	A16S	ATOM	50307	O3'	CYT	1478	187.753	109.955	-23.594	1.00	35.84	A16S
ATOM	50255	C2	ADE	1476	190.767	99.319	-22.456	1.00	53.27	A16S	ATOM	50308	P	ADE	1479	188.254	110.931	-24.767	1.00	49.18	A16S
ATOM	50256	N1	ADE	1476	191.496	99.160	-21.351	1.00	53.27	A16S	ATOM	50309	O1P	ADE	1479	187.135	111.787	-25.217	1.00	71.42	A16S
ATOM	50257	C6	ADE	1476	192.728	98.617	-21.461	1.00	53.27	A16S	ATOM	50310	O2P	ADE	1479	188.964	110.085	-25.751	1.00	71.42	A16S
ATOM	50258	N6	ADE	1476	193.445	98.413	-20.361	1.00	53.27	A16S	ATOM	50311	O5'	ADE	1479	189.334	111.855	-24.053	1.00	49.18	A16S
ATOM	50259	C5	ADE	1476	193.179	98.282	-22.732	1.00	53.27	A16S	ATOM	50312	C5'	ADE	1479	189.329	113.264	-24.259	1.00	49.18	A16S
ATOM	50260	N7	ADE	1476	194.375	97.751	-23.181	1.00	53.27	A16S	ATOM	50313	C4'	ADE	1479	190.728	113.817	-24.152	1.00	49.18	A16S
ATOM	50261	C8	ADE	1476	194.208	97.651	-24.471	1.00	53.27	A16S	ATOM	50314	O4'	ADE	1479	191.272	113.479	-22.869	1.00	49.18	A16S
ATOM	50262	C2'	ADE	1476	192.123	99.485	-26.756	1.00	33.02	A16S	ATOM	50315	C1'	ADE	1479	192.639	113.712	-22.969	1.00	49.18	A16S

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ATOM  50316  N9  ADE  1479     193.373 113.315 -21.772  1.00 71.42      A16S
ATOM  50317  C4  ADE  1479     194.515 112.580 -21.773  1.00 71.42      A16S
ATOM  50318  N3  ADE  1479     195.085 112.006 -22.837  1.00 71.42      A16S
ATOM  50319  C2  ADE  1479     196.200 111.408 -22.482  1.00 71.42      A16S
ATOM  50320  N1  ADE  1479     196.778 111.332 -21.267  1.00 71.42      A16S
ATOM  50321  C6  ADE  1479     196.172 111.935 -20.219  1.00 71.42      A16S
ATOM  50322  N6  ADE  1479     196.755 111.885 -19.021  1.00 71.42      A16S
ATOM  50323  C5  ADE  1479     194.971 112.586 -20.465  1.00 71.42      A16S
ATOM  50324  N7  ADE  1479     194.095 113.268 -19.638  1.00 71.42      A16S
ATOM  50325  C8  ADE  1479     193.152 113.665 -20.454  1.00 71.42      A16S
ATOM  50326  C2' ADE  1479     193.084 113.275 -24.359  1.00 49.18      A16S
ATOM  50327  O2' ADE  1479     194.004 114.227 -24.844  1.00 49.18      A16S
ATOM  50328  C3' ADE  1479     191.761 113.282 -25.142  1.00 49.18      A16S
ATOM  50329  O3' ADE  1479     192.043 114.238 -26.165  1.00 49.18      A16S
ATOM  50330  P   ADE  1480     190.880 114.903 -27.040  1.00 60.94      A16S
ATOM  50331  O1P ADE  1480     191.108 116.362 -26.981  1.00 65.75      A16S
ATOM  50332  O2P ADE  1480     189.552 114.363 -26.688  1.00 65.75      A16S
ATOM  50333  O5' ADE  1480     191.257 114.418 -28.512  1.00 60.94      A16S
ATOM  50334  C5' ADE  1480     191.286 113.022 -28.865  1.00 60.94      A16S
ATOM  50335  C4' ADE  1480     192.439 112.745 -29.808  1.00 60.94      A16S
ATOM  50336  O4' ADE  1480     192.618 113.941 -30.599  1.00 60.94      A16S
ATOM  50337  C1' ADE  1480     193.973 114.073 -30.953  1.00 60.94      A16S
ATOM  50338  N9  ADE  1480     194.401 115.447 -30.734  1.00 65.75      A16S
ATOM  50339  C4  ADE  1480     195.101 116.182 -31.653  1.00 65.75      A16S
ATOM  50340  N3  ADE  1480     195.499 115.784 -32.875  1.00 65.75      A16S
ATOM  50341  C2  ADE  1480     196.158 116.758 -33.491  1.00 65.75      A16S
ATOM  50342  N1  ADE  1480     196.442 117.991 -33.058  1.00 65.75      A16S
ATOM  50343  C6  ADE  1480     196.026 118.357 -31.824  1.00 65.75      A16S
ATOM  50344  N6  ADE  1480     196.313 119.586 -31.394  1.00 65.75      A16S
ATOM  50345  C5  ADE  1480     195.316 117.411 -31.068  1.00 65.75      A16S
ATOM  50346  N7  ADE  1480     194.760 117.451 -29.797  1.00 65.75      A16S
ATOM  50347  C8  ADE  1480     194.229 116.262 -29.650  1.00 65.75      A16S
ATOM  50348  C2' ADE  1480     194.784 113.048 -30.170  1.00 60.94      A16S
ATOM  50349  O2' ADE  1480     195.227 112.007 -31.022  1.00 60.94      A16S
ATOM  50350  C3' ADE  1480     193.787 112.571 -29.127  1.00 60.94      A16S
ATOM  50351  O3' ADE  1480     194.164 111.224 -28.835  1.00 60.94      A16S
ATOM  50352  P   GUA  1481     193.447 109.959 -29.547  1.00 41.14      A16S
ATOM  50353  O1P GUA  1481     194.149 109.661 -30.811  1.00 54.33      A16S
ATOM  50354  O2P GUA  1481     191.967 109.989 -29.527  1.00 54.33      A16S
ATOM  50355  O5' GUA  1481     193.917 108.847 -28.546  1.00 41.14      A16S
ATOM  50356  C5' GUA  1481     195.220 108.933 -28.000  1.00 41.14      A16S
ATOM  50357  C4' GUA  1481     195.350 107.978 -26.867  1.00 41.14      A16S
ATOM  50358  O4' GUA  1481     194.983 108.667 -25.676  1.00 41.14      A16S
ATOM  50359  C1' GUA  1481     194.523 107.719 -24.752  1.00 41.14      A16S
ATOM  50360  N9  GUA  1481     193.597 108.357 -23.828  1.00 54.33      A16S
ATOM  50361  C4  GUA  1481     193.889 108.642 -22.529  1.00 54.33      A16S
ATOM  50362  N3  GUA  1481     195.055 108.374 -21.918  1.00 54.33      A16S
ATOM  50363  C2  GUA  1481     195.051 108.755 -20.671  1.00 54.33      A16S
ATOM  50364  N2  GUA  1481     196.133 108.559 -19.927  1.00 54.33      A16S
ATOM  50365  N1  GUA  1481     193.987 109.356 -20.059  1.00 54.33      A16S
ATOM  50366  C6  GUA  1481     192.772 109.641 -20.667  1.00 54.33      A16S
ATOM  50367  O6  GUA  1481     191.868 110.184 -20.017  1.00 54.33      A16S
ATOM  50368  C5  GUA  1481     192.766 109.232 -22.020  1.00 54.33      A16S
ATOM  50369  N7  GUA  1481     191.775 109.319 -22.987  1.00 54.33      A16S
ATOM  50370  C8  GUA  1481     192.316 108.786 -24.046  1.00 54.33      A16S
ATOM  50371  C2' GUA  1481     194.090 106.446 -25.489  1.00 41.14      A16S
ATOM  50372  O2' GUA  1481     194.792 105.318 -25.005  1.00 41.14      A16S
ATOM  50373  C3' GUA  1481     194.383 106.801 -26.943  1.00 41.14      A16S
ATOM  50374  O3' GUA  1481     194.846 105.724 -27.793  1.00 41.14      A16S
ATOM  50375  P   GUA  1482     196.329 105.114 -27.611  1.00 35.46      A16S
ATOM  50376  O1P GUA  1482     196.501 104.053 -28.621  1.00 41.75      A16S
ATOM  50377  O2P GUA  1482     196.539 104.761 -26.194  1.00 41.75      A16S
ATOM  50378  O5' GUA  1482     197.249 106.310 -28.094  1.00 35.46      A16S
ATOM  50379  C5' GUA  1482     197.068 106.855 -29.405  1.00 35.46      A16S
ATOM  50380  C4' GUA  1482     198.335 107.515 -29.879  1.00 35.46      A16S
ATOM  50381  O4' GUA  1482     198.583 108.760 -29.156  1.00 35.46      A16S
ATOM  50382  C1' GUA  1482     199.826 108.689 -28.476  1.00 35.46      A16S
ATOM  50383  N9  GUA  1482     199.536 108.335 -27.080  1.00 41.75      A16S
ATOM  50384  C4  GUA  1482     199.025 109.181 -26.103  1.00 41.75      A16S
ATOM  50385  N3  GUA  1482     198.721 110.491 -26.253  1.00 41.75      A16S
ATOM  50386  C2  GUA  1482     198.235 111.024 -25.137  1.00 41.75      A16S
ATOM  50387  N2  GUA  1482     197.896 112.320 -25.096  1.00 41.75      A16S
ATOM  50388  N1  GUA  1482     198.051 110.334 -23.980  1.00 41.75      A16S
ATOM  50389  C6  GUA  1482     198.342 108.996 -23.791  1.00 41.75      A16S
ATOM  50390  O6  GUA  1482     198.120 108.479 -22.690  1.00 41.75      A16S
ATOM  50391  C5  GUA  1482     198.880 108.398 -24.979  1.00 41.75      A16S
ATOM  50392  N7  GUA  1482     199.302 107.097 -25.228  1.00 41.75      A16S
ATOM  50393  C8  GUA  1482     199.684 107.108 -26.480  1.00 41.75      A16S
ATOM  50394  C2' GUA  1482     200.622 107.679 -29.303  1.00 35.46      A16S
ATOM  50395  O2' GUA  1482     200.990 108.409 -30.444  1.00 35.46      A16S
ATOM  50396  C3' GUA  1482     199.533 106.649 -29.585  1.00 35.46      A16S
ATOM  50397  O3' GUA  1482     199.608 105.537 -30.501  1.00 35.46      A16S
ATOM  50398  P   URI  1483     200.360 105.648 -31.913  1.00 62.40      A16S
ATOM  50399  O1P URI  1483     200.956 104.297 -32.042  1.00 39.90      A16S
ATOM  50400  O2P URI  1483     201.216 106.828 -32.034  1.00 39.90      A16S
ATOM  50401  O5' URI  1483     199.182 105.835 -32.969  1.00 62.40      A16S
ATOM  50402  C5' URI  1483     199.108 107.010 -33.779  1.00 62.40      A16S
ATOM  50403  C4' URI  1483     198.080 106.828 -34.869  1.00 62.40      A16S
ATOM  50404  O4' URI  1483     198.419 105.622 -35.587  1.00 62.40      A16S
ATOM  50405  C1' URI  1483     197.246 104.925 -35.952  1.00 62.40      A16S
ATOM  50406  N1  URI  1483     197.357 103.542 -35.473  1.00 39.90      A16S
ATOM  50407  C6  URI  1483     197.925 103.238 -34.276  1.00 39.90      A16S
ATOM  50408  C2  URI  1483     196.872 102.554 -36.300  1.00 39.90      A16S
ATOM  50409  O2  URI  1483     196.364 102.789 -37.381  1.00 39.90      A16S
ATOM  50410  N3  URI  1483     197.015 101.279 -35.831  1.00 39.90      A16S
ATOM  50411  C4  URI  1483     197.597 100.902 -34.660  1.00 39.90      A16S
ATOM  50412  O4  URI  1483     197.768  99.704 -34.440  1.00 39.90      A16S
ATOM  50413  C5  URI  1483     198.066 101.985 -33.852  1.00 39.90      A16S
ATOM  50414  C2' URI  1483     196.032 105.697 -35.434  1.00 62.40      A16S
ATOM  50415  O2' URI  1483     195.362 106.327 -36.506  1.00 62.40      A16S
ATOM  50416  C3' URI  1483     196.659 106.607 -34.387  1.00 62.40      A16S
ATOM  50417  O3' URI  1483     195.988 107.837 -34.085  1.00 62.40      A16S
ATOM  50418  P   ADE  1484     195.569 108.896 -35.245  1.00 47.70      A16S
ATOM  50419  O1P ADE  1484     195.697 108.398 -36.630  1.00 48.17      A16S
ATOM  50420  O2P ADE  1484     196.237 110.173 -34.883  1.00 48.17      A16S
ATOM  50421  O5' ADE  1484     194.014 109.123 -34.949  1.00 47.70      A16S
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ATOM  50422  C5' ADE  1484     193.186 108.039 -34.505  1.00 47.70      A16S
ATOM  50423  C4' ADE  1484     192.252 108.484 -33.398  1.00 47.70      A16S
ATOM  50424  O4' ADE  1484     191.555 109.693 -33.780  1.00 47.70      A16S
ATOM  50425  C1' ADE  1484     190.189 109.598 -33.409  1.00 47.70      A16S
ATOM  50426  N9  ADE  1484     189.393 109.509 -34.633  1.00 48.17      A16S
ATOM  50427  C4  ADE  1484     188.024 109.532 -34.733  1.00 48.17      A16S
ATOM  50428  N3  ADE  1484     187.132 109.635 -33.735  1.00 48.17      A16S
ATOM  50429  C2  ADE  1484     185.900 109.656 -34.214  1.00 48.17      A16S
ATOM  50430  N1  ADE  1484     185.482 109.581 -35.475  1.00 48.17      A16S
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ATOM  50432  N6  ADE  1484     185.977 109.371 -37.706  1.00 48.17      A16S
ATOM  50433  C5  ADE  1484     187.745 109.446 -36.078  1.00 48.17      A16S
ATOM  50434  N7  ADE  1484     188.913 109.364 -36.815  1.00 48.17      A16S
ATOM  50435  C8  ADE  1484     189.857 109.400 -35.914  1.00 48.17      A16S
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ATOM  50437  O2' ADE  1484     190.303 108.737 -31.185  1.00 47.70      A16S
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ATOM  50439  O3' ADE  1484     191.595 106.531 -32.179  1.00 47.70      A16S
ATOM  50440  P   GUA  1485     191.253 104.994 -32.415  1.00 38.85      A16S
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ATOM  50443  O5' GUA  1485     189.785 104.865 -31.840  1.00 38.85      A16S
ATOM  50444  C5' GUA  1485     189.516 105.140 -30.479  1.00 38.85      A16S
ATOM  50445  C4' GUA  1485     188.037 105.298 -30.284  1.00 38.85      A16S
ATOM  50446  O4' GUA  1485     187.556 106.442 -31.047  1.00 38.85      A16S
ATOM  50447  C1' GUA  1485     186.247 106.184 -31.506  1.00 38.85      A16S
ATOM  50448  N9  GUA  1485     186.267 106.214 -32.958  1.00 49.34      A16S
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ATOM  50453  N1  GUA  1485     183.539 106.828 -35.711  1.00 49.34      A16S
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ATOM  50457  N7  GUA  1485     187.020 105.953 -35.039  1.00 49.34      A16S
ATOM  50458  C8  GUA  1485     187.327 105.922 -33.774  1.00 49.34      A16S
ATOM  50459  C2' GUA  1485     185.857 104.796 -30.988  1.00 38.85      A16S
ATOM  50460  O2' GUA  1485     185.186 104.910 -29.749  1.00 38.85      A16S
ATOM  50461  C3' GUA  1485     187.219 104.144 -30.818  1.00 38.85      A16S
ATOM  50462  O3' GUA  1485     187.179 103.105 -29.857  1.00 38.85      A16S
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ATOM  50464  O1P CYT  1486     186.565 100.771 -29.090  1.00 43.74      A16S
ATOM  50465  O2P CYT  1486     187.364 101.278 -31.485  1.00 43.74      A16S
ATOM  50466  O5' CYT  1486     185.101 101.980 -30.711  1.00 34.49      A16S
ATOM  50467  C5' CYT  1486     184.117 102.287 -29.739  1.00 34.49      A16S
ATOM  50468  C4' CYT  1486     182.787 102.556 -30.400  1.00 34.49      A16S
ATOM  50469  O4' CYT  1486     182.895 103.706 -31.278  1.00 34.49      A16S
ATOM  50470  C1' CYT  1486     182.032 103.530 -32.391  1.00 34.49      A16S
ATOM  50471  N1  CYT  1486     182.870 103.415 -33.583  1.00 43.74      A16S
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ATOM  50473  C2  CYT  1486     182.291 103.601 -34.831  1.00 43.74      A16S
ATOM  50474  O2  CYT  1486     181.080 103.822 -34.894  1.00 43.74      A16S
ATOM  50475  N3  CYT  1486     183.064 103.518 -35.936  1.00 43.74      A16S
ATOM  50476  C4  CYT  1486     184.360 103.233 -35.817  1.00 43.74      A16S
ATOM  50477  N4  CYT  1486     185.085 103.160 -36.922  1.00 43.74      A16S
ATOM  50478  C5  CYT  1486     184.968 103.012 -34.553  1.00 43.74      A16S
ATOM  50479  C2' CYT  1486     181.261 102.231 -32.149  1.00 34.49      A16S
ATOM  50480  O2' CYT  1486     180.090 102.491 -31.419  1.00 34.49      A16S
ATOM  50481  C3' CYT  1486     182.259 101.464 -31.306  1.00 34.49      A16S
ATOM  50482  O3' CYT  1486     181.615 100.460 -30.556  1.00 34.49      A16S
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ATOM  50484  O1P URI  1487     180.673  98.193 -30.197  1.00 53.33      A16S
ATOM  50485  O2P URI  1487     182.890  98.499 -31.463  1.00 53.33      A16S
ATOM  50486  O5' URI  1487     180.686  99.164 -32.487  1.00 35.05      A16S
ATOM  50487  C5' URI  1487     179.369  99.638 -32.434  1.00 35.05      A16S
ATOM  50488  C4' URI  1487     178.841  99.815 -33.821  1.00 35.05      A16S
ATOM  50489  O4' URI  1487     179.624 100.817 -34.523  1.00 35.05      A16S
ATOM  50490  C1' URI  1487     179.601 100.537 -35.916  1.00 35.05      A16S
ATOM  50491  N1  URI  1487     180.985 100.384 -36.371  1.00 53.33      A16S
ATOM  50492  C6  URI  1487     181.991 100.103 -35.478  1.00 53.33      A16S
ATOM  50493  C2  URI  1487     181.236 100.518 -37.715  1.00 53.33      A16S
ATOM  50494  O2  URI  1487     180.364 100.764 -38.527  1.00 53.33      A16S
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ATOM  50496  C4  URI  1487     183.601 100.044 -37.223  1.00 53.33      A16S
ATOM  50497  O4  URI  1487     184.723  99.865 -37.694  1.00 53.33      A16S
ATOM  50498  C5  URI  1487     183.251  99.930 -35.847  1.00 53.33      A16S
ATOM  50499  C2' URI  1487     178.823  99.231 -36.101  1.00 35.05      A16S
ATOM  50500  O2' URI  1487     177.498  99.528 -36.472  1.00 35.05      A16S
ATOM  50501  C3' URI  1487     178.944  98.602 -34.718  1.00 35.05      A16S
ATOM  50502  O3' URI  1487     177.880  97.709 -34.449  1.00 35.05      A16S
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ATOM  50504  O1P GUA  1488     177.192  95.527 -33.455  1.00 48.47      A16S
ATOM  50505  O2P GUA  1488     179.614  95.868 -34.239  1.00 48.47      A16S
ATOM  50506  O5' GUA  1488     177.770  95.667 -35.901  1.00 36.48      A16S
ATOM  50507  C5' GUA  1488     176.419  95.468 -36.274  1.00 36.48      A16S
ATOM  50508  C4' GUA  1488     176.322  95.279 -37.760  1.00 36.48      A16S
ATOM  50509  O4' GUA  1488     176.868  96.457 -38.407  1.00 36.48      A16S
ATOM  50510  C1' GUA  1488     177.553  96.082 -39.591  1.00 36.48      A16S
ATOM  50511  N9  GUA  1488     178.957  96.398 -39.377  1.00 48.47      A16S
ATOM  50512  C4  GUA  1488     179.943  96.542 -40.324  1.00 48.47      A16S
ATOM  50513  N3  GUA  1488     179.796  96.384 -41.652  1.00 48.47      A16S
ATOM  50514  C2  GUA  1488     180.921  96.619 -42.303  1.00 48.47      A16S
ATOM  50515  N2  GUA  1488     180.949  96.530 -43.635  1.00 48.47      A16S
ATOM  50516  N1  GUA  1488     182.101  96.965 -41.696  1.00 48.47      A16S
ATOM  50517  C6  GUA  1488     182.281  97.117 -40.327  1.00 48.47      A16S
ATOM  50518  O6  GUA  1488     183.406  97.412 -39.872  1.00 48.47      A16S
ATOM  50519  C5  GUA  1488     181.076  96.883 -39.620  1.00 48.47      A16S
ATOM  50520  N7  GUA  1488     180.814  96.925 -38.259  1.00 48.47      A16S
ATOM  50521  C8  GUA  1488     179.549  96.630 -38.163  1.00 48.47      A16S
ATOM  50522  C2' GUA  1488     177.301  94.585 -39.779  1.00 36.48      A16S
ATOM  50523  O2' GUA  1488     176.115  94.401 -40.532  1.00 36.48      A16S
ATOM  50524  C3' GUA  1488     177.138  94.140 -38.336  1.00 36.48      A16S
ATOM  50525  O3' GUA  1488     176.419  92.928 -38.248  1.00 36.48      A16S
ATOM  50526  P   URI  1489     177.176  91.595 -37.789  1.00 36.91      A16S
ATOM  50527  O1P URI  1489     176.178  90.531 -37.527  1.00 46.05      A16S
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ATOM  50528  O2P URI  1489     178.137  91.970 -36.719  1.00 46.05      A16S
ATOM  50529  O5' URI  1489     178.003  91.200 -39.088  1.00 36.91      A16S
ATOM  50530  C5' URI  1489     177.384  91.199 -40.366  1.00 36.91      A16S
ATOM  50531  C4' URI  1489     178.418  91.335 -41.453  1.00 36.91      A16S
ATOM  50532  O4' URI  1489     179.013  92.652 -41.400  1.00 36.91      A16S
ATOM  50533  C1' URI  1489     180.334  92.586 -41.900  1.00 36.91      A16S
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ATOM  50535  C6  URI  1489     180.922  93.201 -39.566  1.00 46.05      A16S
ATOM  50536  C2  URI  1489     182.410  93.698 -41.350  1.00 46.05      A16S
ATOM  50537  O2  URI  1489     182.707  93.702 -42.519  1.00 46.05      A16S
ATOM  50538  N3  URI  1489     183.225  94.223 -40.384  1.00 46.05      A16S
ATOM  50539  C4  URI  1489     182.975  94.289 -39.037  1.00 46.05      A16S
ATOM  50540  O4  URI  1489     183.754  94.915 -38.307  1.00 46.05      A16S
ATOM  50541  C5  URI  1489     181.730  93.725 -38.646  1.00 46.05      A16S
ATOM  50542  C2' URI  1489     180.627  91.118 -42.254  1.00 36.91      A16S
ATOM  50543  O2' URI  1489     180.415  90.931 -43.643  1.00 36.91      A16S
ATOM  50544  C3' URI  1489     179.597  90.378 -41.404  1.00 36.91      A16S
ATOM  50545  O3' URI  1489     179.193  89.162 -42.023  1.00 36.91      A16S
ATOM  50546  P   ADE  1490     179.872  87.764 -41.599  1.00 40.14      A16S
ATOM  50547  O1P ADE  1490     179.147  86.693 -42.327  1.00 49.25      A16S
ATOM  50548  O2P ADE  1490     179.987  87.694 -40.129  1.00 49.25      A16S
ATOM  50549  O5' ADE  1490     181.334  87.880 -42.216  1.00 40.14      A16S
ATOM  50550  C5' ADE  1490     181.544  87.784 -43.623  1.00 40.14      A16S
ATOM  50551  C4' ADE  1490     182.996  88.035 -43.947  1.00 40.14      A16S
ATOM  50552  O4' ADE  1490     183.305  89.446 -43.823  1.00 40.14      A16S
ATOM  50553  C1' ADE  1490     184.678  89.594 -43.504  1.00 40.14      A16S
ATOM  50554  N9  ADE  1490     184.812  90.367 -42.274  1.00 49.25      A16S
ATOM  50555  C4  ADE  1490     185.890  91.149 -41.938  1.00 49.25      A16S
ATOM  50556  N3  ADE  1490     186.970  91.415 -42.690  1.00 49.25      A16S
ATOM  50557  C2  ADE  1490     187.833  92.171 -42.017  1.00 49.25      A16S
ATOM  50558  N1  ADE  1490     187.747  92.650 -40.773  1.00 49.25      A16S
ATOM  50559  C6  ADE  1490     186.647  92.364 -40.047  1.00 49.25      A16S
ATOM  50560  N6  ADE  1490     186.563  92.837 -38.805  1.00 49.25      A16S
ATOM  50561  C5  ADE  1490     185.654  91.577 -40.650  1.00 49.25      A16S
ATOM  50562  N7  ADE  1490     184.429  91.118 -40.202  1.00 49.25      A16S
ATOM  50563  C8  ADE  1490     183.965  90.420 -41.208  1.00 49.25      A16S
ATOM  50564  C2' ADE  1490     185.257  88.190 -43.329  1.00 40.14      A16S
ATOM  50565  O2' ADE  1490     185.850  87.806 -44.539  1.00 40.14      A16S
ATOM  50566  C3' ADE  1490     184.014  87.373 -43.037  1.00 40.14      A16S
ATOM  50567  O3' ADE  1490     184.213  86.032 -43.436  1.00 40.14      A16S
ATOM  50568  P   CYT  1491     184.831  84.969 -42.406  1.00 38.19      A16S
ATOM  50569  O1P CYT  1491     184.667  83.619 -43.009  1.00 49.25      A16S
ATOM  50570  O2P CYT  1491     184.252  85.247 -41.074  1.00 49.25      A16S
ATOM  50571  O5' CYT  1491     186.393  85.295 -42.390  1.00 38.19      A16S
ATOM  50572  C5' CYT  1491     187.203  84.875 -43.472  1.00 38.19      A16S
ATOM  50573  C4' CYT  1491     188.537  85.568 -43.453  1.00 38.19      A16S
ATOM  50574  O4' CYT  1491     188.357  87.008 -43.402  1.00 38.19      A16S
ATOM  50575  C1' CYT  1491     189.438  87.596 -42.692  1.00 38.19      A16S
ATOM  50576  N1  CYT  1491     188.900  88.206 -41.474  1.00 49.25      A16S
ATOM  50577  C6  CYT  1491     187.667  87.855 -41.003  1.00 49.25      A16S
ATOM  50578  C2  CYT  1491     189.670  89.139 -40.798  1.00 49.25      A16S
ATOM  50579  O2  CYT  1491     190.779  89.432 -41.252  1.00 49.25      A16S
ATOM  50580  N3  CYT  1491     189.191  89.693 -39.665  1.00 49.25      A16S
ATOM  50581  C4  CYT  1491     187.994  89.333 -39.207  1.00 49.25      A16S
ATOM  50582  N4  CYT  1491     187.570  89.881 -38.081  1.00 49.25      A16S
ATOM  50583  C5  CYT  1491     187.183  88.388 -39.882  1.00 49.25      A16S
ATOM  50584  C2' CYT  1491     190.405  86.460 -42.356  1.00 38.19      A16S
ATOM  50585  O2' CYT  1491     191.345  86.334 -43.407  1.00 38.19      A16S
ATOM  50586  C3' CYT  1491     189.444  85.280 -42.279  1.00 38.19      A16S
ATOM  50587  O3' CYT  1491     190.112  84.048 -42.468  1.00 38.19      A16S
ATOM  50588  P   CYT  1492     190.499  83.166 -41.193  1.00 42.51      A16S
ATOM  50589  O1P CYT  1492     191.015  81.860 -41.671  1.00 49.76      A16S
ATOM  50590  O2P CYT  1492     189.344  83.203 -40.255  1.00 49.76      A16S
ATOM  50591  O5' CYT  1492     191.703  83.972 -40.532  1.00 42.51      A16S
ATOM  50592  C5' CYT  1492     192.936  84.120 -41.212  1.00 42.51      A16S
ATOM  50593  C4' CYT  1492     193.806  85.104 -40.486  1.00 42.51      A16S
ATOM  50594  O4' CYT  1492     193.140  86.391 -40.469  1.00 42.51      A16S
ATOM  50595  C1' CYT  1492     193.418  87.057 -39.246  1.00 42.51      A16S
ATOM  50596  N1  CYT  1492     192.156  87.255 -38.523  1.00 49.76      A16S
ATOM  50597  C6  CYT  1492     191.051  86.512 -38.819  1.00 49.76      A16S
ATOM  50598  C2  CYT  1492     192.113  88.203 -37.506  1.00 49.76      A16S
ATOM  50599  O2  CYT  1492     193.112  88.897 -37.298  1.00 49.76      A16S
ATOM  50600  N3  CYT  1492     190.988  88.346 -36.781  1.00 49.76      A16S
ATOM  50601  C4  CYT  1492     189.929  87.595 -37.050  1.00 49.76      A16S
ATOM  50602  N4  CYT  1492     188.858  87.742 -36.284  1.00 49.76      A16S
ATOM  50603  C5  CYT  1492     189.927  86.650 -38.114  1.00 49.76      A16S
ATOM  50604  C2' CYT  1492     194.386  86.172 -38.460  1.00 42.51      A16S
ATOM  50605  O2' CYT  1492     195.705  86.595 -38.742  1.00 42.51      A16S
ATOM  50606  C3' CYT  1492     194.045  84.796 -39.019  1.00 42.51      A16S
ATOM  50607  O3' CYT  1492     195.113  83.880 -38.882  1.00 42.51      A16S
ATOM  50608  P   GUA  1493     195.141  82.876 -37.635  1.00 48.69      A16S
ATOM  50609  O1P GUA  1493     196.191  81.860 -37.915  1.00 58.78      A16S
ATOM  50610  O2P GUA  1493     193.758  82.430 -37.341  1.00 58.78      A16S
ATOM  50611  O5' GUA  1493     195.667  83.804 -36.461  1.00 48.69      A16S
ATOM  50612  C5' GUA  1493     196.928  84.440 -36.566  1.00 48.69      A16S
ATOM  50613  C4' GUA  1493     197.139  85.373 -35.406  1.00 48.69      A16S
ATOM  50614  O4' GUA  1493     196.245  86.510 -35.527  1.00 48.69      A16S
ATOM  50615  C1' GUA  1493     195.884  86.963 -34.230  1.00 48.69      A16S
ATOM  50616  N9  GUA  1493     194.438  86.880 -34.082  1.00 58.78      A16S
ATOM  50617  C4  GUA  1493     193.693  87.536 -33.136  1.00 58.78      A16S
ATOM  50618  N3  GUA  1493     194.168  88.408 -32.224  1.00 58.78      A16S
ATOM  50619  C2  GUA  1493     193.217  88.855 -31.421  1.00 58.78      A16S
ATOM  50620  N2  GUA  1493     193.524  89.739 -30.451  1.00 58.78      A16S
ATOM  50621  N1  GUA  1493     191.903  88.472 -31.507  1.00 58.78      A16S
ATOM  50622  C6  GUA  1493     191.392  87.576 -32.436  1.00 58.78      A16S
ATOM  50623  O6  GUA  1493     190.187  87.297 -32.421  1.00 58.78      A16S
ATOM  50624  C5  GUA  1493     192.407  87.092 -33.310  1.00 58.78      A16S
ATOM  50625  N7  GUA  1493     192.336  86.197 -34.372  1.00 58.78      A16S
ATOM  50626  C8  GUA  1493     193.564  86.113 -34.805  1.00 58.78      A16S
ATOM  50627  C2' GUA  1493     196.572  86.042 -33.219  1.00 48.69      A16S
ATOM  50628  O2' GUA  1493     197.776  86.629 -32.788  1.00 48.69      A16S
ATOM  50629  C3' GUA  1493     196.788  84.790 -34.053  1.00 48.69      A16S
ATOM  50630  O3' GUA  1493     197.841  84.001 -33.545  1.00 48.69      A16S
ATOM  50631  P   GUA  1494     197.509  82.801 -32.539  1.00 58.61      A16S
ATOM  50632  O1P GUA  1494     196.295  82.112 -33.039  1.00 55.50      A16S
ATOM  50633  O2P GUA  1494     198.760  82.023 -32.336  1.00 55.50      A16S
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ATOM	50634	O5'	GUA	1494	197.149	83.543	-31.178	1.00	58.61	A16S	ATOM	50687	C2	ADE	1496	196.619	94.986	-25.851	1.00	53.59	A16S
ATOM	50635	C5'	GUA	1494	198.178	84.007	-30.312	1.00	58.61	A16S	ATOM	50688	N1	ADE	1496	197.292	94.902	-27.011	1.00	53.59	A16S
ATOM	50636	C4'	GUA	1494	197.764	83.833	-28.874	1.00	58.61	A16S	ATOM	50689	C6	ADE	1496	196.847	94.048	-27.954	1.00	53.59	A16S
ATOM	50637	O4'	GUA	1494	198.905	84.059	-28.018	1.00	58.61	A16S	ATOM	50690	N6	ADE	1496	197.512	93.991	-29.118	1.00	53.59	A16S
ATOM	50638	C1'	GUA	1494	198.476	84.640	-26.801	1.00	58.61	A16S	ATOM	50691	C5	ADE	1496	195.692	93.278	-27.643	1.00	53.59	A16S
ATOM	50639	N9	GUA	1494	199.129	85.934	-26.669	1.00	55.50	A16S	ATOM	50692	N7	ADE	1496	194.988	92.310	-28.346	1.00	53.59	A16S
ATOM	50640	C4	GUA	1494	199.072	86.777	-25.583	1.00	55.50	A16S	ATOM	50693	C8	ADE	1496	194.006	91.979	-27.538	1.00	53.59	A16S
ATOM	50641	N3	GUA	1494	198.371	86.565	-24.444	1.00	55.50	A16S	ATOM	50694	C2'	ADE	1496	192.216	93.944	-25.291	1.00	43.76	A16S
ATOM	50642	C2	GUA	1494	198.533	87.548	-23.571	1.00	55.50	A16S	ATOM	50695	O2'	ADE	1496	191.688	94.168	-23.990	1.00	43.76	A16S
ATOM	50643	N2	GUA	1494	197.909	87.502	-22.383	1.00	55.50	A16S	ATOM	50696	C3'	ADE	1496	191.097	93.551	-26.234	1.00	43.76	A16S
ATOM	50644	N1	GUA	1494	199.317	88.648	-23.798	1.00	55.50	A16S	ATOM	50697	O3'	ADE	1496	190.076	94.507	-26.050	1.00	43.76	A16S
ATOM	50645	C6	GUA	1494	200.036	88.894	-24.961	1.00	55.50	A16S	ATOM	50698	P	GUA	1497	189.146	94.961	-27.283	1.00	44.98	A16S
ATOM	50646	O6	GUA	1494	200.704	89.934	-25.062	1.00	55.50	A16S	ATOM	50699	O1P	GUA	1497	188.528	96.262	-26.906	1.00	53.43	A16S
ATOM	50647	C5	GUA	1494	199.872	87.844	-25.910	1.00	55.50	A16S	ATOM	50700	O2P	GUA	1497	188.278	93.802	-27.616	1.00	53.43	A16S
ATOM	50648	N7	GUA	1494	200.403	87.688	-27.183	1.00	55.50	A16S	ATOM	50701	O5'	GUA	1497	190.078	95.184	-28.558	1.00	44.98	A16S
ATOM	50649	C8	GUA	1494	199.932	86.544	-27.593	1.00	55.50	A16S	ATOM	50702	C5'	GUA	1497	191.218	96.020	-28.522	1.00	44.98	A16S
ATOM	50650	C2'	GUA	1494	196.955	84.743	-26.865	1.00	58.61	A16S	ATOM	50703	C4'	GUA	1497	192.281	95.463	-29.446	1.00	44.98	A16S
ATOM	50651	O2'	GUA	1494	196.387	83.568	-26.333	1.00	58.61	A16S	ATOM	50704	O4'	GUA	1497	192.154	94.012	-29.487	1.00	44.98	A16S
ATOM	50652	C3'	GUA	1494	196.736	84.822	-28.362	1.00	58.61	A16S	ATOM	50705	C1'	GUA	1497	192.646	93.531	-30.719	1.00	44.98	A16S
ATOM	50653	O3'	GUA	1494	195.427	84.408	-28.699	1.00	58.61	A16S	ATOM	50706	N9	GUA	1497	191.610	92.719	-31.347	1.00	53.43	A16S
ATOM	50654	P	ADE	1495	194.441	85.444	-29.419	1.00	46.00	A16S	ATOM	50707	C4	GUA	1497	191.747	91.919	-32.463	1.00	53.43	A16S
ATOM	50655	O1P	ADE	1495	193.259	84.656	-29.848	1.00	42.41	A16S	ATOM	50708	N3	GUA	1497	192.871	91.746	-33.185	1.00	53.43	A16S
ATOM	50656	O2P	ADE	1495	195.236	86.190	-30.432	1.00	42.41	A16S	ATOM	50709	C2	GUA	1497	192.680	90.925	-34.196	1.00	53.43	A16S
ATOM	50657	O5'	ADE	1495	194.048	86.449	-28.243	1.00	46.00	A16S	ATOM	50710	N2	GUA	1497	193.679	90.646	-35.021	1.00	53.43	A16S
ATOM	50658	C5'	ADE	1495	193.239	86.017	-27.148	1.00	46.00	A16S	ATOM	50711	N1	GUA	1497	191.494	90.316	-34.473	1.00	53.43	A16S
ATOM	50659	C4'	ADE	1495	193.360	86.984	-26.001	1.00	46.00	A16S	ATOM	50712	C6	GUA	1497	190.334	90.461	-33.738	1.00	53.43	A16S
ATOM	50660	O4'	ADE	1495	194.756	87.047	-25.583	1.00	46.00	A16S	ATOM	50713	O6	GUA	1497	189.327	89.829	-34.058	1.00	53.43	A16S
ATOM	50661	C1'	ADE	1495	195.082	88.374	-25.207	1.00	46.00	A16S	ATOM	50714	C5	GUA	1497	190.512	91.354	-32.660	1.00	53.43	A16S
ATOM	50662	N9	ADE	1495	196.091	88.882	-26.142	1.00	42.41	A16S	ATOM	50715	N7	GUA	1497	189.618	91.786	-31.696	1.00	53.43	A16S
ATOM	50663	C4	ADE	1495	196.855	90.015	-25.994	1.00	42.41	A16S	ATOM	50716	C8	GUA	1497	190.313	92.592	-30.941	1.00	53.43	A16S
ATOM	50664	N3	ADE	1495	196.827	90.886	-24.975	1.00	42.41	A16S	ATOM	50717	C2'	GUA	1497	193.070	94.748	-31.540	1.00	44.98	A16S
ATOM	50665	C2	ADE	1495	197.720	91.857	-25.160	1.00	42.41	A16S	ATOM	50718	O2'	GUA	1497	194.453	94.954	-31.330	1.00	44.98	A16S
ATOM	50666	N1	ADE	1495	198.577	92.043	-26.173	1.00	42.41	A16S	ATOM	50719	C3'	GUA	1497	192.228	95.848	-30.912	1.00	44.98	A16S
ATOM	50667	C6	ADE	1495	198.577	91.158	-27.190	1.00	42.41	A16S	ATOM	50720	O3'	GUA	1497	192.866	97.103	-31.096	1.00	44.98	A16S
ATOM	50668	N6	ADE	1495	199.426	91.363	-28.208	1.00	42.41	A16S	ATOM	50721	P	GUA	1498	192.672	97.906	-32.474	1.00	39.31	A16S
ATOM	50669	C5	ADE	1495	197.669	90.072	-27.110	1.00	42.41	A16S	ATOM	50722	O1P	GUA	1498	193.409	99.190	-32.355	1.00	52.78	A16S
ATOM	50670	N7	ADE	1495	197.414	89.001	-27.954	1.00	42.41	A16S	ATOM	50723	O2P	GUA	1498	191.233	97.915	-32.862	1.00	52.78	A16S
ATOM	50671	C8	ADE	1495	196.472	88.329	-27.336	1.00	42.41	A16S	ATOM	50724	O5'	GUA	1498	193.410	97.004	-33.544	1.00	39.31	A16S
ATOM	50672	C2'	ADE	1495	193.767	89.158	-25.235	1.00	46.00	A16S	ATOM	50725	C5'	GUA	1498	194.815	96.957	-33.611	1.00	39.31	A16S
ATOM	50673	O2'	ADE	1495	193.104	88.971	-24.002	1.00	46.00	A16S	ATOM	50726	C4'	GUA	1498	195.219	96.268	-34.876	1.00	39.31	A16S
ATOM	50674	C3'	ADE	1495	193.022	88.426	-26.336	1.00	46.00	A16S	ATOM	50727	O4'	GUA	1498	194.744	94.897	-34.838	1.00	39.31	A16S
ATOM	50675	O3'	ADE	1495	191.622	88.650	-26.254	1.00	46.00	A16S	ATOM	50728	C1'	GUA	1498	194.396	94.481	-36.147	1.00	39.31	A16S
ATOM	50676	P	ADE	1496	190.817	89.084	-27.569	1.00	43.76	A16S	ATOM	50729	N9	GUA	1498	193.026	93.987	-36.098	1.00	52.78	A16S
ATOM	50677	O1P	ADE	1496	189.460	88.497	-27.476	1.00	53.59	A16S	ATOM	50730	C4	GUA	1498	192.417	93.088	-36.948	1.00	52.78	A16S
ATOM	50678	O2P	ADE	1496	191.671	88.777	-28.733	1.00	53.59	A16S	ATOM	50731	N3	GUA	1498	192.982	92.477	-38.013	1.00	52.78	A16S
ATOM	50679	O5'	ADE	1496	190.689	90.664	-27.465	1.00	43.76	A16S	ATOM	50732	C2	GUA	1498	192.126	91.663	-38.626	1.00	52.78	A16S
ATOM	50680	C5'	ADE	1496	189.913	91.254	-26.439	1.00	43.76	A16S	ATOM	50733	N2	GUA	1498	192.507	90.967	-39.702	1.00	52.78	A16S
ATOM	50681	C4'	ADE	1496	190.756	92.202	-25.632	1.00	43.76	A16S	ATOM	50734	N1	GUA	1498	190.831	91.473	-38.225	1.00	52.78	A16S
ATOM	50682	O4'	ADE	1496	192.087	91.614	-25.478	1.00	43.76	A16S	ATOM	50735	C6	GUA	1498	190.236	92.094	-37.137	1.00	52.78	A16S
ATOM	50683	C1'	ADE	1496	193.033	92.651	-25.265	1.00	43.76	A16S	ATOM	50736	O6	GUA	1498	189.062	91.862	-36.867	1.00	52.78	A16S
ATOM	50684	N9	ADE	1496	194.003	92.675	-26.361	1.00	53.59	A16S	ATOM	50737	C5	GUA	1498	191.134	92.955	-36.471	1.00	52.78	A16S
ATOM	50685	C4	ADE	1496	195.109	93.493	-26.407	1.00	53.59	A16S	ATOM	50738	N7	GUA	1498	190.944	93.742	-35.351	1.00	52.78	A16S
ATOM	50686	N3	ADE	1496	195.528	94.341	-25.457	1.00	53.59	A16S	ATOM	50739	C8	GUA	1498	192.088	94.335	-35.170	1.00	52.78	A16S

ATOM	50740	C2'	GUA	1498	194.600	95.684	-37.079	1.00	39.31	A16S	ATOM	50793	O4'	CYT	1501	186.183	97.492	-47.730	1.00	42.30	A16S
ATOM	50741	O2'	GUA	1498	195.851	95.604	-37.724	1.00	39.31	A16S	ATOM	50794	C1'	CYT	1501	184.880	97.602	-47.184	1.00	42.30	A16S
ATOM	50742	C3'	GUA	1498	194.559	96.852	-36.105	1.00	39.31	A16S	ATOM	50795	N1	CYT	1501	184.987	97.802	-45.739	1.00	52.93	A16S
ATOM	50743	O3'	GUA	1498	195.293	97.970	-36.584	1.00	39.31	A16S	ATOM	50796	C6	CYT	1501	186.056	98.450	-45.195	1.00	52.93	A16S
ATOM	50744	P	URI	1499	194.593	98.994	-37.602	1.00	39.75	A16S	ATOM	50797	C2	CYT	1501	183.956	97.332	-44.927	1.00	52.93	A16S
ATOM	50745	O1P	URI	1499	195.568	100.041	-38.011	1.00	49.36	A16S	ATOM	50798	O2	CYT	1501	182.997	96.754	-45.455	1.00	52.93	A16S
ATOM	50746	O2P	URI	1499	193.285	99.394	-37.012	1.00	49.36	A16S	ATOM	50799	N3	CYT	1501	184.023	97.531	-43.596	1.00	52.93	A16S
ATOM	50747	O5'	URI	1499	194.281	98.097	-38.872	1.00	39.75	A16S	ATOM	50800	C4	CYT	1501	185.056	98.191	-43.077	1.00	52.93	A16S
ATOM	50748	C5'	URI	1499	195.318	97.749	-39.762	1.00	39.75	A16S	ATOM	50801	N4	CYT	1501	185.061	98.405	-41.768	1.00	52.93	A16S
ATOM	50749	C4'	URI	1499	194.794	96.836	-40.828	1.00	39.75	A16S	ATOM	50802	C5	CYT	1501	186.125	98.671	-43.881	1.00	52.93	A16S
ATOM	50750	O4'	URI	1499	194.303	95.615	-40.217	1.00	39.75	A16S	ATOM	50803	C2'	CYT	1501	184.209	98.797	-47.854	1.00	42.30	A16S
ATOM	50751	C1'	URI	1499	193.222	95.116	-40.981	1.00	39.75	A16S	ATOM	50804	O2'	CYT	1501	183.385	98.311	-48.885	1.00	42.30	A16S
ATOM	50752	N1	URI	1499	192.026	95.087	-40.134	1.00	49.36	A16S	ATOM	50805	C3'	CYT	1501	185.415	99.573	-48.359	1.00	42.30	A16S
ATOM	50753	C6	URI	1499	191.892	95.877	-39.017	1.00	49.36	A16S	ATOM	50806	O3'	CYT	1501	185.090	100.435	-49.431	1.00	42.30	A16S
ATOM	50754	C2	URI	1499	191.037	94.243	-40.523	1.00	49.36	A16S	ATOM	50807	P	GUA	1502	185.049	102.019	-49.183	1.00	46.88	A16S
ATOM	50755	O2	URI	1499	191.156	93.520	-41.471	1.00	49.36	A16S	ATOM	50808	O1P	GUA	1502	184.981	102.677	-50.515	1.00	46.05	A16S
ATOM	50756	N3	URI	1499	189.907	94.269	-39.756	1.00	49.36	A16S	ATOM	50809	O2P	GUA	1502	186.133	102.387	-48.231	1.00	46.05	A16S
ATOM	50757	C4	URI	1499	189.686	95.035	-38.639	1.00	49.36	A16S	ATOM	50810	O5'	GUA	1502	183.652	102.241	-48.459	1.00	46.88	A16S
ATOM	50758	O4	URI	1499	188.607	94.941	-38.049	1.00	49.36	A16S	ATOM	50811	C5'	GUA	1502	182.449	102.029	-49.170	1.00	46.88	A16S
ATOM	50759	C5	URI	1499	190.784	95.880	-38.270	1.00	49.36	A16S	ATOM	50812	C4'	GUA	1502	181.290	101.887	-48.224	1.00	46.88	A16S
ATOM	50760	C2'	URI	1499	193.032	96.069	-42.161	1.00	39.75	A16S	ATOM	50813	O4'	GUA	1502	181.488	100.733	-47.362	1.00	46.88	A16S
ATOM	50761	O2'	URI	1499	193.799	95.604	-43.255	1.00	39.75	A16S	ATOM	50814	C1'	GUA	1502	180.713	100.902	-46.191	1.00	46.88	A16S
ATOM	50762	C3'	URI	1499	193.596	97.353	-41.585	1.00	39.75	A16S	ATOM	50815	N9	GUA	1502	181.582	100.847	-45.027	1.00	46.05	A16S
ATOM	50763	O3'	URI	1499	194.005	98.226	-42.606	1.00	39.75	A16S	ATOM	50816	C4	GUA	1502	181.186	100.502	-43.769	1.00	46.05	A16S
ATOM	50764	P	GUA	1500	192.921	99.174	-43.288	1.00	36.46	A16S	ATOM	50817	N3	GUA	1502	179.950	100.088	-43.421	1.00	46.05	A16S
ATOM	50765	O1P	GUA	1500	193.564	100.036	-44.304	1.00	47.89	A16S	ATOM	50818	C2	GUA	1502	179.856	99.845	-42.128	1.00	46.05	A16S
ATOM	50766	O2P	GUA	1500	192.159	99.787	-42.171	1.00	47.89	A16S	ATOM	50819	N2	GUA	1502	178.705	99.404	-41.615	1.00	46.05	A16S
ATOM	50767	O5'	GUA	1500	191.983	98.150	-44.064	1.00	36.46	A16S	ATOM	50820	N1	GUA	1502	180.885	100.016	-41.244	1.00	46.05	A16S
ATOM	50768	C5'	GUA	1500	192.435	97.564	-45.272	1.00	36.46	A16S	ATOM	50821	C6	GUA	1502	182.155	100.465	-41.575	1.00	46.05	A16S
ATOM	50769	C4'	GUA	1500	191.334	96.787	-45.942	1.00	36.46	A16S	ATOM	50822	O6	GUA	1502	182.992	100.629	-40.684	1.00	46.05	A16S
ATOM	50770	O4'	GUA	1500	190.896	95.699	-45.090	1.00	36.46	A16S	ATOM	50823	C5	GUA	1502	182.282	100.697	-42.972	1.00	46.05	A16S
ATOM	50771	C1'	GUA	1500	189.553	95.384	-45.397	1.00	36.46	A16S	ATOM	50824	N7	GUA	1502	183.367	101.116	-43.726	1.00	46.05	A16S
ATOM	50772	N9	GUA	1500	188.755	95.531	-44.181	1.00	47.89	A16S	ATOM	50825	C8	GUA	1502	182.905	101.180	-44.943	1.00	46.05	A16S
ATOM	50773	C4	GUA	1500	187.524	94.973	-43.948	1.00	47.89	A16S	ATOM	50826	C2'	GUA	1502	180.084	102.293	-46.281	1.00	46.88	A16S
ATOM	50774	N3	GUA	1500	186.834	94.204	-44.811	1.00	47.89	A16S	ATOM	50827	O2'	GUA	1502	178.788	102.159	-46.832	1.00	46.88	A16S
ATOM	50775	C2	GUA	1500	185.696	93.779	-44.293	1.00	47.89	A16S	ATOM	50828	C3'	GUA	1502	181.059	102.991	-47.216	1.00	46.88	A16S
ATOM	50776	N2	GUA	1500	184.904	92.958	-45.009	1.00	47.89	A16S	ATOM	50829	O3'	GUA	1502	180.488	104.137	-47.820	1.00	46.88	A16S
ATOM	50777	N1	GUA	1500	185.256	94.112	-43.036	1.00	47.89	A16S	ATOM	50830	P	GUA	1503	180.653	105.580	-47.115	1.00	40.71	A16S
ATOM	50778	C6	GUA	1500	185.942	94.910	-42.133	1.00	47.89	A16S	ATOM	50831	O1P	GUA	1503	179.984	106.549	-48.020	1.00	49.07	A16S
ATOM	50779	O6	GUA	1500	185.449	95.141	-41.025	1.00	47.89	A16S	ATOM	50832	O2P	GUA	1503	182.073	105.797	-46.729	1.00	49.07	A16S
ATOM	50780	C5	GUA	1500	187.180	95.356	-42.669	1.00	47.89	A16S	ATOM	50833	O5'	GUA	1503	179.797	105.473	-45.780	1.00	40.71	A16S
ATOM	50781	N7	GUA	1500	188.170	96.154	-42.110	1.00	47.89	A16S	ATOM	50834	C5'	GUA	1503	178.424	105.159	-45.844	1.00	40.71	A16S
ATOM	50782	C8	GUA	1500	189.082	96.234	-43.043	1.00	47.89	A16S	ATOM	50835	C4'	GUA	1503	177.876	104.905	-44.468	1.00	40.71	A16S
ATOM	50783	C2'	GUA	1500	189.138	96.328	-46.528	1.00	36.46	A16S	ATOM	50836	O4'	GUA	1503	178.544	103.766	-43.856	1.00	40.71	A16S
ATOM	50784	O2'	GUA	1500	189.479	95.708	-47.754	1.00	36.46	A16S	ATOM	50837	C1'	GUA	1503	178.524	103.919	-42.448	1.00	40.71	A16S
ATOM	50785	C3'	GUA	1500	190.049	97.515	-46.268	1.00	36.46	A16S	ATOM	50838	N9	GUA	1503	179.900	103.887	-41.965	1.00	49.07	A16S
ATOM	50786	O3'	GUA	1500	190.211	98.277	-47.449	1.00	36.46	A16S	ATOM	50839	C4	GUA	1503	180.302	103.815	-40.659	1.00	49.07	A16S
ATOM	50787	P	CYT	1501	189.698	99.802	-47.501	1.00	42.30	A16S	ATOM	50840	N3	GUA	1503	179.494	103.782	-39.588	1.00	49.07	A16S
ATOM	50788	O1P	CYT	1501	190.395	100.533	-48.591	1.00	52.93	A16S	ATOM	50841	C2	GUA	1503	180.175	103.741	-38.465	1.00	49.07	A16S
ATOM	50789	O2P	CYT	1501	189.753	100.321	-46.113	1.00	52.93	A16S	ATOM	50842	N2	GUA	1503	179.531	103.752	-37.295	1.00	49.07	A16S
ATOM	50790	O5'	CYT	1501	188.176	99.677	-47.920	1.00	42.30	A16S	ATOM	50843	N1	GUA	1503	181.542	103.699	-38.400	1.00	49.07	A16S
ATOM	50791	C5'	CYT	1501	187.781	98.815	-48.964	1.00	42.30	A16S	ATOM	50844	C6	GUA	1503	182.391	103.714	-39.497	1.00	49.07	A16S
ATOM	50792	C4'	CYT	1501	186.332	98.452	-48.800	1.00	42.30	A16S	ATOM	50845	O6	GUA	1503	183.605	103.653	-39.334	1.00	49.07	A16S

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ATOM  50846  C5  GUA  1503     181.677 103.795 -40.700  1.00 49.07      A16S
ATOM  50847  N7  GUA  1503     182.132 103.871 -42.005  1.00 49.07      A16S
ATOM  50848  C8  GUA  1503     181.045 103.919 -42.721  1.00 49.07      A16S
ATOM  50849  C2' GUA  1503     177.818 105.247 -42.156  1.00 40.71      A16S
ATOM  50850  O2' GUA  1503     176.438 105.003 -41.954  1.00 40.71      A16S
ATOM  50851  C3' GUA  1503     178.063 106.007 -43.449  1.00 40.71      A16S
ATOM  50852  O3' GUA  1503     177.090 107.022 -43.628  1.00 40.71      A16S
ATOM  50853  P   CYT  1504     177.417 108.520 -43.145  1.00 35.15      A16S
ATOM  50854  O1P CYT  1504     176.352 109.415 -43.674  1.00 39.35      A16S
ATOM  50855  O2P CYT  1504     178.842 108.793 -43.469  1.00 39.35      A16S
ATOM  50856  O5' CYT  1504     177.280 108.437 -41.565  1.00 35.15      A16S
ATOM  50857  C5' CYT  1504     176.047 108.099 -40.962  1.00 35.15      A16S
ATOM  50858  C4' CYT  1504     176.195 108.124 -39.470  1.00 35.15      A16S
ATOM  50859  O4' CYT  1504     177.054 107.029 -39.077  1.00 35.15      A16S
ATOM  50860  C1' CYT  1504     177.862 107.431 -37.977  1.00 35.15      A16S
ATOM  50861  N1  CYT  1504     179.273 107.277 -38.359  1.00 39.35      A16S
ATOM  50862  C6  CYT  1504     179.642 107.233 -39.672  1.00 39.35      A16S
ATOM  50863  C2  CYT  1504     180.231 107.154 -37.353  1.00 39.35      A16S
ATOM  50864  O2  CYT  1504     179.874 107.251 -36.170  1.00 39.35      A16S
ATOM  50865  N3  CYT  1504     181.519 106.948 -37.693  1.00 39.35      A16S
ATOM  50866  C4  CYT  1504     181.866 106.897 -38.974  1.00 39.35      A16S
ATOM  50867  N4  CYT  1504     183.146 106.706 -39.259  1.00 39.35      A16S
ATOM  50868  C5  CYT  1504     180.913 107.047 -40.019  1.00 39.35      A16S
ATOM  50869  C2' CYT  1504     177.453 108.858 -37.606  1.00 35.15      A16S
ATOM  50870  O2' CYT  1504     176.467 108.807 -36.595  1.00 35.15      A16S
ATOM  50871  C3' CYT  1504     176.894 109.359 -38.927  1.00 35.15      A16S
ATOM  50872  O3' CYT  1504     175.972 110.404 -38.719  1.00 35.15      A16S
ATOM  50873  P   URI  1505     176.504 111.903 -38.559  1.00 44.66      A16S
ATOM  50874  O1P URI  1505     175.328 112.797 -38.554  1.00 47.22      A16S
ATOM  50875  O2P URI  1505     177.575 112.123 -39.555  1.00 47.22      A16S
ATOM  50876  O5' URI  1505     177.197 111.915 -37.126  1.00 44.66      A16S
ATOM  50877  C5' URI  1505     176.467 111.770 -35.908  1.00 44.66      A16S
ATOM  50878  C4' URI  1505     177.388 112.097 -34.761  1.00 44.66      A16S
ATOM  50879  O4' URI  1505     178.491 111.171 -34.802  1.00 44.66      A16S
ATOM  50880  C1' URI  1505     179.714 111.852 -34.657  1.00 44.66      A16S
ATOM  50881  N1  URI  1505     180.663 111.296 -35.631  1.00 47.22      A16S
ATOM  50882  C6  URI  1505     180.375 111.269 -36.972  1.00 47.22      A16S
ATOM  50883  C2  URI  1505     181.863 110.779 -35.139  1.00 47.22      A16S
ATOM  50884  O2  URI  1505     182.162 110.789 -33.945  1.00 47.22      A16S
ATOM  50885  N3  URI  1505     182.691 110.250 -36.091  1.00 47.22      A16S
ATOM  50886  C4  URI  1505     182.456 110.193 -37.449  1.00 47.22      A16S
ATOM  50887  O4  URI  1505     183.308 109.694 -38.187  1.00 47.22      A16S
ATOM  50888  C5  URI  1505     181.204 110.750 -37.870  1.00 47.22      A16S
ATOM  50889  C2' URI  1505     179.482 113.365 -34.668  1.00 44.66      A16S
ATOM  50890  O2' URI  1505     179.960 113.955 -33.500  1.00 44.66      A16S
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ATOM  50892  O3' URI  1505     177.170 114.490 -34.242  1.00 44.66      A16S
ATOM  50893  P   GUA  1506     177.235 114.742 -32.631  1.00 39.80      A16S
ATOM  50894  O1P GUA  1506     175.849 115.055 -32.290  1.00 32.96      A16S
ATOM  50895  O2P GUA  1506     178.279 115.727 -32.292  1.00 32.96      A16S
ATOM  50896  O5' GUA  1506     177.519 113.347 -31.924  1.00 39.80      A16S
ATOM  50897  C5' GUA  1506     177.525 113.269 -30.507  1.00 39.80      A16S
ATOM  50898  C4' GUA  1506     178.335 112.088 -30.059  1.00 39.80      A16S
ATOM  50899  O4' GUA  1506     177.494 110.965 -29.792  1.00 39.80      A16S
ATOM  50900  C1' GUA  1506     178.268 109.815 -29.961  1.00 39.80      A16S
ATOM  50901  N9  GUA  1506     177.411 108.660 -30.174  1.00 32.96      A16S
ATOM  50902  C4  GUA  1506     176.374 108.542 -31.059  1.00 32.96      A16S
ATOM  50903  N3  GUA  1506     175.936 109.498 -31.893  1.00 32.96      A16S
ATOM  50904  C2  GUA  1506     174.941 109.072 -32.636  1.00 32.96      A16S
ATOM  50905  N2  GUA  1506     174.378 109.892 -33.516  1.00 32.96      A16S
ATOM  50906  N1  GUA  1506     174.422 107.810 -32.566  1.00 32.96      A16S
ATOM  50907  C6  GUA  1506     174.858 106.820 -31.704  1.00 32.96      A16S
ATOM  50908  O6  GUA  1506     174.317 105.720 -31.707  1.00 32.96      A16S
ATOM  50909  C5  GUA  1506     175.914 107.258 -30.910  1.00 32.96      A16S
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ATOM  50912  C2' GUA  1506     179.353 110.106 -31.004  1.00 39.80      A16S
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ATOM  50915  O3' GUA  1506     180.683 112.086 -30.814  1.00 39.80      A16S
ATOM  50916  P   GUA  1507     180.977 113.235 -29.710  1.00 50.23      A16S
ATOM  50917  O1P GUA  1507     182.071 112.709 -28.847  1.00 69.57      A16S
ATOM  50918  O2P GUA  1507     179.768 113.779 -29.075  1.00 69.57      A16S
ATOM  50919  O5' GUA  1507     181.570 114.409 -30.597  1.00 50.23      A16S
ATOM  50920  C5' GUA  1507     182.136 114.111 -31.862  1.00 50.23      A16S
ATOM  50921  C4' GUA  1507     183.631 113.989 -31.745  1.00 50.23      A16S
ATOM  50922  O4' GUA  1507     184.070 112.919 -32.599  1.00 50.23      A16S
ATOM  50923  C1' GUA  1507     185.345 113.227 -33.122  1.00 50.23      A16S
ATOM  50924  N9  GUA  1507     185.273 113.160 -34.570  1.00 69.57      A16S
ATOM  50925  C4  GUA  1507     186.333 113.001 -35.412  1.00 69.57      A16S
ATOM  50926  N3  GUA  1507     187.626 112.899 -35.039  1.00 69.57      A16S
ATOM  50927  C2  GUA  1507     188.426 112.743 -36.076  1.00 69.57      A16S
ATOM  50928  N2  GUA  1507     189.743 112.621 -35.883  1.00 69.57      A16S
ATOM  50929  N1  GUA  1507     187.990 112.694 -37.377  1.00 69.57      A16S
ATOM  50930  C6  GUA  1507     186.661 112.800 -37.783  1.00 69.57      A16S
ATOM  50931  O6  GUA  1507     186.373 112.745 -38.986  1.00 69.57      A16S
ATOM  50932  C5  GUA  1507     185.793 112.965 -36.676  1.00 69.57      A16S
ATOM  50933  N7  GUA  1507     184.412 113.109 -36.627  1.00 69.57      A16S
ATOM  50934  C8  GUA  1507     184.151 113.226 -35.356  1.00 69.57      A16S
ATOM  50935  C2' GUA  1507     185.775 114.588 -32.583  1.00 50.23      A16S
ATOM  50936  O2' GUA  1507     186.630 114.380 -31.483  1.00 50.23      A16S
ATOM  50937  C3' GUA  1507     184.446 115.203 -32.165  1.00 50.23      A16S
ATOM  50938  O3' GUA  1507     184.651 116.078 -31.057  1.00 50.23      A16S
ATOM  50939  P   ADE  1508     184.976 117.620 -31.319  1.00 94.92      A16S
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ATOM  50941  O2P ADE  1508     184.981 117.845 -32.787  1.00 88.79      A16S
ATOM  50942  O5' ADE  1508     186.460 117.793 -30.765  1.00 94.92      A16S
ATOM  50943  C5' ADE  1508     186.756 117.662 -29.370  1.00 94.92      A16S
ATOM  50944  C4' ADE  1508     188.257 117.590 -29.157  1.00 94.92      A16S
ATOM  50945  O4' ADE  1508     188.762 116.393 -29.810  1.00 94.92      A16S
ATOM  50946  C1' ADE  1508     189.933 116.698 -30.548  1.00 94.92      A16S
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ATOM  50949  N3  ADE  1508     191.707 116.183 -33.021  1.00 88.79      A16S
ATOM  50950  C2  ADE  1508     192.168 116.021 -34.258  1.00 88.79      A16S
ATOM  50951  N1  ADE  1508     191.511 116.107 -35.428  1.00 88.79      A16S
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ATOM  50954  C5  ADE  1508     189.586 116.598 -34.166  1.00 88.79      A16S
ATOM  50955  N7  ADE  1508     188.282 116.905 -33.806  1.00 88.79      A16S
ATOM  50956  C8  ADE  1508     188.323 116.957 -32.499  1.00 88.79      A16S
ATOM  50957  C2' ADE  1508     190.402 118.063 -30.048  1.00 94.92      A16S
ATOM  50958  O2' ADE  1508     191.204 117.887 -28.897  1.00 94.92      A16S
ATOM  50959  C3' ADE  1508     189.065 118.735 -29.755  1.00 94.92      A16S
ATOM  50960  O3' ADE  1508     189.194 119.829 -28.849  1.00 94.92      A16S
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ATOM  50964  O5' URI  1509     190.325 121.255 -30.605  1.00117.95      A16S
ATOM  50965  C5' URI  1509     191.722 121.189 -30.335  1.00117.95      A16S
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ATOM  50979  C3' URI  1509     192.219 122.422 -32.540  1.00117.95      A16S
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ATOM  50981  P   CYT  1510     192.290 125.043 -32.608  1.00147.98      A16S
ATOM  50982  O1P CYT  1510     190.840 125.045 -32.289  1.00200.01      A16S
ATOM  50983  O2P CYT  1510     193.161 126.114 -32.061  1.00200.01      A16S
ATOM  50984  O5' CYT  1510     192.456 125.020 -34.196  1.00147.98      A16S
ATOM  50985  C5' CYT  1510     191.337 124.806 -35.062  1.00147.98      A16S
ATOM  50986  C4' CYT  1510     191.741 125.030 -36.508  1.00147.98      A16S
ATOM  50987  O4' CYT  1510     192.358 126.344 -36.612  1.00147.98      A16S
ATOM  50988  C1' CYT  1510     193.508 126.272 -37.436  1.00147.98      A16S
ATOM  50989  N1  CYT  1510     194.687 126.500 -36.584  1.00200.01      A16S
ATOM  50990  C6  CYT  1510     194.538 126.827 -35.263  1.00200.01      A16S
ATOM  50991  C2  CYT  1510     195.966 126.379 -37.141  1.00200.01      A16S
ATOM  50992  O2  CYT  1510     196.074 126.088 -38.345  1.00200.01      A16S
ATOM  50993  N3  CYT  1510     197.051 126.583 -36.354  1.00200.01      A16S
ATOM  50994  C4  CYT  1510     196.891 126.899 -35.064  1.00200.01      A16S
ATOM  50995  N4  CYT  1510     197.986 127.087 -34.324  1.00200.01      A16S
ATOM  50996  C5  CYT  1510     195.601 127.034 -34.475  1.00200.01      A16S
ATOM  50997  C2' CYT  1510     193.489 124.903 -38.118  1.00147.98      A16S
ATOM  50998  O2' CYT  1510     192.786 124.986 -39.343  1.00147.98      A16S
ATOM  50999  C3' CYT  1510     192.770 124.056 -37.076  1.00147.98      A16S
ATOM  51000  O3' CYT  1510     192.126 122.939 -37.688  1.00147.98      A16S
ATOM  51001  P   ADE  1511     192.990 121.649 -38.112  0.00200.66      A16S
ATOM  51002  O1P ADE  1511     192.060 120.691 -38.764  0.00200.66      A16S
ATOM  51003  O2P ADE  1511     193.786 121.213 -36.937  0.00200.66      A16S
ATOM  51004  O5' ADE  1511     193.994 122.185 -39.226  0.00200.66      A16S
ATOM  51005  C5' ADE  1511     193.527 122.565 -40.519  0.00200.66      A16S
ATOM  51006  C4' ADE  1511     194.663 123.136 -41.334  0.00200.66      A16S
ATOM  51007  O4' ADE  1511     195.254 124.245 -40.602  0.00200.66      A16S
ATOM  51008  C1' ADE  1511     196.663 124.240 -40.777  0.00200.66      A16S
ATOM  51009  N9  ADE  1511     197.276 123.983 -39.474  0.00200.66      A16S
ATOM  51010  C4  ADE  1511     198.478 124.473 -39.021  0.00200.66      A16S
ATOM  51011  N3  ADE  1511     199.329 125.280 -39.676  0.00200.66      A16S
ATOM  51012  C2  ADE  1511     200.393 125.550 -38.922  0.00200.66      A16S
ATOM  51013  N1  ADE  1511     200.681 125.135 -37.682  0.00200.66      A16S
ATOM  51014  C6  ADE  1511     199.803 124.324 -37.052  0.00200.66      A16S
ATOM  51015  N6  ADE  1511     200.089 123.910 -35.815  0.00200.66      A16S
ATOM  51016  C5  ADE  1511     198.634 123.963 -37.744  0.00200.66      A16S
ATOM  51017  N7  ADE  1511     197.553 123.166 -37.397  0.00200.66      A16S
ATOM  51018  C8  ADE  1511     196.779 123.210 -38.454  0.00200.66      A16S
ATOM  51019  C2' ADE  1511     196.980 123.154 -41.806  0.00200.66      A16S
ATOM  51020  O2' ADE  1511     196.964 123.716 -43.102  0.00200.66      A16S
ATOM  51021  C3' ADE  1511     195.828 122.189 -41.569  0.00200.66      A16S
ATOM  51022  O3' ADE  1511     195.593 121.245 -42.620  0.00200.66      A16S
ATOM  51023 ZN+2 ZN2   190     216.794 127.655  24.827  0.86 40.90      UION
ATOM  51024 ZN+2 ZN2   300     154.444 113.548  39.567  1.03 40.90      UION
END
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TABLE 3 - PAROMOMYCIN

END

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REMARK Written by O version 6.2.1
REMARK Fri Jul  7 22:08:47 2000
CRYST1    1.000    1.000    1.000  90.00  90.00  90.00
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      1.000000 -0.000026 -0.000026        0.00000
SCALE2      0.000000  1.000000 -0.000026        0.00000
SCALE3      0.000000  0.000000  1.000000        0.00000
ATOM      1  C1  PAR     1     190.461  87.836  -9.287  1.00  0.00   6
ATOM      2  O1  PAR     1     191.311  89.006  -9.399  1.00  0.00   8
ATOM      3  C2  PAR     1     189.206  88.140  -8.388  1.00  0.00   6
ATOM      4  N2  PAR     1     188.589  89.472  -8.620  1.00  0.00   7
ATOM      5  C3  PAR     1     189.553  88.079  -6.889  1.00  0.00   6
ATOM      6  O3  PAR     1     188.370  88.092  -6.094  1.00  0.00   8
ATOM      7  C4  PAR     1     190.374  86.823  -6.563  1.00  0.00   6
ATOM      8  O4  PAR     1     190.649  86.762  -5.167  1.00  0.00   8
ATOM      9  C5  PAR     1     191.658  86.770  -7.422  1.00  0.00   6
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ATOM     13  C1  PAR     2     193.694  90.874 -12.406  1.00  0.00   6
ATOM     14  N1  PAR     2     194.599  91.200 -13.522  1.00  0.00   7
ATOM     15  C6  PAR     2     192.392  90.164 -12.889  1.00  0.00   6
ATOM     16  O6  PAR     2     191.687  90.991 -13.811  1.00  0.00   8
ATOM     17  C5  PAR     2     191.447  89.843 -11.695  1.00  0.00   6
ATOM     18  O5  PAR     2     190.337  89.034 -12.184  1.00  0.00   8
ATOM     19  C4  PAR     2     192.185  89.074 -10.550  1.00  0.00   6
ATOM     20  C3  PAR     2     193.515  89.767 -10.114  1.00  0.00   6
ATOM     21  N3  PAR     2     194.240  88.967  -9.102  1.00  0.00   7
ATOM     22  C2  PAR     2     194.432  90.014 -11.340  1.00  0.00   6
ATOM     23  C1  PAR     3     189.190  89.081 -13.073  1.00  0.00   6
ATOM     24  C2  PAR     3     188.912  87.770 -13.832  1.00  0.00   6
ATOM     25  O2  PAR     3     189.440  87.870 -15.175  1.00  0.00   8
ATOM     26  C3  PAR     3     187.410  87.687 -13.844  1.00  0.00   6
ATOM     27  C4  PAR     3     186.990  88.363 -12.544  1.00  0.00   6
ATOM     28  O4  PAR     3     187.939  89.416 -12.445  1.00  0.00   8
ATOM     29  C5  PAR     3     187.217  87.521 -11.488  1.00  0.00   6
ATOM     30  O5  PAR     3     186.688  88.126 -10.265  1.00  0.00   8
ATOM     31  C4  PAR     4     184.462  90.435 -17.095  1.00  0.00   6
ATOM     32  O4  PAR     4     183.965  91.560 -16.991  1.00  0.00   8
ATOM     33  C3  PAR     4     185.961  90.584 -16.964  1.00  0.00   6
ATOM     34  O3  PAR     4     186.394  91.481 -17.969  1.00  0.00   8
ATOM     35  C2  PAR     4     186.803  89.409 -16.757  1.00  0.00   6
ATOM     36  N2  PAR     4     188.253  89.680 -16.667  1.00  0.00   7
ATOM     37  C1  PAR     4     186.232  88.525 -15.734  1.00  0.00   6
ATOM     38  O4  PAR     4     186.759  88.952 -14.460  1.00  0.00   8
ATOM     39  C5  PAR     4     183.986  89.545 -15.971  1.00  0.00   6
ATOM     40  O5  PAR     4     184.795  88.366 -15.730  1.00  0.00   8
ATOM     41  C6  PAR     4     183.584  90.341 -14.803  1.00  0.00   6
ATOM     42  N6  PAR     4     182.738  89.523 -14.052  1.00  0.00   7
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TABLE 4 - SPECTINOMYCIN

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REMARK Mon Jul  3 14:36:04 2000
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ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      1.000000 -0.000026 -0.000026        0.00000
SCALE2      0.000000  1.000000 -0.000026        0.00000
SCALE3      0.000000  0.000000  1.000000        0.00000
ATOM      1  C10 SPC     1     198.994 128.468  -4.902  1.00  0.00    6
ATOM      2  C9  SPC     1     200.373 129.103  -5.073  1.00  0.00    6
ATOM      3  C8  SPC     1     200.771 129.209  -6.563  1.00  0.00    6
ATOM      4  C7  SPC     1     199.682 129.943  -7.374  1.00  0.00    6
ATOM      5  C6  SPC     1     198.265 129.356  -7.181  1.00  0.00    6
ATOM      6  C5  SPC     1     197.957 129.280  -5.666  1.00  0.00    6
ATOM      7  O10 SPC     1     198.640 128.476  -3.531  1.00  0.00    8
ATOM      8  C1  SPC     1     197.361 127.961  -3.275  1.00  0.00    6
ATOM      9  C4a SPC     1     196.304 128.606  -4.138  1.00  0.00    6
ATOM     10  O5  SPC     1     196.680 128.702  -5.480  1.00  0.00    8
ATOM     11  C4  SPC     1     195.038 127.800  -4.108  1.00  0.00    6
ATOM     12  O4  SPC     1     193.959 128.344  -4.057  1.00  0.00    8
ATOM     13  C3  SPC     1     195.212 126.298  -4.187  1.00  0.00    6
ATOM     14  C2  SPC     1     196.377 125.844  -3.295  1.00  0.00    6
ATOM     15  O1  SPC     1     197.533 126.605  -3.590  1.00  0.00    8
ATOM     16  O4a SPC     1     196.032 129.908  -3.714  1.00  0.00    8
ATOM     17  C2a SPC     1     196.701 124.357  -3.530  1.00  0.00    6
ATOM     18  N6  SPC     1     197.300 130.251  -7.797  1.00  0.00    7
ATOM     19  C6a SPC     1     196.625 129.687  -8.958  1.00  0.00    6
ATOM     20  O7  SPC     1     199.716 131.298  -6.985  1.00  0.00    8
ATOM     21  N8  SPC     1     202.032 129.922  -6.637  1.00  0.00    7
ATOM     22  O9  SPC     1     201.330 128.312  -4.410  1.00  0.00    8
ATOM     23  C8a SPC     1     202.700 129.827  -7.918  1.00  0.00    6
END
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TABLE 5 - STREPTINOMYCIN

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ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      1.000000 -0.000026 -0.000026        0.00000
SCALE2      0.000000  1.000000 -0.000026        0.00000
SCALE3      0.000000  0.000000  1.000000        0.00000
ATOM      1  O6  STR     1     181.555 102.493  -6.974  1.00  0.00    8
ATOM      2  C6  STR     1     182.135 101.868  -5.817  1.00  0.00    6
ATOM      3  C5  STR     1     181.233 102.064  -4.571  1.00  0.00    6
ATOM      4  C4  STR     1     181.064 103.569  -4.235  1.00  0.00    6
ATOM      5  C3  STR     1     180.090 103.720  -3.041  1.00  0.00    6
ATOM      6  C2  STR     1     178.754 103.009  -3.372  1.00  0.00    6
ATOM      7  C1  STR     1     179.035 101.535  -3.758  1.00  0.00    6
ATOM      8  O1  STR     1     179.549 100.858  -2.596  1.00  0.00    8
ATOM      9  O5  STR     1     179.954 101.471  -4.865  1.00  0.00    8
ATOM     10  O4  STR     1     182.345 104.131  -3.903  1.00  0.00    8
ATOM     11  O3  STR     1     179.869 105.119  -2.798  1.00  0.00    8
ATOM     12  N2  STR     1     177.862 103.107  -2.194  1.00  0.00    7
ATOM     13  C7  STR     1     176.422 102.861  -2.420  1.00  0.00    6
ATOM     14  C2  STR     2     179.057  99.508  -2.784  1.00  0.00    6
ATOM     15  C3  STR     2     178.920  98.738  -1.444  1.00  0.00    6
ATOM     16  C4  STR     2     179.572  97.374  -1.770  1.00  0.00    6
ATOM     17  O4  STR     2     180.688  97.818  -2.547  1.00  0.00    8
ATOM     18  C1  STR     2     180.177  98.730  -3.529  1.00  0.00    6
ATOM     19  C5  STR     2     180.013  96.567  -0.524  1.00  0.00    6
ATOM     20  O3  STR     2     179.667  99.415  -0.416  1.00  0.00    8
ATOM     21  C6  STR     2     177.490  98.576  -0.995  1.00  0.00    6
ATOM     22  O6  STR     2     176.568  98.465  -1.780  1.00  0.00    8
ATOM     23  O1  STR     3     179.565  97.948  -4.617  1.00  0.00    8
ATOM     24  C4  STR     3     180.248  97.013  -5.541  1.00  0.00    6
ATOM     25  C3  STR     3     179.927  95.686  -4.982  1.00  0.00    6
ATOM     26  C2  STR     3     180.560  94.533  -5.902  1.00  0.00    6
ATOM     27  C1  STR     3     180.072  94.699  -7.365  1.00  0.00    6
ATOM     28  C6  STR     3     180.388  96.128  -7.886  1.00  0.00    6
ATOM     29  C5  STR     3     179.756  97.221  -6.976  1.00  0.00    6
ATOM     30  N5  STR     3     180.082  98.589  -7.443  1.00  0.00    7
ATOM     31  C8  STR     3     179.257  99.084  -8.371  1.00  0.00    6
ATOM     32  N7A STR     3     179.361  98.821  -9.614  1.00  0.00    7
ATOM     33  N7B STR     3     178.300  99.898  -7.923  1.00  0.00    7
ATOM     34  O6  STR     3     179.869  96.259  -9.221  1.00  0.00    8
ATOM     35  N1  STR     3     180.704  93.733  -8.297  1.00  0.00    7
ATOM     36  C7  STR     3     179.971  92.717  -8.821  1.00  0.00    6
ATOM     37  N6A STR     3     179.867  91.466  -8.185  1.00  0.00    7
ATOM     38  N6B STR     3     178.921  92.624 -10.014  1.00  0.00    7
ATOM     39  O2  STR     3     180.173  93.240  -5.406  1.00  0.00    8
ATOM     40  O3  STR     3     180.345  95.466  -3.638  1.00  0.00    8
END
```

Table 6.

(a) Data collection

Data set	Beamline	Resolution limit (Å)	No. of observations	No. of unique reflections	Completeness(%)		<I>/<σ>		R_{sym}	
					Overall	Outer shell	Overall	Outer shell	Overall	Outer shell
Native	ID14-4+SBC ID-19	3.05	840101	254607	94.0	81.7	12.0	1.8	10.8	49.0
Os1	SBC ID-19	3.35	1355593	199999	98.4	90.3	16.4	2.4	13.9	59.2
Os2	ID14-4	4.00	362452	118494	97.4	97.1	8.5	2.3	10.9	38.9
Os3	ID14-4	4.30	259175	93894	96.4	99.0	6.4	1.7	18.7	53.2
Os4	X25	4.50	301216	79267	93.9	65.9	11.6	3.3	9.8	22.9
Lu1	SBC ID-19	3.35	981691	180035	97.5	83.5	16.9	3.4	10.9	37.3
Lu2	SBC ID-19	3.20	929154	230296	98.1	97.6	10.0	2.1	14.7	60.5

Os1 = Osmium hexammine chloride; Os2 = Pentaammine(dinitrogen)osmium(II)chloride; Os3 = Pentaammine(trifluorosulfonato)osmium(III)trifuluoromethanesulfonate; Os4 = Osmium bipyridine; Lu1, Lu2 = lutetium chloride.

Table 6.

(b) Phasing

Derivative	Number of sites	R_{cullis}	Phasing power
Os1	56	0.69	0.84
Os2	6	0.87	0.20
Os3	49	0.70	0.61
Os4	4	0.94	0.10
Lu1	18	0.78	0.33
Lu2	14	0.77	0.39

Mean figure of merit to 3.35 Å: 0.48 ; figure of merit in outer shell: 0.24

Map correlation with final refined model: before density modification: after density modification:

Table 6.

(c) Refinement

Resolution Range:	99. – 3.05 Å
Reflections excluded for crossvalidation:	5%
Number of non-hydrogen atoms:	
Proteins	19198
RNA	32470
Metals	180
R-factor (conventional)	0.213
R-factor (free)	0.256
Cross-validated coordinate error	0.45 Å
Deviations from ideality:	
R.m.s. deviations in bond lengths	0.007Å
R.m.s deviations in bond angles	1.27 degs

Table 7. Summary of crystallographic data

(a) Data collection

Beamline	Resolution limit (Å)	No. of observations	No. of unique reflections	Completeness(%)		$\langle I \rangle / \langle \sigma \rangle$		R_{sym}(%)	
				Overall	Outer shell	Overall	Outer shell	Overall	Outer shell
ID14-4	3.0	1169437	259920	91.1	50.9*	13.7	2.3*	9.6	37.2*

*Completeness = 94.8%, $\langle I \rangle / \langle \sigma \rangle = 4.9$ and $R_{sym} = 30\%$ in the penultimate shell (3.1-3.2 Å).

(b) Refinement

Resolution Range:	99. – 3.0 Å
Reflections excluded for crossvalidation:	5%
Number of non-hydrogen atoms:	
Proteins	19198
RNA	32470
Metals	2
R-factor (conventional)	0.24
R-factor (free)	0.28
Cross-validated coordinate error	0.47Å
Deviations from ideality:	
R.m.s. deviations in bond lengths	0.007Å
R.m.s deviations in bond angles	1.36 degs

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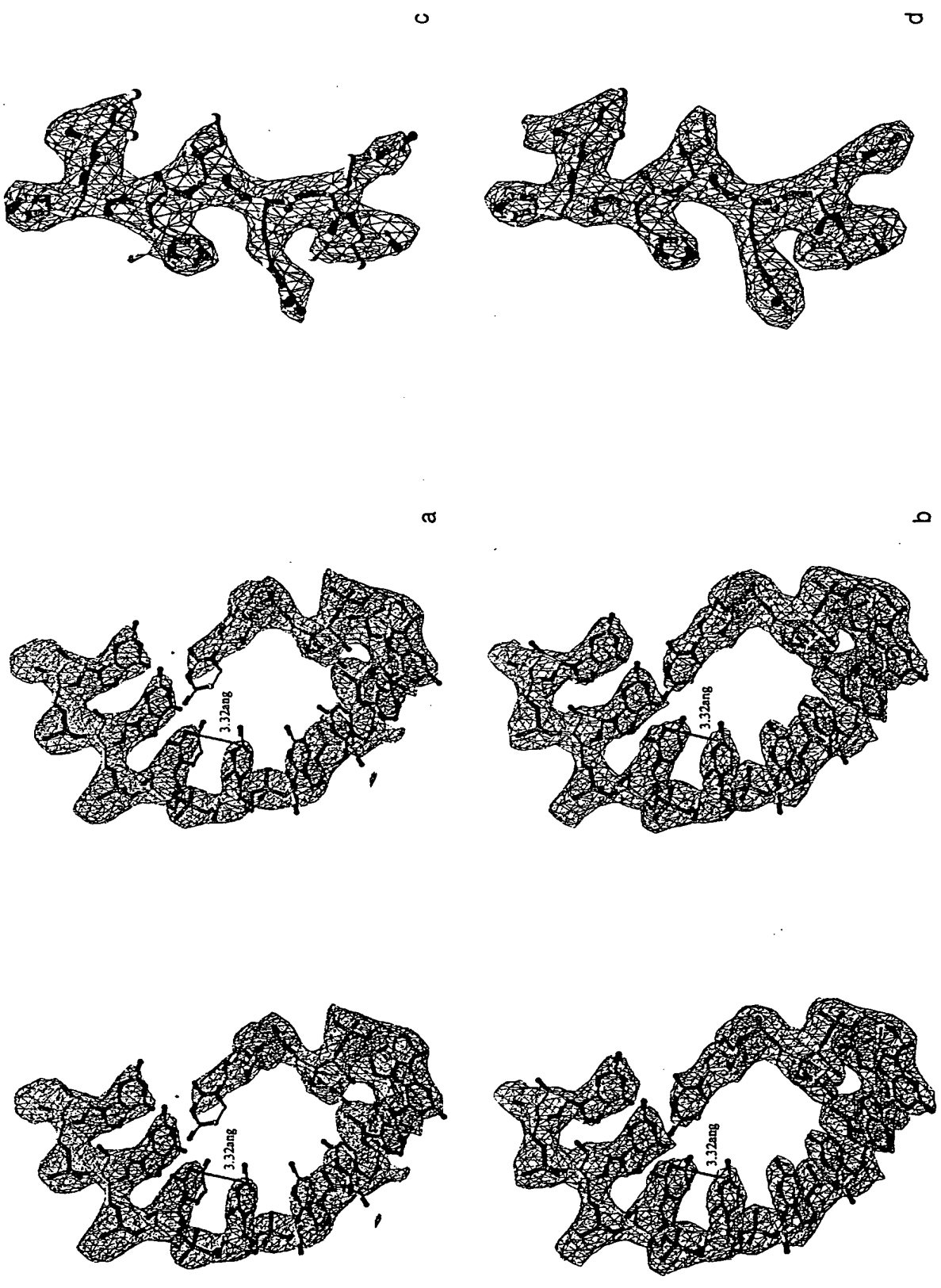
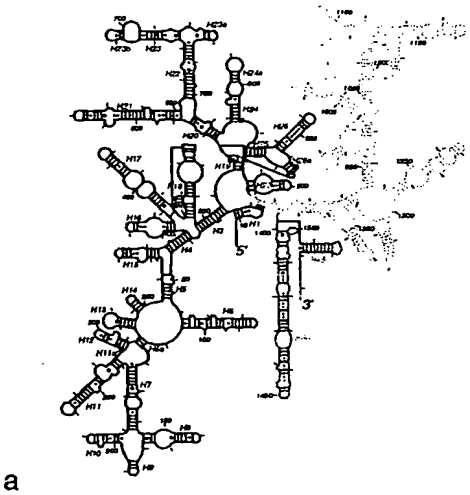


Figure 1/19

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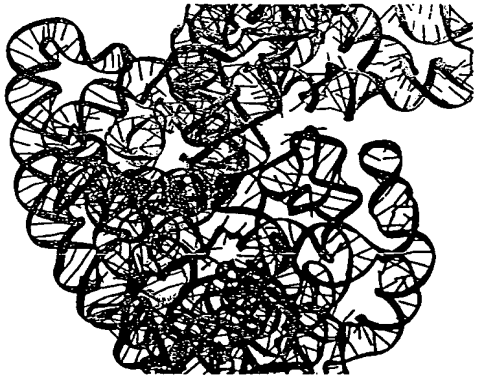
a





b





c

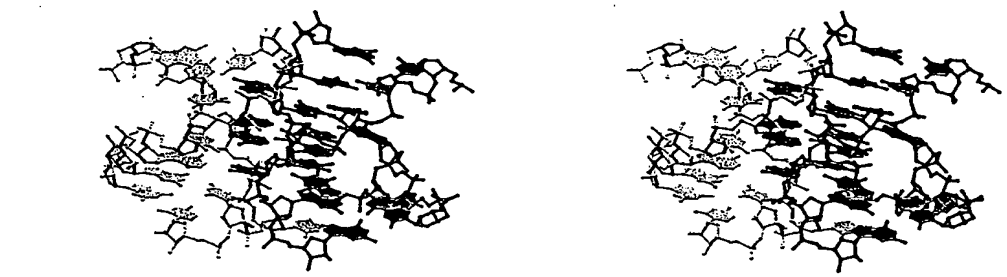




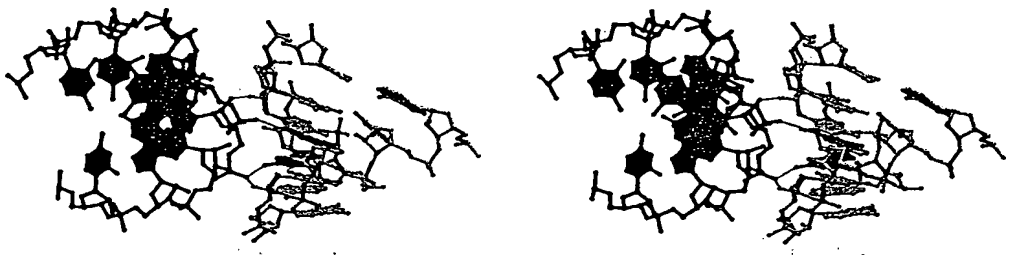
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Figure 2/19

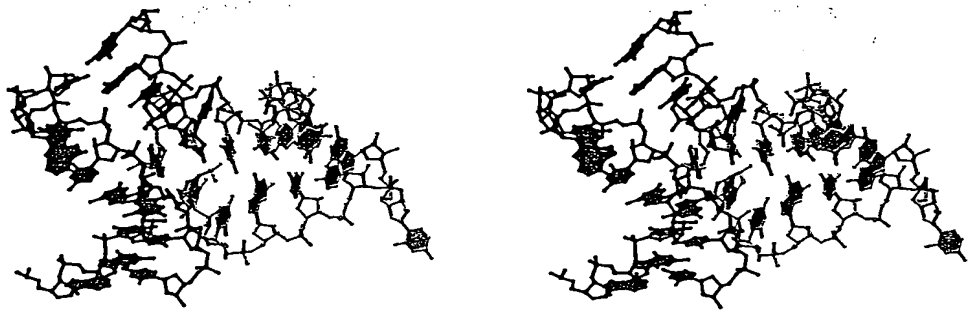
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a



b



c

Figure 3/19

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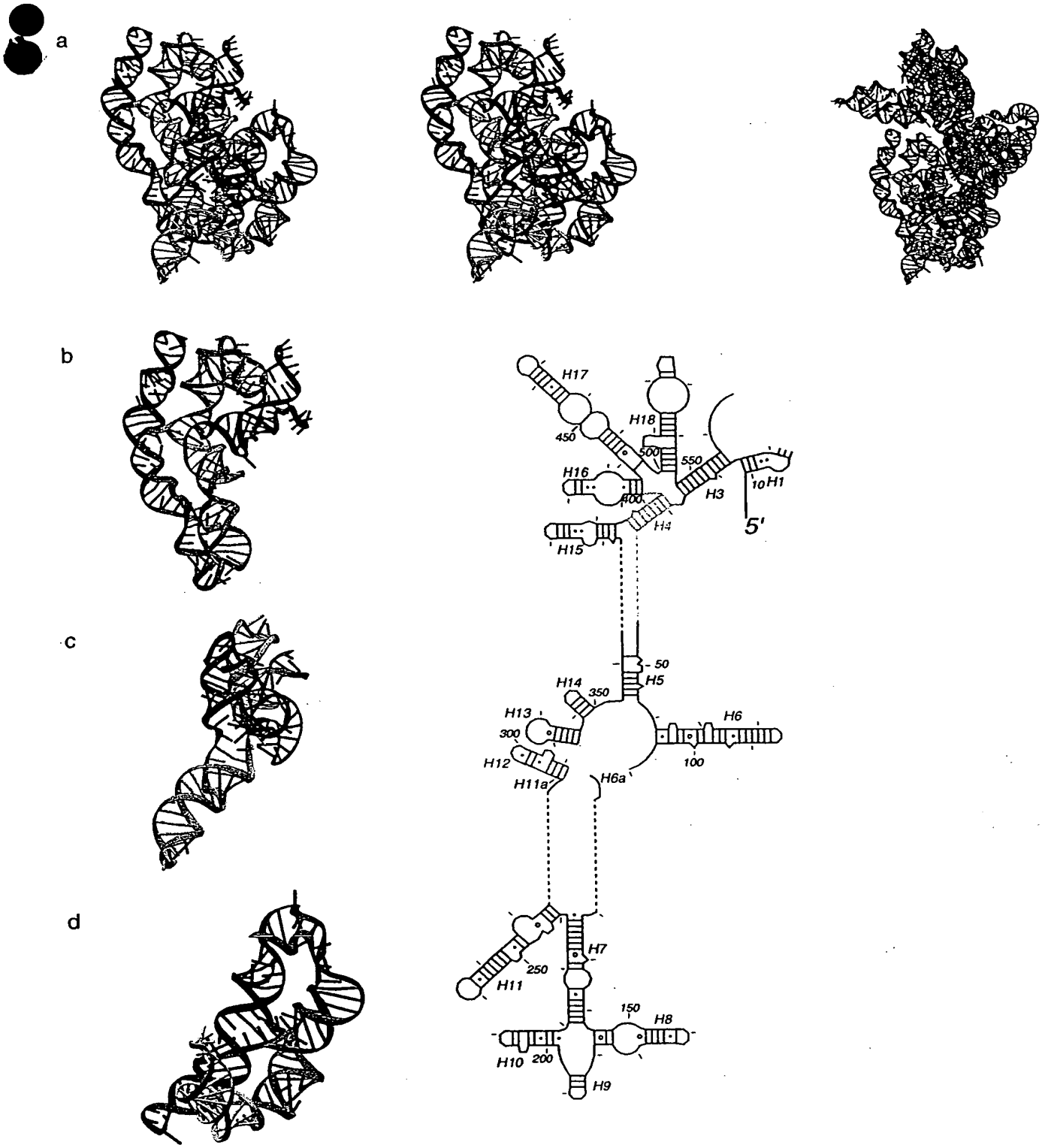
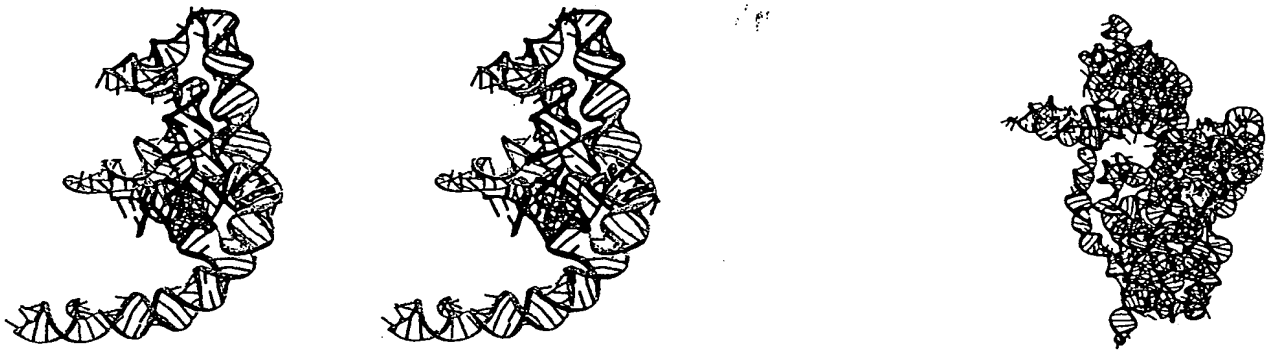

a
b
c
d
H17
H18
450
500
550
H16
400
H3
10
H1
H4
5'
H15
50
H5
H14
350
H13
300
H6
H12
100
H11a
H6a
H7
250
H11
150
H8
H10
200
H9

Figure 4/19

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a



b

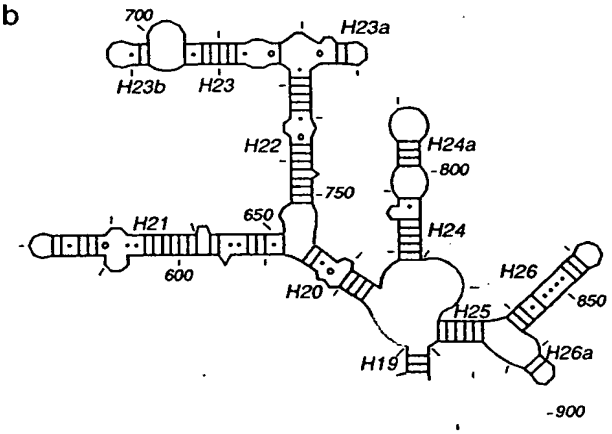


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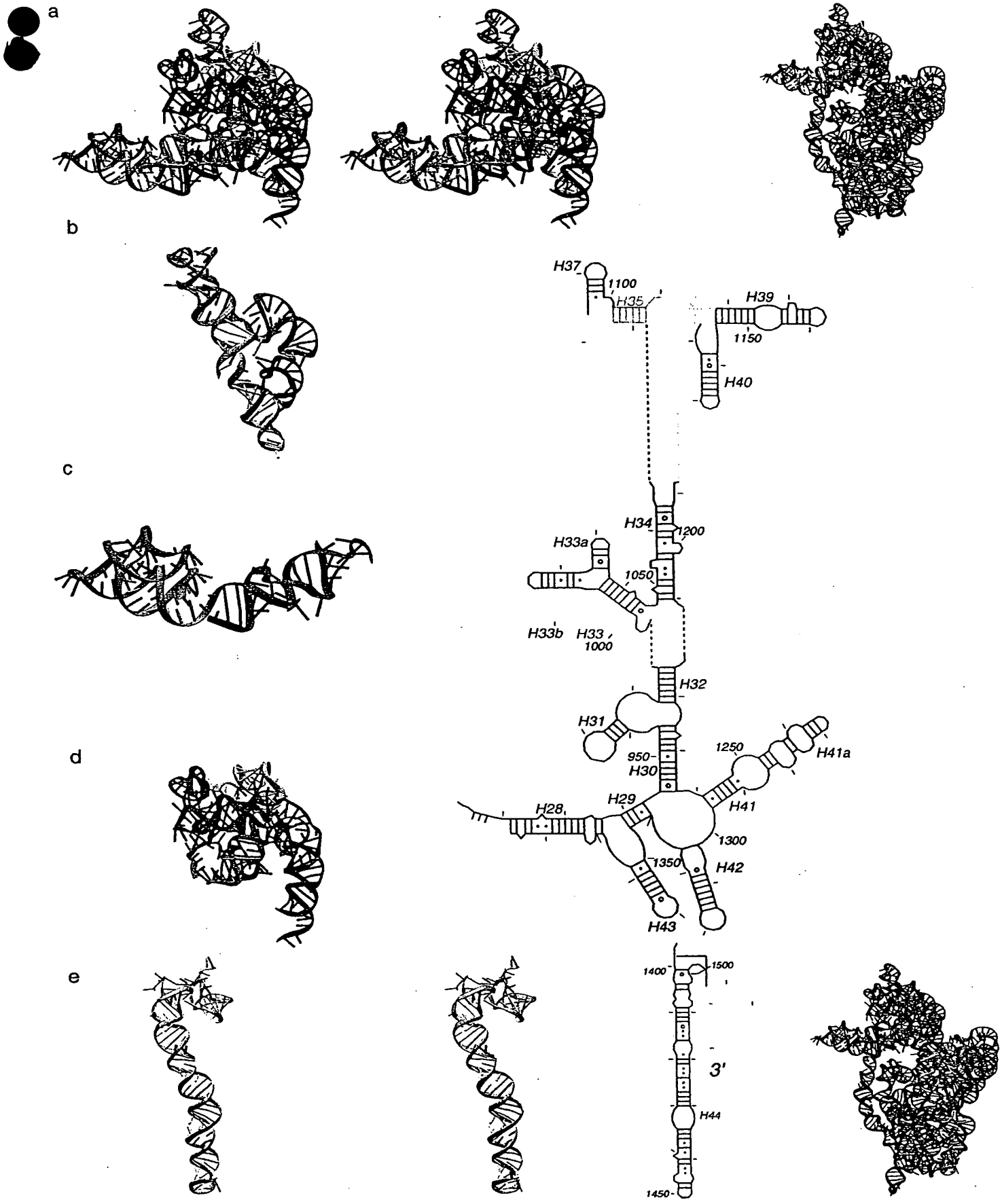

a
b
c
d
e
H37
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H35
H39
1150
H40
H34
1200
H33a
1050
H33b
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1000
H32
H31
950-
H30
1250
H41a
H28
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H44
1450

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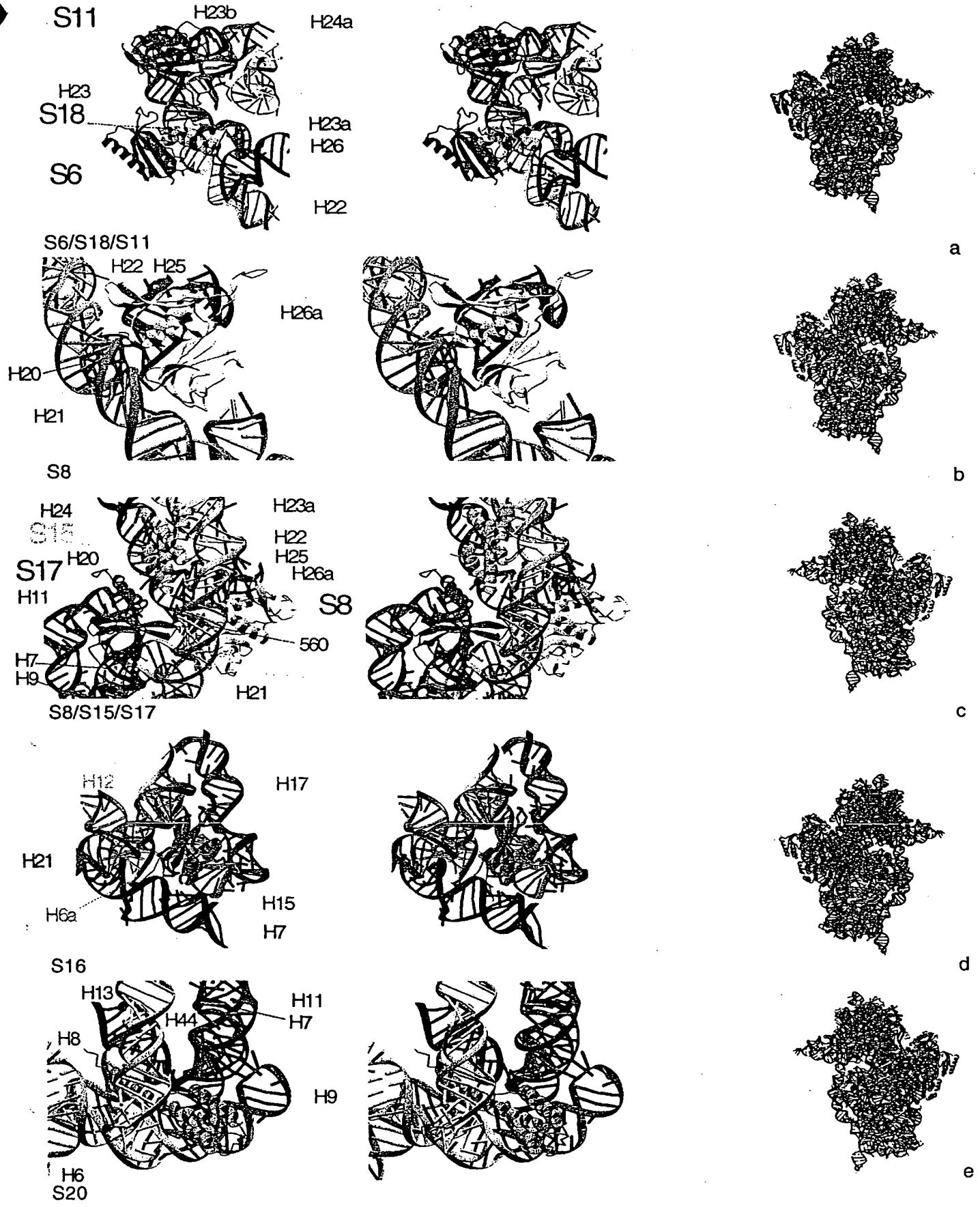

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H23
S18
H23a
H26
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S6/S18/S11
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H22
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H20
H21
S8
b
H24
H23a
S15
H22
H25
S17
H20
H26a
H11
S8
560
H7
H9
H21
S8/S15/S17
c
H12
H17
H21
H15
H6a
H7
S16
d
H13
H11
H44
H7
H8
H9
H6
S20
e

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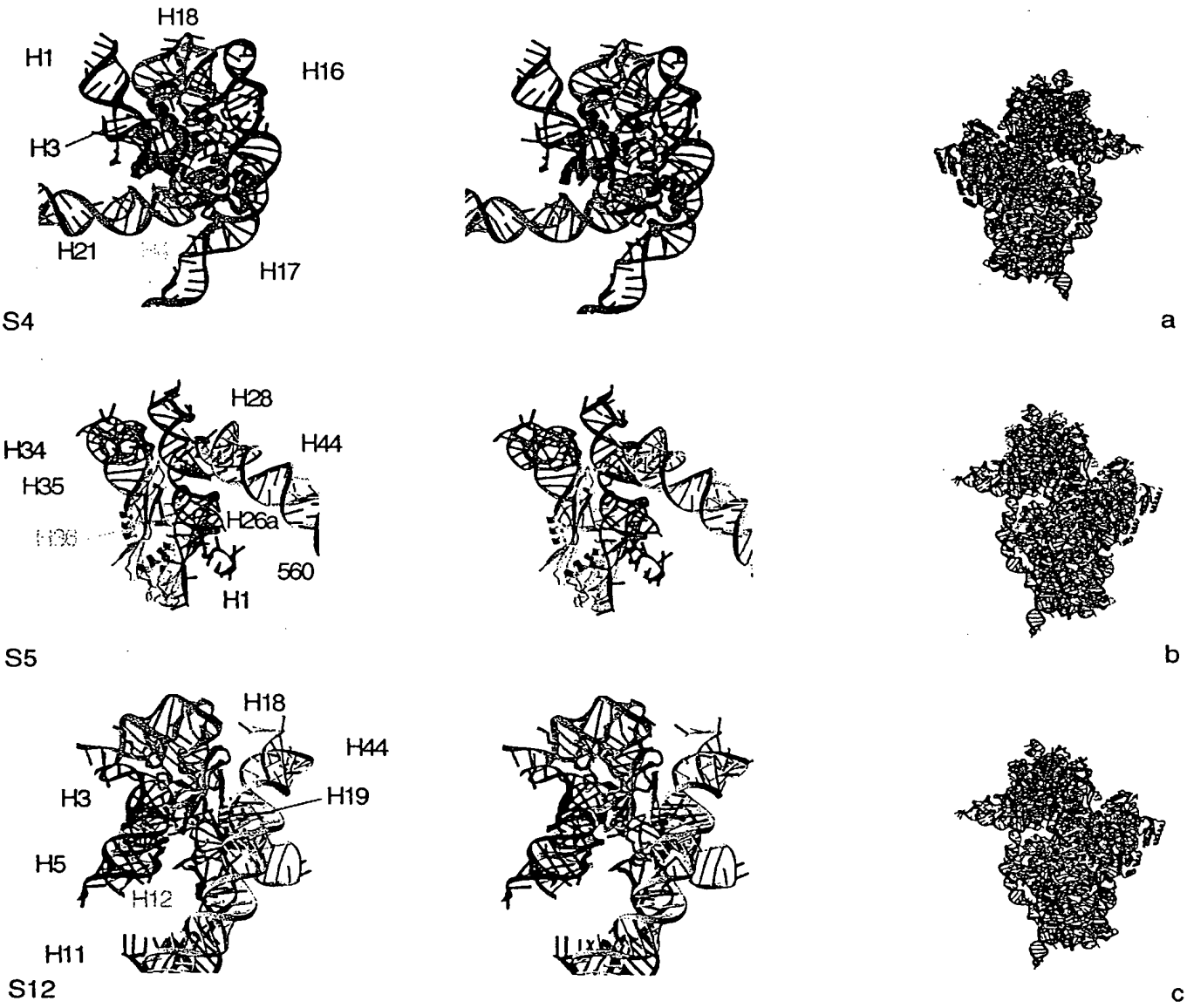

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H3
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S4
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H34
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H35
H26a
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H1
S5
b
H18
H44
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H12
H11
S12
c

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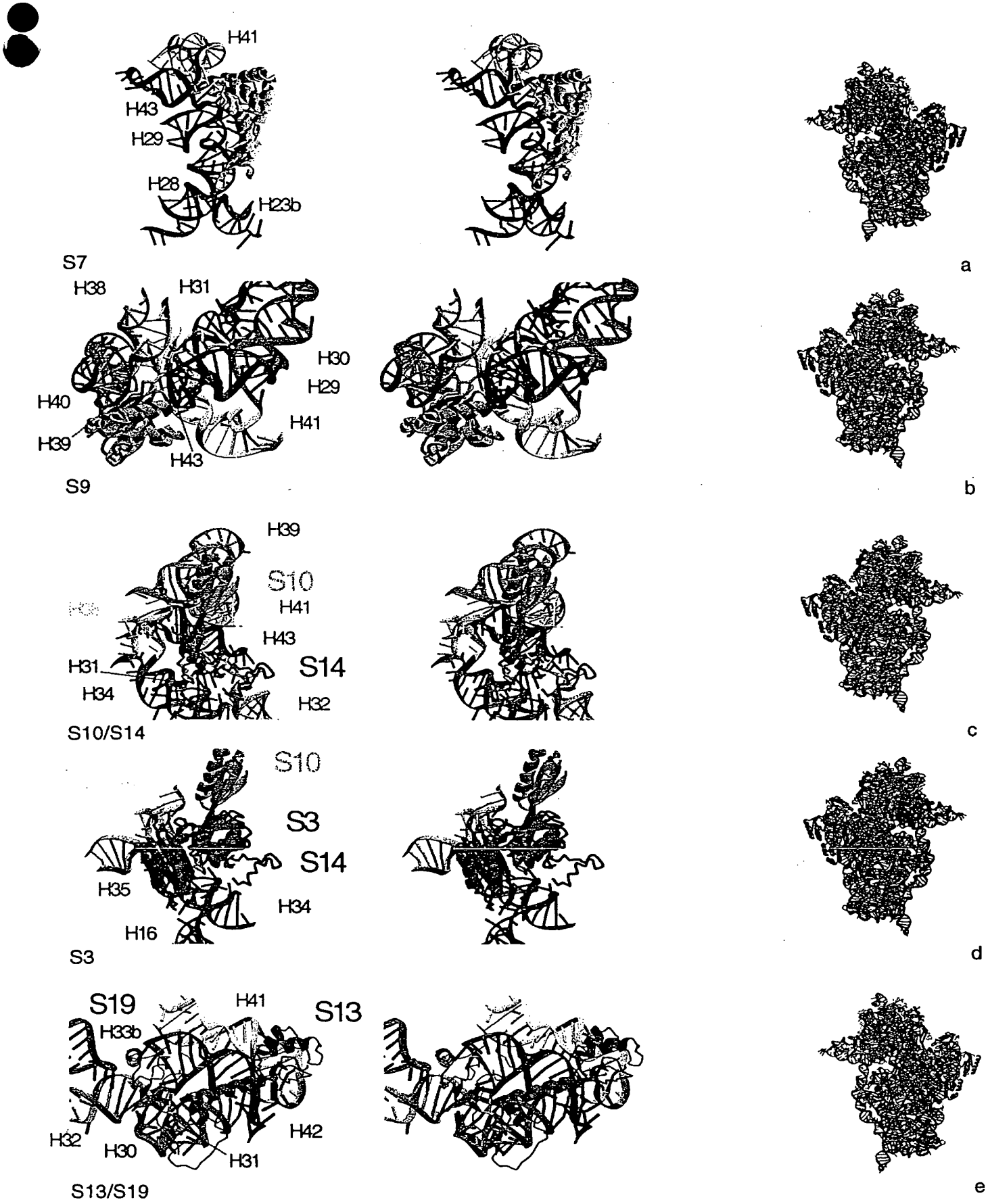

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H28
H23b
S7
a
H38
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H30
H29
H40
H41
H39
H43
S9
b
H39
S10
H41
H43
H31
S14
H34
H32
S10/S14
c
S10
S3
S14
H35
H34
H16
S3
d
S19
H41
S13
H33b
H42
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H30
H31
S13/S19
e

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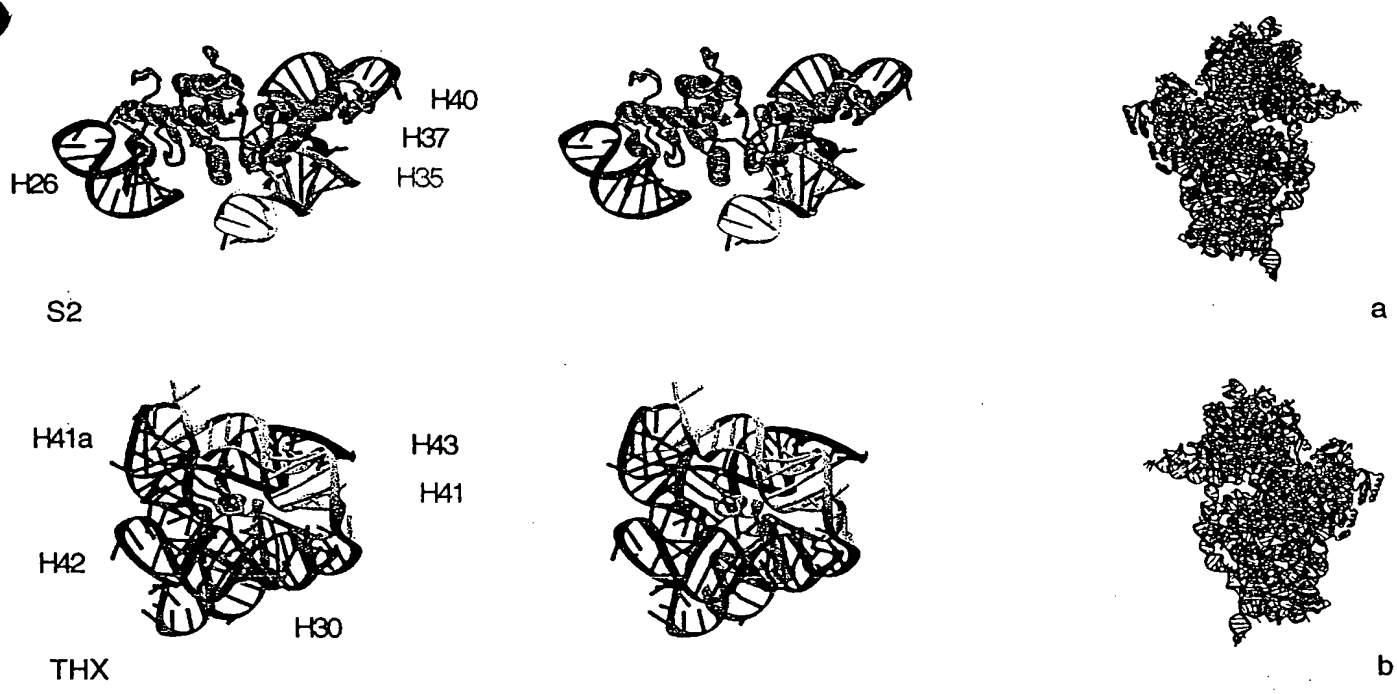


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Figure 11/19

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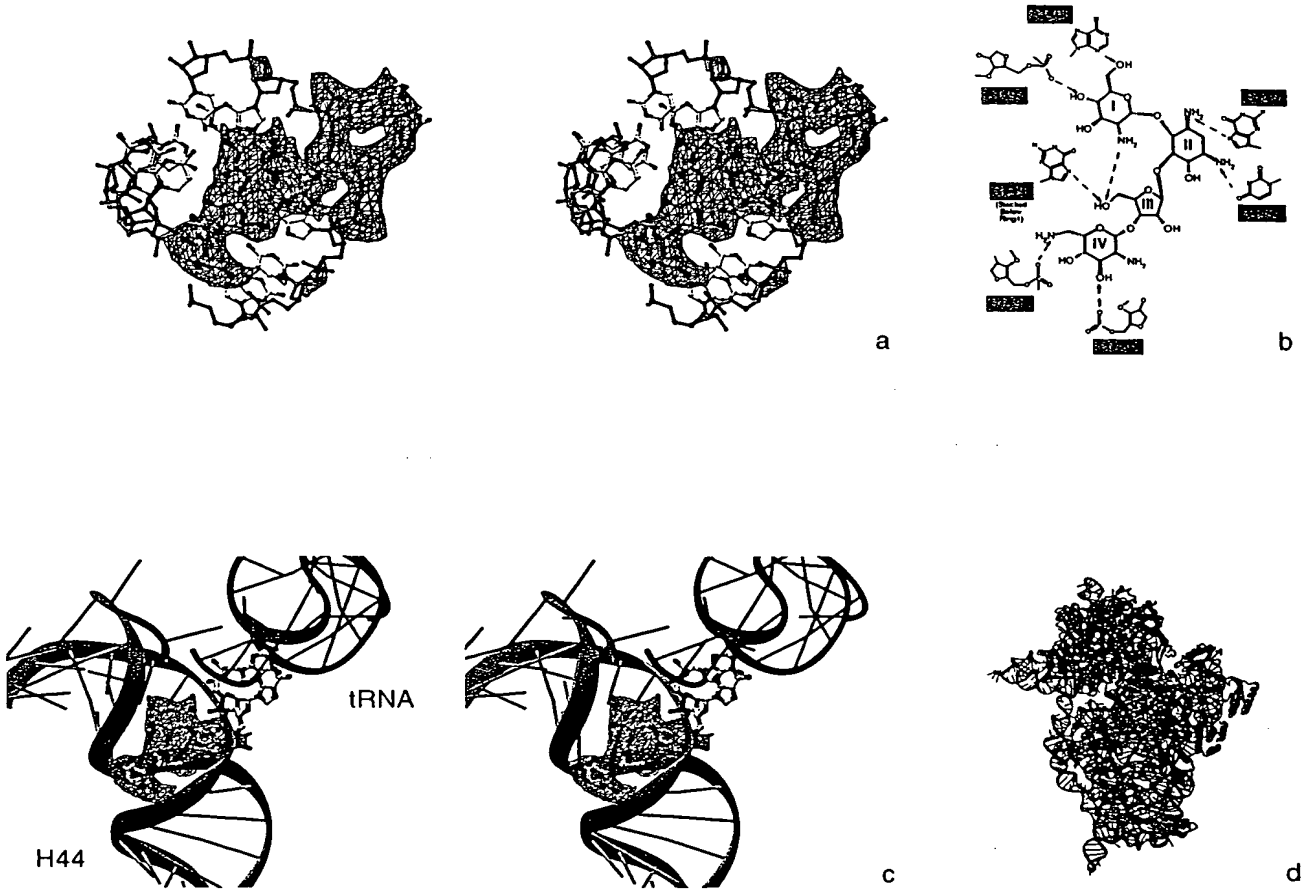


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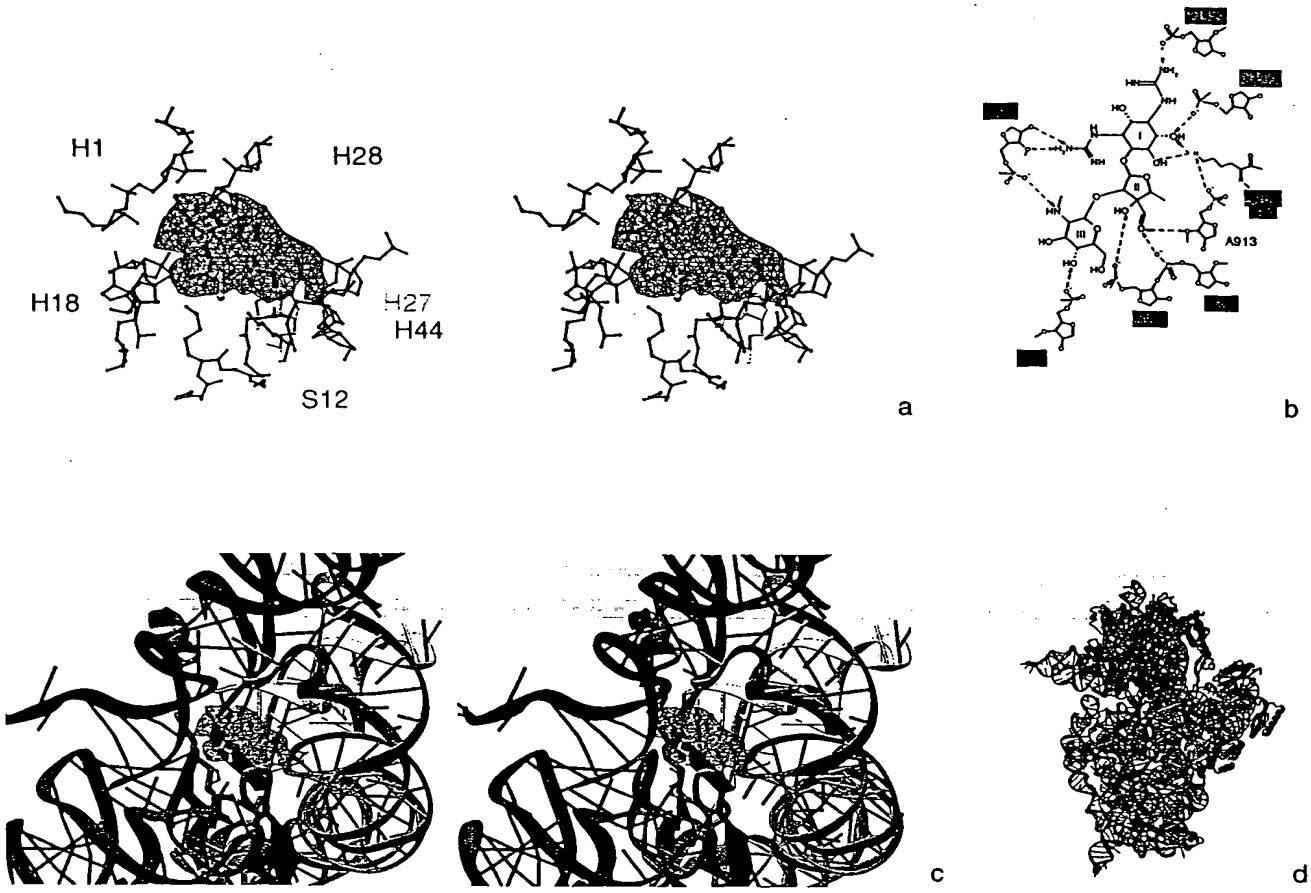


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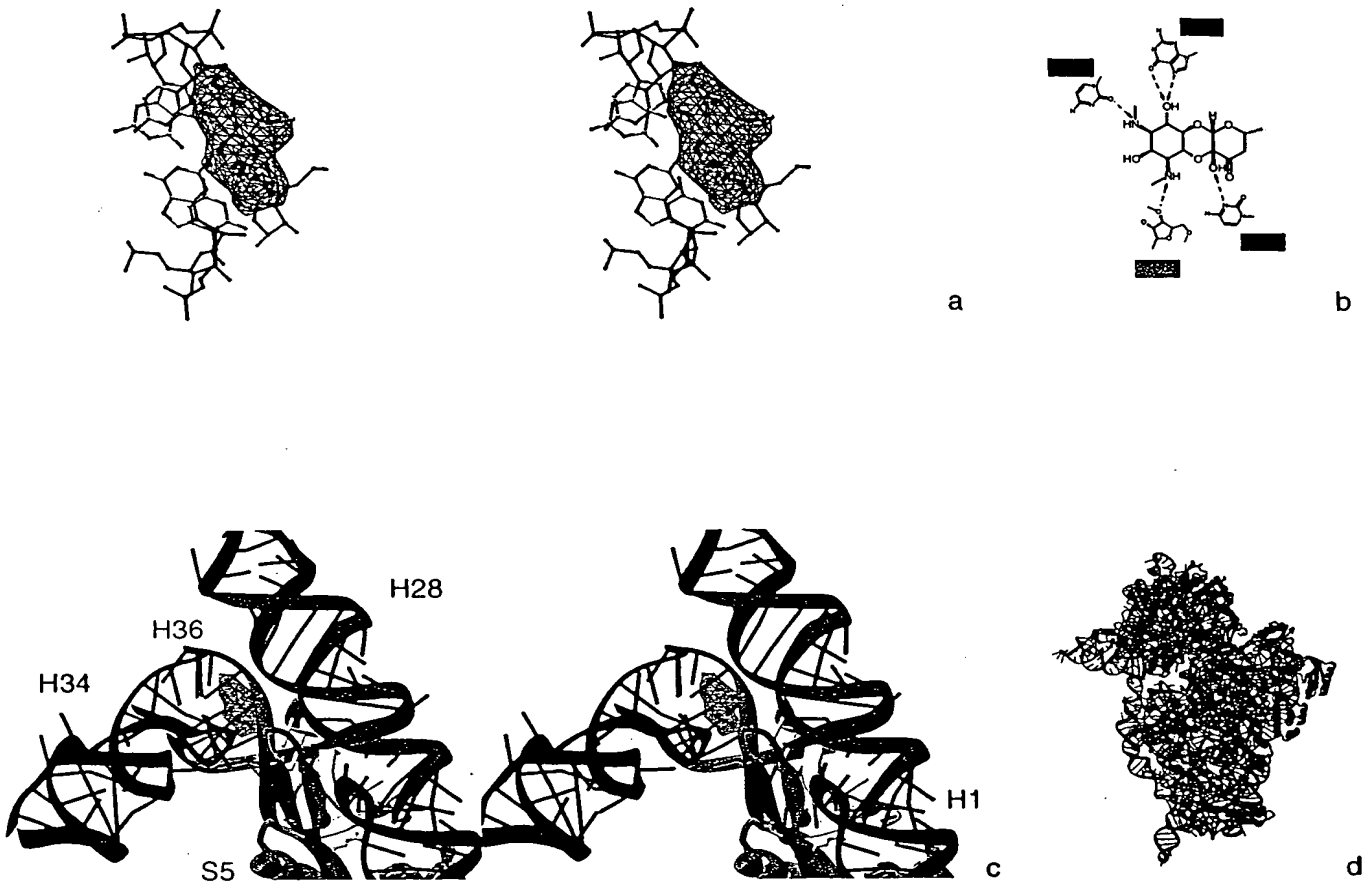


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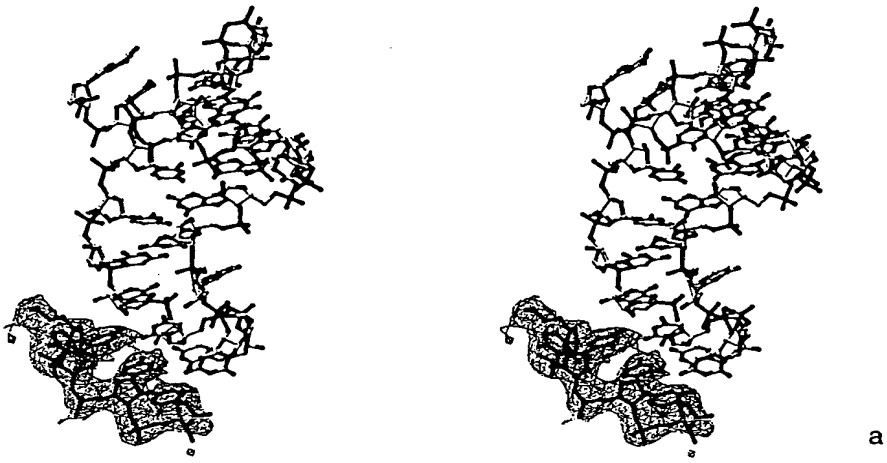
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Figure 16/19

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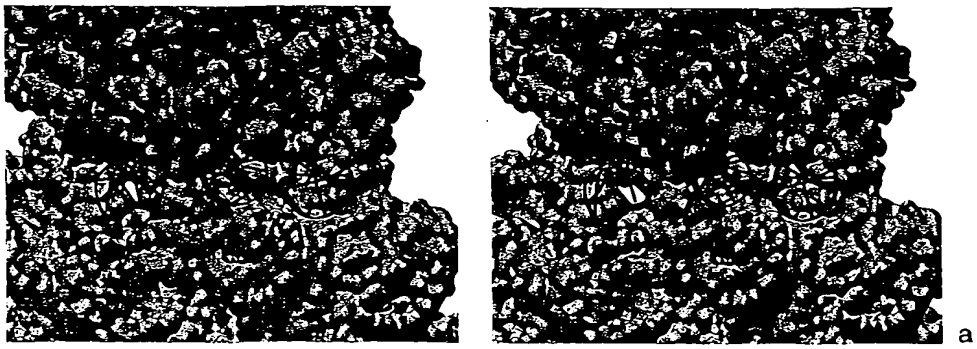
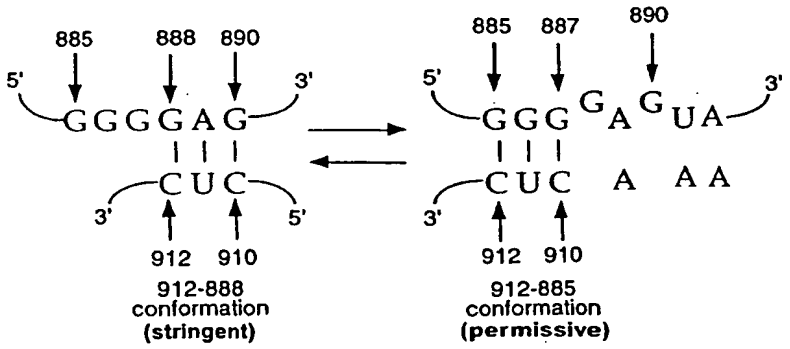


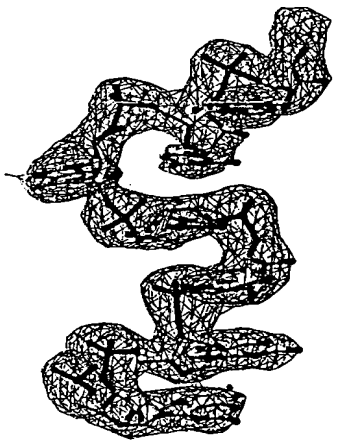


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